



FINANCIAL STABILITY REPORT



20
years
anniversary of the
FINANCIAL STABILITY
REPORT

2020
NOVEMBER

*‘...a nation is strong where property and
independence are guarded by free hands.’*

Ferenc Deák



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2020
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Financial stability is a state in which the financial system, including key financial markets and financial institutions, is capable of withstanding economic shocks and can fulfil its key functions smoothly, i.e. intermediating financial resources, managing financial risks and processing payment transactions.

The Magyar Nemzeti Bank's fundamental interest and joint responsibility with other government institutions is to maintain and promote the stability of the domestic financial system. The role of the Magyar Nemzeti Bank in the maintenance of financial stability is defined by the Central Bank Act.

Without prejudice to its primary objective – to achieve and maintain price stability –, the MNB shall support the maintenance of the stability of the financial intermediary system, the enhancement of its resilience, its sustainable contribution to economic growth; furthermore, the MNB shall support the economic policy of the government using the instruments at its disposal.

The MNB shall establish the macro-prudential policy for the stability of the entire system of financial intermediation, with the objective to enhance the resilience of the system of financial intermediation and to ensure its sustainable contribution to economic growth. To that end and within the limits specified in the Central Bank Act, the MNB shall explore the business and economic risks threatening the system of financial intermediation as a whole, promote the prevention of the development of systemic risks and the reduction or elimination of the evolved systemic risks; furthermore, in the event of disturbances to the credit market it shall contribute to the balanced implementation of the function of the system of intermediation in financing the economy through stimulating lending and by restraining lending it in the event of excessive credit outflow.

The primary objective of the Financial Stability Report is to inform stakeholders about the topical issues related to financial stability, and thereby raise the risk awareness of those concerned as well as maintain and strengthen confidence in the financial system. Accordingly, it is the Magyar Nemzeti Bank's intention to ensure the availability of the information needed for financial decisions, and thereby make a contribution to increasing the stability of the financial system as a whole.

The analyses in this Report were prepared by the Financial System Analysis Directorate, with the contribution of the Prudential and Consumer Protection Supervision of Money Market Institutions Executive Directorate, the Monetary Policy and Foreign Reserve Management Executive Directorate and the International Monetary Policy Analysis Department, under the general direction of Gergely FÁBIÁN, Executive Director for Financial System Analysis and Statistics.

The Report was approved for publication by Barnabás VIRÁG, Deputy Governor.

The Report incorporates the Financial Stability Council's valuable comments and suggestions following its meetings on 20th October and 17th November 2020, and those of the Monetary Council following its meeting on 3rd November 2020.

This Report is based on information in the period to 31st October 2020. Since data frequency is divergent through the analyses, the analysis horizons may also alter.

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Executive Summary

The Hungarian banking system is characterised by strong resilience to shocks, even in the challenging economic environment caused by COVID-19. Owing to the regulatory measures taken in recent years and in the spring, as well as the profitable operation before the pandemic, banks have an adequate capital buffer and significant liquidity reserves. According to the MNB's stress test, most banks would meet the regulatory requirements for liquidity and capital position even in the event of a much worse crisis scenario than what is expected.

The international environment has been characterised by a persistent, high level of uncertainty since the global spread of the coronavirus pandemic. Uncertain prospects may prompt households to curb their demand and corporates to postpone their investments and rationalise their business models. The forced adjustment by economic actors not only slows down the economic recovery, it also poses a risk to debt servicing via its negative impact on the labour market, production and profitability. Various fiscal and central bank measures have dampened the consequences of the first wave, but the second wave and the protracted recovery might require additional economic support measures to be introduced, which may be challenging in some countries due to increased debt levels and the declining leeway for monetary policy action.

As a result of the MNB's measures, the liquidity reserves of the Hungarian banking system increased substantially. The central bank eased the financial market tensions that arose at the beginning of the coronavirus crisis by expanding its monetary toolbox, amongst other things. Bank funding opportunities have not narrowed and the financing environment is favourable: short-term yields are around the level of one-week central bank deposit rate, in line with the monetary policy stance, while long-term yields are historically low, despite the pandemic. Thanks to the MNB's long-term covered loans, asset purchase programmes and the FGS Go! scheme, the banking system's operational liquidity buffer increased steadily and substantially. The distribution of the liquidity buffer built up since March at individual institutions is also favourable. Based on the liquidity stress test, the vast majority of banks have sufficient liquidity buffers to meet the regulatory requirements, even in the event of a severe liquidity stress.

Release of macroprudential capital buffers increased the lending capacity of the banking sector. The sector's free capital buffer was also increased by central bank and international measures: the MNB temporarily waived the capital conservation buffer (CCoB), the systemic risk buffer (SyRB) and the other systemically important institution buffer (O-SII), as well as the compliance with the Pillar II Guidance (P2G), while the total risk exposure amount declined due to international easing. According to the results of the solvency stress test, only a small part of the sector can be considered vulnerable, even in a severe stress scenario. In order to meet all of the currently valid capital adequacy requirements, banks would need to increase capital by a manageable amount of about HUF 86 billion. Thus, despite the deterioration in the external environment, the banking system's capital position has improved over the past six months and is characterised by strong resilience, even to a longer-than-expected economic recovery, which will help maintain banks' lending capacity.

Central bank and government loan programmes and guarantee schemes support the expansion of lending. Following the outbreak of COVID-19, in addition to clients, banks have also become more cautious in the credit market and tightened lending conditions for both household and corporate loans. However, in terms of the recovery it is important to maintain banks' willingness to lend and that economic actors continue to have access to adequate financing sources, which can be facilitated by state involvement in the credit market. In the retail segment, support for the credit market is being provided by the state-supported prenatal baby support loan and the Home Purchase Subsidy scheme, while in the corporate segment, the central bank's FGS Go! programme and the loan and guarantee programmes of state-owned banks and guarantee institutions serve this purpose. Thanks to these factors and the portfolio-supporting effect of the payment moratorium, the annual growth rate of loans outstanding reached 8 per cent in the corporate and 17 per cent in the household segment in 2020 Q2. We expect annual corporate lending dynamics to be above 4 per cent in 2021, while household dynamics should be above 5 per cent, and double-digit growth in both segments may also

return within two years. A significant extension of state guarantee schemes supporting risk sharing could also facilitate banks' willingness to lend and thus to increase the outstanding corporate loan portfolio in the coming period.

The payment moratorium plays a key role in maintaining portfolio quality, but does not prevent an increase in credit risk. Due to portfolio cleaning activity, the ratio of non-performing loans continued to decline in 2020, while new payment defaults are temporarily prevented by the introduction of payment moratorium. Meanwhile, however, as the coronavirus crisis has worsened, the proportion of loans with significantly elevated credit risk has risen substantially. 15–20 per cent of credit institutions' corporate loan portfolio is related to high-risk companies which participate in the moratorium. 5–10 per cent of household borrowers can be considered vulnerable based on their income situation, changes in labour market status and participation in the moratorium. The government will extend the payment moratorium in a targeted manner from January 2021, helping debtors who have become vulnerable to manage their liquidity position, and thus no significant rise in the proportion of overdue loans is expected in the first six months of 2021. However, due to the protracted economic recovery, there is a risk that the temporary liquidity problem will transform into permanent insolvency for some clients, and that even clients not making use of the moratorium may also face repayment difficulties, which may lead to a significant deterioration in portfolio quality in the medium term. The recovery of companies encountering financial difficulties could be facilitated by a legal framework that supports reorganisation.

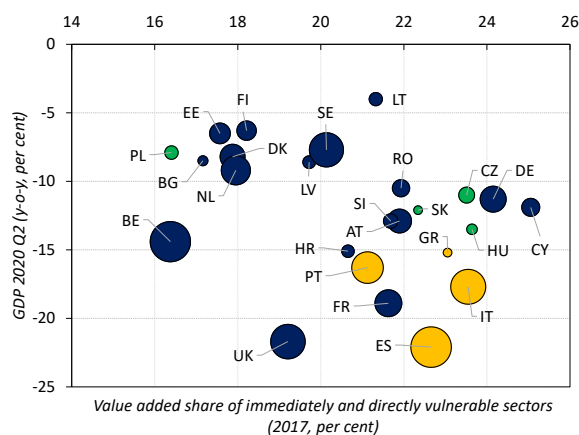
Risks inherent in the real estate markets may create a permanently uncertain market environment. The large increase in housing prices in previous years was not associated with overheating in the credit market, in terms of the distribution of loan-to-value ratios and the ratio of home purchases from loans. There has been some adjustment in housing prices in Budapest this year, but outside of Budapest housing prices have continued to increase. Deteriorating fundamentals entail downside risks in the medium term, but this may be dampened by the recently announced home-building measures. In the commercial real estate market, the hotel segment has been hit hardest by the coronavirus crisis due to the slump in international tourism, which in addition is accompanied by intense development activity, and thus there is a risk of oversupply in the hotel market. In light of changing demand and the completions planned for coming years, significant risks may also arise in the office market. However, the risks from the real estate market are mitigated by the fact that the banking system's exposure to the real estate market is low as a percentage of the regulatory capital.

Poor profitability may pose major challenge to banks. Despite the increase in risk costs, in the first six month of 2020 the banking system recorded positive after-tax profit, which was much lower than in previous years however. The previously observed, gradual decline in profitability ratios has accelerated this year, due to the negative economic effects of the pandemic. The deterioration in profitability is mainly due to increased impairment and provisioning. In the second half of the year, a further decline in banks' profitability is expected, as the forward-looking risk costs of institutions may increase and the profit effect of the payment moratorium is not yet reflected in the income statement of all institutions. The depressed interest income in the low interest rate environment and the increasing need for impairment due to the deterioration of asset quality may put sustained pressure on the profitability of banks, which are already struggling with structural problems.

1 International macro environment: protracted real economic recovery, persistent market uncertainty

Thanks to the measures taken by governments and central banks, the world economy began to recover rapidly after the first wave of the coronavirus. At the end of the summer season, the pace of recovery began to slow in several regions, in parallel with the second wave of the virus, suggesting that the global economy would need a longer time to return to its pre-COVID-19 performance. Individual countries as well as different segments of the economy were affected to varying degrees by the pandemic. While companies in the pharmaceutical, e-commerce and technology sectors have benefit from changing consumer attitudes as a consequence of social distancing measures, other sectors, especially those requiring personal contact, have suffered lasting shocks. Many companies may be forced to rationalise their business models or reschedule their investments. Due to the sectoral effects, the labour market adjustment also mainly impacted the lower-skilled segments of society with less savings. The emergence of the second wave, the renewed curbs, the declining consumption stemming from increased caution and the necessary adjustment by some companies increase the likelihood of a protracted recovery, and the different levels of involvement could lead to economic polarisation. Households and companies which became indebted in previous years may face difficult situations, and for some governments, rising debt levels as a result of fiscal measures could pose a serious challenge. The capital position of European banks is stable, but their profitability and valuation are deteriorating, and their funding is also under pressure due to unfavourable credit ratings.

Chart 1: Evolution of GDP, vulnerability and COVID-19 cases in Europe



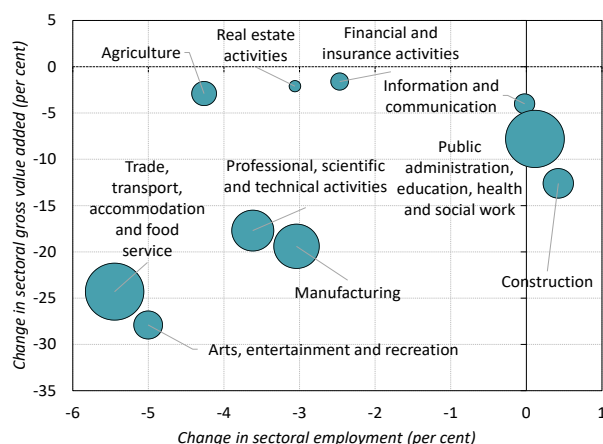
Note: The size of the bubble represents the total number of COVID-19 cases (per million persons), on 31 May 2020. We regarded automotive industry, transportation and storage, hospitality and accommodation, and entertainment sectors as vulnerable. GDP is seasonally adjusted, except for Slovakia. Green shows the Visegrad countries, while yellow shows the Mediterranean countries. No data was available for Ireland, Malta and Luxembourg. Source: Eurostat, Our World in Data

1.1 Uncertainty did not decline after the first wave of the coronavirus epidemic

The first wave impacted various economies to significantly differing extents. The unexpected coronavirus outbreak early in the year caused widespread shutdowns in production and strict lockdowns, putting the global economy on a lower growth trajectory. In the second quarter, growth in OECD countries fell by 11.7 per cent year-on-year, which is well below the negative peak (5.7 per cent decline), observed in the 2009 economic crisis. For each country, the impact depended on the caseload, the country's integration in the world economy, as well as on the proportion of vulnerable sectors (Chart 1). In Europe, growth in Mediterranean countries – where the spread of COVID-19 was stronger and where the weight of sectors vulnerable in terms of the virus was also higher – slowed significantly, but countries with lower infection rates but a higher degree of exposure to the world economy due to their openness, including Hungary, were hit hard by the first wave of the pandemic.

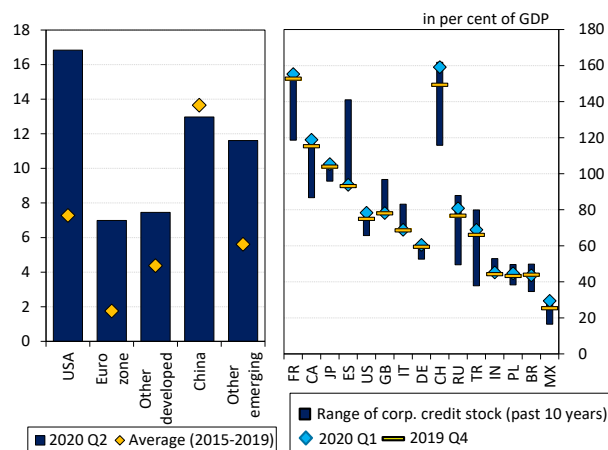
The crisis is affecting the different sectors of the economy and the various segments of the labour market to varying degrees. Unlike the global crisis of 2008, the coronavirus has impacted the financial sector to a much lesser extent, while sectors which were previously considered

Chart 2: Change in sectoral employment and sectoral gross value added in the European Union between 2019 Q2 and 2020 Q2



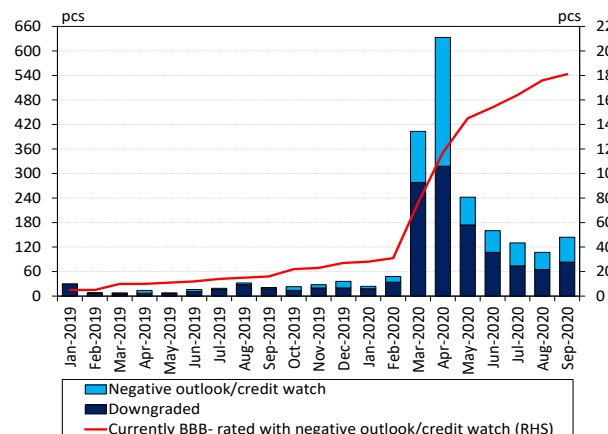
Note: The size of the bubble represents the number of employed persons in each sector in 2020 Q2. Seasonally and calendar adjusted data for gross value added. Source: Eurostat

Chart 3: Growth in corporate loans in developed and emerging countries (left panel) and debt-to-GDP ratios of non-financial corporations (right panel)



Note: Annual growth rate of loan volume. Source: IMF GFSR

Chart 4: Evolution of downgrades and negative outlooks



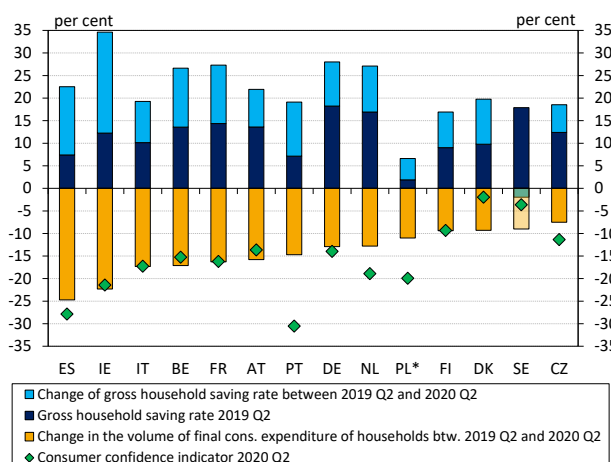
Note: Debt of S&P rated companies in national currency. Source: S&P Market Intelligence

fundamentally non-risky, such as catering, trade, tourism, or arts, proved to be particularly vulnerable. This is a consequence of both social distancing, mobility restricting measures and the growing restraint of the population. Although comprehensive economic protection measures provided support for employment, in the second quarter firms had to respond to the deteriorating economic environment by taking measures on the extensive margin, i.e. in terms of the number of employees, in addition to adjusting the number of hours worked (Chart 2). In parallel with the level of sectoral impact, it was primarily the employment of the lower-skilled, low-income workforce with lower savings that declined: in a European sample, the employment rate of this group fell by 10 per cent, while that of employees with tertiary education rose by 2 per cent year-on-year in the second quarter. In addition to financial stability risks, a protracted recovery may lead to further negative effects on the real economy via the erosion of skills and permanent exclusion from the labour market of those who lose their jobs.

Favourable interest rate conditions have alleviated the liquidity difficulties of corporates, but rising indebtedness poses a risk in the medium term. Slower economic activity due to the spread of COVID-19 has had a negative impact on companies' liquidity position. Taking advantage of the easing financial conditions as a result of targeted central bank programmes, corporates facing a tight financial position carried out significant bond issues and borrowings (Chart 3, left panel), thereby alleviating their liquidity difficulties. Looking ahead, however, there is a risk that newly borrowed funding from external sources further increased the elevated level of corporate debt in many economies (Chart 3, right panel), possibly leading to higher bankruptcy rates in the medium term.

The number of companies that may be classified in the speculative rating category in the medium term has risen sharply. Rating agencies responded to deteriorating corporate credit quality due to the economic downturn: during the first wave of the coronavirus epidemic the number of negative credit rating decisions increased significantly (Chart 4). In parallel with the surge in downgrades, the number of corporates that are currently in the lowest investment grade rating category (BBB-) with a negative outlook has gradually increased. In their case, credit rating decisions going forward are critically important, on the one hand because many institutional investors are subject to regulations according to which they are not allowed to hold non-investment grade (speculative) securities in their portfolios, and on the other hand, because the lower quality rating makes

Chart 5: Gross household saving rate, consumer confidence indicator and change in household saving and consumption expenditure in certain EU Member States

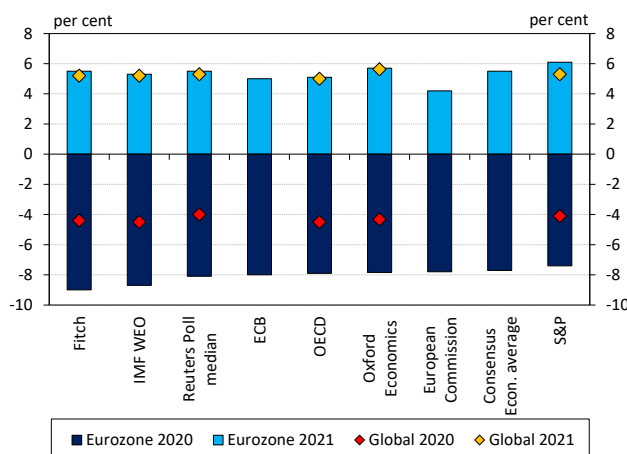


Note: The gross saving rate of households is defined as gross saving divided by gross disposable income (seasonally and calendar adjusted data; for Poland, the data is for the first quarter). In the case of the consumer confidence indicator (3-month average) and final consumption expenditure, the data is seasonally adjusted. Source: Eurostat

fund-raising more expensive for the corporates concerned, thus putting further pressure on their profitability.

Due to the deteriorating outlook, households' cautiousness is increasing, which reduces aggregate demand and further slows down economic recovery. Households have cut their consumption expenditures sharply: in the second quarter, the volume of consumption expenditures fell by almost 15 per cent at the EU level (Chart 5). Lower-skilled (and lower-income) segments, which typically spend a relatively larger portion of their income on consumption, may have been forced to reduce their spending as a result of their deteriorating labour market position. Wealthier segments may have responded to the greater degree of uncertainty by boosting their precautionary savings: between 2019 Q2 and 2020 Q2, the savings rate increased by almost 12 percentage points on average in the EU, which was unprecedented in the last 20 years.¹ The increasingly uncertain economic environment, labour market and income position are also reflected in the weakening consumer confidence index. In addition, a renewed increase in the number of infections and the consequent restrictive measures introduced in many countries have a negative impact on mobility and social activity again.

Chart 6: Eurozone and global growth forecasts

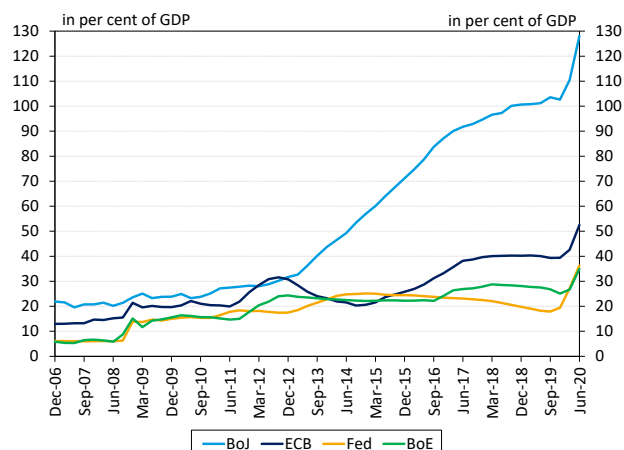


Note: In the case of the ECB, Fitch, Reuters Poll, Oxford Economics and OECD, the forecast refers to September, in the case of the IMF, Consensus Economics and S&P, the forecast refers to October, while in case of the European Commission, the forecast refers to November. Source: OECD, IMF, European Commission, S&P, Thomson Reuters Datastream, ECB, Fitch

The recovery may be slower than previously expected and may differ in pace from sector to sector. In addition to the emergence of the second wave of COVID-19, uncertainty about the recovery is also amplified by the timing of the availability of the vaccine, the possible tightening of social distancing measures, the increasing consumer caution – both financial and physical – and the more limited fiscal and monetary leeway in individual countries. This is also reflected in gloomier expectations: analyses increasingly envision a prolonged, “pipe”-shaped upswing rather than the previously envisioned rapid, “V” or “U” – shaped rebound. There is also a consensus that while the growth rate of the global economy in 2021 may exceed the rate of decline this year, the growth expected for next year cannot offset this year’s decrease in the euro area (Chart 6). In addition, the upswing may be segmented and exhibit a “K”-shape, in parallel with how individual sectors are impacted: while some sectors are benefiting from changed consumer behaviour, others have suffered a prolonged shock. Moreover, while the labour market situation of the higher-skilled has remained stable, the low-skilled may be permanently excluded from the labour market.

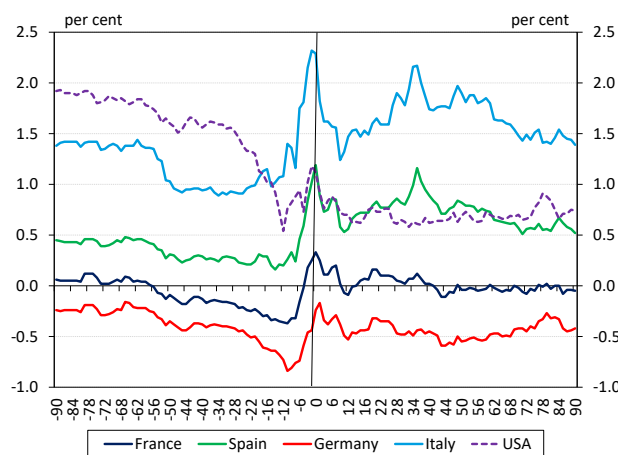
¹ Data were available from 1999 onwards.

Chart 7: Central bank balance sheets as a proportion of GDP



Source: National central banks

Chart 8: Development of 10-year government bond yields



Note: The horizontal axis indicates the business days following and prior to the announcement of government bond purchases. For euro area member states, day 0 marks the announcement of the PEPP on 18 March and for the USA the announcement of the government securities purchase of USD 500 billion by the Fed on 16 March. Source: S&P Market Intelligence

1.2 Government interventions mitigated first-wave impacts, but may lead to risks in the longer term

In the past period, central banks have pursued supportive monetary policy in several market segments, resulting in a sharp expansion of central bank balance sheets. Among the major central banks, the US Fed proved to be one of the most active in mitigating the crisis caused by the coronavirus epidemic, as – in addition to its existing facilities – it announced a programme for purchasing unlimited amount of Treasury securities and mortgage-backed securities in March and launched two corporate bond purchase programmes. To offset the negative effects of COVID-19, the ECB's Governing Council expanded its asset purchase programme from 2014 and launched a pandemic emergency purchase programme (PEPP) with a volume of EUR 1,350 billion, for purchases of government securities, corporate and covered bonds and securitised debt instruments. As a result of the sizable measures, central bank balance sheets expanded sharply (Chart 7). In addition to asset purchase programmes, central banks have also decided to introduce other liquidity-providing and credit facilities (Box 1) and have taken a number of prudential² easing measures.

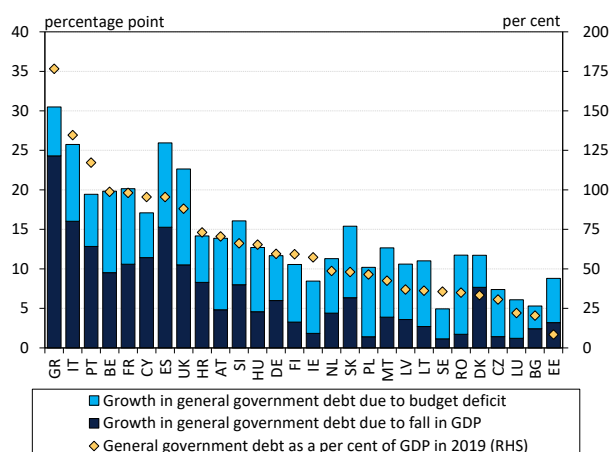
Asset purchase programmes have made a significant contribution to stabilising government securities markets. One of the main objectives of the ECB's and the Fed's asset purchase programmes targeting the government securities market was to mitigate a surge in yields, while ensuring the normal functioning of the government securities market. The central bank facilities proved effective, as there was a considerable adjustment in 10-year bond yields for the countries that benefited most from bond purchases in the euro area³ in the days following the announcement of the PEPP (Chart 8). And in the USA, the 10-year yield began to decline following the announcement of the Fed's USD 500 billion government bond purchase programme.

Due to the fiscal measures to mitigate the economic impact of COVID-19, government debt burdens may rise substantially. Member States' indebtedness may increase significantly in 2020, due to the sharp increases in

² Box 1 of the [Macprudential Report](#) (September 2020) presents an overview of the macroprudential measures taken in EEA countries to mitigate the effects of the pandemic.

³ Based on July 2020 data, Germany received 24 per cent, Italy 19 per cent, France 15 per cent and Spain 12 per cent of the amount spent under the bond purchase programme.

Chart 9: Expected change in gross government debt as a proportion of GDP in 2020 in the EU Member States



Note: MNB calculations, based on the European Commission's forecasts for 2020. Source: Eurostat

government deficits caused by fiscal measures⁴ and slower economic growth. Countries suffering a particularly severe economic downturn in 2020 in parallel with already high budget deficits and government debt are considered to be especially vulnerable in terms of government debt sustainability. Thus, Mediterranean countries might face particular difficulties (Chart 9). Although central bank bond purchase programmes may alleviate the rise in government security yields, the higher default risk due to excessive indebtedness may render the financing of government debt more difficult over the long run in some countries.

BOX 1: INTERNATIONAL OVERVIEW OF MONETARY POLICY MEASURES BY CENTRAL BANKS DURING THE CORONAVIRUS CRISIS

Central banks have taken a number of new measures and introduced new instruments to mitigate the adverse macroeconomic and financial market effects of the coronavirus crisis. As part of these measures, several central banks expanded their existing asset purchase programmes and decided to launch new asset purchase programmes. In addition, they sought to boost lending and provide adequate liquidity via various loan incentive programmes. They also lowered their policy rates, as a result of which in many cases the base rate declined to levels close to zero. To alleviate liquidity tensions, several central banks increased the volume and frequency of repo operations and supported the smooth functioning of financial markets with additional measures.

Asset purchase programmes represent one of the key elements in this year's monetary policy measures. Most of the globally important central banks and regional central banks launched new programmes or expanded their existing asset purchase programmes:

- In March, the **European Central Bank** expanded its asset purchase programme (APP), which was already in use before the pandemic, by an additional EUR 120 billion for 2020. Also in March, it launched a new Pandemic Emergency Purchase Programme (PEPP), the envelope of which rose to EUR 1,350 billion following an increase in July. Purchases under the PEPP programme rose to EUR 571 billion in early October, representing 42.3 per cent of the current envelope.
- The **Federal Reserve** abolished the upper limit on its government and mortgage-backed securities purchase programme and launched 5 additional new indirect asset purchase programmes.
- The **Bank of Japan** expanded its asset purchase programme, under which it can purchase unlimited amounts of Japanese government bonds, exchange traded funds (ETFs) with an envelope of JPY 12,000 billion (EUR 97.3 billion), and Japanese real estate investment trusts (JREITs) up to JPY 180 billion (EUR 1.5 billion). The central bank bought ETFs, which have accounted for a major part of the purchases, in the value of JPY 6,300 billion this year.
- The **Bank of England** also expanded its existing asset purchase programme, as a result of which the total programme envelope increased by GBP 300 billion to 745 billion. The stock of government bonds and corporate bonds purchased by the central bank rose to GBP 699 billion in early October.

⁴ Box 2 in the Report on Financial Stability (May 2020) describes in detail the fiscal measures announced until 8 April 2020.

- Regarding the **CEE region**, the Polish, Romanian and Croatian central banks also started to buy government securities as a previously unused measure, but the decision-makers did not define an envelope in any of these cases.
- The **People's Bank of China** has taken slightly different crisis management measures compared to other major central banks: instead of large-scale asset purchases it has supported financial markets primarily through open market operations and other measures.

Major global central banks have implemented asset purchase programmes in an unprecedented volume this year. By October 2020, the ECB's asset purchases amounted to 7.9 per cent of annual⁵ GDP, with the same rates being higher for the Bank of Japan and the Bank of England at 11 per cent and 12.6 per cent, respectively, while the Fed's purchases reached the highest proportion of GDP, at 14.8 per cent.

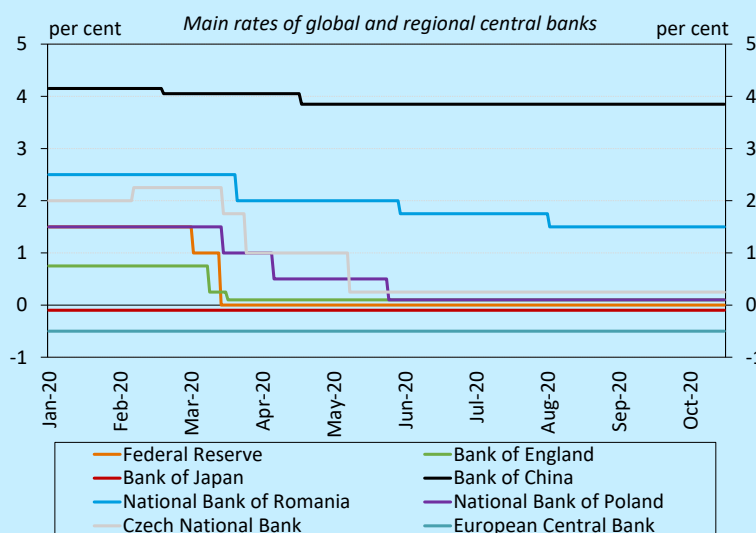
Looking at central banks' asset purchase programmes, it is clear that most of the measures introduced during the first wave of COVID-19 may continue during the second wave. For programmes with an announced envelope, the need for extension may arise over time, while in general the timing and volume of purchases may need to be fine-tuned subject to the macroeconomic, inflationary and money market effects of the new wave. While utilisation of the ECB's PEPP programme has not yet reached half of the envelope, policymakers have indicated that they are prepared to adjust the programme parameters if they deem it necessary. The Bank of England's asset purchase programme approached the envelope amount in October, but – similarly to the ECB – policymakers indicated that they will adjust monetary policy measures if necessary.

Several central banks stimulated banks' lending activity by launching loan programmes. The **ECB** decided to launch several loan incentive programmes (TLTRO III, PELTRO) and ease their conditions. The **Federal Reserve** also introduced two direct and three indirect lending instruments to support lending. However, the utilisation of the loan programmes introduced with different envelopes is low for the time being. The **Bank of Japan** created a new refinancing loan programme specifically to support small and medium-sized enterprises. Since the spring of 2020, the **Bank of England** has been operating the TFSME programme, which promotes lending mainly to small and medium-sized enterprises, which the central bank uses to provide loans on favourable terms to banks that increase their lending in the coming period. In the case of the **People's Bank of China**, special emphasis is placed on the promotion of lending in crisis management.

Its measures mainly target small and medium-sized enterprises, and it already uses a variety of loan programmes to provide targeted support to specific sectors. Among the **regional central banks**, the Polish central bank introduced a refinancing loan programme to support lending. Future application of the individual loan programmes may be limited by, *inter alia*, the envelope set for the programme and the period of availability, but these conditions may change over time subject to the economic situation.

Most central banks also reduced the policy rate as part of crisis management measures.

Although the policy rate has fallen to levels close to zero in most of the countries examined, there still may be room for further interest rate cuts in some countries until the effective lower bound is reached.



Note: In case of the ECB, we depicted the deposit rate, while in the case of the Fed, the lower bound of the main interest rate target range. Source: Home pages of central banks

⁵ Expressed as a proportion of annual GDP measured in 2020 Q2.

For example, decision-makers of the Bank of England have repeatedly indicated that they also deem the possible use of negative rates as part of the monetary policy toolbox.

Some central bank instruments have been gradually reduced or phased out as the money market turbulence from the spring eased. Of these, the repo operations introduced due to the crisis situation should be highlighted, the active use of which was no longer justified after the easing of financial market tensions. In Romania, the average daily stock of repo operations, which increased in the spring, has declined from month to month in the recent period, while in the United Kingdom the flexible repo instrument, which has been used since March, was phased out in June. In the event of a possible deterioration in money market conditions, these tools may once again become an active part of the central bank's toolbox.

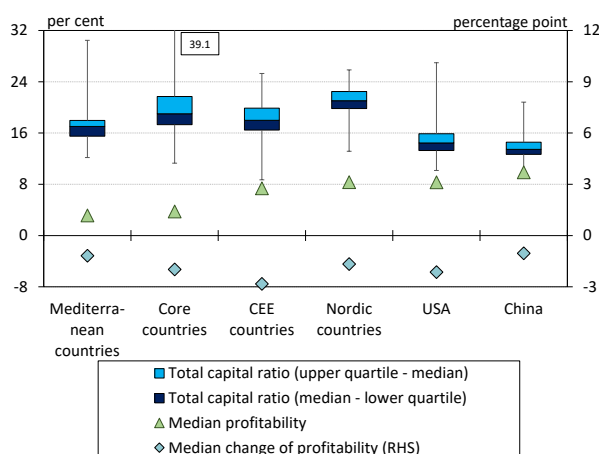
In summary, it can be stated that central banks typically responded to the first wave of the pandemic with a diversified range of large-scale measures, most of which still support the economy. Although central bank activity is somewhat more subdued than in the spring months, most central banks have already indicated that they are ready to intervene if real economic, inflation and money market developments make it necessary.

1.3 Crisis exacerbates structural problems at European banks

The capital position of European banks is stable, but they face mounting structural challenges. The resilience of European banks is adequate, but the persistently low interest rate environment, the repayment moratoria imposed, significant impairments and rising risk costs further undermined their already poor profitability in the second quarter (Chart 10). Moreover, looking ahead their asset quality may be weakened by the end of the moratoria, the more unfavourable economic environment and the deteriorating labour market situation. Mounting government debts also increase the risks arising from sovereign-bank nexus:⁶ according to S&P, European banks have increased their holdings of domestic and foreign government securities by around EUR 210 billion and EUR 100 billion, respectively, since the coronavirus outbreak. This represents an increase of about 15 per cent in the first six months of this year, which is seven times the value of the same period last year.

Both central bank and government measures support lending. Owing to the sound capital position, central bank and government credit and labour market programmes and prudential measures, lending in the EU as a whole has not declined as much as during previous crises: annual growth of the volume of private sector loans outstanding reached 4 per cent in the EU in September. However, lending dynamics were heterogeneous (Chart 11). In some countries, the introduction of guarantee programmes in the corporate segment may have partially offset the rapid

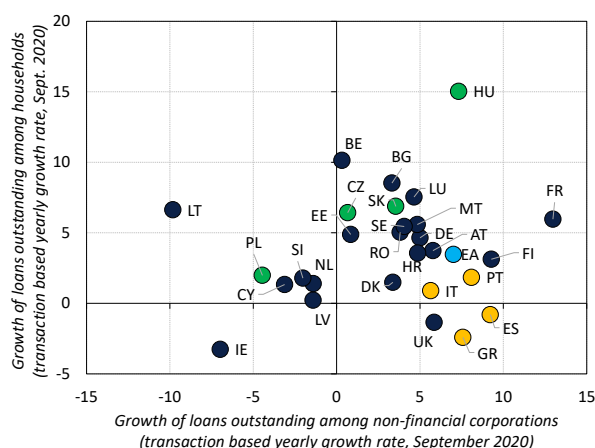
Chart 10: Profitability and total capital ratio of large banks in 2020 Q2



Note: Return on average equity (ROAE). Banks with assets of more than 500,000 euros. Mediterranean countries: ES, GR, PT, IT. Core countries: AT, BE, DE, NL, CH, UK, FR. CEE countries: HU, PL, RO, SI, SK, CZ. Nordic countries: DK, SE, FI, NO. In the diagram, the common border of the two blue boxes represents the median total capital ratio, while the end points of the vertical lines depict the minimum and maximum values. Source: S&P Market Intelligence

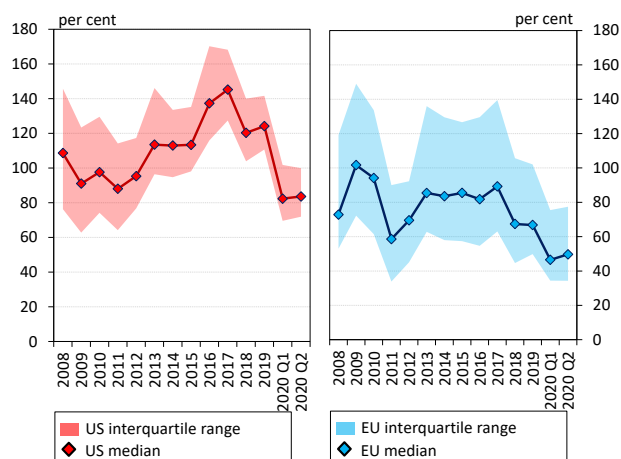
⁶ Risks are described in more detail in the [Report on Financial Stability, May 2019](#) (p.12)

Chart 11: Credit growth in the EU27 and in the United Kingdom



Note: 'EA' stands for the euro area. Source: ECB

Chart 12: EU and US banks' price to book value (P/BV)



Note: Banks with total assets of more than 500,000 euros. In the case of the EU, the UK was also taken into consideration in all time periods. Data were available for 69 EU and 367 US banks. The bands around the median stand for the interquartile range between the 25th and 75th percentiles. Source: S&P Market Intelligence

tightening of lending conditions by banks due to the deteriorating economic outlook, while in other countries the still considerable non-performing loan portfolio may have hampered expansion. On the other hand, growth rates may have been positively affected by repayment moratoria, which were introduced in different ways across Europe. As a result of these effects, the relatively robust corporate dynamics in the Mediterranean region, in Finland and the United Kingdom were accompanied by low growth or contraction in the household loan volume. By contrast, in the Visegrad countries (with the exception of Poland), household dynamics were (also) strong, presumably due in part to moratoria covering households as well.

