



HOUSING MARKET REPORT



2022
MAY

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

Count István Széchenyi



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(May 2022)

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The housing market represents a key area at the level of individual economic agents (households, financial institutions), as well as at the level of the national economy. Housing market developments are closely related to financial stability issues and fundamentally determine short- and long-term prospects for economic activity. Overall, it can be stated that the housing market is integrally linked to every area of the national economy. Housing market developments, in particular the volatility of housing prices, influence the savings and consumption decisions of the household sector via its financial position, and also influence the portfolio, profitability and lending activity of financial institutions via 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 that 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 property 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 factors. The development of property market supply directly influences economic growth, while oversupply and inadequate supply can also have serious consequences for financial stability. Housing price appreciation improves the financial status 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 array of information. The housing market already features in the publications of central banks, both in Hungary and at the international level, but typically from the perspective 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 factors of the property market. The 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, and developments in real income and unemployment, as well as changes in the yield environment.*
- The analysis of current housing market developments primarily relies on information provided by the Hungarian Central Statistical Office, the National Tax and Customs Administration and real estate agents. 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 experiences and proposals of market participants and general government actors, with the contribution of the Housing and Real Estate Market Advisory Board (hereinafter: LITT), help shed light on the broader questions of housing market trends.*
- 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: <http://www.mnb.hu/en/publications/reports/inflation-report>

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

Contents

1 Executive Summary	7
2 Demand in the housing market and residential property prices	9
2.1 Favourable demand conditions supported the housing market in 2021	9
2.2 Significant increase in residential property prices is also accompanied by nationwide overvaluation	11
2.3. The Hungarian housing market is characterised by a high number of transactions, shortening time to sell and reduced bargaining	14
2.4. Rise in rents accelerates as supply continues to fall	16
2.5 Real price increases accelerated in Europe too while housing affordability deteriorated	18
3 Supply of new homes	21
3.1 Construction struggles with rising costs and shortage of raw materials	21
3.2 Supply of new homes declined significantly in 2021	24
3.3 Housing development in the capital cannot keep up with the high demand	26
3.4 Penetration of energy-efficient residential properties is slow	29
4 Lending and subsidies for housing	30
4.1 Housing subsidies have a major role in lending for housing purposes	30
4.2 Results of the FGS Green Home Programme	36
List of boxes	
Box 1: Link between lending and the recovery of the housing market; the related warning by ESRB	19
Box 2: Key messages from the 2022 Spring meeting of the Housing Market Section of the Housing and Real Estate Market Advisory Board (LITT)	23
Box 3: Impacts of the rise in the base rate on housing and credit markets	34

1 Executive Summary

The continuous price increases in the housing market which had already lasted for eight years broke another record in 2021. This was primarily due to the outstanding price increase in the countryside. Based on the MNB house price index, in the fourth quarter of 2021 house prices rose at an annual rate of 21.4 on a national average, being a record high in the current cycle, compared to 8.9 per cent measured a year earlier. In Budapest, house prices were 11.3 per cent higher at the end of 2021 compared to a year before, while provincial towns also recorded the highest annual house price growth in the current housing cycle, at 25.0 per cent. Based on preliminary data provided by real estate agents, in the first quarter of 2022 further extraordinary price increases can be observed, presumably also due to the rising inflation and purchases brought forward due to the rising interest rate environment. Due to the record high increase in housing market prices, according to our estimate house price overvaluation on a national average rose to a historic high of 18 per cent. Overvaluation in Budapest has been high for several years and at present it stands at 15 per cent.

Employment remains at a historic high and domestic unemployment is low by international standards, which, together with the growth in 2021 and further expected expansion in the first quarter of this year, will support housing demand. Looking ahead, however, the negative effects and risks of the Russo-Ukrainian war impair labour market prospects through higher production costs and a slowdown in output.

According to our estimate 168,000 housing market transactions were realised in 2021, which is a significant – 15.6 per cent – increase compared 2020, affected by the pandemic, but still falls short of the 2019 figures. The number of sale and purchase transactions increased in Budapest and in the county seats last year, and this growth continued in the first quarter as well, especially in Budapest. The high number of transactions and buoyant lending were also materially supported by the new housing subsidies starting from the beginning of 2021. The volume of newly disbursed housing loans increased by 40 per cent in the fourth quarter compared to the same period in 2019 – not yet affected by the pandemic – and half of the completed housing transactions were realised through housing loans. Within housing loan applications, the volume of loans applied for the purchase and construction of new homes increased, with the Funding for Growth Scheme (FGS) Green Home Programme launched in October playing a significant role. The increasing disbursement of subsidised and central bank refinanced loans has led to a widening of the gap between transaction and customer interest rates, and as a result, despite the rising interest rate environment, there is still only a moderate increase in the average interest rate on housing loans until March 2022. Looking ahead, if the interest rates on housing loans continue to rise, the affordability of house purchase on credit may deteriorate significantly. In the first quarter of 2022, even under unchanged credit conditions, banks observed a pick-up in demand for housing loans, while half of the banks expect demand for loans to drop in the second and third quarters.

In 2021, around 20,000 new residential properties received occupancy permits, which is a significant – 29.5 per cent – decline, in annual terms. In the first quarter of 2022, the number of newly built homes fell again. The annual renewal rate of residential properties in Hungary is 0.4 per cent, which is low in a European comparison. The decline in home constructions was mainly attributable to the large number of family house constructions brought forward to 2020 due to the expected tightening of energy rules. In 2021, the number of dwellings built by natural persons in the countryside fell by 48.7 per cent year-on-year. On the other hand, the number of new building permits issued increased by 32.7 per cent over the year, probably mainly due to the reintroduction of the reduced VAT for buildings that obtained building permits before the end of 2022. Overall, the supply of new homes cannot keep up with demand. Tight supply is also indicated by the fact that the number of unsold homes in the Budapest market in the first quarter of 2022 was lower by 27 per cent than a year earlier.

The adjustment of the supply side of the housing market is hampered by several discordant factors, which are expected to continue to deteriorate this year. In 2021, the largest increase in home construction costs was registered in Hungary among EU Member States. In 2022, the war has led to a repeated rise in raw material and energy prices as well as increased supply chain problems, which will increase development costs. Looking ahead, further price increases are expected for construction

materials, which could lead to additional delays in the completion of some projects. The uncertainty caused by the war may also reduce demand in the construction sector, where a fall in public sector orders may play a major role. According to market participants, the uncertain regulatory environment may lead to a significant drop in housing investments in the short term, which will have a negative impact on supply over the next two years, while based on the Lending Survey a substantial tightening of the conditions for residential property financing loans may be expected in the next six months.

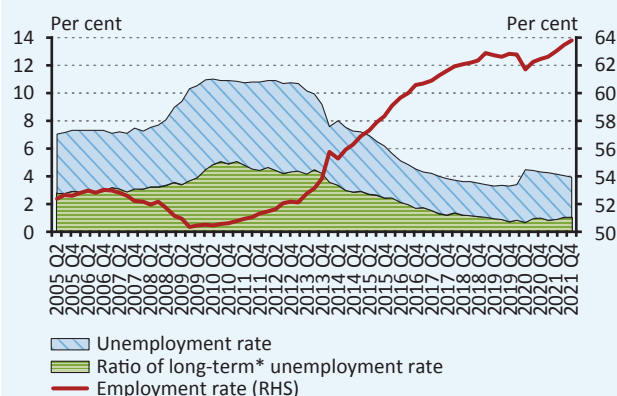
2 Demand in the housing market and residential property prices

The Hungarian economy continued to grow at an accelerating rate. Output increased by 7.1 per cent in annual terms in the fourth quarter of 2021. The number of people in employment is still at a historic high, and unemployment may be deemed low by international standards. Looking ahead, however, the negative effects of the Russo-Ukrainian war impair labour market prospects through higher corporate costs and a slowdown in production.

Based on the MNB house price index, in the fourth quarter of 2021 house prices rose at an annual rate of 21.4 per cent on a national average, compared to 8.9 per cent measured a year earlier. In Budapest, house prices were 11.3 per cent higher at the end of 2021 compared to a year earlier, while provincial towns recorded the highest annual house price growth in the current housing cycle, at 25.0 per cent. Based on preliminary data provided by real estate agents, in the first quarter of 2022 the annual growth rate of house prices may have accelerated further, presumably also due to the rising inflation and purchases brought forward due to the rising interest rate environment. Due to the record high increase in housing market prices, according to our estimate house price overvaluation on a national average rose to a historic high of 18 per cent, while in Budapest has been high for several years and currently it stands at 15 per cent. In parallel with the rise in residential property prices, contraction in supply also caused rental prices to rise, approaching their pre-pandemic level.

According to our estimate 168,000 housing market transactions were realised in 2021, which is a significant –15.6 per cent – increase compared 2020, affected by the pandemic, but still falls short of the figure registered in 2019 by 2 per cent. The number of sales and purchases increased in Budapest and in the county seats over the past year, and the ratio of homebuyers for investment purposes once again has risen in Budapest from the fourth quarter of 2021.

Chart 1
Unemployment and employment



Note: In the age group of 15–74 years. * Unemployed for more than 1 year.

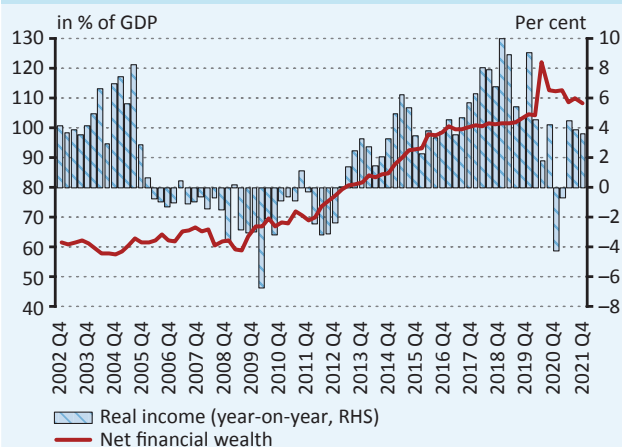
Source: HCSO

2.1 FAVOURABLE DEMAND CONDITIONS SUPPORTED THE HOUSING MARKET IN 2021

The number of people in employment remains at historically high levels (Chart 1). According to the HCSO's Labour Force Survey, employment expanded by 62,000 in the fourth quarter of 2021 year-on-year. Hungary's unemployment rate may be deemed low even by international standards. The tightening of the labour market continued at the beginning of the year: according to the European Commission's survey companies' employment expectations were positive at the start of 2022 and they planned to increase headcount in all key sectors. Manufacturing and service sector labour demand already exceeds the pre-pandemic level. In the fourth quarter of 2021, the gross average private sector wages increased by 8.0 per cent year-on-year, which is almost 1 percentage point higher than in the second and third quarters. Most private sector industries registered an annual wage growth of 7–10 per cent.

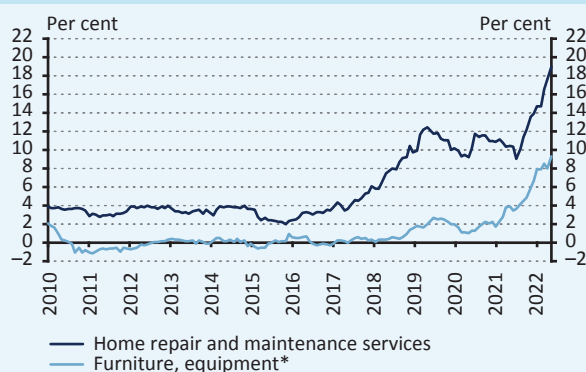
Labour market growth is likely to continue at a slower pace than previously expected. Rising commodity

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



Sources: HCSO, MNB

Chart 3
Changes in the prices of products and services connected to the home improvement subsidy

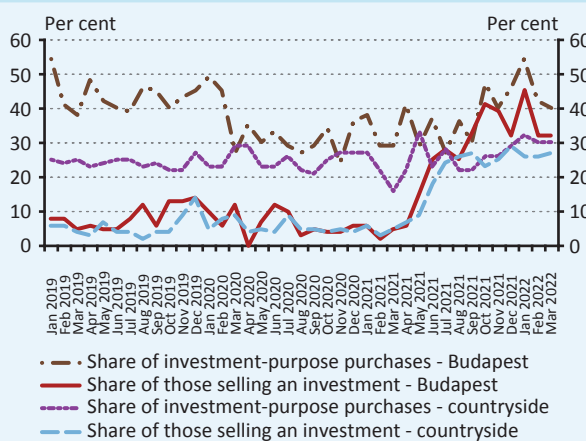


Note: Seasonally unadjusted annual changes excluding indirect tax effects.

*The category includes the following items eligible for home improvement subsidies according to the HCSO classification: kitchen and other furniture, refrigerator, freezer, washing machine, dishwasher, heating and cooking appliances, vacuum cleaner, air conditioner. The weight of items related to home improvement subsidies is low in the consumer basket.

Sources: HCSO, MNB

Chart 4
Share of house purchase for investment purposes and those selling their investment



Sources: Duna House

and energy prices because of the Russo-Ukrainian war dim profit prospects through the further increase in corporate expenditures. Increasing difficulties in supply chains decelerate production, which may reduce labour demand. A tight labour market and increased inflation expectations of households project high wage dynamics this year. On the other hand, the realisation of the yet unannounced wage increases is surrounded by risks due to the difficulties exacerbated by the war (rising commodity and energy prices, disruption of international production chains).

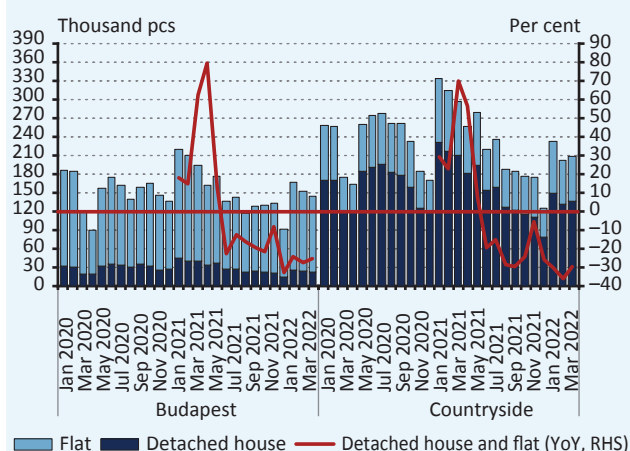
Growth in household incomes was also supported by government disbursements, in addition to the favourable labour market trends. In the fourth quarter households' disposable income increased, while the level of net financial wealth as a percentage of GDP returned to its pre-crisis trend. (Chart 2). Substantial growth in the net wage bill and households' disposable income delivers a rise in purchasing power despite inflation exceeding expectations. The aggregate amount of government disbursements in early 2022 exceeds HUF 2,200 billion. Households may use a significant part of the one-off surplus income for augmenting savings or for deleveraging, and thus the demand boosting effect of the measures may be moderate.

Growth rate of household lending may materially decelerate due to the real economic effects of the war and the rising interest rate environment. The negative real economic impact of the war and the sanctions imposed to contain it, as well as the increasing interest rate environment resulting from rising inflation, may reduce households' borrowing appetite.

Government housing subsidy programmes continue to support housing market demand. Rising inflation decelerates the growth rate of real incomes, and thus households may also reduce their housing investments in addition to consumption. On the other hand, housing subsidy programmes continue to support housing market demand, and – through the home improvements – also housing investments. Rising energy and commodity prices have a negative impact on construction as well; accordingly, the cost of home building and improvement may rise further, which affects housing investments negatively. Housing repair and maintenance services became more than 16 per cent more expensive in an annual comparison already in February 2022 (Chart 3).

