

# Trends in lending

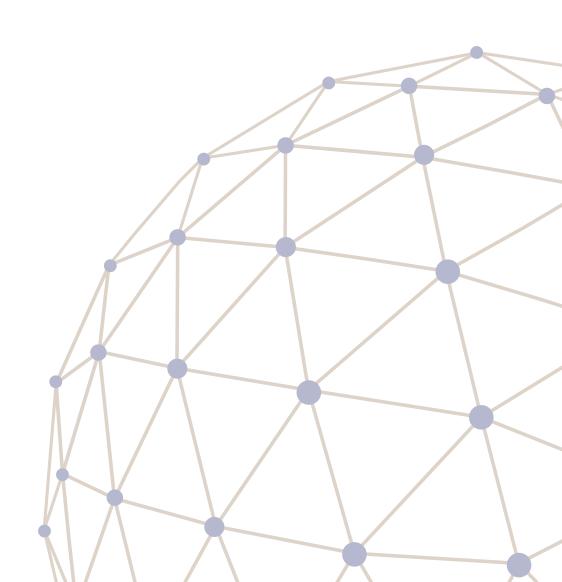
March 2017





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(March 2017)

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The objective of the publication 'Trends in Lending' is to present a detailed picture of the latest trends in lending and to facilitate the correct interpretation of these developments. To this end, it elaborates on developments in credit aggregates, the credit demand perceived by banks, and credit conditions. Within credit conditions, a distinction is made between price and non-price conditions. Non-price conditions influence changes in the clientele considered creditworthy by banks and the conditions on 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, based on the balance sheet statistics of the banking sector. Both the volume of new loans and net changes in the banking sector's loans outstanding (net of exchange rate effects) are presented. From 2013 Q4 on, the analysis presents the trends in lending in the overall credit institution sector (banking system and foreign branches, cooperative credit institutions).
- 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 80 to 90 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 credit demand they perceive. Similarly to credit conditions, banks indicate the direction of the change.

Detailed information on 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 figures based on the findings are published in full on the Lending Survey page of the MNB's website.

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#### 1. FXFCUTIVE SUMMARY

Developments in credit institutions' lending were characterised by general improvement in 2016 Q4. In 2016, total corporate loans grew by 4 per cent, a rate unseen since the crisis. Improvement in SME-lending took place amidst growing demand and easing credit constraints on the supply side, as SME loans grew by 8 per cent in annual terms, while the growth rate was approximately 12 per cent when the self-employed are also taken into account. Banks complied with 150 per cent of their commitments in the Market-Based Lending Scheme, in which 15 banks have exceeded their commitments. Household loans did not change last year as a result of the disbursements and payments, due to the significant pick-up in new lending. Primarily, housing loans supported by the Home Purchase Subsidy Scheme for Families expanded, but an increase in unsecured consumer lending could also be observed.

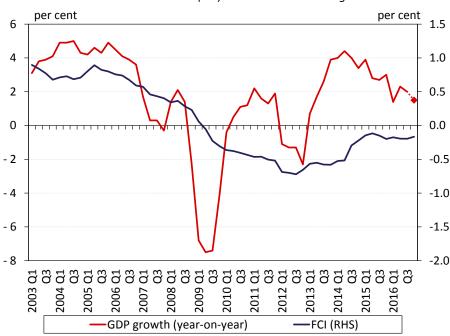
In 2016, corporate lending grew by more than 4 per cent on a transaction basis, i.e. disbursements exceeded repayments by HUF 240 billion during the year. The growth in loans was primarily attributable to an increase in the volume of HUF loans, and – in addition to FGS-loans – there was also a significant increase in market-based HUF lending. Lending to SMEs continued to grow, expanding at an annual rate of 8 per cent. Loans to the self-employed also grew dynamically during the quarter, in which borrowing related to the sale of state lands played a major role. The annual growth rate of loans to the SME sector including the self-employed was approximately 12 per cent in 2016. The Market-Based Lending Scheme also contributed significantly to the recovery in SME lending: banks made commitments to increase their loans to small and medium-sized enterprises by HUF 195 billion, and these commitments were overfulfilled at the sectoral level.

Based on the banks' responses to the Lending Survey, there were no significant changes in the conditions of corporations' access to credit in 2016 Q4. However, one quarter of banks eased credit conditions for small and micro enterprises, and this easing was primarily related to price conditions. This was explained with intensifying competition, and improvements in terms of liquidity and economic prospects by the banks. During the quarter, banks registered a rise in demand for loans, which they expect to continue for the next six months as well. The average financing cost of new corporate HUF loans decreased further during the quarter.

Household loans did not change last year as a result of the disbursements and payments, due to the significant pick-up in new lending. Overall the volume of new housing and consumer loan contracts increased by 50 per cent on an annual average. Within the total volume, new housing loans increased by 42 per cent and new personal loans by 61 per cent over the past year. 17 per cent of the volume of new housing loans is linked to the Home Purchase Subsidy Scheme for Families (HPS).

Based on the banks' responses to the Lending Survey, conditions on housing loans did not change significantly, while the conditions on consumer loans were eased further in Q4. Additionally, a wide range of banks experienced growth in credit demand in both product groups. The banks expect demand to increase further over the next six months and plan to ease credit conditions in both groups. The average APR on new housing loans decreased, while the average interest rate spread remained unchanged, due to the increased financing of riskier customers.

Based on the Financial Conditions Index, which summarises lending developments in the corporate and household segments, through its lending activity the banking system exerted an approximately neutral impact on the annual growth of the real economy.



Financial Conditions Index (FCI) and annual real GDP growth

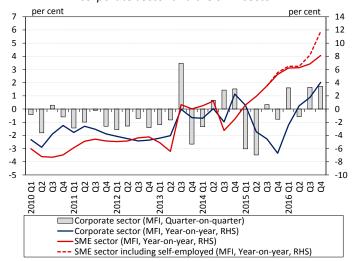
Note: The FCI quantifies the contribution of the banking sector through lending to the annual GDP growth rate. The 2016 Q4 data for the real GDP annual growth rate are the preliminary estimate of the HCSO.

