MID-TERM REPORT

2013
—
2016

MAGYAR NEMZETI BANK

Mid-term Report
2013-2016

Published by the Magyar Nemzeti Bank
Publisher in charge: Eszter Hergár
H-1054 Budapest, Szabadság tér 9.
www.mnb.hu

Contents

Foreword

Having reached the halfway mark of the Governor's six-year term that started in March 2013, it is time to present the most important results of the past three years. This was a period of trend reversals both in Hungarian monetary policy and in central banking as a whole.

Many important milestones were reached the past few years, such as the cautious, but continuous implementation of the easing cycle, the introduction of the Funding for Growth Scheme to facilitate lending to small and medium-sized enterprises, the launch of the Self-Financing Programme in an effort to reduce Hungary's external vulnerability, the commencement of the Growth Supporting Programme, the integration of financial supervision, the elaboration and operation of the central bank's macroprudential strategy and instruments, the conversion of foreign currency loans into forint, the formulation of the "fair banking" concept, the performance of resolution tasks, the establishment of MARK Zrt., the issuance of new banknotes, and the acquisition of GIRO Zrt. and the Budapest Stock Exchange Zrt. In parallel with these developments, the Magyar Nemzeti Bank commenced a comprehensive social responsibility programme by establishing the Pallas Athena Foundations and setting up a broad-based training programme. The central bank had both the mandate and the means to carry out these tasks as, against all expectations, it avoided operating at a loss in 2013 and even with the expenditures of all of the programmes implemented between 2013 and 2015, it achieved a considerable profit while the retained earnings recorded for the period guarantee that the operation of the Bank and its programmes will not impose a burden on the budget for years to come.

This Mid-Term Report summarises and evaluates the work accomplished since March 2013 and provides an overview of the most important changes in monetary policy and its instruments, the new types of tasks and new initiatives. It also describes the evolution of the central bank's attitude in the past three years, the expansion of its previous tasks and the extent to which the central bank's work has changed compared to the period preceding 2013.

Dr. Ferenc Gerhardt
deputy governor

Márton Nagy
deputy governor

Dr. László Windisch
deputy governor

Dr. György Matolcsy
governor

SUMMARY TABLE – ACHIEVEMENTS OF THE MNB 2013–2016[1]

Measures	Period	Objective	Result
I. Monetary policy steps and programmes			
Easing cycle	August 2012 – July 2015	Achieve price stability and provide a corresponding degree of support to the real economy	565-bp reduction of the base rate, which supported economic output and the medium-term achievement of the central bank's inflation target
Funding for Growth Scheme	June 2013 – December 2016	Facilitate lending to Hungarian SMEs	31,000 enterprises received financing amounting to HUF 2,126 billion
Self-Financing Programme	since June 2014	Reduce Hungary's external vulnerability	Vulnerability of the Hungarian economy declined significantly; Hungarian risk premiums decreased
Growth Supporting Programme	since January 2016	Stimulate commercial bank market lending activity	Expected result: promote lending to corporations in support of sustainable economic growth
II. In support of the stability of the financial system			
HFSA-MNB integration	October 2013	More efficient supervisory system	Stronger supervision, clean-up of financial sector began
Macroprudential measures	since October 2013	Address systemic risks affecting the financial system	Set-up and operation of a new macroprudential strategy and instruments
Settlement/ Conversion	February 2015	Compensate customers for burdens incurred due to the exchange rate margin and unfair interest rate increases, eliminate exposure to exchange rate risk	Considerable decline in households' burdens, elimination of systemic exchange rate risks
Fair banking	January 2015	Promote healthy, sustainable competition in banking sector	Facilitating the transparency of lending rates and related commissions
MARK Zrt.	since November 2014	Clean up banking sector balance sheets by removing non-performing commercial real estate loans	Expected result: Ratio of non-performing corporate loans is expected to decline significantly by end-2016
Resolution activity	since September 2014	Maintain financial stability and protect customers	Successful MKB resolution

[1] The Hungarian version of this Report was published in March 2016. The analyses were prepared in the preceding months.

Measures	Period	Objective	Result
III. Fostering the efficient functioning of Hungarian financial markets			
Acquisition of GIRO Zrt.	April 2014	Enforce public interests in payment transactions	Cheaper payment transactions
Acquisition of the Budapest Stock Exchange Zrt.	November 2015	Enhance Hungarian capital market, expand investor base, improve transmission	Expected result: increasing market capitalisation, the number of initial public offerings and turnover
New banknotes	since December 2014	Improve safety of cash handling and thwart counterfeiting by state-of-the art features on banknotes	Renewal of 10,000 and 20,000 forint banknotes
IV. Activities for the public good and other core central bank activities			
Corporate social responsibility	since May 2014	Create value, strengthen social cohesion, promote scientific thinking, improve financial awareness	Setting up six foundations
Education/training	since 2015	Renew and enhance tertiary education and the system of economic and financial training, support scientific activity and financial literacy	Cooperation Agreements with nine Hungarian higher education institutions

1 Introduction

In the second half of the 2000s, Hungary faced increasingly evident growth problems, large fiscal deficits, high public debt and rising current account deficits and foreign currency denominated debt. Consequently, the 2008–2009 global economic crisis hit Hungary particulary hard. The country had been subject to the excessive deficit procedure since its entry into the European Union. In an effort to exit the procedure, after a remarkable fiscal policy turnaround, Hungary succeeded in bringing the government deficit below 3 per cent in three consecutive years between 2011 and 2013, and thus in 2013 the European Commission abrogated the excessive deficit procedure against Hungary. At the same time, the prolonged repercussions of the 2007 global financial crisis and its escalation in 2008 rendered Hungary's external economic and money market environment vulnerable. This rapidly changing, unconventional environment called for new, innovative monetary policy solutions. The turnaround in Hungary's monetary policy started in the summer of 2012 and gained momentum in March 2013.

Since March 2013, the Magyar Nemzeti Bank has played an increasingly active central bank role and has taken proactive steps to fulfil the mandates entrusted to it in the MNB Act. The central bank turnaround involves numerous monetary policy measures and programmes, as a result of which the Magyar Nemzeti Bank is able to meet all its mandates. The easing cycle initiated by the external members of the Monetary Council in the summer of 2012 represented the first step of the policy turnaround. Resumed after a six-month suspension, the series of interest rate cuts lasted until July 2015 and consequently, the key policy rate reached a level of 1.35 per cent, the lowest rate recorded in the MNB's 90-year history. (Madarász – Novák, 2015) By reducing commercial bank interest rates and supporting economic growth, the easing cycle contributed to the achievement of the central bank's medium-term inflation target. (Felcser et al., 2015) In addition, it brought about a favourable change in the government securities market by ensuring cheaper and safer public debt financing, while also improving the result of the MNB, which was positive in 2014 and 2015 as well.

The next significant step was the announcement of the Funding for Growth Scheme (FGS) in June 2013. In line with its purpose, the FGS considerably improved the access to credit of small and medium-sized companies, giving new momentum to the corporate credit market, which then played an important role in the turnaround in investment. (Magyar Nemzeti Bank, 2015c) During the various phases of the FGS (Phase I, Phase II, FGS+), nearly 31,000 enterprises obtained financing amounting to around HUF 2,126 billion in total. (Magyar Nemzeti Bank, 2016a) The central bank's programme made a significant contribution to revitalising economic growth and boosting employment, which – together with the MNB's other measures, e.g. the easing cycle – account for nearly one half of the economic growth observed in recent years.

In the spring of 2014, the management of the Magyar Nemzeti Bank decided to launch the Self-Financing Programme. The programme is intended to encourage the purchase of liquid assets accepted as eligible collateral with a view to mitigating Hungary's external vulnerability by reducing the country's gross external debt. Owing to the unique features of the Hungarian securities market, the programme intensified the government bond purchases of commercial banks, which contributed to the decline in long-term government bond yields, thereby lowering the financing costs of the general government. As a result of the transformation of the main policy instrument and the asymmetric interest rate corridor, bank liquidity shifted from the central bank instrument to government securities. The central bank interest rate swap instrument introduced as part of the programme supports the management of interest rate risk and hence, facilitates bank adjustment. (Magyar Nemzeti Bank, 2015a) Consistent with its objective, the Self-Financing Programme has reduced the external vulnerability of the country.

In recent years, the central bank has also taken measures aimed at financial stability and the efficient functioning of financial markets. The central bank's conversion of household foreign currency loans into forint in cooperation with the Government practically eliminated the largest systemic risk in the economy in 2014–2015. (Magyar Nemzeti Bank, 2015c) The new regulation on "fair banking" was designed, among other things, to ensure the protection of debtors from unfair unilateral contract amendments, while offering an option to commercial banks to impose higher lending costs when justified. The acquisition of GIRO Zrt. and Budapest Stock Exchange Zrt. facilitates the efficient functioning of Hungarian financial markets.

Similarly, the integration of the Hungarian Financial Supervisory Authority and the creation and operation of macroprudential instruments served the interests of financial stability. This will allow the central bank to prevent the build-up of risks jeopardising economy and to ensure that the financial system's capacity to finance the economy is well-balanced. Accordingly, the central bank has become a complex supervisory authority which can guarantee systemic and institutional financial stability.

In the last three years, in accordance with the provisions of the MNB Act and without prejudice to its primary objective, the MNB endeavoured to support the economic policy of the Government using the instruments at its disposal. The desired growth of the real economy requires appropriate and sustained credit growth, which has to be realised without the central bank's support in the long term. To this end, in November 2015 the central bank announced the Growth Supporting Programme (GSP), which is aimed at stimulating the market lending activity of commercial banks while the Funding for Growth Scheme is gradually being phased out. Besides the third phase of FGS, the Growth Supporting Programme also includes the Market-Based Lending Scheme (MLS), which stimulates market credit activity of commercial banks with several, primarily risk and liquidity management supporting tools. With the Growth Supporting Programme, net corporate lending, in particular the SME portfolio, is expected to increase by HUF 250–400 billion in 2016, which corresponds to 5–10 per cent annual lending growth. (Magyar Nemzeti Bank, 2015b)

As a result of coordinated monetary policy and fiscal policy, central bank programmes have fostered fiscal stabilisation through a number of channels. On the one hand, through the decline in government bond yields, the central bank's interest rate cuts and the Self-Financing Programme contributed significantly to the decrease in the interest expenditures of the central budget amounting to nearly 1 per cent of GDP in 2013–2015. On the other hand, the central bank programmes and the introduction of the FGS had a positive impact on economic growth and thus, through the expansion of tax bases, they were partly responsible for the decline in the fiscal deficit to a historically low level in 2015, and a further decrease in the public debt-to-GDP ratio.

Owing to the turnaround in monetary policy, the central bank has recorded a sustained positive P/L since 2013, which in turn played a role in the abrogation of the excessive deficit procedure. Although the previous central bank management had projected a loss in excess of HUF 200 billion at the end of 2012, thanks to the reform of monetary policy the central bank recorded a positive P/L in 2013 and has remained profitable since then. While the MNB does not have a profit target, it was partly because of the monetary policy turnaround that the central bank did not have to be reimbursed for losses from the central budget, which would have added to the fiscal deficit and public debt.

In the context of corporate social responsibility, the Magyar Nemzeti Bank is also participating in the renewal of higher education in the areas of economics and finance. It does so by sponsoring numerous higher education programmes, which is not financed form the central budget or the tax revenue. The central bank measures listed above were merely intended to provide a comprehensive view of the central bank's operation in recent years, as the central bank has taken several additional steps: among other things, it has taken on the role of resolution authority, launched the Central Bank Renminbi Programme and renewed the appearance of the forint banknotes in circulation.