The structural challenges faced by European banks continue to be reflected in low and deteriorating valuations.

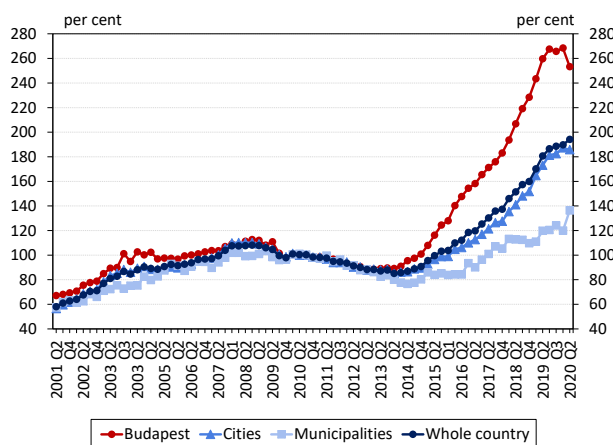
Due to the unfavourable macroeconomic outlook, the coronavirus epidemic led to a deterioration in global bank valuations in the first six months of the year (Chart 12). However, since the sovereign debt crisis, EU banks have been rated lower by investors than US financial institutions due to their structural challenges. The fact that after the 2008 crisis, USA banks quickly cleared their balance sheets, and their dynamic lending activity and more efficient business models led to higher profitability, may have made a significant contribution to this. By contrast, EU banking systems are operating with higher cost-to-income ratios, are more behind as regards balance sheet cleaning and can be considered as over-banked in some Member States; thus their profitability is significantly lower. Weaker valuations mean more expensive funding, which has been made more difficult by the unfavourable assessments of credit rating agencies experienced in the recent period. Due to their weaker competitiveness, European banks are being also increasingly pushed out from certain market segments (such as the global investment banking business by their US competitors) and forced to restructure their business models.

2 Real estate markets: market liquidity remained, despite deteriorating fundamentals

The Hungarian housing market had already started to slow down at the end of 2019, before the COVID-19 outbreak. There was an adjustment in house prices in Budapest at the end of the year, the number of transactions already fell by 8.3 per cent in 2019, and the typical level of market bargain also increased significantly. Curbs implemented in the spring due to the pandemic temporarily reduced the number of transactions significantly, but in the summer months the market expanded again on an annual basis. The economic fundamentals driving housing prices deteriorated in the first six months of 2020, but prices did not fall suddenly and sharply. The supply of new homes may increase in the coming years because of the reduced VAT rate announced by the government in October 2020, which is valid for investments started by the end of 2022.

Among the segments of the commercial real estate market, COVID-19 has affected hotels most severely. With the decline in international tourism, significant hotel capacities remained unused, and thus sales revenue in the domestic sector fell by 90 per cent year-on-year in the second quarter. The uncertain prospects for international tourism are currently paralleled with intense development activity in Hungary, and therefore there is a risk of oversupply in the hotel market. In the Hungarian office market, new developments accounting for 16 per cent of the stock, are currently in progress, which on the whole may result in an increase in the vacancy rate with unchanged demand. In the industrial-logistics segment, the highest completion volume in the current cycle is expected in 2020, but due to the high proportion of pre-leases, the vacancy rate may remain low.

Chart 13: MNB housing price index by settlement types
(2010 average = 100 per cent)



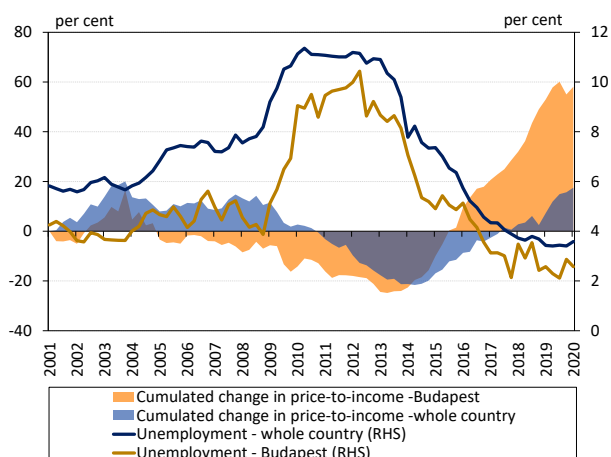
Note: The values of the price indices may be revised significantly in a year after the reference period, because the property transaction data used for the calculations are only available comprehensively with a considerable lag. Source: MNB

2.1 Correction in Budapest, rising housing prices outside of Budapest and low supply of new homes

The continuous, dynamic rise in housing prices was already interrupted before the outbreak of the coronavirus epidemic in Hungary. In 2019 Q4, a small downward adjustment of 1.3 per cent was observed in the level of prices in Budapest. The annual growth rates of house prices decelerated both at the national level and in Budapest at the end of the year, reaching 17.9 and 16.4 per cent, respectively. In 2020 Q2, prices fell again in Budapest, and to a greater extent, by 5.6 per cent, while there was a slight increase nationwide. Thus, the annual dynamics of housing prices in Budapest turned negative for the first time in a long time (Chart 13). According to our preliminary estimate based on real estate agency data, house prices in Budapest stagnated until September 2020, while they rose slightly at the national level.

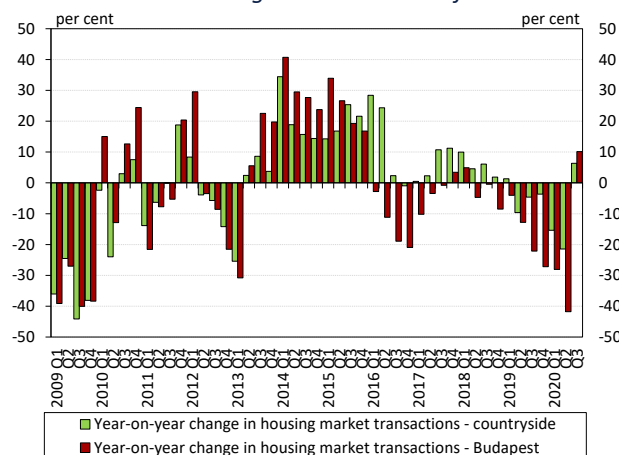
In parallel with the deterioration in housing market fundamentals, prices have fallen only moderately for the time being, which is favourable in terms of the value of bank collateral. The Hungarian housing market has been characterised by housing prices rising at a rate exceeding the economic fundamentals in recent years, particularly in Budapest. Considering all of this, in several previous

Chart 14: Developments in the ratio of house price to income since 2001 and the unemployment rate



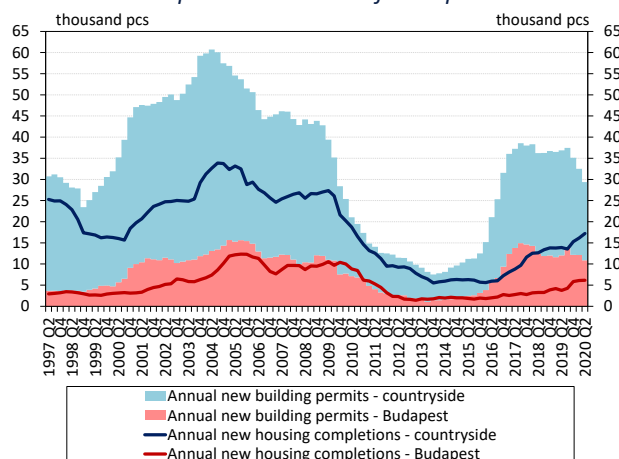
Note: Price-to-income: the ratio of the real MNB house price index and disposable income of households (2001 Q1 = 100%). Source: MNB

Chart 15: Annual change in the number of transactions



Note: 2020 transactions based on real estate agent data. Source: MNB, housing agent database

Chart 16: Annual rolling number of building permits issued for homes and of completed new homes built in Budapest and outside of Budapest



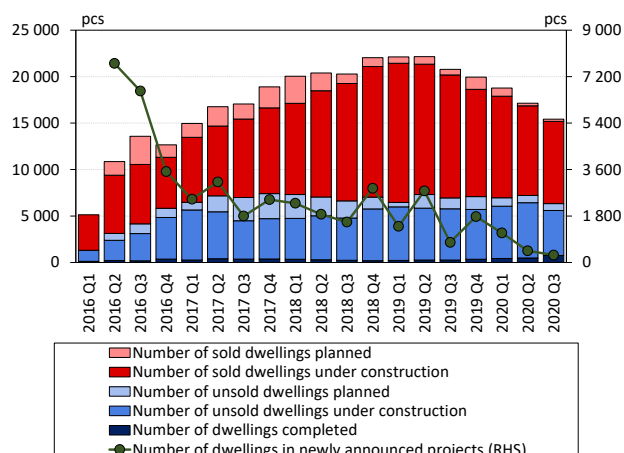
Source: HCSO

analyses the MNB has indicated a rising risk of overvaluation of residential real estate in the capital. Compared to 2001, house prices are nationwide by 18 per cent higher than households' disposable income, while in Budapest this figure is already 55 per cent. In addition, since the 2013 trough in the current housing market cycle, the house price/income ratio has increased by 49 per cent nationwide and by 104 per cent in Budapest (Chart 14). As a result of the negative economic effects of COVID-19, unemployment rose slightly in the first six months of 2020, which – coupled with deterioration of medium-term income prospects – could erode public confidence and discourage investments. Overall, the deterioration of the affordability of housing and the unfavourable labour market prospects are placing downward pressure on house prices, but this may be partially offset by the low interest rate environment and state-subsidised loan products. In terms of the value of bank collateral, it is favourable that there has been no sudden, large-scale fall in housing prices.

Housing market demand and the number of transactions decreased significantly even before the epidemic. In 2019, the number of housing market transactions fell 16 per cent in Budapest and 4 per cent outside of Budapest compared to 2018 (Chart 15). However, the number of transactions after the April low reached the value of the previous year's same period in the summer of 2020. This can be explained on the one hand by the fact that due to restrictive measures many spring home purchases were postponed, which may have already appeared in the 2020 summer data, and on the other hand also by the base effect, as the MÁP+ government security introduced early summer 2019 immediately reduced investment demand in the housing market. Overall, the housing market has not dried up and market liquidity has remained, which may also have a supportive effect on the valuation of bank collateral.

The number of new home completions is low even by historical and international standards. In 2019, 21,000 new dwellings were built, which resulted in a renewal rate of 0.47 per cent for the stock of dwellings. This is considered low by both historical and international standards, with renewal rates of around 1.4 per cent in 2018 and 2019 in both Austria and Poland. In the first six months of 2020, new completions still expanded at a rate of 34.4 per cent nationwide on an annual basis, and within that, to a greater extent, by 37.6 per cent outside of Budapest, mainly due to the postponement of completions originally planned for 2019 to the next year. However, the number of building permits issued fell by 31.6 per cent at the national level, by

Chart 17: Number of new dwellings under development and sale in Budapest



Note: Based on multi-apartment projects for more than 4 new homes in Budapest. Source: ELTINGA – Housing report

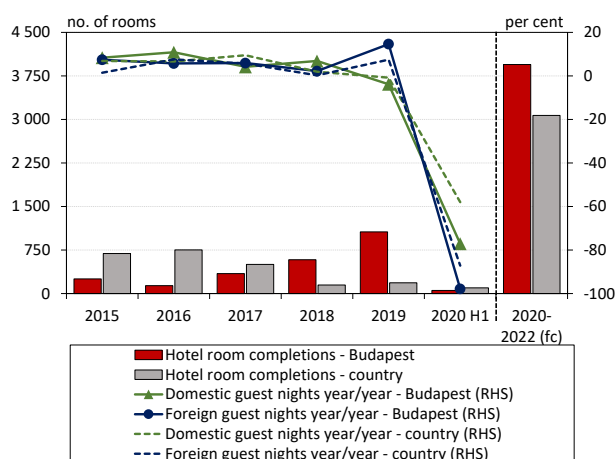
37 per cent outside of Budapest, and by 20.9 per cent in Budapest versus 2019 H1 (Chart 16).

The supply of new homes has embarked on a downward trend, but may rise again in the coming years due to the preferential VAT rate for new homes that was announced. As the end of the 5-per cent preferential VAT rate on homes, which was temporarily introduced in 2016, approached in 2019, home development activity started to decline and by 2020 Q3 the number of projects announced in the current quarter had also fallen to a low (Chart 17). According to the government's announcement in October 2020, from 1 January 2021, housing projects with a final building permit issued by 31 December 2022 will once again be eligible for the 5-per cent preferential VAT rate. In the coming years the preferential rate may again increase the number of permits and investments started. In addition, the government announced that those applying for Home Purchase Subsidy can even reclaim the 5 per cent VAT when buying a new home, which provide additional impetus to demand. However, until the detailed rules are elaborated, the launch of new projects will be characterised by a "wait-and-see" attitude, as – in addition to the newly announced preferential rate – even the brownfield zone regulation is surrounded by uncertainty.

2.2 Major shutdowns in the hotel segment, mounting uncertainty in the office market⁷

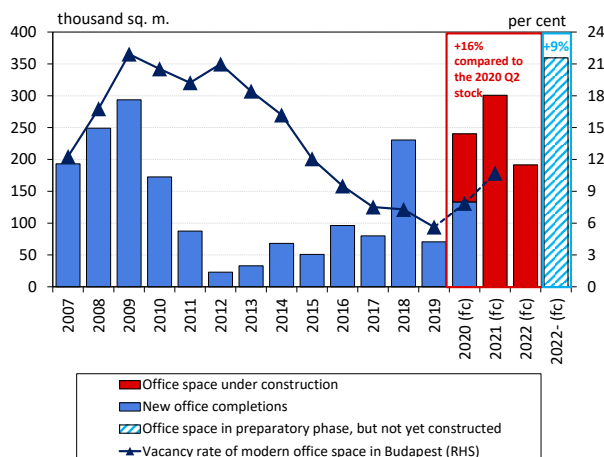
Much of the hotel segment has been forced to shut down because of restrictive measures taken due to the pandemic and lagging international tourism. In June 2020, the number of domestic tourism nights in Budapest and outside of Budapest was down by 77 per cent and 58 per cent compared to June 2019, respectively. The number of tourism nights by foreigners fell even more during this period, plunging by 98 per cent and 87 per cent, respectively. The decline in tourism, and in particular the number of foreign tourists, is hitting Budapest the hardest. As a result of the coronavirus epidemic, significant hotel capacity remained unused, with hotels open offering by 56 per cent less rooms at the April low. Revenue of hotels fell by 90 per cent year-on-year in 2020 Q2 and was 43 per cent lower year-on-year even in July. Hungary is currently characterised by intense hotel construction activity, with more than 7,000 hotel rooms under construction or preparation (Chart 18): therefore, there is a risk of significant oversupply. The segment's loan portfolio to credit institutions amounted to HUF 181 billion in June 2020.

Chart 18: Number of opened and planned hotel rooms and annual changes in tourism nights in Hungary



Note: For changes in the number of tourism nights, the latest data is based on June 2020 and June 2019. Source: Hungarian Hotel & Restaurant Association, HCSO

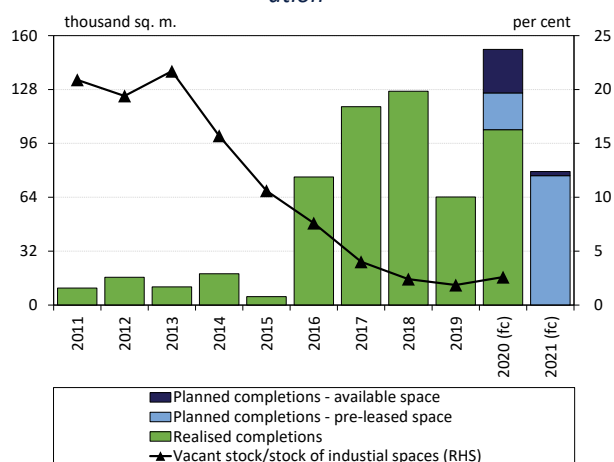
Chart 19: Development activity and vacancy rate in the Budapest office market



Source: Budapest Research Forum, Cushman & Wakefield

Significant completions are also expected in the office segment, but future changes in demand for office space are surrounded by uncertainty. In the first half of 2020, the expansion of office supply was not fully followed by demand, and thus the vacancy rate rose from 5.6 per cent at the end of 2019 to 7.3 per cent by the end of the first half of 2020. By 2022, the Budapest office stock may increase by a total of 16 per cent, as a result of the current intense development activity. According to our calculations, if the new demand and extensions maintain the level of occupancy of the currently existing stock, and the pre-lease level of the developments under construction does not change, the vacancy rate could increase to 10.7 per cent by 2021. However, this would not represent a historically high level (Chart 19). According to market experts, companies' decisions about office use and working from home may change permanently, but in the current uncertain situation, cost reduction and a wait-and-see attitude will determine office demand. The loan portfolio of the office building and shopping centre segment amounted to HUF 591 billion at the end of the first half of 2020.

Chart 20: New completions and vacancy rate in the industrial-logistics market of Budapest and its agglomeration



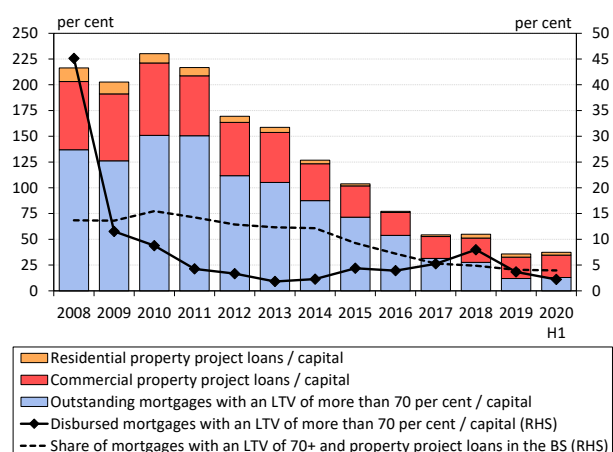
Source: Cushman & Wakefield

The industrial-logistics segment is stable for the time being, with low vacancy rates and high pre-lease rates for future completions. In 2020, a total of 152,000 square meters of new industrial-logistics area is expected to be completed, which is more than twice the volume of the previous year and represents the highest value in the current cycle (Chart 20). 78 per cent of the industrial-logistics properties newly placed on the market in 2020-2021 are secured by pre-lease contracts. The segment's vacancy rate remained extremely low at 2.6 per cent at the end of 2020 H1. The segment's banking system loan portfolio amounted to HUF 178 billion in mid-2020.

The banking system's exposure to the real estate market is significantly lower than in the previous crisis. If coupled with risky lending, overvaluation of the real estate market may make credit institutions more vulnerable. In the case of a negative price shock, banks would suffer losses on loans with high loan-to-value (LTV) ratios due to an increase in the expected loss given default, which would impair their capital position and their lending capacity as well. However, at present the level of these risks is low in the Hungarian banking sector. Firstly, the share of mortgage loans within the balance sheet has declined steadily in the past ten years. Secondly, the ratio of mortgage loans with a relatively high – above 70 per cent – loan-to-value ratio

⁷ For more on the developments on the commercial real estate market, see the MNB's [Commercial Real Estate Market Report](#) published in October 2020.

Chart 21: Exposure of the banking system to risky real estate market assets



Source: MNB

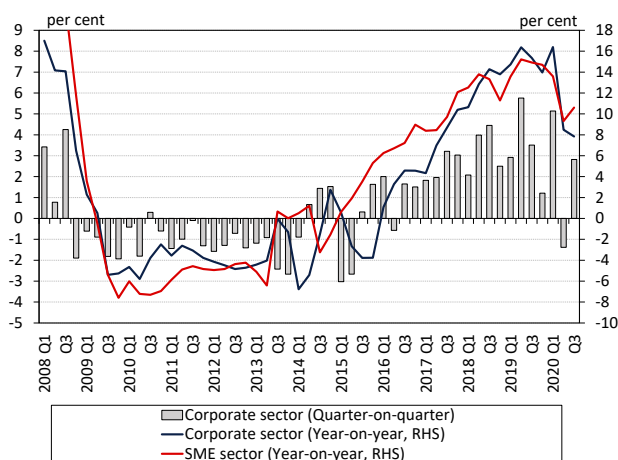
and commercial real estate project loans to the regulatory capital fell to 13 per cent and 22 per cent respectively in the first six months of 2020, whereas the same ratio was 137 per cent and 66 per cent, respectively prior to the outbreak of the previous crisis. In terms of new disbursements, the ratio of loans with a loan-to-value ratio above 70 per cent to regulatory capital was only 3.7 per cent in 2019 and 2.2 per cent in the first six months of 2020, which is a fraction of the 45 per cent seen in 2008 (Chart 21).

3 Trends in lending: central bank and government programmes maintain the expansion of lending

Lending to non-financial corporations by credit institutions and financial enterprises continued to expand in the first quarter, but this was followed by a halt in borrowing in the second quarter. The negative economic effects of the pandemic have cut the previously outstanding annual corporate loan dynamics by roughly half, to a rate of 8.5 per cent. In contrast to several European countries, the volume of overdraft facilities in Hungary did not increase significantly in the uncertain environment, but the previously stronger demand for long-term loans temporarily shifted towards short-term loans. The decline in demand was most pronounced for commercial real estate loans. Due to increased uncertainty, banks have tightened credit conditions, which, however, was partially offset by the new government and central bank loan and guarantee programmes announced as a consequence of the pandemic. A strong rise in loan programmes was observed in the third quarter, primarily supported by working capital financing needs. Looking ahead, however, demand for investment loans may expand again within six months, according to banks' expectations. Due to all of the above and the portfolio-preserving effect of the moratorium extension, annual corporate lending growth is expected to remain in the positive range over the forecast horizon.

In the household sector, the payment moratorium and state-subsidised products maintained the expansion of lending, and consequently outstanding loans of the whole financial intermediary system rose by 17 per cent year-on-year in 2020 Q2. As a result of the coronavirus crisis, new contracts fell in the second quarter, due to a contraction in demand on the one hand and tightening credit conditions on the other. The indebtedness of the household sector is historically low, but insufficient levels of savings can entail risks for low-income debtors. This is mitigated by the payment moratorium in 2020, which is mostly being used by clients with personal loans and housing loans. The characteristics of new contracts have changed primarily in the case of personal loans: credit institutions responded to the crisis resulting from the epidemic and to the APR cap introduced in March by increasing the level of required income, while financial enterprises have responded by shortening maturities. The MNB will extend the Certified Consumer-friendly framework to personal loans as well, in order to strengthen credit market competition and thus help reduce interest rate spreads. Looking ahead, the epidemic continues to cause uncertainty, but with the targeted extension of the moratorium, annual credit growth is expected to be above 5 per cent and may be in the double-digit range again by 2022.

Chart 22: Growth rate of outstanding loans of the over-all corporate sector and the SME sector



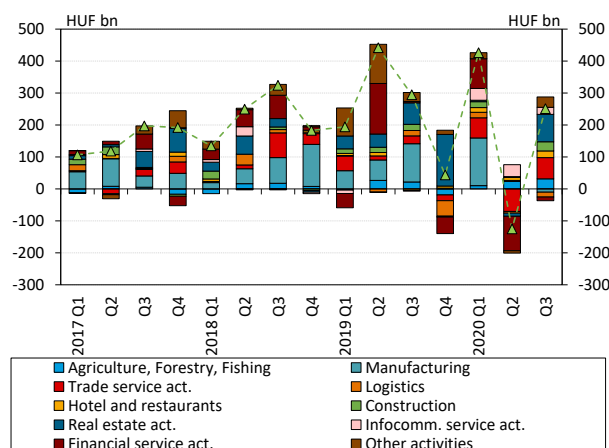
Note: Transaction-based growth rates based on credit institution sector data. Prior to 2015 Q4, data for SMEs are estimated based on banking system data. Source: MNB

3.1 Lending activity may recover swiftly after the setback in corporate lending

The spread of COVID-19 has cut the previously outstanding corporate credit dynamics by roughly half, to a rate of 8.5 per cent. The significant quarterly expansion of 5 per cent in the first quarter turned into a decrease of 1.4 per cent in the second quarter, due to the negative effects of the pandemic on the real economy (Chart 22). The growth rate of SME loans slowed down less, declining by around 4 percentage points to 9.3 per cent. This can be linked mostly to the spring months: after the low point in April, the decline in the loan portfolio started to slow down, and, after the reopening of the economy, since July, it embarked on a growth path again. In the third quarter, a 2.8-per cent increase in the loan portfolio was observed.

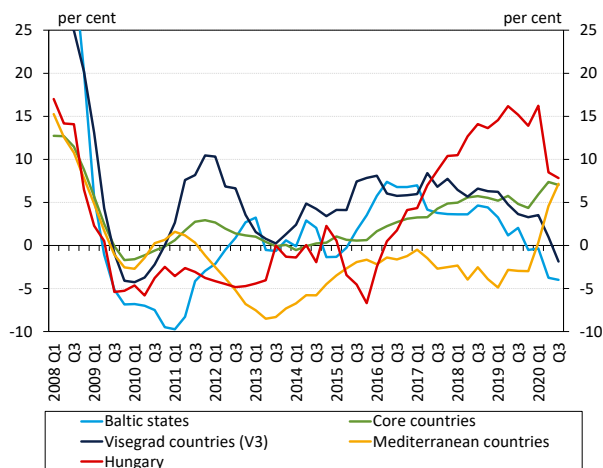
Loans expanded in a wide range of sectors in the third quarter. The outstanding loans of the financial service

Chart 23: Quarterly corporate loan transactions by sectors



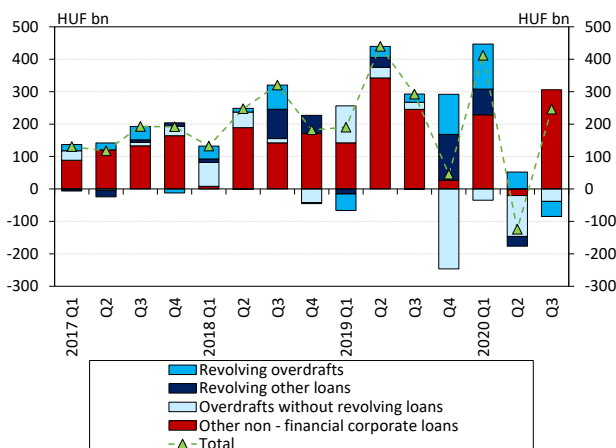
Source: MNB

Chart 24: Annual growth rate of corporate loan portfolio in an international comparison



Note: Transaction-based growth rates. Source: MNB

Chart 25: Corporate loan transactions of the credit institution sector by main loan instruments



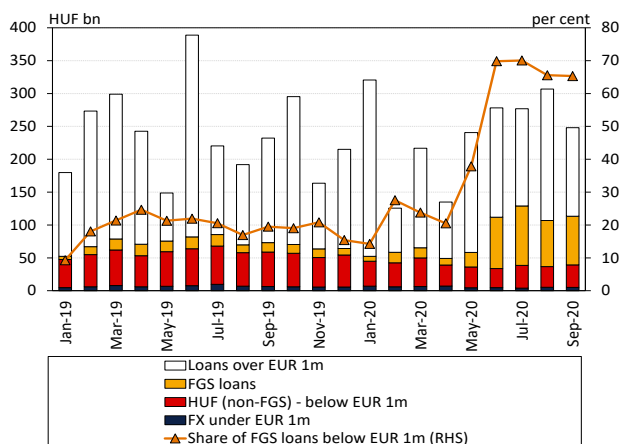
Note: Other loans include, among other things, investment and working capital loans and leasing transactions. Source: MNB

activities sector grew by about HUF 100 billion in the first quarter, followed by a similar decline in the second quarter. This was the result of the individual transactions of holding companies, without which – considering the underlying processes alone – the second quarter would have seen no change. There was another significant decrease in the trade service activities sector in the second quarter (HUF -71 billion), while in the other sectors stagnation or a slight increase was observed (Chart 23). In the second and third quarters, in addition to the decrease in foreign currency loans (by HUF 149 billion and HUF 117 billion, respectively), forint loans increased by HUF 24 billion and HUF 367 billion, respectively. While both large corporate and SME loans rose in the first quarter, lending declined in both size categories in the second quarter. In the third quarter, the expansion of SME loans was the main contributor to the growth observed. The volume of fixed-rate products increased substantially in the second and third quarters, due to the impact of the new central bank and government loan programmes announced as a consequence of the COVID-19 crisis.

As a result of the pandemic, the annual growth rate of outstanding loans changed significantly, but heterogeneously in the EU Member States. In the Mediterranean countries (Chart 24) and France, the annual growth rate of outstanding loans increased significantly, while it declined in Germany and the Netherlands. In the southern Member States, the temporary surge in overdraft facilities and other liquidity providing loans boosted dynamics, and large-scale government guarantee schemes may also have bolstered the expansion of lending. Consequently, annual lending dynamics in the euro area overall roughly doubled compared to last year, rising to 7 per cent. By contrast, similar to other countries in the region, Hungary experienced a significant decline, but Hungary's growth rate remained above the euro area average.

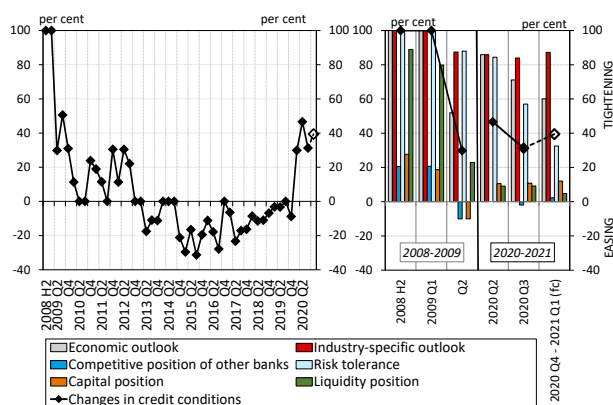
In Hungary, the volume of overdrafts did not increase significantly even in the uncertain real economic environment. In contrast to the Mediterranean countries, the volume of overdrafts fell in Hungary in the first six months of the year (Chart 25), and there was no significant increase in the volume of revolving loans, even despite the uncertain economic environment due to the pandemic. The FGS may have played a significant role in this, as working capital loans under the programme provide a competitive alternative for corporate liquidity financing. In addition, the payment moratorium, which was announced soon after COVID-19 appeared in Hungary and takes a broad approach by international standards, may have played a key

Chart 26: New corporate loan contracts



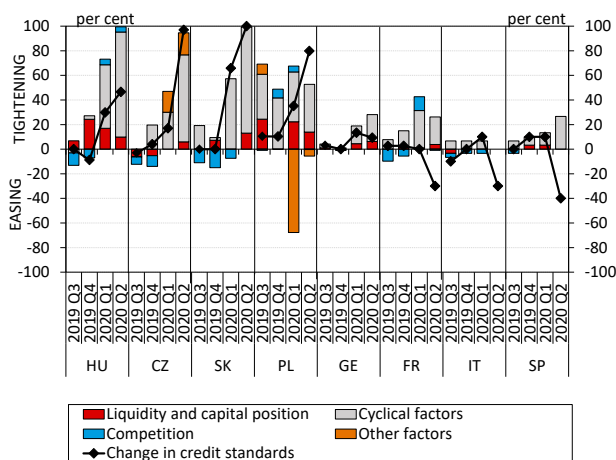
Note: Based on data from the credit institutions sector. Source: MNB

Chart 27: Changes in credit conditions in the corporate segment



Note: Net percentage of respondents tightening/easing credit conditions weighted by market share. Source: MNB, based on banks' responses

Chart 28: Changes and factors contributing to changes in corporate credit conditions in an international comparison



Note: Category values are derived from the arithmetic average of the factors thematically classified therein. In the case of Poland, banks indicated the moratorium on loan repayments among other factors in the first quarter of 2020. Source: MNB, ECB, national central banks

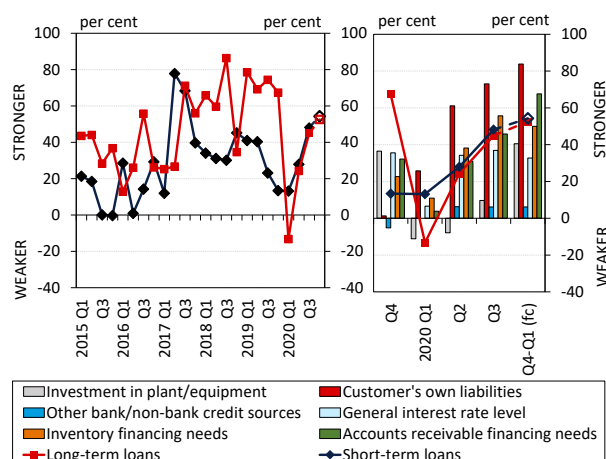
role as well. According to our estimates, it improves the liquidity position of the corporate sector by nearly HUF 1,500 billion this year.

More than half of the newly contracted SME loans were funded by FGS. In April, due to reduced economic and social mobility as a result of quarantine measures, loan extensions were still significantly lower (down 45 per cent) compared to the same period of last year, but a significant rebound has been seen since May. In the second quarter, the dominance of forint, longer-term and fixed-rate loans also strengthened significantly, primarily due to the renewing FGS scheme. In 2020 Q2, nearly 30 per cent of new lending and about 60 per cent of SME contracts were financed under the FGS scheme. In the summer months, after a temporary halt, the recovery in new disbursements continued and the volume of small ticket size loans (less than EUR 1 million), related typically to small companies, exceeded the 2019 values (Chart 26).

Due to the weakening economic outlook and waning risk tolerance, banks have tightened credit conditions. The Lending Survey revealed that, in net terms, 47 per cent of banks tightened their lending conditions in the first six months of 2020, while 31 per cent of institutions reported further tightening in the third quarter (Chart 27). According to the respondents, the tightening mainly affected non-price conditions, such as collateral requirements and the minimum required credit score. In addition to the deteriorating economic outlook, the change in banks' risk tolerance was indicated as the main reason for the tightening. The tightening affected all corporate size categories, but credit institutions tightened the conditions for the commercial real estate segment to the largest degree. Banks did not indicate any significant change in price-type conditions, in line with which the average interest rate of contracts concluded during the first six months of the year did not change significantly. Compared to the global financial crisis of 2008, the 2020 shock hit banks in a much more stable and more prepared state. During the 2008 crisis, the liquidity situation of banks immediately led to the tightening of lending conditions for nearly 90 per cent of respondents, thus deepening the economic crisis.

During the first six months of the year, credit conditions only eased in countries which announced large-volume guarantee programmes. According to the second quarter Bank Lending Survey of the ECB, banks in the Visegrad countries, similarly to Hungary, have tightened their lending conditions to a significant extent (Chart 28), which may also be related to the declining credit dynamics in the

Chart 29: Changes in credit demand and factors contributing to the changes

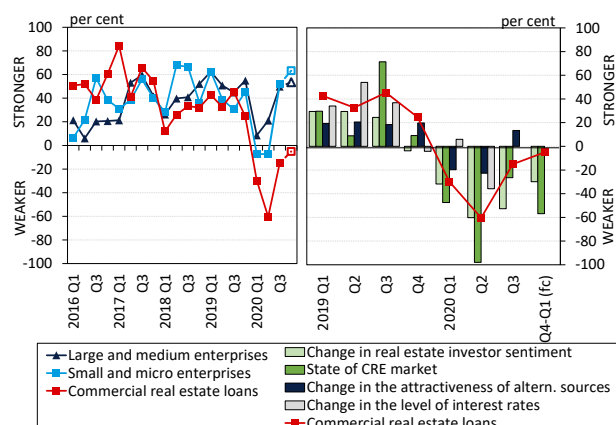


Note: Net percentage of respondent banks indicating stronger/weaker demands, weighted by market share. Source: MNB, based on banks' responses

region. However, liquidity and capital position capturing banks' lending capacity was typically not indicated by the respondents as the reason for the tightening. In the euro area, there was a high degree of heterogeneity in changes in credit conditions in the second quarter. Looking at the four largest euro area Member States, lending conditions have tightened in Germany, while they have eased significantly in France, Italy and Spain. In the case of the Mediterranean countries and France, the easing of credit conditions is mainly due to the announcement of large-volume state guarantee schemes. Large government guarantee schemes were also announced in Germany in the spring, but utilisation is significantly lower than in the other three euro area countries.

The previously stronger demand for long-term loans temporarily shifted towards shorter maturities. As economic uncertainty intensified, many companies decided to postpone their investments, leading to a decline in demand for long-term loans in the first quarter. However, the sudden depletion of revenue sources has resulted in an increase in demand for liquidity loans due to fixed costs and sticky variable costs. As a result, in net terms, 13 per cent of the banks surveyed perceived higher demand for short-term loans, which rose to 28 per cent in the second quarter (Chart 29). As a result of these two processes, the previously stronger demand for long-term loans temporarily shifted towards shorter maturities. However, according to banks' feedback, the phenomenon is only temporary, and demand for long-term loans already increased as well in the second quarter. Looking ahead, the loan demand due to investment demand may increase again within six months. In net terms, 53 per cent of banks expect demand for long-term loans to increase, in the case of both small and large corporates.

