

# HOUSING MARKET REPORT



# 'Using our skills, we may be able to build stairs out of the stones which block our way.'

Count István Széchenyi



# HOUSING MARKET



Housing Market Report

(May 2017)

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The housing market represents a key area at the level of individual economic agents (households, financial institutions), as well as at the level of the national economy. Housing market developments are closely related to financial stability issues and also fundamentally determine the short and long-term prospects for economic activity. Overall, it can be stated that the housing market is intrinsically linked to all areas of the national economy. Housing market developments, in particular the volatility of housing prices, influence the savings and consumption decisions of the household sector through their financial position, and also influence the portfolio, profitability and lending activity of financial institutions through the stock of mortgage loan collateral.

The publication 'Housing Market Report' aims to provide a comprehensive view of current trends on the Hungarian housing market and to identify and present the macroeconomic processes which influence housing market supply and demand. With this publication, the Magyar Nemzeti Bank will regularly present the relevant developments on the Hungarian housing market on a semi-annual basis.

The real estate market and within that the housing market is of key importance for the Magyar Nemzeti Bank in relation to fulfilling its primary tasks, based on inflation and economic considerations as well as financial stability aspects. The development of real estate market supply directly influences economic growth, while oversupply and inadequate supply can also have serious financial stability consequences. Housing price appreciation improves the financial position of households, prompting them to increase consumption, which influences both economic growth and inflation. Price appreciation also boosts the lending capacity of financial institutions by reducing their expected losses, which again invigorates the economy through lending growth. The correlation between the mortgage loan market and housing prices deserves particular attention: during business cycles, a mutually reinforcing relationship can develop between bank lending and housing prices.

The 'Housing Market Report' provides deeper insight into the reasons behind market developments and the system of interactions between individual market agents by presenting a complex, wide-ranging set of information. The housing market already features in central banks' publications, both in Hungary and at the international level, but typically from the point of view of the main topic of the respective publication. Consequently, the 'Housing Market Report' represents a unique central bank publication at the international level as well, due to its integrated presentation of the macroeconomic and financial stability aspects of the real estate market. The set of information used by the publication includes the following:

- The presentation of the macroeconomic environment influencing the housing market is based on the information contained in the MNB's Inflation Report.<sup>1</sup> Key statistical variables relating to the housing market include changes in the volume of gross value added, developments in real income and unemployment, and changes in the yield environment.
- The analysis of current housing market processes relies primarily on the information provided by the Hungarian Central Statistical Office. Information on changes in housing market turnover and housing prices can be split into the differences between new and used housing market developments. In addition to this, data on the regional heterogeneity of the housing market are also used.

The analysis of the housing mortgage loan market relies primarily on the balance sheet data of credit institutions and the interest statistics collected by the MNB; information on the qualitative features of lending processes collected in the Lending Survey<sup>2</sup> is also used.

<sup>&</sup>lt;sup>1</sup> Magyar Nemzeti Bank, Inflation Report: <u>http://www.mnb.hu/en/publications/reports/inflation-report</u>

<sup>&</sup>lt;sup>2</sup> Magyar Nemzeti Bank, Lending Survey: <u>https://www.mnb.hu/en/financial-stability/publications/lending-survey</u>

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# **1. EXECUTIVE SUMMARY**

In 2016, the Hungarian housing market continued to be characterised by rising housing prices and increasing sales, while the market cycle reached a more mature stage. According to the MNB house price index, Hungarian nominal house prices grew at a rate of 15.4 per cent in 2016, while a slight rise in inflation resulted in a deceleration in the annual growth of real prices by the end of the year. Price appreciation was the strongest in Budapest, where it amounted to roughly 22.5 per cent, which was lower than the values of 25-30 per cent seen in previous periods. In rural towns, housing prices increased by 13.8 per cent, while they rose by slightly over 9 per cent in villages in 2016.

On the demand side of the housing market, all factors are pointing towards a recovery. Households' disposable real income has shown stable growth of 3-4 per cent for several years now. Additionally, the net financial assets of the sector are continuously increasing, and labour market prospects also improved in 2016, thanks to the decline in long-term unemployment. Rising real income and favourable labour market conditions contributed jointly to the improvement in long-term income expectations which are of key importance in terms of housing investments. In 2016, lending processes also continued to support the recovery of housing market demand. In addition to favourable financing costs, the volume of new housing loans granted grew by approximately 42 per cent. The weight of housing purchases from loans increased somewhat, exceeding one half of the transactions. The debt cap rules continue to restrict excessive indebtedness, and thus the growth in new lending can be still deemed sustainable. The majority of borrowers took out loans far below the limits.

Considering the supply side, the housing market showed a definite improvement in 2016. The extension of processing time for construction permits resulted in a slower rise in house starts, but after a sharp rise in the number of construction permits issued, the number of completions showed also a double-digit increase in 2016. Several new housing project started in Budapest, the majority of which will be completed in 2018, and thus price pressure on the Budapest housing market may decline, due to a continuous rise in supply. In respect of developments, the lack of skilled labour may continue to represent a restrictive factor. However, the fact that the growth rate of housing prices has exceeded the growth rate of construction costs for years, has a favourable impact on the willingness to develop property.

In addition to the Budapest housing market, the real estate market of the resort area around Lake Balaton is outstanding both considering its size and in tourism terms, and hence this report deals with housing price developments around Lake Balaton as a focus topic. Housing prices in the Balaton region show greater stability over the long term: following the crisis, they lost value to a lesser degree compared to the national average, but currently price appreciation faster than national average is not being observed.

Overall, based on the current developments on the housing market it can be established that the recovery on the market has passed through its initial phase, and the housing market has reached a more mature phase, where supply is responding by adjusting to the increased housing market demand. According to our calculations, in terms of the national average, the Hungarian housing price level is below the level justified by macroeconomic fundamentals, and thus the continuous increase of housing prices can still be deemed sustainable. However, trends in Budapest must be monitored closely.

## 2. MACROECONOMIC ENVIRONMENT

Factors influencing the demand side of the housing market improved further in the second half of 2016, and thus the market has continued to recover with the favourable income and labour market position of households, as well as growth in the volume of new lending. With improving financial position of the household sector, and in parallel with rising real incomes and falling long-term unemployment, both the short and long-term income prospects of the sector display a more favourable picture. The supply side of housing market is also improving, although it is adjusting more slowly compared to the previous real estate market cycle. Housing prices already exceed home construction costs, and thus the increase in the supply margin has a positive influence on the willingness to develop property.