In addition to ensuring price stability and financial stability, central bank programmes will continue to make an important contribution to growth in the years to come, and the Magyar Nemzeti Bank remains committed to responding actively to potential new challenges. Connected to both the state and the market, the banking sector may become the engine of growth over the next few years, and its renewal is expected to foster sustainable growth for successful economic convergence.

I. MONETARY POLICY STEPS AND PROGRAMMES

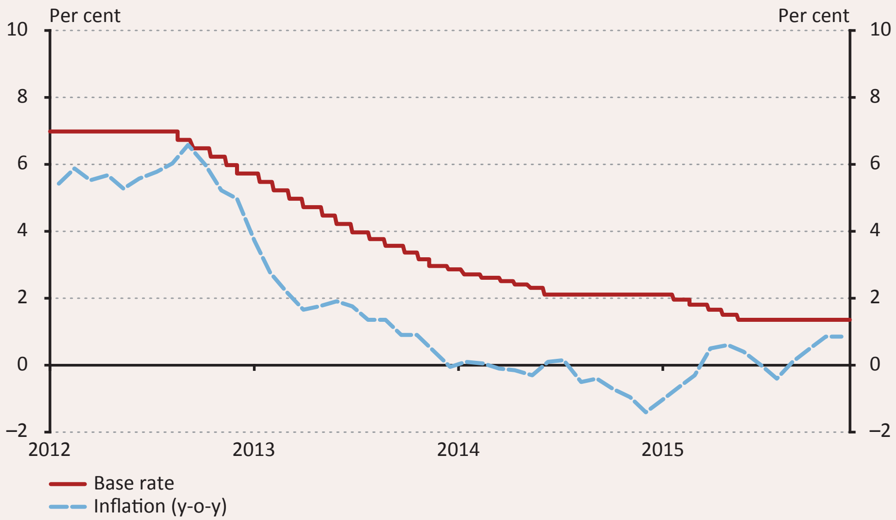
2 Steps taken to meet the inflation target

As a result of international risk appetite increasing considerably from 2012 H2, the risk perception of Hungary improved, contributing to the reduction of stability risks. In parallel, a pronounced disinflation process began to materialise. Favourable inflation and financial market developments supported the launch of an easing cycle in the summer of 2012. Continuation of the easing cycle was also justified by the growing risk of significantly undershooting the inflation target. In line with international practice, alongside the traditional interest rate policy, the Magyar Nemzeti Bank applied additional targeted monetary policy instruments to respond to the challenges posed by a low inflation environment, restrained lending activity and the country's external vulnerability. The easing cycles significantly reduced the risk of deflation with a potential for severe real economy sacrifices, and contributed to increasing the output level. Based on the MNB's latest forecast (December 2015), persistently accommodating monetary policy conditions support the attainment of price stability over the medium term. In addition, central bank programmes are expected to improve the efficiency of monetary transmission, thereby supporting the achievement of the inflation target.

2.1 KEY POLICY RATE FALLS TO A HISTORICAL LOW IN THE EASING CYCLE

The Magyar Nemzeti Bank has made substantial interest rate cuts in recent years and deployed additional, targeted monetary policy instruments with a view to fulfilling its primary mandate of achieving and maintaining price stability. As a result of the easing cycle commenced in the summer of 2012, after a decline of 565 basis points in total, the central bank base rate dropped to a historical low level from the initial level of 7 per cent (Chart 2.1). The three-year easing cycle of the Magyar Nemzeti Bank can be divided into three phases. The commencement of the easing cycle in the summer of 2012 was initially enabled by Hungary's gradually improving risk perception and the steadily loose monetary policy stance adopted by the world's leading central banks, while country-specific factors, such as the sustained turnaround in fiscal policy further increased the room for manoeuvre in monetary policy. During the second phase of the cycle, strong disinflation and the need to stimulate economic growth called for the easing of the monetary stance. The third phase of the cycle commenced in March 2015, when increasing downside risks to inflation pointed to the continuation of monetary easing. (Felcser et al., 2015b)

Chart 2.1
Developments in the policy rate and inflation in Hungary

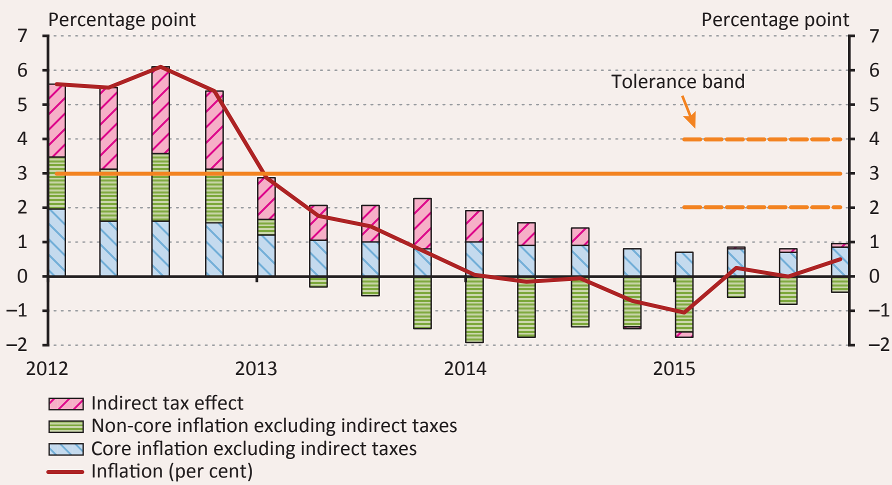


Source: MNB, HCSO

In the first half of the easing cycle, monetary policy's room for manoeuvre was supported by both improving international risk appetite and country-specific factors. Before commencement of the interest rate cuts, the pronounced improvement in international risk appetite had largely resulted from the crisis management measures adopted across the euro area. The expected premium on emerging market assets decreased significantly, and the Hungarian risk spread followed suit. From the beginning of June 2012 to the end of August, the Hungarian CDS spread shrank steadily and considerably, falling by a total of 200 basis points, with a parallel decline in the long-term yields of the government securities market. In addition to stronger international risk appetite, the improvement in Hungary's risk perception was also driven by its increasing fiscal discipline. Following budgetary adjustments, in 2012 Hungary's fiscal deficit according to the EDP methodology edged down to 2.3 per cent of GDP, which was seen as a sharp decline compared to the high average of previous years. In addition, government debt embarked on a downward path, while growth stimulating structural reforms commenced with a primary focus on the expansion of labour market activity and trend growth. **In the context of the supportive global monetary policy setting, during the first half of the easing cycle, the MNB's Monetary Council first cut its key policy rate in increments of 25 basis points from the initial 7 per cent to 4 per cent by July 2013.** (Magyar Nemzeti Bank, 2014a)

At the beginning of the easing cycle, inflation was near 6 per cent, exceeding the central bank's inflation target by a large margin. However, this high inflation level was largely attributable to ad hoc, temporary effects, and as they wore off, **a strong disinflation process began from end-2012, with inflation remaining persistently below 3 per cent, due to external and internal factors** (Chart 2.2). Internal factors behind the period of disinflation included the drop-out of earlier indirect tax hikes from the base and a series of administered price cuts, which significantly reduced the direct inflationary impacts stemming from Government measures. In addition, disinflation in Hungary was also driven by subdued domestic demand, a degree of

Chart 2.2
Decomposition of inflation



Source: MNB

unused capacity that emerged during the crisis and continued to prevail in the economy, and by waning global inflation. In the sustained low inflation environment, inflation expectations also shifted downward. Inflation expectations aligned with the central bank target also reduced inflationary pressure from the labour market by way of lower wage dynamics, further increasing the room for manoeuvre in monetary policy. (Felcser et al., 2015b)

In addition to the emergence of a strongly disinflationary environment, the gradual improvement in risk perception also supported the continuation of the easing cycle. Thanks to Hungary's favourable net lending capacity, a disciplined fiscal policy, the lifting of the excessive deficit procedure and the accommodative monetary policy of the world's leading central banks, the risk perception of Hungary continued to improve in the second phase of the easing cycle. Overall, further easing of the monetary stance was warranted by the lasting disinflationary environment, inflation falling below the 3 per cent target and, looking forward, the inflation outlook. Accordingly, the Monetary Council cut the key policy rate by an additional 190 basis points to 2.1 per cent by July 2014. In the second phase of the easing cycle, however, uncertainty surrounding the international financial environment called for more cautious monetary policy and, in consideration of external shocks, the reduction of the base rate continued in more moderate steps compared to the previous 25-basis point cuts. (Magyar Nemzeti Bank, 2014a)

In its forward guidance issued after the close of the easing cycle, the Monetary Council stressed that "the macroeconomic outlook points in the direction of persistently loose monetary conditions". (Magyar Nemzeti Bank, 2014b) In line with this assessment, the key policy rate remained unchanged at 2.1 per cent until March 2015. In the Monetary Council's judgement, there remained a degree of unused capacity in the economy, the disinflationary impact of the real economy subsided looking ahead, and at the prevailing key policy rate inflation was consistent with the medium-term target. At the same time, primarily in view of the further decline in commodity prices, the central bank indicated that downside risks to inflation had increased. (Magyar Nemzeti Bank, 2014c) However, based on the projection at the time, achieving the medium-term inflation target pointed in the direction of maintaining loose monetary conditions for an extended period.

In March 2015, following the comprehensive assessment of the latest *Inflation Report,* the Monetary Council decided to relaunch the easing cycle and carry out a 15-basis point interest rate cut. Further monetary easing was warranted by trend indicators falling short of the level consistent with the inflation target, the persistently negative output gap, below-target inflation expectations, subdued global commodity prices, as well as monetary conditions that continued to be loose, overall, in both global and regional terms. In the judgement of policymakers, "the probability of second-round effects taking hold in the wake of the change in inflation expectations has increased". (Magyar Nemzeti Bank 2015d) **To achieve the inflation target, the central bank cut the base rate in steps of 15 basis points to 1.35 per cent by July 2015, before deciding to end the interest rate-cutting cycle.** During the 3 years of the easing cycle, the MNB cut its key policy rate by a total of 565 basis points, which was in line with the accommodative monetary policy conducted both by the world's leading and regional central banks. **In its forward guidance issued after closing the cycle, the Monetary Council indicated that the macroeconomic and inflation outlook pointed to the maintenance of loose monetary conditions over a sustained period.** (Magyar Nemzeti Bank*,* 2015e) Coupled with additional cost shocks, communication about the expected path of the key policy rate intensified. Policymakers concluded that maintaining the prevailing level of the base rate and loose monetary conditions over the entire forecast horizon would be consistent with achieving the medium-term inflation target and a corresponding degree of support to the real economy. The forward guidance of the Monetary Council successfully shaped expectations about future monetary policy.

The easing cycle exerted a favourable impact on the Hungarian financial markets. The gradual decline in the central bank base rate fed through to financial market interest rates as the first step of monetary policy transmission, while also exerting a positive impact on government bond yields. Interest rate cuts gradually fed through to short-term money market yields, which correlated strongly with the declining base rate during the easing cycle, while remaining within the interest rate corridor. Cuts to the central bank base rate also reduced bank interest rates and, through bank lending rates, exerted a positive impact on household and corporate interest burdens. **Along with money market interest rates, government bond yields also fell substantially after the start of the easing cycle.** In addition to the international environment, the disciplined Hungarian fiscal policy and the favourable outlook for the Hungarian economy, central bank programmes (the easing cycle, the Self-Financing Programme, the Funding for Growth Scheme) also contributed a great deal to falling yields and higher demand for government securities. Owing to the marked decline in Hungarian bond yields, the interest savings of the general government may exceed 1.7 per cent of GDP per annum over the long term. (Kicsák, 2015) **The three-year easing cycle of the MNB significantly reduced the risk of undershooting the inflation target and substantially moderated the risk of the emergence of a deflationary period.** (Felcser et al., 2015b) According to central bank projections, persistently loose monetary conditions are consistent with the medium-term achievement of the inflation target and a corresponding degree of support to the economy.