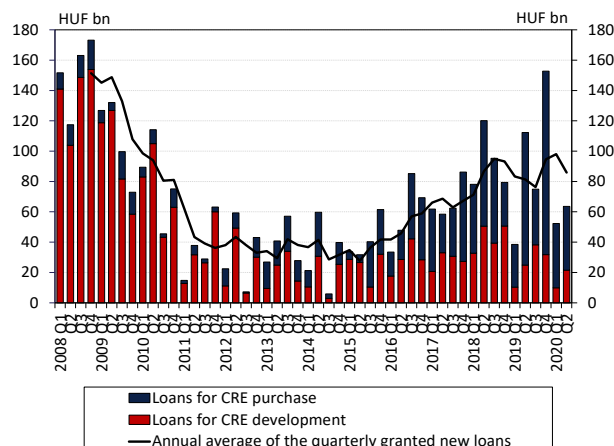
Chart 30: Changes in credit demand and factors contributing to the changes in the commercial real estate segment



Note: Net percentage of respondent banks indicating stronger/weaker demands, weighted by market share. Source: MNB, based on banks' responses

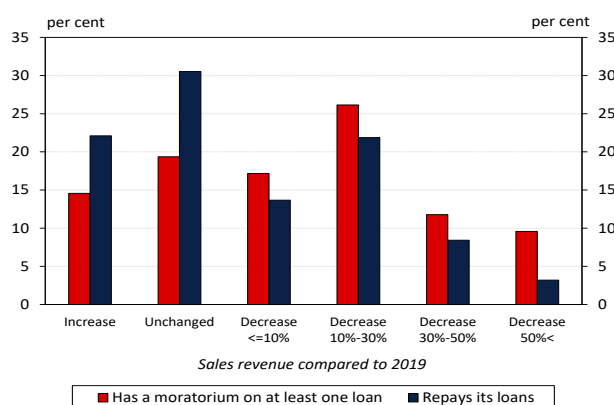
The temporary decline in demand was most pronounced for commercial real estate loans. The decline in demand for commercial real estate loans was indicated by 60 per cent of responding banks, in net terms, in the second quarter (Chart 30). In addition to its pro-cyclicality, the riskiness of the segment is also exacerbated by structural problems potentially stemming from the pandemic situation. In the first quarter, banks perceived the decline in demand for loans related to housing projects most strongly, while they reported unchanged demand for loans financing logistics centres. Loan demand in each segment declined in the second and third quarters, and in addition to the foregoing, nearly half of the banks reported a decline in demand in the shopping centre and office building segments. Looking ahead to the next six months, banks expecting demand to

Chart 31: Disbursements of project loans to domestic companies secured by commercial real estate in the credit institution sector



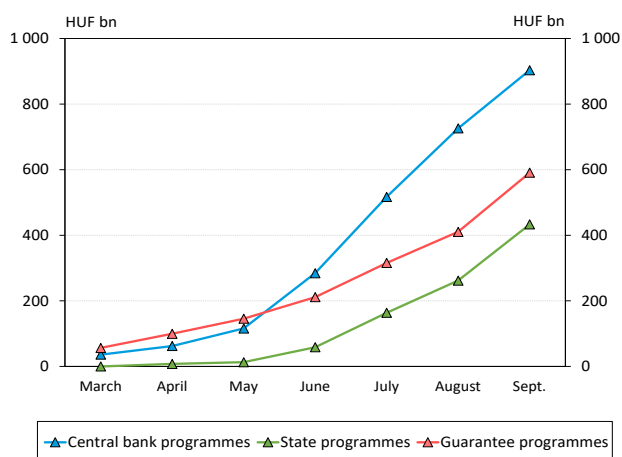
Source: MNB

Chart 32: Distribution of corporates' turnover expectations among those participating in the moratorium and repayers



Note: 501 companies responded that at least one of their loans is in a moratorium, which equals the population ratio. Source: MNB survey

Chart 33: Disbursements under programmes introduced by the central bank or the government as a reaction to the coronavirus pandemic



increase became dominant, with the exception of the shopping centre segment.

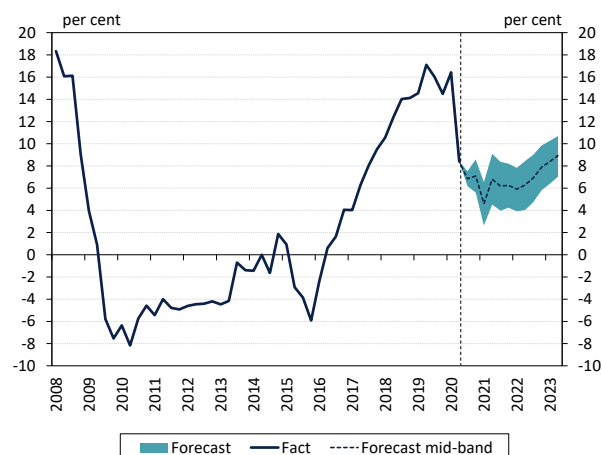
There has been a major decline in the disbursement of project loans with commercial real estate collateral. In the first six months of 2020, credit institutions disbursed HUF 116 billion in project loans covered by commercial real estate. While the disbursement volume of the first quarter was still 35 per cent higher than the low level of previous year's same period, the disbursements in the second quarter were already 43 per cent lower compared to 2019 Q2 figures (Chart 31). Overall, the amount of loans disbursed in the first six months of the year was 23 per cent lower than in the same period last year. Within disbursements in the first half of 2020, the volume of loans for real estate purchase decreased to a greater extent, by 27 per cent, while real estate development loans decreased by 11 per cent year-on-year. This has broken the steadily growing trend of new loans for real estate purchases in recent years. Looking ahead, the protracted economic recovery and uncertain prospects could lead to a decline in commercial real estate investment, which could also reduce the disbursement of loans for real estate purchase.

This year, nearly a fifth of companies with a loan expect a significant drop in sales revenue of more than 30 per cent. According to the MNB's questionnaire survey in August, the real economy effects of the pandemic did not affect all companies negatively; almost one-fifth of the companies reported that this year's sales will increase compared to last year. However, most of them expect revenue to decline, with 42 per cent of respondents expecting a decrease in revenue by more than 10 per cent (Chart 32). Smaller companies were hit harder than average by the crisis. Among the sectors, arts, entertainment, leisure, tourism and catering were the most affected, with more than one half of the businesses in these industries expecting sales revenue to fall by at least 30 per cent this year.

In the third quarter, we observed a strong rise in new government and central bank loan programmes announced in response to the coronavirus pandemic. Taking into account loans taken out by sole entrepreneurs as well, credit institutions and financial enterprises granted more than HUF 800 billion of FGS Go! loans by the end of September 2020 (Chart 33). Among the non-FGS government loan programmes, HUF 213 billion was contracted under the Széchenyi Card Programmes with a budget of ~650 billion HUF, HUF 81 billion under the new MFB Loan Programmes with a budget of ~467 billion HUF and HUF 138 billion under the EXIM Loan Programme with a budget of ~208

Note: Central bank programmes include FGS Fix and FGS Go!, while government programmes include EXIM and MFB loan programmes and the Széchenyi Card Programme. In the case of the MFB programmes, data refer to the credit institution sector, while the rest refer to the whole financial intermediation system. Due to the overlaps between the programmes, summing is not appropriate. Source: MNB

Chart 34: Forecast for the annual growth rate of the corporate loan portfolio



Note: Transaction-based, annual growth rate. Source: MNB

billion HUF by the end of September. The upswing in the programmes is well illustrated by the fact that a significant part of the HUF 229 billion disbursements made so far under loan programmes other than the FGS were made in August and September. Under the largest guarantee scheme announced, the Garantiqa Crisis Guarantee Scheme with a budget of a total HUF 500 billion, nearly HUF 264 billion was contracted by September.

We expect corporate lending dynamics to slow, but to remain in the positive range over the forecast horizon. On the supply side in our forecast, additional tightening of bank lending conditions is expected in the next six months due to the deteriorating economic outlook. On the demand side, however, state lending programmes and guarantee schemes, as well as the FGS Go! have an incentive effect on corporate lending, and therefore a turnaround may take place both in the case of small and micro enterprises, and their loan demand may increase significantly again. Banks participating in the Lending Survey expect an increase in demand in the next six months. The low indebtedness of the corporate sector, which can also be seen in their credit-to-GDP ratio, will not limit loan expansion. Taking into account the up to HUF 400 billion amortisation-reducing effect of the extension of the moratorium and the variety of loan products with low real interest rates fixed for long periods, we expect corporate lending dynamics to remain in the positive range over the forecast horizon. Double-digit growth may also return within two years (Chart 34). In the upcoming period, a significant extension of state guarantee schemes supporting risk sharing could also help increase banks' willingness to lend and thus to increase the outstanding corporate loan portfolio (Box 2).

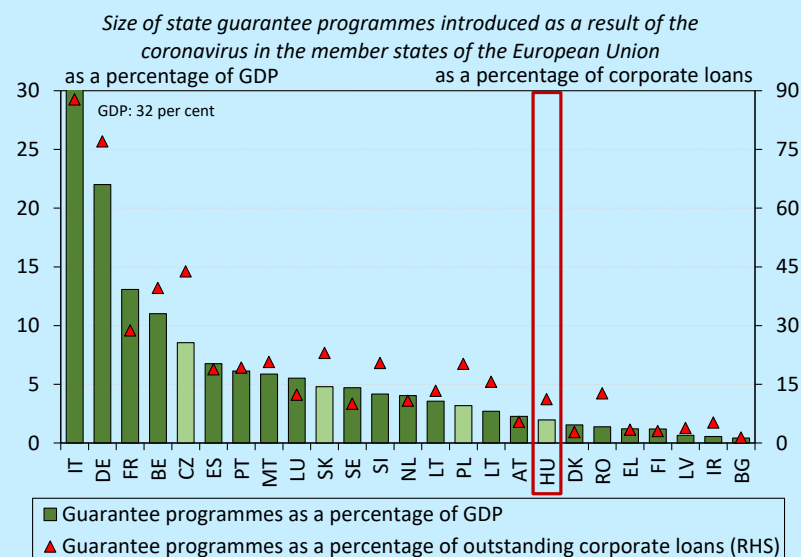
BOX 2: MAIN FEATURES OF STATE GUARANTEE SCHEMES INTRODUCED IN THE EU COUNTRIES IN RESPONSE TO THE EFFECTS OF CORONAVIRUS

The budgets for the guarantee schemes to help bridge the economic situation caused by COVID-19 far exceed the values of previously typical loan guarantee portfolios. So far, EU Member States have launched a total of 48 guarantee schemes (based on data from 25 countries). The potential budget of these schemes, with significant national differences, accounts for almost one sixth of EU GDP, while before the coronavirus, the average value of guarantee portfolios as a proportion of GDP was only around 0.7 per cent in European countries.

State-backed guarantees are of key importance in an uncertain economic situation. When economic activity declines and uncertainty increases, banks typically lend more cautiously. In turn, more cautious lending dampens growth and increases uncertainty, and thus banks' reduced risk appetite results in unfavourable feedback mechanisms. State risk sharing and guarantees for loans is able to break this feedback effect. By maintaining bank lending, economic output may also remain at a higher level. In addition, guarantee schemes represent a relatively low and prolonged, well off-settable cost to the state, while immediately having a counter-cyclical, supportive economic effect in the economy. In Hungary, the annual cost of guarantee drawdowns in the previous decade was around HUF 20 billion, which is a

relatively small amount compared to the loan guarantee portfolio, which averaged HUF 800 billion over the past 10 years, and to the current loan portfolio of approximately HUF 9,000 billion.

Before the pandemic, Hungary had the highest proportion of guarantee portfolios in relation to the size of the economy in the European Union, but the budgets of the new schemes are low in an international comparison. Prior to the crisis, the value of loan guarantee portfolios as a proportion of GDP exceeded 1 per cent of GDP in only three EU countries, with the highest in Hungary at 2.1 per cent. As a result of the coronavirus, EU countries have announced large-scale public crisis response programmes, and in many cases, the budgets for guarantee schemes exceed 50 per



Note: As a proportion of GDP in the first quarter of 2020 and outstanding corporate loans in the first quarter of 2020. Source: MNB, IMF, Bruegel

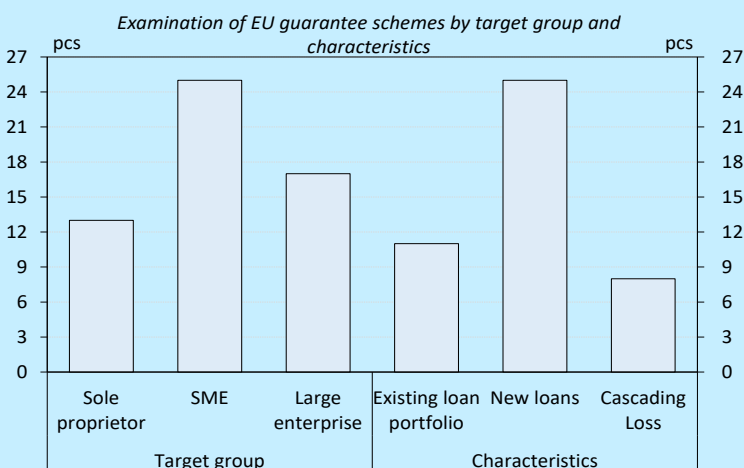
cent of the total amount earmarked for crisis response. The size of the programmes varies considerably from country to country: in some cases, the size of the programmes remains below 2 per cent of GDP, while for instance in Belgium, France, Germany and Italy the available guarantee facility exceeds 10 per cent of GDP. The largest programme was launched by Germany, with a budget of nearly HUF 800 billion, and the programmes in Italy reach 32 per cent as a percentage of GDP. By contrast, Hungary's programmes account for only 2 per cent of GDP, which can now be considered low even at the regional level. In addition to the potential budget, the size of the actual transactions is also an important factor: up to September, the issue of new government-subsidised loans was significant in France, Italy and Spain, reaching 5-8 per cent of GDP, while in Germany, despite a large budget, it only amounted to 2 per cent of GDP. The different levels of utilisation can be attributed to the fact that banks in Germany reported tightening lending conditions in the second quarter, while conditions eased significantly in the other three countries. Utilisation of the newly launched Hungarian guarantee schemes can be considered significant: in September almost 50 per cent of the largest Garantiqa Crisis facility with a budget of HUF 500 billion has been used.

The programmes announced usually target the entire corporate sector, have a limited duration and their main goal is to strengthen new lending. State guarantee schemes launched in European countries usually cover the entire corporate segment, but in some countries (e.g. Austria, Estonia) specific programmes have also been launched for severely affected industries (e.g. tourism, catering). In many cases, the programmes are segmented by company size or sales revenue: micro and small enterprises can receive a larger state guarantee, while large corporates receive smaller state guarantees. The programmes are nationwide and limited in duration: after starting in the spring, most of them will end by 31 December 2020, according to current plans. Their main aim is to strengthen new lending, and in most cases, loan refinancing through the programmes is not allowed, or only to a limited extent. In most cases, disbursement of guaranteed loans is linked to commercial banks, but there are also examples of financing through a public institution.

Most of the announced programs offer 80 or 90 per cent state guarantee. The high guarantee is allowed by a decision of the European Union in March, which became more permissive in terms of guaranteeing loans; this originally applied for loans contracted until 31 December 2020, and in October this date was changed to the end of June 2021. States can provide a reduced-fee guarantee, and this discounted fee can last up to 6 years and cover up to 90 per cent of the principal debt, instead of the previous 80 per cent. Some programmes provide state guarantee only up to a certain percentage of the value of the guaranteed loan portfolio, any loss exceeding this must be borne by the bank. In the

Belgian programme, for example, portfolio-level, staggered loss-liability has been introduced and each loss ratio is borne in different proportions by the bank and the Belgian state.

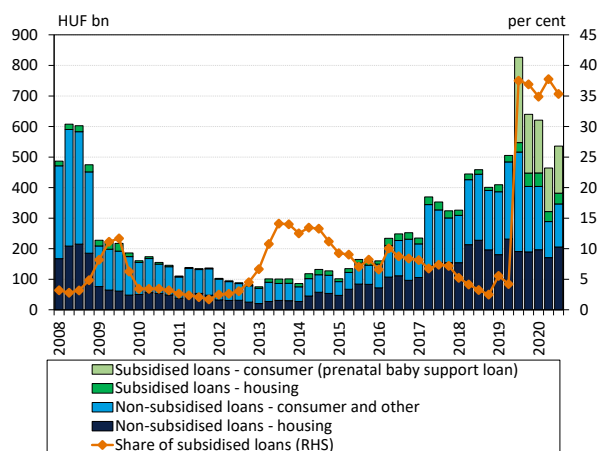
In summary, although different detailed rules have been developed in the implementation of guarantee schemes in the European countries, their importance in economic aid measures has grown widely. However, as a proportion of GDP, the size of the new Hungarian guarantee programmes falls significantly short of the European average. With the number of COVID-19 cases increasing again and the economic risks of the autumn containment measures intensifying, demand for state loan guarantee schemes remains high.



Note: The figure shows how many of the 25 examined member states are characterized by individual points.
Source: MNB, IMF, EBA

3.2 Payment moratorium and state-subsidised products sustain the expansion of household lending

Chart 35: New household loans in the credit institution sector

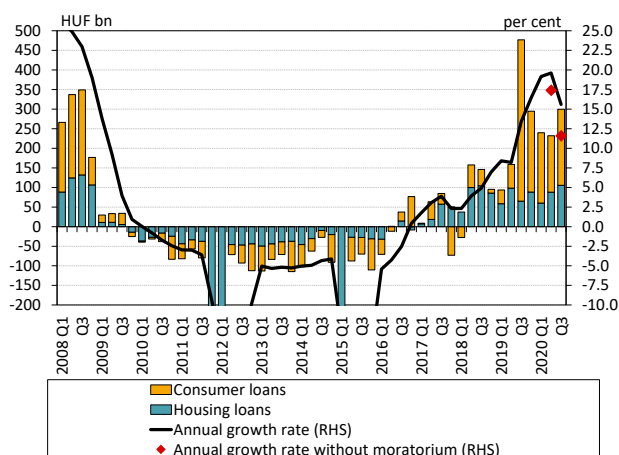


Note: The effect of the early repayment scheme and the refinancing related to the FX-conversion are excluded. Source: MNB

Since mid-2019, one third of new retail lending has been state-subsidised. Following the outbreak of the COVID-19 in March, issuance of all retail credit products declined. Personal lending fell the most in 2020 Q2, with the volume of contracts concluded dropping by about one half in a single quarter (Chart 35). The introduction of the APR cap on consumer loans also played a role in this, as sales were temporarily suspended due to related product developments. The decline in demand also had a significant impact on the automotive market, with overall market-based consumer credit issuance declining by nearly 40 per cent in quarter-on-quarter terms. The volume of housing loan contracts concluded in 2020 Q2 was 15.4 per cent lower than in the previous quarter. Prenatal baby support loan contracts declined only moderately, by 17.3 per cent during the second quarter. The reason for this is that so far prenatal baby support loans have typically been taken out by clients with higher education and income, as well as good debt ratings,⁸ whose financial situation has been less affected by the crisis caused by the coronavirus epidemic. In the third quarter, isolation measures have been lifted, and consequently new loan disbursements started to rise: the volume of new loans for housing purposes was 9 per cent higher in that period compared to the same period in the previous year. Nevertheless, the volume of total household loan disbursement still fell short – by almost a third –

⁸ For more details on the risk profile of prenatal baby support loan debtors, see Box 3 of MNB [Trends in lending, September 2020](#).

Chart 36: Household loan transactions of credit institutions

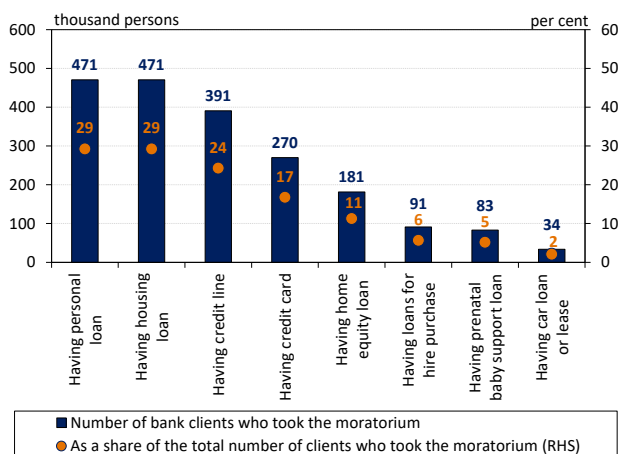


Source: MNB

of that of the previous year, partly because of the base effect stemming from the remarkable interest shown in the prenatal baby support loans at the launch of the product. Since the introduction of the prenatal baby support loan in July 2019, state-subsidised housing and consumer loans account for one third of the volume issued.

The payment moratorium and state-subsidised products support the expansion of lending. Although new loan issuance declined in the second quarter, the household loans outstanding of the total financial intermediary system grew by 17.5 per cent year-on-year. In the case of the credit institution sector's loans, the value of the stock increase was even higher, at 19.6 per cent in the second quarter, before slowing to 15.6 per cent by the end of September (Chart 36). The payment moratorium introduced in March and prenatal baby support loans play a key role in maintaining lending dynamics. Disregarding the impact of the moratorium, annual growth in the credit institution sector amounts to 11.6 per cent at the end of the third quarter, based on our approximation. If, in addition to the effect of the moratorium, we also eliminate the additional effect of prenatal baby support loans,⁹ the annual rate of change in loans outstanding would reach only 5.6 per cent, according to our estimate.

Chart 37: Bank clients using the moratorium, by credit products (June 2020)



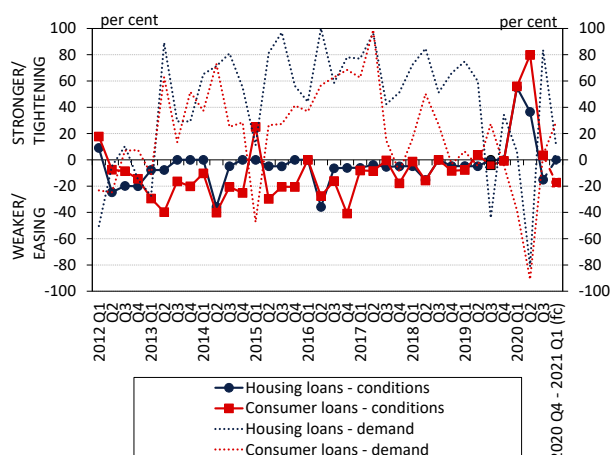
Note: The data shown are not derived from mutually exclusive sets, clients may appear more than once in the chart, depending on how many loans they have. Source: MNB

The majority of clients participating in the moratorium have personal or housing loans. Nearly three quarters of debtors used the payment moratorium for one loan, while one fifth used it for two, and one tenth used it for three or more loans. The proportion of debtors taking advantage of the moratorium is the highest for unsecured consumer loans, which represent the highest repayment burden and usually have shorter maturities. One third of clients using the moratorium for at least one loan, totalling nearly 500,000 individuals (including debtors and co-debtors), have housing or personal loans (or both), while barely one fifth have an overdraft or credit card (Chart 37). Overall, the moratorium may reduce the amortisation of the credit portfolio in the household segment by withholding instalments of approximately HUF 700 billion until the end of the year, in which housing and personal loans have the greatest weight.

Banks tightened both consumer and housing lending conditions as a result of the coronavirus epidemic. Following the outbreak, both banks and clients became more cautious in the credit market. Based on responses to the

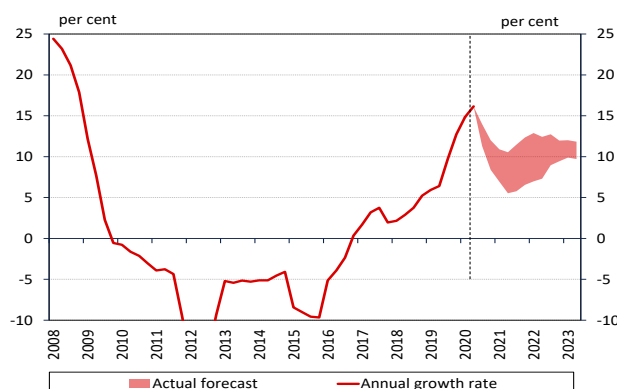
⁹ In June 2020, the MNB conducted an online survey among prenatal baby support loan debtors. Based on the survey, according to our estimate, 63 per cent of prenatal baby support loans represented additional credit demand and 37 per cent substituted other loan products.

Chart 38: Changes in credit conditions and credit demand in the household segment



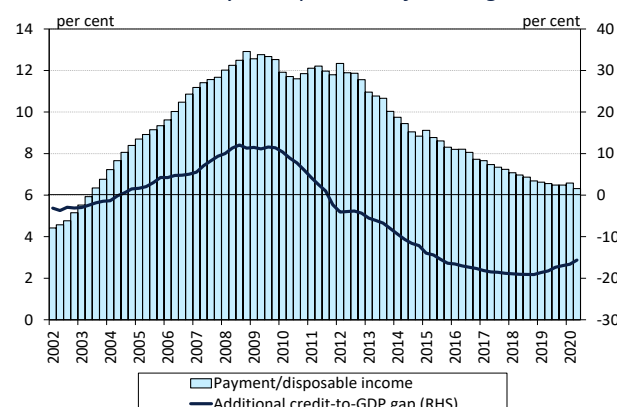
Note: Net ratio is the difference between tightening and easing banks, and the banks indicating stronger and weaker credit demand, weighted by market share. Source: MNB, based on banks' responses

Chart 39: Forecast for lending to households



Source: MNB

Chart 40: Debt service burden of the household sector and the cyclical position of lending



Note: For the methodology of the additional credit-to-GDP gap see <https://www.mnb.hu/letoltes/ccyb-methodology-new-en-1.pdf>. Source: MNB

Lending Survey, in net terms, 37 per cent of banks tightened the housing lending conditions in the second quarter, mainly through changes in the credit rating system. The tightening was justified by changes in the economic outlook and clients' creditworthiness. In the case of consumer credit, 80 per cent of the responding institutions, in net terms, tightened credit conditions (Chart 38). A significant proportion of banks reported weakening demand for both loan products, that can be attributed in part to containment measures. In the third quarter, the vast majority of banks perceived an increase in demand for housing loans, accompanied primarily by an easing of price conditions, while there was no change in consumer credit on either the demand or supply side.¹⁰

Despite the slowdown, the stock of household loans remain on a growth path over the forecast horizon. The household loan portfolio of the financial intermediary system grew by 17.5 per cent in 2020 Q2, but growth is expected to slow due to the high base as a result of prenatal baby support loans available from July 2019 and declining issuance as a consequence of the epidemic (Chart 39). At the same time, the decline is mitigated by the fact that the payment moratorium has been extended for certain social groups until June 2021, as a result of which – with the current willingness to participate unchanged – retail clients may keep HUF 220 billion of instalment payments in the first six months of 2021. With the normalisation of the economy, lending dynamics may be double-digit again from 2022 onwards.

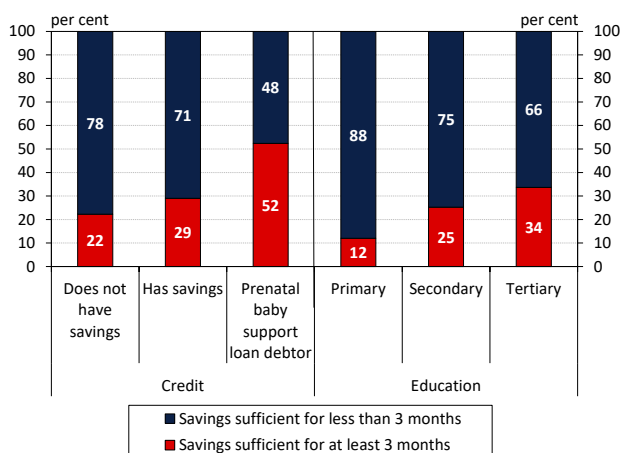
The debt service burden of households is historically low.

The vulnerability of the population is significantly affected by the level of indebtedness. The repayment burden of households relative to disposable income (also considering interest and principal repayments) is historically low and corresponds to the 2003 level (Chart 40). In addition, the low level of cyclical indebtedness is indicated by the fact that the household credit gap remains negative, i.e. the household credit-to-GDP ratio has not reached its long-term trend, despite the increase in the portfolio in recent years. Based on all of this, the coronavirus crisis hit the population in a much less vulnerable position in terms of the indebtedness of the sector as a whole, compared to the financial crisis in 2008.

However, the resilience of households to shocks may vary. Although the level of risks is low in the sector overall,

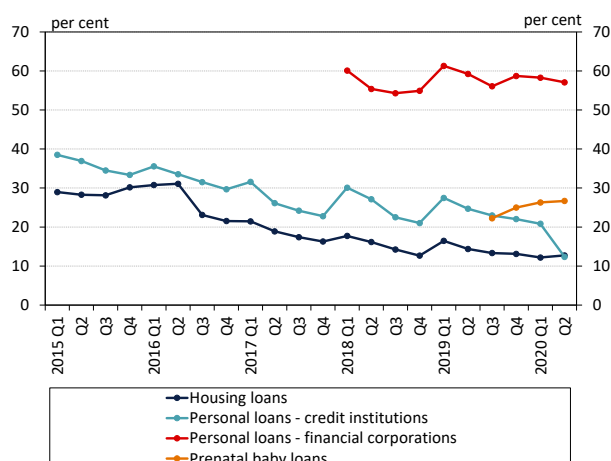
¹⁰ We also collected information on the experiences and expectations of banks' lending officers by interviews, the results of which are detailed in Box 1 of MNB [Trends in lending, September 2020](#).

Chart 41: Savings of households



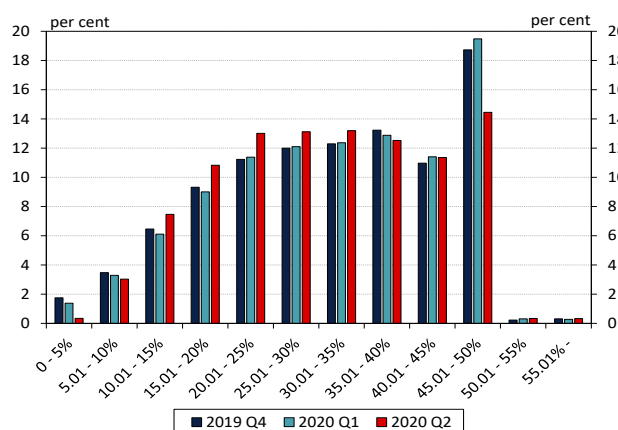
Note: Exact wording of the question: "If all earning members of your household lost their jobs, how long would the household be able to maintain its current standard of living?" Source: MNB Survey on Interest Rate Risk, February 2019 and MNB Survey on Prenatal Baby Support Loans, June 2020

Chart 42: Share of debtors with a below-median income in new loan contracts



Note: The classification of loans was based on income per debtor. The median income reflects the current period income conditions of the total population. Source: MNB, Eurostat

Chart 43: New personal loans of credit institutions by debt service to income ratio



Source: MNB

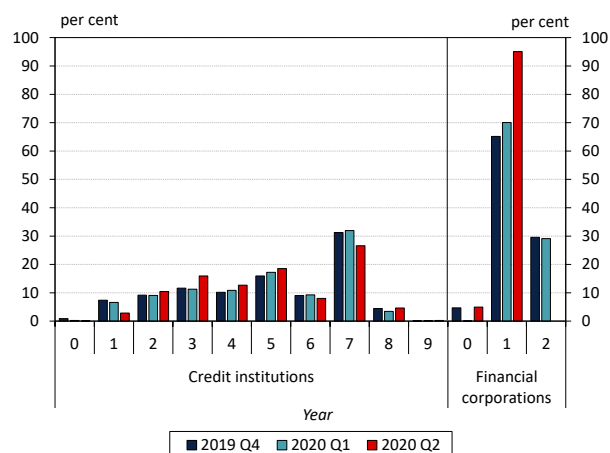
this may obscure a high degree of heterogeneity at the level of individual social groups. To this end, it is worth examining the extent to which different households can withstand the effects of a temporary negative income shock. Among borrowers, the proportion of those with sufficient savings for at least three months is less than 30 per cent – but it is still higher than for households with no loans at all (Chart 41). The breakdown by education level also shows significant heterogeneity: lower education is associated with lower levels of savings, suggesting weaker resilience to shocks. This also poses a risk because the employment of the low-skilled labour force is typically more severely affected by the coronavirus crisis: the employment of the low-skilled has fallen by 10 per cent on average in Europe, while that of the higher-skilled has actually risen by 2 per cent in the past year.

The financial stability risks posed by the coronavirus crisis are mitigated by the fact that the majority of credit institutions' clients are already higher-income earners. 13 per cent of housing loan debtors and 12 per cent of credit institution personal loan debtors had below-median income in mid-2020 (Chart 42). This latter ratio fell sharply in the second quarter from its previous level of 20–30 per cent. The fact that primarily higher-income earners are indebted suggests that a further increase in lending does not carry indebtedness risks other than that so far: relatively high-income earners are more likely to be able to continue repaying their loans, while low-income earners are less likely to become debtors of credit institutions.

Banks are characterised by caution concerning personal loans. Although there has been no change in housing lending, neither among debtors nor in terms of contracts concluded, the characteristics of new loans have changed slightly for personal loans, especially in the second quarter. Borrowers shifted to higher-income earners: the proportion of those with above-median incomes rose from 78 per cent to 88 per cent (Chart 42). Among the credit conditions, banks' caution can be seen primarily in the debt service-to-income ratio: the share of new loans around the limit fell significantly, dropping by one quarter (Chart 43).

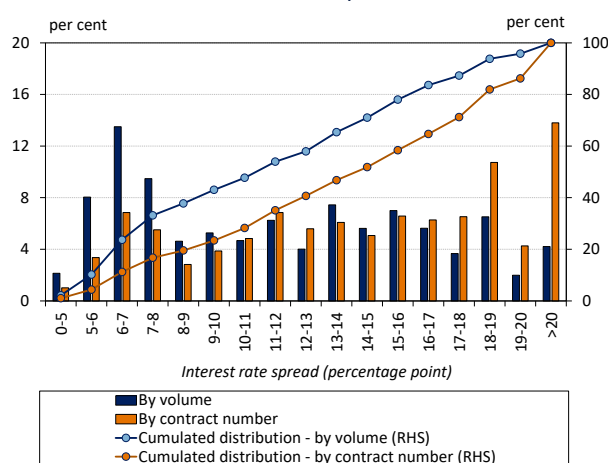
Financial corporations mainly responded to the new situation by shortening maturities. Due to the uncertain economic environment, the financial intermediary system provides unsecured loans under tighter conditions, which was mainly reflected in higher income requirements and shorter maturities. While in 2020 Q1, 62 per cent of personal loans issued by credit institutions had maturities of over 5 years, this proportion fell to 58 per cent in the

Chart 44: Distribution of new personal loans by maturity



Source: MNB

Chart 45: Distribution of personal loan disbursements by interest rate spread



Note: Credit institution loans issued in 2019. The interest rate spread was calculated as the difference between the annualised interest rate and the BIRS yields with maturities corresponding to the interest rate fixation period of the personal loan. Source: MNB

second quarter (Chart 44). In the case of financial corporations, the tightening in personal lending conditions is even more striking, as no contracts are being concluded for a term longer than 2 years, while at the beginning of the year this segment still accounted for 30 per cent. The share of below-median income earners in the clientele of financial corporations is 57 per cent; therefore, as a negative effect of the epidemic, the tightening of lending conditions, in response to increasing solvency risks, is further restricting access to loans for lower income groups.

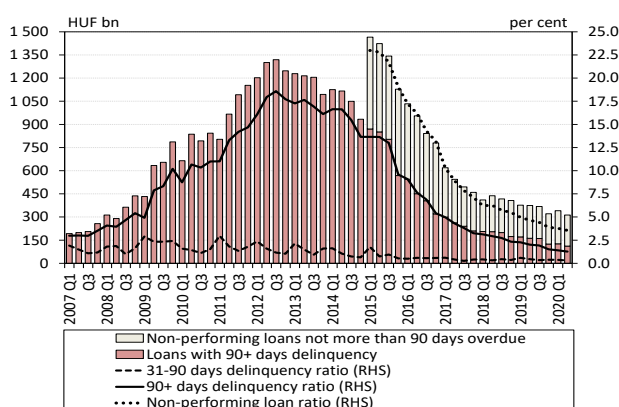
The extension of the Certified Consumer-friendly framework to personal loans supports the reduction of interest rate spreads.

In Hungary, the average APR level of personal loans, which account for the majority of consumer loans, was 13 per cent before the introduction of the APR cap. However, with regard to the levels of interest rate and the interest rate spread, which are high on average, large variance can be seen (Chart 45), which can also be observed for loan contracts and debtors with the same credit risk characteristics. In 2019, 20 per cent of personal loans lent were extended with an interest rate spread of below 10 percentage points. Although loans with both high and low interest rate spreads are present in the market concurrently, the largest market participants continue to have high market share with high interest rate spreads in new disbursements, which may indicate insufficient intensity of banking competition. The extension of the Certified Consumer-friendly framework to personal loans and the spread of certified products may help to reduce the interest rate spread on personal loans, similar to the achievements in the housing loan market. The certification of Certified Consumer-Friendly Personal Loans is expected in the autumn and actual distribution may begin on 1 January 2021.

4 Portfolio quality: moratorium provides temporary support, meanwhile credit risks are increasing

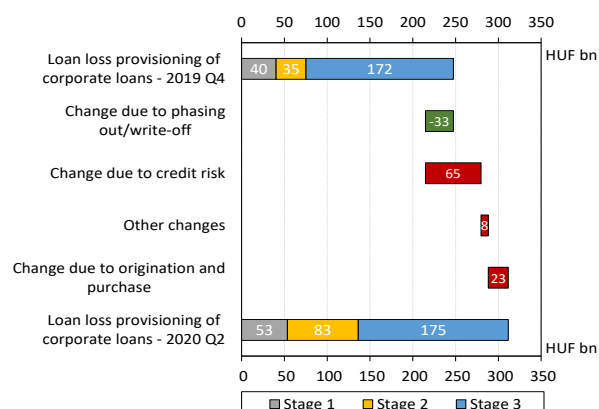
In 2020 H1, the introduction of the payment moratorium played a major role in sustaining the portfolio quality of the credit institutions sector. Meanwhile, as a result of portfolio cleaning activity, the non-performing loan ratio declined further, to 3.5 per cent in the corporate segment and to below 4 per cent in the case of households. In 2020 H1, loan loss provisions for the corporate and household portfolios increased by 26 per cent and 12 per cent, respectively, which was primarily attributable to the rise in the ratio of loans whose credit risk increased significantly. Around 15–20 per cent of the credit institutions' corporate loan portfolio is related to highly risky companies that are currently in moratorium. In parallel with that, 5–10 per cent of household clients with a loan can be considered vulnerable on the basis of income position, change in labour market status and participation in the moratorium. The targeted extension of the payment moratorium from January 2021 improves risky debtors' financial situation in the short run. Therefore, in 2021 H1 no surge is expected in the ratio of overdue loans. Nevertheless, in the medium term a protracted economic recovery may already lead to a major deterioration in portfolio quality. The recovery of companies in financial difficulties could be facilitated by a legal framework that supports reorganisation.