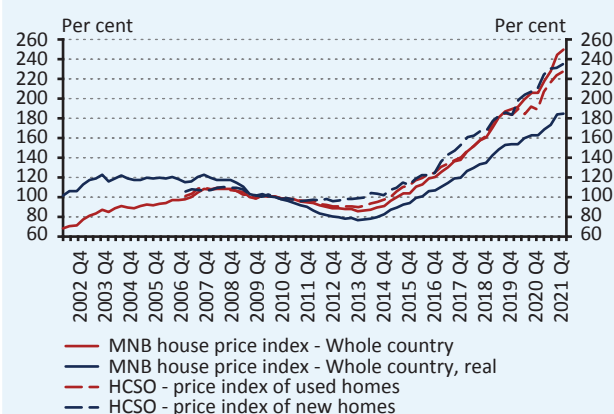
The ratio of investors among homebuyers in Budapest started to increase from the fourth quarter of 2021. According to a survey conducted by Duna House – a real estate agent – the proportion of people buying homes

Chart 5
Demand for properties for sale at ingatlan.com (based on the number of disclosed phone numbers and calls initiated through mobile application)



Source: ingatlan.com

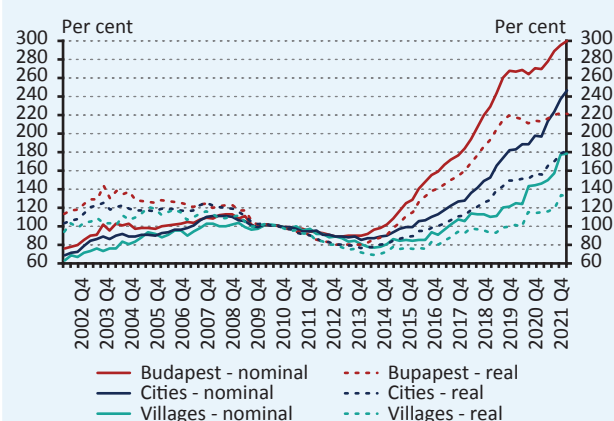
Chart 6
Nominal and real MNB house price index and HCSO's house price indices (2010 = 100%)



Note: Real price index deflated by the consumer price index.

Sources: MNB, HCSO

Chart 7
Nominal and real MNB house price indices by type of settlement (2010 = 100%)



Note: Real price indices deflated by the consumer price index.

Source: MNB

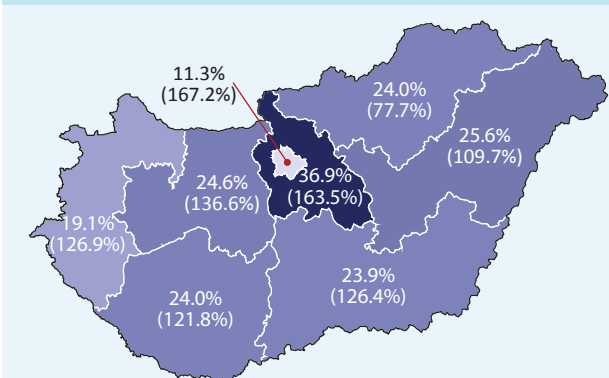
as an investment settled at a steadily lower level after the outbreak of the coronavirus in March 2020, falling from over 40 per cent to around 30 per cent (Chart 4). In rural areas, however, the emergence of the pandemic in 2020 had no effect on the proportion of people buying a home as an investment. In Budapest, the ratio of homebuyers for investment purposes rose again from the fourth quarter of 2021 and remained above 40 per cent in the first quarter of 2022. On the other hand, the ratio of those selling previously purchased investments has increased significantly since May 2021 both in rural areas and in Budapest, which may be due to the high level of prices in the housing market, the realisation thereof and possible expectations of market slowdown due to the rising interest rate environment. In Budapest, the share of those selling their investments rose to over 40 per cent in the fourth quarter.

On an annual basis, housing market demand declined and shifted towards condominiums. According to the data of the ingatlan.com advertising portal, from September 2021 to March 2022, apart from seasonal phenomena, the monthly level of housing market demand remained stable but was substantially below the year-on-year average. In March 2022, demand fell by 25 per cent in Budapest and 30 per cent in rural areas compared to the previous year's high base, resulting from the new housing subsidies introduced at the beginning of 2021. The drop in demand affected detached homes more, where the number of inquiries fell by 36 per cent year-on-year in March, while condominium flats experienced a fall of 20 per cent. As a result of these developments, the ratio of interest in condominium flats within total demand rose from 49 per cent to 55 per cent in one year. By March 2022, inclusive, housing market demand fell short of the year-on-year demand for the third consecutive quarter (Chart 5).

2.2 SIGNIFICANT INCREASE IN RESIDENTIAL PROPERTY PRICES IS ALSO ACCOMPANIED BY NATIONWIDE OVERVALUATION

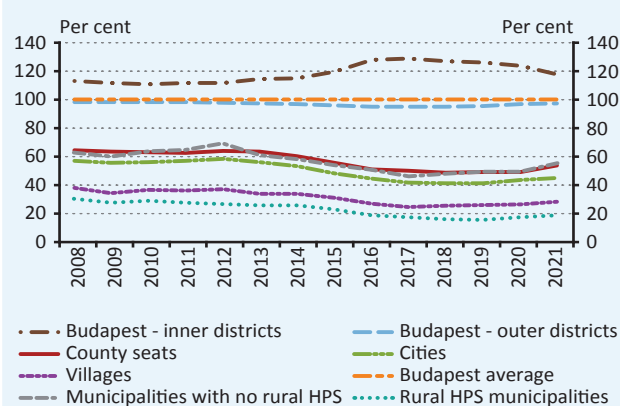
The rise in residential property prices continued at a faster rate in the second half of 2021. According to the MNB house price index, house prices rose by 7.2 and 2.4 per cent in nominal terms on a national average in the third and fourth quarters of 2021, respectively (Chart 6). The annual growth rate of residential property prices accelerated significantly, rising from 14.4 per cent in the second quarter of 2021 to 21.4 per cent in the fourth quarter, in nominal terms. The last time Hungary experienced such a dynamic price increase was in 2003. According to the Hungarian Central Statistical Office's

Chart 8
Development of urban house prices by region
between 2020 Q4 and 2021 Q4 (between 2008 Q4 and 2021 Q4)



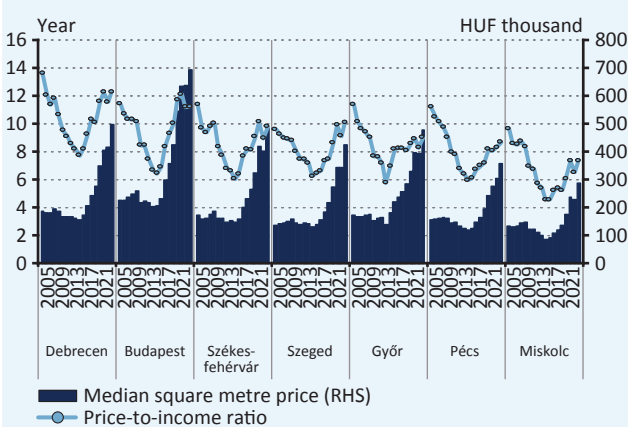
Sources: MNB

Chart 9
Average square metre price by type of settlement
(average of Budapest = 100 per cent)



Sources: NTCA, MNB

Chart 10
Price-to-income ratios in Hungary's regional centres



Note: The price-to-income ratio is the ratio between the price of a 75 square metre median real property and average annual net income of the households. Average incomes are county level data.

Sources: HCSO, MNB

house price indices, the price of new and used homes rose by 12.2 per cent and 20.6 per cent, respectively, in 2021. According to the MNB house price index, house prices rose by 13.4 per cent annually in real terms in the fourth quarter of 2021, which is significantly higher than the 8.7 per cent annual increase measured in the second quarter of 2021, but the annual dynamics in real terms can no longer be regarded as an outlier compared to previous years. House prices have risen by 141.4 per cent in real terms by the end of 2021 compared to their low in the current cycle, registered in the fourth quarter of 2013.

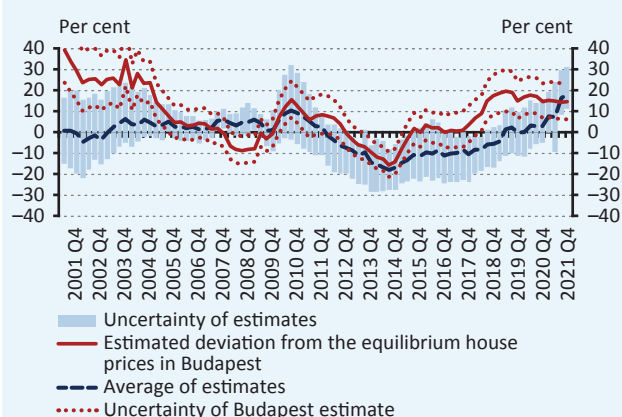
The rate of price increase is highest in provincial towns, but the dynamics have also accelerated in Budapest.

The accelerating rise in housing prices seen in 2021 is mainly attributable to provincial settlements. In Budapest, the annual nominal growth rate of residential property prices rose from 9.7 per cent in the second quarter of 2021 to 11.3 per cent in the fourth quarter (Chart 7). Meanwhile, in provincial towns and in villages, the annual growth rate of house prices accelerated from 18.7 per cent to 25.0 per cent and from 9.7 per cent to 22.3 per cent, respectively, over the same period. In real terms, residential property prices in Budapest rose by 3.9 per cent in an annual comparison in the fourth quarter, slightly falling short of the figure registered in mid-2021. By contrast, the annual rate of increase, adjusted for the consumer price index, in provincial towns rose from 12.9 per cent in the second quarter of 2021 to 16.8 per cent by the fourth quarter, and in villages from 4.3 per cent to 14.2 per cent.

In 2021, residential property prices increased the most in the towns of the Central Hungary region. When examining the change in urban residential property prices by region, similar price dynamics can be observed in most parts of Hungary. The annual rate of price increase varied between 19.1 and 25.6 per cent in the fourth quarter of 2021 across most regions of Hungary (Chart 8). In the towns of the Central Hungary region around the capital, however, the increase in prices was particularly high, i.e. 36.9 per cent in 2021, under the present low pace of transaction data processing. As a result of such increase, compared to 2008 residential property prices in the cities of the Central Hungary region have risen almost as much (+163.5 per cent) as in Budapest (+167.2 per cent).

According to the transaction data provided by real estate agents, house prices continued to rise at an exceptional rate in the first quarter of 2022. According

Chart 11
Deviation of house prices from the estimated level justified by fundamentals, nationwide and in Budapest³



Sources: MNB

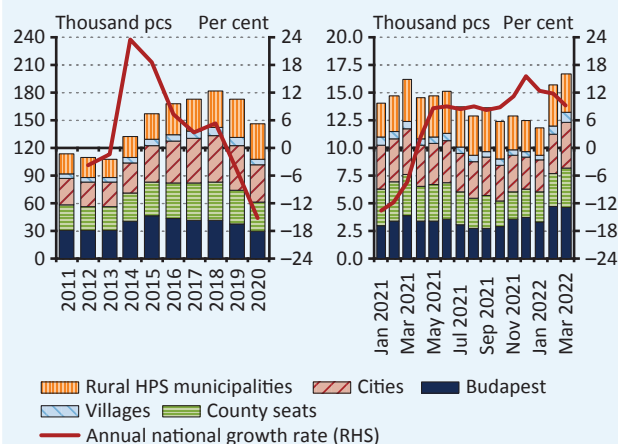
to on our preliminary house price index based on real estate agents' data, residential property prices rose sharply in the first quarter of 2022. The nominal rate of price increase on a quarterly basis was 10 per cent on a national average, and 9.5 per cent in Budapest. As a result, according to preliminary data, the annual nominal growth rate of house prices may have risen to 25.5 per cent in the first quarter, which is the highest in the housing market cycle which commenced in 2014, and it may have been 19.5 per cent also in Budapest, which indicates an equally outstanding price increase.

In 2021, the significant increase in rural house prices narrowed the gap between house prices in Budapest and in the countryside. In 2021, based on the sales and purchase transactions concluded in the Hungarian county seats the average price per square metre was HUF 377,000, i.e. 53.2 per cent of the HUF 709,000 average price per square metre in Budapest (Chart 9). On the other hand, the gap between Budapest and rural house prices has narrowed due to the larger price increases in rural areas. In 2020, the average price per square metre in the county seat was still 48.8 per cent of the Budapest average. In other provincial settlements, there were also signs of convergence to the prices per square metre in the capital, but the degree was smaller. Within Budapest, differences have also decreased, with average prices per square metre increasing more in the outer districts compared to the inner districts.

The ratio of house prices to incomes once again increased in most large towns. In 2021, following a halt in 2020, average prices per square metre in all regional centres of Hungary rose again faster than average wages. As a result, the ratio of house prices to incomes rose in all regional centres, and in most of them exceeded the 2019 record (Chart 10). The ratio of house prices to incomes is the highest in Debrecen, where 12.4 years of total average net income is required to buy a median-priced flat of 75 square metres. In Budapest, the ratio of house prices to income stagnated in 2021, slightly falling short of the peak value in 2019.

³ The quantification of the deviation of house prices from the level justified by fundamentals is 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 2020. 2. Estimate of the long-term equilibrium of Hungarian house prices driven by macroeconomic fundamentals by means of a vector error correction model frame (VECM). For a detailed methodology, see: Berki, T - Szendrei, T (2017), *The cyclical position of housing prices – a VECM approach for Hungary*, Magyar Nemzeti Bank, OP 126. 3. Estimate 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 frame used for forecasting house prices. For more details, see: Magyar Nemzeti Bank: Housing Market Report, October 2016, Box 1. Deviation of housing 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.

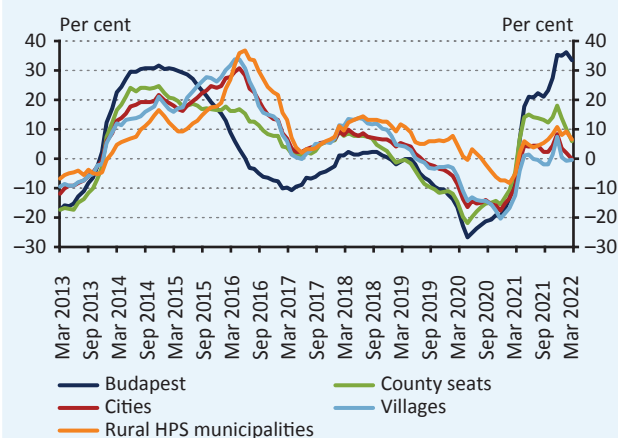
Chart 12
Number of housing market transactions by type of settlement



Note: The monthly frequency is a 12-month rolling growth rate. Taking into account the ownership acquisitions of 50 and 100 per cent by individuals. Between April 2020 and September 2021, data in the National Tax and Customs Administration duty database were adjusted on the basis of the estimated level of processing by type of settlement. As of October 2021, based on transactions and estimated market share of real estate agents. According to our estimate, real estate agent transactions accounted for 11.6 per cent and 13.5 per cent of the turnover in the national market and in Budapest, respectively, in March 2022.

Sources: National Tax and Customs Administration (NTCA), MNB, housing agent database

Chart 13
Annual growth rate of housing market transactions by type of settlement



Note: 12-month rolling growth rates.

Sources: NTCA, MNB, housing agent database

The overvaluation of residential property prices relative to fundamentals rose to a historical high.

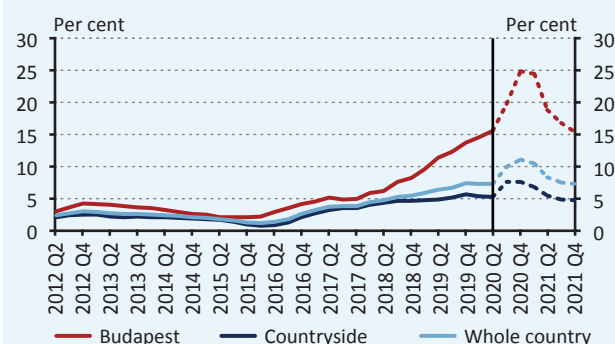
In 2021, house prices in real terms rose more than households' disposable income in Budapest and also on a national average until the fourth quarter, resulting in an increase in the overvaluation of residential property prices (Chart 11). The supply of new homes was not able to offset the high demand, which also contributed to the rise in overvaluation. In Budapest as a whole – also due to the improving unemployment rate – house price overvaluation remained broadly unchanged in 2021, but at 15 per cent it is still high in the current housing market cycle. On a national average, the level of residential property price overvaluation – due to the significant increase in rural house prices – also increased substantially, and it already exceeds the figure registered for the capital. According to our estimate, residential property prices exceeded the level justified by macroeconomic fundamentals by 18 per cent in the fourth quarter at a national level.