Source: MNB, HCSO

#### 2. DEVELOPMENTS IN LENDING IN THE CORPORATE SEGMENT

In 2016 Q4, corporate lending grew at a rate unseen since the crisis, expanding by more than 4 per cent in annual terms, corresponding to an increase of HUF 240 billion in lending on a transactional basis. Within this, net borrowing by non-financial corporations in Q4 amounted to HUF 85 billion. In addition to FGS loans, there was also a significant increase in market-based HUF lending during the year. Furthermore, in 2016, lending to the SME sector grew by 8.1 per cent, and lending to the SME sector including the self-employed grew by 11.7 per cent in annual terms. According to the banks' responses to the Lending Survey, the conditions on corporate loans remained essentially unchanged, although intensifying competition, ample liquidity and improvements in economic prospects resulted in a broad-based easing of spreads between loan interest rates and funding costs. The banks participating in the survey anticipated further easing of conditions in the next six months, which will most likely be implemented through the additional easing of price conditions. Changes in banks' liquidity positions and market share targets are expected to be the main factors behind this. Banks registered a rise in demand for loans in Q4, which may be followed by further growth in demand in the upcoming quarters. The average financing cost of new corporate HUF loans decreased further during the quarter.

Chart 1: Growth rate of loans outstanding of the whole corporate sector and the SME sector



Note: Transaction based, prior to 2015 Q4 data for SMEs are estimated based on banking system data. Source: MNB

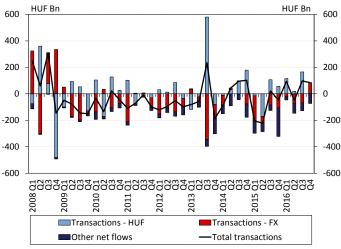
## **Domestic corporate lending**

Corporate lending grew dynamically in 2016. Loans to nonfinancial corporations increased by more than 4 per cent in 2016 (Chart 1), which is equivalent to an increase of HUF 240 billion on a transactional basis. This annual growth was the strongest seen since the crisis. In addition to the rise in new lending, it was also the result of a base effect: the annual growth rate is no longer reduced by the portfolio separation implemented as part of MKB's resolution, which pushed down the indicator by an average of 1.6 percentage points in 2016. In addition to FGS loans, there was also a significant increase in market-based HUF lending during the year. Loans to the SME sector in the narrow sense increased by 8.1 per cent in annual terms, while the annual growth rate of loans to the broader SME sector including the self-employed was 11.7 per cent. The Market-Based Lending Scheme (MLS) and the Funding for Growth Scheme (FGS) also contributed to lending to small and mediumsized enterprises. In our estimate, of the 8.1 per cent annual growth approximately 3 percentage points are attributable to the effect of the FGS. Regarding borrowing by the self-employed, the significant divergence from the underlying trends is primarily attributable to the national land scheme.

Q4 loan transactions also made a major contribution to the annual growth in lending. In 2016 Q4, the transaction-based growth in credit institutions' corporate loan portfolio amounted to some HUF 85 billion (Chart 2). In contrast to previous quarters, growth was predominantly registered in foreign exchange-based loans, which increased by approximately HUF 83 billion on a transaction basis, while forint loans grew by HUF 2 billion. Loans granted in the

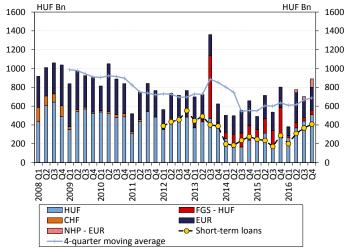
<sup>&</sup>lt;sup>1</sup> Although the self-employed belong to the household sector in a statistical sense, they also qualify as SMEs based on their activities and legal definition.

Chart 2: Net quarterly changes in the corporate loan portfolio, by currency



Note: Seasonally unadjusted net change in outstanding amounts, with rolling exchange rate adjustment, excluding individual institutional effects. Source: MNB

Chart 3: New corporate loans in the credit institution sector



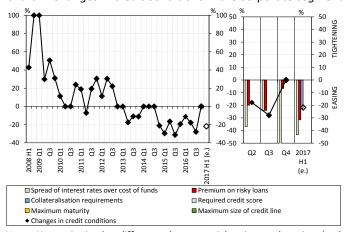
Source: MNB

third phase of the Funding for Growth Scheme increased by HUF 93 billion, of which transactions in the HUF pillar amounted to HUF 41 billion, and transactions in foreign exchange-based loans amounted to HUF 52 billion. In addition loan transactions, write-offs and reclassifications (other change in stocks) reduced outstanding loans of non-financial corporations by HUF 73 billion. A change could also be observed in the structure of the loans, with an increase in the share of long-term loans. Due to a HUF 160 billion decrease in outstanding overdrafts, which had reached a historically high level in previous years, in Q4 short-term loans decreased by HUF 132 billion, while long-term loans increased by HUF 165 billion over the same period. At the end of the year, this is normally attributable to accounting considerations of enterprises in relation to the balance sheet date, which is also implied by the fact that repayments were made while credit lines were maintained. As a result, long-term loans accounted for 73 per cent of all loans at the end of the year.

The volume of new loans continued to increase during the quarter. New loan contracts of the credit institution sector with non-financial corporations amounted to HUF 889 billion in Q4 (Chart 3). Compared to the previous year, this resulted in growth of 8 per cent in the total volume of new loan contracts in 2016. The fastest growth was recorded in market-based forint loans: in annual terms, output in 2016 exceeded the 2015 figure by 56 per cent. Within the annual volume of new loans, short-term loans had a significant share,<sup>2</sup> accounting for 45 per cent of all new loans. Loan agreements with non-financial corporations in the third phase of the Funding for Growth Scheme contributed to the extension of HUF loans by HUF 170 billion and of EUR loans by HUF 154 billion in annual terms. Additionally, sole proprietors signed contracts for HUF 181 billion in new FGS loans, as a result of which the HUF 700 billion scheme was utilised to a level of HUF 507 billion as of the end of 2016, and HUF 557 billion as of the beginning of February 2017.