Chart 46: Ratio of non-performing corporate loans in the credit institutions sector



Note: The definition of non-performing loans changed in 2015. From then on, in addition to the loans over 90 days past due, loans less than 90 days past due where non-payment is likely are also classified as non-performing. Calculated by clients until 2010 and by contracts from 2010. Source: MNB

Chart 47: Loan loss provisioning of the credit institutions sector's corporate loan portfolio and its change in 2020 H1



4.1 Highly risky corporate loans may account for 15–20 per cent of loans outstanding

The ratio of non-performing corporate loans declined further, but due to the moratorium it does not reflect the changes in credit risks. The non-performing corporate loan portfolio of the credit institutions sector amounted to HUF 313 billion in June 2020, as a result of a decline of HUF 8 billion in the first six months (Chart 46). Non-performing loans (NPL) not more than 90 days past due account for most of the portfolio, at around 64 per cent. In 2020 H1, the amount of loans over 90 days past due fell by HUF 13 billion, reducing the ratio of loans over 90 days past due to 1.3 per cent. On the whole, by end-June 2020 the ratio of non-performing corporate loans sank to 3.5 per cent, representing a decline of 1.1 percentage points in annual terms. In 2020 Q1, the decrease in the NPL ratio was mainly due to the expansion in loans outstanding, while in Q2 it was due to portfolio cleaning, loans that became performing again as well as to the absence of new delinquencies as a result of the moratorium.

The rise in credit risks due to the COVID-19 pandemic was a major factor behind the increase in loan loss provisions. From 2019 Q4 to 2020 Q2, loan loss provisions for the corporate loan portfolio rose from HUF 247 billion to HUF 312 billion, a major portion of which was related to changes in credit risk. The HUF 33 billion impairment reversal effect of cleaning was partly offset by the HUF 23 billion loan loss provisioning entailed by the expansion in lending, more than half of which was formed for loans in the Stage 1 category by banks (Chart 47). The Stage 1 category increased

Note: Stage 1: loan loss provisioning for financial assets whose credit risk has not increased significantly since initial recognition. Stage 2: loan loss provisioning for financial assets whose credit risk has increased significantly since initial recognition, but which are not impaired. Stage 3: loan loss provisioning for non-performing financial assets. Source: MNB

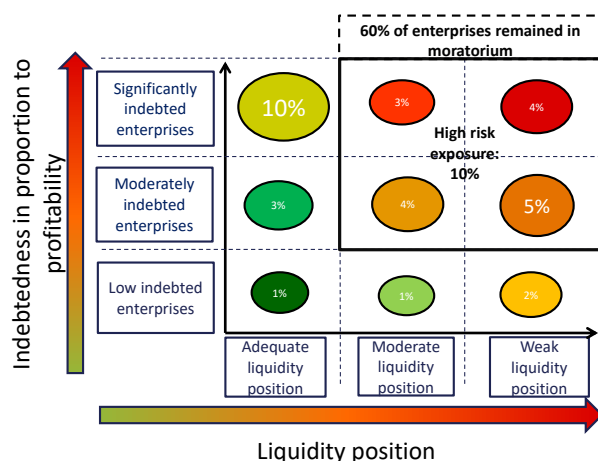
Chart 48: Movements of corporate loans between loan loss categories between 2019 Q4 and 2020 Q2 according to participation in the moratorium

Loans in moratorium					
In proportion to the corporate loan portfolio in moratorium	Impairment category Q2 2020				Total
	Stage 1	Stage 2	Stage 3		
Impairment category Q4 2019	Stage 1	73.8%	12.6%	0.2%	86.6%
	Stage 2	0.7%	9.3%	0.1%	10.1%
	Stage 3	0.2%	0.0%	3.2%	3.3%
Total		74.7%	21.9%	3.4%	100.0%

Loans out of moratorium					
In proportion to the corporate loan portfolio out of moratorium	Impairment category Q2 2020				Total
	Stage 1	Stage 2	Stage 3		
Impairment category Q4 2019	Stage 1	86.0%	6.8%	0.2%	93.1%
	Stage 2	0.9%	3.0%	0.0%	3.9%
	Stage 3	0.1%	0.0%	3.0%	3.0%
Total		87.0%	9.8%	3.3%	100.0%

Note: Credit institutions data. Ratios on the basis of outstanding amounts at the end of 2020 Q2. Source: Central Credit Information System, MNB

Chart 49: Loans of vulnerable companies by liquidity position and indebtedness as a share of total corporate loans



Note: Indebtedness: debt/EBITDA; low when below 1, moderate when between 1 and 4, high when over 4 or negative. Liquidity position: personnel costs/funds; adequate below 0.5, moderate between 0.5 and 2, weak above 2. Based on 2018 tax declarations and end-2019 credit data. Source: Central Credit Information System, MNB, National Tax and Customs Administration

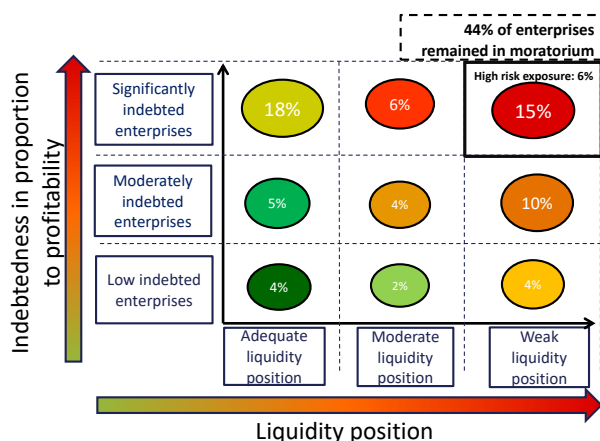
by 32 per cent, while the Stage 2 category more than doubled within the composition of corporate loan loss provisions. Loan loss coverage increased in all three categories in 2020 H1. On the whole, in June 2020, the loan loss coverage ratio of the non-performing corporate loan portfolio of credit institutions was still high, at 57 per cent, while that of the non-performing portfolio over 90 days past due was 76 per cent.

Within the corporate loan portfolio, there was a major increase in the ratio of loans exhibiting a significant increase in credit risk. The impact of the coronavirus pandemic in terms of reducing economic activity resulted in deterioration in many companies' solvency. Based on examining the corporate loan portfolio according to loan loss classification, in 2020 H1 the weight of the Stage 2 category, which indicates a considerable rise in credit risk, more than doubled (rising from 6.9 per cent to 15.7 per cent) within the total portfolio. With regard to corporate loans under moratorium, 14.5 per cent of the loans that were in Stage 1 at end-2019 were reclassified to Stage 2, whereas this ratio was only 7.3 per cent for loans that were not subject to the moratorium. Accordingly, banks perceived an increase in credit risks to a much larger degree in the case of the companies participating in the moratorium (Chart 48). A detailed comparison of the characteristics of the two groups is presented in Box.

The loans of companies belonging to vulnerable sectors¹¹ which are in a tight financial position and moratorium account for one tenth of the total corporate loan portfolio. The sectors most affected by the negative economic effects of the COVID-19 crisis account for one third of the total corporate loan portfolio (Chart 49). In terms of credit risk, low indebtedness and adequate liquidity may help to mitigate the negative effects of the crisis in the case of about one half of this exposure. However, indebtedness is relatively high in the case of the other half of the exposure, and the liquidity position is also inadequate; thus these firms are in a tight financial position. As a proportion of total loans outstanding, 60 per cent of these companies (which is higher than the population value) took recourse to the moratorium. On the whole, vulnerable companies that are in a tight financial position and moratorium at the same time account for 10 per cent of credit institutions' total corporate loan portfolio. The ratio is 12 per cent if these three aspects are examined only for the loans of companies whose loan portfolio is below HUF 10 billion.

¹¹ The vulnerability classification of sectors is described in the methodological annex of the [May 2020 Financial Stability Report](#).

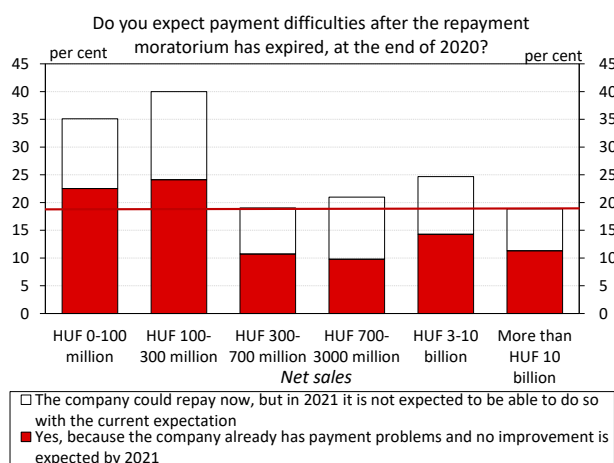
Chart 50: Loans of companies not belonging to vulnerable sectors by liquidity position and indebtedness as a share of total corporate loans



Note: Indebtedness: debt/EBITDA; low when below 1, moderate when between 1 and 4, high when over 4 or negative. Liquidity position: personnel costs/funds; adequate below 0.5, moderate between 0.5 and 2, weak above 2. Based on 2018 tax declarations and end-2019 credit data. Source: Central Credit Information System, MNB, National Tax and Customs Administration

The loans of companies that do not belong to vulnerable sectors but are in a significantly stressed position and moratorium account for 6 per cent of the total corporate loan portfolio. Due to the drop in aggregate demand, the economic uncertainty stemming from the protracted pandemic situation may have reached even those companies that were more protected from the first-round effects of the pandemic wave. Therefore, in our analysis even the loans of those companies are considered risky that are active in sectors less affected by the COVID-19 pandemic but are financially stressed to a great degree (Chart 50). Among these firms, the ratio of those staying in the moratorium remained below 50 per cent, and thus the highly risky exposures in the non-vulnerable sectors account for a further 6 per cent of credit institutions' total corporate loan portfolio. Looking at the loans of companies with loans outstanding below HUF 10 billion, a ratio of 7 per cent is seen. Accordingly, on the whole, the loans of companies currently in moratorium and considered highly risky account for 15–20 per cent of credit institutions' corporate loans. In the case of these companies, non-payment following expiry of the moratorium may pose a major risk. According to our questionnaire survey of 1,100 companies conducted in August 2020, for 24 per cent of the enterprises in moratorium this year's sales revenue may decline by at least 30 per cent. At the same time, in the case of these businesses the targeted extension of the moratorium delays the potential delinquency of customers until June 2021. In the medium term, however, the risks concealed by the moratorium may materialise.

Chart 51: Ratio of companies expecting payment difficulties by revenue category

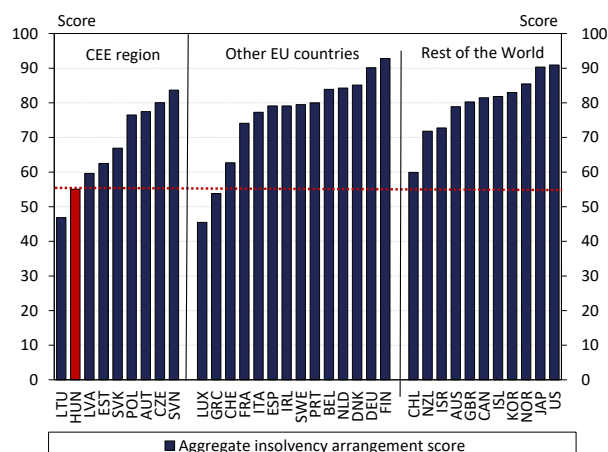


Note: The red line indicates the average of enterprises in the moratorium and currently experiencing payment problems as well among those with a loan. Source: The MNB's questionnaire survey prepared in August 2020 asking 1,100 companies

A much larger proportion of smaller enterprises may face payment problems. 19 per cent of the companies which completed the MNB questionnaire have such payment problems that is expected to persist in 2021 as well, even in spite of their current participation in the moratorium (Chart 51). Repayment difficulties are especially typical of the smaller size categories: 23 per cent of firms with annual sales revenues below HUF 300 million already have payment problems. In the tourism and catering sector as well as in the arts, entertainment and leisure activity sector at least three quarters of the respondents expect repayment problems starting from next year. This year, payment difficulties may primarily arise in the case of circular indebtedness within the corporate sector; they include accounts payable and commercial loans, which do not fall under the scope of the payment moratorium.

For companies experiencing financial difficulties, recovery could be facilitated by a legal framework that supports reorganisation. Bankruptcy proceedings would be a

Chart 52: Ranking of insolvency arrangements among high-income countries in 2019



Note: The insolvency arrangement score is the arithmetic average of the indicators of each component: the rate of return on insolvency proceedings against domestic entities (as a function of outcome, procedural time and procedural costs), and the strength of the legal framework applicable to judicial liquidation and reorganisation proceedings. A higher score indicates a more efficient framework. The dashed red line indicates the Hungarian value. Source: World Bank

way out for companies in need of reorganisation, but domestic regulation operates with low efficiency and its logic is legal rather than economic. In the international ranking of such proceedings, Hungary is among the last (Chart 52), partly due to the lack of a legal framework supporting reorganisation and the high cost of insolvency proceedings, and partly due to the fact that lengthy proceedings usually end in liquidation procedures or forced cancellations, instead of successful reorganisation. The low efficiency of bankruptcy proceedings also comes at the expense of the real economy: international experience¹² shows that recovery from recession is slower in countries where bankruptcy proceedings do not offer a real opportunity for reorganisation. In view of the increased corporate vulnerability due to the COVID-19 pandemic and the protracted economic recovery with the second wave, it would be particularly important to support the reorganisation of viable companies within an effective legal framework.

BOX 3: COMPARISON OF THE CHARACTERISTICS OF DEBTORS PARTICIPATING IN THE PAYMENT MORATORIUM AND THOSE WHO CONTINUE REPAYMENT

The ratio of loans where repayment problems may arise could increase significantly because of the economic downturn caused by the COVID-19 pandemic. The payment moratorium plays a major role in sustaining the portfolio quality, but does not prevent the increase in credit risks resulting from the worsening of customers' economic and financial situation. The ratio of loans falling into delinquency may rise significantly following the expiry of the moratorium, therefore the MNB is paying special attention to the loan portfolio in moratorium, i.e. to the circumstances of debtors that took the opportunity to suspend repayment. In our analysis, we examined the characteristics of the debtors in moratorium on the basis of the data of the National Tax and Customs Administration (NTCA), the Central Credit Information System (CCIS) and a questionnaire survey prepared in August 2020, which was completed by 1,100 companies and nearly 56,000 household debtors.

Based on the data reported by banks, in June 2020 more than one half of household loans outstanding were affected – to various degrees across types of loans – by the suspension of repayment introduced until the end of the year. The moratorium is most typically applied in the case of personal loans, where more than 70 per cent of the portfolio was involved in June. Repayment of a significant proportion (65 per cent) of prenatal baby support loans was also suspended. However, the moratorium related to childbearing also contributes to this. The participation of mortgage loans is somewhat lower: 45 per cent for housing loans and 53 per cent for home equity loans. According to our calculations, around 60 per cent of the approximately 2.7 million household customers with loans outstanding in June 2020 and disbursed before 19 March, i.e. 1.6 million customers, used the possibility of the moratorium at least for one of their loans.

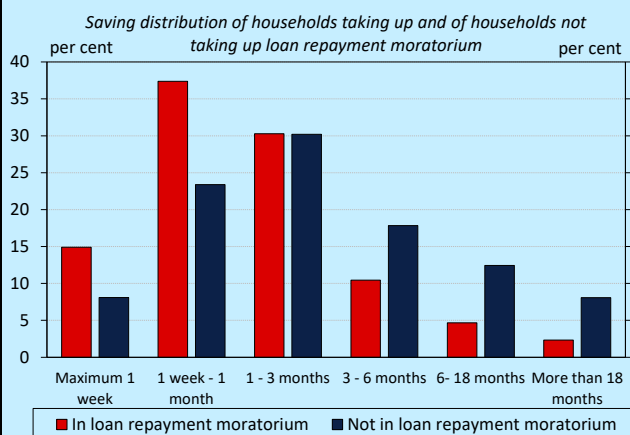
¹² Based on the following papers, e.g.: i) Cirmizi, E., L. Klapper and M. Uttamchandani (2010): The Challenges of Bankruptcy Reform. Policy Research Working Paper 5448, World Bank, Washington, DC. ii) Adalet McGowan, M., D. Andrews and V. Millot (2017): Insolvency Regimes, Technology Diffusion and Productivity Growth: Evidence from Firms in OECD Countries. OECD Economics Department Working Papers, No. 1425. iii) Armour, J., A. Menezes, M. Uttamchandani and K. van Zwielen (2015): How do creditor rights matter for debt finance? A review of empirical evidence. In Research Handbook on Secured Financing in Commercial Transactions. Edward Elgar Publishing. iv) Lee, S.H., Y. Yamakawa, M.W. Peng and J.B. Barney (2011): How do bankruptcy laws affect entrepreneurship development around the world? Journal of Business Venturing, 26(5), 505-520.

According to the findings of the survey, the socio-demographic situation of the customers participating in the moratorium is less favourable compared to the situation of those who continue repayment. Firstly, younger people are overrepresented among them: 27 per cent of them are below the age of 35, whereas this ratio is 20 per cent in the case of those not participating in the moratorium. Secondly, 31 per cent of the debtors participating in the moratorium live in smaller settlements, while only 27 per cent of households continuing repayment live in such settlements. The questionnaire survey conducted by the MNB also reveals that the educational level of the customers who took recourse to the moratorium is typically lower. Only 31 per cent of them are college or university graduates, while this ratio is 46 per cent for those not participating in the moratorium. In terms of the occupation of the main earner, entrepreneurs and part-time employees represent a higher ratio of a total 15 per cent among the customers participating in the moratorium, whereas this ratio is much lower (8 per cent) in the case of non-participants. In addition to that, full-time employees are underrepresented among those participating in the moratorium: their ratio of 68 per cent is lower than the 74 per cent registered for those who continue repayments.

Labour market status of the main earners of households taking up and of households not taking up loan repayment moratorium

	In moratorium	Not in moratorium
In full-time employment	67.5%	73.6%
In part-time employment	7.3%	2.9%
Entrepreneur	7.8%	5.3%
Pensioner	10.3%	15.3%
In parental leave	1.1%	0.6%
Public work scheme	1.1%	0.9%
Unemployed	4.3%	1.1%
Inactive	0.4%	0.4%
Total	100.0%	100.0%

Note: We regard the household as being in moratorium, if the household has minimum one loan, in case of which it has taken up loan repayment moratorium. The survey asked the following question: What is the labour market status of the household's main earner? Source: MNB household moratorium survey, August 2020.



Note: The survey asked the following question: If all earners lost their jobs in your household, how long would your household be able to maintain its current standard of living?
Source: MNB household moratorium survey, August 2020.

The financial situation of those participating in the moratorium is also worse. The income of 53 per cent of the households in the moratorium is lower than HUF 300,000, whereas this ratio is only 35 per cent for those not participating. In addition, 41 per cent of the households which took recourse to the moratorium have only one earner, while the ratio in the other group is 34 per cent. The more exposed position is typically coupled with lower savings as well: 83 per cent of the households in moratorium have enough savings for a maximum of three months only, whereas this ratio is 62 per cent in the case of households continuing repayments.

At the end of 2020 Q2, 44 per cent of corporate loans

outstanding were in moratorium. Participation in the moratorium was affected by various factors. Company size played a major role: a larger proportion of smaller companies used the moratorium. For example, in the case of micro enterprises the ratio of participating companies was almost 20 percentage points higher than in the case of large corporations. Additionally, a significant difference is seen in terms of the denomination of loans as well: the ratio of those using the moratorium was 10 percentage points higher for FX loans than for forint loans. The ratio of companies that exploited the opportunity of the moratorium was also higher in the case of those operating in vulnerable sectors. Of the major sectors, the ratio of companies using the moratorium at present as well is the highest among those active in transportation and warehousing, as well as financial and insurance activities, whereas recourse is roughly one third in construction, covering less than 25 per cent of the loans outstanding of the sector. According to the findings of the survey, a larger proportion of companies used the moratorium in the case of longer-term loans: nearly 60 per cent of respondents with investment loans and overdrafts with maturities over one year participated in the moratorium, while in the case of overdrafts up to one year and credit cards the ratio of users remained below 50 per cent.

The findings of the online questionnaire survey suggest that the moratorium was of great help for the participating companies in managing their temporary liquidity problems. Namely, as noted by 70 per cent of those participating in the moratorium, they would have been completely unable to service their loans or would have been able to service only a part of them. In addition, nearly two thirds of those entering the moratorium spent the released amount on remedying their liquidity shortage. A major difference is seen between the expectations concerning changes in sales revenues of the companies participating and not participating in the moratorium: while 24 per cent of those using the moratorium expect an at least 30 per cent drop in this year's income compared to last year's, this ratio is only 12 per cent for companies that continue repayments.

Overall, the payment moratorium introduced because of the COVID-19 pandemic contributed to sustaining banks' portfolio quality. The findings of the analysis suggest that a larger number of debtors in less favourable economic and financial position took recourse to the moratorium: the socio-demographic situation and material circumstances of participating households are less favourable compared to those who continued repayment, while among corporate debtors it was mainly smaller firms active in more vulnerable sectors and indebted in foreign currency that took the opportunity. The MNB will continue to pay special attention to monitoring the characteristics of the loan portfolios in the moratorium on the basis of financial stability aspects in the future as well.

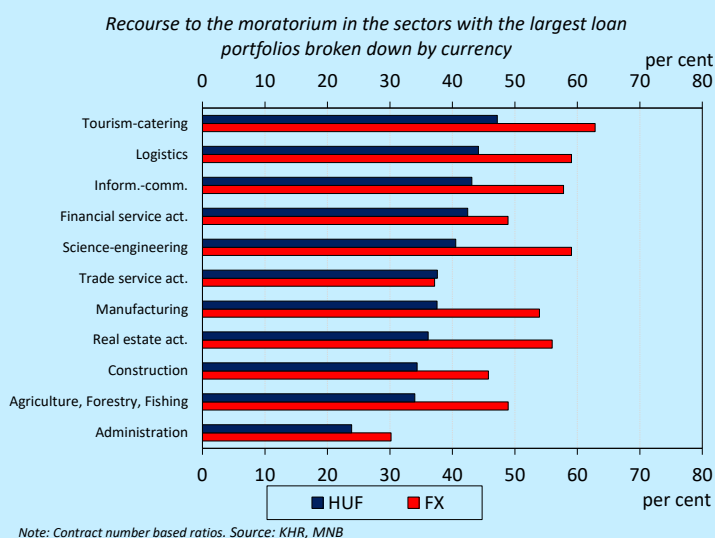
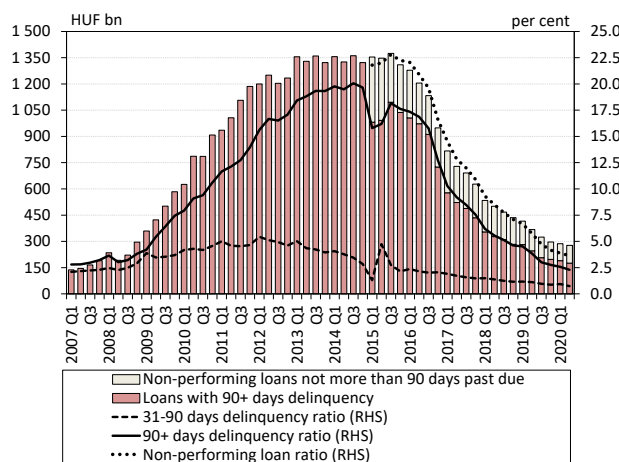


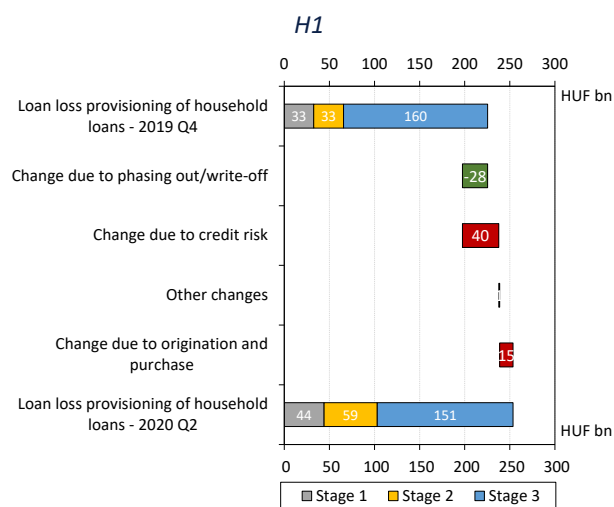
Chart 53: Ratio of non-performing household loans of credit institutions by contracts



4.2 5–10 per cent of households with loans are considered vulnerable

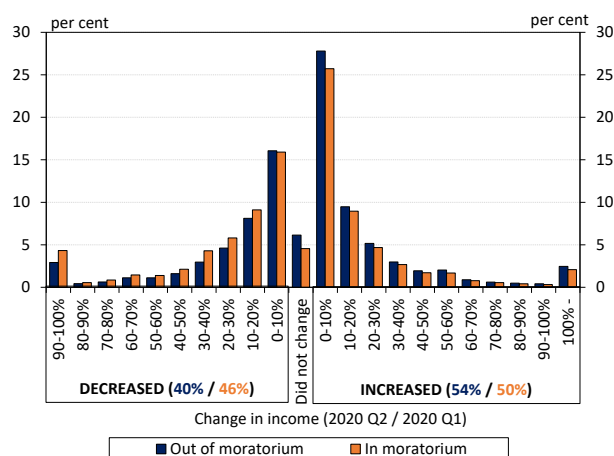
In 2020, the ratio of non-performing household loans fell below 4 per cent, mainly as a result of the still active portfolio cleaning. Compared to end-2019, the credit institutions sector's stock of household loans over 90 days past due declined by HUF 21 billion, and thus the ratio of loans over 90 days past due (NPL ratio) amounted to 2.3 per cent in June 2020 (Chart 53). The household NPL ratio of the credit institutions sector was 3.6 per cent at end-June, representing a decline of 0.6 percentage point compared to end-2019. Non-performing household loans amounted to HUF 277 billion at the end of the period under review, with loans 90 days past due accounting for 63 per cent, i.e. HUF 176 billion. The ratio of non-performing loans 90 days past due declined in the case of all household loan products – to the greatest degree for that of home equity loans, where the year-on-year decline of HUF 35 billion (3.2 percentage points) caused the NPL ratio to drop to 7 per cent. Dynamic expansion in household loans outstanding and banks' portfolio cleaning activity contributed to the decline in the NPL ratio to a similar degree. Credit institutions sold or wrote

Chart 54: Loan loss provisioning of the credit institutions sector's household loan portfolio and its change in 2020 H1



Note: Stage 1: loan loss provisioning for financial assets whose credit risk has not increased significantly since the initial recognition. Stage 2: loan loss provisioning for financial assets whose credit risk has increased significantly since the initial recognition, but which are not impaired. Stage 3: loan loss provisioning for non-performing financial assets. Source: MNB

Chart 55: Distribution of bank customers based on the change in the amount of the average monthly salary received on their bank account between 2020 Q1 and 2020 Q2



Note: Estimate based on income data of bank customers with wage crediting in December 2019. Sample size: 1.1 million bank customers. Source: MNB

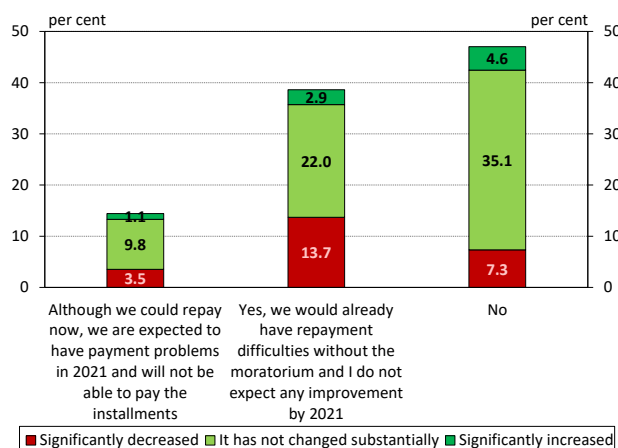
off non-performing claims in a gross amount of HUF 22 billion.

The portfolio of household loans with increased risk expanded considerably in 2020 H1. During the same period, loan loss provisioning for the household loan portfolio rose by HUF 28 billion. The credit institutions sector's loan loss provisioning for increasing risks amounted to HUF 40 billion, which is mainly attributable to the negative impacts of the coronavirus pandemic on the economy. Loan loss provisioning related to portfolio expansion amounted to HUF 15 billion, 80 per cent of which was for the Stage 1 category, while at sector level portfolio cleaning reduced loan loss provisions by HUF 28 billion (Chart 54). Compared to December 2019, the Stage 1 category grew by 35 per cent, while a significant increase of some 78 per cent was observed for the Stage 2 category. Loan loss coverage has increased in Stage 1 and Stage 2 categories since end-2019, while Stage 3 category remained practically unchanged. On the whole, the loan loss coverage of non-performing household loans was 56 per cent in the credit institutions sector in June 2020, and 67 per cent in the case of the non-performing portfolio 90 days past due.

The income of 13 per cent of household customers declined considerably in 2020 Q2. According to available bank data, the income of 43 per cent of domestic household customers fell between March and end-June 2020 (Chart 55). In the case of 13 per cent (some 360,000 debtors) of bank customers, the degree of the decline in income exceeded 30 per cent, which may entail a significant worsening in loan repayment ability. Two thirds of these customers (240,000 debtors) are participating in the payment moratorium. On the whole, roughly 9 per cent of household debtors are participating in the moratorium and suffered major declines in income.

5–10 per cent of households with loans may be vulnerable. According to the findings of the MNB's questionnaire survey, 17 per cent of the participants in the moratorium indicated that there had been significant declines in their income and that they would have experienced payment difficulties without the moratorium (Chart 56). Nearly 65 per cent of them, i.e. 180,000 customers, would be able to sustain their current standard of living for not more than a month if all the earning members of the household lost their jobs. In total, this group accounts for some 7 per cent of retail clients. Also, approximately 7 per cent of households with loans can be considered vulnerable on the basis of changes in their labour market status: by their own admission, 11 per cent of the customers in moratorium

Chart 56: Distribution of households remaining in the moratorium according to expectations of payment difficulties and changes in their income



Note: Question: 'Do you expect payment difficulties following the expiry of the moratorium, i.e. after the end of 2020?' Changes in income of respondents stepping over at least one income band of one hundred thousand forints downward or upward were classified as significant. Sample size: 56,000 household debtors. Source: MNB survey

(180,000 debtors) were still full-time employees in February 2020, but in June 2020 they already worked only part-time or had lost their jobs by then. Accordingly, looking at the income position, the payment difficulties expected to arise without the moratorium and the changes in labour market status, 5–10 per cent of household customers can be considered vulnerable. The payment moratorium will remain in place in 2021 H1 as well for eligible vulnerable customers (Box 4). Nevertheless, households which fall outside the criteria of the extension of the payment moratorium but have suffered major reductions in income may face repayment difficulties in 2021.

BOX 4: POTENTIAL IMPACTS OF EXTENDING THE PAYMENT MORATORIUM

The fundamental objective of payment moratoria is to help debtors which are struggling with temporary liquidity difficulties, but are solvent in the longer run. This is advantageous for banks as well, because by avoiding the consequences of non-performance during the moratorium it allows debtors to be able to repay their loans following the expiry of the moratorium. In addition, during the moratorium the instalments that remain with many debtors may also contribute to sustaining the performance of the economy, in the form of consumption and investment. Taking account of these objectives, upon the outbreak of the COVID-19 pandemic in the spring of 2020, regulatory authorities in many countries announced wide-ranging payment moratoria, typically for periods of 3–12 months. Payment moratorium beyond the immediate crisis period and affecting a wide range of debtors may lead to excessive indebtedness due to the higher interest payment burden accumulating during the moratorium, and long-term suspension of loan repayment obligations may result in moral hazard. Reviewing the duration of the moratorium and the scope of those eligible is a multiple-aspect decision-making problem for economic policy: factors such as the current economic situation and its expected changes, the vulnerability of debtors and financial stability aspects must be taken into account.

In order to sustain the repayment capacity of potentially vulnerable debtors following expiry of the moratorium, the Government – in line with the MNB's proposal – decided to extend the domestic payment moratorium in a targeted manner. Pursuant to the decision, the payment moratorium, which expires on 31 December 2020, was extended by another six months, i.e. until 30 June 2021 for social groups classified as more vulnerable in terms of their repayment capacity (parents raising children, pensioners, unemployed and public workers) as well as for companies facing financial difficulties. Enterprises are entitled to participate in the moratorium on the basis of an application, in line with detailed rules set forth in a separate government decree.

In addition to the extension of the moratorium, the act adopted by the National Assembly also introduces a ban on loan withdrawal. As a result, the loans of debtors struggling with financial difficulties, but which are not yet insolvent cannot be withdrawn until end-June 2021. Mutual renegotiation of the existing loan contract by the parties in line with the requirements of the relevant legislation allows the restoring of the solvency of the debtor concerned. For the protection of customers and smooth creditor adjustment, the MNB continues to help creditors and customers to

understand the application of the law and the regulatory expectations arising in connection with the payment moratorium and the ban on loan withdrawal.

According to our estimation, 22–24 per cent of household loans outstanding may have recourse to the extended moratorium. Assuming that the debtors which would like to take the opportunity to extend the moratorium and comply with the conditions use the current moratorium as well, we estimate that some 820,000–860,000 bank customers with outstanding loans amounting to HUF 1,700–1,800 billion may remain in moratorium in the household segment:

- **Parents raising children** (520,000–530,000 people): 33 per cent of those having recourse to the moratorium.
- **Pensioners** (230,000–240,000 people): 14.5 per cent of the beneficiaries of the moratorium are older than 65 years.
- **Unemployed** (60,000–70,000 people): 4 per cent of the beneficiaries of the moratorium.
- **Public workers** (10,000–20,000 people): 1 per cent of those having recourse to the moratorium.

Debtors and loans eligible to extend the payment moratorium

	Thousand customer	Stock (HUF bn)
Household total	820-860	1700-1800
With children	520-530	1170-1210
Pensioner	230-240	370-410
Job seeker	60-70	130-145
Public worker	10-20	30-35
Corporate total	15-20	1200-1500
Grandtotal	835-880	2900-3300

Note: Credit institution sector data. Estimate based on factual data and the MNB's questionnaire survey. Source: MNB

Approximately 14–17 per cent of corporate loans outstanding may participate in the extended moratorium. According to our questionnaire survey, the companies affected by major declines in income (some 25,000 enterprises) may account for 20–25 per cent of the total corporate loan portfolio. Considering the targeted nature of the programme and also taking into account the expected utilisation rate, the extension of the moratorium is estimated to affect up to 14–17 per cent of the loans outstanding (15,000–20,000 enterprises).

The additional liquidity that may remain with retail and corporate customers in the 6 months between January and June 2021 due to extension of the moratorium will amount to some HUF 600 billion in total. The instalments remaining with households are not expected to amount to more than around HUF 215–225 billion, of which HUF 161 billion, HUF 30–40 billion, HUF 19 billion and HUF 5 billion may remain with those who bring up children, pensioners, unemployed and public workers, respectively. In the corporate sector, the potential liquidity effect may even amount to as much as HUF 400 billion if the ratio of participants is high.

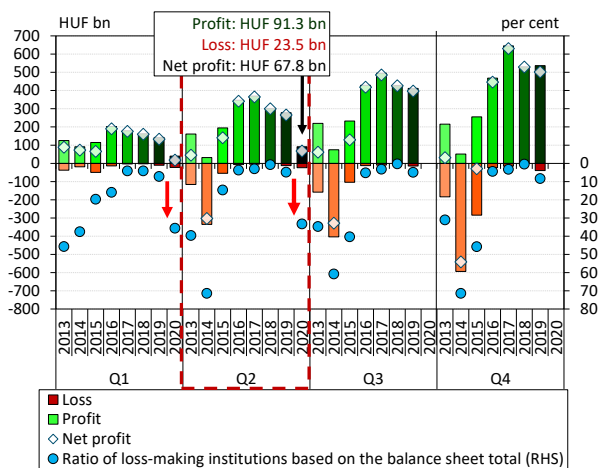
Based on the announced conditions, the additional loss of the banking sector stemming from the present value changes in loan repayments may amount to a maximum of HUF 19 billion, but – considering that not all debtors use the moratorium – the cost of the banking sector is expected to be significantly lower.

5 Profitability, capital position: positive profit and strong capital position, despite higher risk costs

In 2020 H1, the profit of the credit institution sector amounted to HUF 68 billion based on non-consolidated data, corresponding to a year-on-year decline of nearly HUF 200 billion. Compared to the previous year's figure, the consolidated profit, which also contains the profits of foreign subsidiaries, fell by HUF 221 billion to HUF 98 billion. Based on the balance sheet total, the ratio of loss-making individual institutions increased from 5 per cent to 33 per cent, whereas this ratio is 22 per cent according to consolidated data. Profitability ratios have not been this low since 2016, and the 12-month return on equity and return on assets dropped to 6.8 per cent and 0.7 per cent, respectively, with a further decline expected in H2. Of the profit/loss items, the largest negative change is seen in net loan loss and other provisioning. The effect of impairment recognised until June amounted to HUF 133 billion, more than half of which was related to Q2. Institutions' forward-looking risk costs may increase further in H2 and in the medium term. Within revenues from operation, interest income as a ratio of assets as well as commission and fee income declined, in spite of a nominal rise in the former and stagnation in the latter.

The banking sector's capital adequacy ratio increased by 0.4 percentage point to 17.6 per cent in Q2, while the indicator including interim profit advanced to 18 per cent. The improvement is primarily attributable to the drop of 2.1 per cent in the level of the total risk exposure amount as a result of regulatory changes as well as to the stagnation in sector-level own funds. Release of the regulatory capital buffers resulted in a major increase in the sector's free capital – to nearly HUF 1,900 billion by end-June 2020. Although three banking groups continue to have nearly two thirds of the free capital, the capital adequacy ratio of the majority of institutions exceeds the current requirements by at least 2 percentage points.

