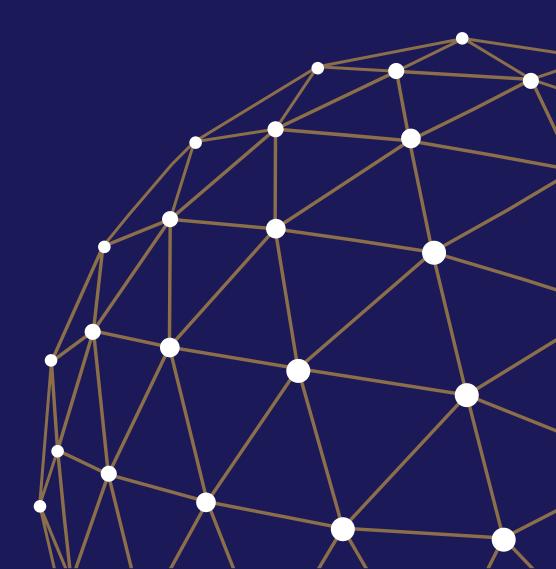
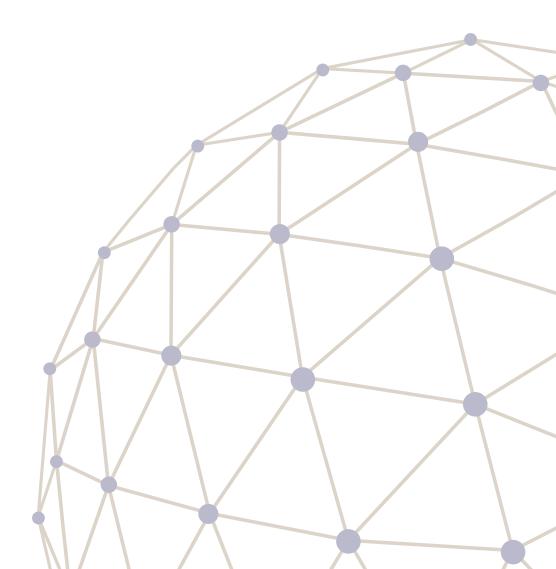


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This publication was approved by Dr Ádám Balog

Published by the Magyar Nemzeti Bank Publisher in charge: Eszter Hergár 8–9 Szabadság tér, H-1850 Budapest www.mnb.hu The objective of the publication Trends in Lending is to present a detailed picture of the latest trends in lending and to facilitate the appropriate interpretation of these developments. To this end, it elaborates on the developments in credit aggregates, the demand for loans perceived by banks and credit conditions. Within credit conditions, price and non-price conditions are distinguished: non-price conditions influence changes in the clientele considered creditworthy by banks and the conditions of access to credit. Price conditions, in turn, show the price of borrowing for creditworthy companies. In addition, with the help of the Financial Conditions Index (FCI), the analysis summarises the impact of the financial intermediary system on the economy. In particular, the key statistics examined in the analysis are the following:

- The credit aggregates present quantitative developments in economic agents' loans outstanding on the basis of banking sector (banks and branches of foreign banks) balance sheet statistics. Both the volume of new loans and net changes in banking sector loans outstanding (net of exchange rate effects) are presented.
- Changes in non-price credit conditions are presented in a qualitative manner based on the Lending Survey, in which the banks that are active in the given segment and jointly cover 85–95 per cent of the credit market indicate the direction of change compared to the reference period. The Lending Survey includes price conditions in a qualitative manner as well, in the form of the spread on the cost of funds, the premium on risky loans and the fees charged.
- The interest rate statistics contain the price conditions, i.e. aggregate interest rates on credit institutions' new loans realised, weighted by the contract amounts. The lending rate can be decomposed into the reference rate and the spread on the reference rate.
- Banks active in the given segment provide qualitative responses in the Lending Survey in respect of their expectations and the changes in demand for loans they perceive. Similarly to credit conditions, banks indicate the direction of the change.

Detailed information about the indicators describing the lending processes and the methodology of the Financial Conditions Index is provided in the annex at the end of the analysis. Within the publication, the findings of the Lending Survey are presented in a condensed form, but the responses to the questions and the set of charts based on the findings are published in full on the Lending Survey page of the MNB's website.

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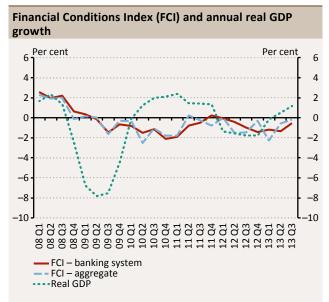
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1 Executive summary

In 2013 Q3, loans outstanding in the corporate segment increased by around HUF 130 billion, which moderated the decline in the annual growth rate from 6.4 to 3.5 per cent. The increase in the outstanding amount can be attributed to new loans disbursed under the Funding for Growth Scheme (FGS), which also facilitated the extension of maturities and the shift toward forint-denominated loans. In Q3 the lending developments beside the FGS were also favourable, significant crowding out effect of the program could not be observed in new lending volumes. Additionally, forint lending rates – that only affects those companies who are considered to be creditable by banks but can't take part in the FGS – have tracked the cuts in the central bank policy rate in Q3 as well, thereby contributing to the improvement of the corporate credit market.