2.2 IMPROVING THE FLEXIBILITY OF INFLATION TARGETING

Following the scheduled review of the inflation target, in March 2015 the Monetary Council decided to improve the flexibility of the inflation targeting regime. As a result, the Council designated a ±1 percentage point tolerance band, while maintaining the inflation target defined as a 3 per cent rate of increase in the domestic Consumer Price Index published by the Central Statistical Office.

The financial crisis posed new challenges to monetary policy worldwide. The crisis highlighted that the shocks to the economy may be much greater and more lasting than previously expected, and the probability of monetary policy being faced with constraints will not be negligible in the future. **Under the inflation targeting regime, central banks have moved towards greater flexibility and reformed their monetary policy instruments.** While maintaining the primary objective of price stability, flexible inflation targeting provides a framework where the central bank not only focuses on inflation in the short run, but it also takes into account other (real economic and financial stability) factors. Real economy considerations may affect decision making primarily when the central bank is willing to temporarily tolerate deviations of consumer prices from the inflation target, in order to avoid the excessive volatility of real variables, and this may also be reflected in the use of the tolerance band. (Magyar Nemzeti Bank, 2015b) **Use of a tolerance band is consistent with international best practice followed by central banks.** The MNB continues to aim at achieving 3 per cent inflation; however, the ±1 percentage point tolerance band recognises that inflation may fluctuate around that level as a result of shocks affecting the economy.

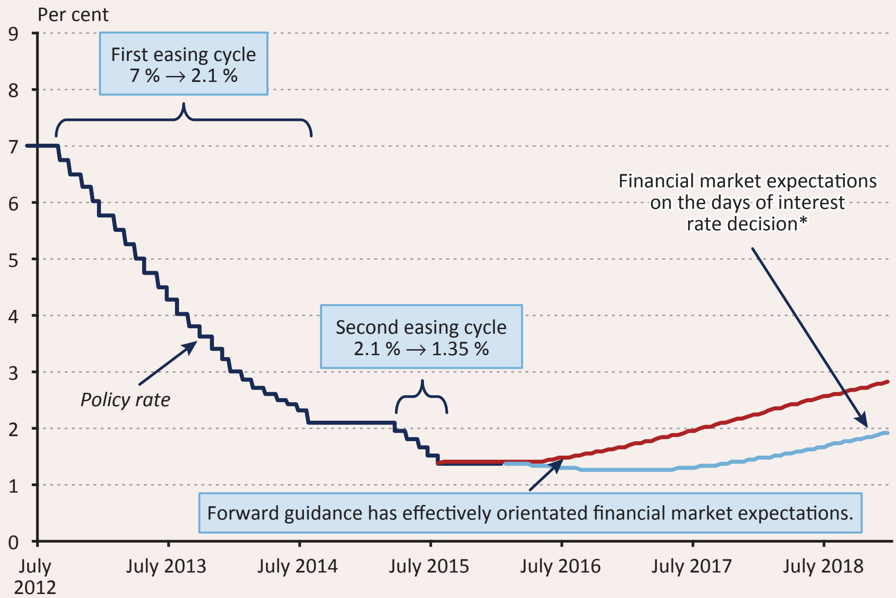
2.3 NON-CONVENTIONAL INSTRUMENTS

Along with gradual interest rate cuts, the MNB also applied other targeted, non-conventional tools to address the monetary policy transmission difficulties caused by the crisis and to reduce Hungary's external vulnerability. In April 2013, the central bank launched the Funding for Growth Scheme in an effort to alleviate the disruptions in lending to small and medium-sized enterprises, to stimulate corporate lending and to thus foster accelerated economic growth. The programme managed to end the credit crunch among SMEs and created credit conditions which improved enterprises' investment appetite and hence, significantly improved monetary policy transmission.

In order to foster a healthier financing environment and to reduce Hungary's external vulnerability, **in April 2014 the central bank decided to commence a Self-Financing Programme and began the transformation of its set of monetary policy instruments accordingly**. The increased use of internal funds in financing government debt and the concurrent reduction of Hungary's reliance on external funds contributed strongly to reducing the external vulnerability of the country. **In addition, the central bank supported the HUF conversion of households' foreign currency based mortgage loans**, which alleviated external vulnerability further and improved the transmission of monetary policy. The dominance of HUF loans improved the efficiency of the interest rate channel, the credit channel and the exchange rate channel alike. The increased efficiency of the credit and interest rate channels contributes to reducing the fragmentation of monetary transmission and thus increases the effectiveness and efficiency of monetary policy, thereby supporting the future achievement of the inflation target.

During the easing cycle, both the decision and the forward guidance played an important part in efficiently shaping expectations. Accordingly, the Monetary Council provided information on a continuous basis regarding the closure or the commencement of the easing cycle and the time horizon of maintaining loose monetary policy conditions. **With an emphasis on conditionality and the achievement of the inflation target, the forward guidance of the Monetary Council succeeded in adequately shaping market expectations and those of economic agents, thereby alleviating the uncertainty around central bank decisions and improving the efficiency of monetary policy.** (Magyar Nemzeti Bank, 2015e)

Chart 2.3
Market expectations regarding the central bank base rate



Note: As at the closure of the easing cycle in July 2015 and on the day of the January 2016 interest rate decision.

Source: MNB, Reuters, Bloomberg

3 Transformation of monetary policy instruments

After the onset of the 2008 economic crisis it became clear that the external fragility of the economy and excessive reliance on external foreign currency financing were among the main reasons for Hungary's vulnerability. After the initial shock, the crisis forced economic agents to carry out adjustments, which initially turned the current account deficit into a surplus and subsequently resulted in a considerable decline in total debt, including short-term debt. Parallel to the reduction in Hungary's external exposure, by 2014 the reserve holdings of the central bank increased significantly, and the resulting, marked improvement in reserve adequacy and accumulation of excess reserves[1] over and above short-term external debt allowed for the cautious, gradual reduction of the reserves.

The MNB's self-financing programme is intended to reduce Hungary's external vulnerability. One way of utilising the foreign exchange reserves is for the state to renew the bulk of its maturing foreign exchange debt in forint, as it carries out the necessary conversions at the MNB, against its forint deposits. The self-financing concept and programme of the MNB takes advantage of this possibility with the objective of increasing the financing of government debt from internal funds and reducing reliance on external funds.

The programme gave rise to processes beneficial for the central bank as well, contributing to the contraction of the central bank's balance sheet. Indeed, the crisis inflated the MNB's balance sheet, which undermined the efficiency of monetary policy transmission, imposed costs on the real economy through the increased use of sterilisation instruments, while the excess liquidity inflows did not substantially ease banks' liquidity management. With the decline in external vulnerability, the accumulation of reserve holdings and

[1] Consistent with international practice, the Guidotti indicator – a measure quantifying the country's short-term external debt – is considered by the MNB to be the most important reserve strategy indicator. In addition, it considers other indicators preferred by investors as appropriate in assessing the adequacy of the reserves and identifying the relevant risks. (Csávás, 2015)

excess liquidity accelerated further; therefore, the central bank balance sheet contraction stemming from the Self-Financing Programme also represented added value from the aspect of monetary policy.

3.1 THE SELF-FINANCING PROGRAMME[2]

In the context of the Self-Financing Programme, the MNB has transformed its monetary policy instruments. According to the self-financing concept, with the increased use of internal sources of financing gross external debt can be reduced and the country's external vulnerability can be lowered. Announced on 23 April 2014, the MNB's Self-Financing Programme supports this objective. As part of the programme, through the transformation of monetary policy instruments (Table 3.1), the MNB encouraged banks to purchase eligible, domestic securities not issued by the central bank, instead of central bank sterilisation instruments. Due to the nature of the Hungarian securities market, this primarily meant government securities. With this step, the MNB reduced external exposure and improved the currency structure of financing.

Table 3.1
Transformation of central bank instruments

Instrument	Before the Self-financing programme	Status at December 2015
main policy instrument	2-week bill	3-month deposit
interest rate corridor	symmetrical: main policy rate ±100 bp	asymmetrical: O/N deposit: main policy rate -125 bp, O/N loan: main policy rate +75 bp
minimum reserve requirement	optional ratios: 2-5%	unified reserve ratio: 2%
collateralised loan	2-week and 6-month maturities	1-week and 3-month maturities
supplementary tool supporting forint-liquidity management	–	limited 2-week deposit

Source: MNB

The Self-Financing Programme was carried out in three consecutive phases between the spring of 2014 and January 2016. The steps of each phase are presented below, followed by an overview of the programme's results.

[2] The self-financing concept and the parts describing the programme draw on the contents of the study entitled "The Magyar Nemzeti Bank's self-financing programme – April 2014 – May 2015 (Evaluation)".

Self-financing programme 1.0

In the first phase of the Self-Financing Programme, the main policy instrument was turned into a deposit facility and the MNB introduced self-financing interest rate swap tenders. The first phase of the Self-Financing Programme began in the summer of 2014 when the MNB transformed its monetary policy instruments as follows:

- As of 1 August 2014, the two-week MNB bill was replaced by a two-week central bank deposit.
- As of 16 June 2014, the MNB offered banks an interest rate swap instrument (IRS), announced every two weeks.
- As of 16 June 2014, a three-year secured forint loan and an asset swap instrument providing banks with foreign currency liquidity in exchange for long-term HUF-denominated securities were included in the set of potential central bank instruments.[3]

By transforming the two-week bill into a deposit, the central bank changed the liquidity profile of its main policy instrument because – in contrast to the bill – the deposit may not be accepted as collateral for banks' borrowing and may not be broken before it matures; consequently, it is a less liquid instrument. There was also an important change in the potential users of the instrument: the only economic agents entitled to place deposits with the central bank are credit institutions which are required to hold reserves. This means that non-resident and non-bank domestic investors were driven out of this main policy instrument. With the introduction of the central bank's HUF-denominated interest rate swap (IRS) instrument, the MNB enabled participating banks to manage their interest rate risk, thereby encouraging banks to purchase longer-term, liquid securities. Under the IRS contract, banks receive a floating rate in return for a fixed rate, for which they agree to increase their eligible security holdings at least to the extent of the IRS contracts concluded with the MNB. While turning the two-week bill into a deposit has "driven out" bank funds from

[3] The three-year secured forint loan and the asset swap are among the MNB's potential instruments. They are activated on an ad hoc basis, in the event of market disturbances, with a view to mitigating the impact of market strains. Linked to the central bank base rate, the three-year floating rate collateralised loan transaction is intended to ease the systemic liquidity problems of credit institutions. See: MNB (2014b): Notice on the terms and conditions of the three-year floating rate collateralised loan transaction linked to the central bank base rate. Under the asset swap instrument, the MNB provides EUR-denominated securities accepted as collateral by the European Central Bank in order to facilitate counterparties' access to the required foreign currency liquidity. See: MNB (2014c): Notice on the terms and conditions of securities swap transactions. MNB.

the central bank instruments, due to the conditional nature of the instrument, the regular announcement of the central bank IRS tenders "steered" bank liquidity to the relevant securities markets; as a result, the decisions of the first phase of the Self-Financing Programme complemented each other to facilitate the achievement of central bank objectives.

