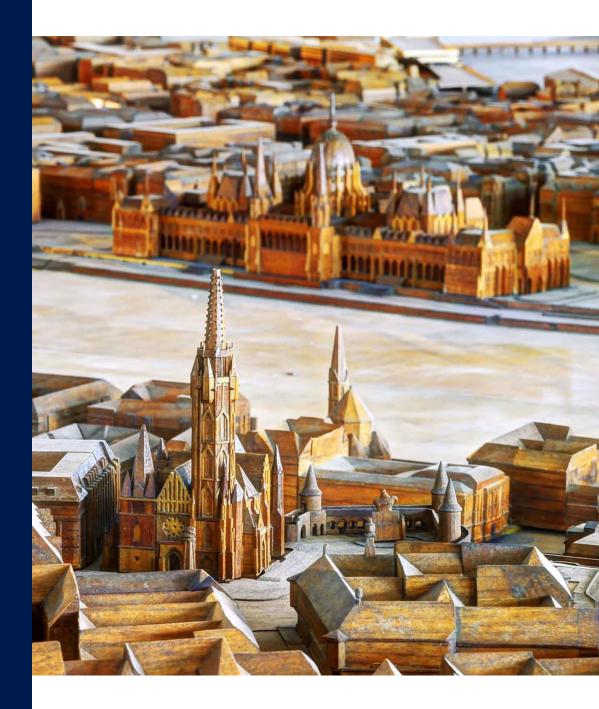


HOUSING MARKET REPORT



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

Count István Széchenyi



HOUSING MARKET REPORT



Housing Market Report

(November 2018)

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The housing market represents a key area at the level of individual economic operators (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 of 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 its financial position, and also influence the portfolio, profitability and lending activity of financial institutions through the stock of mortgage loan collateral.

The '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 regularly presents 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 factors 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.¹ 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 developments primarily relies on the information provided by the Hungarian Central Statistical Office. Information on changes in housing market turnover and housing prices can be divided 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 residential mortgage loan market primarily relies on the balance sheet data of credit institutions and the interest statistics collected by the MNB; information on the qualitative features of lending developments collected in the Lending Survey² is also used.

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

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

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1. EXECUTIVE SUMMARY

The upturn on the Hungarian housing market continued in 2018 H1, as reflected both in the dynamic increase in house prices and the rising number of transactions. On a national average, domestic house prices rose by 16.2 per cent on an annual basis at the end of Q2, according to the values of the MNB's aggregate house price index. At the same time, in real terms, house prices advanced by 12.7 per cent, while according to our forecasts, an increase of 11.5 per cent can be expected for 2018 as a whole. Despite the steady increase, on a national average house prices remain below the level justified by macroeconomic fundamentals, but in Budapest the risk of overvaluation has increased, and consequently careful monitoring of market developments in the capital has become even more important. The risks are mitigated by the fact that, for the time being, there is no indication that credit institutions in the capital are shifting towards financing at a higher level of risk tolerance.

The Hungarian housing market shows a strong level of spatial heterogeneity, and the disparities between the individual settlement types continued to increase in 2018 H1. Compared to a rate of 15.6 per cent at the end of 2017, the annual nominal growth rate of house prices in Budapest had accelerated to 20.2 per cent by 2018 Q2. During the same period, in other cities annual house price growth rose from 13.3 per cent at the end of 2017 to 16.3 per cent, while in villages it slowed down from 16.9 per cent to 11.8 per cent. In light of these developments, the price gap between smaller settlements and the capital widened even more. The average square metre prices registered in villages now reach only 22 per cent of the average values in the capital, while the price level registered in other cities reaches 37 per cent; by contrast, in 2012, when the smallest price differences were registered, these values were 47 and 62 per cent, respectively. According to preliminary calculations the annual growth rate of house prices accelerated once again to reach 23.9 per cent in Budapest during 2018 Q3, while as a national average growth of 16 per cent was registered at the same time.

In the domestic housing market, all factors are pointing towards quickening demand. The improving financial position of the household sector and the intense wage outflow also substantially boosted the savings of this sector, which – along with the long-term income prospects – paints a more positive picture of prospective demand conditions in the housing market. In 2018, interest in purchasing and intentions to renovate started to increase again among households. In 2018 H1, credit institutions' newly extended housing loans increased by almost 40 per cent on an annual basis, but loans for housing are also starting to play an increasingly dominant role within consumer loans. Interest rate spreads narrowed significantly in the period under review, and as a result the average spread on loans with fixed interest rates has reached those for loans with variable rate. Although the volume of newly issued loans accounts for 80 per cent of the corresponding value from 2008, there is still room for further expansion in housing lending. Calculated at real value, current loan volumes are still lower, while in terms of the number of transactions, there is even a decrease in housing loans – with higher average contract size – compared to 2008. Domestic housing credit-to-GDP can be viewed as quite low by international standards. The debt cap rules applied by the MNB ensure the expansion of lending in a sound structure, while in an effort to mitigate the interest risk of households and to encourage further mortgage loans with fixed interest rates, from October 2018 the central bank introduced a payment-to-income regulation differentiated by interest rate fixation period.

The supply side of the domestic housing market still cannot keep up the pace with the strong demand, which is exemplified by the fact that more and more new dwellings under development in the capital are sold prior to completion; in 2018 Q3 this ratio was 68 per cent. On the other hand, market participants reported practically inexhaustible demand for new dwellings, and early demand has also appeared in the market. During 2018 H1, 6,517 new homes were completed, which exceeds the value registered in the same period of the previous year by 30 per cent, but the number of building permissions issued dropped by 9 per cent in the same period. As a result, the annual renewal rate of the domestic housing stock amounted to 0.36 per cent at the end of Q2. A high level of regional heterogeneity can be seen, as the latter figure is 0.9 per cent in Central Hungary, while in Northern Hungary it is only 0.1 per cent. On the whole, however, the renewal rate is low compared to the countries of the region. The main causes may be the tight labour and material capacities of the construction industry and the relatively low productivity of the sector, while certain interviewed experts were of the opinion that the lack of the use of efficient technologies may also play a role.

In Budapest, housing completions may peak in 2019. We project the completion of 7,400 new homes in 2018 and 15,700 new homes in 2019. However, supply may dwindle from 2020, owing to the termination of the preferential VAT rate, and this assumption is confirmed by the uniform opinion of market participants. We expect the completion of a total of 3,000 homes for

this year. 60 per cent of projects are falling behind owing to tight capacities, here with part of the large number of planned completions in 2019 may shift to 2020.

On the whole, all of the factors in the domestic housing market point to the continuation of strong demand, while there are several factors working against a healthy upswing in housing loans. The increase in house prices is not yet excessive at the national level, but the market in Budapest must be closely monitored to ensure that the increase in house prices beyond what is justified by fundamentals is not coupled with excessive risk tolerance in lending.

2. MACROECONOMIC ENVIRONMENT

This year, the upswing in demand on the housing market has continued, and the underlying developments in income and assets still paint a favourable picture. The underlying wage developments determining current incomes have further strengthened, and the financial position of households has also improved, due to a propensity to save that is high by historical standards. In the meantime, the extension of housing loans also continued at a brisk pace in 2018 H1. Along with the favourable long-term income prospects, this paints a positive picture of prospective demand conditions in the housing market. In response to these demand conditions, the housing market exhibits continued growth, although the adjustment of supply in the sector is still slower compared to the previous real estate market cycle, which can be primarily explained by the difficulties in obtaining skilled labour capacities. The growth rate of house prices continues to exceed the rate of the increase measured in housing construction costs, and thus although the supply price margin has decreased somewhat in recent quarters, it still has an adverse impact on the propensity for property development. The strong wage outflow and the scarce labour capacities strengthening this phenomenon, as well as the accelerating increase of construction costs, may mitigate this incentive in the future.

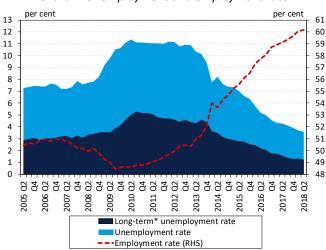
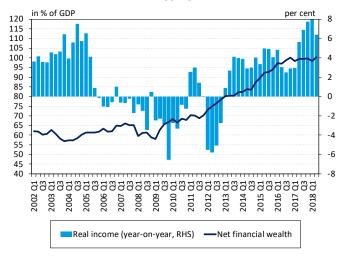


Chart 1: Unemployment and employment rate

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



Source: HCSO, MNB

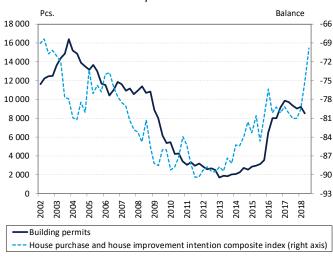
2.1. Domestic housing market demand

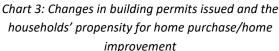
The upswing on the domestic housing market continued into 2018 H1. On the demand side, this was supported by the steady improvement in household income developments, as well as the favourable financing environment, and to a significant extent, by the increasing utilisation of government programmes that stimulate home construction. As a result of the burgeoning demand, house prices continue to rise, and in parallel with this, further increases were also registered in households' disposable income and in the volume of new loans extended for housing purposes.

The favourable situation on the labour market is supporting demand in the housing market. Housing market trends are fundamentally determined by labour market prospects, and therefore the steady increase in labour demand and in parallel with this, the decline in unemployment, support households' propensity to invest by improving longer-term income prospects. Increases in real income were strengthened by the improving employment rates and strong wage outflows along with the low tax burdens in recent years, stemming from the substantial increase in the minimum wage and the guaranteed wage minimum, which lay the foundations for improvements in the demand side of the housing market (Chart 1).

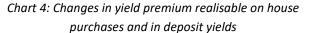
Households' favourable income and financial position has a stimulating effect on the housing market over the long term. In past quarters, households' disposable income grew dynamically, with their financial assets reaching a historical high, owing to the increase in savings (Chart 2). As a result, the income outlook which determines households' investment decisions has improved substantially. Consumption growth remains lower than the rate of growth in household's real income, which can be explained by the accumulation of savings by households for home

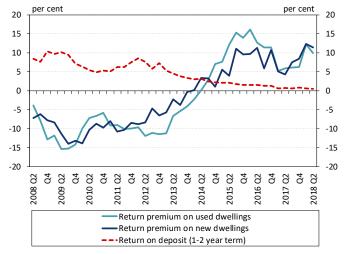
Note: * Unemployed for more than 1 year. Source: HCSO





Source: HCSO, MNB





Note: The yield premium realisable on housing is the difference between the annual change of the nominal house price index and the reference yield of one-year government securities.

Source: Government Debt Management Agency, MNB

construction and home improvement, as well as by the increasing volume of household investments. The increase in savings for housing purposes, coupled with strong underlying wage developments and the continuing rise in housing and consumer lending activity, may serve as the basis for the further expansion of the domestic housing market.

In recent quarters, intention for home buying and home improvement has received new momentum. This year, the ratio of households intending to purchase or improve homes in the next 12 months has risen substantially, after stagnating last year. The intention of home improvement is becoming more and more common among households, but the propensity to purchase homes has also increased significantly, which indicates further strengthening of demand looking forward (Chart 3).