Chart 1: Annual dynamics of house prices, disposable income and newly issued housing loans

Source: MNB.

Chart 2: Changes in households' financial assets and liabilities, and real income



Source: HCSO, MNB.

#### 2.1. Hungarian housing market demand

Housing market trends are very interdependent on and correlate closely to the income position of households and the current situation of credit market. This can be attributed to the fact that – in addition to income – housing affordability often depends on loan conditions, due to the need for external financing. In the second half of 2016, the housing market continued to recover. Housing prices show a continuous increase, while the disposable income of households, as well as the volume of new loans granted for housing grew further (Chart 1).

Numerous demand factors are supporting recovery on the housing market. The negative trend that started in 2008 on the Hungarian housing market reached its low point in 2013. Following the turnaround, a gradual improvement in fundamental factors of housing market demand was seen: employment and income increased, while financing conditions eased. In addition to favourable employment trends, nominal wages rose also considerably in the past years, entailing a substantial increase in real wages in a low inflation environment. This rise real wages was further strengthened by the minimum wage and guaranteed minimum pay hikes starting from this year, which resulted in a strong wage outflow and a rise of almost 10 per cent in the growth rate of the nominal wage bill. Due to favourable income trends, since 2013 the income of the sector has shown a continuous, stable 3-4 per cent increase on an annual basis in real terms (Chart 2).

Net financial assets and income of households exhibit continuous growth. The increase in households' disposable income and their improving financial position in the past period led to a strong boost in housing demand, which was initially reflected in a rise in the number of housing market transactions, and in line with this, an increase in prices. Housing market trends were also strongly driven by labour market prospects; accordingly, the gradual increase in labour demand by the private sector and the related decline in permanent unemployment result in an improvement in households' willingness to invest, thanks to the longer-term



Chart 3: Short and long term unemployment

Note: \* Unemployed for more than 1 year. Source: HCSO.





Note: The yield realisable from home investment is calculated exclusively based on the growth rate of the MNB house price index. Source: GDMA, MNB.





Source: HCSO, MNB.

income prospects (Chart 3). On the whole, improving employment figures and increased real incomes considerably ameliorated longer-term income expectations, which are an important factor behind housing investment.

The low interest environment and dynamic increases in housing prices make residential properties an attractive investment. At the beginning of the upward phase of the cycle, the turnaround on the housing market was mainly seen in the used housing market (used housing market transactions rose from 83,000 in 2013 to over 135,000 in 2015, while the prices of used dwellings appreciated by nearly 25 per cent on a year-on-year basis). The price increase caused the yields realisable on housing investments to grow in a low interest environment, which generated additional demand in the used housing market (Chart 4). The low interest environment with favourable financing conditions also boosts investment-purpose demand through another channel.

#### 2.2. Hungarian housing market supply

The supply side of the housing market is primarily influenced by the quantity and quality of the existing stock of dwellings and by the situation and performance of the construction industry (Chart 5). The cost of construction and the real estate sector's financing situation are also key determinants.

On the supply side, several factors are supporting recovery, but supply conditions typically respond with a delay on the real estate market. The recovery on the demand side of the housing market and – in parallel with this – the increase in the price level gradually triggered an adjustment in supply, indicating a more mature phase of the housing market cycle. Last year, numerous real estate development projects were launched, and the number of completed multi-apartment residential buildings is expected to increase considerably. However, there are still obstacles to the housing market recovery on the supply side.

The adjustment of supply slowed down in the current real estate market cycle. Despite the favourable economic environment, the pace of recovery in housing construction is slower compared to previous episodes, reflecting the slower adjustment of supply in the current housing market cycle. While a stable, strong rise has been seen in the number of residential construction permits since 2014, the number of home starts only began to increase significantly this year. Based on previous real estate market cycle – changes in the number of residential construction permits were followed by an increase in housing starts after 5-7 quarters, slowing to 8-



#### Chart 6: Changes in credit conditions in the commercial real estate segment

Note: Positive values represent the tightening of conditions, while negative values show the easing of conditions. Source: MNB, Lending survey.





construction industry (ESI)

Source: European Commission.



Chart 8: Construction costs and house price developments

9 quarters in the current cycle.<sup>3</sup>

**Financial institutions have not yet significantly eased financing conditions on real estate loans.** As a result of excessive financing prior to the crisis, a significant volume of dwellings is still linked to the balance sheets of commercial banks as collateral, which represents a potential factor of uncertainty for supply adjustment. Based on the responses to the Lending Survey, banks eased conditions on commercial real estate loans – in particular loans for residential projects – in 2016, but in the post-crisis years the financing of the real estate sector was restrained to a great degree and banks even tightened the conditions for such financing (Chart 6), which may also restrict the adjustment of supply side. Based on all of the above, considering the financial system, there is still room to ease supply restrictions.

The pace of the recovery on the housing market is also strongly influenced by the availability of skilled labour. Along with favourable demand conditions, in recent years an increasingly typical feature of the construction industry has been that the lack of labour and basic materials are the main factors hindering production. In terms of these factors, the lack of labour as a factor hindering production was most pronounced in the responses of the construction companies polled by the European Commission (Chart 7). The projected pace of expansion on the housing market may be hindered to a great degree by this restrictive factor.

In the past quarters, housing price appreciation exceeded growth in construction costs, which creates favourable conditions for real estate developers and for supply. While housing prices typically decreased between 2008 and 2013 in an annual comparison, construction costs have not fallen in parallel with this since the turn of the millennium. Thus, the level of housing prices was significantly lower than the level of housing construction costs. In recent years, however, a turnaround was observed: the pace of housing price appreciation now significantly exceeds the pace of increases in construction costs, i.e. housing price appreciation narrowed the aforementioned gap (Chart 8). Overall, the recovery in supply is supported to a great degree by the change in the relation of price and cost dynamics, but looking ahead, wage inflation may put pressure on the development of costs.

Source: HCSO, MNB.