Self-financing programme 2.0

In the second phase of the Self-Financing Programme launched in early June 2015, the MNB introduced a new main policy instrument and restricted the volume of the two-week deposit instrument. The second phase of the Self-Financing Programme was announced on 2 June 2015. The MNB carried out the following changes in its monetary policy instruments:

- Replacing the former two-week deposit, the three-month deposit became the MNB's main policy instrument, i.e. as of 23 September 2015, the maturity of the main policy instrument was extended to three months.
- In addition to the three-month main policy instrument, the two-week deposit facility remained part of the monetary policy instruments as a supplementary instrument for the management of forint liquidity, allocated at floating rate tenders. The available volume of the two-week deposit was gradually reduced (to HUF 1,000 billion by the end of 2015), with a view to steering banks toward the three-month main policy instrument and the relevant securities markets, specifically, the government securities market.
- From 25 September 2015, the MNB shifted the O/N interest rate corridor around the base rate by -25 basis points. Shifting the interest rate corridor and its asymmetry were justified by the fact that the interest rate on the three-month discount Treasury bill had dropped to the level of the interest rate on the central bank O/N deposit and as a result, the yield advantage of short-term government securities against the central bank deposit had practically disappeared. This was not consistent with the objective of the Self-Financing Programme, and the modification of the interest rate corridor addressed this anomaly by reducing the appeal of the central bank overnight instrument, while increasing the appeal of the central bank O/N lending facility.
- As of 25 September 2015, in order to support banks' liquidity management,[4] the MNB also altered the conditions on longer-term collateralised loans:

[4] On 25 August 2015, taking recourse to its national discretionary competence, the MNB decided on the accelerated introduction of the liquidity coverage ratio (LCR) to improve the shock-absorbing capacity of the banking sector. As a result of the accelerated introduction, banks are required to meet the 100 per cent LCR requirement from as early as 1 April 2016.

  - The maturity of fixed-rate collateralised loans was reduced to one week from two weeks, with the fixed interest rate declining from base rate + 50 basis points to base rate + 25 basis points.
  - The maturity of floating rate collateralised loans decreased from six months to three months.
- As of 1 December 2015, the central bank standardised the reserve requirement system and brought it in line with the practice of the European Central Bank (ECB). The optional reserve requirement regime[5] introduced in 2010 was replaced by a system requiring a fixed, 2 per cent reserve ratio, applicable to all banks. In addition to the intention to bring in line the reserve requirement regime with international practice, standardisation was also justified by the fact that, instead of purchasing liquid securities, banks may have opted to increase their reserve ratio in order to adjust to the latest transformation of monetary instruments, which was in conflict with the objective of the Self-Financing Programme.

Table 3.2
Hungary's reserve ratio in an international comparison

EU member states	Is there any minimum reserve system?	Type of the reserve ratio: fix or optional?	Reserve ratio
Eurozone member states (ECB)	yes	fix	1%
Member states outside the Eurozone			
Bulgaria	yes	fix	10% (BGN), 8% (FX)
Czech Republic	yes	fix	2%
Denmark	no	–	–
United Kingdom	no	–	–
Croatia	yes	fix	12%
Poland	yes	fix	3,5%
Hungary	yes	optional → fix	2%, 3%, 4%, 5% → 2%
Romania	yes	fix	8% (RON), 12% (FX)
Sweden	no	–	–

Source: MNB

[5] In consideration of the unfavourable liquidity environment brought about by the crisis and in order to support banks' liquidity management, in 2010 the central bank adopted a reserve requirement system under which banks were entitled to choose, within a range of 2 to 5 per cent, a reserve ratio that best suited their individual liquidity management.

Self-financing programme 3.0

In the third phase of the Self-Financing Programme, the MNB is phasing out the two-week central bank instrument, giving rise to an optimal set of monetary policy instruments that corresponds to the current size and structure of the central bank's balance sheet. The third phase of the Self-Financing Programme commenced in January 2016, completing the reform of the MNB's monetary policy instruments in progress since the spring of 2014. The third phase implied the following measures:

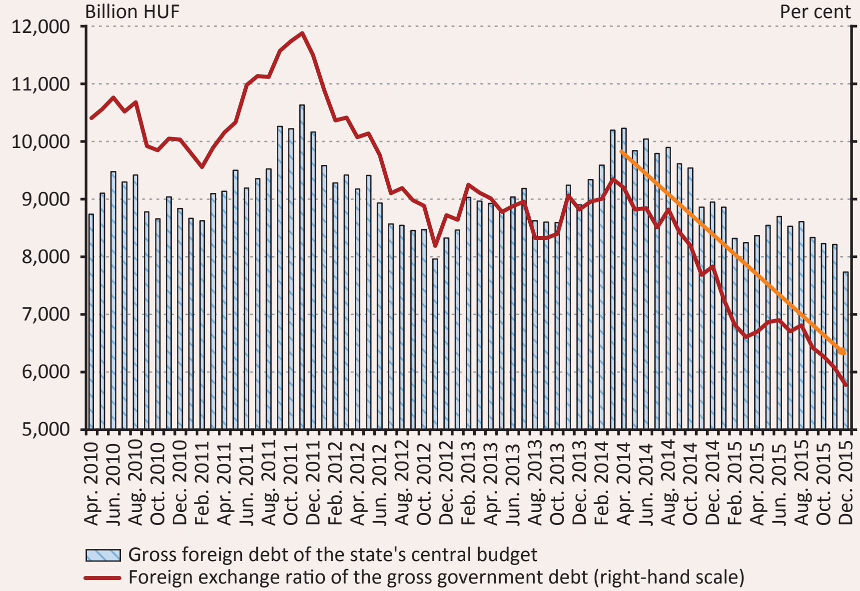
- After 17 years, the two-week deposit instrument will be removed from the set of monetary policy instruments by the end of April 2016;
- As of 21 January 2016, the MNB raised the amount to be announced at IRS tenders, encouraging banks to take increased recourse to the instrument.

The phase-out of the two-week deposit was supported by the favourable experiences of the 2015 reform of monetary policy instruments. The banking sector adjusted to the changes adopted during the second phase without major frictions. The average yields emerging at the auctions of the two-week deposit were close to the key policy rate; thus, the auctions did not signal any substantial liquidity strains, while increased recourse to more favourably priced central bank lending facilities helped banks to manage their liquidity efficiently. Another favourable experience was the fact that the transmission of monetary policy did not deteriorate; in fact, short interbank yields converged to the level of the key policy rate. Moreover, banks' adjustment was primarily reflected in the increased purchase of liquid securities, in particular, government securities.

3.2 RESULTS OF THE PROGRAMME

The Self-Financing Programme significantly reduced the vulnerability of the Hungarian economy and improved the international perception of the country. As a result of refinancing the government's maturing external foreign currency debt from increased HUF-denominated government paper issues, the ratio of FX debt to gross government debt declined from above 40 per cent at the end of 2013 to below 32 per cent by the end of 2015. In a period of two years – 2014 and 2015 – the Government Debt Management Agency (ÁKK) repaid a total of HUF 2,000 billion (EUR 6.3 billion) of external foreign currency debt in forints, which was primarily supported by strong household demand and the adjustment of banks prompted by the Self-Financing Programme. The financing cost and rollover risk of government debt declined and a far more stable public debt financing practice emerged, which reduced Hungary's external vulnerability and improved its international perception.

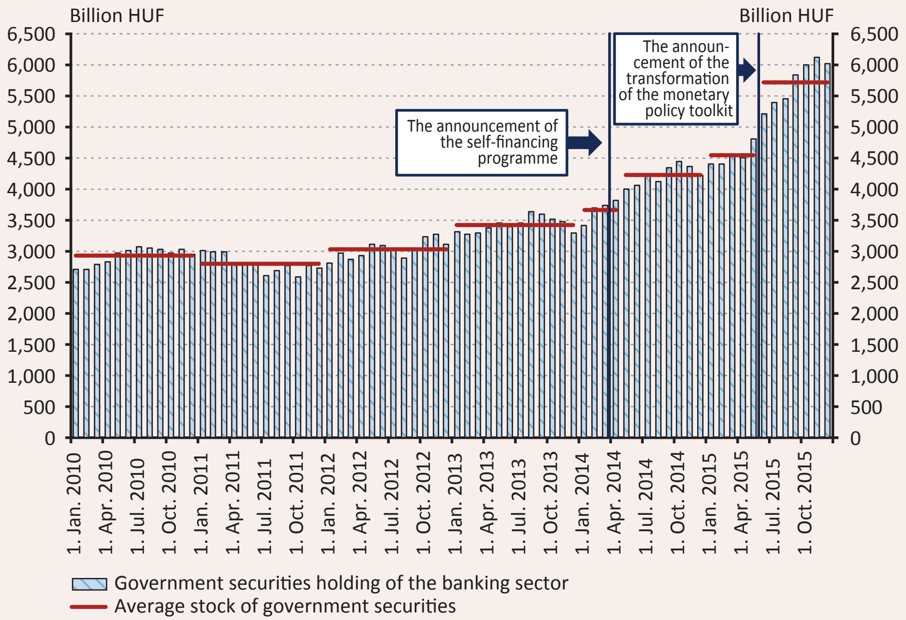
Chart 3.1
Ratio of FX debt to gross government debt



Source: MNB és ÁKK

Another achievement of the programme was that the role of eligible, non-central bank issued securities increased considerably in banks' liquidity management. Banks' holdings of HUF-denominated government securities – which represent a particularly high share in liquid securities – rose to more than HUF 6,000 billion from around HUF 3,300 billion between 2013 and 2015, and the residual maturity of the papers increased from 2.8 years to 4 years between 2014 Q1 and the autumn of 2015. Thanks to their successful adjustment, banks are also capable of meeting strict LCR requirements.

Chart 3.2
Changes in the HUF-denominated government security holdings of the banking sector

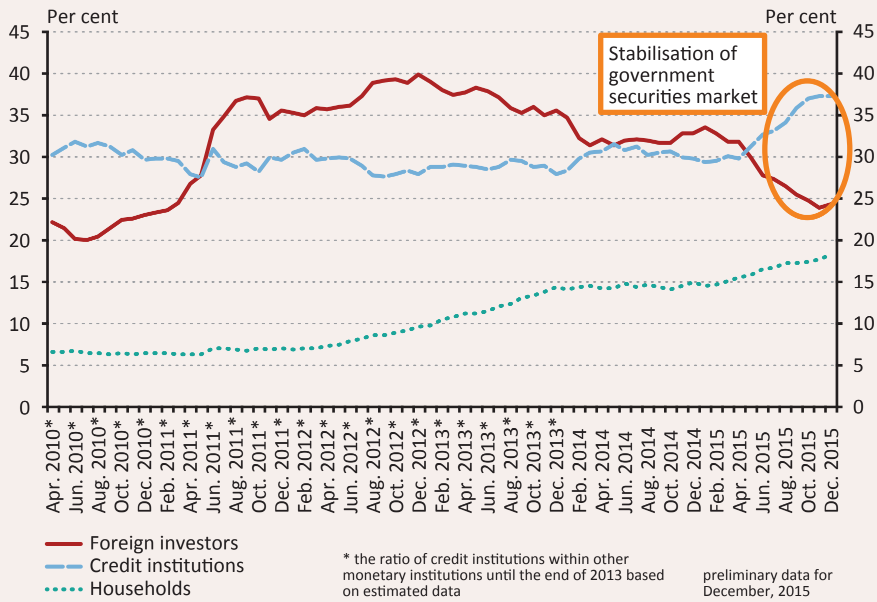


Source: MNB

Banks' adjustment prompted a structural transformation in the HUF-denominated government securities market. While non-resident investors had been the most important subscribers of HUF-denominated government securities in the past four years, by the end of 2015 the Self-Financing Programme and the ÁKK's intensified retail government securities issuance fundamentally changed the ownership structure of government debt. Compared to the spring of 2014, the share of non-residents dropped to below 25 per cent from 30 per cent, while the respective share of the banking system and households rose to 37 per cent and 17 per cent from 30 per cent and 15 per cent, respectively.[6] As a result, resident banks became the most important participants in forint government securities markets, which entails a decline in external vulnerability.