2.3. THE HUNGARIAN HOUSING MARKET IS CHARACTERISED BY A HIGH NUMBER OF TRANSACTIONS, SHORTENING TIME TO SELL AND REDUCED BARGAINING

The number of transactions in the housing market in the first quarter of 2022 was close to the year-on-year level. In the domestic housing market, the number of private purchases fell from 171,500 in 2019 to 145,300 in 2020. However, according to our estimate, it rose to 168,000 in 2021, essentially returning to its pre-pandemic level (Chart 12). In 2021 as a whole, the number of transactions completed in Budapest was close to 39,500; 36,600 in the county seats, 41,900 in the localities eligible for rural Home Purchase Subsidy Scheme for Families (HPS); 42,800 in other towns and 7,300 in other villages. In the first quarter of 2022, the estimated number of transactions in the housing market was 44,400, which is only a minor shortfall from the year-on-year figure of 45,100, which is considered high due to the demand-increasing effect of the new housing subsidies.

The number of transactions increased to the greatest extent in Budapest. In the first quarter of 2022, the estimated the annual rolling growth rate of the number of transactions was 32.3 per cent in the capital, 5.5 per cent in the county seats and 6.0 per cent in the rural HPS-eligible settlements, while the annual number of transactions stagnated in the other towns and villages (Chart 13). In addition to the base effects, the fact that

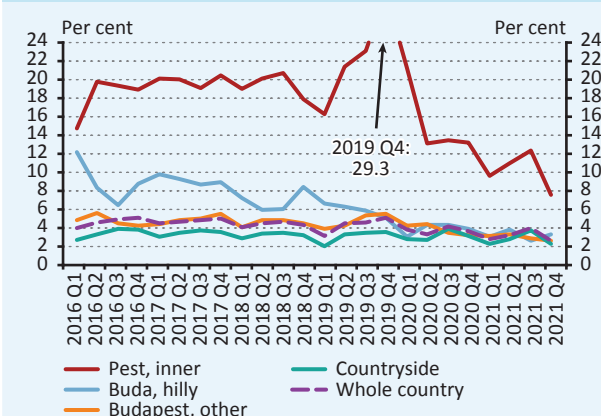
Chart 14
Share of new dwelling transactions within all transactions in Budapest and the countryside



Note: Four-quarter rolling ratios. Only considering purchases by individuals. Estimate based on the number of newly completed homes built by companies since the third quarter of 2020.

Sources: NTCA, HCSO, MNB, housing agent database

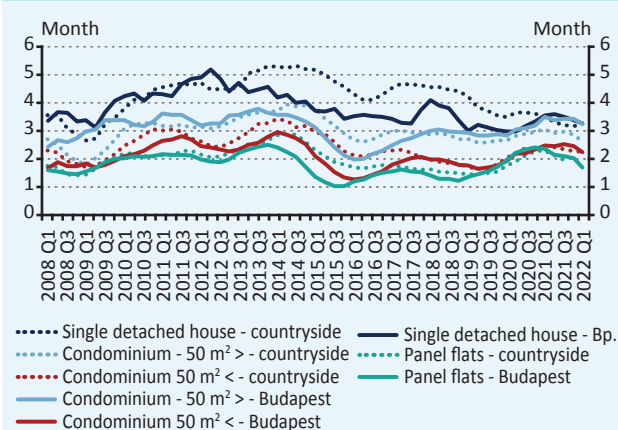
Chart 15
Share of foreign buyers in the housing markets of Budapest and the countryside



Note: Buda, hilly districts: 1st, 2nd, 12th, Inner district of Pest: 5th, 6th, 7th, 8th, 9th.

Source: NTCA

Chart 16
Median time to sell residential property, broken down between Budapest and countryside, and by type of property



Note: Time from the start of advertising to sale. Annual rolling averages.

Sources: MNB, housing agent database

the demand brought forward because of the tightening interest rate environment and the dynamically increasing house prices may have been realised to different degrees in the various types of settlements may have also contributed to the differences in the dynamics of sales and purchases.

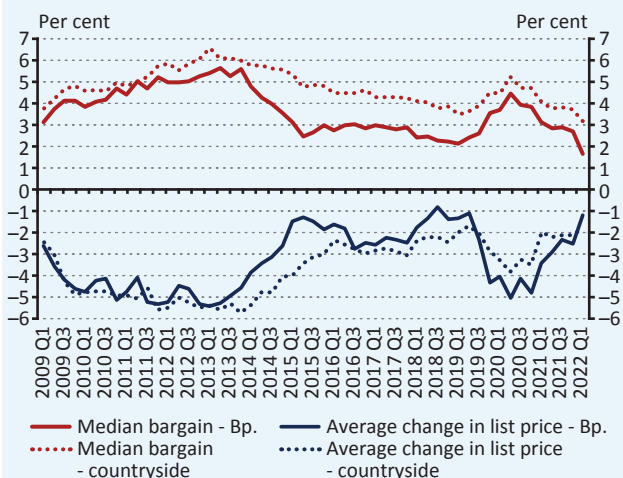
The ratio of new homes in total housing market transactions was around 7.4 per cent nationally in 2021.

According to our estimate based on the number of newly completed homes built in 2020 in business projects, the ratio of new homes significantly increased within home purchases by individuals; accordingly, it reached 24.6 per cent in Budapest, 7.7 per cent in the countryside and 11.1 per cent nationwide (Chart 14). The high rates estimated for 2020 can be explained by the fact that most of the definite sale and purchase contracts are signed within six months of the completion of newly built homes, and in the last quarter of 2020 and the first quarter of 2021 a particularly high number of new homes, built by companies for sale, were completed. However, the time of concluding the pre-contract may be regarded as the actual commitment to the housing market transactions, i.e. the increasing willingness to buy new housing, reflected in the ratios, did not necessarily culminate in 2020, but had already appeared in previous years. In 2021, the ratio of new home transactions fell back to essentially the same level as in 2019, i.e. to an estimated 15.3 per cent in Budapest, 4.9 per cent in the countryside and 7.4 per cent nationwide.

The ratio of non-resident homebuyers has continued to fall, and thus it substantially falls short of the pre-pandemic levels.

The ratio of non-resident buyers in the domestic housing market fell from 4.4 per cent in 2019 to 3.9 per cent in 2020, due to the changed economic and social situation caused by the pandemic, and in 2021 it only amounted 3.3 per cent (Chart 15). While the ratio of non-resident buyers in the Buda hilly districts and other districts of Budapest outside the city centre has been broadly the same as the national ratio over the past two years, the ratio of non-resident buyers in the inner districts of Pest declined in 2020 to 15.5 per cent, compared to 22.1 per cent in 2019. By 2021, their ratio fell even further to 10.4 per cent. In rural settlements, which account for nearly 80 per cent of housing market transactions, the ratio under review fell from 3.3 per cent to 2.9 per cent over the same period. The lower demand from non-residents than in previous years in the high-value markets of the inner Pest and the Buda hilly districts may imply a reduction in investment-motivated purchases.

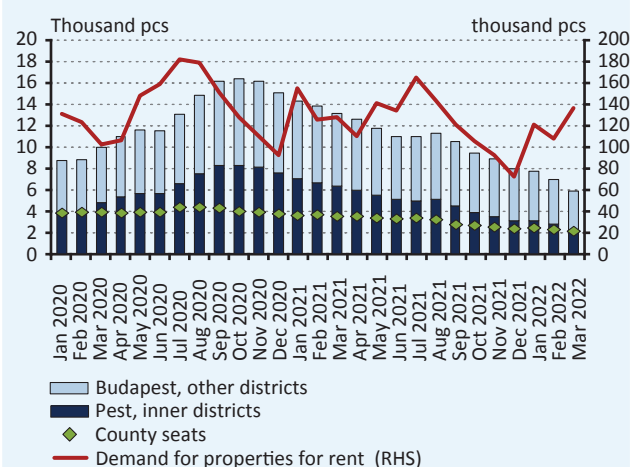
Chart 17
Median bargain in the Budapest and rural housing markets, with the average change to the asking price



Note: Bargain: percentage of drop in the transaction price compared to the last listed price. Change to list price: percentage change applied to the list price during the advertising period.

Sources: MNB, housing agent database

Chart 18
Supply of residential properties to let at ingatlan.com on the last day of the given month and the demand for properties for rent in that month



Note: Demand: number of telephone number disclosures and phone calls initiated from mobile application on the ingatlan.com advertising site Pest, inner districts: 5th, 6th, 7th, 8th, 9th.

Source: Ingatlan.com

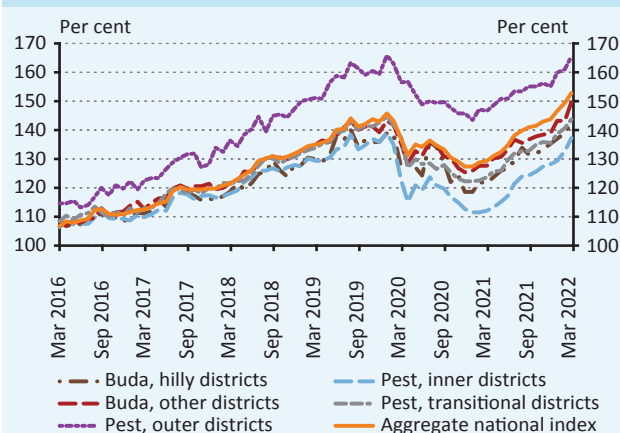
The time to sell has decreased for all residential property types, that of panel flats showing a considerable decrease. In the first quarter of 2022, the median time to sell for residential property fell to 2.7 months from 3.1 months a year earlier (Chart 16). The typical time to sell decreased the most in the case of panel flats, from 2.3 to 1.6 months in the countryside and from 2.4 to 1.7 months in Budapest. The median time to sell for detached houses also decreased, by 0.3 months both in the countryside and in Budapest. The median time to sell for condominium flats fell to a larger degree in the category above 50 square metres than for small flats.

In the first quarter of 2022, the extent of the typical bargain declined to a historical low both in the countryside and in the capital. In line with the high demand at the beginning of the year and the exceptionally rapid price increases, the median market bargain decreased from 2.8 per cent to 1.7 per cent in Budapest and from 3.8 per cent to 3.2 per cent in the countryside, both being the lowest value in the current housing market cycle (Chart 17). In addition to accelerating growth in residential property prices and shortening time to sell, sellers also reduced the list price to a smaller degree than in 2021, and thus the asking price became lower only by 1.0 per cent in Budapest and by 1.6 per cent in the countryside on average during the advertising period.

2.4. RISE IN RENTS ACCELERATES AS SUPPLY CONTINUES TO FALL

The supply of available rentals flats significantly contracted both in the capital and in the county seats. Based on data from ingatlan.com, at the end of March 2022, there were 2,100 flats to rent in the county seats, representing a year-on-year decline of almost 39 per cent, and it hardly exceeds half of the pre-pandemic level, registered at the end of February 2020 (Chart 18). In Budapest, the shock increasing the level of long-term rental supply caused by the emergence of the coronavirus pandemic in Hungary subsided by the end of 2021, but the number of flats for rent continued to decline after that as well. According to data from the ingatlan.com portal, rental supply in the capital

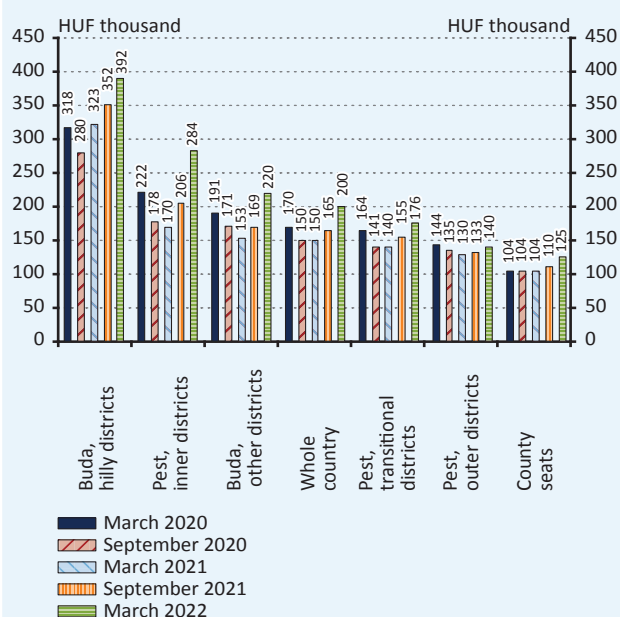
Chart 19
Rent indices of groups of districts in Budapest based on flats to rent advertised on ingatlan.com (2015 = 100%)



Note: Buda, hilly districts: 1st, 2nd, 12th, Buda, other districts: 3rd, 9th, 22nd, Pest, inner districts: 5th, 6th, 7th, 8th, 9th, Pest, transitional districts: 10th, 13th, 14th, 19th, 20th, Pest, outer districts: 4th, 15th, 16th, 17th, 18th, 21st, 23rd.

Source: HCSO-Ingatlan.com

Chart 20
Average rents based on flats to rent advertised on ingatlan.com



Note: The rents per category are the average value of the average rental prices in the districts belonging to the respective category, weighted by the number of advertisements. Buda, hilly districts: 1st, 2nd, 12th, Buda, other districts: 3rd, 9th, 22nd, Pest, inner districts: 5th, 6th, 7th, 8th, 9th, Pest, transitional districts: 10th, 13th, 14th, 19th, 20th, Pest, outer districts: 4th, 15th, 16th, 17th, 18th, 21st, 23rd.

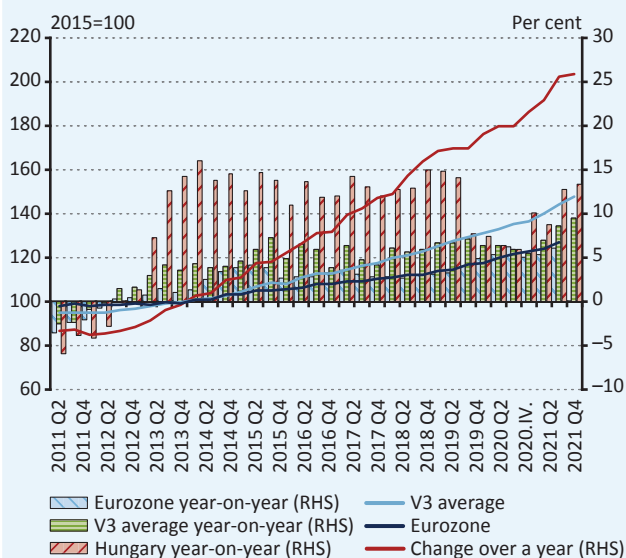
Source: HCSO-Ingatlan.com

amounted to 5,900 flats in March 2022, representing a decline of one-third compared to the pre-pandemic level. In the inner districts of Pest, the most popular area for renting, supply fell to an even larger degree, by 42 per cent, over the same period. While a significant part of vacant rental flats has been let, there was no steady fall in demand for rental flats. The number of disclosed phone numbers and calls initiated through mobile application on the ingatlan.com portal in the first quarter of 2022 was broadly the same as in the same period of 2020. Rental demand may also be supported by a gradual return to office work accompanied by the revival of appreciation of the closeness of the home to the office. Rapid price rises in the rental market may persist as a combined result of rising demand and falling supply.

The rate of increase in rents accelerated. In parallel with the gradual decrease in supply, the annual growth rate of rental prices in Budapest and nationwide increased from 12.7 per cent in the fourth quarter of 2021 to 19.0 per cent in the first quarter of 2022, and from 13.1 per cent to 18.2 per cent, respectively, according to the HCSO-ingatlan.com rent index (Chart 19). The level of rents in the capital exceeded, to a small degree, its previous, pre-pandemic, record for the first time. On a quarterly basis, the growth rate of rental prices accelerated from 2.6 to 7.4 per cent in Budapest and from 2.0 to 6.9 per cent nationwide. In the individual district groups in the capital, the rate of quarterly rental price increases was similar, between 5.9 and 8.4 per cent in the first quarter.

At the beginning of 2022, there were significant differences in the average rent levels in the individual district groups in the capital. In March 2021, the average rent level of Budapest's district groups was HUF 130,000-170,000, except for the significantly higher-priced Buda hilly districts, but the price gap between the individual district groups has widened over the past year (Chart 20). At present, the average rent of properties in the inner districts of Pest is HUF 284,000, which is an extraordinary – HUF 114,000 – increase in one year. During the same period, the average rent in the other districts of Buda, the transitional districts of Pest and the outer districts of Pest reached HUF 220,000, HUF 176,000 and HUF 140,000, respectively, representing a decreasing increase of HUF 67,000, HUF 36,000 and HUF 10,000, respectively.