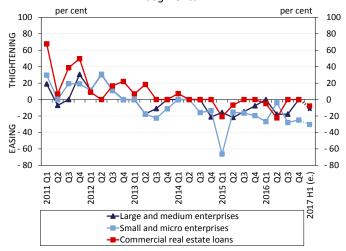
<sup>&</sup>lt;sup>2</sup> Loans with a maturity of less than one month and the renewal of earlier credit line agreements increase neither the loans outstanding at the end of the month, nor the value of transactions.

Chart 4: Changes in credit conditions in the corporate segment



Note: Net ratio is the difference between tightening and easing banks, weighted by market share. Source: MNB, based on the answers of respondent banks

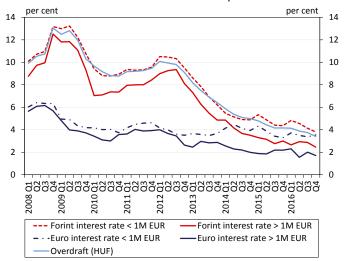
Chart 5: Changes in credit conditions in the corporate subsegments



Note: Net ratio is the difference between tightening and easing banks, weighted by market share. Source: MNB, based on the answers of respondent banks

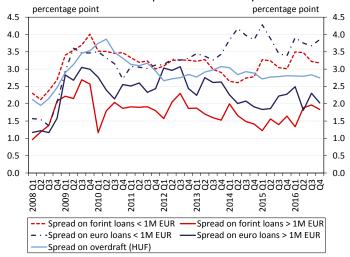
There were no substantial changes in corporate credit conditions. In Q4, banks made no changes to the overall conditions on corporate credit, but indicated specific adjustments. In the period under review, respondent banks did not make changes to non-price conditions (collateral requirements, minimum required level of creditworthiness), while they eased price conditions. The premium on riskier loans was reduced by a net 7 per cent of banks, and the spread between funding costs and loan interest by a net 53 per cent (Chart 4). Banks indicated easing standards primarily in the case of products for small and micro enterprises, and 30 per cent also expect further easing in this sub-segment over the next six months (Chart 5). They also anticipate easing in the standards for large and medium-sized enterprises, as well as for commercial real estate loans. Looking ahead, a net 22 per cent of the banks indicated an intention to ease the conditions on corporate credit over the next six months, which will most likely be implemented through further easing of price conditions. In net terms, one quarter of the respondents noted that over the next six months changes in their liquidity positions and market share targets could make the largest contributions to the easing of standards and conditions on loans granted. According to a net 16 per cent of the banks, additional reasons for easing are associated with changes in economic prospects and the competitive positions of other banks.

Chart 6: Interest rates on new corporate loans



Note: Loans with variable interest rate or with up to 1-year initial rate fixation. Adjusted for money market loans > 1M EUR since 2015. Source: MNB

Chart 7: Interest rate spreads on new corporate loans



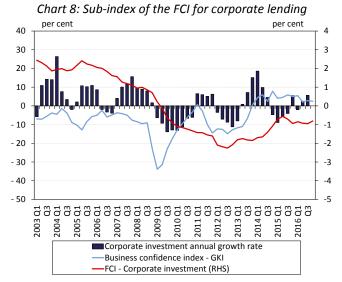
Note: Spread on the 3-month BUBOR and EURIBOR. Loans with variable interest rate or with up to 1-year initial rate fixation. Adjusted for money market loans > 1M EUR since 2015. Source: MNB

distort the observed average interest rates, owing to their low weight.

The financing costs of HUF loans decreased further. After filtering out money-market type transactions, the interest rate on new market-based corporate loans<sup>4</sup> decreased by an average 0.4 percentage point in the case of high-amount HUF loans, and 0.3 percentage point in the case of HUF loans below EUR 1 million (Chart 6). This is mainly the result of the decline in the reference rate. While the interest rate spread remained unchanged, interest rates on HUF overdraft facilities also decreased by 0.3 percentage point. Despite intensifying competition, there was no substantial change in average interest rate spreads on HUF loans, which may partly be due to a composition effect: in Q4, the share of investment loans, which typically have longer terms and higher costs of credit risk to banks, increased within both low-amount and high-amount loans. Average interest rates on high-amount EUR loans also decreased by 0.3 percentage point, which is attributable to a decline in the EUR reference rate to a lesser extent than to a decrease in the interest rate spread (Chart 7). Interest rates on lowamount EUR loans increased by an average of 0.2 percentage point as the result of the increase in the average interest rate spread.

<sup>&</sup>lt;sup>3</sup> Money market transactions are loans extended to non-financial corporations with a value of over EUR 1 million; their term is short (typically less than 1 month) and they serve to fund some kind of financial operation. Therefore, they do not generate investments in the real economy. From 2015, it has been possible to generate data from which money market transactions are filtered out, and at the same time, in the previous period they did not significantly

<sup>&</sup>lt;sup>4</sup> In the case of new contracts, we examined floating-rate loans or loans with interest rate fixation for less than one year. The majority of loans granted under the Funding for Growth Scheme are long-term loans, and therefore the interest rates reviewed by this publication are only shaped by smaller, short-term FGS loans.



Note: The sub-index of the FCI quantifies the banking system's contribution, through lending, to annual growth in corporate fixed investments. Source: MNR GKI

per cent per cent 100 100 80 80 STRONGER 60 60 40 40 20 20 n 0 -20 -20 WEAKER -40 -40 -60 -60 -80 -80 -100 -100 

2013

····· Short-term loans - expectations

· Long-term loans - expectations

201

201

Short-term loans

Long-term loans

2010

201

2016

2017 H1

2015

Chart 9: Change in credit demand by maturity

Note: Net ratio is the difference between banks reporting stronger and weaker demand, weighted by market share. Source: MNB, based on the answers of respondent banks

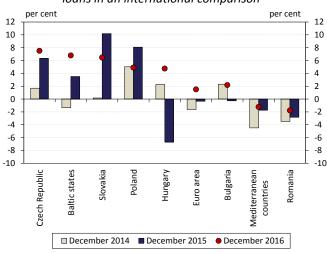


Chart 10: Annual transaction-based growth rate of corporate loans in an international comparison

Note: Mediterranean countries: Greece, Italy, Portugal and Spain. Baltic states: Estonia, Lithuania and Latvia. Source: ECB, MNB

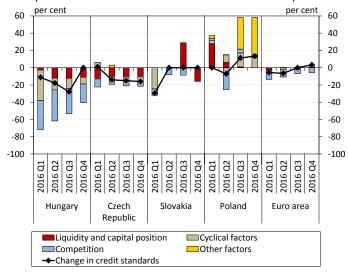
The banking system's lending activity continues to have a moderate contractionary effect. In 2016 Q4, the corporate sub-index of the Financial Conditions Index increased moderately but remained in negative territory (Chart 8), meaning that the annual level of corporate investments was slightly reduced by the restrained lending of the banking system. The value of the business confidence index, which captures expectations and is published by GKI, decreased slightly compared to the previous quarter, but remained in historically high positive territory. In 2016 H2, the largest improvements were seen the sub-indices of the service and construction sectors. Banks' responses to the Lending Survey, the decrease in average interest rates, and the FCI all indicate an improvement in the financial environment of corporations in 2016 Q4.