The low interest rate environment and dynamic increases in house prices make residential properties an attractive investment, due to the favourable returns realisable. As the housing market cycle progressed, a strong surge was seen initially in the market for used properties and then later in the market for newly built properties, while house prices rose significantly. The dynamic appreciation of house prices has continued since then, offering a high realisable return in the low interest rate environment (Chart 4). As it is higher than the yield realisable on financial assets, the high yield realisable merely from price appreciation and from rent has resulted in strengthening of the market for used properties and further growth in market supply for new properties. In addition, the low interest rate environment and the improvement in price conditions for housing loans in 2018 H1 further supports housing market demand by boosting housing lending.

The emergence of adjustment on the supply side enables investment demand to appear in the market for new properties, as well as in the market for used homes. The steadily low interest rate environment may sustain investors' interest in the housing market. As a result of the favourable financing environment and the high yield premium realisable on home purchases, homes are currently purchased primarily as investments in Budapest. However, by the rising of the housing market cycle, the number of house purchases with the aim of home creation has also increased, which shows that – while investment continues to be an important aim – most housing purchases in the market are still conducted for various purposes related to residential use. The picture is further nuanced when we consider that in many cases investment purpose

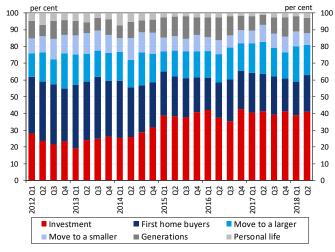
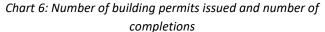
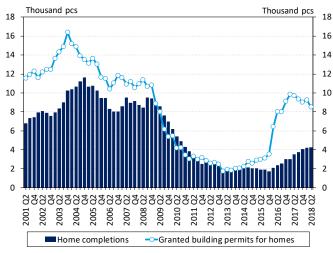


Chart 5: Distribution of home buyers in Budapest by the purpose of home purchase

Source: Duna House





Note: Seasonally adjusted data.

Source: HCSO, MNB.

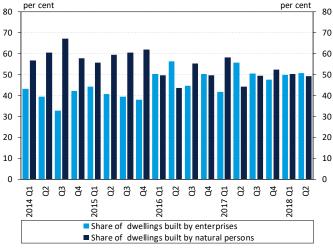


Chart 7: Distribution of home completions by builder

Source: HCSO

means that customers purchase a dwelling in university cities for further education of their children (Chart 5).

2.2. Domestic housing market supply

In line with the favourable demand conditions, housing market supply has responded more and more robustly to the steady upturn in demand for new homes, and thus we have seen significant growth in house construction in the domestic housing market (Chart 6). However, the pace of the upswing in the housing market may be strongly influenced by the limited construction industry capacities and thus the availability of skilled labour. Owing to the construction capacity needs of simultaneous investment cycles (public infrastructure projects, capacity expansion projects in the vehicle and chemical industries), a lack of skilled labour continues to be a significant problem in the construction industry and thus in the current housing market cycle. Consequently, the supply of skilled labour increasingly represents an effective constraint to boosting production in the construction industry. Therefore, the renewal rate of the domestic housing stock is rather low even with the upturn (see Box 2). House price appreciation and the favourable level of realisable yields still provide supportive conditions for real estate developers and for supply.

On the supply side, several factors support the upswing, but supply conditions typically respond with a delay in the real estate market. The upturn in the demand side of the housing market and – in parallel with this – the increase in the price level and in the yield realisable from investment in real estate, also entailed a gradual adjustment in supply, resulting in a rise in the volume of residential construction starting from 2016. In 2018, numerous real estate development projects were launched, and the number of completed multi-apartment residential buildings is also expected increase considerably in 2019. However, supplyside obstacles to the housing market recovery remain in place.

In parallel with the upswing in real estate development activity, the share of developers within new residential construction is growing. At the beginning of the current housing market cycle, properties built by natural persons constituted the majority of the stock, but the supply adjustment that evolved as a result of the favourable demand conditions resulted in a sharp increase in the number of properties built by enterprises. While the ratio of natural persons within builders of new properties was over 60 per cent in 2014, almost half of the newly built

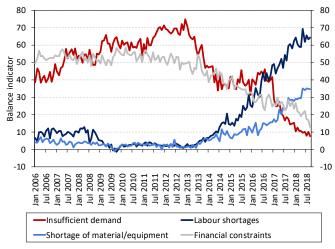


Chart 8: Constraints to construction output



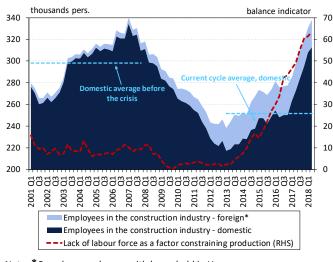
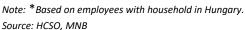


Chart 9: Number of employees in construction



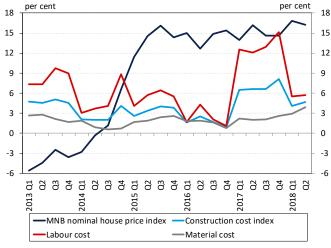


Chart 1: Home construction costs and nominal house prices

Source: HCSO

properties completed this year were built by enterprises (Chart 7).

The shortage of skilled labour and basic materials represents an increasingly effective constraint on the pace of the upturn in the housing market. Along with the increasingly favourable demand faced by construction companies and financing being an issue for a decreasing number of companies, in recent years, it has been an increasingly typical feature of the construction industry that the shortage of labour and basic materials are the main factors hindering production. In terms of the factors hindering production, labour shortage is still the most pronounced problem noted in the responses of the construction companies polled by the European Commission (Chart 8). Despite the burgeoning demand and improving financing conditions, almost 65 per cent of companies experience capacity shortages in the labour force, and almost 35 per cent are faced with shortages of basic materials in their activities (Chart 8). The projected pace of expansion of house construction is thus significantly hindered by these constraints.

A large number of workers previously employed in the construction industry are now employed abroad, contributing to the scarcity of labour market capacities in the industry. Labour shortage was not a constraint at the beginning of the current housing market cycle, but in the recent past it has become one of the most important factors hindering production (Chart 9). Accordingly, considering that during the pre-crisis cycle the number of domestic construction workers was higher by nearly 30,000, labour force is increasingly becoming an effective constraint to the upswing in construction output. Similarly to 2017, a substantial increase has also been registered this year in the number of workers employed in the Hungarian construction industry, which somewhat eases the lack of labour market capacity, but this phenomenon remains a significant constraining factor with regard to the upswing in residential construction.

According to the Hungarian Central Statistical Office indices, increase in construction costs has slowed down this year. In the past quarters, home construction costs rose strongly, while the annual rate of house price appreciation still outstrips the rise in construction costs, which may contribute to supply side adjustment. In 2017, the gap between the construction cost index and the house price index narrowed substantially, which resulted in a decrease in the profitability of residential property developers. As a result of robust wage growth, labour costs for home construction rose significantly in the past period,

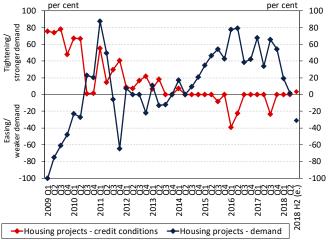


Chart 11: Changes in credit conditions of housing projects

and changes in demand

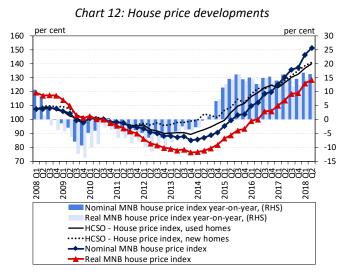
Note: Time series of lending conditions show the net ratio, i.e. the difference between banks tightening and easing, weighted by market share. Source: MNB, based on banks' responses

contributing to the dynamic growth in construction costs (Chart 10). However, the high price appreciation of house prices has remained this year, while the increase in construction costs may have slowed, which could give a new impetus to the willingness of residential real estate development and thus to the continuation of house construction. Looking ahead, the combination of the strong wage growth, the scarcity of skilled labour and rising construction material prices may reduce the profitability of developers, as supply-side adjustment may lead to slower house price appreciation.

Banks report that demand for loans for financing housing projects has stalled. In 2018 H1, the financing banks did not change the credit conditions in case of commercial real estate loans. Hence, standards have not been eased on the whole in this credit segment for an entire year. At the same time, the institutions polled in the Lending Survey anticipated the tightening of lending conditions in H2. Within commercial real estate, in the case of housing projects no change was made in the conditions of obtaining funding, but in this sub-segment no significant change is expected, even looking forward (Chart 11). The rising trend observed since 2014 in demand for loans to finance housing projects has stalled according to the answers of the banks: in the past quarter they already observed no change, and by 2018 H2 one-third of the banks in net terms were expecting a decrease. This latter development may be explained by the expectations related to the drop in investment appetite caused by the restoration of the preferential VAT rate from the beginning of 2020.

3. CURRENT HOUSING MARKET TRENDS

In 2018 H1, the domestic housing market continued to grow, accompanied by strong demand. While the number of transactions increased by roughly 6 per cent, house prices rose by 16 per cent on a national average annually. The robust market demand is well exemplified by the reduction in advertising times and the decrease of the size of a typical bargain. In Budapest, the annual growth rate of house prices has accelerated, reaching 20 per cent at the end of H1, while in Q3 it approached 24 per cent according to preliminary calculations. As a result of the faster increase in house prices in the capital, the gap between the house price level in Budapest and that of smaller settlements grew even wider. Despite the significant increase in prices, house prices still remain below the level justified by macroeconomic fundamentals on a national average, but the risk of overvaluation has increased in Budapest. Considering the above, housing market trends in Budapest need to be monitored even more closely. The supply side of the domestic housing market still cannot keep up the pace with the elevated demand. The number of completions increased significantly in 2018 and 2019, but on the one hand, with the termination of the preferential VAT rate, developers are planning significantly fewer projects starting from 2020, and on the other hand, almost 70 per cent of the homes that are planned or currently under construction have been pre-sold, i.e. they will not increase supply when they are completed. Finally, the current increase in supply results in a low renewal rate at regional level. According to the professionals interviewed, the quality of the housing stock is not adequate, and renewal continues to progress at a slow pace. Reasons for this include the capacity shortages registered in the construction industry and the lower efficiency of the sector in a regional comparison, while the lower equilibrium level of housing construction caused by the decreasing and ageing population may also be a contributing factor.



Note: In the case of house price indices (left-hand scale) the average of 2010 = 100%. Source: HCSO. MNB

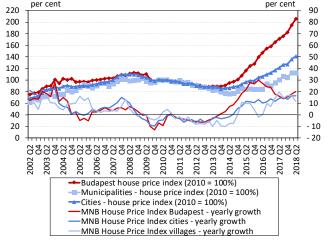


Chart 13: MNB nominal house price index by settlement type

3.1. Domestic housing market developments

In 2018 H1, the level of domestic house prices increased significantly. At the end of 2018 H1, the annual growth rate of the aggregate MNB house price index was 16.2 per cent, representing faster growth compared to the 14.6 per cent rate seen at end-2017. On a national average, real house prices were thus 12.7 per cent higher at the end of 2018 Q2 compared to the same prior-year period. According to the measurements of the Hungarian Central Statistical Office (HCSO), the prices of both new and used homes continued to rise in 2018 H1. The annual growth rate of used properties was 10.6 per cent in the period under review, which is higher than the value of 6.2 per cent registered at the end of the previous year. According to the HCSO the prices of new dwellings rose by 10.4 per cent in the space of one year, which also represents faster growth compared to 2017 (Chart 12). In nominal terms, the level of domestic house prices already exceeds the level measured at the end of 2008 by 40 per cent, but even in real terms it is above the pre-crisis level by 9 per cent. Regarding only the current cycle, the rate of price increase is even higher. Compared to the end of 2013, the level of house prices was 78 per cent higher in nominal terms and 68 per cent higher in real terms at the end of 2018 Q1.