<sup>&</sup>lt;sup>3</sup> For more details, see: Magyar Nemzeti Bank: Housing Market Report, October 2016, Box 3 (link).

## 3. CURRENT HOUSING MARKET TRENDS

The negative trend on the Hungarian housing market that started in 2008 reached its low point in 2013, and afterwards a continuous recovery was observed in the housing market. In 2016, housing prices grew by 15 per cent on a national average, but in regional terms the picture is more heterogeneous. In Budapest, housing prices were 22.5 per cent higher at the end of 2016 compared to the previous year, while housing prices appreciated by 13.8 per cent in rural towns and by 9 per cent in villages. The adjustment of new housing market supply only followed the improvement in demand conditions with some delay, and thus housing starts only show a significant increase starting from this year. In addition to the high number of construction permits, housing starts already show a double-digit increase this year. In the Budapest market, as a result of significantly higher prices, sales already fell in 2016 on an annual basis. A large number of new housing market has increasingly reached a mature phase, characterised by the adjustment of supply in reaction to higher housing market has increasingly reached a mature phase, characterised by the adjustment of supply in reaction to higher housing market demand.



Chart 9: Number of residential construction permits issued and number of homes built

Chart 10: Annual dynamics of the number of construction permits issued, number of completions and real estate sector investments



Note: Seasonally adjusted data. Source: HCSO, MNB.

#### 3.1. Domestic housing market developments

The positive trend in the housing market that started in 2013 was primarily linked to the sale of used dwellings. In parallel with the upturn on the used housing market, the downtrend in the number of housing starts halted and a gradual increase was observed. In 2016, as opposed to the previous year's 7,612 dwellings, nearly 10,000 new dwellings were completed (Chart 9). The number of construction permits issued grew dynamically after 2013 and had already risen to the pre-crisis level by the end of 2016. Throughout 2016, based on the aggregated housing market data both the number of sold dwellings and new supply grew. Within the transactions, the ratio of new dwelling sales is also increasing, which, looking ahead, may form the basis for growth in the number of transactions through supply-side adjustment.

In parallel with previously issued construction permits, in 2016 Q4, the number of completions also surged. At the end of 2016, more than 4,700 completions were registered, representing nearly 60 per cent growth in annual terms. In 2016, the number of completions rose by 31.3 per cent compared to 2015, and the number of construction permits issued grew by 152.2 per cent (Chart 10). Based on our estimates, the time from issuing the permit until completion may be 8-9 years, and thus, based on the increase in the number of construction permit issued, further growth in the volume of housing starts can be expected.

Housing price increase halted by the end of the year in real terms, but the annual growth rate remains high. During the second half of 2016, an increase in Hungarian housing prices was observed. The aggregated MNB housing price index expressing the changes in housing prices in the national average rose by nearly 5.7 per cent in 2016 Q3 on a nominal basis, however, in Q4 an increase of only 1 per cent was observed. As a result of inflation increasing by the end of the

Note: Seasonally adjusted data. Source: HCSO, MNB.



Chart 11: House price developments

Source: MNB, HCSO.

Chart 12: Quarterly and annual number of housing market transactions









Source: MNB.

year, however, the housing price increase slowed down in real terms by the end of 2016. The aggregated real MNB housing index still rose by 5.9 per cent in Q3, whereas it no longer increased in Q4 and instead decreased by 0.1 percentage point. Overall, based on the MNB housing price index, the annual growth rate of housing prices did not change considerably in the second half of 2016, amounting to 15.4 per cent in nominal terms and 13.5 per cent in real terms. The housing price indices relevant to new and used dwellings which are published by the Hungarian Central Statistical Office (HCSO) showed a change of 3.4 per cent and -1 per cent, respectively, in Q3, and a 1.5 per cent and 2.5 per cent change in Q4, respectively (Chart 11). According to the calculations of the HCSO, after the housing market turnaround in 2014 used dwelling prices increased to a greater degree compared to new dwelling prices, but the prices of the new properties did not decline to such a great degree as the prices of used residential properties did following the crisis.

Market turnover rose further in 2016. According to the number of transactions estimated based on the preliminary data of HCSO, the number of sales and purchases on the housing market increased further during the year. In 2016 Q4, nearly 32,000 transactions were registered, up roughly 6.4 per cent on the same period of the previous year. Based on the HCSO's preliminary data on the number of transactions, according to our estimates, the number of sales and purchases concluded over one year may have reached 147,000 transactions, marking a 10 per cent increase compared to the previous year. The total sales figure for 2016 already approximated - but is still somewhat below - the long-term annual average of 157,000 sales and purchases seen since 2001. Apart from this, the considerable housing price appreciation observed in the last three years may slow down the increase in housing sales (Chart 12).

**Considering the size of settlements, the Hungarian housing market shows a heterogeneous picture.** In the course of the second half of 2016, one feature which was still seen on the Hungarian market was that – compared to smaller villages – housing prices increased to a greater degree in Budapest in particular, but also in larger settlements. In 2016 Q3 and Q4, housing prices grew by 4.5 and 1.6 per cent, respectively, in Budapest in nominal terms, i.e. housing price appreciation slowed down significantly by the end of the year. Considering 2016 as a whole, the slowdown in growth in Budapest is more striking. Following appreciation of 9.6 per cent in Q1, each quarter slower housing price appreciation was observed. The price of urban dwellings showed an upward trend during the half year, but while prices of residential properties located in villages grew significantly,



Chart 14: MNB house price index for cities by regions (2010=100%)

Source: MNB.

Chart 15: Annual change in the number of housing market transactions by segments



Note: 2016 according to the number of transactions estimated based on preliminary HCSO figures. Source: HCSO, MNB.

rising by 11 per cent in Q3, they fell back slightly by the end of the year. Despite the slowdown, annual housing appreciation is still the strongest in the capital, where it reached 22.5 per cent at the end of 2016, while rural cities and villages saw price appreciation of 13.8 per cent and 9.3 per cent, respectively, at the end of the year (Chart 13).