Chart 57: Year-to-date cumulative after-tax profit or loss of the credit institution sector



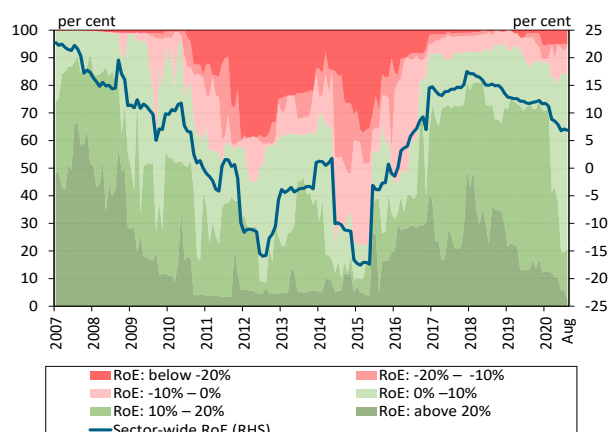
Note: At the end of June 2020, the ratio of loss-making institutions was 22 per cent based on consolidated data. Source: MNB

5.1 The banking sector remains profitable, but the profit is surrounded by significant risks, despite the forward-looking provisioning

The H1 profit of the banking sector has not been lower since 2014. In 2020 H1, the credit institution sector recorded an after-tax profit of HUF 68 billion according to non-consolidated data, down nearly 74 per cent on the same prior-year period (Chart 57). This is the lowest sector-level profit since 2014. The consolidated sector-level figure, which contains the profit/loss of domestic and foreign subsidiaries as well, shows a similar picture: following an annual decline of HUF 221 billion, the H1 profit amounted to HUF 98 billion. The number of individual loss-making institutions increased from 8 to 15 compared to last year, while their share based on balance sheet total rose by an even greater degree, from 5 per cent to 33 per cent. Based on consolidated data, the latter reached a lower level of 22 per cent.

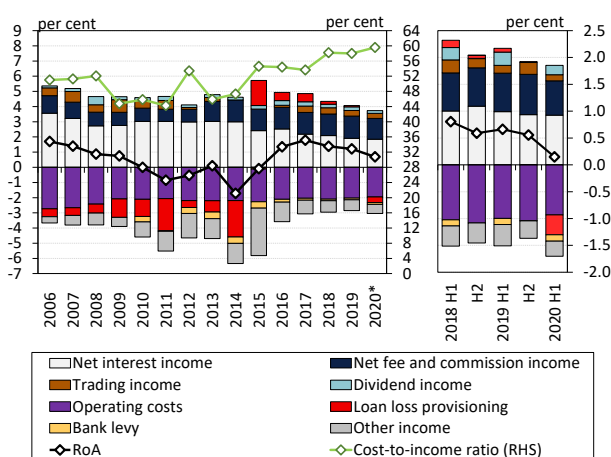
The previously gradual decline in profitability ratios accelerated this year. By end-June 2020, the 12-month rolling return on equity (RoE) and return on assets (RoA) had fallen to 6.8 per cent and 0.7 per cent, respectively, i.e. to nearly half their previous value compared to end-2019. In

Chart 58: Distribution of 12-month rolling after-tax return on equity of credit institutions weighted by the balance sheet total



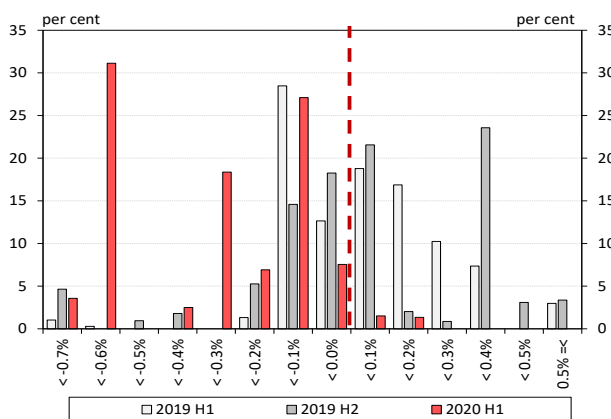
Note: Monthly data. Source: MNB

Chart 59: Development of credit institutions' income components as a ratio of total assets



Note: The left-hand panel shows 12-month rolling data, while the right-hand panel shows 6-month rolling data. 2020* refers to 12-month rolling data as of June 2020. Source: MNB

Chart 60: Distribution of credit institutions by net impairment and loan loss provision as a ratio of assets based on the balance sheet total



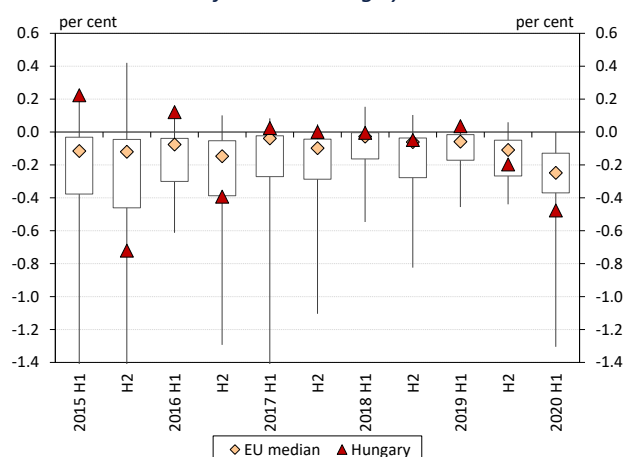
Note: Positive values denote net impairment and loan loss reversals, negative values denote net impairment and loan loss provisions. Source: MNB

the meantime, the sector's leverage increased by 50 basis points in year-on-year terms, while it remained stagnant compared to end-December. Neither RoA nor RoE have shown lower values since 2016. Between 2017 and 2019, institutions that achieved a RoE of more than 10 per cent and ones that achieved a RoE lower than -10 per cent accounted for an average 73 per cent and a mere 2 per cent, respectively, of credit institutions' sector-level balance sheet total (Chart 58). However, in June 2020, already 7 per cent of the sector had a return on equity worse than -10 per cent. In the meantime, the ratio of those achieving a RoE of at least 10 per cent declined considerably, to 20 per cent. Nevertheless, 68 per cent of the institutions still have a RoE above 5 per cent. At the same time, the ratio of less profitable institutions is still far from the worst levels observed after the financial crisis and during the early repayment of foreign exchange loans at a preferential exchange rate and the settlement of FX loans.

The deterioration in profitability is primarily attributable to impairment and provisioning. While in 2019 H1 the sector-level reversal of impairments amounted to HUF 28 billion, which had a positive impact on profits, the impairment of HUF 64 billion and HUF 69 billion in 2020 Q1 and Q2, respectively, resulted in a major deterioration in the profit of the credit institution sector (Chart 59). Although it was below its March value by HUF 4 billion in June 2020, this year's provisioning of HUF 35 billion also had a negative impact on profits. As a result of a nearly 16-per cent expansion in the balance sheet total, interest income and fee and commission income on assets both declined, despite an increase in the former and stagnation in the latter in nominal terms. Similarly to previous years, the gross interest margin fell further, to 2 per cent by June 2020, which was a result of the fact that the rise in interest-bearing assets – mainly credit claims – was not coupled with a similar increase in net interest income. Following relative stagnation for several years, the cost-to-assets ratio fell to below 2 per cent for the first time, which was attributable to the decline in personnel costs and other administrative costs. The drop in the latter was presumably supported by the gradual contraction of the branch network as well. This year, the cost-to-income ratio (CIR) increased by a mere 1.6 percentage points, i.e. for the time being the profit from core operations shows only minor deterioration. Since the one-time bank tax can be deducted from future tax liabilities, its net impact on profit is nearly neutral.

Additional downside risks can be identified in the sector's profitability. According to end-June data, the total cost of the moratorium – resulting from changes in the present

Chart 61: Distribution of risk costs as a ratio of total assets for EU banking systems

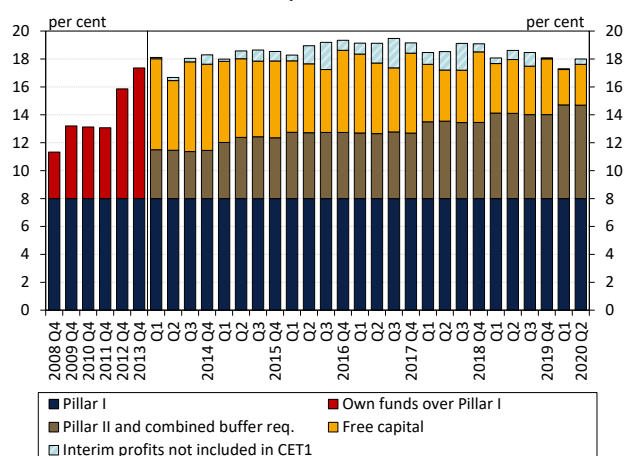


Note: Risk costs include quarterly impairment and provisioning of financial assets not measured at fair value. The distribution shows the 25–75 percentile, the minimum and the maximum of banking systems. Source: ECB CBD

value of repayments – is estimated at HUF 30 billion in 2020. According to our estimation, the moratorium that can be claimed with renewed conditions from January 2021 may reduce credit institutions' profit by up to HUF 19 billion next year, whereas calculating with the utilisation rate observed in June of this year this effect is estimated to amount to HUF 6–7 billion. In addition, the degree of increase in risk costs seems to be heterogeneous within the sector (Chart 60), and a major portion (some HUF 103 billion) of this year's loan loss provisioning originates from the risk costs of five banking groups. Profitability is expected to decline further in the medium term, because the effect of the payment moratorium is not yet reflected in the profit and loss statement of all institutions, and the loan loss and the default rate of the stock may increase significantly in the coming period (Box 5). In addition, the decline in loan dynamics may also have an unfavourable effect on banks' profitability through lower interest income.

The H1 net impairment of the Hungarian consolidated banking sector is high in an international comparison. In terms of consolidated data, the H1 cumulative provisioning and impairment (related to financial assets not valued at fair value) as a ratio of assets amounted to nearly -0.5 per cent (Chart 61). More than 80 per cent of this stems from provisioning. Even the less than -0.4 per cent value calculated with the exclusion of foreign subsidiaries is the eighth highest in the ranking of the 27 Member States. Although H2 might clarify the picture, and banking sectors' loan loss policies can be assessed in various ways, the above-average Hungarian figure suggests that the sector's risk provisioning is prudent.

Chart 62: Consolidated capital adequacy of the banking system

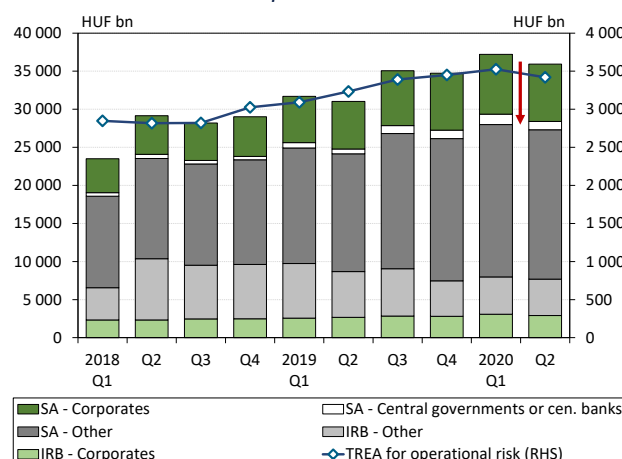


Note: Data prior to 2014 were prepared under different prudential and accounting standards. Data for June 2020 are included without the easings related to capital requirements. Source: MNB

5.2 Domestic and international measures improved the capital position of the sector

Taking into account the total interim profit, the sector's capital adequacy remained at an unchanged level compared to end-2019. The consolidated capital adequacy ratio (CAR) of the banking sector reached 17.6 per cent at end-June 2020. Taking account of the interim profit as well, the CAR increased by 70 basis points to 18 per cent in Q2, representing stagnation compared to December 2019 (Chart 62). The improvement between March and June is attributable to the unchanged level of own funds and a 2.1 per cent decline in the total risk exposure amount (TREA). Free capital of the sector amounted to HUF 824 billion. Taking into account the authorisation of the release of the capital conservation buffer and other systemically important institutions' capital buffers,¹³ free capital increases by HUF 1,076 billion to 6.7 per cent as a ratio of the TREA. Although

Chart 63: Development of exposure amount for credit and operational risk

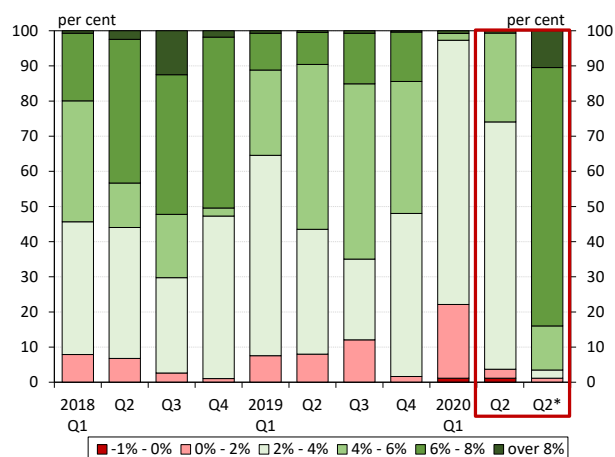


Note: SA denotes Standard Approach and IRB denotes Internal Ratings Based Approach. Source: MNB

the CET1 ratio of the banking sector is not outstanding in an international comparison, in terms of the net non-performing loans to regulatory capital ratio Hungary is among the forerunners within the EU.

The general decline in the total risk exposure amount is attributable to international measures. The 2.1 per cent quarterly sector-level decline in the TREA corresponded to HUF 599 billion, with one sixth of this decline attributable to operational risk and the better part to credit risk exposure (Chart 63). The former is related to the affiliates that apply the basic indicator approach (BIA), where the operational risk exposure is calculated as a function of profit items realised in the past three years. The latter is the result of the amendment to the CRR in effect as of 29 June 2020 ('quick-fix')¹⁴ introduced in order to mitigate the impacts of the COVID-19 pandemic. Although the regulation reacts to institutions' internal market models as well, and brought forward various easing measures planned for the coming years, the provisions concerning exposures to central governments, central banks and undertakings improved domestic capital adequacy to the greatest degree in Q2.¹⁵

Chart 64: Distribution of banks according to the level of own funds over the overall capital requirement weighted by the balance sheet total



Note: Q2* takes into account the easing of buffer requirements in place as of June 2020. The categories indicate the level of own funds above the overall capital requirement as a ratio of the total risk exposure amount. Own funds include total interim or year-end profits as well. Source: MNB

The release of capital buffers increased banks' free capital considerably. Taking into account the release of the 2.5-per cent capital conservation buffer and the 0.5–2-per cent O-SII buffer authorised as of April 2020, the free buffer of 96.5 per cent of the sector exceeds 4 per cent (Chart 64). Although the sector-level capital exceeds the original overall capital requirement by a buffer that is of adequate size, a shortage of capital amounting to nearly HUF 1 billion arose in the banking sector. At the same time, the share of institutions with a shortage of capital is insignificant based on balance sheet total. Taking into account the easing measures, the free capital of all banks is estimated to exceed 1.5 per cent, while medium-term prospects are further improved by the capital raising plans for this year.

The free capital of the banking sector would be able to absorb the loan losses arising, even if historically high NPL ratios were assumed. In the coming years, the capital adequacy of the sector may be in jeopardy primarily due to losses resulting from non-performing loans. In order to assess these risks, we calculated how the sector's capital

¹³ Other systemically important banks have to rebuild the O-SII buffer within three years starting from 2022: <https://www.mnb.hu/en/press-room/press-releases/press-releases-2020/mnb-supports-lending-activity-of-banking-system-by-releasing-capital-buffer-requirements-for-systemically-important-banks>

¹⁴ The amendment to the CRR is available at the following website: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0873>

¹⁵ In the case of exposures to Member States' central governments and central banks denominated in the currency of another Member State a 0-per cent risk weight should be applied until 31 December 2022. In 2023 and 2024, the risk weight will increase to 20 and 50 per cent, respectively.

Table 1: CAR level of the banking system at hypothetical non-performance parameters

			LGD		
Is the loan under moratorium?			40 per cent	50 per cent	60 per cent
No	Yes				
NPL ratio	3 per cent	5 per cent	16.9%	16.7%	16.6%
	5 per cent	10 per cent	16.3%	16.0%	15.6%
	8 per cent	15 per cent	15.6%	15.0%	14.5%
	10 per cent	20 per cent	14.9%	14.2%	13.5%

Note: In the calculation of the CAR levels shown in the table, immediate sales of non-performing loans at various hypothetical NPL and LGD ratios were assumed on June 2020 data for the total bank loan portfolio of the private sector. Source: MNB

adequacy ratio would change for loan losses occurring in the case of hypothetical non-performance parameters for the sector's total corporate and household loans outstanding in June 2020. Four scenarios were elaborated in terms of the assumptions for non-performing loans, assigning higher NPL ratios in each of them for the loans participating in the moratorium. The NPL ratios were paired with three different levels of loss given default (LGD) assuming immediate sales of non-performing portfolios, thus determining 12 hypothetical CAR levels in total (Table 1). According to the results, the sector's free capital as a proportion of TREA would remain positive, reaching some 2.7 per cent, even in the worst case, i.e. at a 60-per cent LGD and assuming NPL ratios of 20 per cent and 10 per cent for the debtors participating in the moratorium and for the ones that continue the repayment, respectively. Within the sector, there would be banks that would not meet the eased requirements; a shortage of capital amounting to HUF 110 billion would arise in their case. In addition, assuming a 60-per cent LGD ratio, we assessed the NPL ratios at which the free capital buffer of the sector would be depleted, in the case of a simultaneous occurrence of 30-per cent and 20-per cent non-performance ratios for loans participating in the moratorium and loans outside the moratorium, respectively. These figures are far higher than the ratios that can be realistically assumed, which also indicates a strong capital position.

BOX 5: EXPECTED IMPACT OF THE PAYMENT MORATORIUM ON BANKS' LOAN LOSS PROVISIONING

The payment moratorium affects banks' loan loss provisioning practices. On 18 March 2020, the Government introduced a precautionary payment moratorium until end-2020, automatically applying to both household and corporate loans already disbursed on the basis of contracts effective on 18 March 2020. The deteriorating economic environment and outlook, the nine-month arrears of instalments and the extension of maturity following the moratorium raised the issue of increased credit risk for credit institutions and, in this context, the need for reclassification between IFRS 9 performance and impairment categories.

Participation in the moratorium for 2020 alone is not deemed to be an event that indicates a major increase in credit risk. In line with the statement¹⁶ of the European Banking Authority (EBA) as well as with its guidelines¹⁷ for the moratoria introduced before 30 September 2020, the MNB complemented its previously issued executive circular,¹⁸ stating that recourse to the moratorium in itself does not indicate a significant rise in credit risk, and thus does not require the automatic reclassification of exposures as loans with increased credit risk (Stage 2) under IFRS 9 or their recording as restructured or non-performing receivables.

¹⁶ <https://eba.europa.eu/eba-provides-clarity-banks-consumers-application-prudential-framework-light-covid-19-measures>

¹⁷ <https://eba.europa.eu/regulation-and-policy/credit-risk/guidelines-legislative-and-non-legislative-moratoria-loan-repayments-applied-light-covid-19-crisis>

¹⁸ Executive Circular on using macroeconomic information and the factors indicating a significant increase in credit risk under the IFRS 9 standard (27 July 2020).

Nevertheless, credit institutions must continue to assess the credit quality of debtors using the moratorium and to identify cases with increased probability of default. If developments that go beyond the temporary liquidity problem remedied with the moratorium, such as a permanent deterioration in the solvency of debtors, are identified, credit institutions should take these into account and reclassify the relevant outstanding loans to a higher impairment category (Stage 2, Stage 3), in the event of a significant increase in credit risk and must at the same time establish higher loan loss provisions.

With the promulgation of Act CVII of 2020 on 28 October 2020, Hungary's National Assembly introduced a payment moratorium for the period between 1 January 2021 and 30 June 2021. The moratorium framework entering into effect in 2021 is significantly different from the currently effective general moratorium, as it does not apply automatically to all private persons and corporate debtors (Box 4). In addition, the new act provides for a ban on loan withdrawal until 30 June 2021 for those debtors that are not eligible for participation in the moratorium from 2021, but are unable to meet their respective payment obligations on time.

The MNB expects a further increase in loan loss provisions during 2021. Our assumption is partly based on the fact that upon impairment recognition, in the case of corporate clients falling within the scope of the moratorium entering into effect as of 1 January 2021 it must be taken into account that one of the conditions for their participation in the moratorium is the existence of financial difficulty. With its verification, fulfilment of the provisions of Point b) of Section 5 of MNB Decree 39/2016. (X. 11.) on prudential requirements regarding non-performing exposures and restructured receivables may arise in a general manner, in which case these transactions should be treated as non-performing exposures. Vulnerability and deteriorating solvency identified at the individual level may lead to reclassifications in the case of household debtors. In addition, the end of the general moratorium and the ban on loan withdrawal may result in an increase in the volume of restructured loans, which also entails loan loss provisioning.

Nevertheless, a major rise in loan loss provisions may be mitigated by various factors. Firstly, the executive circular contains a temporary easing provision that can be applied until 31 December 2021. Accordingly, the restructurings – with a validity not exceeding 2 years – applied in order to bridge debtors' temporary problems should not be considered automatic Stage 2 indicators. Secondly, a further MNB recommendation¹⁹ must be applied starting from 1 January 2021. Accordingly, if the repayment of the liability is suspended due to a possibility provided by law or other legal constraints, the calculation of days past due should also be suspended for the period concerned, and thus the magnitude of non-performing exposures will not increase despite the default in payment.

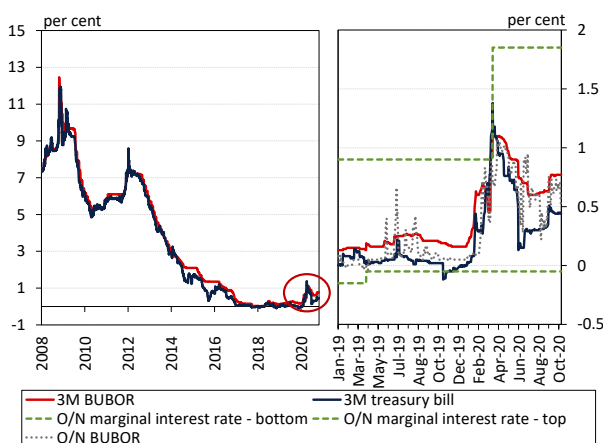
The MNB issued guidance to prevent the occurrence of additional provisioning requirements stemming from the uncertainties. In its executive circular, the MNB established a minimum loan loss provisioning requirement for the institutions as well. Accordingly, in the period until 31 December 2021 the amount of their level of loan loss provisioning should exceed the amount calculated with the size of the end-2019 average loan loss coverage projected to the stock data at the end of 2020 Q1. Adequate application of the provisions of the executive circular concerning the minimum level of loan loss provisioning as well as concerning the application and recognition of portfolio-level management corrections, so-called overlays, allows for the avoidance of significant differences in individual institutions' loan losses between 2020 and 2021, considering that these provisions intend to address various calculation and methodological uncertainties existing due to the coronavirus pandemic and the general moratorium.

¹⁹ Recommendation No 13/2019. (VII. 2.) of the Magyar Nemzeti Bank on the application of the notion of default as defined in Article 178 of Regulation 575/2013/EU.

6 Market and bank liquidity: the banking sector has significant liquidity and financing reserves

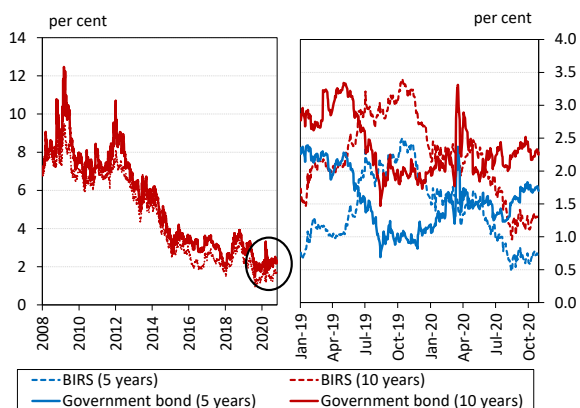
In line with the monetary policy stance, short-term yields are around the level of the one-week central bank deposit rate, whereas long-term yields are historically low, despite the pandemic situation. Banks' opportunities to obtain funds did not narrow, but the increased volatility of O/N market yields is a good reflection of the uncertainty about economic prospects caused by the coronavirus pandemic. As a result of central bank and government measures (the MNB's asset purchase programmes, its long-term collateralised loans, the FGS Go! scheme as well as the job-creating wage cost subsidy introduced by the Government), the operational liquidity reserve of the banking sector increased considerably, while client deposits continue to provide stable financing for banks. External liabilities of the banking sector did not decline in the pandemic situation either, while foreign assets continue to exceed foreign liabilities. The stability of the banking sector's financing and liquidity position justified the autumn revision of the MNB's March 2020 macroprudential tightening.

Chart 65: Developments in short-term yields



Source: Government Debt Management Agency, MNB

Chart 66: Changes in long-term interbank interest rate swaps and government bond reference yields



Source: Government Debt Management Agency, MNB

6.1 Short-term yields conform to the level of the one-week central bank deposit rate, while long-term yields are historically low

The anchor of short-term yields is the level of the one-week central bank deposit rate. The MNB decided to activate the one-week deposit in April 2020 in order to be able to flexibly shape short-term yields, which was necessary for managing the money market tensions caused by the pandemic. The central bank accepts one-week deposits once a week, and it became the primary tool for absorbing banks' liquidity. Short-term market yields adjust to the one-week deposit rate, which declined from its 0.9 per cent level to 0.6 per cent in two steps by end-July 2020, before rising to 0.75 per cent in the tender held on 24 September 2020. The three-month BUBOR rates, which are crucial in terms of the pricing of loans, conformed to the level of the one-week deposit rate, and stood at 0.77 per cent at end-October (Chart 65). The turnover in the O/N market, which is important in terms of the financing of banks, still does not indicate any narrowing of the market, but the elevated volatility of daily yields is a good reflection of the uncertainty around economic prospects caused by the coronavirus pandemic.

The successful management of the initial money market shock caused by the pandemic is shown by the extremely low level of long-term yields compared to previous years. At maturities that are more important in terms of fund raising, the costs of government securities yields and bank interest rate swaps stabilised at levels seen prior to the pandemic situation (Chart 66). In the weeks following the outbreak of the pandemic, in an uncertain global market environment, demand for domestic government securities

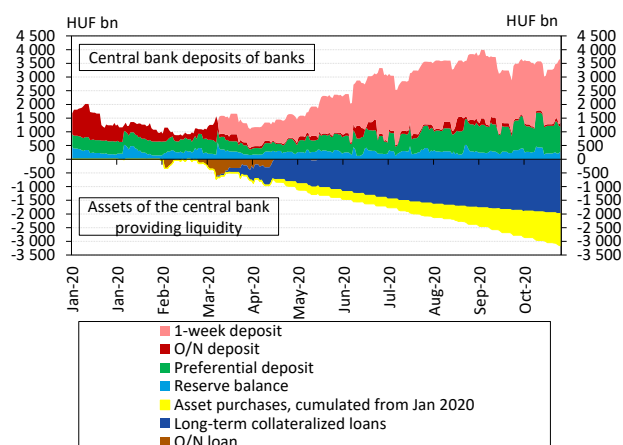
declined both in the primary and secondary markets, resulting in a sharp rise in yields. The liquidity of the secondary market has strengthened in recent months, while – against the background of the higher borrowing requirement of the general government due to the increased deficit target – strong excess demand was typical at the auctions of the ÁKK (Government Debt Management Agency), resulting in a fall in yields. The demand for government securities is efficiently supported by the central bank's collateralised long-term lending facility and the asset purchase programme (Box 6).

6.2 Central bank measures resulted in significant liquidity reserves in the banking system

As a result of liquidity-providing measures, the banking sector's liquidity underwent a transformation. One of the determinants of banking sector liquidity is the stock of deposits placed with the central bank, the total amount of which was around HUF 1,200 billion in the months prior to the outbreak of the pandemic, before expanding considerably as a result of the central bank's liquidity providing measures to reach an average of HUF 3,500 billion in October (Chart 67). More than two thirds of the deposits placed with the central bank are one-week deposits, the stock of which is growing as a result of the central bank's asset purchases and an increase in the central bank's collateralised credit facilities, while the preferential deposits, which account for nearly one third, are growing in conjunction with the expansion in the loans refinanced in the FGS schemes. Until end-October 2020, holdings amounting to some HUF 2,000 billion mostly with a 5-year maturity built up in the banking sector from the collateralised central bank loans announced with a weekly frequency. The liquidity-expanding instruments originating from the central bank play a crucial role in supporting the economy and the government securities market through the banking sector. In addition, they also contribute to the strengthening in the liquidity position and stability of the banking sector.

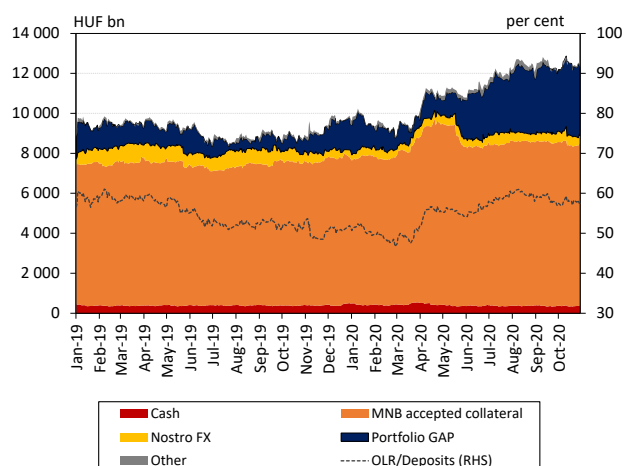
As a result of the measures taken by the central bank and the Government, the operational liquidity reserves of credit institutions expanded further. The increase in liquidity reserves was fundamentally determined by the expansion in MNB-eligible collateral and a rise in contractual net flows of treasury operations (portfolio gap) (Chart 68). While MNB-eligible collateral expanded by nearly HUF 1,600 billion on average between mid-March and end-April, a portfolio gap increase of HUF 2,500 billion was observed from May until October, in parallel with an average decline of nearly HUF 800 billion in MNB-eligible collateral.

Chart 67: Developments in central bank deposits of banks and assets of the central bank providing liquidity



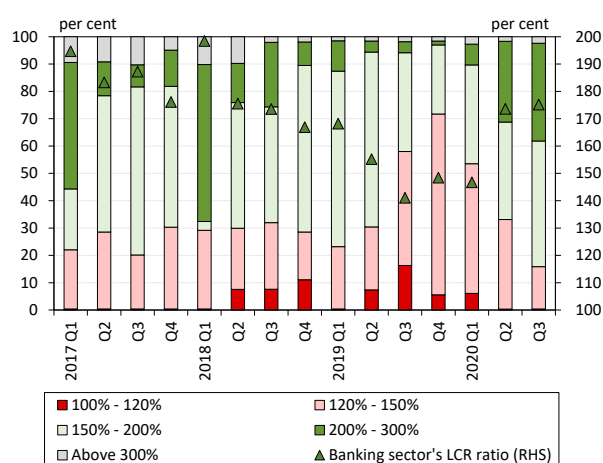
Note: In addition to government securities and mortgage bond purchases, the Bond Funding for Growth Scheme was also indicated as an asset purchase programme. Source: MNB

Chart 68: Decomposition and development of banks' operative liquidity reserves



Note: The portfolio gap denotes the contractual net flows of treasury operations within 30 days from the date of data reporting with the following content: interbank loans and deposits, MNB deposits, repos, securities other than own issued, deposits over HUF 5 billion, derivatives. Classified into the "other" category: ECB eligible collateral, cash flows from own securities, deviation from and changes in reserve requirements. Source: MNB

Chart 69: Distribution of individual institutions' LCR levels weighted in proportion to the balance sheet total and changes in the LCR of the banking sector



Source: MNB

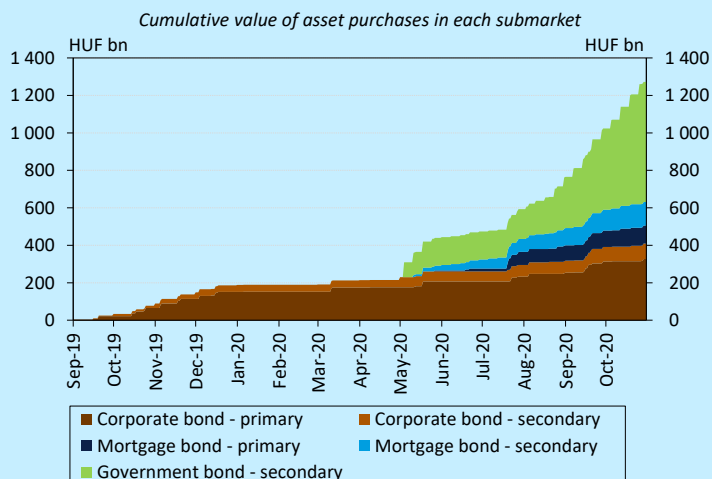
This latter phenomenon is mainly attributable to the upswing in recourse to the five-year central bank credit facility launched in April, which reduces the instruments eligible as central bank collateral, while – depending on the use – a large portion of the loan taken appears in the one-week central bank deposit, adding to the portfolio gap, i.e. to net inflows of money. Nevertheless, in addition to the collateralised central bank loan facility, the impacts of other central bank and government measures are also reflected in the expansion in the portfolio gap. They include the MNB's asset purchase programmes (Box 6), FGS Go! as well as the job-creating wage cost subsidy. As a result of all this, compared to the February level, operational liquidity reserves of the banking sector expanded by more than HUF 3,000 billion on average by October, and thus a significant liquidity and financing buffer can be identified in the banking sector. The rise in liquidity reserves has taken place in parallel with an expansion in client deposits exceeding loan growth, and thus the loan-to-deposit ratio, which captures the funding risks, has also declined since the outbreak of the coronavirus pandemic.

The distribution across individual institutions of the liquidity buffer accumulated since March is also favourable. The expansion in banking sector liquidity was reflected in the developments in the LCR ratio as well, which rose to 175 per cent by end-September 2020 (Chart 69). Based on the liquidity coverage ratio, the holdings of high-quality liquid assets in the banking sector exceeded the value that would cover money outflows presumed in the case of a liquidity shock by some 75 per cent. Nevertheless, behind the increase in the banking sector's average, the distribution of the liquidity buffer is also favourable, as the share of institutions with a lower surplus (of maximum 50 per cent) also declined markedly, and thus at end-September institutions in this category accounted for just over 15 per cent of the balance sheet of the banking sector.

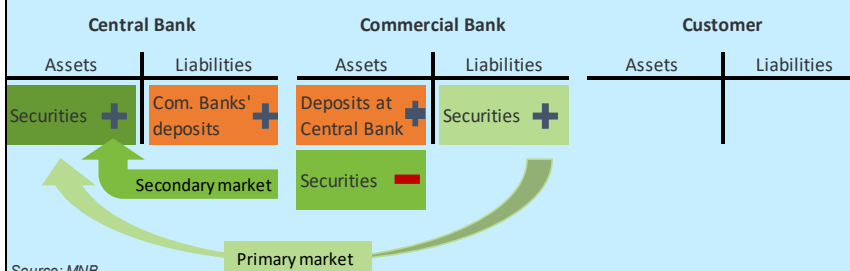
BOX 6: IMPACT OF CENTRAL BANK ASSET PURCHASE PROGRAMMES ON BANKING SECTOR LIQUIDITY

The MNB announced asset purchase programmes to facilitate efficient monetary transmission and reduce the economic and financial effects of the coronavirus pandemic. On 4 May 2020, the MNB launched its government securities and mortgage bond purchase programme, and on 23 September 2020 it increased the overall envelope of the Bond Funding for Growth Scheme (BGS) that had been in effect since 1 July 2019. A technical revision is carried out by the MNB if the holdings increase by HUF 1,000 billion and HUF 300 billion in the case of government securities purchases and mortgage bond purchases, respectively. In the case of the BGS, according to the currently effective conditions, the central bank may purchase bonds with a good rating issued by non-financial corporations up to a limit of HUF 750 billion.

Between the launch of the programmes and October 2020, the MNB purchased mortgage bonds worth more than HUF 200 billion, corporate bonds in excess of HUF 400 billion and government securities with a value of more than HUF 600 billion. The primary objective of the asset purchase programmes is to facilitate monetary transmission by allowing the influencing of monetary conditions on the longer section of the yield curve. At the same time, the aforementioned purchases have a major impact on the liquidity of the banking sector through the change in the balance sheet of those economic actors concerned in the asset purchases. Upon discussing this subject, it is worth handling those two cases separately when the central bank purchases securities from commercial banks (held or issued by them) and when the central bank purchases from non-bank actors securities owned by them (e.g. corporations, households, investment funds or foreign institutional investors) or own issued securities in the case of companies.



The central bank purchases assets from commercial banks



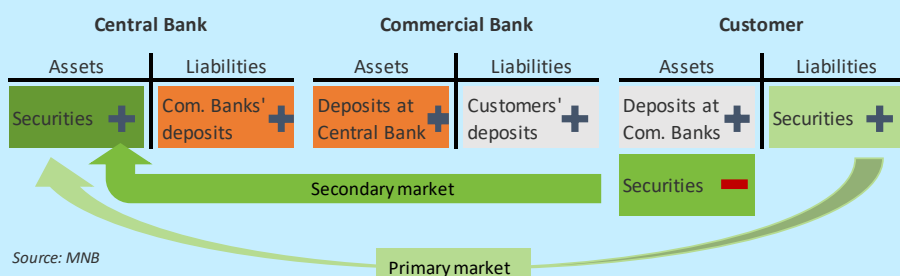
When the central bank purchases securities owned but not issued by commercial banks, we speak of a **secondary market purchase**. In this case, the stock of securities on the asset side of the balance sheet of commercial banks declines, while the money received as consideration increases the balance of the deposit accounts held with the

central bank (reserve account, O/N deposit or one-week deposit). Accordingly, the balance sheet total of the commercial banks does not change during the transaction, only the asset side is restructured, while in parallel with that the balance sheet of the central bank expands with the amount corresponding to the value of the securities transaction.

By contrast, in the case of a **primary market purchase**, when the central bank purchases securities, i.e. mortgage bonds, issued by the banking sector, the balance sheets of both the commercial banks and the central bank expand by an amount corresponding to the securities transaction. As in the case of secondary market purchase, the amount received during the mortgage bond issue adds to the balance of the deposit accounts held with the central bank.