The pace of house price growth in Budapest has accelerated. Considering changes in domestic house prices by settlement type, a picture of increasing heterogeneity can be seen: in the capital and in other cities, where the increase had previously been higher even up to now, price

Source: MNB

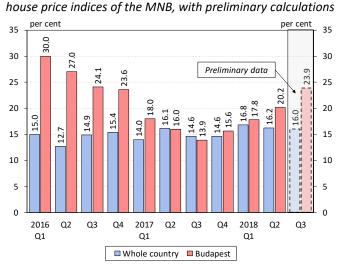
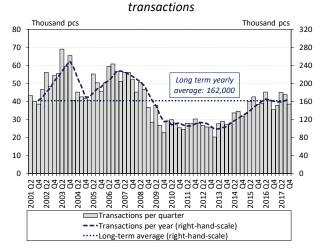


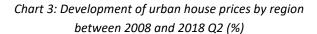
Chart 14: Annual growth rate of aggregate and Budapest

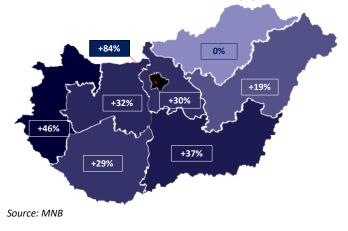
Note: The preliminary national index was calculated on a sample covering 12 per cent of the market turnover, and the preliminary Budapest index on a sample covering 17 per cent of the turnover in the capital. Source: Housing market intermediary database, MNB calculation





Note: Only acquisitions of a title of 50 and 100 per cent to a property are included. According to the figure estimate from 2017 Q3 to 2018 Q2. Long-term average: 2001 Q1–2018 Q2. Source: MNB





appreciation accelerated, while a slowdown was registered in villages. At the end of 2018 H1, the annual nominal growth rate of house prices was 20.2 per cent in Budapest, significantly faster than the 15.6 per cent rate registered for end-2017. On the whole, price appreciation in cities in the countryside also accelerated in 2018. The annual growth rate of urban house prices was 16.3 per cent at the end of Q2, as opposed to 13.3 per cent at the end of 2017. In villages, the growth rate of 16.9 per cent measured at end-2017 had slowed to 11.8 per cent by the end of 2018 H1 (Chart 13). In light of the above, in Budapest the level of house prices is 84 per cent higher in nominal terms and 43 per cent higher in real terms compared to the level measured at the end of 2008. In addition, prices in Budapest have already risen by 131 per cent during the current cycle.

According to preliminary data, house prices continued to increase in 2018 Q3. The housing market intermediary database enables us to review more recent information on the current state of the housing market, one quarter earlier than the publication of the official statistics. According to our preliminary calculations, in 2018 Q3 domestic house prices continued rising both on a national average and in Budapest. According to preliminary data, on a national average, house prices rose 4.1 per cent in nominal terms, corresponding to an annual growth rate of 16 per cent. On a national average, the growth rate of house prices may thus remain more or less unchanged. Besides, according to the preliminary house price index, price appreciation may have accelerated in Budapest in 2018 Q3: house prices rose 5.9 per cent quarterly, representing an annual growth rate of 23.9 per cent (Chart 14).

The number of transactions continued to rise in 2018. At the end of 2018 H1, the number of transactions concluded by private individuals was 168,000, which is 5.8 per cent higher than the corresponding value for the previous year. Consequently, the number of transactions is already slightly above the long-term average, but still falls short substantially of the level registered in the previous cycle, which exceeded 200,000 annual transactions on several occasions (Chart 15). Although to a small extent, the share accounted for by Budapest continued to decrease among transactions, while the role of settlements in the countryside increased. At the beginning of 2018 H1, Budapest accounted for 22 per cent of market turnover, while this ratio was 33 per cent at the beginning of 2015. Over the same period, the share of transactions concluded in villages increased from 20 per cent to 24 per cent.

There are significant regional differences in Hungary in terms of changes in house prices. By 2018 Q2, in nominal terms, the level of house prices had already exceeded the

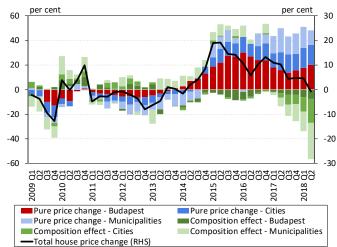
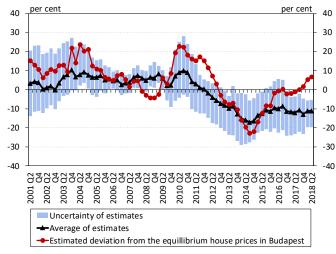


Chart 4: Annual change in the average house price and its components, pure price change and composition effect

Note: Annual growth rates of the MNB's house price indices and those of the composition effect indices. The individual sub-indices would only provide the entire price change in a weighted form. Source: MNB

Chart 5: Deviation of house prices from the estimated level justified by fundamentals, nationally and in Budapest³



Source: MNB

level measured at the end of 2008 in every region in Hungary, but in terms of the extent of the price appreciation substantial regional heterogeneity was seen. The two extreme cases are Budapest and Northern Hungary: while in the case of the former house prices in nominal terms are 84 per cent above the level of 2008, in Northern Hungary urban house prices have stayed at the same level as in 2008. Considering the prices of urban dwellings, a significant increase was also observed between 2008 and 2018 H1 in Western Hungary and Southern Great Plain. While in the case of the former, house prices exceed the price level of the pre-crisis period by 46 per cent, in the latter category the increase is 37 per cent (Chart 16).

In addition to the increase in house prices, the quality of properties bought and sold has been increasingly inferior. On an annual basis, the average price of sold houses already showed a decrease in 2018 Q2. Coupled with the significant increase in house prices, this means that in terms of quality composition the homes sold and purchased are increasingly inferior (in terms of area, condition, age, energy, location), i.e. cheaper. Considering Budapest, it is quite clear that the composition effect index - which shows how the average price of sold homes changes exclusively as a result of a modification in quality composition - usually stayed in the negative range during the current upswing. Therefore, as a result of the price increases in the capital, the traded homes have been of gradually lower quality, and therefore relatively cheaper. This may also be related to the fact that at the time of the cycle it was mainly affluent buyers with significant savings who purchased dwellings of superior quality. In 2018, the composition effect indices showed a decrease both in Budapest and in cities and villages, i.e. demand everywhere shifted towards cheaper dwellings of inferior quality (Chart 17).

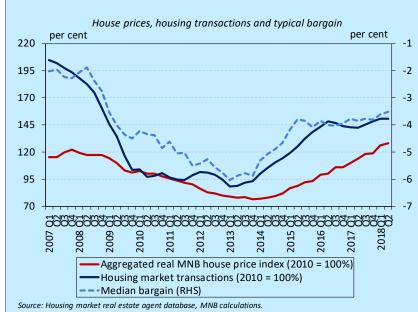
In Budapest, the level of house prices already slightly exceeds the level justified by the macroeconomic fundamentals. In 2018, the upswing on the housing market occurred while the income position of households was improving and the situation of the labour market was favourable. According to our estimation, on a national average, house prices thus remain below the level justified

³ The deviation of house prices from the level justified by fundamentals is quantified based on four methodologies. In the report, we publish the minimum, maximum and average values of the results delivered by the individual methodologies. The four calculation methods are as follows: 1) Percentage deviation of the ratio of real house prices to disposable real income from the average of the indicator calculated between 2001 and 2016. 2) Estimation of the long-term equilibrium of Hungarian house prices driven by macroeconomic fundamentals by means of a vector error correction model frame (VECM). For the detailed methodology see: Tamás Berki – Tibor Szendrei (2017): *The cyclical position of housing prices – a VECM approach for Hungary*, Magyar Nemzeti Bank, OP 126. 3) Estimation of the level of Hungarian house prices driven by macroeconomic fundamentals by means of a dynamic OLS model frame. 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: Housing Market Report, October 2016, Box 1. Deviation of house prices in Budapest from the level justified by fundamentals is quantified by the dynamic OLS model framework; for more details on the methodology, see: Magyar Nemzeti Bank: Financial stability report, May 2017, Box 2.

by the macroeconomic fundamentals. However, in Budapest the level of house prices already slightly exceeds the level justified by the macroeconomic fundamentals (Chart 18). As a result of the excessive rise in house prices, risks may emerge in the banking system, if the latter is coupled with a high volume of mortgage lending and increasing risk appetite. Therefore – especially given the currently strong demand environment – close monitoring of the market in Budapest has become even more important.

BOX 1: THE CYCLICALITY OF BARGAIN AND LIQUIDITY IN THE HOUSING MARKET

In this box, we assess the evolution over time of alternative indicators characterising developments on the housing market, including the behaviour of market participants and property listings. The information obtainable from property listings, such as the amount of time a home remains in the market or changes in list prices, provides considerable information on market conditions. It is a characteristic feature of the expanding phase of the cycle that the sellers see increasingly shorter selling times, which reflects the increased liquidity of the market, while buyers are less and less in a position to negotiate discounts off the published list price, which may indicate the stronger negotiating position of sellers. In the following section, we assess the domestic housing market in terms of how the selling time for residential properties, the list price during the time of advertisement and the room for bargaining have changed, with special regard to the period of upswing in progress since 2014.

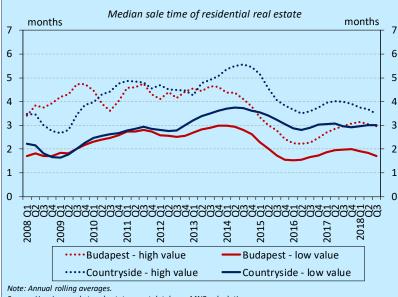


The housing market real estate agent database, which is provided by the largest market actors to the MNB, contains not only the selling price of residential property transactions, but also the first list price advertised, the last list price advertised, the date of the first publication of the advertisement and the date of the transaction. These data enable us to assess the detailed development of three important indicators that provide a good representation of market conditions.⁴ (1) The rate of bargain, which is the difference between the last advertised list price known before the transaction on the one hand and the transaction price on the other hand, expressed as a percentage of the last advertised list price before the transaction. (2)

The advertising time is the difference between the start of the advertisement and the date of the transaction, expressed in months. **(3) Change in list prices** means the difference between the initial advertised list price and the last list price known before the transaction, expressed as a percentage of the initial advertised price.