Demand continued to increase for both short-term and long-term corporate loans. In net terms, 29 per cent of the banks responding to the Lending Survey observed higher demand for short-term loans, while a somewhat lower net 26 per cent reported an increase in demand for long-term loans (Chart 9). This rising demand affected both HUF and FX loans, but a significantly higher percentage of banks observed rising demand for HUF loans. A breakdown by size category shows that increased demand was more widespread among small and micro enterprises, but the demand of large and medium-sized companies also increased during the period under review. A net 43 per cent of respondent banks expect rising demand in 2017 H1 in the market of long-term loans, while 14 per cent expect the same trend to emerge in short-term loans as well.

## International outlook in corporate lending

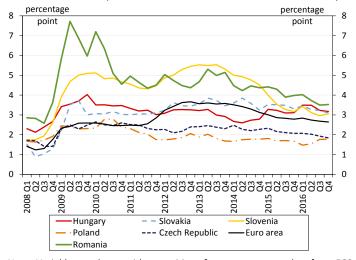
Growth in corporate lending can be observed both in the euro area and in the region. Within the euro area, corporate loans increased by an average 1.5 per cent over the past year (Chart 10). Corporate loans in the Mediterranean countries have been deteriorating at a decelerating rate over the past years, with an overall -1.2 per cent change in 2016 on a transaction basis. This country group was dominated by Spanish and Italian lending trends. By contrast, in the central countries, mainly as the result of French and German bank lending, corporate loans increased by an average 3.1 per cent in 2016. Corporate lending grew by 6.8 per cent in the Baltic states and 5.7 per cent in the Visegrád states. In year-on-year terms, loans to non-financial corporations increased by 1.6 per cent in Croatia, more or less stagnated in Slovenia, and decreased by 1.8 per cent in Romania.

Chart 11: 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. Positive values indicate the tightening of conditions, while negative ones indicate the easing thereof. Source: MNB, ECB, national central banks

Chart 12: International comparison of interest rate spreads on small-amount corporate loans extended in domestic currency



Note: Variable-rate loans with maturities of up to one year; therefore, FGS loans with the maximum 2.5 percentage point spread are not included. Adjusted for Money Market loans > 1M EUR since 2015 in the case of Hungary. Source: MNB, ECB, national central banks

Regional trends in corporate credit conditions are rather heterogeneous. Based on the banks' responses to lending surveys, corporate credit conditions became somewhat stricter overall in the euro area, with a net 1.5 per cent of the banks tightening the conditions of credit accessibility (Chart 11). The value is derived as a result of tightening in Austria and the Netherlands and unchanged conditions observed in the rest of the countries. Regarding the CEE region, corporate credit conditions became tighter in Poland, remained unchanged in Hungary and Slovakia, and eased in the Czech Republic. Across Europe, banks' responses indicated that competition among banks remained a factor that contributes to easing, which in the Netherlands was offset by banks' deteriorating risk tolerance and SMEs' increased credit risk, resulting in the tightening of conditions on the whole.

There was no substantial change in the average financing cost of corporate loans across the region. The average interest rate on corporate loans below EUR 1 million decreased by 0.1 per cent in the euro area in Q4, due to the continued decline in the reference rate (Chart 12). In the region, the average interest rate on corporate loans decreased at the sharpest rate in Hungary, where it fell by around 0.3 percentage point, while both Slovakia and the Czech Republic recorded a 0.1 percentage point decrease. The average cost of financing remained unchanged in Romania and Poland, and increased by 0.1 percentage point in Slovenia. Interbank rates — serving as reference rates — remained unchanged within the Visegrád Group (except in Hungary), and as a result the change in spreads was the same as that in interest rates.

#### **Box: Assessment of LIRS fulfilments**

In January 2016, the Magyar Nemzeti Bank (MNB) launched the Growth Supporting Programme (GSP), which facilitates banks' return to market-based lending with a gradual phasing out of the Funding for Growth Scheme (FGS) and the announcement of the new Market-Based Lending Scheme (MLS). Within the scope of the MLS and by means of concluding interest rate swaps with commercial banks, the MNB developed an incentive system aimed at market-based lending. In line with the eligibility criterion of the swap (LIRS) banks implicitly committed to increasing their SME-lending proportionally to the allocated deal size, in total value of HUF 195 billion.

The fulfilment of lending commitment is checked annually, based on the lending criterion indicator defined by the MNB, which contains loans disbursed to SMEs (and to the self-employed sector), reduced by the repayments, by 25 per cent of FGS disbursements and by the gross book value of sold performing claims. In line with the MNB's portfolio cleaning objectives, the lending reference indicator is not reduced by the decrease in transactions arising from selling non-performing credit claims nor by the repayments generated on such claims (in line with the decision of the Monetary Council on January 10th, 2017). Institutions must comply with the lending criterion in relation to a full calendar year.

In our previous forecasts we considered the banks' MLS-commitments as one of the pillars of the increase in SME-lending in 2016. Overall, based on the annual processes observed in the SME-lending, the expected fulfilment of the conditions was to be predicted on an aggregated level.