[6] Data on changes in the ownership structure of the sector reflect the change between 2013 and 2015.

Chart 3.3
Ratio of holder sectors to total HUF-denominated government securities holdings

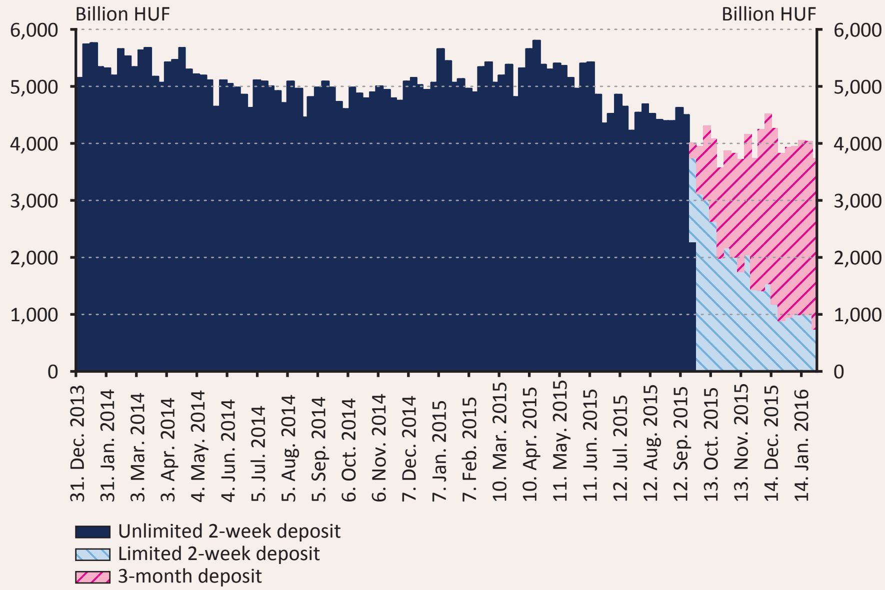


Source: MNB

Another positive effect of the Self-Financing Programme is the shrinking of the MNB's balance sheet. By the end of 2015, total sterilisation holdings fell to less than HUF 4,000 billion, compared to HUF 5,100 billion at the end of 2013. Meanwhile, on the asset side of the central bank's balance sheet foreign exchange reserves decreased, partly due to the refinancing of maturing foreign currency government debt from forints.[7] Since the sterilisation costs paid on banks' funds held in the sterilisation instrument exceed the yields to be realised on the foreign exchange reserves, the shrinking of the central bank's balance sheet generated savings not only for the MNB but also for the whole national economy.

[7] In 2014 and 2015, the conversion of foreign currency household loans to forint also reduced the MNB's foreign exchange reserves substantially while its reserve adequacy was maintained continuously.

Chart 3.4
Changes in the holdings of the main policy deposit



Source: MNB

Amounting to nearly HUF 1,400 billion in January 2016, due to its conditional nature, the IRS instrument ensured that at the beginning of 2016, government papers worth more than HUF 3,100 billion were held on banks' balance sheets until the maturity of IRS contracts. Therefore, central bank interest rate swaps not only proved to be exceptionally efficient in "steering" banks' funds into the desired direction, but due to their conditionality, they have also played an extremely important role in maintaining the stability of the government securities market.

The Self-Financing Programme and the central bank's IRS instrument contributed to the decline in the long-term yields of the government securities market.[8] The yield-suppressing effect of the Self-Financing Programme is aptly illustrated by the fact that by the end of 2015 the Hungarian 5-year benchmark yield sank to the level of the corresponding Polish yield, whereas the Hungarian yield had been 100–150 basis points higher at the beginning of 2014. This indicates that the decline in long-

[8] Baksay and Kicsák (2015)

term Hungarian yields was not only prompted by a general improvement in international investors' sentiment, but also resulted from country-specific effects which, in the case of long-term yields, mainly imply the MNB's Self-Financing Programme and the ensuing increase in banks' demand for government securities. With the more targeted monetary easing programme, the central bank succeeded in creating looser monetary conditions at the long end of the yield curve.

4 In support of growth

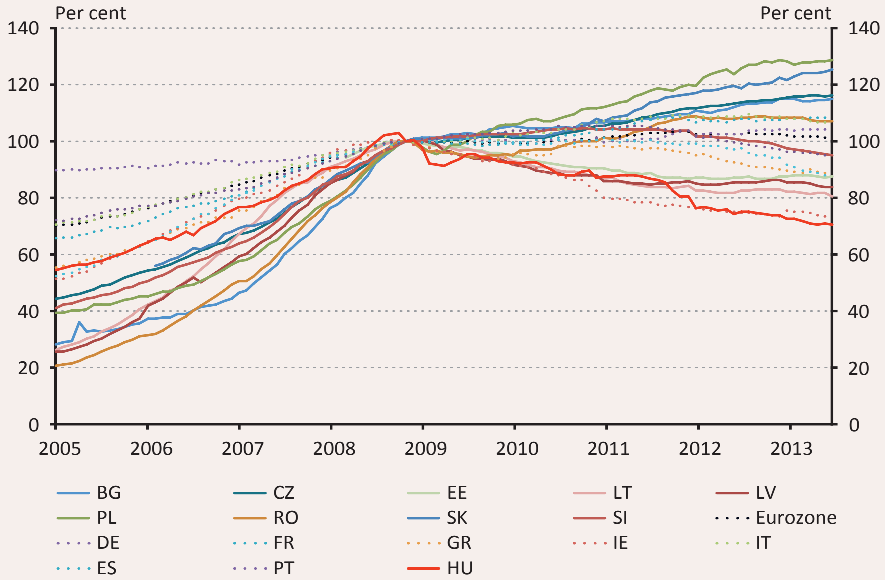
The magnitude of the decline in lending in Hungary after the crisis threatened to freeze up the corporate credit market in 2013 H1. The easing cycle and targeted central bank measures brought about a reversal in the sector most affected by the crisis, i.e. small and medium-sized enterprises: not only did these measures halt the lasting decline in lending, they also contributed to an increase as early as 2015. In addition to the interest rate cuts implemented by the MNB, the Funding for Growth Scheme – as a temporary monetary policy tool – also exerted a significant impact on economic growth.

4.1 CRITICAL SITUATION IN CORPORATE LENDING IN THE AFTERMATH OF THE CRISIS

The contraction in lending to the private sector after the crisis was considered to be significant even by international standards. This **primarily affected corporate lending**, and its magnitude was only comparable to that observed in the Baltic States, which had suffered the largest downturn. This should be viewed as a particularly severe problem, as the credit contraction reached one of the highest levels observed in Europe despite the fact that Hungary had not seen outstanding growth before the crisis and that the private sector's debt-to-GDP ratio had not significantly exceeded the assumed equilibrium level. (Fábián – Vonnák, 2014)

The main cause of the downturn in lending was therefore not an excessive credit expansion deviating significantly from the equilibrium level, but rather the unhealthy structure of lending. While increased risks may have negatively affected both household and corporate lending, the disruptions of the financial intermediary system were reflected, to a large degree, in the downturn in corporate lending. This can be partly attributed to the rapid emergence of negative cyclical effects in the corporate sector (declining revenues, increasing production costs) and to the typically higher significance of the information asymmetry phenomenon in the sector, which weighs on banks' willingness to take risks. On the other hand, it was in the corporate lending segment where the banking sector could perceivably adjust to the challenges of the crisis (deleveraging) given that shorter-term loans can be repriced or phased out more easily, and previously concluded credit line agreements can be terminated with less difficulty.

Chart 4.1
Changes in private sector debt in international comparison
(Oct. 2008 = 100%)

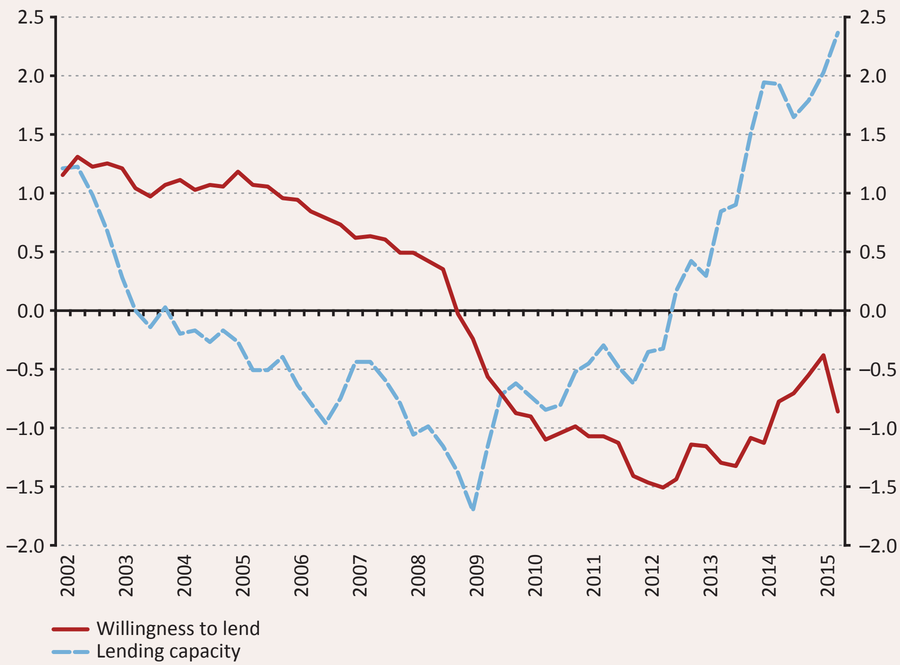


Source: ECB, MNB

In Hungary, loans outstanding in the corporate segment shrank by 4 to 5 per cent on an annual basis (excluding exchange rate effects) **between 2009 and 2013**, and while the contraction in lending typically ended in the fifth year following the crisis in most countries that had experienced a severe financial crisis, the outstanding borrowing of the Hungarian private sector was still declining in 2013.

Although the **decline in lending can be explained by both demand and supply factors**, based on previous research (Sóvágó, 2011), credit supply played a more significant role. The weakness of banks' credit supply can be attributed to two factors: to the lending capacity of the financial institutional system on the one hand (capital and liquidity supply) and on the other hand to banks' willingness to lend, which depends on banks' forward-looking risk appetite. With respect to Hungarian credit supply, the latter factor was more dominant after the outbreak of the crisis.[9]

Chart 4.2
Banking sector factors in credit supply



Note: Factors measured in terms of number of standard deviations away from historical mean.
Source: MNB

A lasting contraction in credit supply may give rise to undesired results over the long term. A sustained creditless period distorts the production, investment and financing decisions of firms, resulting, overall, in a loss of allocation efficiency, which reduces the long-term growth potential of the domestic economy. The deterioration of the economic environment lowers debtors' sustainable debt level and borrowers' creditworthiness. In both cases, this leads to an economic slowdown: it forces debtors to restrain production and carry out balance sheet adjustments, while without access to credit, corporations need to postpone developments and investment projects.

[9] For details, see: Financial Stability Report, November 2015, Box 3.

This also has an effect on credit supply: the shrinking number of corporations deemed creditworthy **induces a downward spiral, which further intensifies the procyclicality of the banking sector**.