Chart 21
Real house price developments in Europe



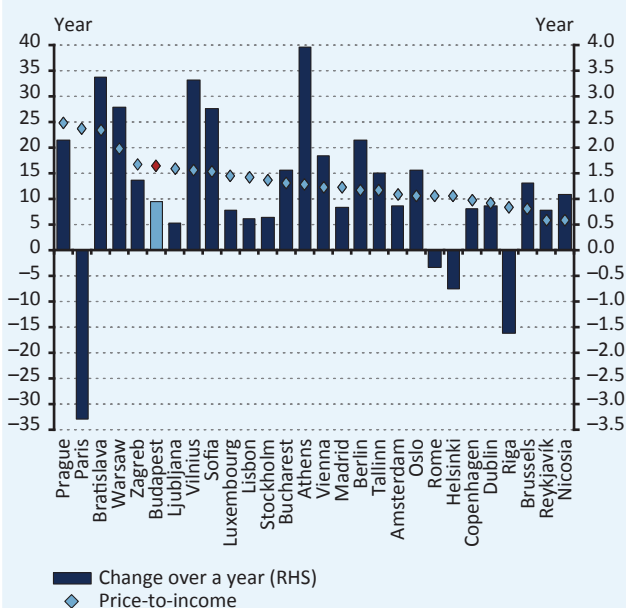
Sources: BIS, MNB

In the county seats, the average rent of flats to let rose from HUF 108,000 to HUF 125,000 in one year.

2.5. REAL PRICE INCREASES ACCELERATED IN EUROPE TOO WHILE HOUSING AFFORDABILITY DETERIORATED

In the fourth quarter of 2021, Hungarian annual house price dynamics rose well above the average of the region. While the real value of flats in Hungary exceeded twice its 2015 level, the average real residential property price appreciation in the Visegrád countries excluding Hungary (V3) has been 48 per cent since 2015, and only 27 per cent in the euro area, adjusted for inflation, according to the latest data (Chart 21). In the fourth quarter of 2021, the annual growth rate of house prices in real terms accelerated from 5.9 per cent to 13.4 per cent in Hungary and from 6.0 per cent to 9.6 per cent on average in the other Visegrád countries. Accordingly, the appreciation pressure on the domestic housing market may once again be considered high compared to the surrounding countries.

Chart 22
Price-to-income ratios in European capitals (2022 Q1)

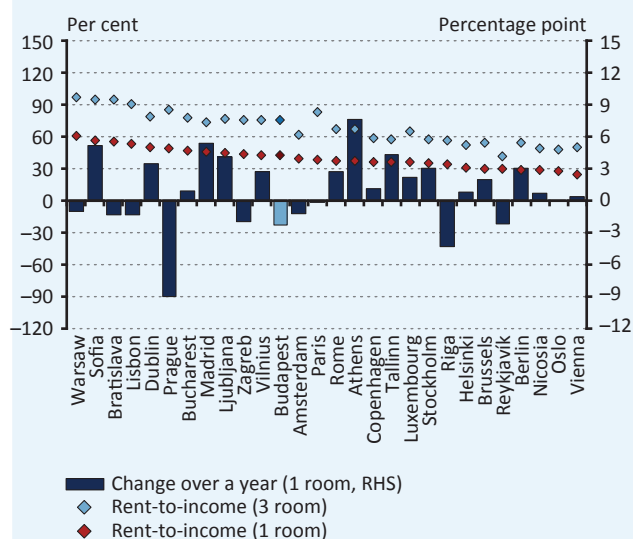


Note: The price-to-income ratio is the ratio of the average housing property prices outside the city centre to the national average wage. Calculations based on 75 square metre homes. Change between 2021 and 2022 Q1. Budapest is marked with a different colour.

Sources: Eurostat, numbeo.com

Housing affordability deteriorated in a wide range of European capitals. A year ago, Budapest was the fifth least affordable capital in Europe, while by the first quarter of 2022 the position of the Hungarian capital improved by one place. However, a year ago and this April, buying a 75-square metre residential property in Budapest required 15.3 and 16.2 years of national average income, respectively (Chart 22). In a European comparison, housing affordability deteriorated at a similar rate as in Budapest, with the median house price/income ratio for European capitals rising from 11.1 to 12.3 years. Affordability deteriorated in the capitals of the other Visegrád countries to a higher degree than in Budapest, with a property of 75 square metres of average price level requiring an average income of 24.5 years in Prague, 23.1 years in Bratislava and 19.4 years in Warsaw.

Chart 23
Rent-to-income ratio in European capitals (2022 Q1)



Note: The rent-to-income ratio is the quotient of the rent for a typical rental flat in the capital outside the city centre and the national monthly net average income. Change between 2021 and 2022 Q1. Budapest is marked with a different colour.

Sources: Eurostat, numbeo.com.

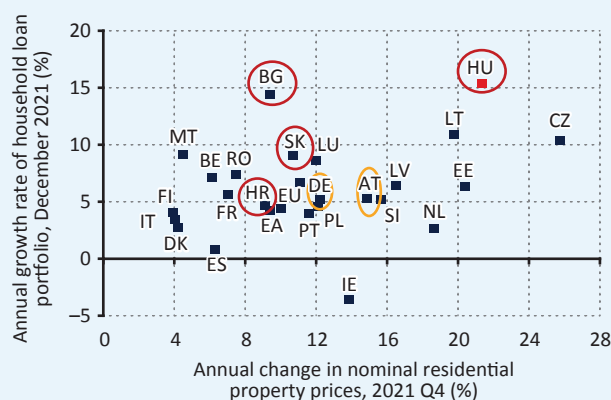
Housing affordability in the rental market of Budapest has improved slightly over the past year. The rent for a typical 3-bedroom or 1-bedroom flat in the Hungarian capital is 72.8 and 40.9 per cent of the average net wage in Hungary, respectively. (Chart 23). A year ago, these ratios were 73.5 and 43.2 per cent, respectively, which shows that the growth in incomes has been able to offset the increase in rents. Affordability in the other Visegrád capitals has also improved or remained unchanged, but they still belong to the group of least affordable cities in Europe: In Prague, the rent/income ratio for a one-bedroom flat is 47.3 per cent, in Bratislava 53.6 per cent and in Warsaw 58.4 per cent. We get a similar picture of housing affordability when examining the disposable income at purchasing power parity remaining with the tenant after paying the typical rent for a one-bedroom flat from an average wage. This figure at purchasing power parity is EUR 837 in Budapest, EUR 835 in Prague, EUR 674 in Warsaw and EUR 518 in Bratislava. By contrast, in the capitals of Germany, Norway and Iceland, the purchasing power of the remaining income after rent exceeds EUR 1,800.

Box 1

Link between lending and the recovery of the housing market; the related warning by ESRB

In Hungary, the sharp rise in housing prices in recent years has been accompanied by a significant increase in outstanding borrowing of households. In 2021, the housing market in most European countries was in its ascending phase and lending to households also continued at a rapid pace. The annual nominal growth rate of house prices in most EU Member States was between 5 and 15 per cent, while prices did not fall in any of the countries. The 18.5 per cent annual residential property price dynamics in Hungary in the third quarter of 2021 was the third highest after the Czech Republic and Lithuania, with annual house price increases of 22.0 and 18.9 per cent, respectively. Residential property price dynamics have been combined with a substantial increase in retail loans in almost all European countries. In December 2021, only one European country, Ireland, registered a year-on-year decline in its household loan portfolio, while the average growth in the loan portfolio in the EU Member States was 5.9 per cent. The annual growth of 15.4 per cent in the household loan portfolio in Hungary may be regarded as the most dynamic in EU comparison. However, the instalment-reducing effects of the moratorium on payments,

Changes in nominal house prices and household lending in European comparison



Note: Yellow ellipses indicate a recommendation on medium-term vulnerabilities in the housing market, and red ellipses indicate countries that have received a warning from the ESRB in February 2022. Liechtenstein is not shown on the chart, but has also received a warning. Yearly change in nominal house prices: GR: 9.1%; CY: -5.3%. Yearly change in household lending: GR: -11.9%; CY: 0.8%.

Source: Eurostat, EKB, BIS, MNB

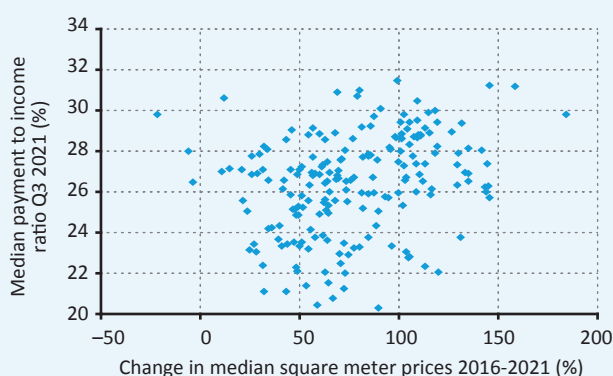
which is rather wide-ranging in a European comparison, also greatly contributed to this; in addition, the household debt-to-GDP ratio is the second lowest in a European comparison. The outstanding degree of price increase in the housing market and the significant pick-up in lending together may give rise to cyclical systemic risks, which is why the analysis of the interaction of the two markets and the change in risks is a top priority.

In February 2022, the European Systemic Risk Board (ESRB) issued a warning to Hungary on the potential build-up of systemic risks in the housing and credit markets in the medium term.⁴ Based on the MNB's data for September 2021, the ESRB highlighted that in Budapest, significant overvaluation, as high as 18 per cent, was measured in residential property prices. In addition, outstanding mortgage loans to households has shown robust growth since 2018. According to the ESRB, due to the insufficient supply, demand stimulating government subsidies and preferential loans contribute to an increase in lending to households and overall to a rise in medium-term vulnerabilities.

According to the ESRB, Hungary's current macroprudential rules mitigate risks partially, while it has made a number of recommendations for the medium term. According to the ESRB's assessment, the MNB's prevailing macroprudential rules, the payment-to-income ratio (PTI) and loan-to-value (LTV) limits, mitigate vulnerabilities in the real estate market, and banks, recognising the increase in credit risks due to the extended moratorium and following the MNB's recommendation, have already classified some loans as Stage 2 loans, representing higher risk. According to its assessment, the current regulatory framework is partially adequate to manage the risks, but if risks increase in the medium term, the ESRB believes that tightening of the PTI limits and the addition of maturity limits and capital buffer requirements may be justified. In addition, according to its assessment, the creation of a supportive regulatory environment for sufficient supply and the creation of a rental market supported by appropriate legislation could ease the pressure on residential property prices and credit demand.

In our analysis, there is no strong correlation between the current pick-up in lending and the increase in housing market prices. When examining the housing and credit market developments by district, we assessed how tight the relationship between the increase in credit market risks and the housing price appreciation is. When dividing Hungary's districts into two groups, one with higher (an increase in average price per square metre of over 70 per cent between 2016 and 2021) and one with lower housing price appreciation, there are no clear signs in the indicators of credit market risk that the increase in residential property prices has been accompanied by an increase in risk appetite. In the districts affected by higher price per square metre changes, the median PTI of new housing loans is only a few percentage points higher than that of loans disbursed in areas with lower price increases. In addition, the median loan-to-value ratio is lower in areas affected by larger price increase. Moreover, only a weak correlation of 29 per cent was found between the change in median price per square metre and the median PTI level of the districts in Hungary. Moreover, there is no unambiguous underlying causal link. On the one hand, it is possible that the more stretched income situation (higher PTI) has somewhat contributed to the sharper rise in house prices. On the other hand, it may as well be the situation that borrowers' income situation has become more stretched due to the larger price increase.

Change in median square meter prices between 2016 and 2021 and median PTI in Q3 2021 by districts



Source: MNB

⁴ Source: <https://www.esrb.europa.eu/news/pr/date/2022/html/esrb.pr220211~9393d5e991.en.html>

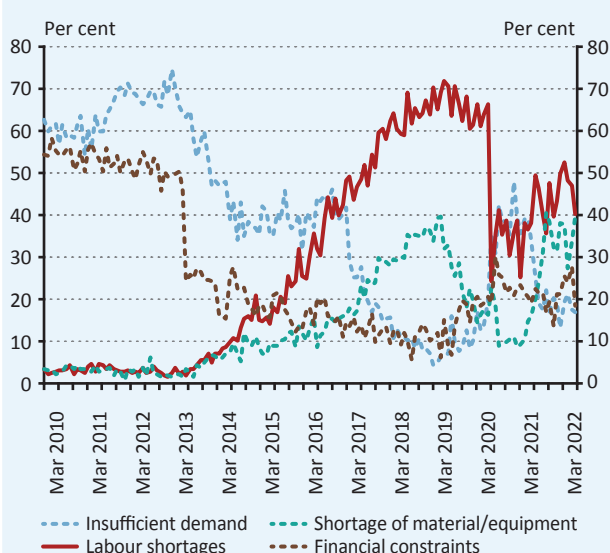
3 Supply of new homes

In 2021, the largest – almost 16 per cent – increase in home construction costs was registered in Hungary among EU Member States. As a result of the war, raw material and energy prices have started to rise again, supply chain problems have also intensified, generating higher costs for companies. Looking ahead, prices are likely to rise further and demand in the construction sector may also weaken due to the uncertainty caused by the war. On the supply side, the construction sector's performance is mainly hindered by labour and raw material shortages.

In 2021, around 20,000 new residential properties received occupancy permits, which resulted in a significant – 29.5 per cent – decline compared to 2020. The decline in the number of completed new homes continued in the first quarter of 2022. At 0.4 per cent, the annual renewal rate of housing stock in Hungary is low by European standards. The decline in home constructions was mainly attributable to the large number of single detached house constructions brought forward to 2020 due to the expected tightening of energy rules. In 2021, the number of homes built by natural persons in the countryside fell by 48.7 per cent year-on-year. By contrast, the number of new building permits issued increased by 32.7 per cent over the year, probably mainly due to the temporary reintroduction of the reduced VAT for buildings that obtained building permits before the end of 2022.

In the first quarter of 2022, the number of new condominium projects under development and sale in Budapest increased year-on-year, but increased demand due to expanded housing subsidy programmes and the FGS Green Home Programme resulted in a shortage of new home supply in the capital, with the number of available unsold homes falling by 27 per cent at an annual level. Construction has already started at more than half of the flats under development in the capital, but more than half of them is behind schedule, 37 per cent by more than one year. Rural housing developments are typically concentrated in the county seats and around Lake Balaton. In the quarter under review, 41 per cent of the flats for sale in Budapest were repriced, the vast majority of which involved a price increase.

Chart 24
Constraints to construction output



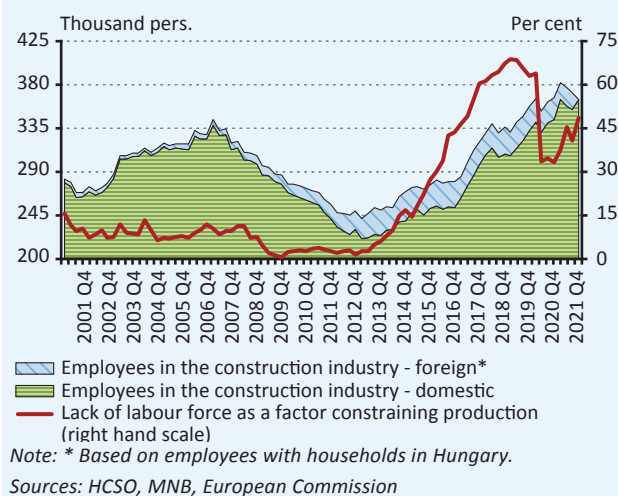
Note: Seasonally adjusted series.

Source: European Commission

3.1 CONSTRUCTION STRUGGLES WITH RISING COSTS AND SHORTAGE OF RAW MATERIALS

The performance of construction companies is mainly hindered by labour and raw material shortages. At the beginning of the year, less than a third of the respondent companies reported that their performance was curbed by the shortage of raw materials. However, following the outbreak of the Russo-Ukrainian war, raw material prices started to rise again significantly, the effects of which are already reflected in the March data. 40 per cent of companies experienced a shortage of raw materials (Chart 24). In addition to rising raw material prices, companies are also hit by increasing energy prices, which also contributes to the growth in the corporate costs. In addition to the existing bottlenecks, looking ahead, additional problems may arise if demand declines because of the accelerating inflation and the uncertainty caused by the war.