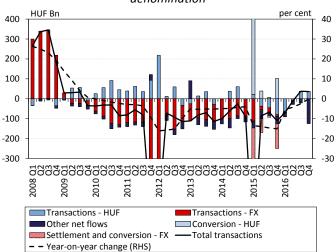
The revision of the first year of Market Lending Scheme was completed at the end of February. It can be established that the majority of the institutions (15 out of 17 banks of bank groups) closed 2016 with significant over-performance, thus the consolidated annual compliance was 150 per cent at sectoral level. The condition was not fully met by only two institutions; in their case the sanction set in the product description of the deal was imposed.

Institutions which did not close their position with the MNB until the end of February, committed, by this, to a new lending criterion for 2017 proportionate to the deal size. Thus, according to our expectations, the Market Lending Scheme may continue to remain one of the supporting pillars of SME-lending in the banking sector, even after phasing out of the FGS.

#### 3. DEVELOPMENTS IN LENDING IN THE HOUSEHOLD SEGMENT

In 2016, the decline in household lending came to a halt, as a result of which annual dynamics show a clear improvement compared to the previous years. In Q4, credit institutions' household loan transactions amounted to HUF 36 billion. Positive transactions were significantly influenced by an increase in loans to the self-employed, while the balance of household borrowing and repayments also followed an improving trend. The volume of new contracts for non-FGS loans amounted to HUF 260 billion in the period under review, representing an annual average increase of 50 per cent. Within the total volume, new housing loans increased by 42 per cent and new personal loans by 61 per cent over the past one year. Based on the banks' responses to the Lending Survey, in Q4 the conditions on housing loans remained generally unchanged, while the conditions on consumer loans were eased in Q4. Based on feedback from banks, credit conditions may continue to ease substantially in both product groups over the next six months. Additionally, banks observed a large-scale increase in credit demand in Q4, and they forecast further intensive growth looking ahead. The Home Purchase Subsidy Scheme for Families (HPS) continues to have a positive effect in this regard, with 17 per cent of the volume of new housing loans linked to the scheme. The average APR on new housing loans decreased, while the average interest rate spread remained unchanged in the period under review, which is attributable to the increased financing of riskier customers.

Chart 13: Net quarterly change in household loan portfolio by denomination



Note: Seasonally unadjusted net change in outstanding amounts, with rolling exchange rate adjustment. The annual change in the outstanding amount includes the effect of the settlement. Source: MNB

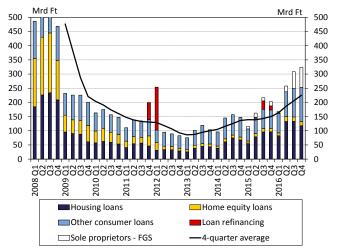
### **Domestic household lending**

Growth in household lending was also stimulated by borrowing by the self-employed in Q4. In 2016 Q4, credit institutions' loans to households increased similar to the previous guarter, with a volume of HUF 36 billion as a result of loan transactions (Chart 13). In the period under review, write-offs and reclassifications resulted in a decline of HUF 124 billion. Transactions resulted in a HUF 37 billion increase in HUF loans and a HUF 1 billion decrease in FX loans. As a result of transactions, housing loans decreased by HUF 10 billion and consumer loans by HUF 48 billion, while the volume of other loans increased by HUF 95 billion, which is predominantly attributable to loans to the self-employed.<sup>5</sup> Overall, loans to households remained unchanged in annual terms, which was, however, significantly influenced by a HUF 82 billion increase in loans to the self-employed. Retail loans contracted at an annual rate of 2.6 per cent, with a total contribution of HUF 44 billion from the sale of two individual loans during the quarter. The improved dynamics of household loans involved a pick-up in new lending accompanied by higher principal repayments.

The volume of new contracts increased by 50 per cent in annual terms. The volume of credit institutions' new household loan contracts amounted to HUF 260 billion in Q4, after adjustment for FGS loans granted to the self-employed (Chart 14). The volume of new household loan contracts was up from 2015 by an annual average of 50 per cent. The annual growth rate was 42 per cent in the case of housing loans, while the output of home equity loans increased by 37 per cent and other consumer loans by 64 per cent, including a 61 per cent increase in new personal loans compared to

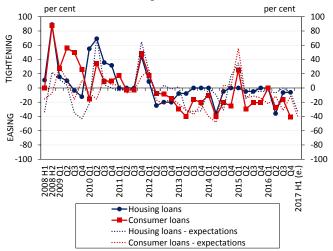
<sup>&</sup>lt;sup>5</sup> The statistical category of households includes retail customers and the self-employed (sole proprietors and small-scale producers).

Chart 14: New household loans in the entire credit institution sector



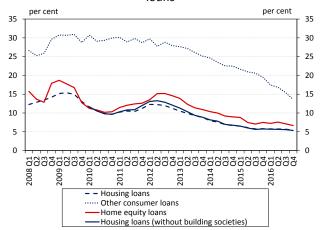
Note: Loan refinancing indicates only refinancing related to the early repayment scheme and the FX-conversion. Source: MNB

Chart 15: Changes in credit conditions in the household segment



Note: Net ratio is the difference between tightening and easing banks, weighted by market share. Source: MNB, based on the answers of respondent banks

Chart 16: Annual percentage rate of charge on new household loans



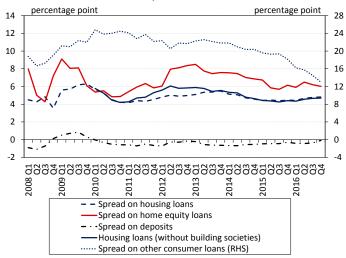
Note: Quarterly average of lending rates on newly disbursed loans. Source: MNB

the volume in 2015. The rate of housing loans for new homes continuously increased during 2016, amounting to the 16 per cent of new disbursements.

Credit conditions on consumer products eased during the quarter. Based on the responses to the Lending Survey, a net 41 per cent of the banks eased their conditions on consumer loans in 2016 Q4. A net 6 per cent of the banks reported a general easing of standards on housing loans (Chart 15). Nevertheless, in terms of specific conditions, a large proportion of the banks indicated easing: 44 per cent reduced spreads, 7 per cent reduced the charges for loan disbursement and an additional 23 per cent relaxed the maximum loan-to-value ratio. There were banks that also eased conditions on the payment-to-income ratio. The respondent banks primarily explained this easing of conditions by improvements in the housing market and economic prospects, and secondarily by changes in risk tolerance. A similar percentage of banks reported plans to ease conditions further on housing loans (34 per cent) and consumer loans (41 per cent) over the next half year.