In addition to the risk of **credit crunch, there is a risk of creditless recovery,** which may widen the gap between different parts of the economy (e.g. between corporations producing for export markets or for domestic markets), preserving a distorted, dual economic structure. This duality was also apparent in the Hungarian corporate sector in 2012–2013: while the large, foreign-owned (mainly export-oriented) corporations actively engaged in foreign trade had easy access to cross-border financing and did not face any financing constraints (on the contrary, there was fierce competition between banks for such customers), domestic-owned small and medium-sized enterprises (SMEs) relying on bank financing and producing primarily for domestic markets were hit hard by the scarcity of credit supply. (Balog et al., 2014)

On the whole, the **access of** Hungary-based **SMEs to credit deteriorated sharply** after the outbreak of the financial and economic crisis, both in terms of price and non-price credit conditions. The protracted recession exerted a negative impact on the profitability of SMEs through several channels; in addition, there was a high risk of the emergence of an adverse feedback loop between the high cost of finance and deteriorating profitability, threatening to reduce the volume of outstanding borrowing even further, whereas **corporate credit growth should reach 6–8 per cent in order to be consistent with a sustainable growth path for the real economy in the long run.** (Fábián – Vonnák, 2014) Indeed, the credit institutions should be capable of satisfying the prevailing demand for credit in the economy continuously and smoothly at all times.

4.2 AN INTEREST POLICY SUPPORTING GROWTH

The primary mandate of the MNB is to achieve and maintain price stability and, without prejudice to the primary objective, **to support the maintenance of the stability of the financial system and the economic policy of the government, using the instruments at its disposal**. In response to the challenges posed by the crisis, under the inflation targeting regime, central banks have moved towards greater flexibility and reformed their monetary policy toolkit. While maintaining the primary objective of price stability, flexible inflation targeting provides a framework where the central bank not only focuses on inflation in the short run, but also takes into account other (real economic and financial stability) factors. Real economy considerations may affect decision making primarily when the central bank is willing to tolerate deviations from the inflation target temporarily in order to avoid the excessive volatility of real variables, and this may also be reflected in use of the tolerance band.[10] In view of this, in addition to mitigating the extent of undershooting the inflation target, the interest rate moves taken by the MNB with a view to achieving the inflation target yielded a significant growth effect and considerably contributed to increasing the economic output level. (MNB, 2014a)

Table 4.1
Cumulated impact of the easing cycle on the level of GDP

Period	GDP level (per cent)	Contribution of domestic demand to GDP	Contribution of net export to GDP
2013	0.5	0.1	0.4
2014	1.1	0.5	0.6
2015	1.4	0.9	0.5

Source: (Felcser et al., 2015b)

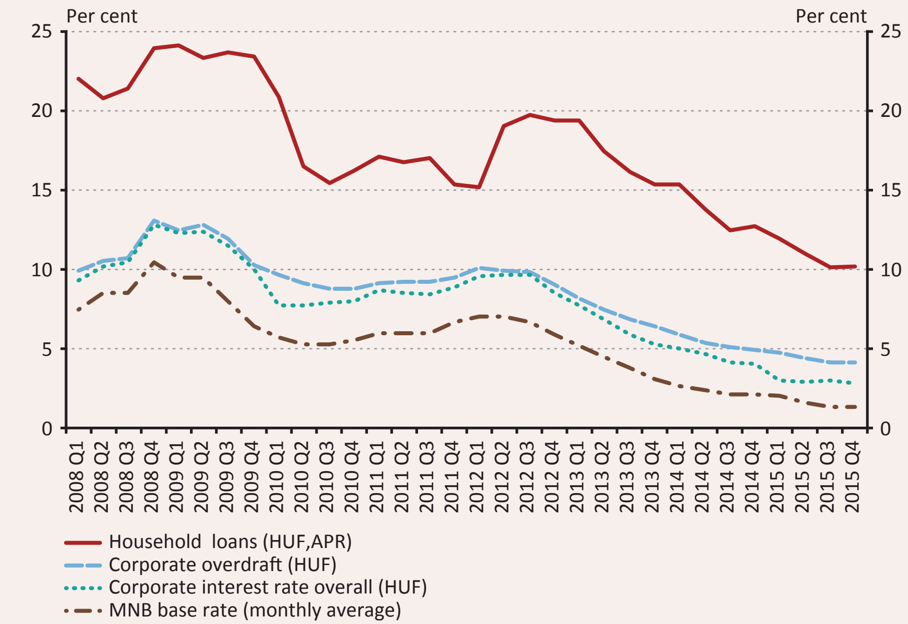
As a result of the easing cycle commenced in the summer of 2012, after a decline of 565 basis points in total, the central bank base rate dropped from the initial 7 per cent to the historical low level of 1.35 per cent. Initially, the boosting effect of the easing cycle was primarily related to the recovery in exports, since the Hungarian household sector had accumulated a substantial amount of foreign currency debt before the crisis and, given the outstanding debt, the direct interest rate channel was less efficient with respect to households' consumption and savings decisions. The conversion of foreign currency loans to forint in 2015 removed the exchange rate risk from households' balance sheets; consequently, through lending rates and deposit interest rates, the interest rate reduction was able to make a stronger contribution to the upturn in consumption. (Felcser et al., 2015b)

According to central bank projections, persistently loose monetary conditions are conducive to achieving the inflation target over the medium term and to

[10] With that in mind, after the scheduled review of the inflation target, in March 2015 the Monetary Council of the MNB designated a ±1 percentage point ex ante tolerance band while maintaining the 3 per cent inflation target. (Felcser et al., 2015a)

providing adequate stimulus to the real economy. The decline in the central bank base rate fed through to financial market interest rates, while also exerting a positive impact on government bond yields. Through declining bank lending rates, the monetary easing also had a positive impact on household and corporate interest burdens. At the same time, despite the interest rate cuts, firms (in particular in the SME sector) faced excessively strict credit conditions even in 2013, which necessitated **additional lending incentives.**

Chart 4.3
Interest rates on new loans to the corporate sector



Source: MNB

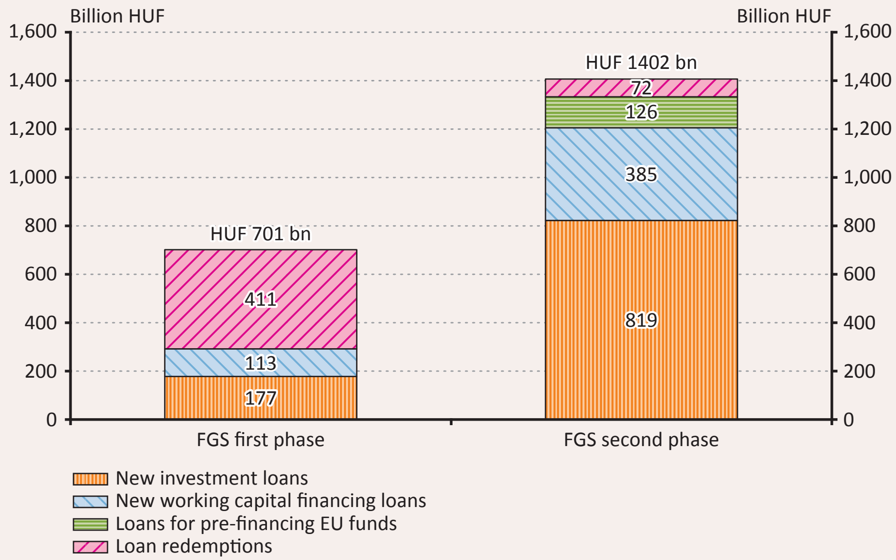
4.3 THE FGS: THE FIRST DIRECT LENDING INCENTIVE OF THE CENTRAL BANK

In April 2013, **the MNB announced the Funding for Growth Scheme (FGS) as a new element of its monetary policy toolkit** designed to mitigate the protracted disturbances in lending to SMEs, to strengthen financial stability and to reduce Hungary's external vulnerability, thereby supporting economic growth. By the end of 2015, **around 31,000 enterprises had obtained financing amounting to HUF 2,126 billion in the first and second phase of the FGS altogether, and about 95 per cent of the total amount allocated under the Scheme was utilised.** Under the FGS, the MNB provides refinancing loans with 0 per cent interest to participating credit institutions, which can lend these funds on to SMEs **with an interest margin capped at 2.5 per cent**. In the first two phases of the programme SMEs obtained access to investment and working capital loans, as well as loans to pre-finance EU funds, and also had an option to redeem loans disbursed previously for similar purposes. Capped at 2.5 per cent and **remaining fixed over the entire period of the loan** (which could be as long as 10 years), the lending rate offered by credit institutions to SMEs under the FGS enabled SMEs to expand their business activity, ensure more flexible operation and implement postponed investment projects. The FGS **boosted** the **credit demand** of enterprises significantly, while also directing the attention of credit institutions to the SME sector, which **intensified competition** for obtaining and retaining customers. Bank competition plays a key role as the resulting interest rates reflect real costs, thereby encouraging investment activity. (Nagy – Vonnák, 2014)

Lasting only for three months, **in the first phase of the FGS banks concluded contracts with around 7,000 enterprises with a total value of HUF 701 billion**. The Scheme had a significant impact on the activity of participants both on the demand and supply side. The share of investment loans within new disbursements was exceptionally high and thus had a favourable impact on economic growth. Redemptions, however, also played an important role in boosting competition, reducing interest burdens and, **in the case of those redeeming foreign currency loans, in eliminating exchange rate risk**. Firms – which presumably lacked natural hedge – converted foreign currency loans worth HUF 229 billion in total, which implied the redemption of more than 10 per cent of the HUF 1,800 billion in performing FX loans outstanding at the time. This improved the stability of the firms' financial position and rendered their financial management more predictable.

Building on the results of the first phase, the **second phase** of the FGS was initially announced from October 2013 until the end of 2014. With a view to achieving a stronger growth effect, in this phase the **emphasis shifted to new loans, in particular, investment loans**. **New loans accounted for around 96 per cent of the loans granted, with 60 per cent of the loans intended to finance new investment directly.** While credit purposes did not change notably compared to the first phase, loan redemption was limited to 10 per cent of the total disbursed amount. The extended contracting period allowed for the implementation of more time-consuming projects and provided a **broader range of customers** with access to financing.