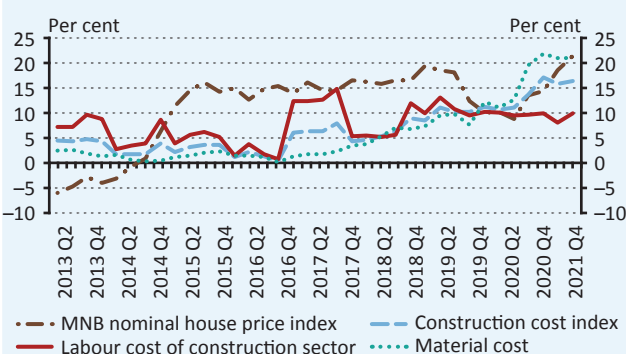
Chart 25
Number of employees in the construction industry



The number of construction employees is already above its pre-crisis peak from 2008. After the 2008–2009 crisis, many construction workers started working abroad, which contributed to the increasing scarcity of capacity on the labour market for the construction sector in recent years. In 2020, because of the pandemic, part of the skilled construction workers returned from abroad and the number of those working abroad declined in the second half of 2021, which may have contributed to the increase in the number of employees in Hungary (Chart 25).

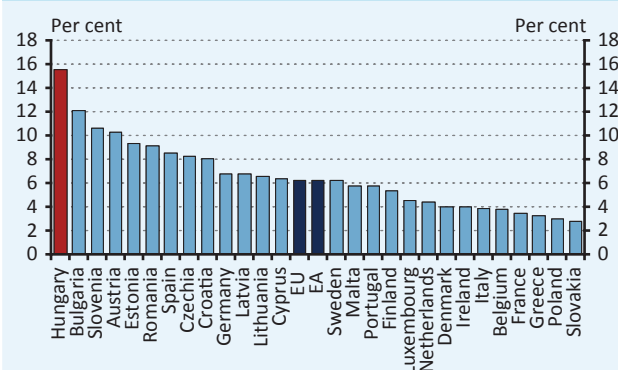
According to the data of the Hungarian Central Statistical Office, the increase in home construction costs continued. In the fourth quarter, material costs rose by more than 20 per cent year-on-year. (Chart 26). Construction labour costs also rose significantly, by 10.1 per cent. Looking ahead, housing subsidies will continue to support demand in construction, while rising raw material and energy prices may have a negative impact on the performance of the sector.

Chart 26
Annual change in home construction costs and nominal house prices



Global and domestic factors contribute equally to the rise in construction prices. In 2021, home construction costs in the EU rose to the greatest extent— by almost 16 per cent – in Hungary, compared to 2020. (Chart 27). On average, the cost of home construction rose by 6.3 per cent in the 27 EU Member States and in the euro area. In Hungary, the underlying reasons for the rising construction costs include country-specific factors, in addition to global price rises. From 2016, supply constraints (labour, raw materials) have increasingly hampered production in the sector. Prices started to rise as, partly resulting from public investments and housing measures, the supply side was unable to keep pace with increasing demand. According to market actors, it is important to foster competitiveness and supply-side developments to avoid excessive price increases. (Box 2). Mainly due to the warring countries' high share in the world exports of certain raw materials and the resulting increase in the cost of materials, the Russo-Ukrainian war will lead to a further increase in construction costs.

Chart 27
Annual changes in construction costs of residential buildings in EU member countries in 2021



Box 2**Key messages from the 2022 Spring meeting of the Housing Market Section of the Housing and Real Estate Market Advisory Board (LITT)**

At a meeting held in April 2022, the Housing and Real Estate Market Advisory Board discussed the current housing market situation and trends. The Board's agenda emphasised housing developments, changes in construction costs and the financing prospects.

HOUSING DEVELOPMENTS

According to the experts attending the LITT meeting, the predictability and stability of the regulatory environment is important for home creation and the maintenance of home construction. Although the family policy instruments – such as Home Purchase Subsidy (HPS) – having been in force for a while have contributed to this predictability, there are several factors that create uncertainty both for end-users and developers. These include the VAT rate on the sale of new homes, the brownfield regulation and uncertainties concerning loan programmes. According to market experts, the continued maintenance of the reduced VAT rate, the increased transparency of the assessment of the brownfield status and the maintenance of subsidised loan schemes would also play an important role in terms of supply and demand. For the time being, demand for new homes is kept high by household savings and fears of inflation. However, experts believe that if the measures supporting the demand side (preferential VAT, favourable borrowing opportunities, family allowances) are phased out, a major – according to some players as high as 50 per cent – decline may be expected in new home developments through the next year.

In terms of occupancy permits, there has been a significant increase in the number of family house constructions in recent quarters, influenced by two regulatory factors. On the one hand, according to the current regulations, only houses meeting the criteria of nearly-zero energy demand can be granted a building permit after 30 June 2022, and on the other hand, many people have tried to take advantage of the preferential financing offered by the FGS Green Home Programme. This generated earlier demand; however, after the entry into force of stricter energy requirements and due to the uncertainties caused by certain regulations, such as the temporary preferential VAT on homes, the number of newly started constructions may fall, which may be reflected in the number of completions in 2023-2024.

Inflation, supply-chain difficulties, and rising interest rates are leading to a deterioration in the affordability of home purchase, while renting can be a housing solution for buyers priced out of the housing market. Western European countries have a decades-old institutional rental housing market, which has also started to emerge in Poland because of the appearance of Scandinavian and German investors. The Polish example shows that while the emergence of institutional investors buying in large volumes takes a significant part of the supply of new homes out of the tenement flat market, it also creates new supply in the rental market offering alternative housing opportunities. Based on international examples, tenement flat schemes are combined with self-funding schemes to help people save the funds they need to buy their own home later. Institutional housing investments are financed by investors with long-term, low amortisation loans. At present no financing on these terms is available in Hungary.

For housing developers, the rise in the price of building materials is a major risk, and there have been examples of developments being postponed as a result. This was the case at projects in locations where it is unlikely that the cost increase can be passed on to the house prices. Experts expect that there will be an increasing number of cases when the start of developments is postponed, because, in addition to rising construction material prices, there is a shortage of construction materials on the domestic market, which has been exacerbated by the Russo-Ukrainian war and the stockpiling behaviour triggered by the price increase. In addition to the scarce availability of key building materials such as reinforcing steel and cement, market participants are also experiencing disruptions in the availability of public utility capacity. The pricing of new housing is mostly

controlled by cost-side processes rather than by market competition. The price rise is expected to reduce demand, and supply is also expected to fall because of material supply problems and continued cost increases, but the new equilibrium to be developed is not expected to lead to a fall in the price of new homes. Regarding the high house prices in general (including the market of used homes), it was mentioned that the price of new housing does not play a significant role in the price level, as new home transactions accounts for around 15 per cent of all sales nationally. On the other hand, tight supply also plays a role in the rise in the prices of used homes, as few homes have been built in the last 10 years, and thus used homes of good repair for sale are scarce on the market.

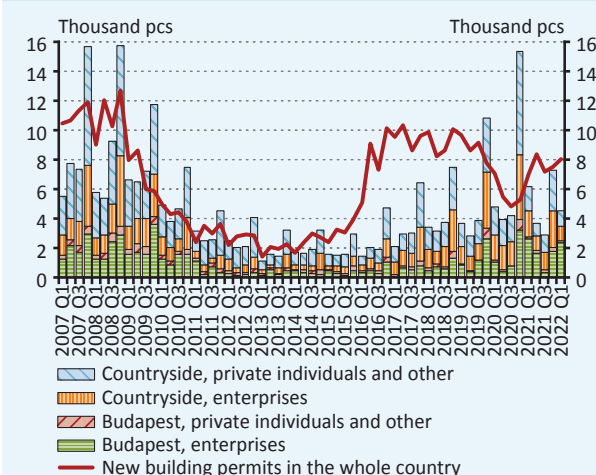
FINANCING

Uncertainties on the demand side of the commercial real estate market mean that office, hotel, and retail developments may be less attractive to banks in 2022 from a financing perspective. Owing to household savings, demand for new housing will persist, and thus from a financing perspective, housing developments may remain the focus of institutions, with a more cautious approach than in previous periods. At the same time, the rise in construction material prices also carries significant risks in this segment. As a result of the development difficulties, the number of housing project loan applications received by banks has fallen significantly and the plans underlying pending loan applications also call for a review.

Developments realised relying on project financing loans face significant cost increases due to rising lending rates, while, conforming to the MNB's recommendation and in accordance with consumer protection considerations, payments by buyers are not used. By contrast, developments without project loans represent an unregulated area, where developers can start construction using and risking customer deposits in a turbulent construction materials market. According to market participants, these latter developments carry a higher risk from a consumer protection perspective than projects controlled by banks and may therefore call for regulatory intervention.

Maintaining the supply of new housing is also necessary to preserve construction capacity, and the MNB's Green Home Programme has proven to be a good tool for this; its continuation would be welcomed even under higher interest rates.

Chart 28
Distribution of new completions by location and developer

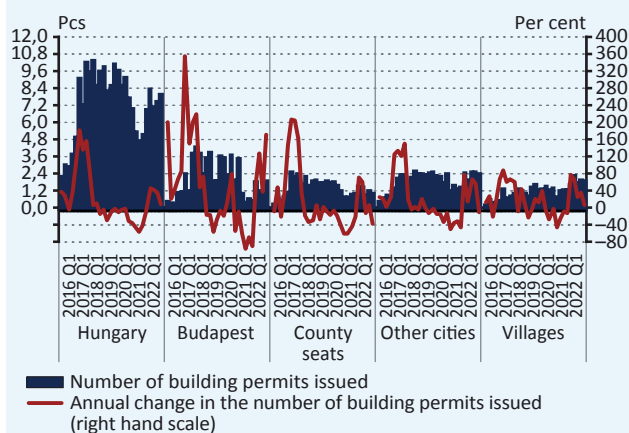


Source: HCSO

3.2 SUPPLY OF NEW HOMES DECLINED SIGNIFICANTLY IN 2021

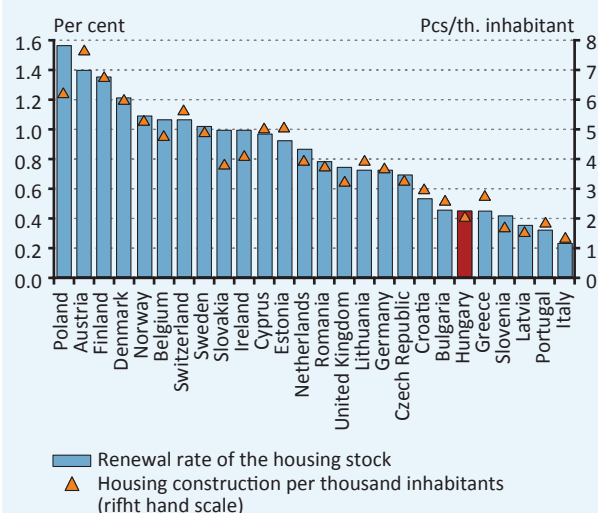
In 2021, the number of new homes completed declined significantly. In 2021, a total of 19,000 new residential properties received occupancy permits, which is a significant – 29.5 per cent – decline compared to the 28,200 new homes completed in 2020 (Chart 28). The number of residential properties (mostly detached houses) built by natural persons in rural areas fell the most, by around 48.7 per cent year-on-year. At the same time, in rural areas the number of homes built by companies, mostly for sale, also fell, by 31.1 per cent compared to 2020. In Budapest, dominated by home constructions by companies, the number of new homes completed increased by 11.0 per cent in 2021. However, this increase is attributable to the delayed completions at the beginning of the year originally planned for the end

Chart 29
Number of dwellings included in issued residential building permits and annual growth rate by type of settlement



Source: HCSO

Chart 30
Annual renewal rate of the housing stock and housing construction per thousand inhabitants in Europe



Note: The reference year for Cyprus, the United Kingdom and Switzerland is 2019, for Austria, Belgium, Croatia, Germany, Italy, Italy, Slovenia, Sweden and Switzerland it is 2020, and 2021 for the other countries.

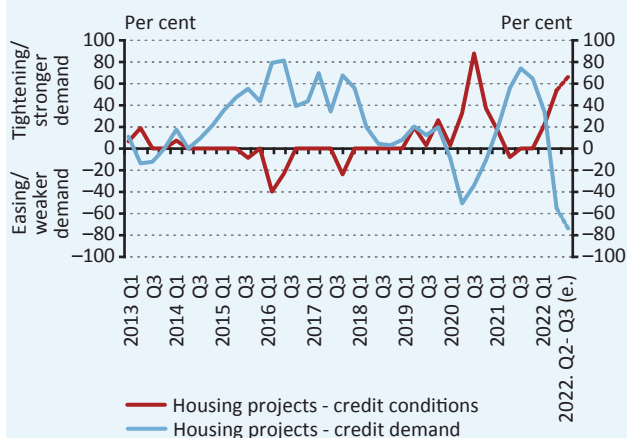
Sources: ECB, national statistical offices, MNB

of 2020. In the third and fourth quarters, the number of new homes completed in Budapest also significantly fell year-on-year. The fall in newly completed homes in 2021 was caused by the construction of many family houses brought forward to 2020 in anticipation of tighter energy rules. In the first quarter of 2021, the number of new homes completed continued to decline, falling by 26.4 per cent year-on-year.

Owing to the temporary introduction of preferential VAT on housing, the number of building permits issued has increased. A total of 29,000 new building permits were issued in 2021, which is a substantial – 32.7 per cent – increase compared to the previous year (Chart 29). The number of building permits also increased in the first quarter of 2022, by 15.2 per cent, year-on-year. The main reason for the increase in building permits is the temporary reintroduction of the reduced VAT rate of 5 per cent on the sale of new homes for two years from 2021. Under the current rule, new homes with a building permit obtained by the end of 2022 can be sold at the reduced VAT rate until 2026. By type of settlement, the number of building permits issued in Budapest decreased by 13.6 per cent in 2021, while rural settlements generally witnessed a significant increase in the willingness to build new homes. The number of new building permits issued increased by 34.6 per cent in the towns of county rank, by 58.4 per cent in other towns and by 55.2 per cent in villages.

The annual renewal rate of the housing stock in Hungary is in the last quarter of the European ranking. In 2021, 19,000 homes received occupancy permit in Hungary, which corresponds to 0.4 per cent of the residential properties in Hungary, and in terms of population, two homes per thousand inhabitants were occupied (Chart 30). This level of home construction is rather low by European standards, putting Hungary in the last quarter of the home construction ranking. It is the sixth lowest in terms of stock of residential properties and the fourth lowest in terms of homes completed per thousand inhabitants. Poland leads the ranking based on the stock, with 1.56 per cent of the housing stock built in 2021, but ratios above 1 per cent are also registered in Austria, the Scandinavian countries, Belgium and Switzerland. In terms of population, the picture is similar, with Austria at the top of the ranking with 7.65 homes per thousand inhabitants completed in 2020, followed by the Scandinavian countries (4.9–6.8 homes/thousand inhabitants), Poland (6.2 homes/thousand inhabitants), Switzerland (5.62 homes/ thousand inhabitants) and Belgium (4.76 homes/ thousand inhabitants).

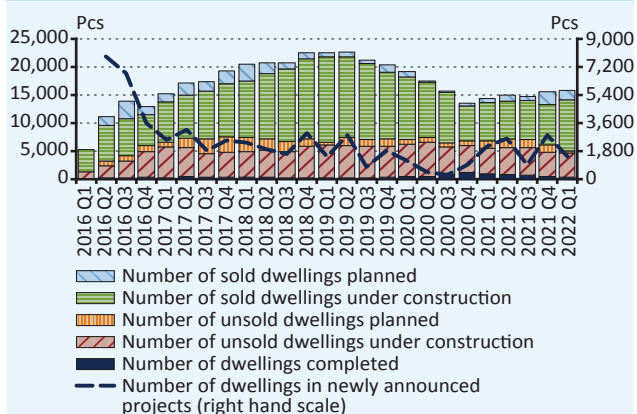
Chart 31
Changes in credit conditions of housing projects and changes in demand



Note: The net ratio is the difference between banks tightening and easing, and reporting stronger or weaker demand, weighted by market share.