The contraction in household loans outstanding continued, reaching an annual rate of 5.2 per cent, which is fully attributable to the decrease in foreign currency loans outstanding, while forint loans increased during the quarter. The volume of new loans moved further away from its historic low at the beginning of the year. Conditions for unsecured household loans continued to ease, while in terms of housing loans the banks reported the conditions to be unchanged. The APR on actual transactions declined, and the APR on housing loans is now approaching 9 per cent. At the same time, the level of credit conditions and interest rate spread remains high.

According to the Financial Conditions Index, which summarises lending developments in the corporate and household segments, conditions eased due mainly to the FGS and the cuts in the central bank policy rate.



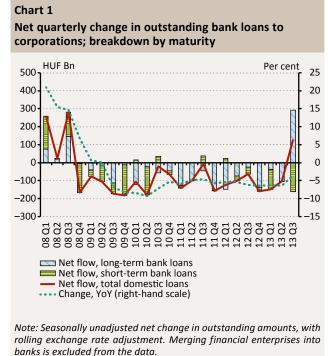
Note: The annual increase in the FCI shows the contribution of the financial intermediary system (banking sector) to the annual growth rate of real GDP. While the banking sector sub-index only contains the variables related to lending, the 'overall' index contains the monetary conditions, i.e. the interbank rate and the exchange rate as well. Source: MNB.

2 Developments in lending in the corporate segment

In Q3, there was a substantial increase in total corporate loans outstanding, which grew by a total of HUF 130 billion, lowering the annual growth rate from minus 6.4 to minus 3.5 per cent. This positive turning point was mainly the consequence of the central bank's Funding for Growth Scheme, which, in addition to the increase in loans outstanding, also facilitated the shift towards forint loans and the longer maturities of loans. In Q3 the lending developments beside the FGS were also favourable, the crowding out effect of the program could not be observed in new lending volumes. According to the responses provided in the Lending Survey, credit conditions eased somewhat compared to the previous quarter, but the majority of the respondents still reported unchanged conditions. Forint lending rates continued to decrease during the quarter, while the spread on the reference rate also fell. There was no substantial change in euro interest rates. Altogether interest rate spreads are still favourable in a regional comparison. Nevertheless, these favourable market-based interest conditions apply only to those companies who are considered to be creditable by banks but can't take part in the FGS. Based on the Financial Conditions Index, the banking sector continues to be contractionary in corporate lending, but to a lesser extent compared to the previous quarter, to which the FGS and the reduction of central bank policy rate contributed.

There was a substantial increase in the banking system's corporate loans outstanding. In 2013 Q3, the corporate sector's bank loans outstanding increased by almost HUF 130 billion, thereby reducing the annual decline rate of loans outstanding to 3.5 per cent (Chart 1). The increase in loans outstanding is the net result of a HUF 290 billion increase in long-term loans and a HUF 160 billion decrease in short-term loans. As a result of the FGS a favourable shift toward forint loans was observed in the denomination of loans outstanding. The share of forint loans rose from 40 per cent to almost 48 per cent.

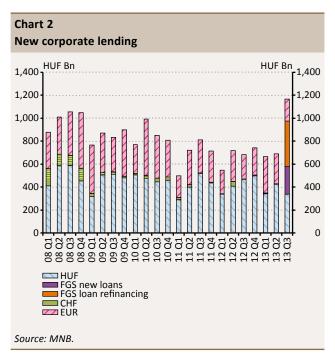
As a result of the FGS, the gross volume of new loans extended was outstanding in Q3. In 2013 Q3, the volume of new contracts (gross loans) reached almost HUF 1,200 billion, exceeding the value recorded in Q2 by 70 per cent (Chart 2). This favourable development in the extension of new loans is primarily attributable to the FGS. Of new disbursements during Q3, the value of refinancing loans was HUF 396 billion, of which HUF 176 billion related to Pillar I and HUF 220 billion to Pillar II of the scheme. Additionally there wasn't any significant setback in new lending volumes beside the FGS in the third quarter. Due to the conditions of the FGS, the majority of new loans were denominated in forint, but the volume of new euro loans also did not decline substantially, compared to previous quarters.



Source: MNB.