Changes in housing prices also vary from region to region. In the second half of 2016, housing prices appreciated in all regions of the country, but the extent of this appreciation was not completely uniform. During the period surveyed, housing prices increased the most in the cities of the Southern Great Plains, while the weakest appreciation was observed in the cities of Northern Hungary. However the regional heterogeneity in housing price developments is more striking if one considers them over the longer term. The post-crisis housing price depreciation in the cities of Western Transdanubia halted as early as the beginning of 2013, while in the other areas of the country renewed housing price appreciation started from the beginning of 2014. From the beginning of 2014, housing prices appreciated to the greatest degree in the Central Transdanubian and Central Hungarian region, rising by nearly 40 per cent in both regions over three years, while the smallest increase (24 per cent) during the same period was observed in Northern Hungary. In the course of 2016, it was also Central Hungary, where rural housing prices appreciated the most, and the region's location near the capital's conurbation might well significantly contribute to this (Chart 14).

**Changes in market sales are varied in many respects.** In 2014, following the housing market turnaround, market sales rose significantly in the capital, and the number of transactions concluded over one year was around 35 per cent higher than the figure registered for 2013 as a whole. However, during the same period the number of concluded sales and purchases over one year grew only by 25 per cent in settlements outside of Budapest. From 2015 on, the rise in housing market sales slowed down in Budapest, and the number of housing market transactions concluded in the capital in 2016 was already lower compared to the same period of the previous year. As opposed to this, sales volume grew by a total of 16 per cent in other settlements in 2016 (Chart 15).

#### BOX 1: HOUSING PRICE DEVELOPMENTS IN THE BALATON RESORT AREA

The Hungarian housing market shows considerable heterogeneity both in terms of regions and settlement types. Not only has the real estate market recovery in the past years been stronger in Budapest and in the larger cities, the square meter prices of residential properties also considerably exceed prices in other rural and smaller settlements. However, real estate prices are significantly higher if the property is located in a resort area. According to the classification of the Hungarian Central Statistical Office (HCSO), seven resort areas can be distinguished. Among these, the Lake Balaton shore area, and the Danube bend and Velence Lake–Vértes regions featured square meter prices significantly higher than the country average.

Areas near the shores of Lake Balaton are outstanding among Hungarian resort areas in two respects. On the one hand, with its considerable size, it represents a significant portion of the Hungarian housing market, and partially due to this, it is also one of the country's prominent areas in terms of tourism. On the other hand, based on sale and purchase transactions concluded in 2015 and 2016, square meter prices in cities are the highest in this region. In the towns around Lake Balaton the average square meter price was somewhat above 280,000 forints in the past two years, which was not lower in the villages located here. The average square meter price of shore-area residential properties around Lake Balaton was nearly 74 per cent higher than that of rural dwellings not located in resort areas, and 54 per cent higher than the square meter price of dwellings located in county seats, and was only 15 per cent below the average square meter price in Budapest (Table 1). As a result, the market of properties located in the resort area around Lake Balaton can be deemed the second most important after the housing market of Budapest.

HUF thousands	Non-	Resort areas							
	recreational area	Balaton - lakeside	Balaton - other	Danube Bend	Mátra-Bükk	Sopron- Kőszeghegyalja	Tisza-lake	Velencei- lake-Vértes	Total
Budapest	332	-	-	-	-	-	-	-	332
City with county authority	183	-	-	-	136	236	-	-	180
Other city	162	282	132	270	127	190	96	192	179
Municipality	118	279	109	453	95	165	56	303	140

 Table 1: Average square meter prices in 2015-2016 in individual resort areas and settlement types

Source: NTCA, HCSO, MNB.



The high price of residential properties around Lake Balaton raises the question of whether or not - similarly to larger settlements - the dynamic rise in prices can currently be observed here as well. In order to answer this question, by using the MNB housing price index methodology<sup>4</sup> we prepared the housing price index for the entire Balaton resort area (lake side and other together), and within that separately that for the Lake Balaton shore area. Based on the latter it is visible that, following the crisis, housing prices near the Balaton did not decline to the same degree as they did on average nationally, and the pace of price increase is also currently lower (chart). The reasons for this can probably

<sup>4</sup> Banai Ádám – Vágó Nikolett – Winkler Sándor (2017): Az MNB lakásárindex módszertana, MNB-tanulmányok, MT 127. (MNB housing price index methodology, MNB-studies, MT 127. <u>Link to the study.</u>

be explained by factors that are related to the motivations of holiday home purchasers and owners, but beyond doubt the fact that, due to the lower number of transactions, the Balaton indices could be estimated on a smaller sample compared to the national MNB housing price index also contributed to this. When purchasing a holiday home, investment motivation may play a major role, which over the short term results in the volatility of housing prices. In addition, a large share of the properties around Lake Balaton are holiday homes which do not directly serve residential purposes and are mostly a second property within the assets of the households. Due to this, a deterioration in income may be compensated by some households by the sudden sale of holiday homes, which entails price volatility over the short term. In addition to this, those purchasing a holiday home may respond to changes in economic cycles more inflexibly over the longer term, and their motivation to purchase a holiday home may also be independent of that. All of this may explain why the prices of holiday homes around Lake Balaton aid not decline to such a degree. Overall, the square meter prices of lake-side holiday homes around Lake Balaton are similarly high as in the capital, but housing prices fell to a smaller degree here following the crisis, and currently no significant rise in prices can be observed.

Thousand HUF Thousand HUF 500 500 31% 450 450 400 400 55% 350 350 22% 19% 300 300 15% 250 250 27% 200 200 17% 150 150 16% 100 100 50 50 0 0 Budapest with county Other city Municipality Budapest with county cit∕ Municipality authority authority Other City Cit Used homes New homes ■ 2012 ■ 2013 ■ 2014 ■ 2015 ■ 2016

Chart 16: Average price of housing per square meter by settlement type

Note: Changes in the average prices between 2013 and 2016 is shown above the individual categories.

Source: HCSO.

Chart 17: Level of and changes to the average square meter price of used dwellings in 2016



Source: HCSO.