Sources: MNB, based on banks' responses

Chart 32
Availability of homes in new projects under development and sale in Budapest and number of newly announced housing starts



Note: Based on projects for at least 4 new homes in Budapest.

Sources: ELTINGA – Budapest Housing Market Report

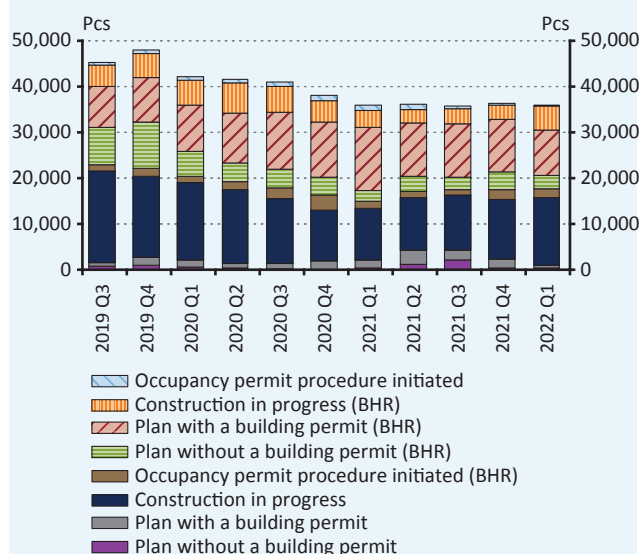
3.3 HOUSING DEVELOPMENT IN THE CAPITAL CANNOT KEEP UP WITH THE HIGH DEMAND

Banks have tightened the conditions for residential property project loans, while they experienced a fall in demand for loans. Based on responses to the Lending Survey⁵, 53 per cent of banks, in net terms, tightened financing conditions for housing projects in the first quarter of 2022, citing industry-specific problems and decreasing tolerance for risk. Looking ahead to the second and third quarters of 2022, 65 per cent of banks, in net terms, foresee further tightening due to problems affecting the sector (rising financing and construction costs, preferential VAT and the expected phase-out of home purchase subsidies) (Chart 31). In the first quarter of 2022, a net 53 per cent of respondent institutions reported a decline in credit demand for housing projects, with the vast majority of them attributing this to the rising interest rate environment, and 72 per cent of the respondent banks expect a further decline in demand in the next six months due to the same factor.

The number of unsold new homes in the capital significantly declined. The number of new condominium projects under development and sale in Budapest rose to 15,200 by the end of the first quarter of 2022, following a 15 per cent annual increase (Chart 32). The re-introduction of the reduced 5 per cent VAT on housing from 2021 could also play a significant role in the increase in the number of homes appearing in the market. At the same time, the scarcity of new home supply in the capital shows that by the end of March, the number of unsold homes still available fell to 4,901, after a 27 per cent annual decline, as the number of newly marketed homes could not keep pace with the number of sales realised because of the high demand. In the quarter under review, 2,451 flats were sold in Budapest, while 1,400 flats were newly advertised, being 32 per cent lower than the number of flats put on the market in the same period last year.

⁵ Banks' senior loan officers responded to the MNB's first quarterly Lending Survey between 1 and 20 April 2022; therefore, the changing market conditions have already been taken into account.

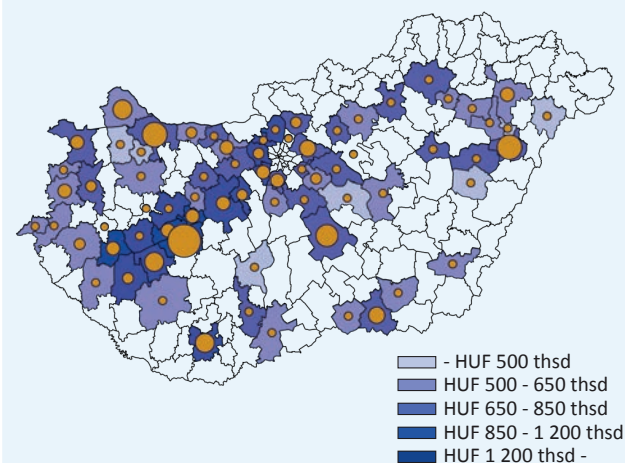
Chart 33
Number of condominiums under development in Budapest



Note: The flats shown in the BHR (Budapest Housing Market Report) categories are also included in the Budapest Housing Market Report, i.e. they are under sale.

Sources: ELTINGA – Budapest Housing Market Report, Building Permit Monitor

Chart 34
Average price per square metre and number of new flats under development and sale in provincial condominiums by district



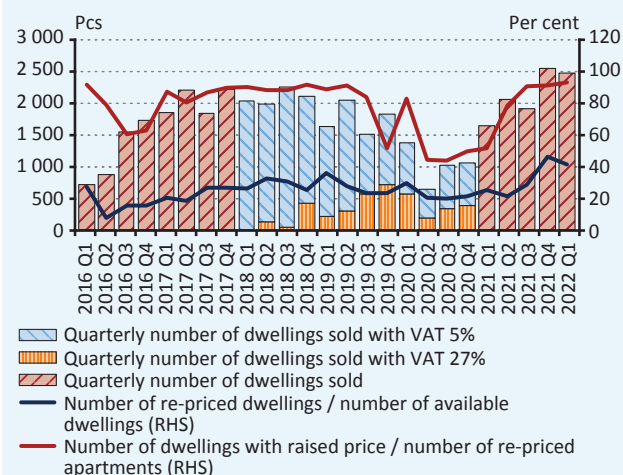
Note: Considering condominiums with 10 or more flats. The size of the circles is proportional to the number of flats. The smallest circle indicates a number of flats below 100, while the largest one above 1,000.

Sources: ELTINGA – Countryside Housing Market Report

Development activity in the capital has stagnated at a lower level since 2021. In the first quarter of 2022, a total of 35,500 flats were under development in Budapest, of which 14,000 flats still exist only on the drawing board, while 20,000 flats are already under construction. The sale of half of the flats under development have not yet started, but during the quarter construction of an increasing number of flats have commenced, and thus about 5,000 flats are expected to enter the market soon. (Chart 33). Between 74 and 90 per cent of the flats in Budapest projects under construction and completed, respectively, were offered for sale in the first quarter of 2022, while only 7 per cent of the flats on the drawing board were available for purchase. For flats under construction and available off the drawing board, sales are typically scheduled to allow developers to control construction costs, which are increasingly difficult to predict.

Rural housing developments are typically concentrated around Lake Balaton and in the county seats. In the first quarter of 2022, 10,200 new homes were under development and sale in rural areas, which means a 9 per cent year-on-year increase. However, half of the national developments outside the capital are located in 10 districts, with the largest number of 1,038 homes being built in the district of Siófok, followed by the large towns of the automotive industry centres, such as Győr, Debrecen and Kecskemét (Chart 34). During the quarter under review, only 262 newly completed homes were available at an average price per square metre of HUF 500,000 or less, compared to 2,060 a year earlier. The unit price of homes increased in all districts on an annual basis, with the largest increase registered at Lake Balaton in the Balatonalmádi district, where the average price per square metre of homes under development doubled to reach HUF 1.6 million. The surrounding settlements are characterised by prices per square metre above one million forints, as are the districts of Székesfehérvár and Szentendre.

Chart 35
Number of new homes sold in Budapest, and ratio of repricing within the advertised new homes

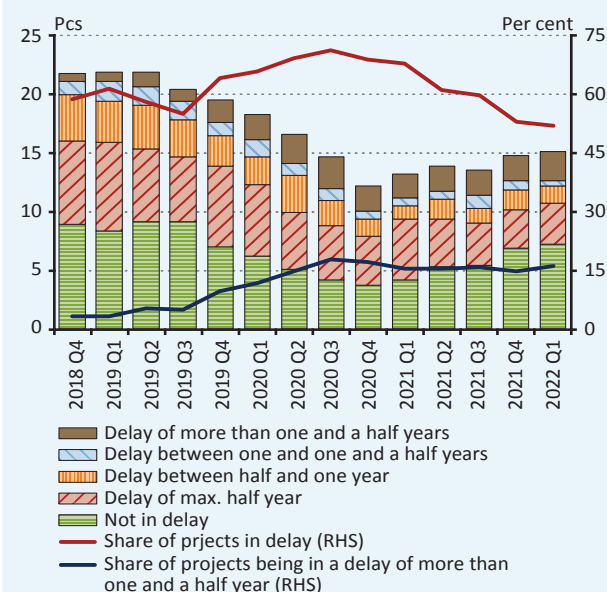


Note: Based on projects for more than 4 new homes in Budapest.

Sources: ELTINGA – Budapest Housing Report

The new home market in Budapest was once again characterised by price rises in the first quarter of 2022. The number of new homes sold in Budapest in the first quarter of 2022 was also outstanding, with 2,451 new condominium flats sold (including pre- and final contracts), falling short of the record sales of the previous quarter only by 3 per cent, and rising by 51 per cent year-on-year. The high number of transactions is attributable to the demand brought forward due to the inflation and interest rate expectations as well as to the FGS Green Home Programme and the widely available subsidies. In the quarter under review, 41 per cent of the homes offered for sale were repriced (Chart 35), where the price of 92 per cent of the repriced homes was increased, affecting a total of 1,827 homes in the first quarter of 2022, and the asking price of only 159 homes decreased. This brings the average quarterly price change for the re-priced homes to 9.8 per cent, representing a further increase.

Chart 36
New homes under development and sales in Budapest, broken down by the delays compared to the originally announced date of completion



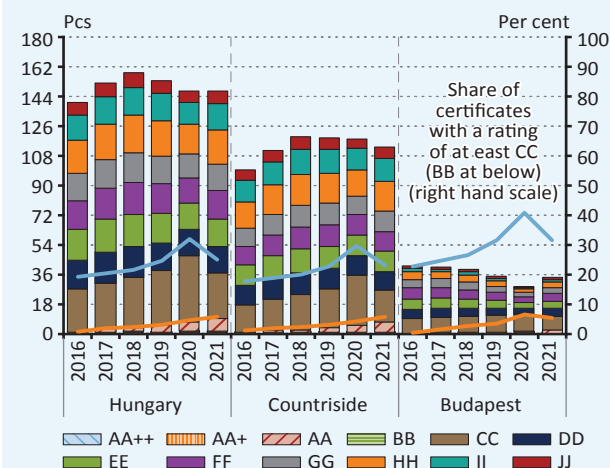
Note: Based on projects for more than 4 new homes in Budapest.

Sources: ELTINGA – Budapest Housing Market Report

More than half of the housing developments in the capital are behind schedule compared to the originally announced completion date. In the first quarter of 2022, in Budapest 52 per cent of the new condominium flats under development and sale were delayed compared to the originally announced expected completion. However, this ratio is 16 percentage points lower than in the same period of last year (Chart 36). In the first quarter of 2022, a total of 7,913 new homes were affected by delays in the construction of projects, 45 per cent of which are delayed by up to half a year, while 37 per cent are delayed by more than a year, due to rising construction material prices and labour costs, as well as capacity constraints. The weighted average delay compared to the originally announced expected completion of projects was 5.4 quarters in the period under review.

Chart 37

Number of energy performance certificates issued for (used and new) residential and accommodation building by category, broken down to Budapest and the countryside



Note: In the case of multi-apartment residential properties the energy performance certificate is prepared separately for each flat. The figures contain the certificates issued before the occupancy permit of newly built properties as well as the certificates issued upon the sale and purchase of used homes.

Source: <https://entan.e-epites.hu>

3.4 PENETRATION OF ENERGY-EFFICIENT RESIDENTIAL PROPERTIES IS SLOW

Due to the fall in the number of newly completed homes the ratio of homes classified CC or above declined in 2021. Since 2016, only 23.9 per cent of energy performance certificates issued for new homes and used homes have been rated CC, i.e. modern or better, while only 3.2 per cent of them fulfilled the requirements for BB, i.e. nearly-zero energy (Chart 37). Since 2016, there has been gradual improvement in the distribution of categories of certificates issued each year, mainly due to an increase in the number of newly built homes. The ratio of certificates issued with a rating of BB or higher increased from 0.9 per cent in 2016 to 6.4 per cent in 2021, while the ratio of certificates issued with a rating of CC or higher decreased in 2021 compared to the previous year due to a decrease in the number of new homes in 2021. In addition, in Budapest - due to the proportionally higher number of newly built homes - the ratio of properties of better classification was higher.

Around one third of the new home supply under development and sale in Budapest involve buildings that do not yet use renewable energy. In the new home market of the capital, the ratio of new homes with an energy rating of at least BB in new housing projects under development and sale has been steadily increasing since 2019 (Chart 38). New homes with nearly-zero energy requirements accounted for 29.9 per cent of the supply in the capital in the first quarter of 2016, rising to 61.8 per cent by the fourth quarter of 2021. However, the ratio of new housing below the BB energy rating in the supply is still significant, i.e. almost one-third.

Chart 38

Distribution of flats in new condominium projects under development and sale in Budapest by estimated energy rating



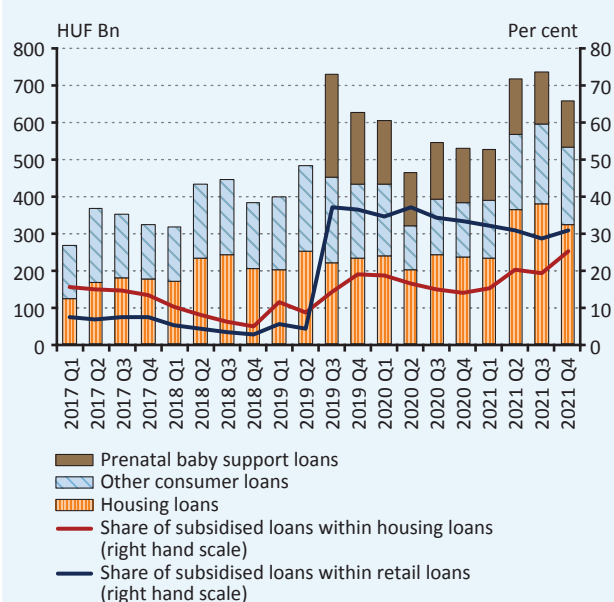
Note: Based on 4-flat or larger condominiums. Estimated energy efficiency classifications: where the energy efficiency is unknown, we used category BB for renewable energy, and category CC for all other.

Sources: ELTINGA – Housing Report, MNB

4 Lending and subsidies for housing

In the fourth quarter of 2021, credit institutions signed housing loan contracts worth HUF 325 billion with households, which, with the substantial contribution of the new housing subsidies available from 2021, resulted in a 40 per cent increase compared to the volume of disbursements before the outbreak of the pandemic. Within housing loan applications, the volume of loans applied for the purchase and construction of new homes increased, with the FGS Green Home Programme launched in October playing a significant role. Half of all housing transactions concluded in the fourth quarter of 2021 were realised through taking out a housing loan, and the ratio of home purchases with at least 50 per cent equity contribution increased to 53 per cent. In parallel with the rise in house prices, the average loan amount and maturity of housing loans continued to increase, with an average of HUF 18 million applied for the construction and purchase of new homes during the quarter, under a maturity of 22 years. According to the responses to the Lending Survey, banks observed a pick-up in demand for housing loans in the first quarter of 2022, even under unchanged credit conditions, while half of respondents expect demand for loans to fall in the second and third quarters. The volume of HPS (CSOK) materially increased in 2021. The increasing disbursement of subsidised and central bank refinanced loans has led to a widening of the gap between transaction and customer interest rates, and as a result, despite the rising interest rate environment, overall, there was only a moderate increase in the average interest rate on housing loans until March 2022, the end of the period reviewed by this Report.

Chart 39
Newly contracted household loans and share of subsidised loans in the credit institution sector



Note: Other consumer loans include free purpose, car finance, other consumer loans and hire purchase loans as well as personal loans.