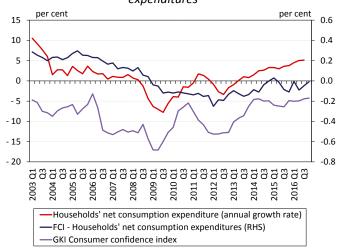
The APR on housing loans decreased, while average spreads remained unchanged in the period under review. The average APR for new HUF housing loans decreased by 0.2 percentage point to 5.5 per cent in 2016 Q4 (Chart 16). In terms of interest payment, there were slight variations in APR development, with a 0.3 percentage point decrease in the smoothed average APR of variable-rate loans, and a 0.1 percentage point decrease in the smoothed APR of fixed-rate housing loans. During the quarter, the composition effect had no material influence on the development of the average APR, and similarly to the previous quarter, fixed-rate loans (typically involving a higher APR) accounted for 59 per cent of new output. On average, spreads remained unchanged in the period under review, with the spread over the 3-month BUBOR amounting to 4.8 percentage points at the end of December (Chart 17). The apparent contradiction to the Lending Survey's indication concerning the reduction in spreads continues to be explained by the financing of new, riskier customers.

Chart 17: Interest rate spreads on new household loans



Note: Quarterly average of interest rate spreads on the 3-month BUBOR. Spreads based on the APR. Source: MNB, GKI

Chart 18: Sub-index of the FCI for household consumption expenditures

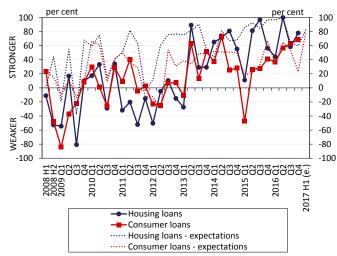


Note: The FCI quantifies the banking system's contribution through lending to the annual growth rate of household consumption expenditures. For technical reasons, the chart indicates the GKI index divided by 100. Source: MNB

In Q4, both APRs and spreads decreased on consumer loans. Interest rates on home equity loans fell by 0.4 percentage point, while rates on other consumer loans dropped by 1.8 percentage points in Q4. Consequently, in 2016 Q4, the average interest rate level of home equity loans was 6.7 per cent and that of other loans was 13.6 per cent (Chart16). In the case of home equity loans, interest rate spreads decreased by 0.2 percentage point to 6 percentage points, while in the case of other consumer loans, spreads decreased by 1.6 percentage points to 13 percentage points by the end of the year (Chart 17). Term deposits continue to ensure somewhat cheaper funding for banks as compared to interbank loans.

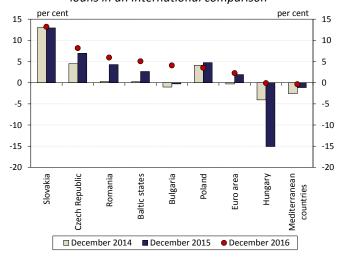
Overall, the financial intermediary system continues to have a neutral effect on the consumption of households. During the quarter, the increasing trend of household expenditures on consumption was accompanied by an increase in the forward-looking consumer confidence index. The indicator, which is outstandingly high by historical standards, has been influenced in recent quarters by the population's reduced fears over unemployment, improvements in personal finances and ability to save. According to the consumption expenditure sub-index of the Financial Conditions Index, the impact of lending in the financial intermediary system on the consumption of households is neutral (Chart 18).

Chart 19: Credit demand in the household lending segment



Note: Net ratio is the difference between banks reporting stronger and weaker demand, weighted by market share. Source: MNB, based on the answers of respondent banks

Chart 20: Annual transaction-based growth rate of household loans in an international comparison



Note: Mediterranean countries: Greece, Italy, Portugal and Spain. Baltic states: Estonia, Lithuania and Latvia. Source: ECB, MNB

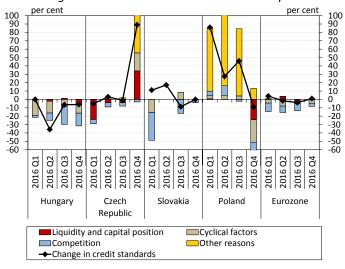
Banks remain optimistic about further growth in demand for retail credit. In Q4, over three-quarters of the banks responding to the Lending Survey observed a rise in demand for both housing loans and for consumer loans. Over the next six months, close to 80 per cent of the banks expect demand to intensify further in these two market segments. Demand for housing loans continues to be supported by the Home Purchase Subsidy Scheme for Families (HPS) scheme: in Q4, HUF 20 billion was granted under the scheme, accounting for 17 per cent of disbursements of new housing loans. In 2016, the rate of loans for new homes increased within loans disbursed under HPS, the HPS 10+10 loans<sup>6</sup> accounted for 38 per cent of HPS-related loans in the last quarter of the year.

## International outlook in household lending

Household lending increased in both the CEE region and the euro area. The average annual growth rate recorded for the euro area improved moderately in 2016 Q4, amounting to 2.3 per cent at the end of December (Chart 20). Households' debt increased in the majority of member states in year-onyear terms, but contracted by 3 per cent in Ireland and Greece and 1 per cent in Spain, Portugal and Cyprus in annual terms. In Ireland, the reduction supports households' sustainable debt service, as the amount of loans outstanding may be deemed significant in an international comparison. This is accompanied by a rise in the volume of new lending, while growth in consumer loans entered positive territory in 2016. By contrast, retail customers continue to restrain their consumption due to unfavourable macroeconomic indicators, which causes lending to narrow. In the CEE countries, an increase in household debt has been observed: the annual growth rate in lending to households was 13 per cent in Slovakia, 8 per cent in the Czech Republic, 6 per cent in Romania, and 4 per cent in Poland.

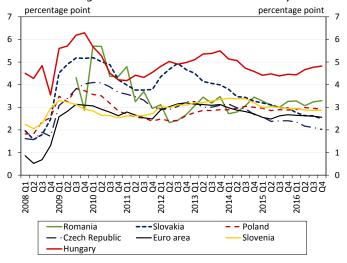
<sup>&</sup>lt;sup>6</sup> Under the HPS, families with more than 2 children can claim HUF 10 million subsidy and HUF 10 million preferential loan if they claim for a new home.