Considering square meter prices, the largest rise was seen in the case of used dwellings in Budapest. In 2016, the average square meter price of both used and new dwellings continued to rise, but the strongest rise was observed in Budapest. The average square meter price of used dwellings in Budapest was as high as the average square meter price of new dwellings in Budapest two years ago, and is already significantly higher than the square meter price of new dwellings in smaller settlements. The average square meter price of used dwellings in Budapest rose by 60,000 forints to 350,000 forints in 2016, and this is almost double the price of used dwellings located in cities with county rank. However, considering used dwellings, there are also major differences between smaller settlements. In 2016, in cities without county rank the average square meter price of used dwellings was 137,000 forints, while in the case of the same dwellings in smaller municipalities, the square meter price was less than 71,000 forints. Outside of Budapest, there is no longer such a great difference between the average square meter price of new dwellings, but the average square meter price of 461,000 forints seen in the capital in 2016 can be deemed extremely high (Chart 16).

**Considering average square meter prices, there are major regional differences.** The average square meter price of used dwellings increased during 2016 both in a breakdown by regions and by settlement types in all regions of the country, except for the municipalities of the South Transdanubian region. The increase was the largest in Budapest: following a 21 per cent annual dynamics, by the end of 2016 the specific price of used dwellings amounted to 350,000 forints. In the cities with county rank, the average square meter price increased by 11 per cent during the year, and rose by 6 per cent in other cities, while it only increased by 3 per cent in the municipalities. The previously observed correlation, namely that the increase was greater in settlement types and in regions where average square meter prices were originally higher, is still true (Chart 17).

#### BOX 2: ANALYSIS OF THE BUDAPEST NEW HOUSING MARKET USING MICRO-LEVEL DATA



Source: ELTINGA - House Report



Average square metre price of free dwellings HUF thousand per cent 40 1600 1400 35 1200 30 25 1000 800 20 600 15 400 10 5 200 0 0 2016 Q2 2016 Q3 2016 Q4 2016 Q2 2016 Q3 2016 Q4 2017 Q1 2016 Q2 2016 Q3 2016 Q4 2016 Q2 2016 Q3 2016 Q4 2017 Q1 2016 Q1 2016 Q1 2017 Q1 <u>0</u>1 8 2016 Q1 2017 2016 Up to 40 sq meter 40-60 sq meter 60-100 sa meter Over 100 sa meter Average price per square meter ---Annual growth (RHS) Source: ELTINGA - House Report

Based on construction permits issued, the number of residential property constructions grew significantly over 2016. Demand for new dwellings rose significantly during the year, as the joint result of a number of factors: households have postponed their housing investments since the crisis, but in an improving income and labour market environment these became timely again, and the accessibility of the extended HPS (Home Purchase Subsidy Scheme for Families) – favourable in particular for the purchase and construction of new dwellings – gave also a further impetus to demand for new dwellings.

Newly constructed residential properties may be reserved or purchased before the completion of the dwellings, and thus these dwellings enter the supply side of the housing market before completion. Therefore, projects still under construction are able to reduce the pressure from the demand side, which has major effect on the housing market, in addition to the major rise in prices observed in Budapest.

The database of Eltinga Research Centre made available for the MNB contains the dwelling level data of new housing projects in Budapest. All information regarding the location, features and price of dwelling are available. As a result of data collection with quarterly frequency, the date of completion and sale of the Budapest real estate projects can be seen, the data show which dwellings are sold the soonest and the quarterly change in supply prices, furthermore the selling time of the individual dwelling types can also be estimated.

In Budapest, 60 per cent of free dwellings – nearly 3,500 dwellings – not yet sold at the beginning of 2017 will be completed in 2018. The relative low number of projects to be completed in 2019 may be explained by the discontinuance of the 5 per cent VAT rate planned for the end of 2019, due to which projects may become risky for the contractors – if construction or sale cannot be accomplished according to the plans, they will be completed only in 2020.

Housing projects are concentrated within Budapest: the most new dwellings are offered for sale in District 13 (32 per cent of new dwellings are built here) and in District 11 (19 per cent). One quarter of new dwellings are built in Districts 8, 9 and 14, and thus these five districts cover three fourths of new dwelling supply.



Two-room dwellings are the most popular among both offered and purchased properties: in 2016, 36 per cent of the sold properties had this division. Accordingly, the demand for 40-60 square meter dwellings is the largest and 40 per cent of sold properties fall within this category. The share of properties below 40 square meters among dwellings sold in the second half of 2016 was greater than their share in supplied dwellings, indicating that the demand for this category is higher than supply. The expected sale time of properties of the most popular size with medium floorspace has increased since mid-2016, which can be viewed as a reduction in demand pressure.

The average square meter price of free dwellings below 100 square meters showed an upward trend in 2016. In response to demand, the supply price of dwellings below 40 square meters showed the largest rise in price: unit price of the smallest

dwellings was in 2017 Q1 by 38 per cent more than in 2016 Q1, thus – considering also reservations – the average square meter price of new dwellings in Budapest amounts to nearly 455,000 forints. After a 18 per cent rise, the unit price of the most popular dwellings of 40-60 square meters was 575,000 forints, while the unit price of 60-100 square meters was 780,000 forints at the beginning of 2017. However, the average square meter price of the most popular dwellings with a floorspace of 40-60 square meters shows major heterogeneity by districts. Average values of districts where at least 10 dwellings are offered range between 485,000 and 952,000 forints.

Overall, new housing projects increased in Budapest in 2016, but this followed the increased demand with a delay, and thus price pressure could not be mitigated. With the scheduled completion of projects, the forward-looking supply will peak in 2018, but due to reservations these dwellings are already present in the supply. The dominant position of sellers may be reduced with the increase of expected sale time and the rise in supply, which will reduce price pressure, so much so that the rise in square meter prices so far leaves little room for further growth.



Chart 18: Changes in nominal house prices on a one-year and three-year time horizon in a European comparison

#### Source: BIS, MNB.

#### **3.2.** International comparison

The short-term rise in Hungarian house prices has been among the highest in a European comparison. In 2016 Q3, house prices in Hungary appreciated by 15 per cent over the course of one year, and by nearly 25.7 per cent over the course of three years (Chart 18). Thus, changes in Hungarian house prices on a one-year horizon are regarded as the highest among European countries, but higher price increase can be observed in four other countries over a three-year horizon. All of this can be attributed largely to the fact that Hungarian house prices dipped significantly and for a sustained period in the aftermath of the crisis, and hence the current upward trend cannot necessarily be deemed outstanding.



#### Chart 19: House price developments in an international comparison, 2008 average = 100%

Source: BIS, MNB.