According to the Lending Survey, corporate credit conditions eased again on the whole. A net 11 per cent¹ of the banks eased their credit conditions (Chart 3), but most

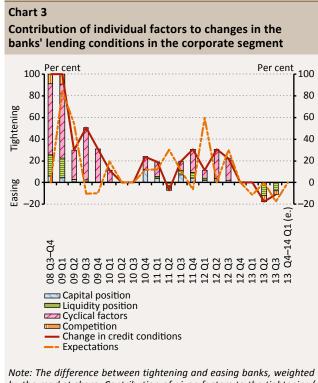
¹ The difference between banks that tightened and eased the conditions, weighted by market share.



respondents reported unchanged conditions. Easing appeared both in price conditions (lending fee, spread on funding costs, risk premium) and non-price conditions (collateral requirements, covenants). As regards the next half year, all banks projected unchanged conditions. Thus, the easing which has materialised inside a narrow group so far has yet to offset the previous widespread tightening; accordingly, corporate credit conditions can be still considered tight.

Liquidity position points easing credit conditions at an increasing number of banks. According to the Lending Survey, a net 65 per cent of banks cited liquidity and funding as factors pointing to easing of conditions. According to the banks' responses, the pick-up in competition also pointed to an easing of conditions. In previous quarters a large number of banks had cited the economic outlook and industry-specific problems as factors contributing to tightening, however, only very few banks cited them as an obstacle to easing in Q3.

Lending rates on forint loans continued to decline. Based on actual transactions, the average quarterly lending rates on variable interest forint loans (i.e. excluding FGS loans) decreased to 6 per cent from 6.9 per cent in Q2 (Chart 4). This change exceeded the decline in the reference rate (3-month BUBOR) in the same period; thus the average interest rate spread decreased by around 0.3 percentage point to 2 percentage points. The interest rate of loans disbursed under the FGS was slightly below 2.5 per cent, and as a result the aggregated forint interest level fell to 3.6 per cent, while the interest rate spread became negative. In

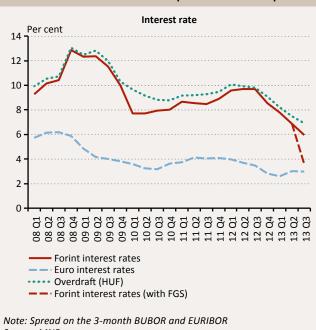


Note: The difference between tightening and easing banks, weighted by the market share. Contribution of given factors to the tightening/ easing that took place, normalised to the net percentage balance of respondents reporting tightening/easing. Source: MNB, on the basis of the replies by banks.

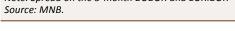
the case of euro-denominated loans, both the interest level and the spread remained unchanged: the former stood at 3 per cent, while the latter remained at 2.8 per cent in Q3 as well.

The contractionary impact of the banking system has declined in the corporate segment. Both the Lending Survey and the interest rate statistics on actual transactions are necessary for the assessment of the credit market position of businesses. The Lending Survey shows developments in credit supply constraints, which determine whether a company is creditworthy, whereas interest rate statistics indicate the financing costs of the companies deemed creditworthy. Due to the tightness of other credit conditions, at present only a rather narrow range of enterprises - only those who are considered to be creditable by banks but can't take part in the FGS - can benefit from the lower interest rates. Compared to the previous quarter, in 2013 Q3 the corporate sub-index of the Financial Conditions Index improved (mainly due to the FGS and the reduction of central bank policy rate), increasing to a level around -0.2 per cent; i.e. real GDP deteriorated by this much due to tight credit supply in the period between 2012 and 2013 Q3 (Chart 5).

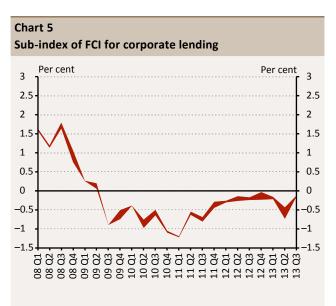
Demand for loans continued to increase in the corporate segment. According to the Lending Survey, the credit demand perceived by banks increased again. Roughly the



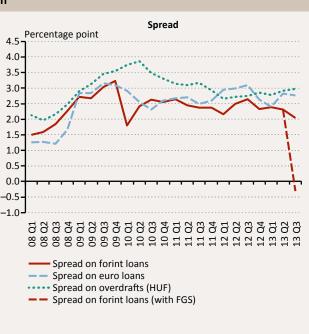
Interest rates and interest rate spreads of new corporate loan



same number of banks reported an increase in demand for short-term loans as in the previous quarter, while more banks perceived an increase in demand for long-term loans than in the previous period. For the next half year, banks expect a substantial increase mainly in demand for longterm loans (Chart 6). The expansion and prolongation of the FGS may play a role in the growing demand for longer-term loans and in further favourable expectations.

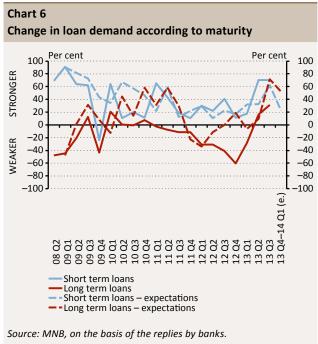


Note: The index quantifies the impact of financial conditions on annual GDP growth through corporate lending. The band illustrates the methodological uncertainty. Source: MNB.