When the central bank purchases government securities, mortgage bonds or corporate bonds from non-bank actors in the secondary market, the stock of securities declines in the balance sheet of non-bank actors, whereas the counter-value is recognised on their account held with the commercial banks, which place these additional funds on their above-mentioned central bank accounts. Accordingly, in this case the asset-side structure of the balance sheet of non-bank actors changes, while the balance sheets of the commercial banks and the central bank expand to a degree corresponding to the securities transaction.

The central bank purchases assets from non-bank economic actors

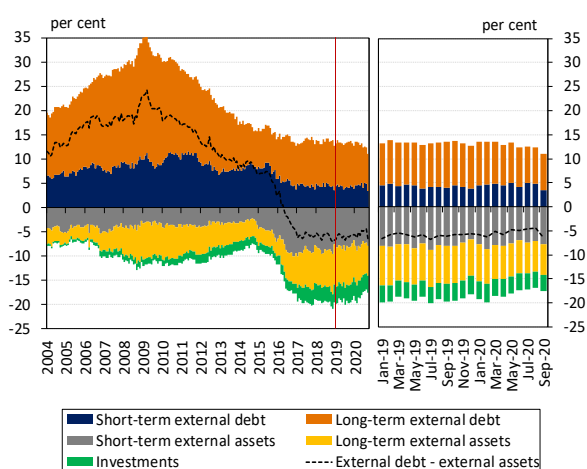


If the central bank purchases from non-bank actors in the **primary market**, i.e. it purchases a bond from a company issued by the same company, the balance sheets of all the three players (central bank, commercial bank, company)

expand to a degree corresponding to the securities transaction, as the countervalue of the purchase is credited to the company's account held with the commercial bank, and commercial banks place these additional funds on their above-mentioned central bank accounts.

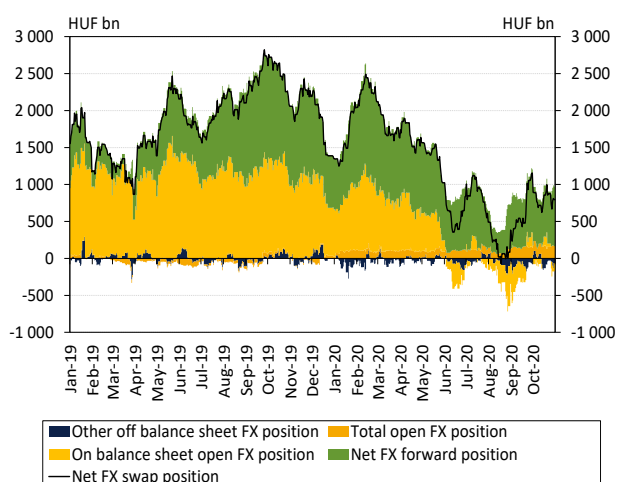
In summary, the central bank's balance sheet expands with the size of the transaction in any case during the asset purchases, and the liquidity resulting from the purchase appears on the accounts of the banking sector held with the central bank. Considering that in the period from May to October the total amount of the aforementioned asset purchase programmes exceeded HUF 1,000 billion, 40 per cent of the expansion in the portfolio gap seen in this period is explained by this impact. Looking at the central bank asset purchase from the side of non-bank actors, it is established that the transaction increases their deposits at commercial banks in any case. In the case of foreign actors, this latter may entail an increase in the banking sector's short-term external debt, which also means moderate risk in addition to the liquidity expanding and yield reducing effects of the programmes.

Chart 70: External assets and liabilities of the banking system in proportion to the balance sheet total



Note: Credit institutions sector, including the data of EXIM, MFB and KELER, by original maturity Source: MNB

Chart 71: Changes in the banking sector's FX swap position and in other components of the total FX position



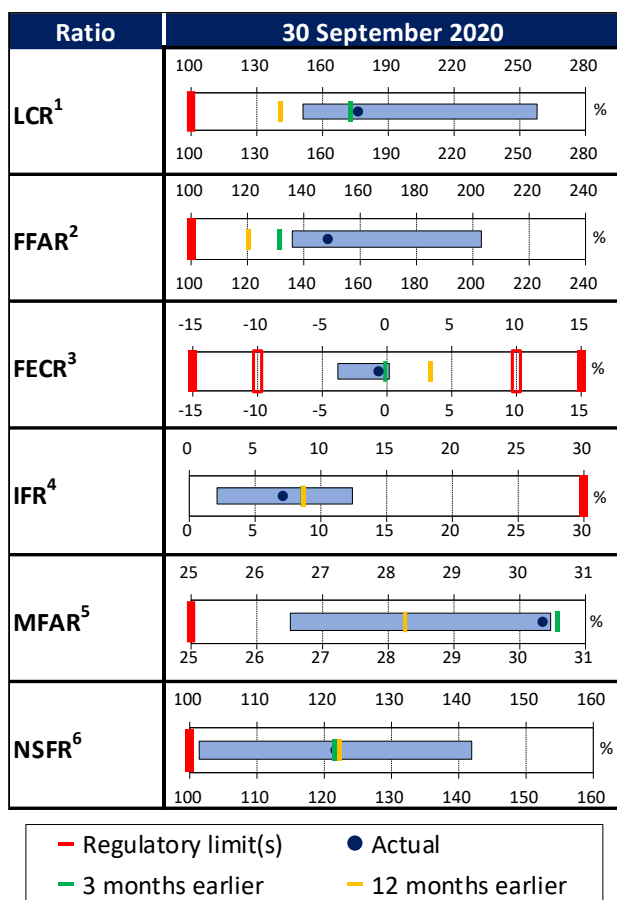
Note: Net FX swap position = (On balance sheet FX position – Total open FX position) + Net forward FX position + Other off balance sheet FX position. Source: MNB

6.3 External financing is stable, and the banking sector's foreign currency need declined considerably

The banking sector's external financing is very stable, despite the pandemic. Compared to the end-February figure, the ratio of external liabilities to the balance sheet total was down by nearly 2.5 percentage points to 11 per cent by end-September, and this change conforms to the slowly declining trend of the past five years (Chart 70). The stability of external financing is mainly attributable to the fact that as a result of the liquidity-expanding measures of foreign central banks and governments, there were no major disruptions in the functioning of foreign money markets that are important for domestic banks; therefore, access to foreign funds did not decline considerably. An adjustment similar to that of foreign liabilities took place in the banking sector's foreign assets as well, the value of which as a percentage of balance sheet total decreased by nearly 2.3 percentage points to 17.5 per cent compared to February.

Both on-balance-sheet and off-balance-sheet foreign currency exposures of the banking sector were down, resulting in net FX swap holdings declining to a multi-annual low. In February 2020, credit institutions still had a net foreign exchange long FX swap position of HUF 2,270 billion on average, which fell to a multi-annual low of HUF 160 billion by August (Chart 71). The low net FX swap position is a favourable development in terms of both the size of the counterparty risk and the liquidity effect of margin requirements. The net FX swap position of the banking sector is essentially determined by the size of on-balance-sheet and off-balance-sheet unhedged FX positions. The off-balance-sheet FX position is primarily determined by the net balance of FX forward positions concluded with non-bank actors (corporations and investment service providers). The roughly HUF 2,100 billion drop in net swap holdings between end-February and mid-August was attributable in a ratio of roughly

Chart 72: Compliance with the MNB's liquidity and funding regulations in the banking sector



Note: The edges of the blue rectangle denote the lower and upper quartiles of the distribution. 30 September 2020 data for the LCR, FFAR and IFR, 31 August 2020 data in the case of FECR, and 30 June 2020 data for the other indicators. 1) LCR data without mortgage banks and building societies. 2) Between 24 March 2020 and 17 September 2020, a stricter requirement was in effect for financial corporations' liabilities over one year. 3) Between 24 March 2020 and 17 September 2020, the expected level of the FECR was +/- 10 per cent. 4) From 17 September 2020, the IFR easing entered into effect with the exemption from the obligations related to derivatives. 5) From 1 October 2018, the regulatory minimum level is 20 per cent, and 25 per cent from 1 October 2019. 6) Regulation not yet in effect; will enter into force in 2021. Source: MNB

fifty-fifty to the changes in on-balance-sheet FX positions and the decline in forward FX positions. The evolution of the on-balance-sheet FX liability surplus is a result of the domestic sectors' rising foreign currency deposits and a decline in external FX assets, while the decline in net forward FX positions was driven by the decreasing forward FX short position of the corporate sector. In the subsequent period, swap holdings started to expand again, with this change mainly induced by renewed growth in forward FX positions.

Considering that bank liquidity is stable, and funding has a sound structure even in the pandemic situation, the MNB decided to discontinue the March tightening of the FECR and the FFAR. In order to offset the possible negative impacts of the coronavirus pandemic on bank financing, in March 2020 the MNB tightened the FFAR and FECR regulations, and eased the MFAR requirement to support the long-term borrowing of banks.²⁰ In the pandemic situation, the liquidity of the domestic banking sector improved sharply, *inter alia* as a result of the MNB's measures. In addition, the financial situation has proven to be stable in recent months, and its structure has remained sound (Chart 72). The on-balance-sheet FX open position of the banking sector became practically balanced, and the dispersion of individual banks also narrowed. The surplus of stable FX liabilities typically with maturities over one year increased considerably at banks, although partly in parallel with a decline in corporate foreign currency lending. The financial stress observed at the beginning of the pandemic and the uncertainties around the conditions of funding returned to normal. Potential risks – such as a sudden withdrawal of funds, a rise in short-term external debt, a shortage of FX funds of adequate maturity and quantity – did not materialise. Therefore, in September 2020 the MNB restored the FFAR and FECR regulations to their pre-March state. In addition, the IFR requirement was also amended through the exemption of the on-balance-sheet liabilities related to the revaluation of swap market transactions. The amendments may expand the leeway of banks active in certain special financial services in the area of funding, which may contribute to more efficient future operation of the FX swap market as well. In addition, the reduction of the volatility of domestic FX swap yields is served by the fact that the MNB announced FX liquidity providing swap tenders on an ad-hoc basis from September 2020. The MNB may also use the euro liquidity providing international repo framework agreements for funding the swap facility (Box 7).

²⁰ <https://www.mnb.hu/en/publications/reports/macprudential-report/macprudential-report-2020>

BOX 7: FX SWAP AND REPO AGREEMENTS CONCLUDED BY THE MNB

The MNB has built up a safety net of EUR 10 billion, through agreements with the major central banks and international organisations. On 23 July 2020 the MNB announced that in the previous months it had built up an international safety net consisting of bilateral FX swap and repo agreements, with the help of which it is able to increase its FX liquidity by as much as EUR 10 billion in a short time.

The European Central Bank concluded repo or swap agreements with several central banks in the region. In June 2020, the ECB announced that it would introduce a repo facility for central banks (EUREP) to address the market disruptions caused by the pandemic and to satisfy potential euro liquidity demand. The repo facility can be used against adequate collateral, including euro-denominated, euro area government securities, or bonds issued by supranational institutions. The EUREP facility complements the previously established system of swap and repo agreements concluded on a bilateral basis. In the spring and summer of 2020, of the EU member countries the ECB concluded repo agreements with the Romanian central bank and the MNB, and signed swap agreements with the central banks of Croatia and Bulgaria.

The Bank for International Settlements (BIS) provides a wide range of financial services for central banks, including collateralised lending. The BIS provides various financial services related to the management of FX and gold reserves for its member central banks, monetary authorities and international financial institutions, including the placing of deposits or FX market operations. Among them, short-term lending is also available for central banks, typically against collateral. The BIS usually accepts highly rated government securities as well as bonds of government agencies and supranational institutions as collateral. As the BIS is not a central bank, it is unable to create foreign currency; it uses its existing assets and liquidity when extending loans.

Main parameters of FX swap and repo agreements of the MNB

Central bank / international institution	Total amount (bn EUR)	Form of agreement	Announcement date	Term of agreement*
European Central Bank (ECB)	4	repo	23-Jul-2020	30-Jun-2021
Bank for International Settlements (BIS)	2	repo	23-Jul-2020	-
Federal Reserve (Fed)	~0.8-1.7	repo	23-Jul-2020	31-Mar-2021
People's Bank of China (PBoC)	~2.5	swap	10-Jan-2020	3 years

**The agreements can be prolonged by mutual consent. Source: MNB*

At end-March, the Federal Reserve created a new repo facility for central banks and monetary authorities. The Fed announced at end-March 2020 that within the framework of repo facility it allows central banks and monetary authorities to access USD financing in exchange for US government securities (Foreign and International Monetary Authority [FIMA] Repo Facility). The term of agreements is overnight, but can be rolled over as needed. The Fed also made the interest rate of the transaction public. At present, it is 35 basis points, exceeding the interest rate on the loan granted by the Fed to the best debtor credit institutions (Discount Window, Primary Credit) by 10 basis points. According to the original announcement, the facility will be available for at least 6 months, which was extended by the Fed in July 2020 until March 2021.

The People's Bank of China (PBoC) has swap agreements with several developed and emerging countries. The PBoC has concluded bilateral swap agreements with central banks around the world since 2008. The objective of the agreements can be to facilitate the expansion of bilateral economic, financial and trade relations or to support the stability of financial markets and satisfy FX liquidity needs. In parallel with the strengthening international role of the renminbi, the PBoC increasingly expanded the network of swap agreements, which covers more than 30 central banks now. A further feature of the agreements is that their form is not repo, but swap, which allows the establishment of a safety net, even without holding renminbi assets. The MNB concluded a swap agreement with the PBoC for the first time in September 2013, with an amount of RMB 10 billion (approx. EUR 1.3 billion), which was renewed several times, with a

doubling of the total amount announced in January 2020. Among EU central banks, in addition to the MNB, the ECB and the Bank of England have swap agreements with the PBoC.

The safety net that has been built up provides additional liquidity beyond the existing international reserves of the MNB. At the time of the announcement, the MNB's international reserves amounted to EUR 30.2 billion, which significantly exceeds the indicators used for reserve adequacy. FX swap and repo agreements themselves are not parts of international reserves, but in the case of activating them, the foreign currency that has been drawn is included in the MNB's FX reserves.

For its FX liquidity providing swap tenders introduced in September 2020, the MNB also used its repo framework agreements it has with international organisations. At the end of previous quarters, high volatility and temporary decline in yields evolved in the FX swap market. In September 2020, the MNB introduced an FX liquidity providing HUF/EUR swap facility for short-term money market yields to adapt to the short-term interest rate level deemed optimal by the MNB. In the second half of September, the MNB provided a total EUR 1.1 billion to the banking sector. The tenders successfully smoothed the swap market developments at the end of the quarter, for the financing of which the central bank used its euro liquidity providing international repo framework agreements as well.

In an economic sense, FX swap and repo agreements are considered collateralised lending and borrowing; the only difference between them is in the underlying collateral. Upon drawing the FX swap agreements, central banks give their own currencies to one another, and thus for both central banks the foreign currency of the other central bank is considered as the collateral for counterparty risk. In the case of repo transactions, the collateral is a security, and the central bank that draws the repo line receives foreign currency in exchange for the bond it holds, which is denominated in the same currency. Although it is a theoretical difference between swap and repo that central banks are able to create unlimited liquidity in their own currency, which would make swap agreements more favourable, the concluded agreements always have constraints, and thus there is no practical difference in terms of the available amounts.

Both agreements add to FX reserves when they are drawn. In the case of a swap transaction, the foreign currency is put in the reserves, against which the central bank's liability outstanding in its own currency is recorded on the central bank's liability side. In the case of repo transactions, the security that serves as collateral remains in the central bank's balance sheet, and the foreign currency received in the repo transaction represents additional liquidity in addition to that.²¹ A further difference is that in the case of repo transactions between central banks, similarly to their domestic operations, the central banks that provide liquidity apply haircuts for the securities accepted as collateral, whereas in the case of swaps the exchange of the two currencies typically takes place at the current foreign-exchange rate.

On the whole, international repo and swap agreements allow the MNB to have quick access to FX liquidity, thus enabling it to act efficiently in the case of any incidental market distortions. The central bank significantly expanded its leeway with the safety net, and thus it is able to react rapidly and decisively to any tensions that might arise in FX market segments, while sustaining a safe level of international reserves.

²¹ Government Decree 221/ 2000. (XII. 19.) on special reporting and accounting requirements applicable to the Magyar Nemzeti Bank

7 Banking sector stress tests: manageable capital needs even in the event of a severe stress

Based on the results of the liquidity stress test and taking into account the adjustment opportunities, the vast majority of the banks have a sufficient liquidity buffer to meet the regulatory requirements even in the event of a severe liquidity stress. In 2020 H1, the Liquidity Stress Index fell close to its theoretical minimum, to which the additional adjustment opportunities offered by the new elements of the monetary policy toolkit also contributed.

Based on the solvency stress test, the additional provisioning needs for the corporate and household portfolios over two years would eat up more than 90 per cent of the profit before loan losses in the stress scenario. Taking into account all profit and loss items, almost three fourths of the banks would become loss-making over the two-year horizon of the stress scenario, with a sectoral-level decrease in regulatory capital. The severe shocks assumed in our stress test highlight vulnerability for a small portion of the banking sector: by the end of the stress scenario the capital adequacy ratio would drop below 8 per cent for 7.8 per cent of the sector, and to meet the overall capital requirement effective at the time of writing the report, a capital injection of approximately HUF 86 billion would be needed at the sectoral level.

7.1 The Liquidity Stress Index fell close to its theoretical minimum

Table 2: Main parameters of the liquidity stress test

Assets			Liabilities		
Item	Degree	Currencies affected	Item	Degree	Currencies affected
Exchange rate shock on derivatives	15 per cent	FX	Withdrawals in household deposits	10 per cent	HUF/FX
Interest rate shock on interest rate sensitive items	300 basis points	HUF	Withdrawals in corporate deposits	15 per cent	HUF/FX
Calls in household lines of credit	20 per cent	HUF/FX	Withdrawals in debt from owners	30 per cent	HUF/FX
Calls in corporate lines of credit	30 per cent	HUF/FX			

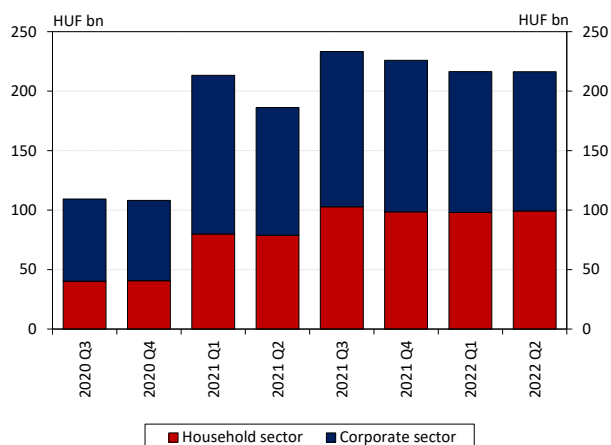
Source: MNB

The liquidity stress test assumes the simultaneous occurrence of major bank liquidity risks and takes into account short-term adjustment and contagion among banks. The liquidity stress test examines the impact on the LCR of an assumed simultaneous occurrence of financial market turmoil, exchange rate shock, deposit withdrawals, credit line draw-downs and withdrawals of owners' funds. It is a low-probability, but high-impact scenario. In addition, in determining the outcome of the stress test, banks' short-term adjustment opportunities as well as the contagion effects of these adjustment channels and of defaults on the interbank market are also taken into account (Table 2).²²

The liquidity-expanding changes to the monetary policy toolkit compensated for the effect of missing loan instalments resulting from the moratorium. During the moratorium, within the loan portfolio to the private sector, banks can expect instalments only from the debtors opting for loan repayment and the contracts disbursed after the announcement of the moratorium (Chart 73). It is significantly less than the usual cash flows from loans, and hence represents a marked deterioration in the liquidity position. However, this loss of inflow does not necessarily appear as an equal loss of liquidity, due to the fact that some of the unused reserves of the debtors still remain in the banks' balance sheets as deposits, which mitigates the liquidity-decreasing

²² For a detailed description of the methodology, see Box 9 of the [May 2016 Financial Stability Report](#). In terms of its objective, logic and applied assumptions, our stress test is fundamentally different from the liquidity stress test used in the supervisory review of the Internal Liquidity Adequacy Assessment Process (ILAAP). Therefore, our findings cannot be directly compared to that.

Chart 73: Expected interest income from the household and corporate loan portfolio on a cashflow basis

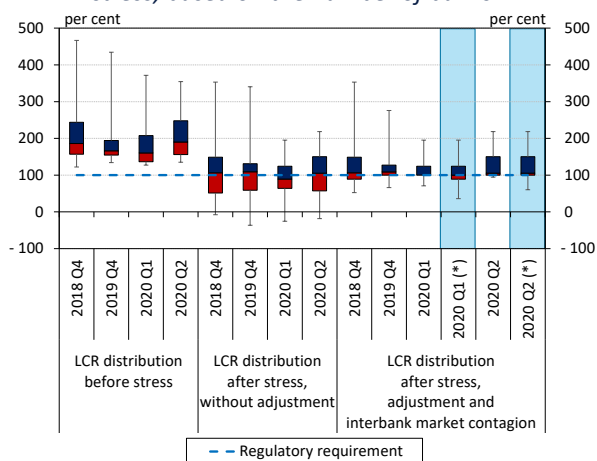


Note: Based on contract-level calculations. It was assumed that the loan interest rates would remain unchanged over the horizon and the debtors opting for repayment according to June 2020 data would carry on. Contracts eligible for moratorium extension were selected as described in the solvency stress test credit risk calculations. Source: MNB, CCIS

impact of the moratorium. Also, the potential funding challenges due to the missing liquidity were meaningfully addressed by the MNB's decision to introduce liquidity-expanding changes to the monetary policy toolkit.

The toolkit changes contribute through multiple channels to the improvement of banks' liquidity position in a stress situation. On the one hand, the liquid assets made available by the suspended sanctioning of under-reserving *ceteris paribus* increase the liquid asset portfolio considered for LCR. On the other hand, with the introduction of the MNB's long-term collateralised loan facility and the simultaneous expansion of the scope of collaterals, the institutions' liquidity coverage ratios can be improved if they encumber assets newly accepted by the MNB as collateral for long-term borrowing (such as large corporate loans) and not deemed to be liquid assets as per the LCR calculation. Finally, the transfer of one-week deposits indicated as an inflow in the LCR into liquid assets can also improve the indicator if it is below the 100-per cent requirement, even if it represents liquidity expansion only in the technical sense. Since the MNB explicitly introduced these instruments to stabilise the liquidity position of the banking system during the COVID-19 crisis, their availability in a stress situation can be well assumed. Therefore, the transfer of one-week deposits into liquid assets is considered as an adjustment opportunity; so is collateralised borrowing by means of encumbering unencumbered mortgage bonds and large corporate loans. We also performed our calculations without considering these toolkit changes.

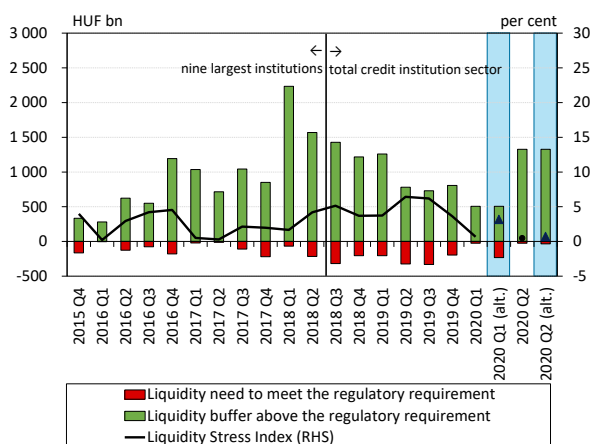
Chart 74: Distribution of the LCR before and after stress, based on the number of banks



Note: The edges of the boxes mean the lower and upper quartiles of the distribution; the border of the colours means its median. The lower whisker of the plot shows the tenth percentile, while the upper shows the ninetieth percentile. The alternative results disregarding the spring 2020 changes to the monetary policy toolkit are marked with asterisk and blue background. Source: MNB

The vast majority of banks have a sufficient liquidity buffer to meet the regulatory requirements even in the event of a severe liquidity stress. The median of pre-stress LCR indicators improved by almost 30 percentage points by the end of the first half of 2020, following a slight deterioration in the first quarter (Chart 74). In the stress scenario, the vast majority of the institutions – including the lowest quartile of the distribution – is able to reach the regulatory minimum, thanks to the additional adjustment opportunities offered by the extended monetary policy toolkit. By contrast, looking at the LCR distribution without permitting adjustment opportunities, it can be established that the assumed shocks would reduce the LCR below the regulatory requirement for a significant portion of the institutions. The alternative results disregarding the toolkit changes (periods marked with an asterisk and blue background in the chart) indicate that the liquidity expansion effect of the introduced changes would actually help several institutions in the assumed liquidity stress situation.

Chart 75: The Liquidity Stress Index

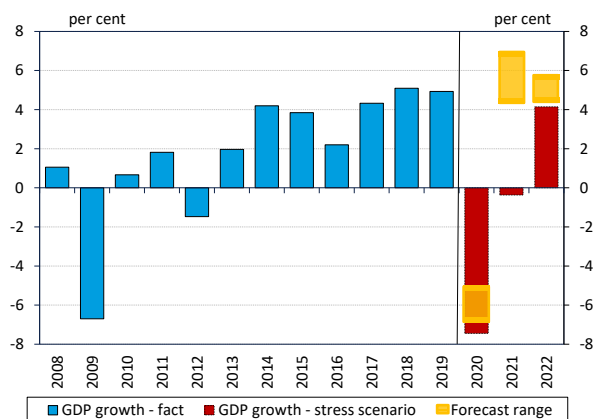


Note: The indicator is the sum of the liquidity shortfalls in percentage points (but a maximum of 100 percentage points) compared to the 100-per cent regulatory limit of the LCR, weighted by the balance sheet total in the stress scenario. The higher the value of the indicator, the higher the liquidity risk. The alternative results disregarding the spring 2020 changes to the monetary policy toolkit are marked with blue background. Source: MNB

In the first half of 2020, the Liquidity Stress Index fell close to its theoretical minimum thanks to the liquidity-expanding measures of the MNB. The Liquidity Stress Index is designed to capture the heterogeneity across institutions and aggregates the post-stress percentage-point liquidity shortfalls compared to the regulatory limit calculated at the individual bank level by also considering the size of the given bank. This also allows us to draw conclusions regarding the extent of a potential stress situation within the banking sector. The index decreased markedly in 2020 H1 and with a value of 0.5 it approached its theoretical minimum by the end of the half-year (Chart 75). The impact of the MNB's liquidity-expanding measures is shown by the fact that without the additional adjustment channels there would have been a smaller decrease, particularly in the first quarter of 2020 when the contribution to the decrease amounted to 2.5 percentage points.²³ The post-stress aggregate liquidity surplus above the regulatory requirement was HUF 1,327 billion at the end of the half-year, with the liquidity need amounting to a mere HUF 25 billion.

7.2 Only a minor portion of the sector would become vulnerable even in the event of a severe stress

Chart 76: GDP growth rate in the scenarios

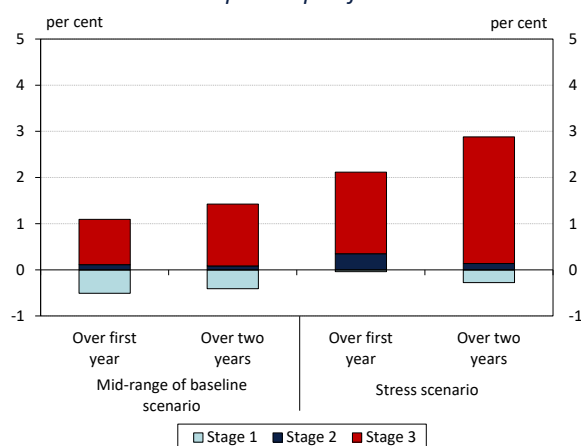


Source: MNB

In the stress scenario, we examined the effect that a prolonged economic recovery, a rising interest rate level and a weakening exchange rate would have on capital adequacy. For the baseline scenario of the stress test the GDP forecast published in the September Inflation Report was used, which is a range due to the COVID-19 induced economic uncertainty. In the stress testing exercise, the impact of the stress scenario on the financial system was compared to this baseline scenario (Chart 76). In the stress scenario, we examined the effect of the simultaneous occurrence of multiple risks: the severity of the COVID-19 pandemic and the downside risks to global growth slow down the formerly anticipated recovery of Hungary's markets, causing a significant drop in domestic growth and damage to production capacities. Furthermore, increased risk avoidance in the private sector cause businesses postponing planned investments and introducing lay-offs. As a result, domestic output would fail to recover next year, and economic growth would be short of the baseline scenario by a cumulative 6-7 per cent over two years. In the stress scenario the economic slowdown is accompanied by unfavourable financial conditions (rising interest rates and weakening exchange rate).

²³ In fact, we underestimate the effect of the liquidity-expanding measures as the suspended sanctioning of under-reserving directly increased the banks' liquidity buffer, and therefore it does not count as an additional adjustment channel.

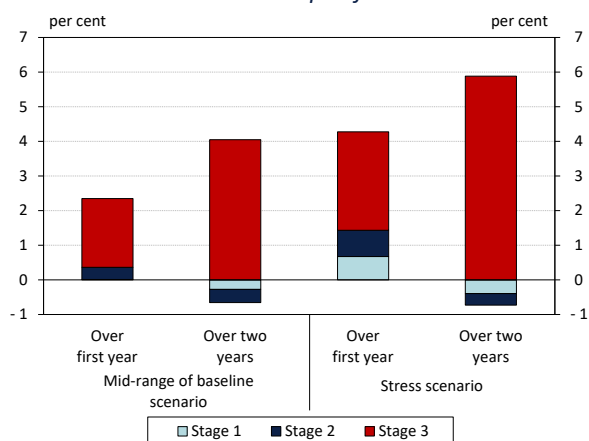
Chart 77: Cumulated loan loss provision rate for the corporate portfolio



Note: Net generated loan loss provisions, cumulated from the start of the stress test, grouped by end-of-period stages. In proportion to the gross book value of the corporate portfolio. Source: MNB

Our credit risk models also took into account the extension of the loan moratorium and the effect of the repayment option. In our impairment calculations, the moratorium-induced modifications implemented in the May 2020 Financial Stability Report remain effective, and we also still take into account the higher credit risk of the sectors considered particularly vulnerable as a result of the pandemic. Additionally, our model was supplemented to handle those opting for repayment by the end of June 2020: in their case willingness to continue repayment during the entire moratorium period was assumed. At the same time, the calculation of transition probabilities also considered the fact that their possible default would have been masked by the automatically applied moratorium. Our models take into account the impact of moratorium extension among the eligible parties,²⁴ as well: the impact of a credit risk increase resulting from the deteriorating macroeconomic environment during the moratorium period was considered in the post-moratorium transition probabilities, which occur in 2021 Q1 or Q3 depending on eligibility for extension.

Chart 78: Cumulated loan loss provision rate for the household portfolio

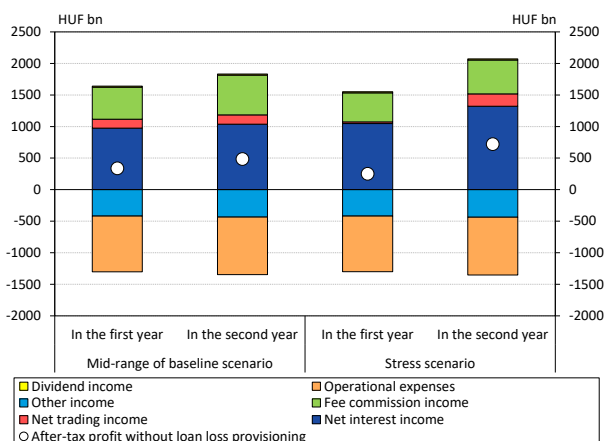


Note: Net generated loan loss provisions, cumulated from the start of the stress test, grouped by end-of-period stages. In proportion to the gross book value of the household portfolio. Source: MNB

Compared to the spring-time stress test results, the relative proportion of Stage 3 increased markedly within additional loan loss provisioning. In the stress scenario, with the inclusion of the shock into expectations a significant portion of the two-year additional loan loss provisioning appears at the start of the scenario in accordance with the IFRS 9 standard, irrespective of the current impossibility of delinquency due to the payment moratorium. After that, a significant number of contracts are expected to shift to the past due categories due to the deteriorating economic environment. As a result, the impairment recognised for performing loans will decrease by the end of the second year for the household portfolio, and by the end of the first year for corporate loans. This phenomenon can be observed particularly in the periods following the original and the extended moratorium terms. According to our estimate (taking into account the decrease observed in Stage 1, and also in Stage 2 for the household portfolio), the total additional provisioning need in the stress scenario would reach 2.6 per cent of the aggregate gross book value of the corporate portfolio (Chart 77), and 5.1 per cent of the household portfolio (Chart 78) over two years. Our model predicts that the ratio of loans past due for over 90 days to the gross loan portfolio would rise

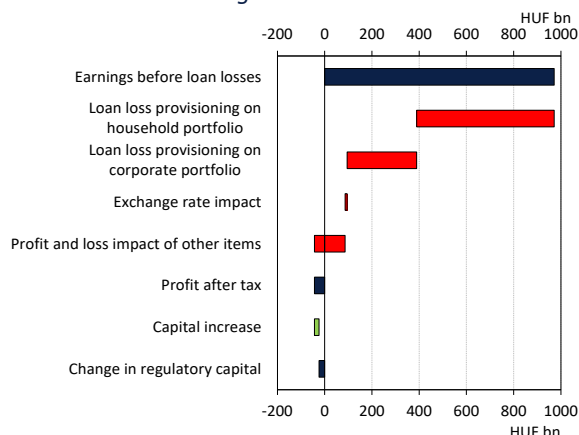
²⁴ The scope of eligible parties was identified based on the wage data available up to 2017 for the households, and on the basis of the MNB survey presented in Chapter 3 of this Report for the businesses. As for the household loans in relation to which there was no information to draw conclusions about extension eligibility (due to the different years of availability in respect of the loan and wage data), the eligible parties were selected randomly, assuming that the proportion of eligible debtors among the clearly identified ones was equal to the population proportion for each loan type. Random selection was used to determine the eligible parties in respect of the corporate portfolio as well, with proportions available at the level of activity.

Chart 79: Developments in items of profit before loan losses



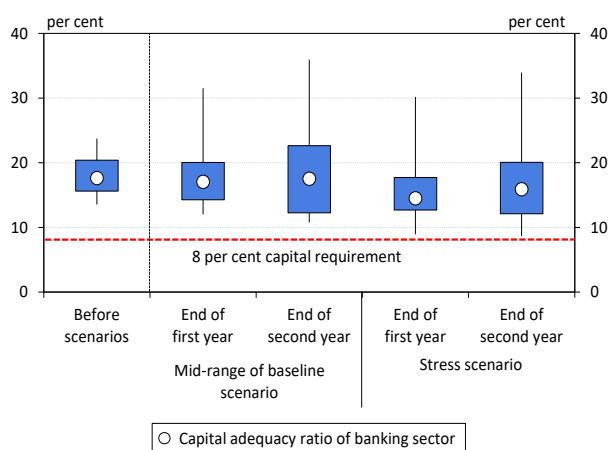
Source: MNB

Chart 80: Developments of certain profit and loss statement items in the stress scenario, at the banking sector level



Note: Values cumulated over 2 years. The profit or loss effect of other items consists of the following elements: NDIF, IPF and Resolution Fund fee, bank levy, capital needs of foreign subsidiaries and profit of financial enterprises belonging to bank groups. Source: MNB

Chart 81: Distribution of the capital adequacy ratio based on the number of banks



Note: Vertical line: 10–90-per cent range; rectangle: 25–75-per cent range. Source: MNB

by the end of the second year to 5.1 per cent for the corporate, and to 11.4 per cent for the household portfolio.

The profit before loan losses exceeds the baseline scenario result by approximately HUF 150 billion in the two-year stress scenario, primarily as the result of the interest rate shock. In the forecast of profit before loan losses, our stress test switched to a new modelling framework in which the main profit items are predicted separately (Box 8). Since the impact of the individual scenarios on net interest income appears explicitly in the new framework, the effect of the interest rate shock is provided for here. There is significant loss on items held at fair value occurring with the interest rate increase at the time the stress scenario materialises, and therefore net trading income (in which this change in value appears) is significantly lower than the baseline result in the first year of the stress scenario (Chart 79). However, this loss is reduced over time due to the so-called ‘pull-to-par effect’, i.e. the convergence of fair values to face values over time. Moreover, the increasing interest rates in the stress scenario also improve banks’ earnings through higher interest revenues via spilling over into interest payments. This improvement cannot be outweighed by the deteriorating fee and commission income in the stress scenario (resulting from reduced business activity in the weakening economic environment), with the result that there is a cumulative HUF 150 billion higher profit before loan losses compared to the baseline scenario over two years.

In the stress scenario, almost three fourths of the banks become loss-making, with decreasing regulatory capital at the sectoral level. The additional provisioning needs of the household and corporate portfolios in the two-year stress scenario eat up HUF 876 billion of the estimated HUF 971 billion profit before loan losses in the sector. The profit or loss effect of the other items would turn the sector-level after-tax profit into a loss of HUF 43 billion (Chart 80). In the quarter in which the stress materialises almost every institution would recognise losses, while over the two years almost three fourths of banks would become loss-making. In contrast, in the baseline scenario, half of the number of banks, and – weighted by risk-weighted assets – 34.8 per cent of the sector would suffer losses over the two years. The recognition of the already approved, but not yet realised capital injections slightly improves the sector’s situation, nevertheless, it would still end up with a decrease in regulatory capital at the end of the stress scenario.

Our stress scenario highlights vulnerability in a small portion of the banking sector, but the capital needs that arise appear manageable from a financial stability perspective.