Chart 21: Changes and factors contributing to changes in housing loan conditions in an international comparison



Note: Category values are derived from the arithmetic average of the factors thematically classified therein. Positive values indicate the tightening of conditions, while negative ones indicate the easing thereof. Source: MNB, ECB, national central banks

Chart 22: International comparison of interest rate spreads on housing loans extended in domestic currency



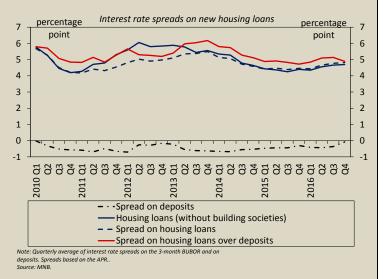
Note: APR-based spreads above the 3-month interbank interest rate. Source: MNB, ECB, national central banks

Conditions on housing loans remained unchanged in the euro area during the quarter. According to the European Central Bank's survey, banks in the euro area did not make significant changes to conditions on housing loans, while more than one third of the banks reported an increase in demand. While the easing of standards was supported by the competitive situation and perceived risks, banks' risk tolerance would have called for tightening in the period under review. In terms of specific conditions, in net terms close to 20 per cent of the banks continued to reduce spreads. Credit conditions evolved heterogeneously in CEE countries: In Slovakia, conditions on access to housing loans remained unchanged, while they were eased in Poland, and tightened in the Czech Republic (Chart 21). The tightening in the Czech Republic was motivated by an increase in financing costs, risks perceived in the housing market, and the central bank recommendation on the LTV ratio taking effect.

Average spreads on new housing loans remained unchanged in the euro area, and evolved heterogeneously in the region. During the quarter, the average APR on new housing loans dropped by 0.1 percentage point to 2.2 per cent. Of the countries in the region, interest rates decreased in Slovakia and in the Czech Republic by 0.2 and 0.1 percentage point respectively. While the average interest rates on housing loans disbursed in local currency remained unchanged in Slovakia and Poland, they increased by 0.1 percentage point in Romania. Interest rate spreads typically did not change during the period under review: in the euro area they remained at 2.6 percentage points on average, which is 2.3 percentage points lower than the spreads in Hungary (Chart 22). In CEE countries, a change occurred in the same direction as the change in interest rates, and to a similar extent. Accordingly, spreads in Hungary can still be considered high, as they exceed the average spread in the Visegrád Group by 2.3 percentage points.

## Box: Reasons for last year's increase in housing loan margins

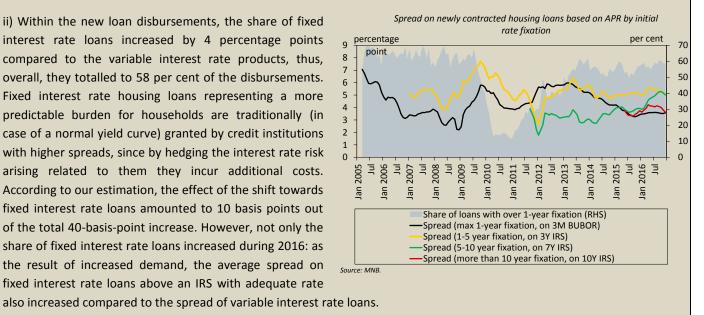
Overall, the average APR-level of housing loans issued by the domestic credit institutional sector decreased by 0.3 percentage points to 5.5 per cent during 2016, while the average interest rate spread increased by 0.4 percentage points during the same period. However, the banks' answers for the Lending survey suggest that on the whole banks eased or left housing loan lending conditions unchanged in 2016, moreover, considering terms and conditions, they admittedly reduced spreads. This apparent contradiction may be resolved by the composition of disbursed loans and the difference between the reference rate and the banks' average cost of funds. The increase observed in the case of housing loans was not realised for consumer loans: in this segment interest rate spreads decreased on average by 3.7 percentage point to 12 per cent during the year.



The increase in spreads on housing loans is attributable to multiple reasons:

i) When calculating spreads, the generally accepted practice is to compare effective transactional interest rates to the interbank average interest rate, since this captures in a transparent manner the average marginal costs of collecting new funds (necessary for lending) of the banking system. However, this statement can be spoiled in an interest rate environment close to zero, even if the interbank rate does not decline to a negative range. The reason for this is the need for retaining clients with deposits may result even in a deposit rate above the interbank rate for the relevant term. This phenomenon was reflected primarily in the case of retail term deposits at the end of 2016, and the average interest of newly placed corporate deposits also approximated the interbank rates (thus, the deposit margin increased). The average spread would increase in 2016 even if the interest of retail term deposits was to be taken for basis as reference rate instead of the interbank rate, however, its value at the end of 2016 would only be higher by 20 basis points - instead of 40 basis points -than at the end of 2015.7

ii) Within the new loan disbursements, the share of fixed interest rate loans increased by 4 percentage points compared to the variable interest rate products, thus, overall, they totalled to 58 per cent of the disbursements. Fixed interest rate housing loans representing a more predictable burden for households are traditionally (in case of a normal yield curve) granted by credit institutions with higher spreads, since by hedging the interest rate risk arising related to them they incur additional costs. According to our estimation, the effect of the shift towards fixed interest rate loans amounted to 10 basis points out of the total 40-basis-point increase. However, not only the share of fixed interest rate loans increased during 2016: as the result of increased demand, the average spread on fixed interest rate loans above an IRS with adequate rate

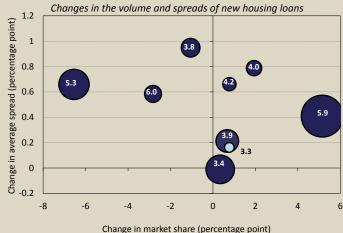


<sup>&</sup>lt;sup>7</sup> Certainly, neither the interbank rate nor the interest of term deposits captures accurately the average costs of funds of the banking system, but neither dos capture it the costs of new lending. However, due to the transparent and universal character of interbank interest rates, these are the most suitable indicators for time and international comparisons.

iii) The other reason for the increase in the spreads is that the banks' risk appetite rose last year: they started to lend to customers previously not considered creditworthy. This is reflected in the changes in spreads by banks and the rise in the average maturity of new housing loans. Due to the expected further expansion of demands, and thus the broadening of the potential customer base, the composition effect resulting from this may continue to play a role in the development of interest rate spreads.