2.1. INTERNATIONAL OUTLOOK IN CORPORATE LENDING

There is a diverse picture in respect of the development of corporate loans outstanding. While in the previous quarter the downturn in corporate loans outstanding was a general trend, in Q3 most countries under review saw an opposite trend. Albeit to different degrees, corporate loans



outstanding increased relative to Q2 in most regional countries (Chart 7). Besides Hungary, the Czech Republic reported the largest increase. By contrast, the decline observed since the beginning of 2012 continued in the euro area. Corporate lending fell in Slovenia and Romania as well, although in Romania corporate loans outstanding still exceed the pre-crises level.

In 2013 Q3, corporate loans outstanding decreased compared to the previous year in all country groups under review. The outstanding amount of corporate loans declined with the same pace in the EU and in the euro area. The largest year-on-year decline (over 11 per cent) was observed in the Mediterranean countries (Club Med) (Chart 8). The trends in corporate lending were the most favourable in the countries of Visegrád and in the Nordic states. While in the last two years Hungary saw the most unfavourable average annual growth rate, for this quarter the year-on-year decline can be considered common in international comparison.

Corporate credit conditions show diverse developments in the region. Similarly to the previous quarter, it was once again in Hungary that credit institutions reported an easing of credit conditions, whereas according to the Lending Surveys, there was no material change overall in Q3 in the

CEE region, whilst the euro area experienced further

Chart 7

Changes in corporate loans outstanding in international comparison

(October 2008 = 100, exchange rate adjusted)

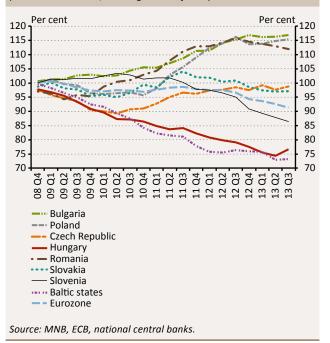
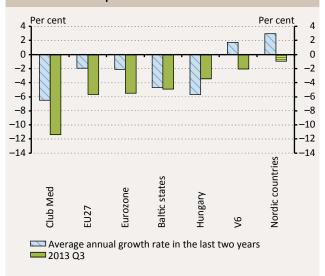


Chart 8

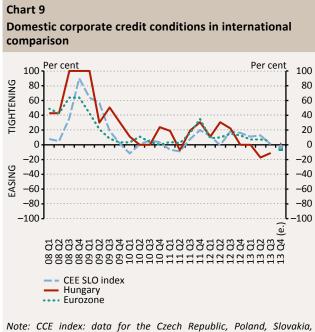
Annual growth rate of corporate loans outstanding in International comparison



Note: V6 group shown in the chart include Austria, the Czech Republic, Poland, Slovakia and Slovenia, but Hungary is excluded. The Club Med contains Greece, Italy, Portugal and Spain, the Baltic states contains Estonia, Latvia and Lithuania, and the Nordic states Denmark, Finland, and Sweden.

Source: MNB, ECB, national central banks.

tightening (Chart 9). According to banks' responses, the uncertainty about the macroeconomic outlook is the main factor which is constraining easing.² While according to the forecasts, corporate lending conditions are not expected to

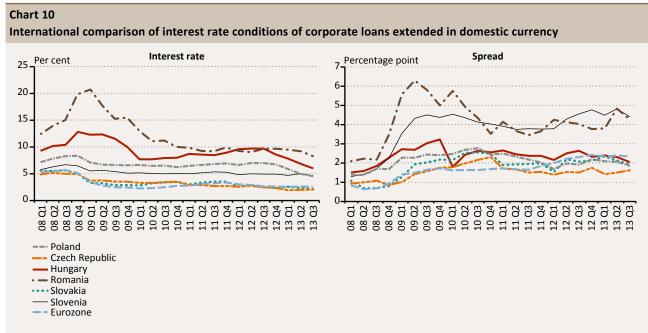


Note: CCL index: data for the Czech Republic, Poland, Slovakia, Slovenia and Romania weighted on the basis of outstanding loans to residents. The data indicate direction and not degrees. Source: ECB, selected national central banks, MNB.

² It should be emphasised, nevertheless, that the Lending Surveys reviewed only provide information in respect of the direction of the change in credit conditions, and thus no conclusions can be drawn from them concerning the level of the credit conditions.

change in Hungary in the next quarter, credit conditions may be eased both in CEE countries and in the euro area. In respect of the latter, the decrease in banks' financing costs points in the direction of easing credit conditions.