In 2007, when house prices were still increasing slightly in real terms and the number of transactions in the housing market was also high, the typical bargain registered in the domestic housing market was low, hovering around two per cent. However, from 2009, when market turnover started contracting and prices were gradually decreasing, the rate of a typical negotiated discount suddenly jumped up to above 4–5 per cent. Factors that contributed to the significant increase in the

⁴ The database contains transactions of companies providing intermediary services. Since in the housing market there are a significant number of transactions concluded by private individuals between each other without real estate agents, we therefore add to the conclusions written here the assumption that the characteristics of transactions concluded with the involvement of an agent and those concluded without such involvement are not significantly different from each other.

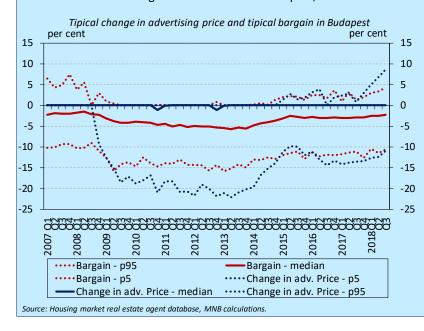


Source: Housing market real estate agent database, MNB calculations.

expanding markets.

negotiated discount may have included an improvement in buyers' bargaining position, or even the lack of adjustment of list prices, i.e. supply was inflexible in a downward direction, while the market environment deteriorated. From 2014, the renewed increase in the number of transactions and the rise in prices was followed by a drop in the rate of negotiated discounts, which typically amounted to 6 per cent at that time. Since 2015, the rate of a typical negotiated discount has been around 4 per cent, which indicates the better position of sellers on the one hand, but still falls short of the value registered at the peak of the latest cycle, in 2007 and 2008. Therefore, the rate of bargain typically responds quickly and strongly to changes in the market environment, both in contracting and

If we assess the time that a residential property typically spends listed on the market, it can be seen quite well that regardless of the cycle, typical homes of smaller value are sold faster than those of high value,⁵ while typically we can talk about a faster market in the capital. From 2009, i.e. from the starting date of the downturn on the domestic housing market, the advertising time of properties, i.e. the time spent on the market, gradually started increasing. The latter was especially registered for dwellings of lower value located in the countryside, where the median selling time rose from the value of around 2 months to about 3 to 4 months. Beginning with the market turnaround in 2014, typical selling times started decreasing rapidly. In Budapest, during a period of two years, the median selling time of properties worth HUF 25 million or higher decreased from 4 to 5 months to 2 months; moreover, the median selling time of high value properties in Budapest already dropped below the level of properties of lower value located in the countryside, which is a good indication of the significant demand that overwhelmed the market in Budapest at the beginning of the cycle. In addition, the time spent on the market for dwellings of lower value in Budapest, i.e. those worth less than HUF 25 million, decreased from 3 to 1.5

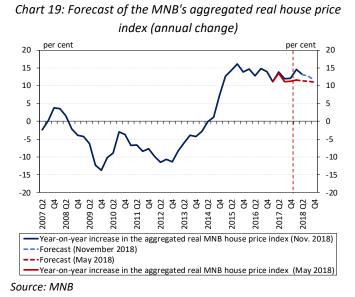


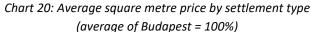
months by the middle of 2015. After a small increase, this latter figure once again remained at a historic low in 2018 Q3, indicating that dwellings in Budapest worth less than HUF 25 million are currently especially marketable and in demand. Typical selling times have also decreased in every category in 2018, which reflects strong demands and market liquidity. If we assess the time spent on the market by property type, we can see that the value of detached houses has not decreased nearly to such an extent as that of apartments in prefabricated blocks or in non-prefabricated condominium buildings, i.e. in the current cycle it is rather the interest in properties with multiple apartments that increased.

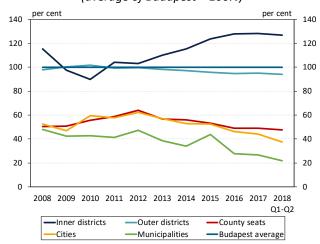
⁵ In this analysis the category of high value properties means those worth more than HUF 25 million in Budapest or more than HUF 15 million in the countryside. These prices roughly delimit the upper 25 per cent of the distribution.

Assessing the changes in the bargain and in the list price in Budapest, we can identify especially well those periods in between cycles where there is strong demand. Although in the case of a rising market the median value of bargain also dropped spectacularly (from 5.6 to 3.2 per cent in 2014), it is even more conspicuous that a negotiated "premium" appears in the market, i.e. a property is sold at a price higher than the last advertised list price known before the transaction. This latter phenomenon already appeared in the current cycle at the end of 2014, and by 2018 Q3 we already see a situation where in the case of 5 per cent of all sale and purchase transactions the selling price was at least 4.2 per cent higher compared to the latest target price. These factors indicate a tight market and a very dominant position of sellers, who can take advantage of their negotiating power by conducting auctions instead of bargaining on the price of their property. By way of comparison, in 2007 in at least 5 per cent of all transactions there were auctions driving up prices by at least 5 to 7 per cent in addition to the advertised price. The changing of the advertised price is more volatile than price bargains. Although typically sellers will not change the list price during the term of the advertisement (the median change in the advertised price is zero, regardless of the cycle), after the market turnaround in 2014 individual advertisers had to decrease their target prices to a much lower extent, by 2018 Q3 5 per cent of sellers raised their target prices by at least 8.7 per cent during the time of advertising, which is a historical peak and implies strong optimism in the market.

Looking at the three indicators under review, we can identify how strong demand is in the housing market at present, and how favourable the resultant bargaining position of sellers is. The median value of negotiated discounts is 2.3 per cent in Budapest, which is the lowest in the current cycle, and advertising times decreased significantly in 2018, while there are more and more sellers in the market who raise their list prices during the time of advertising.







Source: National Tax and Customs Administration, MNB

According to our forecast, house prices may continue to rise in 2018. For 2018, we anticipate further improvement in the macroeconomic fundamentals determining the housing market, which may additionally support house price appreciation. According to our expectations, the steady growth in households' real income and the decline in longterm unemployment, which both shape longer-term income expectations, will continue this year as well. The favourable financing environment is expected to support the upturn in the housing market this year as well, which may be accompanied by steady household demand for credit. In H1, house prices increased to a smaller extent than anticipated earlier, but the underlying developments were in line with our expectations. According to our forecast, in 2018 real house prices may increase further on a national average. However, the growth rate of prices may decrease gradually, albeit only slightly: the real price increase of 14.6 per cent registered in 2018 Q1 may slow to 11.5 per cent by the end of the year, and therefore annual real house prices are expected to increase by 13 per cent on average (16.2 per cent in nominal terms) (Chart 19).

The price gap between the price levels of dwellings in Budapest and those in the countryside widened further. In 2018, based on average square metre prices, in the villages the level of prices decreased to 20 per cent of the average level of Budapest, as opposed to 25 per cent in 2017. The average square metre prices registered in cities in the countryside also fell in 2018 compared to the average in Budapest. In light of the above, the price gap in the housing market between the capital and smaller settlements in the countryside widened even more. By way of comparison: the

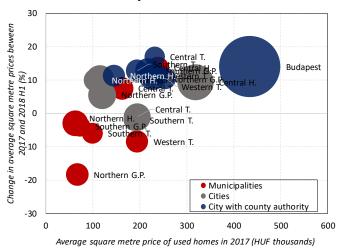
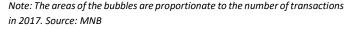
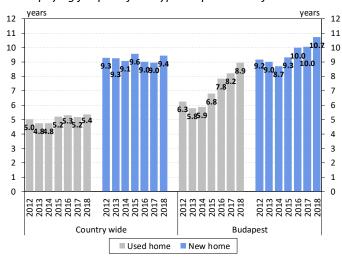
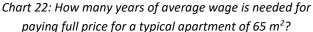


Chart 21: Changes, levels of average square metre prices and number of market transactions







Note: The price of a typical apartment is calculated each year based on the average square metre prices and the wages based on the net earnings each year. Based on quarterly data from 2018 Q2. Source: HCSQ. MNB

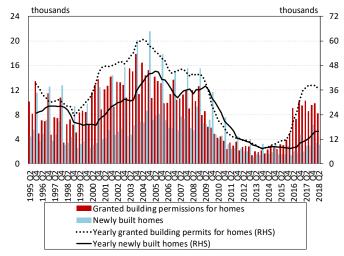
price gap was the narrowest in 2012, when the price level of villages stood at 45 per cent and that of cities in the countryside at 62 per cent of the average level of Budapest. Nevertheless, the average price of one square metre in a county seat has not decreased substantially compared to Budapest in 2008, but even so these settlements stand at 48 per cent of the price level of Budapest (Chart 20).

2018 continues to be characterised by average square metre prices rising primarily in the more expensive regions. In the period under review, the trend continued that average square metre prices primarily increased in those regions and in those types of settlements where they were already at a high level in 2017. It can be seen that average square metre prices decreased in villages in most regions in 2018, but the price level is among the lowest in these settlements. In respect of villages, the highest rise occurred in Central Hungary, while the level of average square metre prices was the highest in this region (HUF 238,000) in 2017 (Chart 21).

Compared to average wages, average square metre prices rose substantially in Budapest. While on a national average the average square metre prices did not rise significantly, in Budapest housing is becoming increasingly unaffordable, even despite the rise in average wages. On a national average, the prices of a used and a new apartment of 65 m² are 5.4 and 9.4 times the average wage for one year, respectively, and these values have not changed significantly since 2013. However, in 2013 in Budapest only 5.9 times the average wage for one year was necessary for the purchase of an apartment of 65 m² on average, which jumped to 8.9 times the average annual income by 2018. In the case of new apartments in Budapest the relevant figure is now more than 10 times the annual average wage (Chart 22).

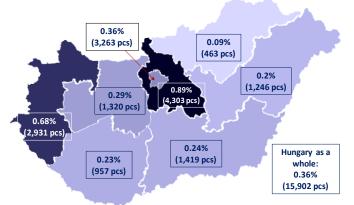
During 2018 H1 the number of building permits issued stayed at a high level, but on an annual basis we see a decrease. During 2018 H1 a total of 18,066 new residential building permits were issued, and although this is still a high level compared to the low point registered in the field of housing construction up to 2015, on an annual basis it already marks a decrease of 8.9 per cent. Taking all of this into account, however, the number of completions increased significantly in the first half of the year. At the national level, 6,517 dwellings were completed, which is 30.2 higher than in the corresponding period of the previous year. We see a similar picture emerging if we consider Budapest only: while on an annual basis the number of building permits issued has already decreased, the number of completions started increasing dynamically (Chart 23). In 2018 H1, in the capital 6,119 new building permits were issued, down 27 per cent on the number registered in 2017 H1, while during the same

Chart 23: Number of building permits issued and number of completions



Source: HCSO

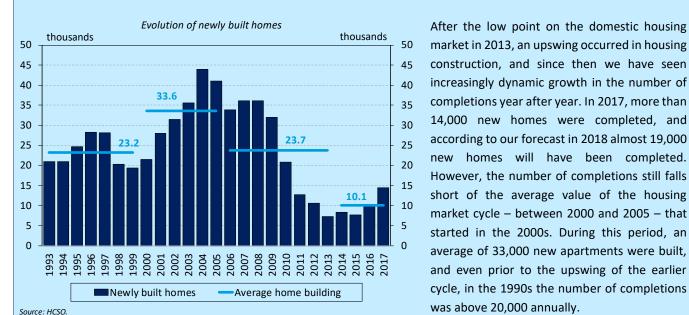
Chart 24: Ratio of new completions in one year compared to the housing stock, by region



Note: Based on new completions in the period between 2017 Q3 and 2018 Q2 and the housing stock at the beginning of 2017. Source: HCSO

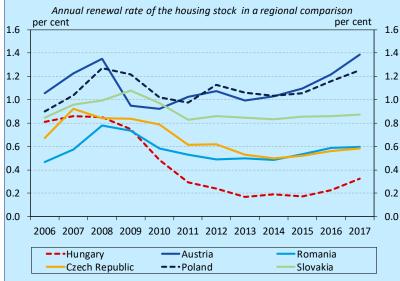
period 1,483 dwellings were completed, which represents a value 51.2 per cent higher than in the corresponding period of the previous year.