Chart 20: Development of nominal housing prices in the European capitals and nationally between 2013 Q2 and 2016



Note: Change in prices based on pure price changes: Hungary, Romania, Norway, Lithuania, Slovenia, Croatia. In the case of other countries, based on average house price or average m<sup>2</sup> price. Source: BIS. MNB.

House prices are still below pre-crisis levels in many European countries. On average, in 2016 Q3 house prices were as high as in 2008 in the Eurozone countries. Considering the Visegrad countries, in the Czech Republic house price appreciation of 6.8 per cent was seen, while in Poland and in Slovakia prices deprecated by 7.2 and 6.7 per cent compared to 2008. In Q3, Hungarian house prices also exceeded the average of 2008 by nearly 10 per cent. Among the European countries under review, Austria and Germany are notable based on the long-standing continuous increase in house prices. House prices have appreciated in Germany by 26.5 per cent since 2008 Q1 and rose to a larger degree, by 57.3 per cent in Austria during the same period. However, there are several European countries where the pre-crisis house price appreciation was followed by a sudden dip. After 2008, house prices fell by nearly 50 per cent in Ireland, although prices somewhat adjusted after 2013, while in Spain a reduction by 29.4 per cent was seen compared to 2008 (Chart 19).

The difference between capital and rural house prices is also considerable at the European level. House prices in the capital tend to exceed the national house price increase in European countries where the increase of capital residential real estate prices can be observed. At the same time, the national reduction of house prices is accompanied by a single capital house price reduction of a greater degree in many countries. Based on this, we can conclude that house prices at the national level - in parallel with the regional heterogeneity of Hungarian housing market - show greater volatility in the capitals compared to the given countries as a whole. In addition to Hungary, the United Kingdom is outstanding amongst the European countries. In London, house price appreciation of 47 per cent can be observed since 2013 Q2, which is nearly double the national house price increase (Chart 20).

## 4. FEATURES OF THE RESIDENTIAL MORTGAGE LOAN MARKET

Housing affordability from loans deteriorated in 2016 H2 even despite the decreasing financing costs and increasing income, which is attributable to the rising house prices, although its level is still favourable based on the HAI index. In Budapest, however, the high house price level significantly lowers housing affordability for households. In parallel with the continuous increase in demand, the volume of newly disbursed loans also increased, with both the amount and share of new housing loans rising. The role of loans also rose within the market transactions. Based on the responses of banks, credit conditions did not change overall, but based on the average increase in interest margins, maturity and payment to income ratios, banks finance the housing objectives of even riskier customers. In the first half of 2017, the easing of credit conditions and an additional increase in demand is expected. Demand – shifting towards fixed interest products – is also supported by the Home Purchase Subsidy Scheme for Families: besides increasing the number of housing purchases, the subsidy also boosted the volume of housing loans granted in 2016.

Chart 21: Distribution of dwellings by tenure status in an international comparison



Note: Based on 2015 figures. Source: Eurostat EU SILC survey.

Chart 22: Volume of new housing loans by interest rate fixation and denomination



Source: MNB

The role of loans in housing purchase has increased. When assessing the Hungarian housing market trends, particular attention must be paid to developments in the mortgage loan market. Ownership of residential properties is typical in Hungary as opposed to renting, although the share within the entire population of those living in rented dwellings grew by 3 percentage points to 14 per cent between 2014 and 2015 (Chart 21). One half of the increase was in attributable to market tenants and one half to social tenants - the operation of National Asset Management Agency also contributed to the increase of the role of social tenements, while the share of those renting on a market basis is still low in international comparison (5 per cent as compared to the EU average of 20 per cent). According to the most recent annual Eurostat survey, in Hungary the rate of home ownership is the 5th highest in the EU after Romania, Croatia, Lithuania and Slovakia. Within this, the share of owners with loan is not regarded as outstanding in an international comparison: 19 per cent of the population lives in homes for which a housing loan is not yet fully repaid, while the EU average is 27 per cent. Bank financing has played an increasing role in housing transactions in recent years: 51 per cent of housing market transactions were combined with a loan in 2016, while this figure was 49 per cent in 2015 and 46 per cent in 2014.

The volume of new housing lending grew by 42 per cent in 2016. The volume of housing loans amounted to HUF 251 billion in the second half of the year and amounted to HUF 468 billion in 2016 as a whole (Chart 22). In 2016, the volume of new lending grew by 29 per cent on an annual basis including the free of charge loan refinancing in 2015 and by 42 per cent if this is eliminated. In the upward phase of the lending cycle, between 2002 and 2008 the annual average volume of housing loans granted totalled HUF 660 billion, and loan outflow in 2016 is considerably low than this. The share of fixed interest rate loans within total disbursements continued to increase in the period under



Chart 23: Distribution of housing loan disbursements by loan purpose

Source: MNB.





Note: The red lines indicate the HHI thresholds: Market concentration is low below 1000, moderate between 1000-1800 and high above 1800. Source: MNB.

Chart 25: Changes in credit conditions and demand for housing loans



Note: Time series of lending conditions show the net ratio, i.e. the difference between banks tightening and easing weighted by market share. Source: MNB based on banks' responses.

review: it grew from 56 per cent at the end of 2015 to 59 per cent by the end of 2016.

The share of loans for new homes increased. The structure of housing loan demand showed a change in 2016. The amount of loans disbursed for construction or purchase of new homes amounted to HUF 52 billion during the year, and thus showed a 83 per cent increase on an annual average (Chart 23), which is in line with the start of new housing projects. Within the total newly disbursed loans, the share of housing loans thus rose from 8 per cent at the end of 2015 to 16 per cent in 2016 Q4. Housing loan demand for new homes grew to a greater degree from Q2 compared to other housing loan purposes, which correlates with the start of the Home Purchase Subsidy Scheme for Families with new conditions<sup>5</sup> in February 2016. Within the scope of the support programme, non-refundable grants with a value of HUF 66 billion were disbursed during the year, of which HUF 32 billion was for new home construction, and HUF 10 billion was for new home purchases. Support was used for the purchase of used dwellings in a value of HUF 23 billion, while for the extension of existing dwellings in value of nearly HUF 1 billion. In addition to this, borrowing related to the HPS amounted to an additional HF 72 billion for the year as a whole, 29 per cent of which represented the volume of maximum HUF 10 million preferential loan contracts that can be granted alongside the non-refundable grant of HUF 10 million.