The gap between the Hungarian and regional interest level has narrowed. Except for the Czech Republic, compared to the previous quarter, interest rates on new corporate loans denominated in domestic currency fell in all of the countries under review, with the steepest decline reported in the two countries with the highest interest rate levels: Hungary and Romania (Chart 10). The decline in Hungarian corporate loan interest rates is a favourable trend, but there is still a gap of 2-3 percentage points compared to the regional average. By contrast, as regards corporate spreads, Hungary shows rather average values. In the last quarter, regional spreads followed the trend of the interest rates and increased only in the Czech Republic, but it is worth pointing out that even before, Czech companies already had access to new loans with one of the lowest premia.

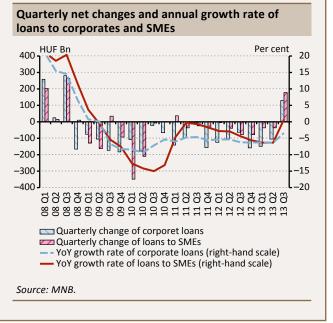


Source: ECB, selected national central banks, MNB.

Quarterly developments in SME and sectoral loans outstanding

The portfolio of loans to micro-, small and medium-sized enterprises increased considerably in 2013 Q3 as a result of the FGS disbursements. The banks' SME loan portfolio, adjusted for exchange rates, increased by HUF 177 billion, as a result of which the annual growth rate is now in positive territory.

According to the quarterly industry statistics of corporate loans by banks, 2013 Q3 saw considerably higher growth in loans outstanding than the average quarterly change observed in several sectors during the two years preceding the FGS. The increase in loans outstanding was observed primarily in the sectors affected the most by the FGS, i.e. agriculture, trade and repair (the growth rate in Q3 of the latter don't show any improvement yet due to base effect). Even though the manufacturing sector also benefited from a large volume of preferential funds, on balance the outstanding amount of loans declined due to contraction in foreign currency loans and the large heterogeneity of the sector. While loans outstanding increased in light industry and the food sector, in other



sectors, where SMEs might play a less significant role – such as the chemical industry, metal processing and engineering – there was a decline due to the decrease in foreign currency loans, offsetting the expansion of forint loans in the sector set off by the FGS. In the case of project loans –where there was an excessive expansion in lending before the crisis – loans outstanding decreased in the course of Q3.

Breakdowns of the net changes and annual growth rate of corporate loans by industries (exchange rate adjusted)

	Net quarterly change (HUF Bn)		Annual growth rate (per cent)	
	Former average	2013 Q3	Former average	2013 Q3
Agriculture	0.4	45.5	-1.8	13.2
Manufacturing industry	-16.9	-46.5	-6.0	-10.4
Construction	-11.4	-4.7	-11.4	-4.7
Trade, repair	-14.9	41.3	-2.8	-6.2
Transport, storage, post, telecommunication	-20.7	20.6	-18.1	3.8
Real estate, business services	-16.4	-11.0	-3.2	-5.4
Professional, scientific technical services	-5.6	5.7	-6.1	2.8
Other	-9.8	82.1	-6.3	8.6
Sum	-95.2	133.0	-5.6	-3.1

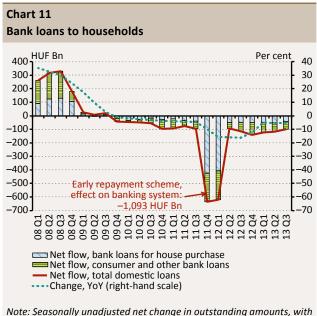
Note: Former average is the average of values between 2011 Q3 and 2013 Q2. Source: MNB.

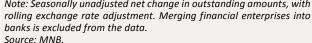
3 Developments in lending in the household segment

Loans outstanding continued to decline in the household segment. In Q3, loans outstanding fell by around HUF 100 billion, corresponding to a 5.2 per cent annual decline. The decline in the outstanding amount was attributable to the reduction of foreign currency loans, while forint-denominated loans increased during the quarter. The volume of new loans continued to increase compared to the historic low seen at the beginning of the year. In the case of unsecured consumer loans, credit conditions continued to ease, while banks reported unchanged conditions on housing loans. The APR on actual transactions fell to 9.3 per cent in the case of housing loans, and to 11.5 per cent in the case of home equity loans, parallel with the cuts in central bank policy rate. However, the interest rate spread on housing loans is still extremely high in a regional comparison. According to the Financial Conditions Index, the banking sector is still contractionary in household lending.

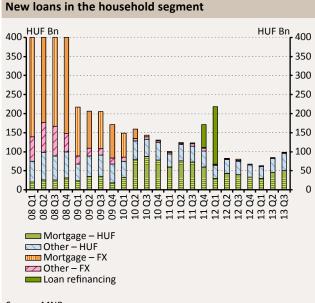
The banking system's household loans outstanding continued to decline. In 2013 Q3, banks' household loans outstanding fell by almost HUF 100 billion (Chart 11), corresponding to a 5.2 per cent year-on-year decline in the portfolio. This decline is the net result of a decrease of HUF 118 billion in foreign currency loans and an increase of HUF 20 billion in forint loans. With this, the shrinking of the foreign currency loan portfolio accumulated in pre-crisis years continued coupled with a steady shift in the denomination structure toward forint loans. In terms of product composition, the decline resulted from a HUF 44 billion decrease in housing loans and a HUF 55 billion decrease in consumer credits.