The renewal of the domestic housing stock presents a heterogeneous picture by region. Despite the constant increase in the number of completions, the renewal rate of the domestic housing stock can be considered low. In 2017, the average renewal rate was 1.25 in Poland, 0.87 in Slovakia, 0.58 in the Czech Republic and 1.39 in Austria, while in Hungary it was only 0.33 per cent. By 2018 Q2, the domestic annual renewal rate had increased slightly to 0.36 per cent, but in a regional comparison we can see a significant level of heterogeneity in this indicator. The annual renewal of the housing stock is the highest in Pest county at 0.89 per cent, followed by Western Hungary at 0.68 per cent. In the capital the national average, i.e. 0.36 per cent can be registered, while at the bottom we find Northern Hungary where the number of completions during one year was less than 0.1 per cent of the total stock (Chart 24). We detail the possible causes of the slow renewal rate in Box 2.



BOX 2: POSSIBLE CAUSES OF THE LOW RENEWAL RATE OF THE HOUSING STOCK IN A REGIONAL COMPARISON

In recent years, we have seen growth on the housing markets in several countries in Europe, and since 2014, the number of residential building permits issued and completions shows an increasing trend in all of the countries in the region. When comparing the number of completions to the number of residential building permits issued in the previous year, we see that in Austria and the Czech Republic, in 2017 the new stock roughly corresponds to the number of residential building permits issued one year prior, while in Poland and Slovakia 75 to 85 per cent of the permitted home constructions were completed, as compared to only 46 per cent in Hungary. Of the countries under review, at present the annual renewal rate of the housing stock is the highest in Austria, where 1.4 per cent of the existing housing stock was renewed in 2017. In Poland, this indicator hovered around 1.25 per cent, in Slovakia around 0.9, in the Czech Republic and Romania around 0.6 per cent last year. In Hungary, by 2013 the annual renewal rate of the housing stock had fallen to one fifth of the figure of 0.85 per cent



Source:ECB, national statistical offices, MNB.

that was registered in 2008, and it was still low (at 0.33 per cent) in 2017.

construction, and since then we have seen

completions year after year. In 2017, more than

14,000 new homes were completed, and

according to our forecast in 2018 almost 19,000

new homes will have been completed.

However, the number of completions still falls

market cycle – between 2000 and 2005 – that

average of 33,000 new apartments were built,

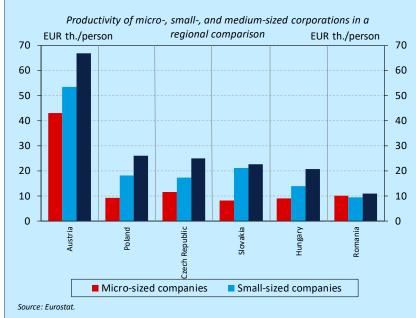
The "turnover ratio" of the building permits issued can be considered extremely low in Hungary based on these data, even in a regional comparison, which shows that the upswing in the domestic housing market cycle is proceeding at a slow pace, not only compared to the earlier domestic housing market cycle, but also in an international comparison. The speed of the upswing of the housing market cycle and the level of the renewal rate are interrelated from several aspects, in the following section we present the possible causes of this phenomenon.

The upswing in residential construction is primarily determined by the productivity and

efficiency of the construction industry and the availability of the production capacities necessary for housing construction. Assessing the differences between the output figures of various construction industries in the region, we can see that the weight of the Hungarian construction industry is the smallest within GDP, and that since the time of the crisis the ratio of employment in the construction industry has also been lower than the regional average. In the recent period, in addition to the upturn on the housing market, the capacities of the vehicle and chemical industries and, mainly related to the use of EU

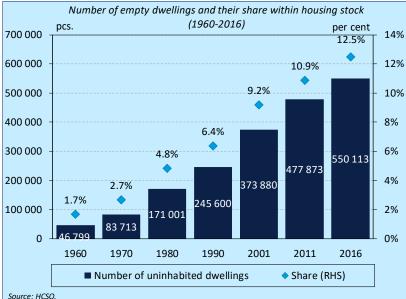
resources, corporate and public construction investments also expanded, which may have contributed to the emergence of bottlenecks. In an effort to accomplish higher profitability, construction companies are interested in larger projects, and therefore smaller projects, such as residential construction, may have been crowded out from the portfolio of construction companies. Over recent years, an increasingly large number of construction industry companies have pointed out labour force and construction materials as the bottleneck impeding production. The scarcity of labour market capacities can be considered an international phenomenon, but in Hungary the shortage of available skilled labour in the construction industry can be considered exceptionally high: in the EU on average 20 per cent of construction industry enterprises consider the shortage of labour as a factor impeding production, while in the region on average 27 per cent of construction industrial enterprises consider the shortage of labour force as a factor impeding production, and in Hungary the corresponding value this year already exceeds 60 per cent.

The relatively low productivity of the Hungarian construction industry may also be a reason why Hungary's renewal rate is lower than that of the regional competitors. The productivity of domestic SMEs was less than one third of the corresponding figure in Austria in 2016 and also falls short substantially of the productivity of Polish construction industry companies. The lower domestic productivity may also be explained by the weak investment rate of construction companies, the improper utilisation of the economies of scale and the use of less modern technologies.



The renewal rate of the housing market is related to the level of home construction considered as an equilibrium in several ways. The equilibrium housing construction figure is determined by the population's growth rate (demographics), the average household size (family structure), the current housing stock and the rate of amortisation. In terms of the demographic trends fundamentally shaping home construction, in spite of the sustained contraction of the population at an annual rate of roughly 0.2 per cent, the number of households has increased over the past decade. The increase in the number of households may be linked to shrinking household size and changes in family models, coupled with the ageing of the population.

However, growth in the number of households has also stalled in recent years, owing to population decline. Therefore, the contraction in population may slow down the increase in the number of households, which reduces the level of equilibrium home construction, thus having a negative impact on the renewal rate of the housing market. According to our estimation, the annual number of equilibrium home construction fell from the level of 40,000 estimated for the earlier cycle (2000–2005) to about 32,000, as the deterioration of the current demographic trends has reduced the housing construction equilibrium figure, which may also have contributed to the moderate renewal rate.



Finally, another factor that may restrict the renewal of the domestic housing stock is the ratio of homes that become obsolete or have been completed in an earlier cycle but not occupied or remain vacant, which represent an increasingly large ratio within the existing housing stock. Since the earlier housing market cycle (2001: 373,880 units) the number of unoccupied homes continued increasing, according to data of 2016, at present 550,113 homes are vacant in the country, which is 12.5 per cent of the existing housing stock. Therefore, vacant homes indicate substantial free capacities in the domestic housing market, but presumably the low classification, location and accessibility of part of the unoccupied homes do not enable them to be involved in

meeting the current demands in the housing market. However, non-marketable vacant homes constitute part of the domestic housing stock, and therefore in the calculation of the renewal rate the vacant homes distort the renewal rate of the domestic housing market in a downward direction.

This year, the renewal of the Hungarian housing stock will be supported by the large volume of planned completions of new homes, but over the long run, substantial renewal of the housing stock may be ensured by steady growth in the number of completed new homes. However, both the delays in the completion of home construction projects and the restoration of VAT to its original high level, planned from 2020, may restrict the inclination to build homes and therefore can be considered factors of uncertainty from the aspect of the continuation of the housing market cycle. All of these factors create risks on the side of both residential property developers and buyers, which could limit the pace of the upturn in residential construction, and therefore the increase of the renewal rate of the housing market, for some period of time.

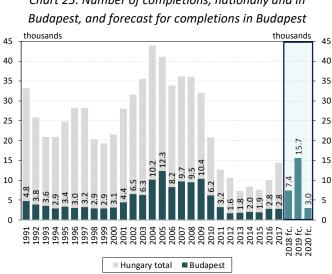


Chart 25: Number of completions, nationally and in

Note: The forecast has been calculated based on planned completions by residential property developers and the ratio of homes constructed for sale. Source: HCSO, MNB, ELTINGA - Housing report

From 2020, the supply of new homes may contract. According to our forecasts, in 2018 and 2019 the number of completions in Budapest may increase significantly. In 2018, we expect the completion of a total of 7,400 new homes, and in 2019 this number may increase to 15,700. However, from 2020 - according to the project plans of residential property developers - a significant drop in supply can be expected: for that year we expect the completion of a total of 3,000 new homes. The primary reason for the above is that developers are attempting to complete the homes before the expiry of the term of the discounted VAT. It should be added that especially because of the delay caused by the shortage of new residential development capacities - from 2019 substantial deliveries may be postponed to 2020, which could result in a more even distribution of completions over time, but would also pose a risk for a wide group of buyers as the final gross price could potentially rise (Chart 25).

In the period between March and August, the volume of residential property development increased by 6.5 per cent, but despite this, its share within construction industry projects went down. In August 2018 residential property

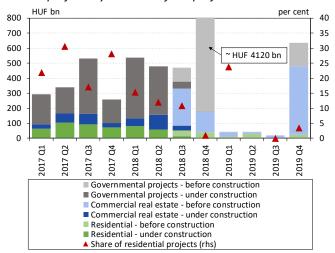
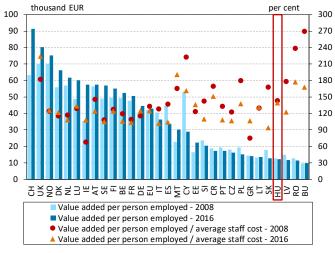


Chart 26: Distribution of the estimated value of construction projects by the start of the project and sector

Note: The chart was prepared based on the state of the ibuild.info database as of 13 August 2018 and includes newly constructed investments, without renewals and reconstructions. Within public investments to be constructed with total value of HUF 4,120 billion, starting in 2018 Q4, the value of the Paks II project is significant. Source: ibuild.info

Chart 27: Productivity of the construction industry in 2018 and 2016, in a European comparison

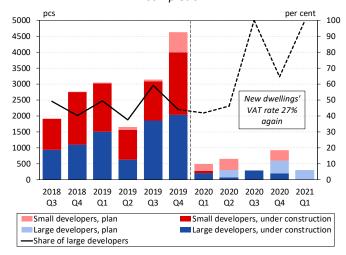


Source: Eurostat

development accounted for 19 per cent of the estimated value of domestic real estate investments in progress, involving new construction. Public investments had a share of 64 per cent of the total value of construction projects, and commercial real property development was responsible for 17 per cent (Chart 26). The estimated value of residential property developments under construction increased by 6.5 per cent between March and August 2018, while at the same time, their share compared to the summarised estimated value of all projects under construction dropped by 3.5 per cent, to 19 per cent. Simultaneously, the estimated project value of public investments increased by 48 per cent compared to the beginning of the year, and that of commercial property projects under construction decreased by 3 per cent. Based on these figures, it can be determined that the capacity-diverting effect of state investments has not eased over the years, which is also confirmed by the responses of real estate market actors in interviews (Box 3).