The bank concentration of loan disbursements decreased by the end of 2016. Concentration on the new housing loan market rose in 2016 Q1, and then after remaining unchanged for six months it decreased to the 2015 year-end level during the last quarter. The aggregate market share of the three largest banks fell from 67 per cent at the middle of the year to 62 per cent (Chart 24). The Hirshman– Herfindahl-index considering the market as a whole also fell in the last quarter, thus moving away from the high threshold of market concentration. The decline in concentration can be explained by the market expansion of large banks (beyond the three market leaders).

**Demand steadily decreased with unchanged credit conditions.** Based on the responses of banks taking part in the Lending Survey, in 2016 H2 the banks' conditions for accessing housing loans did not ease significantly (Chart 25). However, considering partial conditions, banks reported a reduction in margins and the fees charged for loan

<sup>&</sup>lt;sup>5</sup> Most important new HPS conditions are: for used dwellings the amount of support is not subject to the floorspace of the dwelling; for new dwellings preferential loan can be taken out even for properties over 30 million forints in value, and it is not necessary to sell pre-owned homes, and the comfort requirements have been also eased.



Note: 3-month smoothed APR values, and 3-month smoothed margins above APR. In the case of housing loans with variable interest or interest fixed for at least 1 year the 3-months BUBOR, while in case of housing loans fixed for over one year the relevant margin above IRS. Source: MNB.





Source: MNB.

Chart 28: Average initial maturity and LTV ratio of new housing loans



Note: Since 2011, the LTV ratio is determined based on the collateral's market value, and was determined based on the mortgage lending value prior to 2011. Source: MNB.

disbursement, as well as the easing of LTV ratio, while according to the survey, additional easing is planned for 2017 H1. Market share goals and housing market trends pointed towards the easing of the conditions of accessing loans over the entire year – the easing planned for 2017 H1 may be also driven by the improvement in customers' creditworthiness based on the banks' responses. With conditions remaining unchanged, a wide range of banks perceived a recovery in housing loan demand during the year, and the continuance of this trend is also expected for 2017 H1.

The rise in housing loan spreads is partially explained by the extension of the scope of parties obtaining financing. The APR on housing loans fell in 2016. However, changes in the average smoothed APR values of variable and fixed rate loans varied: while in the case of newly disbursed variable rate loans (or loans fixed for at least one year) it decreased by 0.6 percentage point, in the case of fixed rate loans (fixed for over one year) the decline amounted to 0.2 percentage point (Chart 26). Despite this, interest rate spreads increased in the period under review: the smoothed spread of variable rate loans over the 3-month BUBOR rose slightly, advancing by 0.1 percentage point to 3.6 percentage points, while the smoothed margin of fixed rate loans above IRS corresponding to the period of fixation - rose by 0.3 percentage point to 4.9 percentage points. The interest rate spread increase during the year is partially explained by banks' increasing risk appetite, as a result of which they financed riskier customers. Considering the distribution of interest rate spreads it is visible that, while 70 per cent of variable rate loans is below 3.5 percentage point, only 27 per cent of fixed rate loan fall in this interval (Chart 27).

Average term of newly disbursed loans has increased. Nonprice conditions on new loans eased during 2016. Over one year, the average duration of new housing loans rose by 1.6 months to 15.9 months, continuing the upward trend that started in 2014 (Chart 28). The average LTV of newly contracted housing loans dropped by 3 percentage points over the year, reaching 56 per cent in Q4. The decline is an adjustment of the increase due to loan refinancing in 2015, with a large volume of this attributable to FX conversion.



# Chart 29: Distribution of the number of new loans by PTI value

Source: MNB.

Chart 30: Housing Affordability Index (HAI)



Note: HAI shows how many times the income of a household with two average wages covers the income necessary for the purchase of an average (65  $m^2$ ) dwelling with a loan. Parameters of loan product are except for the interest rate throughout unchanged. LTV = 70%, PTI = 30%, maturity= 15 year.

Source: MNB.

The average payment-to-income ratio rose. The average payment-to-income ratio (PTI) values of newly granted housing loans rose from 27 per cent to 28.3 per cent in 2016, which also reflects the increase in banks' risk appetite (Chart 29). In conjunction with this, the debt cap rules which entered into force at the beginning of 2015 do not hinder the prudential recovery of residential lending, as only a small portion of concluded contracts and disbursed volumes falls within the proximity of the indicator's threshold. The ratio of PTI values above 40 per cent was 17 per cent on contract basis and 22 per cent on volume basis.

Housing affordability from loans is hampered by the sharp house price appreciation in Budapest. The Housing Affordability Index (HAI) was low before the crisis compared to its current level: compared to their income, households must undertake high repayments when purchasing a home with a loan, i.e. riskier loans had been disbursed. As opposed to this, purchasing a home with a loan has been regarded as affordable since 2012 considering the income of an average two-earner household (Chart 30). The national average shows significant regional differences: due to the strong house price appreciation in Budapest since 2014, the HAI decreased to nearly 1 by the end of 2016, meaning that the income of a two-earner household is just sufficient for the purchase of a 65 m<sup>2</sup> dwelling with loan. Notwithstanding, the affordability of dwellings in Budapest is still better than it was before 2008, which is attributable partially to the increase in households' income and partially to the low interest environment. The national average is still much higher, i.e. except for the home purchases in Budapest, buying a home with a loan is more affordable for average households.

## 5. CYCLICAL POSITION OF HUNGARIAN HOUSING MARKET

Although Hungarian house prices exceeded the pre-crisis level in nominal terms during 2016, they are still below that level in real terms. Despite the continuous increase, the national average of house prices are still lower than the level justified by macroeconomic fundamentals. It is important to note that – at the national level – the upswing in the cycle does not fundamentally mean a deterioration in equilibrium, but rather its recovery. According to our forecast, house price appreciation may continue in 2017 H1, but with slower growth than in 2016. The strong regional heterogeneity of Hungarian housing market, and within that the extreme increase in house prices in Budapest, underlines the need to closely monitor the market in Hungary's capital.