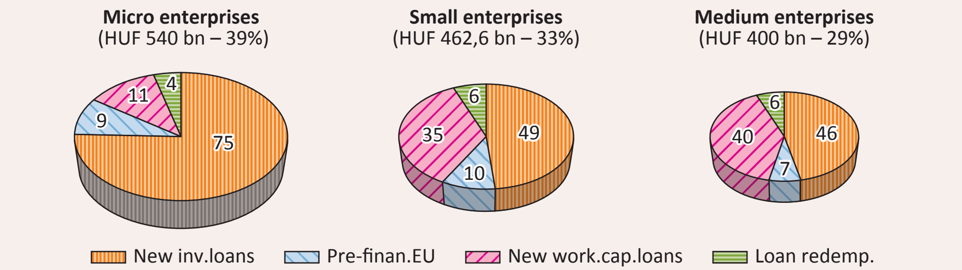
Chart 4.4
Distribution of loans provided in the first and second phase of the FGS by purpose



Source: MNB

In response to feedback from the financial sector, the MNB **"fine-tuned"** the terms and conditions of the Scheme several times to ensure access to credit under the programme for a broader range of enterprises. An important element of this endeavour was the inclusion of **leasing and factoring schemes** in the financing options offered by the programme. Thanks to repeated fine-tuning and extended contracting periods, the share of smaller enterprises – those facing the greatest financing difficulties – increased considerably. Subsequently, in consideration of the large demand both the contracting period and the allocated amount was extended. **In the second phase of the FGS, around 27,000 enterprises obtained financing amounting to HUF 1,402 billion, which means that 95 per cent of the total amount allocated under the Scheme was utilised.** In the second phase of the FGS, most loans were taken out by **smaller enterprises** both in terms of number and volume, with the **vast majority of the loans intended for investment purposes**. Their share in new loans is around 40 per cent in terms of volume and more than 60 per cent in terms of number. This ratio can be considered favourable; indeed, according to research, the investment stimulating effect of the FGS was the most pronounced in this corporate segment. (Endrész et al., 2015) Average loan size decreased in line with the higher ratio of smaller participants: in the second phase, **every second FGS loan was below HUF 10 million.**

Chart 4.5
Distribution of loans provided in the second phase of the FGS by company size and purpose



Source: MNB

Even in the first phase of the programme, **the regional concentration of disbursements was less pronounced** than before with respect to the total SME portfolio, and this equalisation was even more apparent during the second phase. Although most loans were disbursed in the region of Central Hungary (Budapest and Pest county) under the FGS as well while 56 per cent of SME contracts were linked to this region upon the start of the FGS, in its second phase only one third of all loan contracts were located in the region. Most of the loans were granted to SMEs in the sectors of trade and repair and agriculture; the share of both sectors in total FGS loans was 25 per cent each, while the third most prominently represented sector was manufacturing, receiving nearly 20 per cent of the loans.

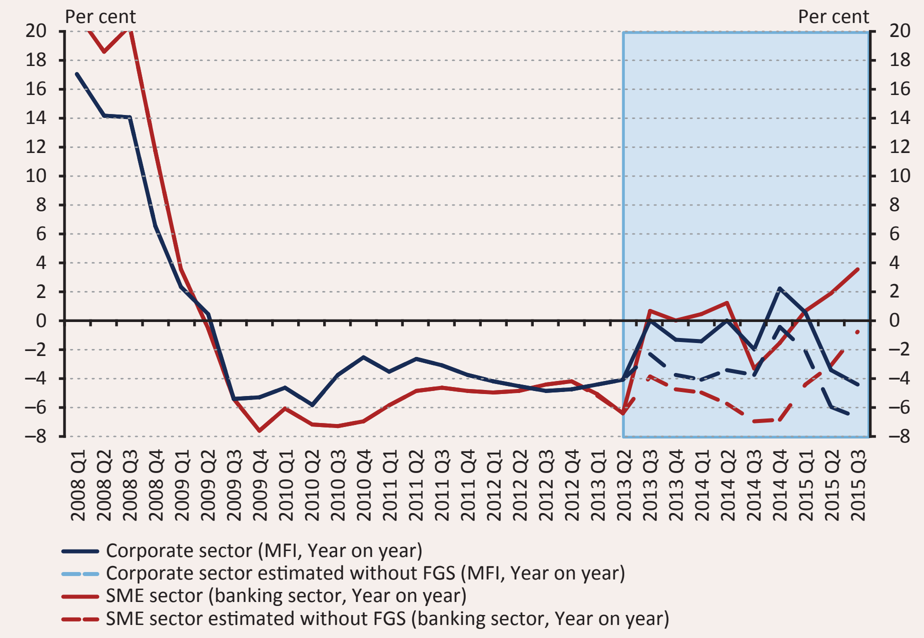
The MNB took a number of steps to improve credit conditions for enterprises that had been previously excluded from the FGS based on risk considerations despite being creditworthy otherwise, as these companies only had access to credit for short maturities at unreasonably high lending rates even in the face of the low interest environment. In March 2015, the MNB launched the **FGS+** under which, **for a limited time and to a limited extent, the MNB assumed**

a part of the risks associated with SMEs from credit institutions. From May 2015, it also allowed credit institutions to charge a guarantee fee in addition to the 2.5 per cent margin limit in relation to institutional guarantee taking. As a result, a number of instruments were available to credit institutions to mitigate the risks, such as the institutional guarantee provided for FGS loans and the risk-sharing available under the FGS+, which they could choose from based on their own business considerations.

4.4 EFFECTS OF THE FGS ON THE REAL ECONOMY

The programme resulted in a turnaround in SME lending. Following its announcement, the FGS successfully stabilised the downward trend previously observed in outstanding SME loans, and lending to SMEs began to show signs of growth as early as 2015. The dynamics of corporate lending as a whole started to improve from 2013, with an expansion recorded in corporate lending as early as 2014. In 2015, corporate lending was subject to

Chart 4.6
Growth rate of loans to the total corporate sector and to SMEs



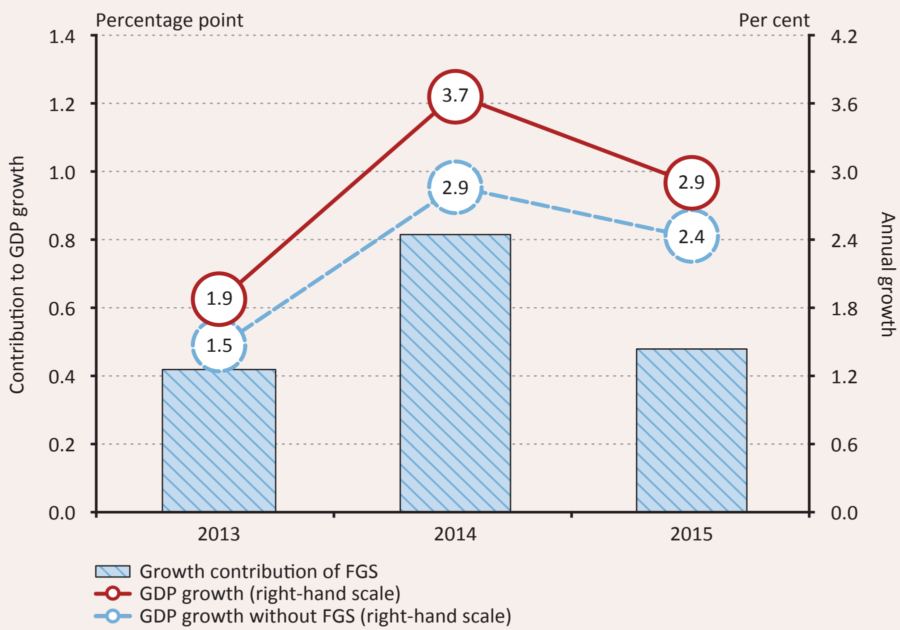
Source: MNB

dual trends: while lending to large corporations declined markedly – mainly as a result of ad hoc, demand-related reasons – SME lending continued to accelerate, reaching an annual growth rate of 3.5 per cent by the third quarter.

In addition to playing a prominent role in breaking the unfavourable trend observed in SME lending, the FGS exerted a perceivable impact on economic growth primarily by boosting credit demand and the expanding credit supply. According to the MNB's research, a 1-percentage point rise in the corporate loan stock may increase GDP by 0.2 percentage point. (Tamási and Világi, 2011)

The FGS made an important contribution to economic growth by stimulating investment in the corporate sector. Assessing the volume of additional investment generated by the FGS based on the financial statements of firms in the SME sector, Endrész et al. (2015) made an estimation. Re-evaluating this model they found that loans disbursed in the first phase of the FGS

Chart 4.7
Effect of the FGS on real GDP growth



Source: HCSO, MNB calculation

generated additional investment amounting to HUF 137.3 billion, while the corresponding amount in the second phase was HUF 210.6 billion. Moreover, a questionnaire-based survey conducted in October 2014 among SMEs obtaining loans under the FGS indicated that without the FGS, approximately 40 per cent of the investment loans would not have been granted at all, while 30 per cent would have been disbursed only in part.[11] The additional capacities generated by the projects have a positive impact on employment; according to the MNB's calculations, the FGS may have created 5,000–13,000 new jobs both in 2013–2014 and in 2014–2015.

In addition to the growth effect of the MNB's interest rate cuts, **the FGS may have contributed 1–1.5 percentage points to GDP growth both in 2013–2014 and in 2014–2015**.[12]

4.5 GRADUAL PHASE-OUT OF THE FGS AND LAUNCH OF THE MARKET-BASED LENDING SCHEME

Introduced as a temporary instrument, the FGS successfully fulfilled the market building and growth **objectives** set out upon the announcement of the programme. Over the longer term, however, the desired lending practice is market-based lending which supports economic growth both in terms of quantity and quality and does not involve the central bank. Consequently, **at the end of 2015** the second phase of the FGS and the FGS+ were **completed**. At the same time, in consideration of the risks associated with future developments in general credit conditions, the FGS should only be **phased out gradually**, as abrupt discontinuation of the favourable source of funding would hinder SMEs in implementing their projects.

In order to facilitate the transition to market-based lending, **in January 2016 the MNB launched its Growth Supporting Programme (GSP)** which, along with the phase-out of the FGS, includes new central bank instruments designed to provide positive incentives to lending (Market-Based Lending Scheme: MLS).

[11] A non-representative survey conducted by the MNB based on a sample of 3,000 companies

[12] Along with MNB calculations based on the essays and studies. (Magyar Nemzeti Bank 2014d; Tamás – Világi, 2011)

Table 4.2
Elements of the Growth Supporting Programme

Growth Supporting Programme (GSP)	
Phasing out stage of the Funding for Growth Scheme (FGS 3)	**Market-Based Lending Scheme (MLS)**
Pillar I.: HUF funding with reduced range of credit objectives (HUF 300 bn)	Interest rate swap conditional on lending activity (LIRS – HUF 1000 bn) Preferential deposit facility (HUF 500 bn)
Pillar II.: HUF funding combined with market-priced currency interest rate swaps (HUF 300 bn)	Incentives through capital adequacy requirements for banks (SREP)
	Corporate credit reporting system

Source: MNB

Under the **third, phase-out stage of the FGS** consisting of two pillars, Hungarian SMEs are afforded the opportunity to conclude loan contracts between the beginning of January 2016 and the end of December. The **first pillar** of the third phase of the FGS allows for **more targeted forint-based financing** both in terms of volume and loan purposes. In the **second pillar**, banks will convert the forint loans received, which enables them to provide foreign currency financing to SMEs with natural hedging. This pillar is intended to manage market distortions in **long-term foreign currency lending**.

The interest rate swaps conditional on lending activity **(LIRS)** introduced under the MLS are designed to **boost lending** by providing banks with an opportunity to manage the interest rate risk associated with their long-term SME loans, while credit institutions pledge to increase their stock of loans in a quantifiable and verifiable manner. The **preferential deposit facility linked to the LIRS** instrument is a supplementary instrument for the management of forint liquidity, under which credit institutions concluding LIRS transactions are entitled to place a part of their surplus liquidity above their required reserves on a preferential deposit account bearing an interest rate corresponding to the central bank base rate.

In addition, lending activity will be boosted by the fact that within the MLS framework and in the context of the 2016 SREP review, the MNB is to introduce a number of **incentives reflected in banks' capital requirement** that are expected to stimulate the economy efficiently through the improvement of capital adequacy. Similarly, the implementation of a **new corporate credit information system** will also support the achievement of lending objectives. Owing to the adoption of the legislative amendment proposed by the MNB, the MNB is entitled to examine the credit information and financial statements of enterprises together, which allows for the joint modelling of credit risk, corporate features and macroeconomic developments. With the assistance of the database, the central bank will be able to provide relevant information to the banking sector, supporting them in their lending decisions.

On the one hand, through banks' explicit lending pledges, the instruments of the GSP facilitate predictable, stable growth in SME lending; on the other hand, **they support corporate lending activity and hence, sustainable economic growth, over the long term**.