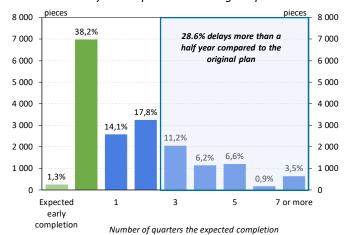
Measured on the basis of per capita added value, the productivity of the Hungarian construction industry is low in nominal terms. In a European comparison, the per capita added value of the domestic construction industry is extremely low, and only the construction industries in Lithuania, Romania and Bulgaria produce lower per capita added values than in Hungary (Chart 27). However, if we consider this indicator adjusted for the average staff cost in the construction industry, Hungary is ahead of several West European countries that have significant economic strength. The reason is that in Hungary the average wage level in the construction industry as measured by Eurostat is much lower than in more developed countries. The low level of wages shows, on the one hand, that in the domestic construction industry enterprises pay relatively low wages even compared to the generated value, but this ratio may also reflect the high share of concealed income.

Chart 28: Breakdown of new homes under construction and planned in Budapest in 2018 Q3 by quarter of planned completion



Note: Large residential property developers include developers with at least 250 homes under construction or planned. Source: ELTINGA – Housina report

Chart 29: Breakdown of new homes under construction in Budapest by the number of quarters expected completion is delayed compared to the original plan



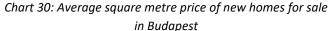
Note: Based on auarterly data from 2018 O3.

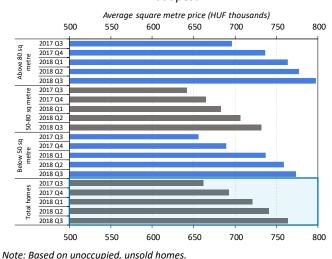
Source: ELTINGA – Housing report

3.2. New dwelling supply in Budapest

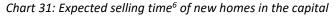
After the expiry of the effect of the reduced VAT rate the supply of new dwellings may drop significantly; presently, there are no housing projects to be completed in or after 2020 that would create a significant number of homes. According to the Housing Market Report of Budapest, at present 17,200 dwellings are under construction in the capital, and the construction of 2,800 more dwellings is planned. Considering 2018 as a whole, the completion of 6,200 homes is planned, of which developers anticipate the completion of 2,800 homes (38 per cent) for 2018 Q4 (Chart 28). Looking to 2019, 12,500 homes are slated for completion, and the significant weight of 2018 Q4 can also be observed in the figures for next year, as 37 percent of all completions are focused on the period October to December, according to the data. However, there is practically no significant stock of homes to be completed in 2020; up to August 2018 the completion of only 2,400 such homes had been registered. Although in the near future residential developments to be completed in 2020 could still be started, at this point already the data clearly foreshadow a significant drop in the supply of homes in Budapest starting from 2020. It is certainly a factor in the anticipated drop of supply that the temporary reduction of the VAT rate applying to the sale of new homes will be terminated. Property developers continue to emphasise the importance of further maintaining the reduced VAT rate, and they are of the opinion that restoring the general VAT rate could also be performed without problems if a regulation with favourable provisions for the transitional situation is introduced (Box 3).

Development lagging behind the original plans in the case of 60 per cent of dwellings in Budapest currently under construction. The shortage of construction industry capacities that was registered at the beginning of 2018 has not eased off in the recent period, and residential property developments still have to compete with public investments and commercial property developments for labour force. The situation is further compounded by the fact that with scarce construction capacity supply, the effect of the reduced VAT rate of new homes lasting until the end of 2019 will cause a high level of concentration: every developer intends to deliver as many homes as possible before this deadline expires. In parallel with this situation, about 40 per cent of homes under construction in Budapest will not be delayed compared to the original plans, while in the case of 34 per cent the delay is shorter than six months, and in the case of 26 per cent a delay longer than that is anticipated (Chart 29). Based on data from 2018 Q3, the average lag in delayed housing projects in Budapest compared to the original plans





Source: ELTINGA – Housing report



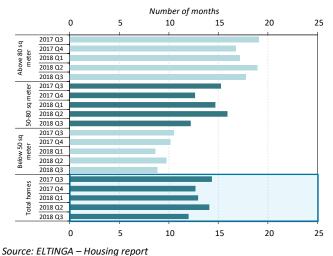
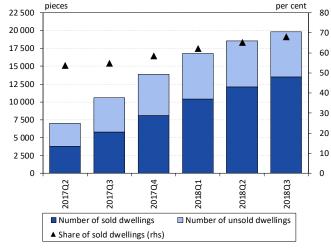


Chart 32: Development in the number of dwelling units and sold status of new home projects offered for sale in Budapest



Source: ELTINGA - Housing report

was 2.6 quarters. As a result of these factors, in the case of new projects investors now anticipate longer development times.

The average square metre price of new homes on sale in Budapest exceeds HUF 750,000. The prices of newly built homes in Budapest continued to increase, after having exceeded the level of HUF 700,000 in 2018 Q1, and in Q3 the current supply already showed an average square metre price of HUF 763,000 (Chart 30). This represents an increase of 15 per cent compared to 2017 Q3. If we assess the price increase in categories according to dwelling size, in the case of dwellings with an area less than 50 square metres the growth rate was 18 per cent, for those between 50 and 80 square metres it was 14 per cent, and the rate of unit price increase for dwellings above 80 square metres corresponds to the average of 15 per cent. Looking forward, expiry of the reduced VAT rate at the end of 2019 could generate early demand; furthermore, the steady increase in construction costs also implies an increase in prices until the end of 2019. From 2020, the rise in the VAT rate may have a one-time price-raising impact, but the narrowing supply presented above implies a continued increase in the price of new dwellings.

The selling time for new dwellings dropped in every size category in the capital. The time necessary for the sale of new homes in Budapest became shorter between 2018 Q1 and Q3: on average it was 12 months, based on data from August 2018 (Chart 31). This is 2.4 months less than what was measured in 2017 Q3 and almost one month less than the corresponding figure for 2018 Q1. Similarly to the previous period, dwellings smaller than 50 m² were sold within the shortest time, in 9 months on average, while dwellings with an area exceeding 80 m² take the longest to sell, at 18 months on average. The selling times are probably shortening because of mounting demand for new dwellings, which also means a stronger negotiating position for residential property developers.

In recent quarters, the supply side of the market for new dwellings in Budapest was unable to keep up with the demand side. In the past quarters, the number and the selling ratio of homes under construction or planned in new housing projects in Budapest has been constantly increasing (Chart 32). Compared to 2017 Q3, by August 2018 the number of homes under construction and the number of homes not yet under construction, but planned and already offered for sale, had increased by 87 per cent. The average selling ratio of the projects was able to increase even with the constant launch of new developments, i.e. supply had been lagging behind demand all along. Over the last three quarters, the number of available vacant homes has been relatively stable, hovering

between 6,300 and 6,450, which means that developers did sell a quantity equal to the number of new homes reported from quarter to quarter. If we consider the selling levels of housing projects according to the quarter of the expected delivery, we can state that developments reach a selling level of 50 per cent as early as one and a half years before the expected date of completion.

BOX 3: SUMMARY FINDINGS OF INTERVIEWS CONDUCTED WITH HOUSING MARKET PARTICIPANTS

In an effort to understand the trends on the domestic housing market more thoroughly, in September 2018 we polled the opinions of major market participants for the second time, in the form of an in-depth interview with each participant. In this box we present the common, synthesised opinion of the senior executives and experts from the respondent companies.

Development of demand conditions in the housing market

In our interviews conducted with major participants in the housing market, the decision on the reduced VAT rate on new homes continued to play a significant role. Even though in the summer the government made a statement that implied the phasing-out of the reduced VAT rate, the experts polled still considered the maintenance of a reduced VAT rate as optimal. Among the participants there was one market participant who said that demand for new homes had increased tangibly as a result of the statement on the phasing-out of the reduced VAT rate. It was the unanimous opinion and message of the interviewees that – in the case of restoring the 27 per cent VAT rate – a gradual transition would probably be a good idea. This means that provisions supporting the transition are needed, which would still permit application of the reduced VAT to contracts already concluded and the purchase price instalments already paid, by various legal schemes. Without such regulatory actions many customers could experience problems in paying the higher purchase price of dwellings the completion of which will have to be postponed to 2020. The development of demand after the restoration of the general VAT rate also depends on what changes are introduced concerning the Family Home Creation Allowance, but most of the market participants felt that if the VAT rate on new homes is raised back to the general level, from 2020 we should anticipate decreasing demand and supply, which will ultimately also reduce the revenues of the government.

It was stated in the interviews that the generally observable seasonal fluctuation in demand for homes seems to be levelling out in 2018. Generally, demand start intensifying at the beginning of the year, after the holiday season, peaking by the end of the spring or the beginning of the summer. This is followed by a slower summer, and then in the autumn the market once again starts becoming more active and then falls off again by the time of the Christmas holiday. However, this year the summer season was not characterised by the usual slump, and instead the activity level of home buyers remained strong. One interviewee recounted that the price increase they had predicted at the end of last year for 2018 as a whole had already materialised in the first half of the year, as a result of strong demand, while another participant mentioned that at present they have the impression that demand for new dwellings is practically boundless anywhere within Budapest. Those buyers who are looking for homes for the purpose of living are starting to realise that in the near future properties will become even more expensive, and so they prefer to buy earlier. We also heard the opinion that most of the early demand was invoked by the statement projecting the phasing-out of the reduced VAT rate, since many customers would like to purchase a new home before the increase in the VAT rate. We were told that there has been congestion on the demand side of the housing market, since the market has not yet even fully satisfied the demand deferred from the years prior to the start of the housing market upturn, while in the meantime early demand also started appearing.

⁶ The expected time to sell new homes is calculated as follows: based on the dwellings sold in the given quarter, we first determine the probability of sale, and then assuming the latter to be constant we determine the expected time to sell the homes according to the following formula, expressed in months: (2-probability of sale)/2/probability of sale *3.

The professionals highlighted that regulatory actions predictable in the long term would be necessary to help calm down the demand. Temporary application of the currently valid, reduced VAT rate caused congestion in terms of both demand in the housing market and in the construction market, and therefore in addition to the demand-supply relationship, the cost side also strengthened the process of price increases. It was also stated during the interviews that the debt cap rules implemented by the MNB are adequate measures, since these measures work against an increase in house prices triggered by excessive indebtedness. Another professional opined that in an extreme case early demand may result in a low point in the housing market cycle in 2020, which could be followed by a recovery period in 2021, with a new market equilibrium possibly developing by 2022–2023.