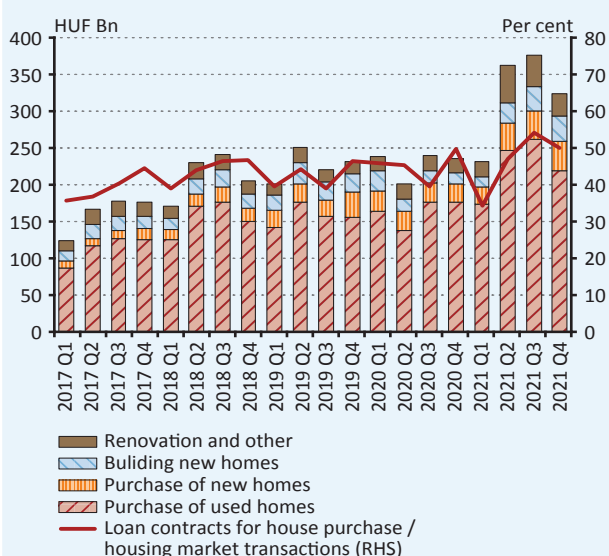
Source: MNB

4.1 HOUSING SUBSIDIES HAVE A MAJOR ROLE IN LENDING FOR HOUSING PURPOSES

A quarter of the housing loan volume were disbursed with a state interest rate subsidy at the end of 2021.

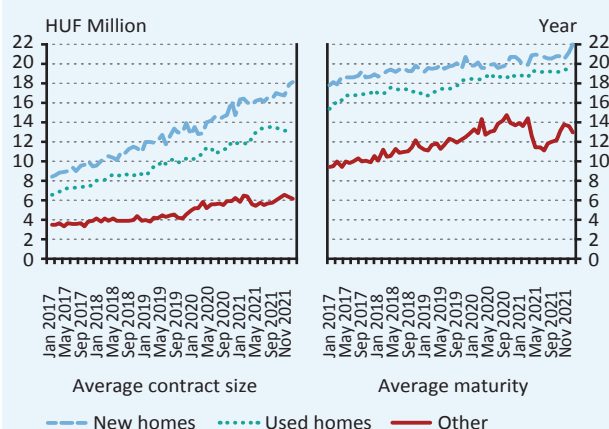
In the fourth quarter of 2021, credit institutions concluded loan contracts worth HUF 657 billion with households, half of which were housing loans. Housing loan disbursements to the amount of HUF 325 billion represented a 40 per cent increase compared to the fourth quarter of 2019, i.e. the period before the outbreak of the coronavirus pandemic, where the new housing subsidies available from 2021 played a significant role, and the FGS Green Home Programme also supported lending for housing purposes during the quarter (Chart 39). In the fourth quarter, disbursement of consumer loans returned to pre-pandemic levels, while the volume of prenatal baby support loans fell by 36 per cent. The decline in prenatal baby loans (HUF 123 billion) is partly explained by the high base caused by the strong increase in the product following its launch in July 2019, but the declining utilisation of the product is also indicated by the fact that the number of contracts signed fell short of the disbursements in the same period of the previous year by 16 per cent. State-subsidised loan schemes play an important role in household lending: banks disbursed one in four housing loans and 31 per

Chart 40
Disbursement of housing loans by loan purpose and share of home purchase on credit



Source: MNB

Chart 41
Average contract size and maturity of new housing loans



Note: Maturities are averages weighted by the contracted amount.

Source: MNB

cent of total disbursements⁶ with state interest rate subsidies during the period under review.

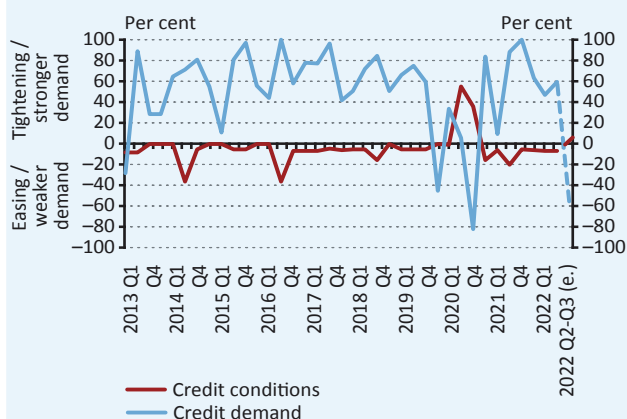
As a result of the FGS Green Home Programme the volume of loans requested for the purchase and construction of new homes substantially increased. In the fourth quarter of 2021, the purchase of used homes remained dominant within housing loan applications, accounting for two-thirds of the disbursement of housing loans (Chart 40). The FGS Green Home Programme, launched in October, boosted demand for loans to buy and build new homes: the volume of loans requested for the purchase rose by 56 per cent while those requested for the construction of new homes more than doubled in an annual comparison. Until December 2021, for the pre-financing of the home improvement subsidy, banks concluded contracts for subsidised mortgage loans, introduced from February 2021, for a total amount of HUF 46 billion, HUF 6.4 billion of which was contracted in the fourth quarter. We estimate that around half of all housing transactions in the fourth quarter of 2021 were realised relying on housing loans, while the stock of housing loans as a percentage of GDP is the lowest in the EU at 8.1 per cent. The share of Hungarian households with a housing mortgage loan (15.5 per cent) is lower than the euro area average (29.1 per cent).

In parallel with the rise in house prices, the average loan amount and maturity of housing loans continued to increase. In 2021, credit institutions signed a total of 109,000 housing loan contracts with households, which exceeds the disbursements in 2020 by 29 per cent. The new housing subsidies available from January 2021 played a substantial role in this. The largest increase of 82 per cent was for other housing purposes, including home improvements and extension, which are also used to pre-finance the home improvement subsidy available from 2021. The average loan amounts applied for the individual housing purposes rose further over the period under review: In December 2021, the average loan amount requested for the construction and purchase of new housing and for the purchase of used homes was HUF 18 million and HUF 13 million, respectively, representing an annual growth of 11 per cent for both loan purpose (Chart 41). For other housing purposes, however, the average loan amount decreased from HUF 6.5 million to HUF 6.1 million in one year. In parallel with the rising loan amounts⁷, average maturities have also increased: in 2021 housing loans were requested for a new home with average maturity of 22 years, while for

⁶ The ratio of subsidised loans in total disbursement of household loans rose to 46 per cent by March 2022.

⁷ For the loan amount, the average is by contract rather than by borrower

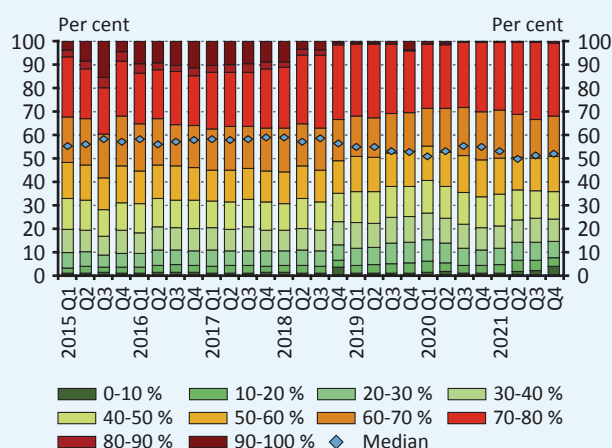
Chart 42
Changes in credit conditions and demand for housing loans



a used home, the average maturity is 19 years, weighted by the loan amount. The more dynamic increase in the fourth quarter was also attributable to the FGS GHP, which allows application for higher than market rate loan amounts with a maximum maturity of 25 years. The average maturity of loans for home improvement purposes declined to 13 years by the end of 2021.

Even under unchanged credit conditions, demand for housing loans picked up, while banks anticipate a prospective decline. According to the responses to the Lending Survey⁸, in the first quarter of 2022, banks did not change their housing loan conditions overall, while in terms of the individual conditions almost half of the institutions indicated a reduction in spreads, which may be due to the delayed pass-through of rising funding costs to bank interest rates. Overall, banks do not plan to change their housing loan standards in the second and third quarters of 2022, but in terms of the individual conditions, a net 48 per cent and 35 per cent of banks anticipate an increase in spreads and the tightening of the scoring system, respectively (Chart 42). 60 per cent of the respondent institutions, in net terms, reported a pick-up in demand for housing loans in the first quarter of 2022, which was also attributable to the growth in demand for the Green Home Programme. At the same time, already a net 55 per cent of them expect a decline in demand for credit in the next six months.

Chart 43
Distribution of new housing loan disbursement by LTV

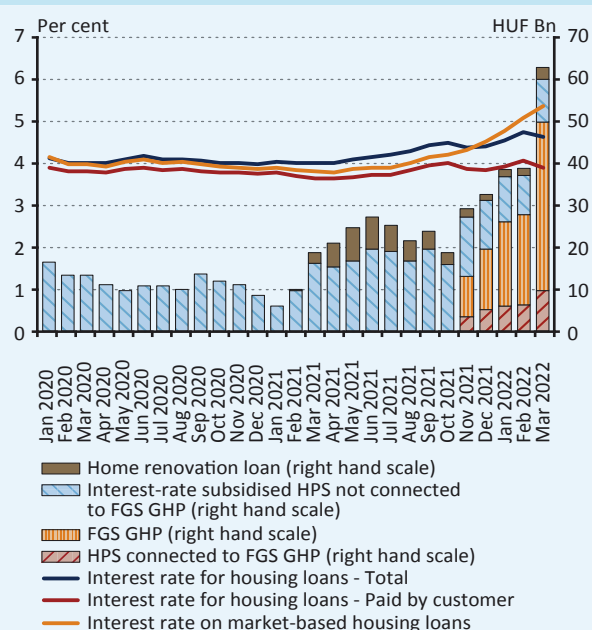


On an annual basis, the ratio of housing loan contracts with at least 50 per cent equity increased slightly at the end of 2021. Despite the persistent rise in house prices in recent years, the debt cap rules in force since 1 January 2015 have effectively curbed over-indebtedness, as the median LTV ratio of newly disbursed mortgage loans has not increased since 2015. The median loan-to-value ratio for housing loans signed in the fourth quarter of 2021 was 52 per cent, compared to 57 per cent for contracts signed in the same quarter of 2015 (Chart 43). The ratio of home purchases with at least 50 per cent equity rose to 36 per cent, following a 3 percentage point annual increase.

The rising interest rate environment has only a partial impact on the interest paid by the customer due to the increasing role of subsidised loans. For subsidised loan products, the interest rates reported in the interest rate statistics include state aid, i.e. the part of the interest rate that is paid to the bank by the budget rather than by the borrower. For example, in the case of interest subsidised HPS loans available from 2016 and the subsidised home

⁸ For the detailed results of the Lending Survey see: <https://www3.mnb.hu/penzugyi-stabilitas/publikaciok-tanulmanyok/hitelezesi-felmeres>

Chart 44
Transaction and customer interest rates on newly disbursed housing loans and the volume of housing loans with preferential interest rate



Note: Contracted volume weighted average interest rates. The FGS Green Home Programme are shown as GHP. Transaction and customer interest rates include all housing loans.

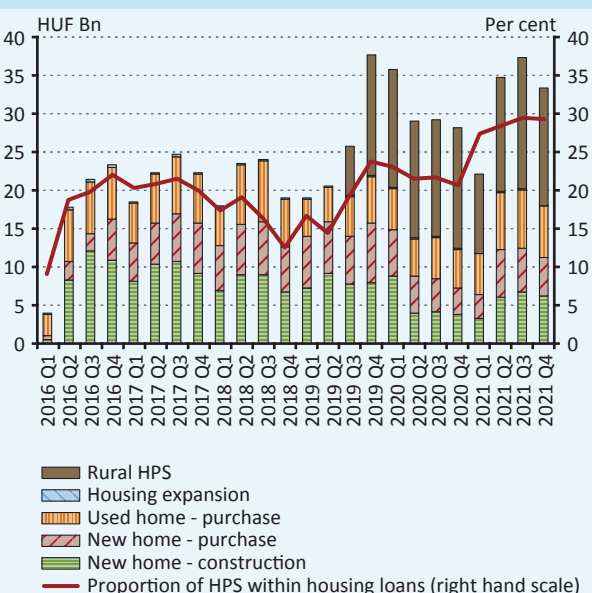
Source: MNB

improvement loan introduced from February 2021, the interest rate paid by the customer is 3 per cent, but the transaction interest rate including the subsidy is significantly higher and is usually around the maximum statutory limit. The FGS Green Home Programme loans available from October 2021 are mostly contracted at a 2.5 per cent transaction rate, while the HPS loans associated with the programme are available at a 0 per cent customer interest rate. The increasing disbursement of subsidised and central bank refinanced loans has led to a widening of the gap between transaction and customer interest rates, and as a result, despite the rising interest rate environment, overall there has only been a moderate increase in the average interest rate on new housing loans. Between March 2021 and March 2022, the average transaction rate increased by 0.6 percentage points, while the average customer interest rate increased by only 0.3 percentage points. By contrast, non-interest subsidised market-based housing loan schemes registered a higher increase, at 1.5 percentage points (Chart 44).

Half of the quarterly HPS were linked to rural HPS.

A major part of the new housing subsidies introduced from January 2021⁹ were connected to the Home Purchase Subsidy, which was also reflected in the volume of HPS applied for. During the fourth quarter, banks concluded approximately 7,700 subsidy contracts with families under the HPS, amounting to roughly HUF 18 billion, exceeding the volume of subsidies in the same quarter of 2020 by 45 per cent. 62 per cent of the volume was disbursed for the construction or purchase of new homes, while nearly HUF 7 billion was disbursed for the purchase of used homes (Chart 45). The volume of housing loans amounting to HUF 95 billion applied for with HPS accounted for 29 per cent of the housing loans disbursed in the quarter, almost half of which were market-based loans taken out with HPS. There is continued strong demand for rural HPS, available from July 2019, accounting for half of the quarterly HPS. During the quarter, almost 3,000 contracts were concluded under the scheme to the amount of roughly HUF 15 billion, 80 per cent of which was for the purchase and modernisation of property in the preferred small settlements.

Chart 45
Volume of contracts in the Home Purchase Subsidy scheme by purpose



Note: The columns show the non-refundable HPS, while the line shows the ratio of subsidised and market-based loans in the total volume of housing loans disbursed with HPS.

Sources: MNB, Ministry of Finance

⁹ Reducing the VAT rate on new homes to 5 per cent, VAT and duty exemption of new properties purchased under HPS, multi-generation HPS, Home improvement subsidy, Subsidised housing loan for home improvement.

Box 3**Impacts of the rise in the base rate on housing and credit markets**

The tightening of the interest rate environment affects all sectors of the economy through changes in lending conditions, including the housing market, where almost half of the transactions are realised on credit. The agent-based model developed by the MNB for modelling housing and credit market processes, assessing the impact of regulatory measures on the housing market and analysing the associated financial stability risks is suitable for assessing the impact of interest rate increases on the housing and credit markets.¹⁰ The model includes almost 4 million interacting, heterogeneous households and homes and thus provides a complete mapping of the Hungarian housing market.

For the purposes of our analysis we must rely on external assumptions about government actions and the macroeconomic environment. In the former case, we have taken into account the fact that households can take advantage of the moratorium on loan instalments from March 2020 to June 2022, and we have assumed that family policy support (HPS for the purchase of new and used homes, rural HPS, prenatal baby support loan) will remain in place until the end of the time horizon under review. In our model, from October 2021, a GHP loan can also be taken out for properties with appropriate energy rating. To assess the interest rate environment from 2021 to 2024, we have examined the impact of the actual and expected (projected) interest rate paths up to November 2021.¹¹ We ran our model assuming two macro paths: a hypothetical macroeconomic scenario in which the base rate is fixed at 0.9 per cent over the entire time horizon, and a path that uses actual data until the third quarter of 2021 and the forecast included in the December 2021 Inflation Report until the end of 2024.¹² The difference between the results of the two models was considered as the impact of the increase in interest rates. The scenario with higher interest rates is also characterised by a stronger exchange rate path and lower inflation, but interest rates between the two macro paths already differ significantly in 2022, while the two paths for inflation and the exchange rate only diverge significantly from the second half of 2023.