#### Chart 31: Nominal and real MNB house price indices nationally and for Budapest



Source: MNB.

Chart 32: Deviation of house prices from the level justified by fundamentals<sup>6</sup>



Source: MNB.

The real level of house prices is below the 2008 level on a national average. The aggregated nominal MNB house price index was already higher in 2016 than in 2008, but the same is not true for the real house price level. The aggregated real MNB house price index is 10 per cent lower than the level measured in 2008, meaning that, both on a national average and in real terms, Hungarian house prices declined from 2008 until 2014 to a greater degree than the upswing seen in the past three years of recovery on the housing market. However, as a result of the extremely rapid increases, house prices in Budapest are above the pre-crisis level, both in real and in nominal terms. The nominal MNB house price index for Budapest reached the 2008 level by the beginning of 2015 and is currently 45 per cent higher than this level, while the real MNB house price index for Budapest reached the 2008 level by 2016, and at the end of the year it was 15 per cent higher than that (Chart 31). Cyclical changes in the housing market and in house prices greatly affect financial stability, and thus it is important to monitor the cyclical position of the market.

According to our calculations, the real level of house prices is below the level justified by macroeconomic fundamentals. According to our estimation, both on a national average and in real terms Hungarian house prices are below the equilibrium level justified by macroeconomic fundamentals influencing the housing market (Chart 32). House prices rose in real terms with the ongoing improvement in households' income and labour market position, and thus on a national average, the continuous appreciation of the prices of residential properties cannot be regarded as excessive. The growth rate of house price appreciation decelerated slightly by the end of 2016 with

<sup>&</sup>lt;sup>6</sup> The deviation of house prices from the level justified by fundamentals is quantified based on four methodologies. In the report the minimum, maximum and average values of results delivered by the individual methodologies are published. The four calculation methods are as follows: (1) Percentage deviation of real house prices to disposable income ratio from the average of the indicator calculated between 2001 and 2016. (2) The estimation of long-term equilibrium of Hungarian house prices driven by macroeconomic fundamentals by means on a vector error correction model (VECM). For the detailed methodology see: Tamás Berki – Tibor Szendrei (2017): The cyclical position of house prices – a VECM approach for Hungary, Magyar Nemzeti Bank, OP 126. (3) The estimation of the level of Hungarian house prices driven by macroeconomic fundamentals by means of a dynamic OLS model. (4) Deviation of Hungarian house prices from the equilibrium by means of a structural model used for forecasting house prices. For more details, see: Magyar Nemzeti Bank: Financial Stability Report, October 2016, Box 1.



# Chart 33: Short-term forecast of annual house price dynamics

Source: MNB.



-10 -10 -20 -20 -30 -30 2006 2008 2009 2010 2012 2013 2003 2004 2005 2007 2014 2015 2002 2011 201 Real house price index/real PDI difference from its long run average + Real house price index/real PDI difference from its long run average in Budapest

Source: MNB.

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the trends in Budapest and the end of house price appreciation in the municipalities as factors in the background. The cyclical position of the housing market could close following a further increase in prices and with unchanged fundamentals.

According to our forecast, Hungarian house prices may continue to rise in 2017 H1, but we expect a slowdown in the growth rate. Based on our estimation, the short-term development of house prices is closely related to real income trends, financing conditions, as well as changes in permanent unemployment. Over the short term, we expect gradual growth in the volume of home constructions with the persistence of favourable income trends, further improvement in the labour market and a permanently low financing environment. Based on the forecast using the estimated correlations, real house prices may continue to appreciate over the course of this year, but due to the proximity of house prices to the long-term trend, the dynamics of the growth in prices may slow over the coming quarters: overall, following the real house price appreciation of 14.1 per cent seen in the previous year we expect appreciation of 10.6 per cent in real house prices and appreciation of 12.3 per cent in nominal house prices in the first half of 2017 on an annual basis (Chart 33).

The price-to-income ratio in Budapest exceeded the longterm average in 2016. While Hungarian house prices are below the level justified by macroeconomic fundamentals, the extreme rise in Budapest house prices must be monitored more closely. The growth rate of house prices in Budapest has exceeded the growth rate of households' income for several years. As a result, the so-called house price-to-income ratio calculated for Budapest is already above the long-term average calculated between 2001 and 2016, while this is not true for the national average (Chart 34). On the Budapest housing market, the risk of excessive house price appreciation beyond the level justified by fundamentals arises, and therefore the ongoing monitoring of the Budapest housing market is of key importance.

HOUSING MARKET REPORT • MAY 2017

# Count István Széchenyi

(21 September 1791 – 8 April 1860)

Politician, writer, economist, minister for transport in the Batthyány government whom Lajos Kossuth referred to as 'the greatest Hungarian'. His father, Count Ferenc Széchényi established the Hungarian National Museum and Library; his mother, Julianna Festetich was the daughter of Count György Festetich, the founder of Georgikon, an institution for the teaching of agricultural sciences.

With his ideas – whose message remains relevant even today – and his activities both as a writer and a politician, István Széchenyi laid the foundation for modern Hungary. He is one of the most eminent and significant figures in Hungarian politics whose name is associated with reforms in the Hungarian economy, transportation and sports. He is also known as the founder and eponym of numerous public benefit institutions, a traveller all across Europe and an explorer of England as well as the champion of economic and political development at the time. István Széchenyi recognised that Hungary needed reforms in order to rise, and considered paving the way for a Hungary set on the path of industrialisation and embourgeoisement to be his calling in life.

Published in 1830, his Credit outlined the embourgeoisement of Hungary and summarised its economic and social programme. Count Széchenyi intended this writing to make the nobility aware of the importance of the country's desperate need for a social and economic transformation. Another work of his, Stádium [Stage of Development] (1833) listed the cornerstones of his reform programme in 12 points, including the voluntary and compulsory liberation of serfs; the abrogation of avicitas (inalienable status of noble property); the right of possession for the peasantry; and the freedom of industry and commerce. This work of Széchenyi already conveyed the idea of equality before the law and the general and proportionate sharing of taxation.

After the revolution in 1848 István Széchenyi joined the Batthyány government and as minister embarked vigorously on implementing his transportation programme.

## HOUSING MARKET REPORT

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