It was stated in the interviews that demand from investors is still present in the housing market, but on the whole it is not the purchases of investors that played the main role in the increase of house prices. In the case of new housing projects, the ratio of buyers looking for investment properties varies by neighbourhood, and while their ratio in downtown and in projects with good transport connections could be higher, as high as 50 to 60 per cent, in green belts it is close to zero. The professionals stated that in most cases the investors are Hungarian families who invest their savings in residential properties. Foreigners also appear as investors, but they are not a majority, and they are usually interested in properties located downtown and in other high-end neighbourhoods. According to the opinions expressed, the development of the interest rate environment will be an important factor in demand from investors. At present, a yield of 4 to 7 per cent can be realised on the rental of residential properties, depending on location and quality, and if the deposit interest rates and yields on government securities remain significantly below that level, investors will continue to be present in the housing market. Several of the polled professionals highlighted the positive role of investors in the improvement, maintenance of the quality of rental properties offered on a market basis, and in keeping rents at an affordable level. Some market actors set the ratio of buyers purchasing with credit financing within the demand for new homes at between 25 and 30 per cent, others between 30 and 35 per cent according to the sales that they had seen, but everyone concurred that the ratio had been increasing.

The supply side

Some of the polled experts anticipate that if the VAT rate on new residential properties is raised, a one-time price increase of at least 15 per cent would occur, but it is also possible that the entire VAT increase would be passed on to buyers. It was also mentioned that the VAT increase could only be included in the price in a segmented manner: the VAT increase can be included to a higher extent in the prices of more saleable homes, built for the masses, and to a smaller extent in the case of higher-end properties. In respect of the VAT raise, several of the polled professionals stressed that a VAT rate of 27 per cent drives the activities of smaller developers towards the black economy, which can also be supported by the buyer side, in order to negotiate a purchase price that could be lower, in some cases by as much as several millions forints. Owing to the substantial anticipated impact of the VAT raise, certain market participants would even consider a compromise VAT rate of 18 per cent acceptable.

The supply of labour for the development of new houses has not improved since the beginning of the year, and the shortage of trained, skilled workers, and even that of unskilled workers with practical experience, still prevails. The market actors told us that although in some cases entire construction teams had returned to Hungary, most of the workers cannot be brought back even by higher wages, because the Hungarian construction industry is characterised by a high level of cyclicality. The boom periods of a few years are not attractive enough for the workers to return home, they prefer working abroad with business relations already established, which also means that work is distributed in a more even, steadier way. Some of the interviewees were of the opinion that the main source of the shortage of labour is not those workers who moved abroad, but rather that a significant part of young skilled workers have practically disappeared, and most of the graduates leaving the vocational schools do not even start working in their trade. On the other hand, the productivity of the existing labour force is very low, and persons working in the Hungarian construction industry are not motivated to produce as much as they could. Based on what we were told, this could be improved by performance-based remuneration and the introduction of a wage tariff system for the construction industry, this latter would also contribute to reducing the volume of undeclared work in the sector. Most of the interviewees were of the opinion that it is inevitable to involve labour from foreign countries in order to mitigate the labour problem; there is a regular inflow of workers from Romania and Slovakia in high numbers. One market actor mentioned China as a possible country to recruit workers from.

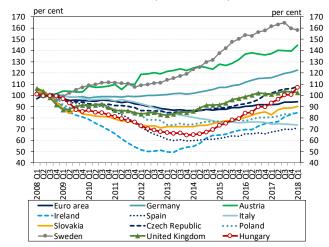
Concerning the work phases of construction, currently the finishing works are delayed, the availability of structural construction capacities is somewhat better than at the beginning of the year. In the recent six months to one year, in consideration of the delays, in total the developers had to raise the time necessary to finish the developments from one and a half years to two years. The capacity-draining effect of public investments has not weakened since the beginning of the year, in the opinion of the polled actors, and the housing market would welcome a counter-cyclical involvement of the State in the construction market, i.e. the launch of public investments that are not vital and require substantial overground construction capacities should be scheduled for 2020.

Concerning the possible technological developments supporting the progress of construction projects, in the opinion of some of the interviewees, so-called "house factories" would be necessary: these would produce prefabricated elements as a result of which a significant part of the labour-intensive tasks could be transferred from the construction sites to the plants. On the other hand, other actors pointed out that in Hungary buildings made from prefabricated elements are traditionally called "panel" buildings, which would cause problems in selling, as they have a negative connotation. Also, the adoption of technologies using prefabricated elements is constrained by the still relatively cheap labour force, which makes the application of conventional structural construction solutions even more favourable financially. Some of the interviewees also mentioned it as a problem that the designers ignore the needs of the constructors. Requirements of efficiency, economy are disregarded in planning, for which the domestic training system of engineers is to blame.

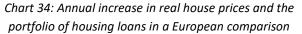
Housing quality

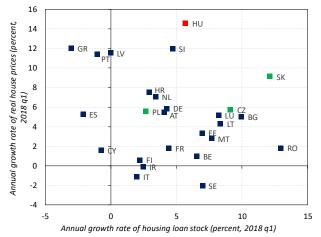
In the opinion of certain interviewees, at the national level there is no shortage of residential properties; the problem is with quality and the location of the existing properties: the trend of outward migration from villages to cities because of employment opportunities has resulted in a situation of many villages with an increasing number of vacant residential properties, while in the cities shortages may develop in terms of both quantity and quality. Concerning the VAT regulatory regime, several of the participating market actors mentioned that a reduced VAT rate for home renovation would go a long way to improving the quality of existing residential properties. One professional expressed the pronounced opinion that a completely new mindset would be necessary to reach a level of home construction that would support the maintenance of the quality of the housing stock, new neighbourhood concepts should be elaborated, for which new residential areas should be designated, infrastructure needs to be developed and quality residential properties, a livable environment should be built up there, rather than jamming even more residential properties into the most central areas of large cities. In the central parts of Budapest there is less and less undeveloped land, there is practically no buildable land downtown and in neighbouring areas, and the renewal of the existing houses is cumbersome from several aspects: on the one hand, in such cases the investor faces administrative difficulties, owing to the need to obtain consents because of the condominium form and because of the heritage protection rules. On the other hand, the performance of construction work is also impeded by additional difficulties in the narrow streets of the central areas, where opportunities for area occupation and freight traffic, supply of construction materials are more limited. A professional among the interviewees told us that it is difficult to the find a contractor in the current market situation for the renovation of a downtown building under heritage protection, because there are lots of preferred construction jobs on undeveloped land.

Chart 33: Real house price indices in certain European countries (2008 = 100%)

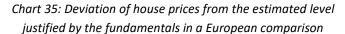


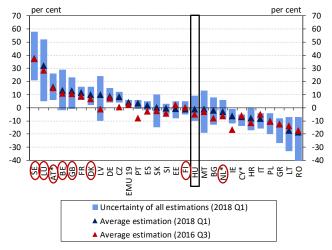
Source: BIS, MNB





Note: Visegrád countries are indicated in green. In the case of Cyprus, Finland, the Netherlands and Malta, based on data of 2017 Q4. Source: BIS, EKB, MNB





Note: In the case of countries marked with *, based on 2017 Q4 figures. Hungary based on ESRB estimate. Countries circled in red were warned by the ESRB in 2016. Source: ESRB Risk Dashboard

3.3. House price developments in an international comparison

Rising house prices have been registered in most European countries, but in many places house prices remain below the level from 2008 in real terms. In many European countries, a trend of rising house prices has been registered in recent years. In certain countries, such as in Sweden, Austria and Germany, house prices did not drop after the crisis of 2008. Instead, stagnation or a slight increase was registered, followed by a long period of growth. In Sweden, the level of house prices in real terms is already at 160 per cent of the level from 2008, while this figure is 145 per cent in Austria, and 122 per cent in Germany. The average value for the euro area is 95 per cent, and thus by and large, house prices are still below the level from 2008. In the group of Visegrád countries, house prices exceed the 2008 level in Hungary and in the Czech Republic, while in Poland and Slovakia they are below that level (Chart 33).

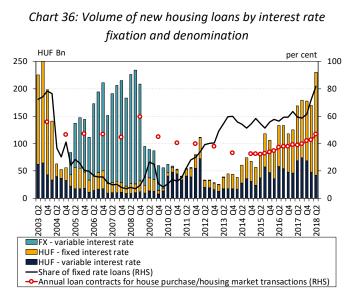
In most of the countries, the increase in house prices is coupled with growth in housing lending. At present, most European countries are in the expanding stage of the housing market and lending cycle, i.e. as a result of transactions, in addition to rising prices, an increase in the outstanding housing loans can also be observed. However, in certain countries there has been a drop in residential real estate lending, even though house prices keep rising. The South European countries are mainly found in this group, such as Greece, Portugal, Spain and Cyprus. In 2018 Q1, there were only three countries, namely Sweden, Italy and Ireland, where real house prices decreased on an annual basis, but in each of these three countries the volume of lending was increasing (Chart 34).

The excessive rise in house prices poses a risk in several European countries. According to the calculations of the European Systemic Risk Board (ESRB), as a result of this persistent rise, house prices have already significantly exceeded the level justified by macroeconomic fundamentals in several European countries. Of the 28 member states, the estimates show an overvalued price level in 13, while in the case of the remaining 15 states it is undervalued compared to the fundamentals. In 2016, the ESRB issued a warning for 8 countries, stating that the risks emerging in the housing markets could have consequences for financial stability over the medium term. In most of these countries it has been observed that house prices are significantly overvalued, and furthermore the risks have not eased since the end of 2016 (Chart 35).

4. FEATURES OF THE RESIDENTIAL MORTGAGE LOAN MARKET

The housing credit disbursement of credit institutions stood at HUF 400 billion in 2018 H1, representing an increase of almost 40 per cent on an annual basis. Within new loan contracts, the share of purchase or construction of new homes has decreased, while the share of loans borrowed for used homes has gone up; furthermore, loans borrowed for housing now account for a significant weight within consumer credit as well. Demand for loans keeps intensifying, which – according to banks' answers – is not accompanied by significant loosening of the conditions offered by the banks. Interest rate spreads decreased significantly during the period under review, and as a result the average spread of loans with fixed interest rates has reached those of loans with variable rate. Considering non-price conditions, the average maturity has increased for every housing loan purpose category during 2018 H1, while the average loan-to-value ratio has not changed substantially. At the end of Q2, 46 per cent of housing market transactions were already conducted with borrowing. Housing affordability on loans has deteriorated, both in a national average and in Budapest. This is explained by the fact that the rise in the average wage could not offset the house price appreciation.

Although the volume of newly disbursed loans amounts to 80 per cent of the corresponding value from 2008, on the whole there is still room for further expansion of housing lending. The domestic housing credit-to-GDP and loan penetration can be considered low internationally. The currently effective debt cap rules continued to contribute to the avoidance of excessive indebtedness of households, which is supported by the fact that households do not face any exchange rate risk in the current cycle. With the intention of reducing interest rate risk, in October 2018 the MNB tightened the payment-to-income regulation in the case of loans with interest periods shorter than 10 years. By doing so, the central bank diverts demand towards longer-term interest rate fixation, which is also supported by the expansion of Certified Consumer-Friendly Housing Loans.