Higher interest rates affect the housing and credit market through the following main channels: higher instalment burdens reduce households' creditworthiness, which may lead to some households being partly or entirely excluded from the credit market, which may also reduce or even change the composition of housing demand. Higher interest rates will increase the opportunity cost of investing in housing, which will curb investment demand. The risk of default on variable rate loans is rising, but due to the moratorium and lower unemployment, this channel does not ultimately have a significant impact on the housing market over the horizon under review. By contrast, there are also opposite effects. Lower inflation curbs the rise in house prices, which stimulates demand through the higher purchasing power of household incomes. Lower inflation and a stronger exchange rate also have a positive impact on construction costs, which also boosts demand. Due to the time profile of macroeconomic variables, the demand-curbing effect of higher interest rates is immediate, while the expansionary effect of lower inflation is felt only in the second half of the time horizon.

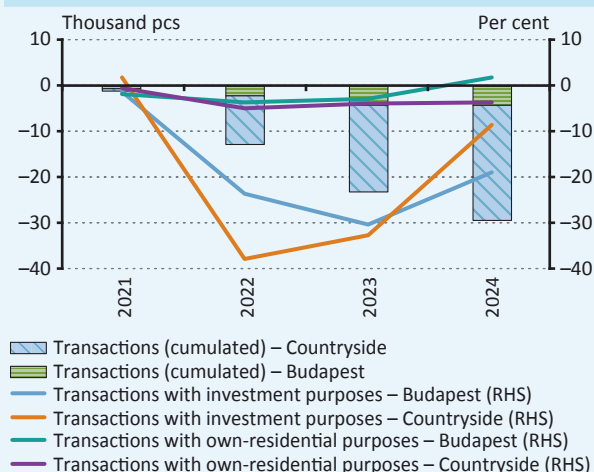
Overall, along the higher interest rate path, the average annual number of housing market transactions in the simulation is lower by 9,000, or around 4-5 per cent, starting from 2022. The housing market in the countryside is more affected by the downturn both in absolute and percentage terms, but the difference in the ratio of transactions is not significant. As regards the time profile, the demand-curbing effect is stronger in 2022 and 2023, with the gap between the two paths narrowing in 2024 as inflation and the exchange rate decline and interest rates rise. The fall in the number of transactions is much larger in the case of purchases for investment purposes than for own purposes (25 and 3 per cent per year on average), moreover, in 2024, a large number of purchases would be realised for own purposes at higher interest rates. Such a sharp fall in investment

¹⁰ For more details on the model, see the MNB's May 2021 Financial Stability Report, the MNB's November 2022 Housing Market Report, the MNB's December 2022 Financial Stability Report or the following video: <https://www.youtube.com/watch?v=geFDEsr6u0>.

¹¹ Between 11 November 2021 and 28 April 2022, the central bank's policy rate rose by 465 basis points, which may serve as an approximation of the magnitude of the spread between the two interest rate paths.

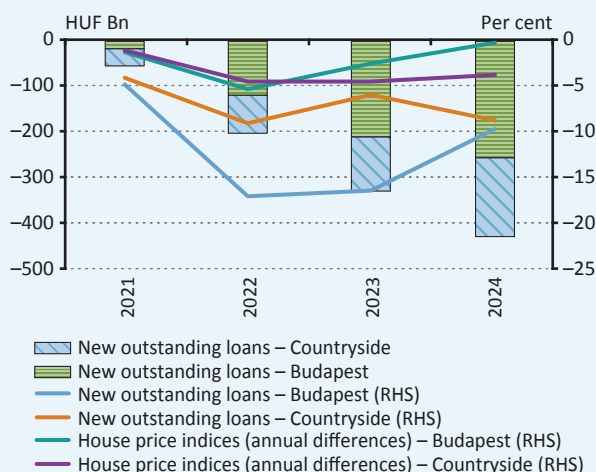
¹² Consequently, our macroeconomic path does not yet take into account the impact of the Russo-Ukrainian war.

The impact of higher base rates on the cumulated changes in the number of total housing market transactions, annual changes in housing market transactions with investment and own-residential purposes



Source: MNB

The impact of higher base rates on the annual and cumulated changes of new outstanding housing loan amount, and annual changes of house price indices



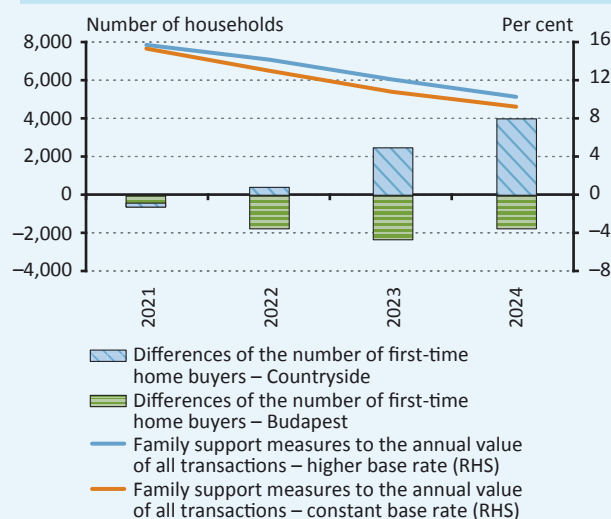
Source: MNB

demand supports purchases for housing, as aggregate demand in the housing market falls, and this dampens the impact borrowing costs made higher by higher household borrowing rates in Budapest and in rural areas.

Under higher interest rates and falling demand, house price indices are also rising to a smaller degree, with price dynamics declining by an average of 2 percentage points per year in Budapest and 4 percentage points per year in rural areas. As regards newly disbursed housing loans, the average annual difference is HUF 130 billion, but there is a significant gap between Budapest and the countryside: while the average annual volume of new housing loans is 8 per cent lower in the countryside, it is 15 per cent lower in Budapest. The decline is the combined effect of unrealised transactions, a shift in demand towards cheaper properties by households that are partly subject to credit constraints due to higher financing costs and the more moderate price dynamics.

Purchasing a home mostly on credit is more difficult under a higher base rate scenario, which makes the housing market less affordable for lower income groups and first-time buyers. In some cases, households with less equity can also buy their own home, but these households also become indebted with higher instalments. However, the price reducing effect of the fall in investment and the relatively more supportive family allowances due to lower price dynamics may be able to offset the crowding-out effect of the interest rate hike on the credit and housing markets for households with children. Under higher interest rates, family policy subsidies (new construction and rural HPS, prenatal baby support

The value of family support measures to the annual value of all transactions, and the impact of higher base rates on the number of first-time home buyers



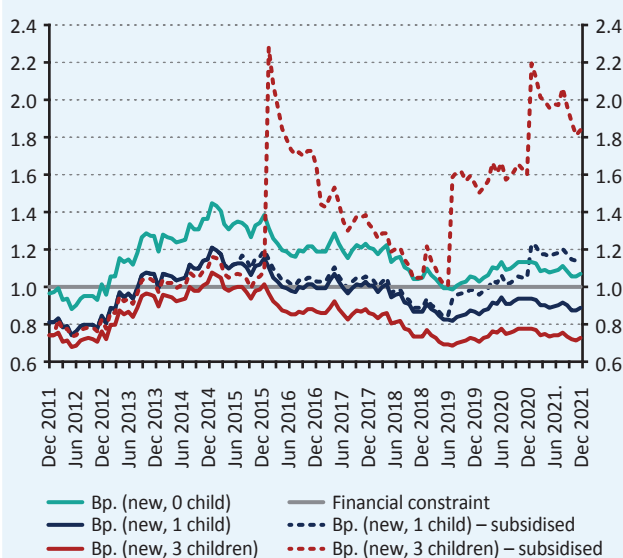
Note: We have taken into consideration the rural HPS and the HPS, which can be used for the purchase of newly built homes, and the prenatal baby support loan.

Source: MNB

loan) are one and a half percentage points higher relative to the value of transactions, and thus provide proportionally larger support for buying a home. As a result, the impact of interest rate increases differs for first-time homebuyers in Budapest and in the countryside: households in Budapest that are forced to take out larger loans due to higher house prices in Budapest are more affected by interest rate increases than households in the countryside for whom, by contrast, more moderate price dynamics and a higher ratio of family subsidies at higher interest rates make buying a house more affordable overall.

Based on our simulation analysis, there are around 4-5 per cent fewer transactions per year along the higher interest rate path, mainly due to a decline in investment demand, while house price growth is 3 percentage points lower per year. The volume of housing loans disbursed is HUF 130 billion less on average per year. Higher lending rates make it more difficult for households to buy a home, while lower house prices relative to incomes make buying a home more affordable to households, and overall, more first-time buyers, especially in rural areas, may purchase a home at higher interest rates. Among first-time homebuyers, the situation is particularly favourable for young families due to the available family allowances.

Chart 46
Housing Affordability Index (HAI)



Note: The HAI shows the number of times the income of a household with two average earnings covers the income required for the financed purchase of an average home. If the value of the indicator is over 1, the family is able to buy a home on credit without overstressing its liquidity. However, if it is below 1, the purchase represents excessive risk and financial burden. Calculating with a flat of 45 square metres without child, 55 and 75 square metres for one child or three children, respectively. Parameters of the loan product, except for the interest rate, are constant. LTV = 70 per cent, PTI = 30 per cent, maturity = 15 years. Net wages used in the calculation of the indicator are seasonally adjusted.

Sources: HCSO, NTCA, MNB

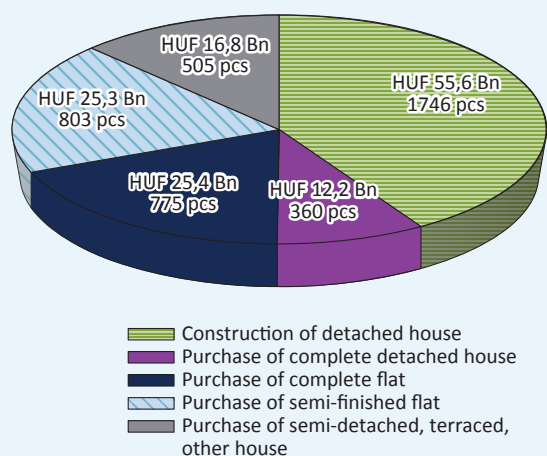
The allowances to support families underpin housing affordability Taking the example of families with different numbers of children considering the different types of subsidies, the affordability of buying a home is most favourable for couples with three children. As regards the underlying trends ignoring the subsidies (continuous lines on the chart), in Budapest the affordability of home purchase on credit has deteriorated compared to early 2015. (Chart 46). As a result, buying a new home without subsidies would currently represent an excessive financial burden for families in Budapest. The recent dynamic increase in house prices points to a strong downturn in affordability, and thus the VAT refund and exemption from levy, available to buyers applying for HPS from January 2021 – similarly to previous types of subsidies – will mean diminishing relative easing for homebuyers. Looking ahead, the rise in interest rates on housing loans will create further financial difficulties for homebuyers, and we expect the deterioration in affordability to intensify in the period ahead, irrespective of the forward-looking housing market and wage developments.

4.2. RESULTS OF THE FGS GREEN HOME PROGRAMME

The Green Home Programme (GHP), launched in October 2021, fosters the creation of a green housing loan market and the diffusion of environmental sustainability considerations in the domestic housing market. By 1 April 2022, credit institutions participating in GHP reported 4,189 transactions to the MNB for a total amount of HUF 135 billion¹³. The actual outstanding stock on 4 April 2022 – i.e. the stock already drawn but

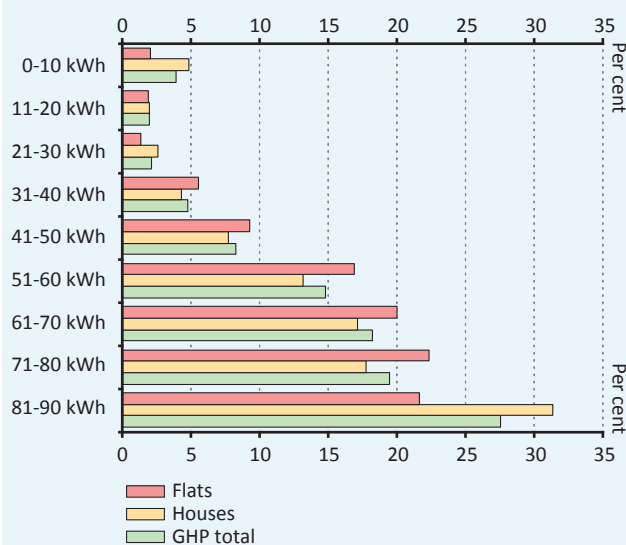
¹³ Contracted volume reported to the MNB by 1 April 2022, as part of the AL12 reporting. The volume/number of contracts actually signed may slightly exceed this.

Chart 47
Distribution of the contracted volume under the FGS GHP by loan purpose and property type (as of April 4, 2022)



Source: MNB

Chart 48
Distribution of properties purchased under GHP by primary energy demand



In the category of houses, the types of property include detached houses, semi-detached and terraced houses.

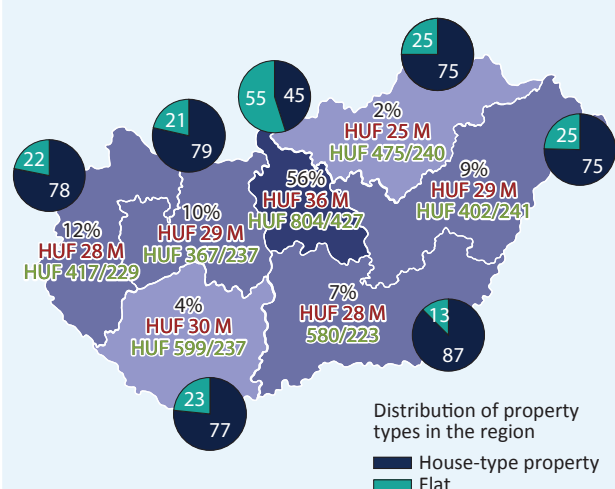
Source: MNB

not repaid – was HUF 36 billion, almost 30 per cent of the contracted amount, as most of the contracts are connected to properties under construction, and thus they (also) entail a later drawdown.

Half of the contracted volume, a total of nearly HUF 68 billion, has so far been borrowed for the construction or purchase of detached houses (Chart 47). Under this loan purpose, households used more than 80 per cent of the total volume to finance the construction of a detached house, 60 per cent of which is in rural regions, with an average loan amount of HUF 29 million. More than a third of the loans signed were for housing, close to half of which was used for buying homes under construction, the other half to buy finished homes. More than four fifths of these loans went to the Central Hungary region (and more than 60 per cent were directly linked to Budapest). The average amount of loans taken out for the purchase of finished homes in the capital exceeded HUF 35 million. The lower ratio of purchases of semi-finished houses is partly explained by the fact that under current mortgage lending practices, banks only conclude the loan contract with the client if there is a final sales contract, while some property developers only conclude a *pre-contract* with the buyer at an early stage of construction.

The average primary energy use is below the maximum of 80 kWh/m²/year required by the programme following the increase of the facility amount, with 73 per cent of GHP properties below 80 kWh and at 53 per cent it is even lower than 70 kWh (Chart 48). In the case of properties with BB energy certification only, it is clear that the annual energy consumption per square metre is below the lower criterion of the overall energy indicator for BB classification, i.e. 80 kWh, for 70 per cent of the properties. As regards the property types, nearly 80 per cent of flats currently have an energy demand of less than 80 kWh, and 56 per cent of them have an energy demand of less than 70 kWh, compared to around 70 and 50 per cent, respectively, in the case of house-type properties. The average annual primary energy consumption per square metre is around 66 kWh for BB-rated properties, compared to only 27 kWh/m²/year for AA++ properties, the highest energy rating.

Chart 49
Regional distribution of contracts concluded under the GHP based on volume



Note: The regional distribution of volume is shown in black, the average loan amount in a given region is shown in red, and the average price per square metre per type of property i.e. house/flat – calculated as the quotient of the ratio of the market value provided by the bank and the useful floor area – is shown in green.

Source: MNB

More than half of the concluded contracts are connected to properties under construction or already built in the Central Hungary region, and in terms of number of contracts, half of the loans were used in this region (Chart 49). The average loan amount here is HUF 36 million, which is higher than the average loan amount HUF 32.3 million of the entire portfolio. By contrast, the average loan amount for loans related to real estate in rural regions reached HUF 28.3 million. While the average price per square metre of houses in provincial regions was HUF 234,000, with minor differences by region, the average price of flats was close to HUF 473,000, with a significant divergence in individual values by region. The average maturity of the total GHP portfolio is 20.9 years.

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 Széchenyi 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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