Table 3: Stress test results with different capital requirements

	Before scenarios	8-per cent capital requirement		All capital requirements*	
		Mid-range of baseline scenario	Stress scenario	Mid-range of baseline scenario	Stress scenario
Capital need of banks (HUF bn)	0.0	0.0	25.2	32.9	86.2
Average capital need of banks (percentage points)	0.0	0.0	1.5	2.3	3.1
Capital buffer of banks above requirement (HUF bn)	1 808.6	1 947.9	1 652.3	1 265.0	987.8
Average capital buffer of banks above requirement (percentage points)	10.2	10.2	9.5	8.1	7.4

Note: *Capital requirements effective at the time of the publication. Data for before the scenarios are 2020 Q2 figures, while data of the respective scenarios pertain to the end of the second year of the scenario. Source: MNB

In the baseline scenario, the sector-level capital adequacy ratio remains essentially unchanged compared to the value at the start of scenario, but the range of the end-of-second-year distribution indicates significant heterogeneity across banks (Chart 81). In the stress scenario most of the losses are realised in the first year, by the end of which the sector-level CAR decreases by approximately 3.1 percentage points. However, the sector's aggregate CAR falls short of the initial actual value by 1.7 percentage points even at the end of the stress scenario. The tenth percentile of the distribution approaches the Pillar 1 capital requirement of 8 per cent, indicating vulnerability for only a fraction even in the event of a severe stress scenario. By weighting banking groups with their risk-weighted assets (RWA), for the end of the second year, 7.8 per cent of the banking sector would fall below Pillar 1's 8-per cent threshold, requiring HUF 25 billion worth of capital injection (Table 3). Considering all capital requirements effective at the time of publication, the need for capital injection increases to HUF 86 billion.

BOX 8: IMPROVEMENTS TO THE SOLVENCY STRESS TEST'S PROFITABILITY MODEL

In this stress test, the calculation of the banks' income forecast is based on a model with a more detailed breakdown by main profit items. The profit before loan losses was previously projected according to a static econometric model estimated on a bank-level panel database based on the methodology presented by Banai et al. (2013).²⁵ This approach, however, failed to allow for a detailed analysis of the projected income broken down by profit items and to reveal the explicit impact mechanisms of profit development. Therefore, a transition was initiated to a model framework in which the scenario-dependent forecasts of the main profit components are prepared separately. In the current format of the model, the interest income, the commission and fee income and the trading income's specific sub-items are modelled in more detail.

The projection of interest income is based on our interest rate risk model.²⁶ The macroeconomic environment primarily shapes the banks' interest income by the extent of the received and paid interests (interest rate risk) and the interest's probability of receipt (credit risk).²⁷ On the one hand, the model was changed in order to calculate the interest income realised in the individual yield curve scenarios for each interest-sensitive item, instead of the impact of interest rate change. On the other hand, the impact of credit risk on interest income is presented by taking into account the projected probability of non-performance in the interest revenues anticipated for each contract, quantified from our credit risk models capturing the impact of macro and transaction level variables. At the same time, we sought to fully capture the banks' interest revenues and interest expenditures, and thus quantified the interest revenues expected, for example, on non-maturing loan products such as credit cards and overdrafts, at a portfolio level.

In contrast to the interest rates, directly capturing the specific services and fee-generating transactions and commissions as well as their pricing is more difficult; therefore the modelling of this profit item is performed in a dynamic fixed effect panel regression framework with error autocorrelation. The time series of the applied database start from

²⁵ Ádám Banai, Zsuzsanna Hosszú, Gyöngyi Körmendi, Sándor Sóvágó, Róbert Szegedi (2013): Stress Testing at the Magyar Nemzeti Bank, MNB Occasional Papers, No. 109.

²⁶ The interest rate risk model is presented in more detail in Box 10 of the [May 2020 Financial Stability Report](#).

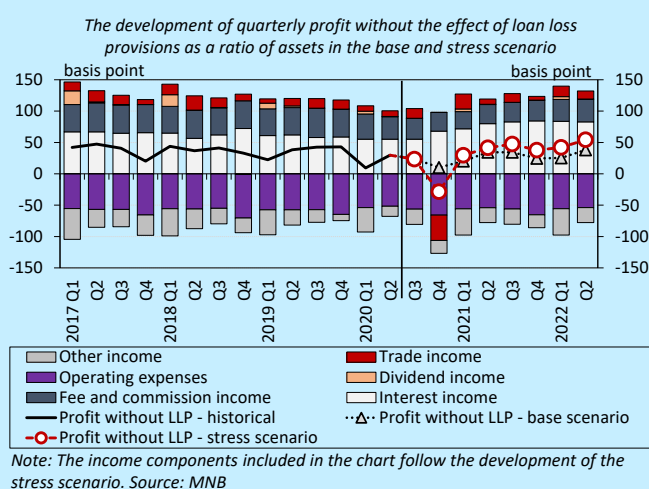
²⁷ The exchange rate risk, considered as the third channel materially shaping interest income, is calculated separately in the current stress testing framework, using the total open FX position of the banking sector.

the beginning of 2008²⁸ with quarterly frequency, including all 20 currently operating bank groups and individual institutions. Separation from the interest income, alongside the incorporation of the lagged dependent variable, allows for a more accurate identification of channels influencing the item and the inclusion of the item's persistence as a ratio of total assets. The scope of explanatory variables to be used was narrowed by the availability of data varying in time and across banks, as well as the predictability of time series coherent with macroeconomic scenario variables. Of the suitable variables, the lagged value of the fee and commission income as a ratio of total assets, the dummy variable capturing the fee increase following the introduction of the transaction tax, the annual GDP growth and inflation proved to be statistically significant and compatible with economic intuition. As for the coefficients, the target variable indicates significant, 70-per cent persistence. In a given period, presumably capturing a deteriorating economic environment, a 1-percentage point decline in GDP growth rate reduces the target variable by 0.3 basis point, while a 1-percentage point rise in the inflation rate reduces it by 0.5 basis point, which is considered significant compared to the dependent variable's 2020 Q2 average of 0.3 per cent. Moreover, persistence boosts both one-time effects in the longer term.

From trading income, the impact of the scenarios on balance sheet items held at fair value was modelled separately, using the interest rate risk model. Through developments in loan interest revenue and deposit interest expenditure, the projected gradual changes in the interest rate paths in the scenarios are presented with periodical parallel shifts in the yield curve. However, in the case of securities and derivatives, compared to the interest rate path appearing in the initial yield curve, we quantified the impacts of parallel, one-time and permanent yield curve shifts occurring in the stress scenario in Q2. Therefore, the impairment of items held at fair value generates substantive loss with the shock-like interest rate rise which, however, is compensated at a later stage with value increase due to the items approaching maturity and thus face value, on the one hand, and the growing interest revenues, on the other hand.

The remaining profit components were projected based on the average of former periods. These include dividend income, operating expenses, trading income adjusted for revaluation, non-credit related impairment loss and provisioning, and other profit and loss also comprising tax payment. In the case of seasonality, the projections were based on the average of the respective quarters in the past three years; otherwise, the average for all quarters was used. The only exception was dividend income, which – reflecting the setback in 2020 brought about among others by regulatory incentive – was estimated based on the past one-year level as a ratio of total assets. Thanks to the current methodology, the development of the mentioned four items in the baseline and stress scenarios does not differ. Since the balance sheet total estimated for the end of each period should also contain profit or loss for the specific quarter, every profit component estimated as a ratio of total assets was taken into account, using the balance sheet total at the end of the previous period.

The cumulative profit calculated without the negative effect of portfolio-level impairment on profit or loss in the banking sector is moderately higher in the stress scenario. This is primarily attributable to the fact that the negative effect of the interest rate shock materialising in the second quarter of the stress scenario (2020 Q4) on assets held at fair value, the rising ratio of non-performing loans and the decrease in commission and fee income were successfully compensated by a rise in the interest margin. The sector-level cumulative profit without impairment is approximately HUF 150 billion higher in the full two-year stress scenario than in the baseline scenario. However, there is significant heterogeneity in respect of individual profitability across banks.



²⁸ In determining the time horizon we sought to maximise the information content of the database, and also to avoid structural breaks in the business model of the institutions.

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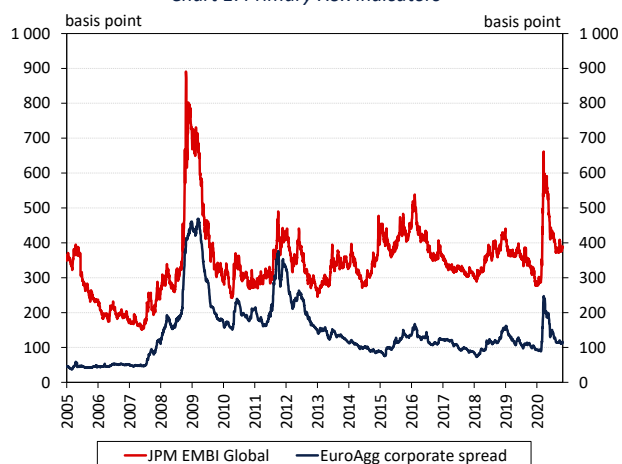
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APPENDIX: MACROPRUDENTIAL INDICATORS

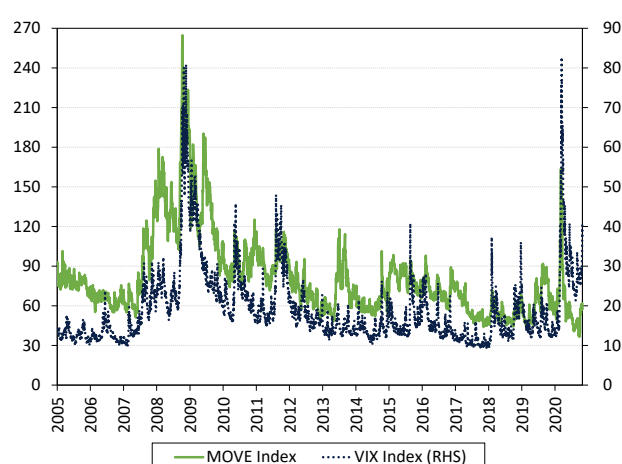
1. Risk appetite

Chart 1: Primary risk indicators



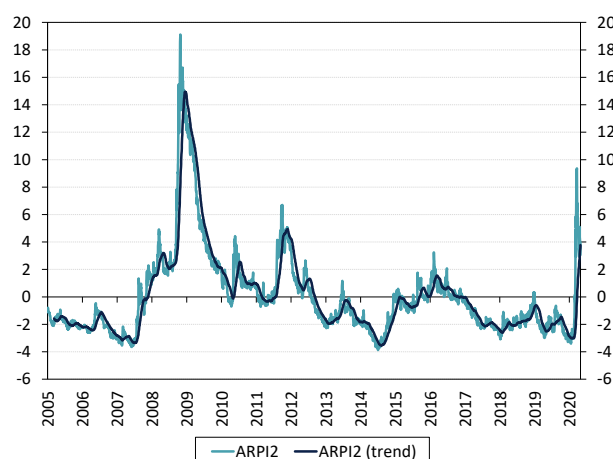
Source: Bloomberg.

Chart 2: Implied volatility of the primary markets



Source: Datastream, Bloomberg

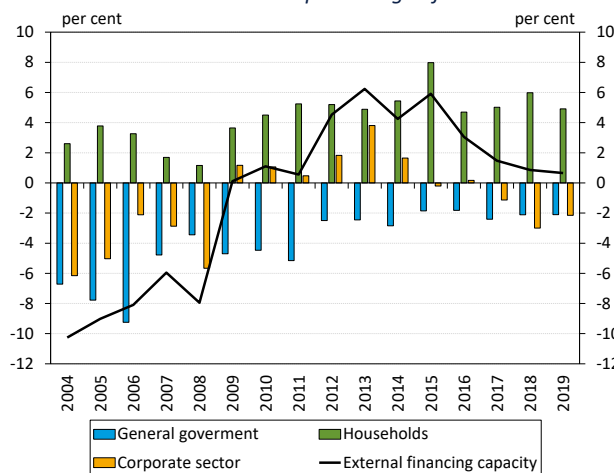
Chart 3: Dresdner Kleinwort indicator



Source: DrKW

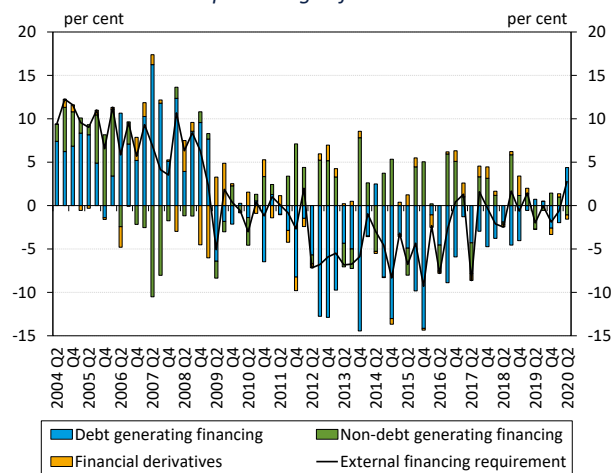
2. External balance and vulnerability

Chart 4: Net financing capacity of the main sectors and external balance as percentage of GDP



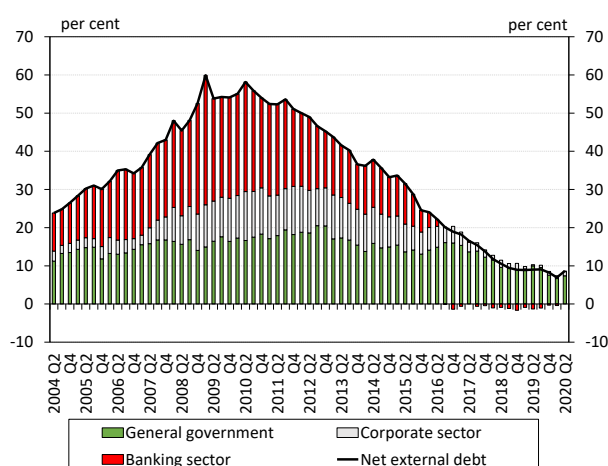
Source: MNB

Chart 5: External financing requirement and its financing as a percentage of GDP



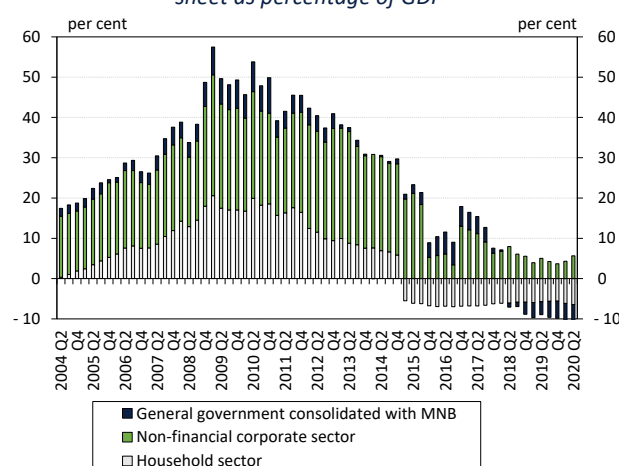
Source: MNB.

Chart 6: Net external debt as a percentage of GDP



Source: MNB

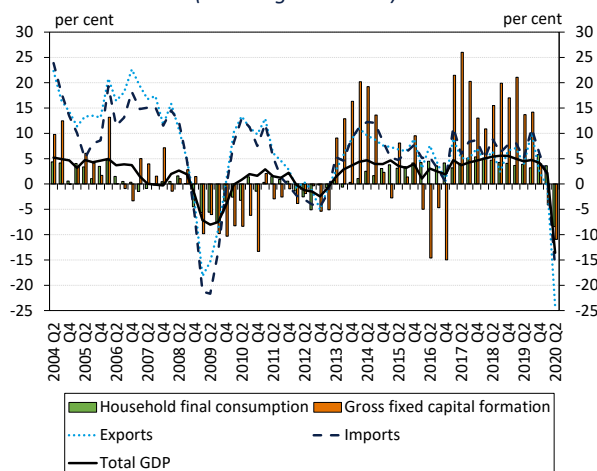
Chart 7: Open FX position of the main sectors in the balance sheet as percentage of GDP



Source: MNB

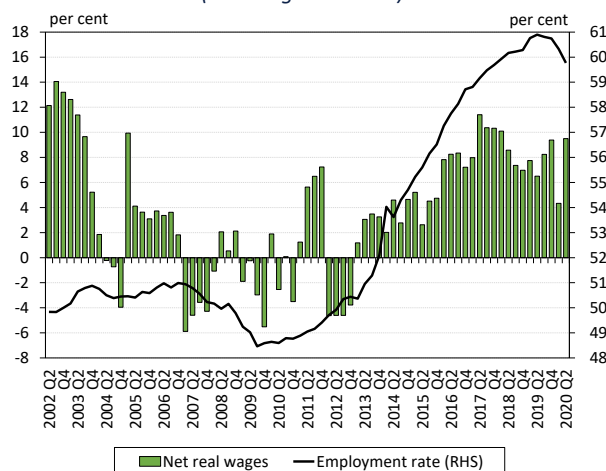
3. Macroeconomic performance

Chart 8: GDP growth and its main components (annual growth rate)



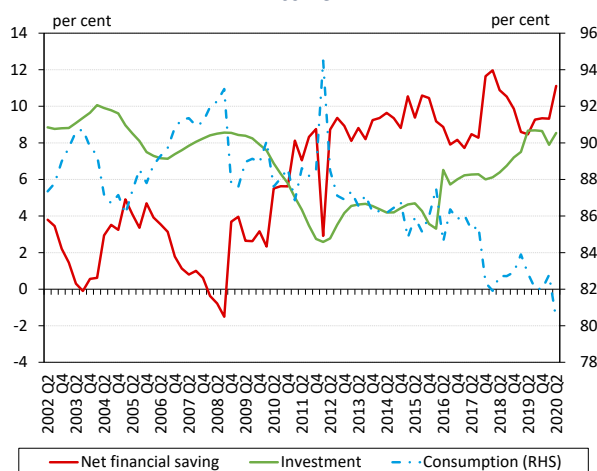
Source: HCSO

Chart 9: Employment rate and net real wage developments (annual growth rate)



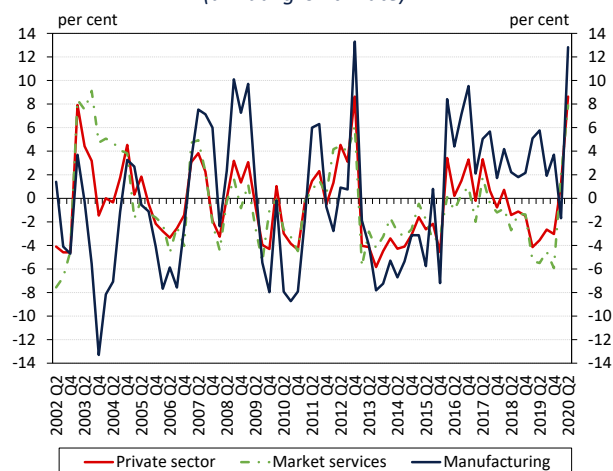
Source: HCSO

Chart 10: Use of household income as a ratio of disposable income



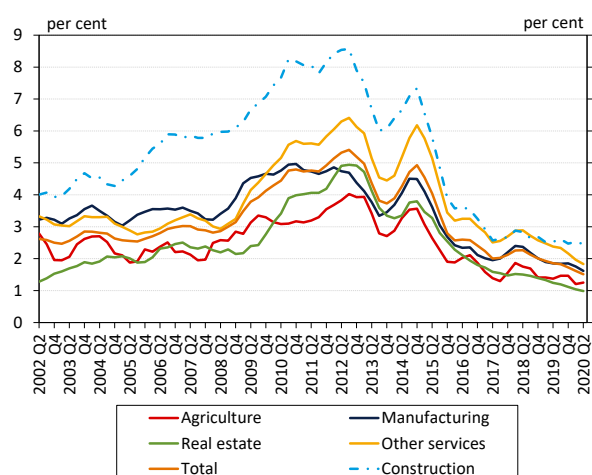
Source: HCSO, MNB

Chart 11: Corporate real unit labour cost in the private sector (annual growth rate)



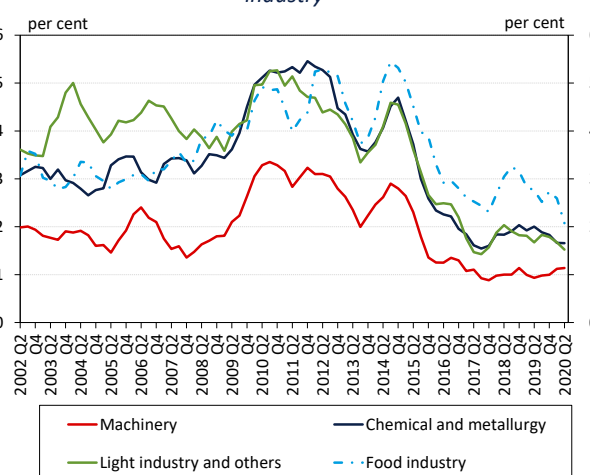
Source: HCSO, MNB

Chart 12: Sectoral bankruptcy rates



Source: Opten, MNB, HCSO

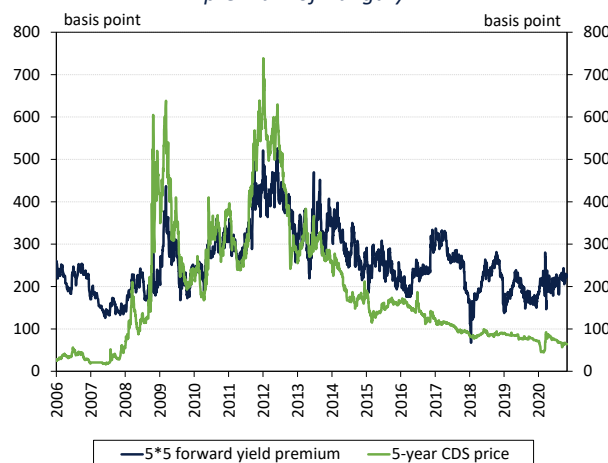
Chart 13: Bankruptcy rates for the subsets of manufacturing industry



Source: Opten, MNB, HCSO

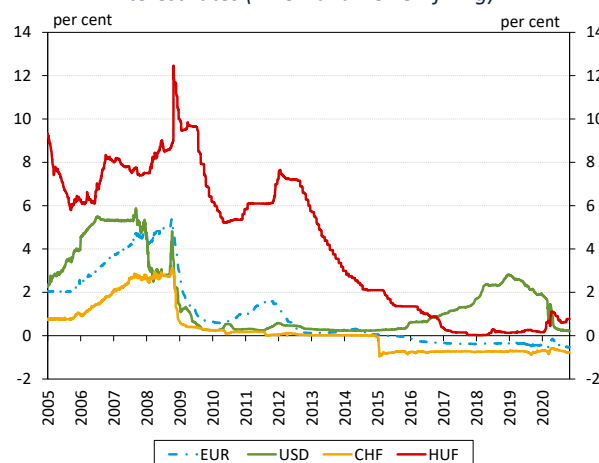
4. Monetary and financial conditions

Chart 14: Long-term sovereign default risk and forward premium of Hungary



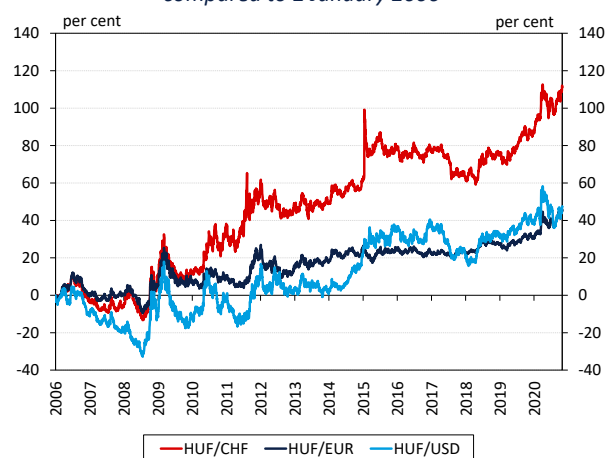
Source: Datastream, Reuters, Bloomberg

Chart 15: Three-month EUR, USD, CHF and HUF money market interest rates (LIBOR and BUBOR fixing)



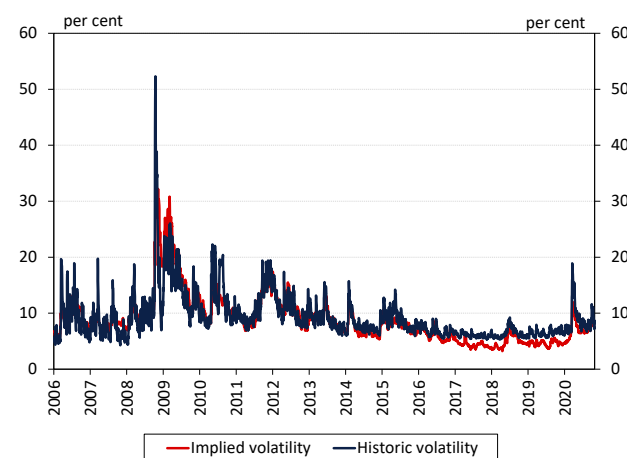
Source: Reuters

Chart 16: HUF/EUR, HUF/USD and HUF/CHF exchange rates compared to 2 For 1 January 2006



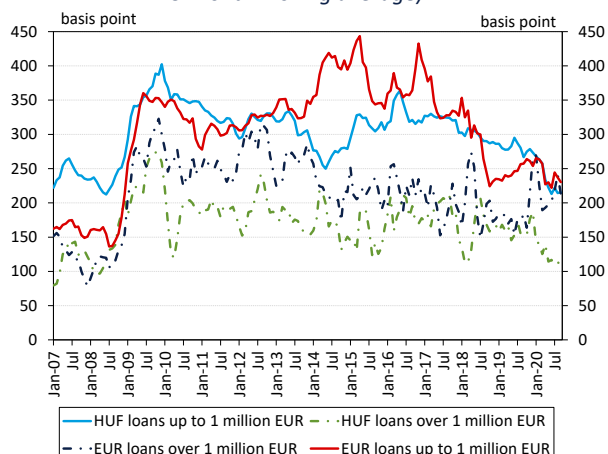
Source: Reuters.

Chart 17: Volatility of the HUF/EUR exchange rate



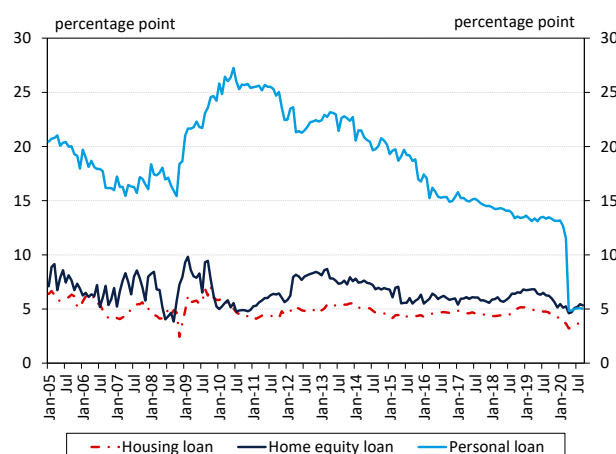
Source: MNB, Reuters

Chart 18: Interest rate premium of new loans to non-financial enterprises (over 3-month BUBOR and EURIBOR, respectively, 3-month moving average)



Source: MNB.

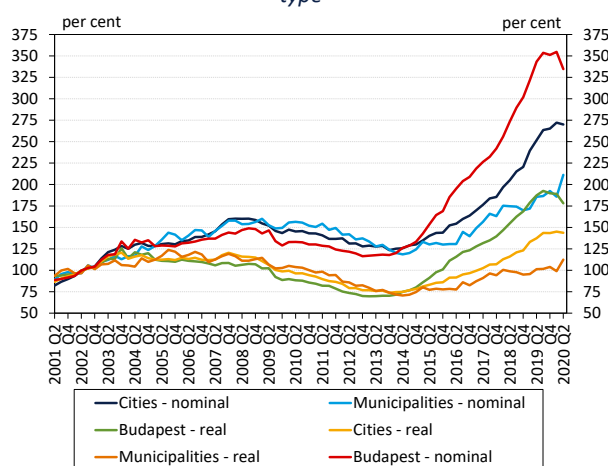
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Source: MNB

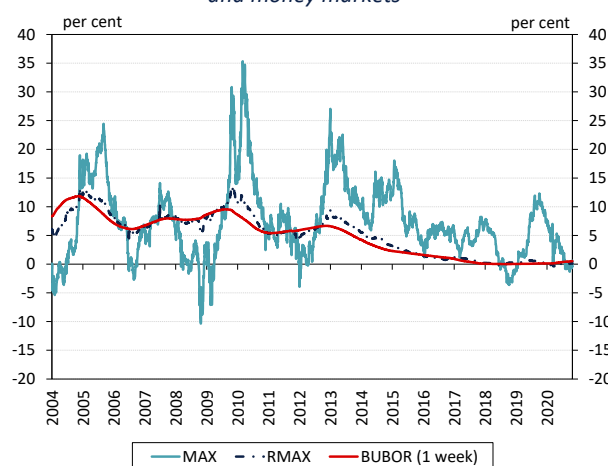
5. Asset prices

Chart 20: MNB house price index breakdown by settlement type



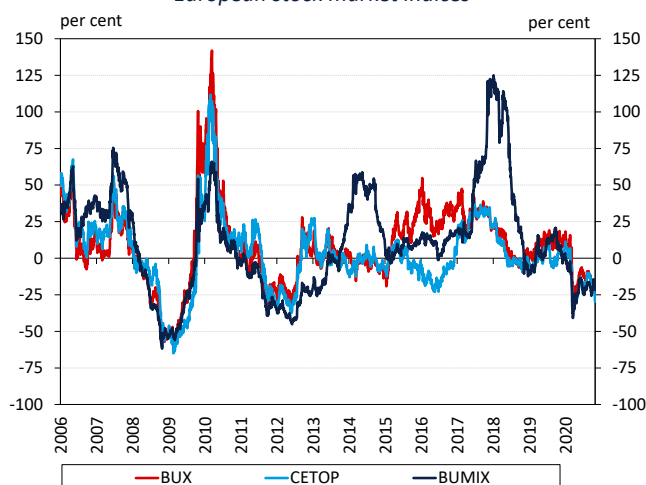
Source: MNB

Chart 21: Annualised yields on government security indices and money markets



Source: Government Debt Management Agency, MNB, portfolio.hu.

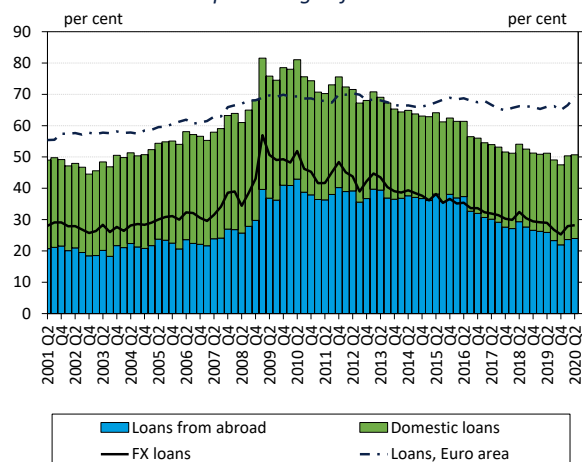
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Source: BSE, portfolio.hu

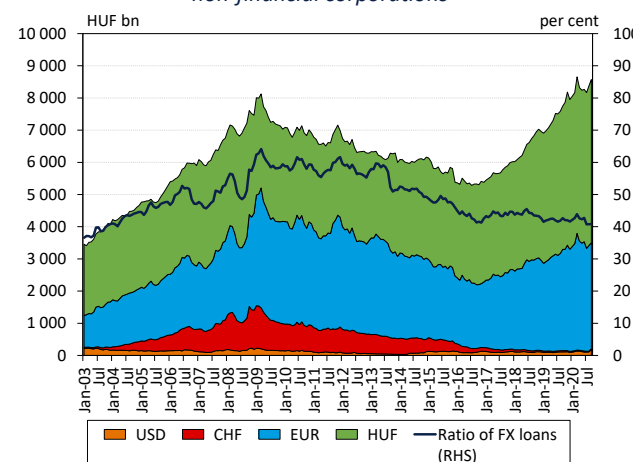
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Chart 23: Indebtedness of non-financial corporations as percentage of GDP



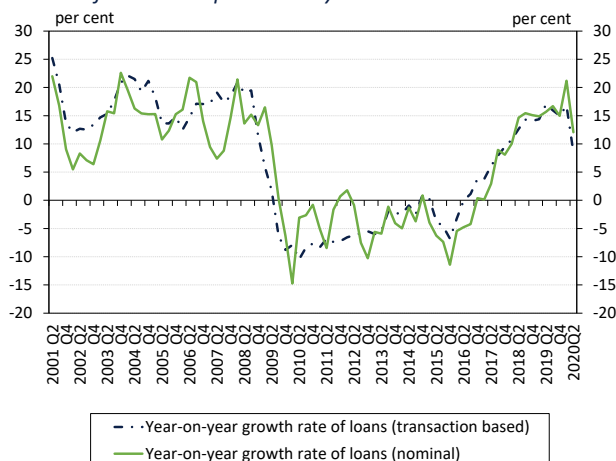
Source: MNB, ECB, Eurostat.

Chart 24: Denomination structure of domestic bank loans of non-financial corporations



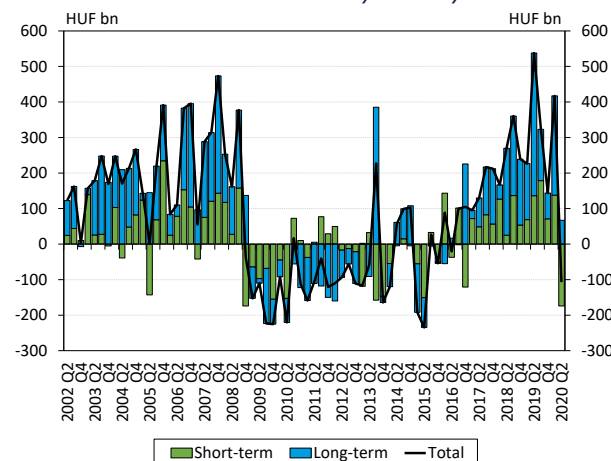
Source: MNB

Chart 25: Annual growth rate of loans provided to non-financial corporations by credit institutions



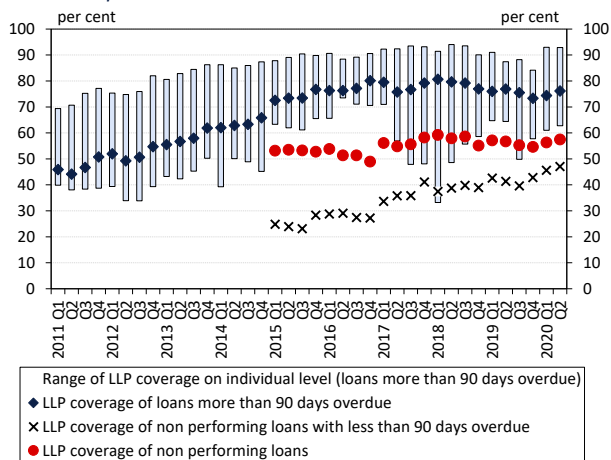
Source: MNB

Chart 26: Lending transactions to the non-financial corporate sector broken down by maturity



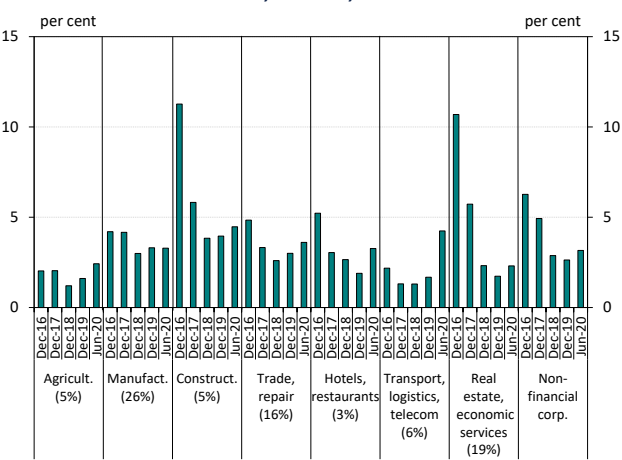
Source: MNB

Chart 27: Loan loss coverage ratio for non-performing corporate loans in the credit institutions sector



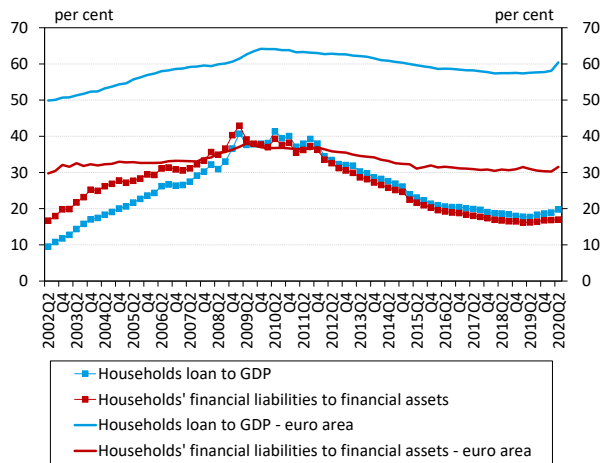
Source: MNB.

Chart 28: Provisioning on loans of non-financial corporations by industry



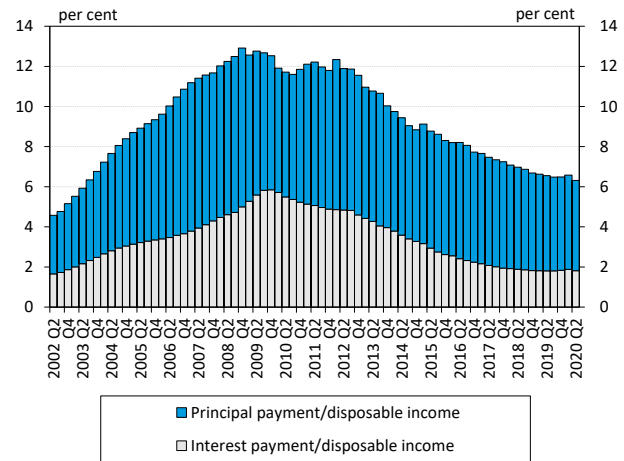
Source: MNB.

Chart 29: Indebtedness of households in international comparison



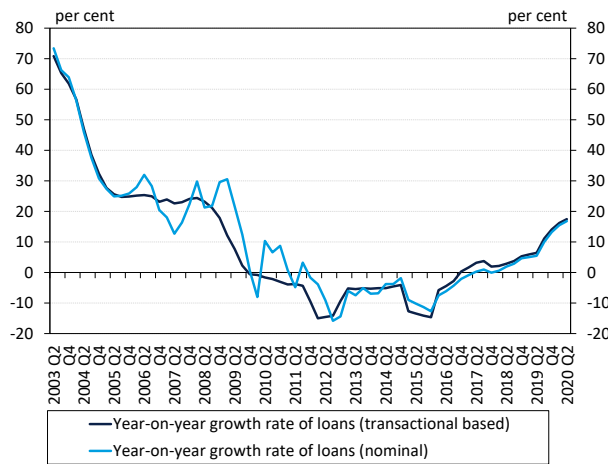
Source: MNB, ECB.