Note: Fixed rate loans indicates loans with over 1 year interest rate fixation. Source: MNB

borrowing keeps rising. In 2018 H1, households concluded new contracts for housing loans in the value of HUF 400 billion, representing a 39 per cent annual increase in the disbursement of new loans (Chart 36). The increasing role of lending is also reflected in the number of housing market transactions involving loans: while in 2015 only about one third of the transactions were associated with borrowing, by the end of 2017 this figure had risen to above 40 per cent, and in 2018 Q2 up to 46 per cent of all purchases involved borrowing. Although the annual volume of newly extended housing loans reached four-fifths of the credit issued in 2008, the indebtedness of households is currently associated with lower risks as compared to the period directly preceding the crisis. On the one hand, home equity loans also played a key role in the indebtedness of the previous credit cycle, while at present secured loans borrowed are spent on housing almost exclusively. In real terms, however, the current volume of loan disbursements still falls significantly short of the precrisis levels, and the number of new housing loans is also less than before 2008. While in the previous credit cycle most of the loans were provided on a foreign currency basis and with variable interest rate, at present lending is practically performed in forint exclusively, and the share of loans with interest rate fixation is also rising. The introduction and increasing popularity of Certified Consumer-Friendly Housing Loans in the autumn of 2017 contributes to this latter process, since this certification was only granted to loan products with longer interest rate fixation periods.

The share of housing market transactions involving

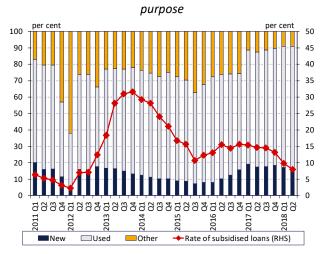
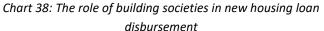
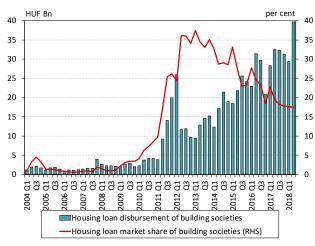


Chart 37: Distribution of housing loan disbursements by loan

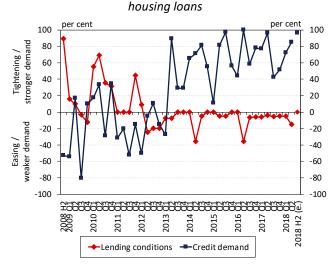
Note: Non-market loans related to HPS are classified as subsidised loans. Source: MNB





Source: MNB

Chart 39: Changes in credit conditions and demand for



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

As an annual average, the value of loans spent on used and new homes increased by one and a half times. Based on the breakdown of housing loans by loan purpose, the value of loans borrowed for the purchase of used homes increased by 49 per cent, and the value of loans spent on construction or purchase of new homes went up by 57 per cent as annual average. Despite that, the share of new home loans started declining in 2018 H1 from its peak reached last year, while the ratio of loans for used homes increased to 75 per cent. This dynamic growth occurred at the expense of other housing loan aims (such as expansion, renovation) (Chart 37). However, this may also reflect to the fact that owing to the low, single-digit interest rates and simpler processing (since there is no need to record the mortgage), home-related aims are among the most popular motivations for borrowing in personal loans.

The termination of state subsidy for building societies may rearrange the mortgage loan market. In 2018 H1, four building societies were operating, but only two participants are present actively in the market of savings for housing purposes. The role of building societies in the mortgage loan market started increasing from 2009 and reached its peak level in 2012 and 2013, in that period 33 to 37 per cent of the issued housing loans were related to these institutions on a quarterly basis (Chart 38). Over the last year, loans extended by these institutions were only accounted for 18 per cent of the total volume of new housing loans. However, the change of the legislative environment modifies the situation of the 3 building societies that are active in the market: effective since October 2018, the state support on savings deposited with building societies was terminated.⁷ While the available state support was a significant element of this scheme of savings for housing purposes, the modification may rearrange the market forces - nevertheless, the building societies will not stop operating as a result, they remain available for savings and they are also allowed to extend loans; therefore, they remain mortgage loan market participants.

The banks still perceive buoyant demand for loans. Based on the responses in the Lending Survey, demand for housing loans keep rising: in net terms, 72 and 85 per cent of the banks perceived an upswing in demand during the first two quarters of 2018, and almost every institution expects the continuation of this trend in the second half of the year as well. Even though demand has been on the rise constantly for several years, the banks are not significantly easing their lending standards: in Q1, in net terms 5 per cent and 15 per cent in Q2 indicated that they relaxed credit conditions (Chart 39). Considering the partial conditions, the easing of the lending standards is only manifest in the interest rate spread, while – disregarding the unchanged state of risk appetite –

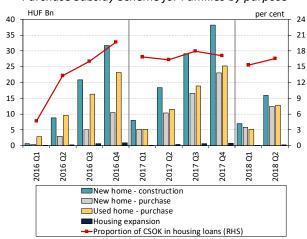
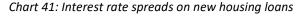
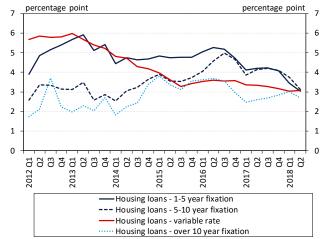


Chart 40: Cumulative volume of contracts in the Home Purchase Subsidy Scheme for Families by purpose

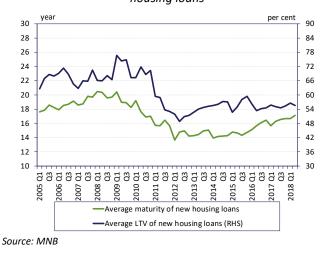
Source: MNB, Ministry of Finance





Note: APR-based smoothed spread over the 3-month BUBOR in the case of variable-rate or for up to 1 year fixed-rate housing loans, while in the case of housing loans fixed for a period longer than 1 year, the smoothed spread over the relevant IRS. Source: MNB

Chart 42: Average initial maturity and LTV ratio of new housing loans



⁷ Act LXIII of 2018 on the amendment of Act CXIII of 1996 on building societies.

every factor points towards the loosening of lending conditions. Looking forward, in 2018 H2 none of the banks plans to relax its overall standards, which is attributed to the resultant of two effects: while price conditions could be further relaxed, the modified debt cap rules – effective since 1 of October –, which means payment-to-income regulation differentiated by interest rate fixation period, will be perceived as a tightening condition. According to the expectations of the MNB, the lower permitted PTI ratio introduced for loans with variable rate will not significantly affect the credit volumes, only it will drive demand towards products with longer interest rates fixation.

The Home Purchase Subsidy Scheme for Families continues to support demand for housing loans. In 2018 Q1, 15 per cent of the borrowed housing loans, and in Q2 17 per cent, which can now be considered the typical figure, were related to the Home Purchase Subsidy Scheme for Families, in the form of a preferential loan, or a market loan supplementing the preferential loan and the subsidy (Chart 40). The Home Purchase Subsidy for Families became available in its new form in February 2016; since then almost 62,000 subsidy contracts were concluded in the total value of HUF 195 billion.

The average spread on fixed-rate loans has reached the spread on variable-rate loans. The interest rate spread on new housing loans decreased in every fixation category compared to end-2017 (Chart 41). The spread on variable rate products over BUBOR decreased by 0.1 percentage point, while the spread over the relevant IRS of loans fixed for 1-5 year and 5-10 years dropped by 1 percentage point on average. The spread of loans with an interest rate period longer than 10 years, constituting 6 per cent of all issued loans on average, also decreased, by 0.2 percentage points during 2018 H1. During the first half of the year, the share of new loans with variable rate dropped significantly, and thus 82 per cent of all housing loans issued in Q2 were extended at an interest rate fixed for over one year, while primarily the ratio of products with a fixation period of 5 years increased.

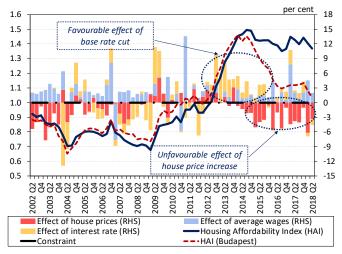
The average maturity increased, but the loan-to-value ratio did not change. Since 2015, the average contractual maturity of new housing loans has shown an upward trend, rising from 16.7 years at the end of last year to 17.1 years. This can be explained partly by the composition effect, since the share of housing loans for renewal and expansion, typically borrowed for a shorter-term, decreased, but the average maturity of loans borrowed for the purchase of used and new homes also increased, by 4 and 7 months, respectively. The average loanto-value (LTV) ratio of mortgage loans rose slightly, by 0.2

	Interest rate fixation period		
	Variable interest rate or fixed for less than five years	At least five years, but less than ten years	At least ten years or fixed for the whole term
Below HUF 400,000 (HUF 500,000 from 1 July 2019)	25%	35%	50%
At least HUF 400,000 (HUF 500,000 from 1 July 2019)	30%	40%	60%

Chart 43: Amendment of the payment-to-income rules, effective from 1 October 2018

Source: MNB

Chart 44: 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 the loan product, except for the interest rate, are constant until maturity. LTV = 70%, PTI = 30%, maturity = 15 years. Source: MNB

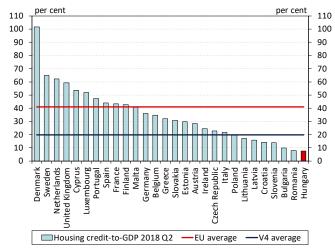


Chart 45: Housing credit-to-GDP in European comparison

Source: ECB

percentage points compared to the end of 2017 and thus stood at 55.5 per cent in 2018 Q2 (Chart 42). Assessing the distribution of the LTV ratios in Budapest, we can see that the risk appetite of the banks has not increased in the capital either: in the case of mortgage loans extended over the last 18 months, the median loan-to-value ratio in Budapest (47.4 per cent) is below the median value outside the capital (52.6 per cent). The debt cap rules continue to ensure that excessive indebtedness of households is avoided, and PTI limit of 25 per cent applicable from 1 of October to loans with an interest rate fixation period shorter than 5 years (30 per cent in the case of income exceeding HUF 400,000) is expected to reduce the interest rate risk significantly as well (Chart 43).

Housing affordability deteriorated both nationally and in the capital. The credit-financed purchase of an average house by a double income household with average income became less affordable in 2018 H1 (Chart 44). This is due to the fact that the increase in average wages was unable to offset the impact of the increase in house prices. The increase in average interest rates primarily derived from the composition effect, since the share of products with fixed rate and higher financing costs rose substantially during 2018 H1. In the housing market of Budapest housing affordability with credit has deteriorated, and in terms of its level it has developed much more unfavourable than the national average. This was because the growth rate of house prices in the capital exceeded the national average and relative to that, wages increased more slowly.

Compared to the size of the economy, the domestic portfolio of housing loans is the lowest in Europe. Although the portfolio of housing loans is increasing at present, owing to loan transactions, and the disbursement of new loans has increased significantly in recent years, credit-to-GDP was at 7.5 per cent at the end of 2018 Q2, which is the lowest figure in a European comparison (Chart 45). This is a significant shortfall in the region as well, since in the Visegrád countries the value of the credit-to-GDP indicator is about 20 per cent on average. Therefore, overall there is still considerable room in the domestic economy for the household sector to raise the housing loan portfolio. Although the share of the population living in owner-occupied dwellings is distinctly high in Hungary, ranging at 85 per cent in 2017, the ratio of those repaying their mortgage loans on their homes at present is 16 per cent of the total population, while this ratio on the EU average is 27 per cent, with a lower proportion of home ownership.

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.

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