The pick-up observed in new loan volumes continued. After hitting a historic low in 2013 Q1, the volume of newly disbursed loans has been on the rise for the past two quarters. In Q3, the domestic banking sector disbursed new loans in the total amount of HUF 97 billion, which exceeded the output of the previous quarter by around 15 per cent (Chart 12). The rebound in lending affected both mortgage loans and unsecured consumer credit. Within the first group, the share of housing loans continued to increase, also facilitated by the slightly increasing - roughly 31 per cent share of state subsidised housing loans. However, the future volume of this scheme may be limited by the fact that the amount of subsidization can be just so high, that the interest rate paid by the debtor is can only be reduced to 6 per cent. Thus in parallel with the fall in market interest rates, the cost benefit provided by the scheme will become less attractive, and if the interest rate part paid by the customer reaches 6 per cent, the scheme don't provide subsidization any longer.





There was no substantial change in conditions on secured loans, while banks eased conditions on unsecured loans. In net terms, 16 per cent of the banks eased conditions on consumer credit in Q3, while leaving conditions on housing loans unchanged (Chart 13). As regards consumer credit, the easing affected unsecured loans primarily, while nearly all banks left conditions on home equity loans unchanged. According to banks' responses, easing appeared mainly in price conditions, and the spread on funding costs decreased for both loan types. However, in the case of consumer credit,



Source: MNB.

Chart 13 Changes in credit conditions



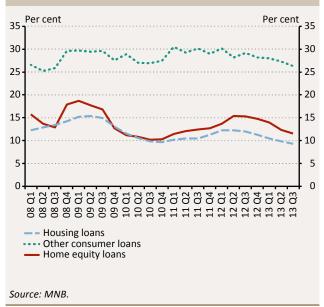
Source: MNB, on the basis of the replies by banks.

a small group of banks also eased the minimum creditworthiness criteria. According to banks' responses, over the next half year conditions are more likely to be eased on consumer credit.

The APR is declining, but the spread on housing loans remains high. By Q3, the APR on housing loans fell to 9.3 per cent from 9.9 per cent in Q2 (Chart 14).³ The reference rate

Chart 14

Interest rate level of new household loans

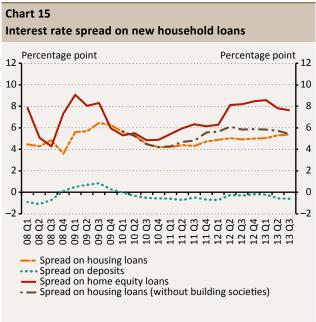


dropped to a slightly greater extent than lending costs, and thus the spread increased to 5.4 per cent (Chart 15). However, there are significant differences in the change of APR by institution types. While previously the special loans disbursed by the home savings and loan associations reduced the aggregate interest level considerably, by Q3 this impact had disappeared almost entirely. In part, this resulted from the continuous drop in the APR associated with traditional commercial bank schemes since 2012 Q2 which followed, and even exceeded, the level of the central bank policy rate cuts.

In respect of home equity loans, the lending rate and the interest rate spread both decreased. The downward trend in the APR on home equity loans continued, as the average APR fell to 11.5 per cent in Q3 from 12.4 per cent in the previous quarter. The reduction in the APR exceeds the decline in the reference rate, and thus by Q3 the interest rate spread on home equity loans decreased to 7.6 percentage points from 8.6 percentage points at the beginning of the year. The average APR on unsecured consumer credit also fell in Q3, declining to 26.3 per cent (Chart 14).

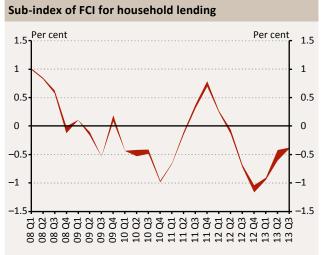
Overall, the banking sector is contractionary in the household segment. Despite the easing of credit conditions, the interest rate spread on new mortgage loans is still above 5 per cent, whereas the loan-to-value ratio (LTV) of new loans is 55 per cent on average, which falls short of both the

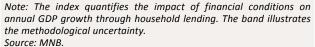
³ The interest subsidy provided by the state does not appear in the interest levels reported by the bank, as banks report the interest rates inclusive of the subsidy.



Note: interest rate spread on 3-month BUBOR. Source: MNB.