Chart 30: Debt service burden of the household sector



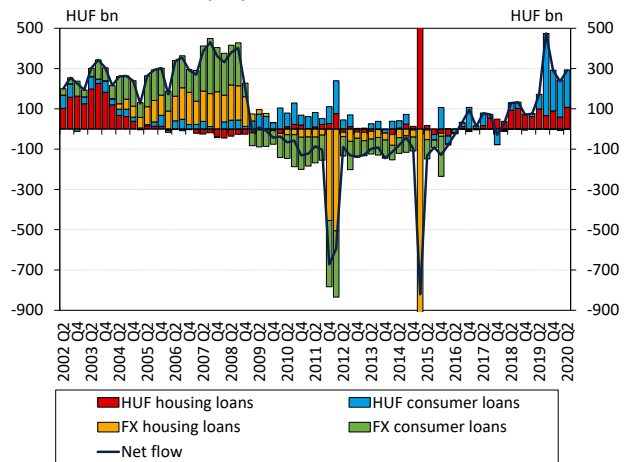
Source: MNB.

Chart 31: Annual growth rate of total domestic household loans



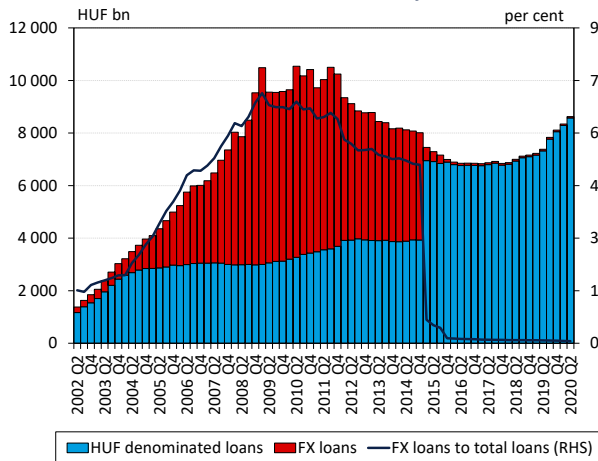
Source: MNB

Chart 32: Transactions of household loans broken down by credit purpose and denomination



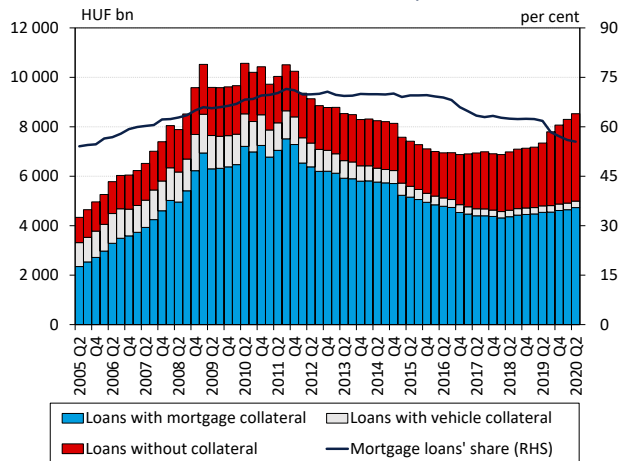
Source: MNB

Chart 33: The denomination structure of household loans



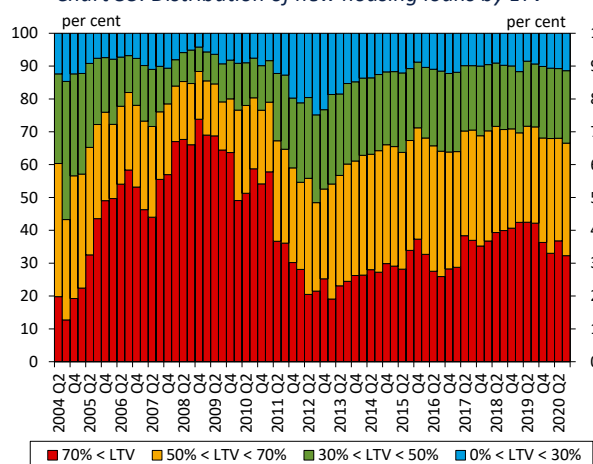
Source: MNB

Chart 34: Household loans distribution by collateralisation



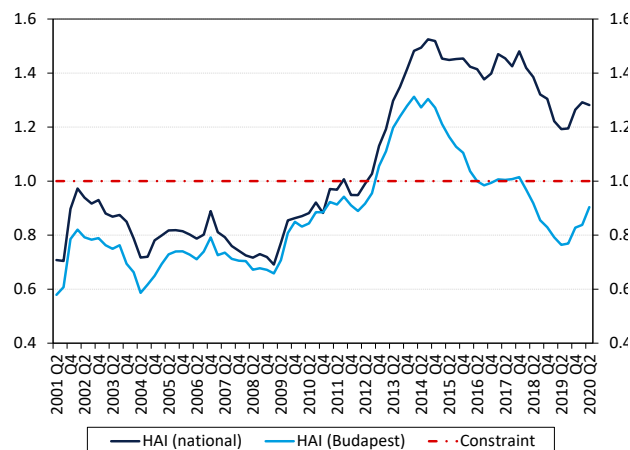
Source: MNB

Chart 35: Distribution of new housing loans by LTV



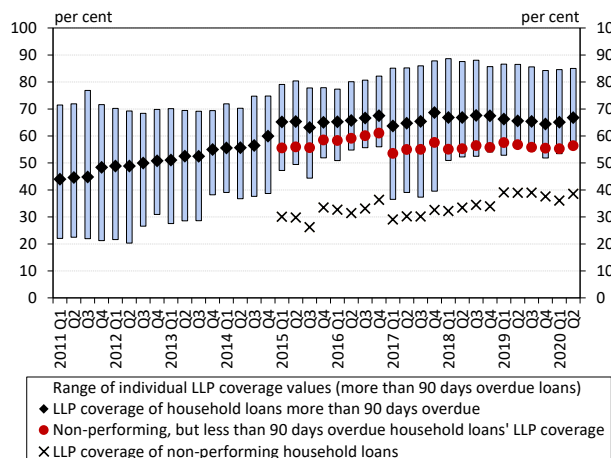
Source: MNB

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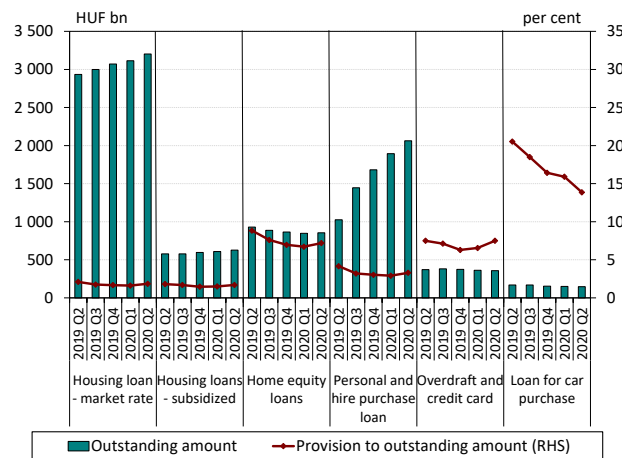
Source: MNB

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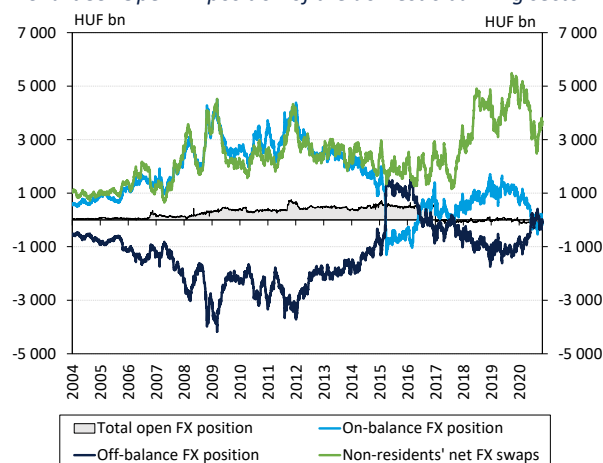
Source: MNB

Chart 38: Provisioning on household loans of financial institutions



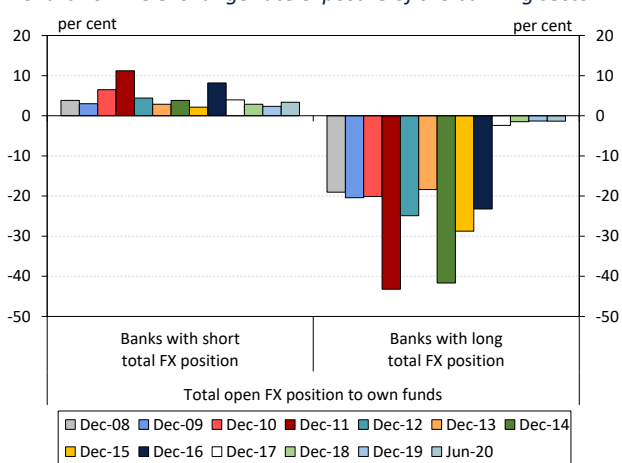
Source: MNB

Chart 39: Open FX position of the domestic banking sector



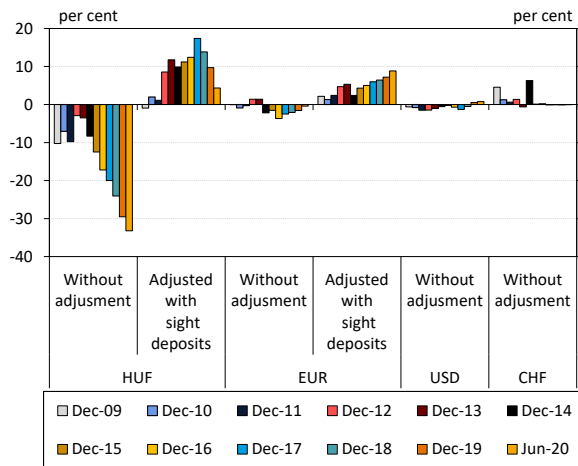
Source: MNB

Chart 40: The exchange rate exposure of the banking sector



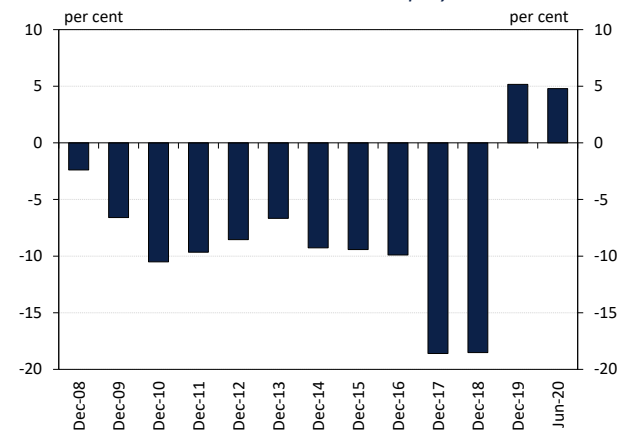
Source: MNB

Chart 41: 90-day re-pricing gap of the banking sector



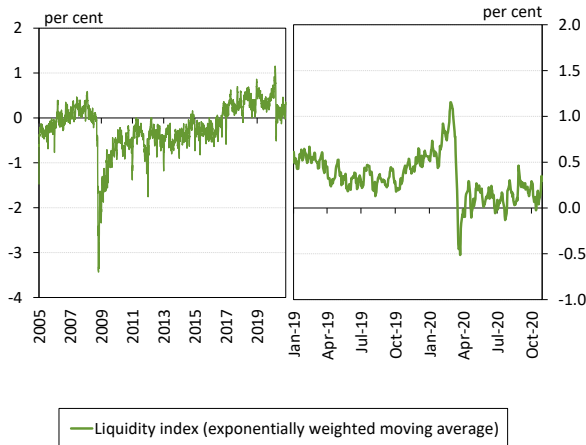
Source: MNB

Chart 42: Estimated maximum loss based on interest rate risk stress tests relative to equity



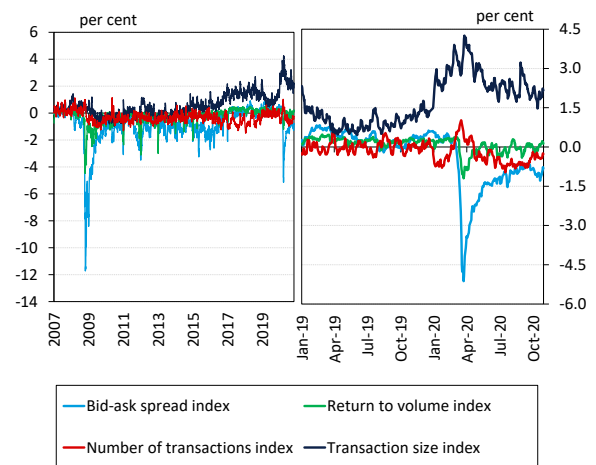
Source: MNB

Chart 43: Liquidity index (exponentially weighted moving average)



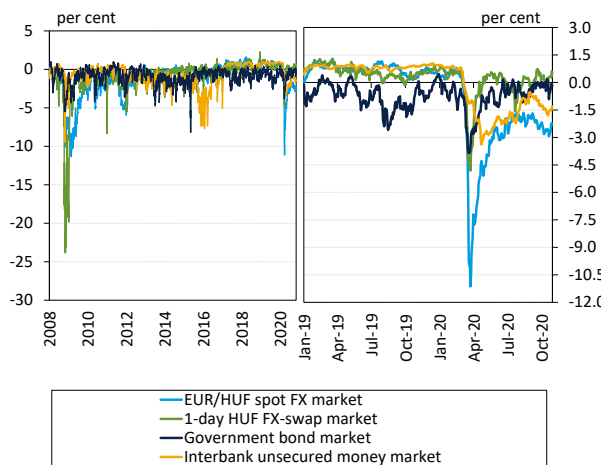
Source: MNB, KELER, Reuters, DrKW

Chart 44: Liquidity sub-indices (exponentially weighted moving average)



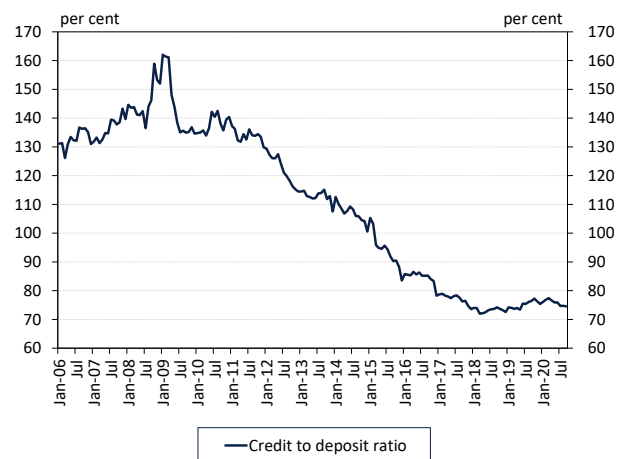
Source: MNB, KELER, Reuters, DrKW

Chart 45: Bid-ask spread indices of the major domestic financial markets (exponentially weighted moving average)



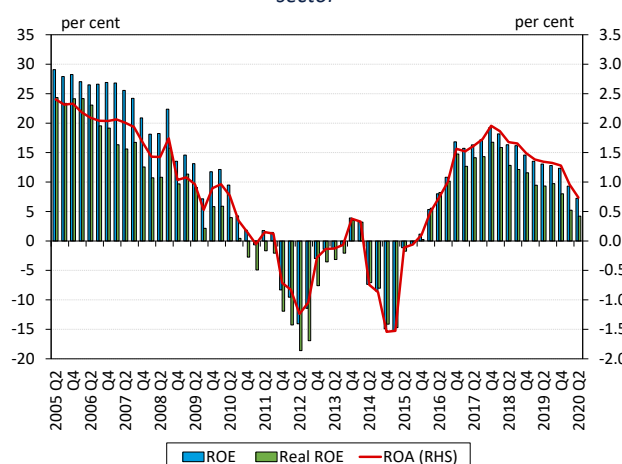
Source: MNB, KELER, Reuters, DrKW

Chart 46: Credit to deposit ratio of the banking sector



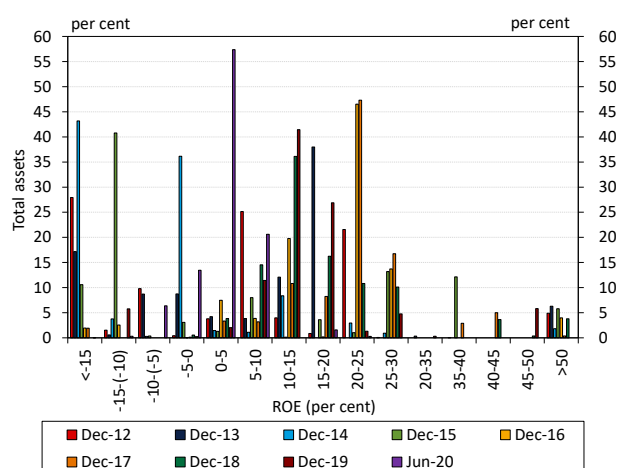
Source: MNB

Chart 47: ROA, ROE and real ROE of the credit institution sector



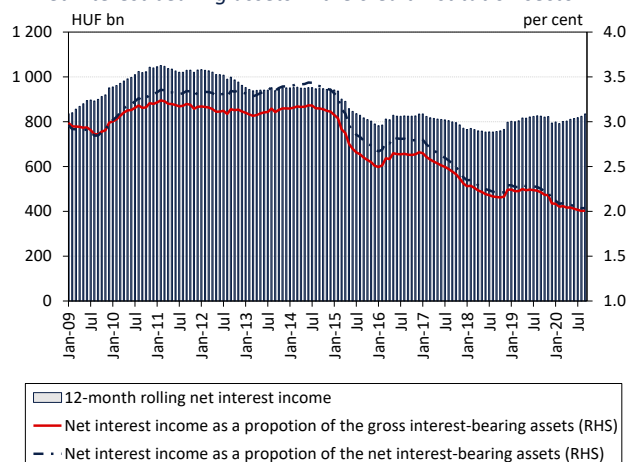
Source: MNB

Chart 48: Dispersion of banks' total assets by ROE



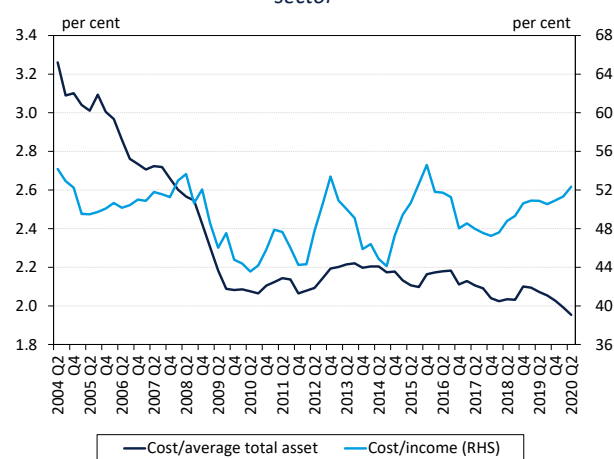
Source: MNB

Chart 49: Net interest income as a proportion of the gross and net interest bearing assets in the credit institution sector



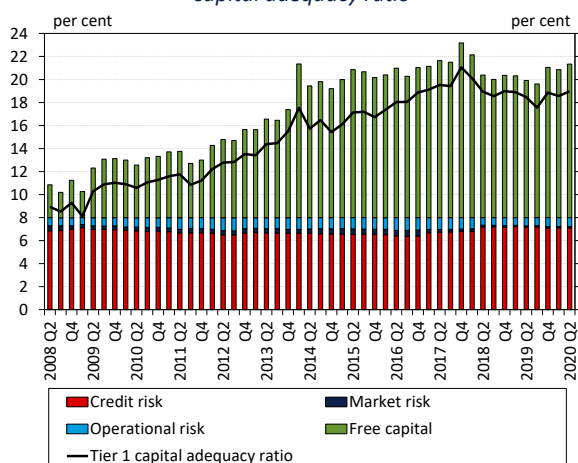
Source: MNB

Chart 50: Operating efficiency indicators of the banking sector



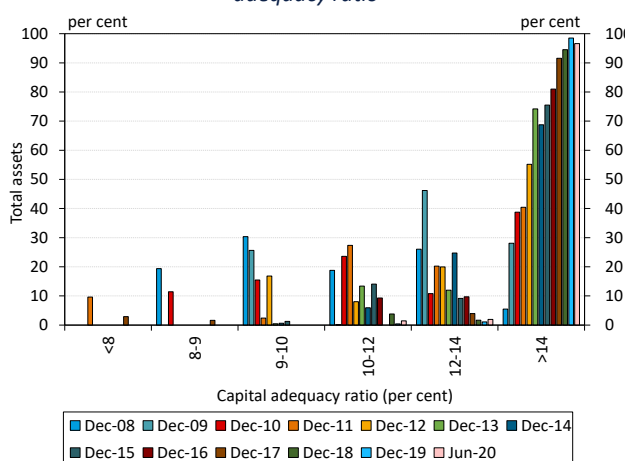
Source: MNB

Chart 51: Banks' capital adequacy ratio (CAR) and Tier 1 capital adequacy ratio



Source: MNB

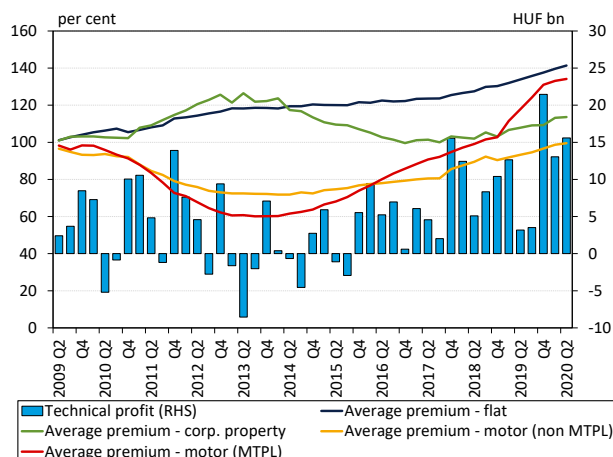
Chart 52: Dispersion of banking sector's total assets by capital adequacy ratio



Source: MNB

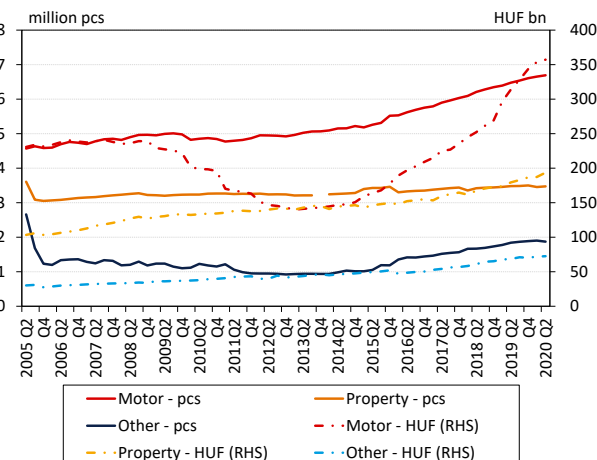
7. Institutional investors

Chart 53: Underline data of insurance tax



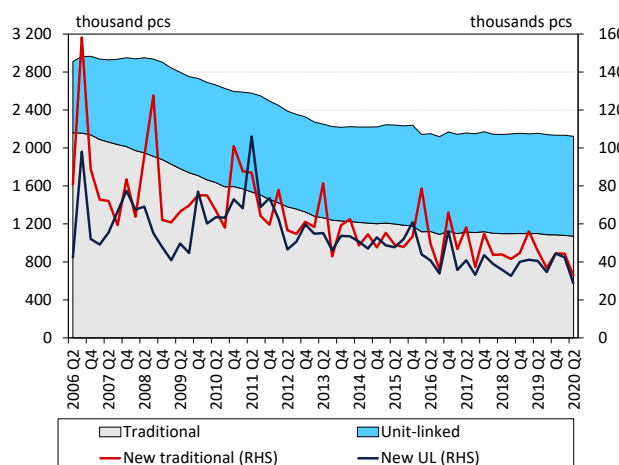
Source: MNB

Chart 54: Development of the outstanding amount of non-life insurance



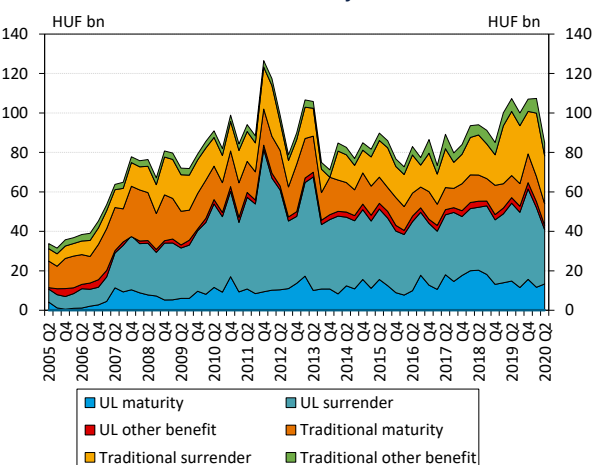
Source: MNB

Chart 55: Development of the outstanding amount of life insurance



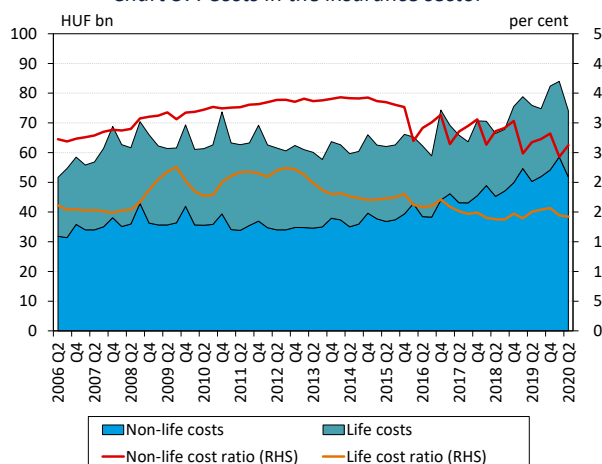
Source: MNB

Chart 56: Development of the outstanding amount of life insurance benefits



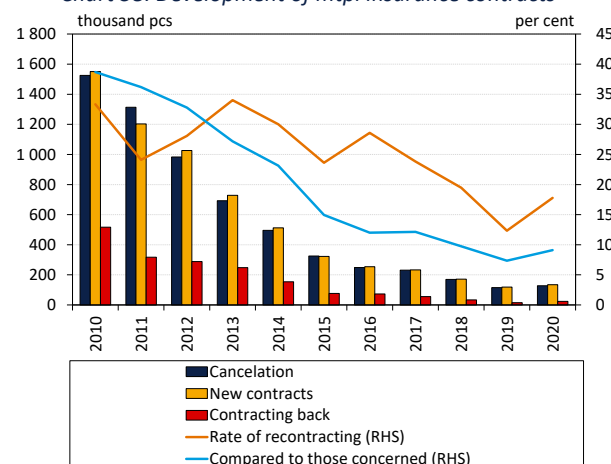
Source: MNB

Chart 57: Costs in the insurance sector



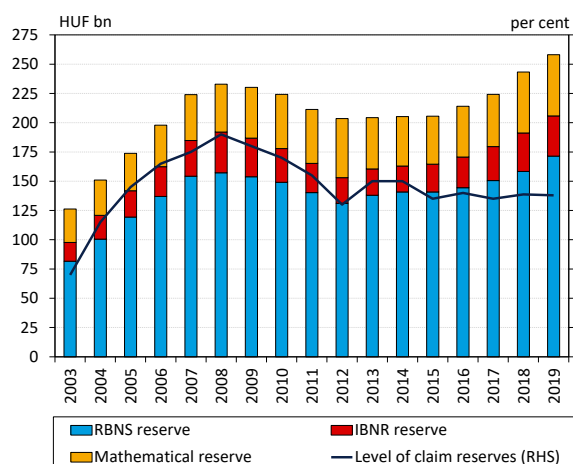
Source: MNB

Chart 58: Development of mtpl insurance contracts



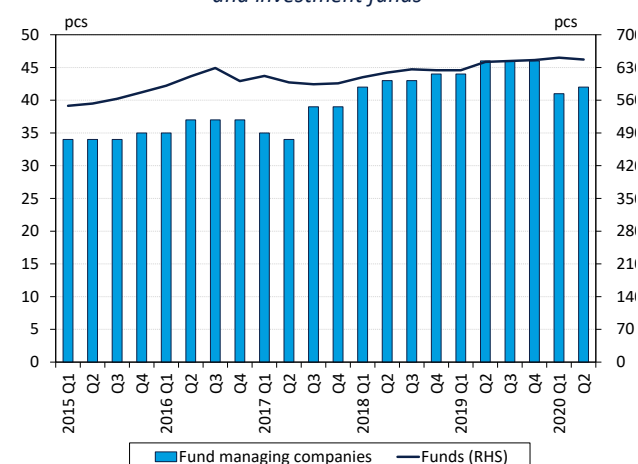
Source: MNB

Chart 59: Development of gross mtpl reserves



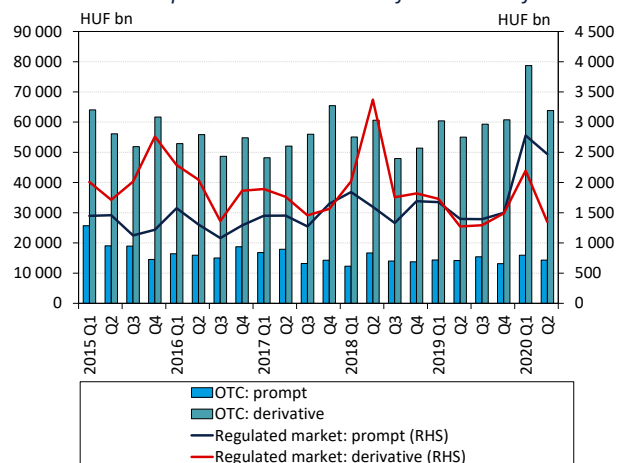
Source: MNB

Chart 60: Number of investment fund managing companies and investment funds



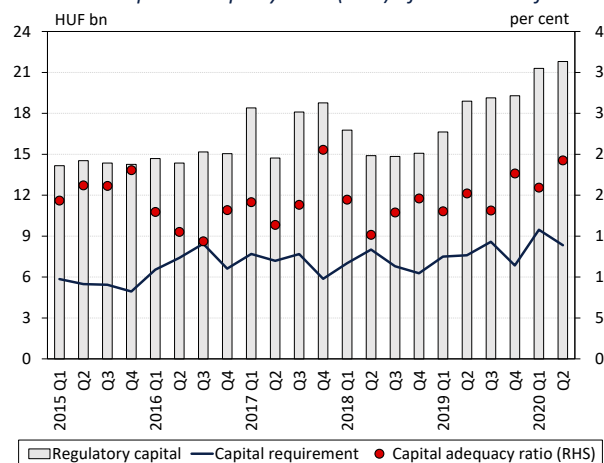
Source: MNB

Chart 61: Capital market turnover of investment firms



Source: MNB

Chart 62: Capital adequacy ratio (CAR) of investment firms



Source: MNB

Notes to the appendix

The chart date (e.g. 2016) means the end of the year (the 31st of December) unless indicated otherwise.

Chart 1:

The increased value of the indicator shows declining risk appetite or increasing risk aversion.

Chart 2:

VIX: implied volatility of S&P 500, MOVE: implied volatility of US Treasuries (Merrill Lynch).

Chart 3:

The increased value of the indicator shows declining risk appetite or increasing risk aversion.

Chart 7:

The open FX position of households has turned because of the FX conversion. The compensation of this is shown at banks temporarily (see chart 39), by time it is expected to get to the consolidated state with the MNB.

Chart 10:

Disposable income is estimated by the MNB using household consumption, investment and financial savings data.

Chart 12:

Number of bankruptcy proceedings of legal entities, aggregated as of the date of publication and cumulated for 4 quarters, divided by the number of legal entities operating a year before.

Chart 13:

Number of bankruptcy proceedings of legal entities, aggregated as of the date of publication and cumulated for 4 quarters, divided by the number of legal entities operating a year before.

Chart 14:

The 5-year forward forint risk premium as of 5 years from now, compared to the euro forward yield (3-day moving average) and the 5-year Hungarian credit default swap spread.

Chart 17:

Historic volatility: weighted historic volatility of the exchange rate (GARCH method). Implied volatility: implied volatility of quoted 30-day ATM FX options.

Chart 18:

Spread on the 3-month BUBOR and EURIBOR. Loans with floating interest or with up to 1-year initial rate fixation. Adjusted for money market loans > 1M EUR since 2015.

Chart 19:

Spreads based on the APR.

Chart 20:

2002 average = 100 per cent.

Chart 23:

Nominal values, on current rates. Based on consolidated data (previously only unconsolidated data were available for the euro area).

Chart 26:

Exchange rate adjusted values.

Chart 27:

The individual loan loss coverage range covers the banks with at least 2 per cent share in corporate lending.

Chart 28:

In brackets below the names of sectors the weights within corporate credit portfolio are indicated for end-of-observation period.

Chart 35:

The category 0-30 percent contains also the loans disbursed without mortgage before 2008.

Chart 36:

HAI shows how many times the income of a household with two average wages covers the income necessary for the purchase of an average (65 m²) dwelling from loan. Parameters of loan product except for the interest rate are throughout unchanged. LTV = 70%, PTI = 30%, maturity = 15 year.

Chart 37:

The range of LLP coverage on the individual level refers to the larger banks.

Chart 39:

An increase in the swap stock stands for swaps with a long forint spot leg. Based on the daily FX reports of credit institutions. Calculated from swap transactions between credit institutions and non-resident investors. Revisions due to reporting errors and non-standard transactions can lead to significant subsequent modifications of the data series. The data series does not include swap transactions between branches, specialised credit institutions, cooperative credit institutions and non-resident investors. The swap stock is the sum of termin legs calculated at actual foreign exchange rates.

Chart 41:

The values for December 2019 and June 2020 have been calculated in the case of the security portfolio, the IRS portfolio, loans and liabilities on a cashflow basis instead of a contract basis. In addition, in the case of loans and liabilities and for the same period, we could only take into account remaining maturities instead of the times left until repricing.

Chart 42:

The interest rate risk stress test indicates the two-year projected result of an extreme interest rate event; in this scenario this event is a parallel upward shift of the yield curve by 300 basis points. For calculating the results for December 2019 and June 2020, we applied the interest rate risk model detailed in Box 10 of the December 2019 Financial Stability Report. While for earlier calculations we assumed shocks of each currency's yield curve, for these new calculations we only assumed the shock-like upward shift of the HUF curve.

Chart 43:

A rise in the liquidity index indicates an improvement in the liquidity of the financial markets.

Chart 44:

Similarly to the liquidity index, an increase in liquidity sub-indices suggests an improvement in the given dimension of liquidity. The source of bid-ask spreads in case of HUF government bond market is calculated from the secondary market data transactions. The earlier version of the liquidity index included the CEBI bid-ask spread.

Chart 45:

A rise in the indices represents a narrowing bid-ask spread, thus an increase in the tightness and liquidity of the market. The liquidity-index of HUF FX swap market includes the data of USD/HUF and EUR/HUF segments, taking into account tom-next, overnight and spot-next transactions. The earlier version of the liquidity index included only the tom-next USD/HUF transactions.

Chart 46:

Client loans include loans and bonds of non-financial institutions, household loans, loans and bonds of financial and investment enterprises, government loans, municipal loans and municipal bonds. Client deposits include the deposits of non-financial institutions, household deposits, deposits of money market funds, deposits of financial and investment enterprises, government deposits and municipal deposits. The loan-to-deposit ratio is exchange-rate-adjusted with respect to the last period.

Chart 47:

ROE: pre-tax profit / average (equity - balance sheet profit).

ROA: pre-tax profit / average total assets.

Interim data are annualised.

Pre-tax profit: previous 12 months.

Average total assets: mean of previous 12 months.

Average (equity - balance sheet profit/ loss): 12 month moving average.

Deflator: previous year same month=100 CPI (per cent).

Chart 48:

Pre-tax profit.

Chart 49:

Based on aggregated individual, non-consolidated data.

Net interest income: 12-month rolling numbers, the difference of interest revenue and interest expenditure.

Gross interest bearing assets: 12-month average numbers, total exposure.

Net interest bearing assets: 12-month average numbers, exposure minus the provision.

Chart 50:

Cost: previous 12 months.

Income: previous 12 months.

Average total asset: mean of previous 12 months.

Chart 51:

Capital adequacy ratio (CAR) = (total own funds for solvency purposes/minimum capital requirement)*8 per cent.

Tier 1 capital adequacy ratio = (tier 1 capital after deductions/minimum capital requirement)*8 per cent.

Chart 54:

Motor insurance premiums contains insurance tax from 2019.

Chart 61:

Sum turnover of investment firms and credit institution.

Ferenc Deák

(17 October 1803 – 28 January 1876)

Politician, lawyer, judge at a regional high court, member of parliament, minister for justice, often mentioned by his contemporaries as the 'wise man of the homeland' or the 'lawyer of the nation'. Eliminating the ever-recurring public law disputes and clarifying the relationship between the ruling dynasty and the hereditary provinces, he not only reinforced the constitution and the existence of the nation but also paved the way for the development as well as the material and intellectual enrichment of Hungary.

Deák was actively involved in preparing the laws for the parliamentary period between 1839 and 1840, and he became an honorary member of the Hungarian Academy of Sciences in 1839. After the death of his elder brother in 1842, Deák the landowner liberated his serfs and voluntarily undertook to pay taxes proving that he was an advocate of economic reforms not only in words but also in deeds. He refused to fill the position of delegate to the 1843/44 parliament because he disagreed with the idea of having to be bound by the instructions received as delegate, and as a moderate political thinker he had his concerns about the radical group led by Kossuth.

He remained level-headed also with regard to the evaluation of the events of 1848, he was afraid of violence and rejected it as a political tool. All the same, he accepted the post of minister for justice in the government of Lajos Batthyány. In December 1849 he was arrested for revolutionary activities, but later on, after being tortured for information, he was released. From then on he acted as the intellectual leader of the national passive resistance movement, and believed from the very beginning that Austrian centralisation was doomed to fail due to its inherent faults. He became the leader of the Address Party in the parliament of 1861, and even though they failed to bring the monarch to accept their ideas, he increasingly managed to take over the initiative over time.

Based on his earlier proposals, in 1865 Deák published his so-called Easter Article – which radically influenced Hungarian politics of the time – and until 1867 he virtually devoted all his time to reaching a compromise with the Hapsburg dynasty. After the compromise between Austria and Hungary ratified in 1867, Hungary was able to return to the path of social and economic development.

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