Changes in the value and spreads of new housing loans

iv) The fourth possible reason is the shift in the proportion of banks lending with higher and lower spreads. If the market share of banks that disburse loans with higher spreads increased within new loans, the aggregate average interest rate spread would increase even with the banks' constant willingness to take risks. The higher spread in the case of these banks may be attributable to a number of reasons, including, for example, different target groups, lesser cost efficiency, as well as a better bargaining position. However, according to our research, this factor did not increase the average spread. Calculating with the market share in 2015, we would end up with the same average spread on new loans as the actual average interest rate spread observed in 2016.



Note The bubble size represents the market share in new housing loans in 2016 Q4. Numbers in the bubbles show the actual level of interest rate spreads. Source: MNB

Thus, on the whole, it can be stated that the rise in the average aggregate spread observed in the last one year was only partially caused by the price hike of banking products. The main reason was the greater risk-taking by households and banks, but the change in the borrowers' needs also had a significant effect (e.g. preferring loans with fixed interest rate).

#### 4. ANNEX: NOTES ON THE METHODOLOGY

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

## 1. Credit aggregate and lending rate data

One of the statutory tasks of the Magyar Nemzeti Bank is to publish statistical data regarding the functioning of the system of credit institutions and the financial position of the country. The statistics compiled, the press releases presenting the main data and the methodological descriptions of preparing the statistics are available on the MNB's website at: <a href="http://www.mnb.hu/statisztika">http://www.mnb.hu/statisztika</a>.

## 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. A total of 11 banks participated in interviews on household loans. 9 banks responded to questions related to housing loans, while 10 banks and 7 financial enterprises answered questions on consumer loans. Based on data from the end of 2016 Q4, the surveyed institutions accounted for 86 per cent of the banking sector in the case of outstanding housing loans and 89 per cent in the case of outstanding consumer loans. The corporate questionnaire was completed by 8 banks in total, which represent 79 per cent of the corporate loan market, while the market share of the 7 banks responding to the questionnaire related to commercial real estate loans is 89 per cent.

The survey consists of a standard questionnaire in each segment. The retrospective questions refer to 2016 Q4 (compared to 2016 Q3), whereas the forward-looking questions concern the next half-year period, i.e. covering 2017 Q1 and Q2 (relative to 2016 Q4). The current questionnaire was completed by the senior loan officers between 3 and 17 January 2017.

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 <a href="http://www.mnb.hu/penzugyi-stabilitas/publikaciok-tanulmanyok/hitelezesi-felmeres">http://www.mnb.hu/penzugyi-stabilitas/publikaciok-tanulmanyok/hitelezesi-felmeres</a>.

## 3. The Financial Conditions Index (FCI)<sup>8</sup>

Numerous indicators and hence a substantial set of information are available regarding the functioning, status, environment and performance of the system of financial intermediation. In order to condense the information relevant to the financial system and to describe the underlying processes, many central banks (including the Magyar Nemzeti Bank) apply factor models, which allow them to present key information extracted from hundreds of time series in a few variables, i.e. factors. Based on the results of the factor model, the FCI discussed in the publication shows the contribution of the banking system to the annual real GDP growth rate.

The database used for the factor analysis is composed of individual bank data; namely, certain individual data of the largest nine banks and some aggregate indicators of the rest of the banking system. From the panel database consisting of 10 banks, the following indicators were included for the purposes of the factor analysis:

<sup>&</sup>lt;sup>8</sup> Hosszú, Zs. (2016): The impact of credit supply shocks and a new FCI based on a FAVAR approach, MNB Working Papers 2016/1, Magyar Nemzeti Bank.

## Liquidity:

- o liquid assets as a percentage of the balance sheet total
- o stable funding as a percentage of the balance sheet total
- o FX swaps outstanding as a percentage of the balance sheet total

## Capital:

- o own leverage
- o parent bank leverage
- capital buffer as a percentage of the balance sheet total

## • Risk:

- o changes in the proportion of non-performing portfolios
- o cost of provisioning as a percentage of the total portfolio
- o risk-weighted assets as a percentage of the balance sheet total
- o interest and commission revenue as a percentage of the balance sheet total

The question to decide during factor analysis is the exact number of estimated variables that can capture the essential information contained by the data. The MNB decided this question based on the factors' impact on macroeconomic variables: inserted in a VAR (vector autoregressive) model, the first two financial factors proved to be significant. At the same time, these two factors explain around 50 per cent of the variance of bank data.

The factors and the VAR model were estimated in accordance with the methodology presented in Koop and Korobilis (2014). Based on the relationship between the factors and the original variables, the two factors were respectively interpreted as an indicator gauging banks' lending capacity, and as an indicator capturing banks' willingness to lend; at the same time, only the factors' change over time has significance; their level does not; in other words, a single data point does not carry information in itself. With that in mind, the final FCI was quantified based on the effect of these two factors on macroeconomic variables. According to the FAVAR estimate, as opposed to the factor measuring lending capacity, after the crisis the factor expressing willingness to lend significantly influenced changes in outstanding borrowing. Thus, the FCI was identified as the impact of banks' willingness to lend on GDP. The indicator is interpreted very similarly to the previous FCI: it shows the contribution of the banking system to the annual real GDP growth rate through the banking system's lending activity. In other words, if the FCI takes a value of 1, one percentage point of the annual growth rate of GDP can be attributed to the lending activity of the banking system.

In addition to the total impact of the FCI on GDP, sub-indices can also be calculated on the basis of the VAR model. The FCI's corporate lending sub-index indicates the contribution of the banking sector's lending activity to the annual growth rate of corporate fixed capital investment. The FCI's household consumption expenditure sub-index quantifies the contribution of the banking sector's lending activity to the annual growth rate of household consumption.

Koop, G. and Korobilis, D. (2014): (2014): A new index of financial conditions, European Economic Review, vol. 71, pp. 101–116.

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