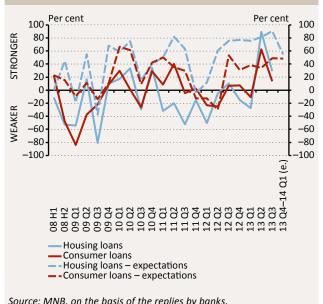


historic average and the regulatory limit. The household subindex of the FCI slightly improved compared to the previous quarter, but is still negative. According to the index, the banking sector's moderate credit supply reduced the annual GDP growth rate by 0.4 per cent between 2012 and 2013 Q3 (Chart 16).

Demand for household loans is still on the rise. Compared to the previous quarter, only a smaller group of banks reported higher demand. In net terms, 30 per cent of banks reported increased demand for housing loans, and 13 per



Credit demand in the household segment



cent of them indicated a pick-up in demand for consumer credit. The expectations of banks were similar to what was expressed in the previous quarters. Looking ahead, banks expect a steady increase in demand both for housing loans and consumer credit (Chart 17).

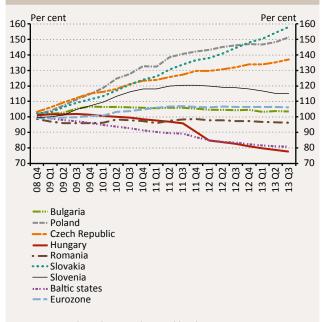
3.1 INTERNATIONAL OUTLOOK IN HOUSEHOLD LENDING

There are major differences in the changes in household loans outstanding. The trend observed in the previous quarters for household loans outstanding continued in most of the regional countries. The increase since the crisis continued in 2013 Q3 in Slovakia, Poland and the Czech Republic, while in Hungary, Romania and the Baltic states loans outstanding contracted further. The rate of decrease was significant only in Hungary (Chart 18). Household loans outstanding in the euro area and in Bulgaria remained largely unchanged. After a steady decline of two years, for the first time this quarter, Slovenia saw no further decline in household loans outstanding. The level of household loans outstanding – as opposed to corporate loans – exceeds the pre-crisis value in most countries.

In terms of lending to households there is a significant heterogeneity in Europe. The average growth rate of households' outstanding amount of loans in the last two years was positive in the EU and in the euro area also (Chart 19). Besides In international terms, apart from Hungary, only the Mediterranean countries (Club Med) and the Baltic states saw negative growth rates over the last two years. The

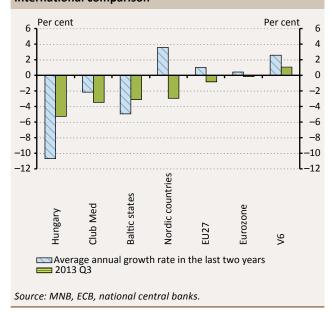
Changes in household loans outstanding in international comparison

(October 2008 = 100, exchange rate adjusted)

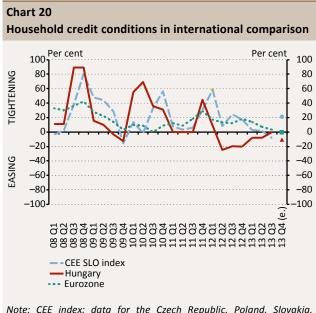


Source: ECB, selected national central banks, MNB.

Chart 19 Annual growth rate of household loans outstanding in international comparison



comparison is slightly distorted by the fact that the Hungarian figures reflect the impact of the early repayment scheme. In the Visegrád countries there is still a positive annual growth rate, but it is lower than in the last two years, while the

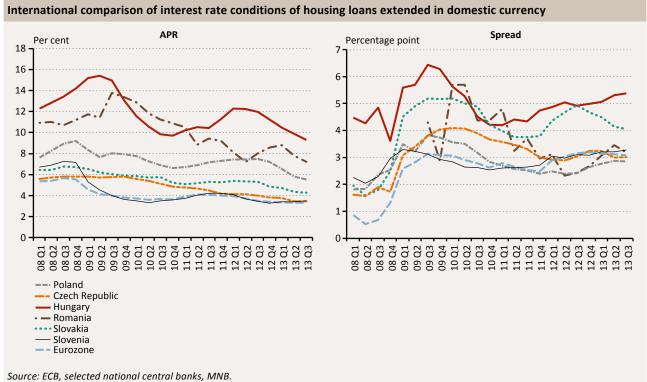


Note: CEE index: data for the Czech Republic, Poland, Slovakia, Slovenia and Romania weighted on the basis of outstanding loans to residents. The data indicate directions and not degrees. Source: ECB, selected national central banks, MNB.

Nordic states faced with a decline in loans outstanding on a yearly basis compared to their average positive year on year growth rate in the last two years.

In the Central and Eastern European countries, credit conditions in the household segment remained almost unchanged. In the countries of the euro area, banks reported an overall tightening in Q3 as well, although to a smaller extent than in the previous quarter (Chart 20). In most countries of the CEE region, conditions remained the same, except for Poland where, based on the Lending Survey, banks eased conditions on housing loans. Looking ahead, the picture is mixed for Q4. While no change is expected in Hungary and in the euro area, according to the Lending Surveys, the CEE countries expect tightening.

The gap between the Hungarian and the regional interest rate spreads does not appear to be narrowing. In Q3, the APR on housing loans continued to decline in the countries under review, falling by the largest extent in Hungary and Romania (Chart 21). By contrast, based on the international outlook, developments in the interest rate spreads on housing loans reveal a mixed picture: while in most countries there was hardly any change at all in the interest rate spreads, they decreased in Romania and Slovakia. In international comparison, the Hungarian interest rate spread is still excessively high in the household segment.



Annex: Methodological notes

The analysis is based on statistical data and the findings of the Lending Survey.

1. Credit aggregates and lending rate data

A statutory task of the Magyar Nemzeti Bank is to publish statistical data on the functioning of the system of credit institutions and the financial position of the country. The statistics compiled, press releases presenting the main data as well as the methodological descriptions of preparing the statistics are available on the MNB's website at: http://english.mnb.hu/Statisztika

2. Lending Survey

The Lending Survey facilitates the analysis of how major banks perceive and evaluate market developments and how they develop their respective strategies, in particular their lending policies. In the case of the household segment, a total 14 banks were involved in the interviews. 10 banks responded to questions related to housing loans, while 14 banks and 6 financial enterprises questions on consumer loans. Based on data from the end of 2013 Q3, the surveyed institutions accounted for 92 per cent of the banking sector in the case of housing loans outstanding, while 94 per cent in the case of consumer loans outstanding. The corporate questionnaire was completed by 8 banks, with a total market share of 83 per cent and 94 per cent of the corporate loan and commercial real estate loan markets, respectively. A total 7 banks were interviewed on the subject of loans extended to municipalities. Based on data from the end of 2013 Q3, the institutions surveyed covered 97 per cent of total municipal exposure by banks.

The survey consists of a standard questionnaire in each segment, and since the survey conducted in January 2010 we have also asked ad hoc questions of current concerns related to the credit markets. The retrospective questions refer to 2013 Q3 (compared to 2013 Q2), whereas the forward-

looking questions concern the next half-year period, i.e. the one covering 2013 Q4 and 2014 Q1 (relative to 2013 Q3). The current questionnaire was completed by the senior loan officers between 1 and 16 October 2013.

To indicate changes, the survey used the so-called net change indicator, expressed as a percentage of respondents. This indicator is calculated as follows: market share-weighted ratio of respondents projecting a change (tightening/ increasing/strengthening) minus market share-weighted ratio of respondents projecting a change in the opposite direction (easing/decreasing/weakening).

The detailed findings of the Lending Survey and the set of charts are available at:

http://english.mnb.hu/Kiadvanyok/hitelezesi_felmeres

3. The Financial Conditions Index (FCI)

In addition to short-term interest rates and the nominal exchange rate, which represent the behaviour of money markets, the FCI condenses the information contained in other price, quantitative and qualitative variables characterising the financial intermediary system into one indicator. The FCI gauges the impact of the financial sector on the real economy. The annual change in the FCI mentioned in the survey shows the contribution of the financial system and the banking sector to the annual real GDP growth rate.

The weights of the variables that determine the FCI are derived from a VAR (vector autoregressive) model based on the Bayesian structural VAR model developed by Tamási and Világi (2011).⁴ In the VAR model, the use of the so-called sign restriction method allows the identification of monetary policy shocks as well as the supply shocks of financial markets and the banking sector. The identified shocks allow for the calculation of how unexpected changes in individual financial variables affect GDP growth. The advantage of the method is that it is possible to exclude the endogenous

⁴ TAMÁSI, B. AND B. VILÁGI (2011), "Identification of Credit Supply Shocks in a Bayesian SVAR Model of the Hungarian Economy", *MNB Working Papers*, 2011/7.

reaction of financial variables on the developments in economic activity, i.e. a real cause and effect relationship can be identified.

The FCI is based on the following variables:

- 3-month interbank rate (BUBOR),
- nominal effective exchange rate,
- corporate loans outstanding,
- household (consumer and home equity) loans outstanding,
- interest margin on corporate loans,
- interest margin on household (consumer and home equity) loans.

In addition to the overall FCI, sub-indices may also be calculated. Accordingly, for example, the 'banking sector' FCI

net of money market effects is prepared with the weighting of credit aggregates and interest margins. At the same time, the VAR model serving as the basis for the FCI does not provide information on the size of the effect of the interbank rate through household and corporate loans. Only rough estimates can be given for this, based on the shares of household and corporate forint lending in the private sector lending. This uncertainty is expressed by the fact that the effect of household and corporate loans on GDP is illustrated in banded charts. One of the limits of the band only measures the effect of credit quantity and interest margin calculated on the basis of the VAR model. For the calculation of the other limit of the band, the effect of money market interest rates is also taken into account, but this calculation is already based on the aforementioned estimate, and not on the VAR model.

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