Published in February 2016, the MNB's book entitled **"Competitiveness and Growth"**[13] is also intended to make a notable contribution to the joint thinking process regarding sustainable economic growth and competitiveness. On the one hand, the book aims to provide assistance to the academic community as well as Hungarian economic policy in identifying key areas for the strengthening of competitiveness. On the other hand, by presenting a thorough and comprehensive analysis of the Hungarian growth model before and after the crisis, it is meant to serve as a suitable baseline for the development of a new, long-term convergence strategy that can be more successful than those strategies seen in the previous 25 years.

[13] The Government requested the MNB to create a competitiveness strategy in order to lay the foundations of sustainable economic convergence, relying on the professional expertise at its disposal.

5 Impact of monetary policy on the government budget and the MNB's role in the Fiscal Council

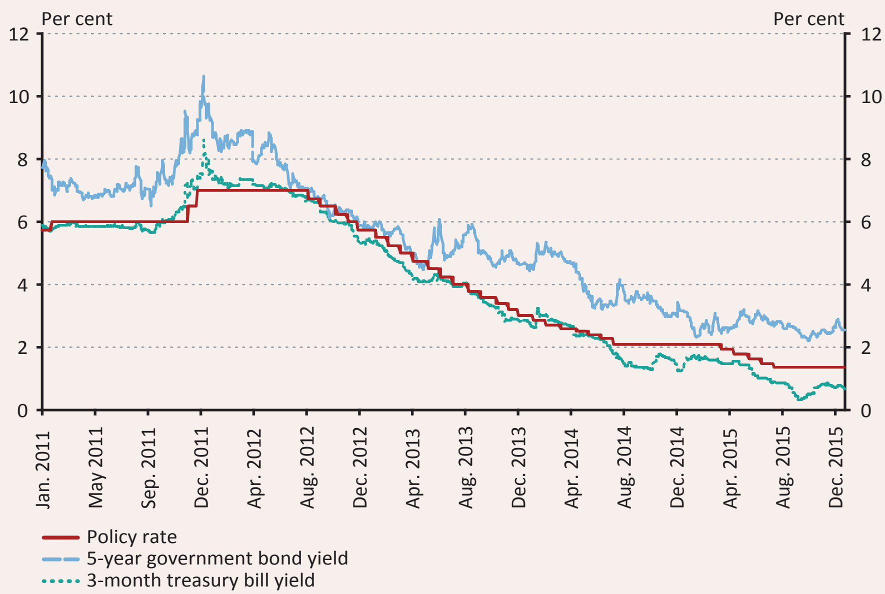
Since 2013, in accordance with the MNB Act and without jeopardising its primary objective, the MNB has endeavoured to support the Government's economic policy using the instruments at its disposal. As a result of coordinated monetary policy and fiscal policy, the central bank programmes implemented since 2013 fostered fiscal stabilisation and a reduction in the public debt ratio through a number of channels. Firstly, the central bank's interest rate cuts and the Self-Financing Programme contributed to reducing the interest expenditures of the central budget by nearly 1 per cent of GDP between 2013 and 2015. Secondly, certain central bank programmes – in particular the rate-cutting cycle and the introduction of the FGS – increased the tax revenues of the central budget, thanks to their favourable effects on economic growth and the expansion of tax bases. Thirdly, the realignment of monetary policy helped the MNB to avoid losses, and the central bank has actually been profitable since 2013. Moreover, as member of the Fiscal Council, the Governor of the MNB contributed to improving the fiscal balance and reducing public debt by inspecting compliance with fiscal rules. Finally, in accordance with the request of the Government, in its publication entitled "Competitiveness and Growth" the MNB examined the economic policies of countries achieving successful convergence and, based on the results and on the analysis of the current situation of the Hungarian economy, it identified a number of areas in which reforms may contribute to improving the economic competitiveness of Hungary.

5.1 BENEFICIAL EFFECTS OF THE MNB'S MONETARY POLICY ON FISCAL POLICY SINCE 2013

After the budgetary consolidation implemented between 2010 and 2013, an overhaul of monetary policy took place in 2013, in the course of which the MNB became a strategic partner of the Government. Indeed, through the consistent reduction of the monetary policy rate and other central bank programmes (FGS, Self-Financing Programme, GSP), in addition to pursuing its primary objective (the attainment and maintenance of price stability), the MNB strived to strengthen and support – without jeopardising the primary objective – financial stability and the economic policy of the Government, in line with its duties set forth in the MNB Act. This was reflected in three factors: the declining interest expenditures of the government, increased tax revenues through stimulation of the economy, and the consistently positive central bank income.

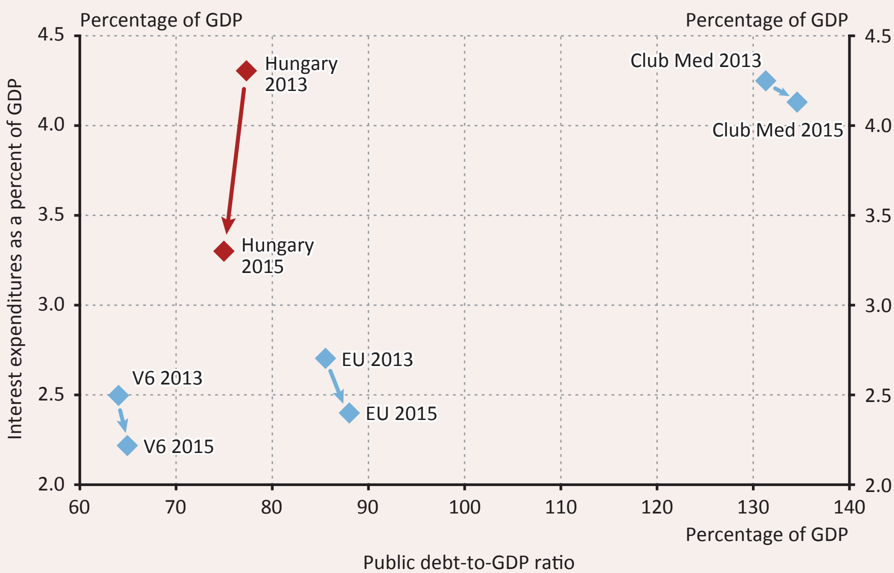
Through the decline in government securities yields, the MNB's monetary policy contributed significantly to the fact that the central budget's interest expenditures decreased by nearly 1 per cent of GDP between 2013 and 2015. The substantial reduction of the central bank base rate (by 565 basis points so far) and other central bank programmes introduced after 2013 (e.g. the Self-Financing Programme) and the stable and adequate communication of the monetary policy stance exerted downward pressure not only on short-

Chart 5.1
Developments in the Hungarian policy rate and benchmark yields of government securities between 2011 and 2015



Source: MNB, ÁKK

Chart 5.2
Changes in interest expenditures and public debt between 2013 and 2015



Source: Eurostat, European Commission Autumn 2015 Economic Forecast

term government securities yields, but also on long-term yields. Even the analysis of the European Commission noted that the interest expenditure reduction achieved in Hungary between 2013 and 2015 was outstanding even by regional and EU standards, and the partly related decline in the debt ratio is also remarkable in an international comparison. The gradual repricing of public debt points to a further decline in interest expenditures, and the annual level of interest savings is expected to reach 1.7 per cent of GDP,[14] which should ensure a substantial degree of additional room for manoeuvre for fiscal policy.

Since 2013, the monetary policy of the MNB has also contributed to the improvement in the fiscal balance through the support of real economic expansion.[15] The policy rate cuts boosted Hungarian investments and consumption, while the Funding for Growth Scheme directly supported the

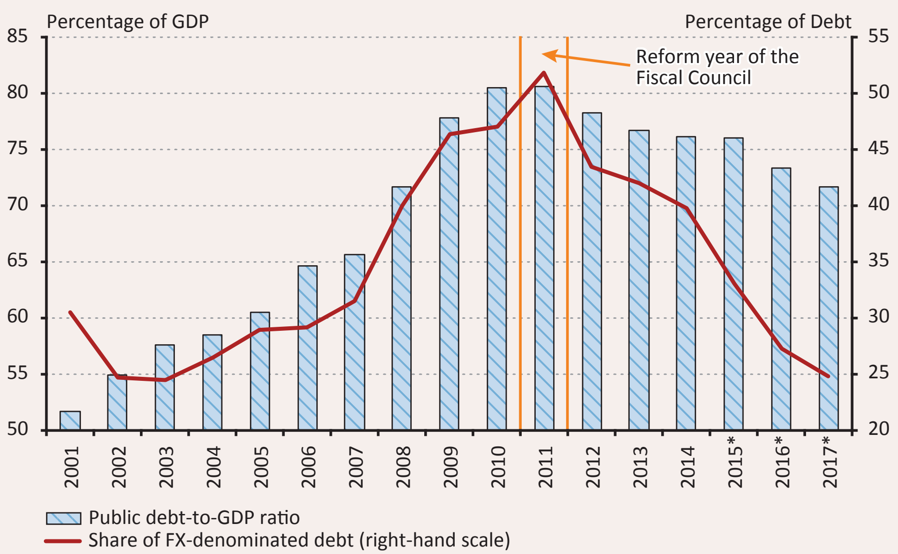
[14] European Commission (2016): Fiscal Sustainability Report 2015

[15] Felcser, D. – Soós, G. D. – Váradi, B. (2015): The impact of the easing cycle on the Hungarian macroeconomy and financial markets. *Financial and Economic Review,* 14 (3), September 2015.

financing of small and medium-sized enterprises. On an annual basis, each programme contributed to GDP growth by 0.5 per cent on average which, according to the MNB's estimate, may have improved the general government balance by 0.3–0.4 per cent of GDP annually through increased tax and social security contribution revenues.

The consistently positive central bank income from 2013 also contributed to the end of the EU's excessive deficit procedure against Hungary in 2013. The central bank does not aim to be profitable, but achieving a positive income may still be important from a fiscal perspective, because if the central bank is unable to cover its losses from its retained earnings, the losses for the given year are to be reimbursed from the central budget, which will increase the fiscal deficit and public debt. At the end of 2012, the previous central bank management projected a historically high loss of more than HUF 200 billion for 2013. However, this loss – which would have directly jeopardised Hungary's exit from the EU's excessive deficit procedure (EDP) because of the central budget reimbursement – was avoided through the reform of monetary

Chart 5.3
Developments in gross public debt-to-GDP ratio and the share of FX-denominated debt



**Note: Forecast of the MNB in the December 2015 Inflation Report.*
Source: MNB

policy. Ultimately, the central bank recorded a profit of HUF 25 billion in 2013, and maintained this positive income throughout the next two years as well.

As a result of the above described effects (support for the real economy, a reduction in government interest expenditures, positive MNB-income), from 2013 monetary policy contributed significantly to the reduction in the public debt ratio, which has been falling since 2011. According to the MNB's preliminary financial accounts data, the public debt-to-GDP ratio, which reached its historical peak at the level of 80.8 per cent of GDP in 2011, may have declined to 75.5 per cent by the end of 2015.

5.2 ROLE OF THE GOVERNOR OF THE MNB AND THE MNB IN THE FISCAL COUNCIL

The primary mandate of the Fiscal Council – of which the Governor of the MNB is a member – is to supervise compliance with the provisions regarding the level of public debt during the preparation of the Budget Bill. Through its supervisory function, the Fiscal Council contributed to the fiscal turnaround implemented since 2010, which – in spite of the downturn in European economic activity and rising EU debt levels – has resulted in the budget deficit remaining below 3 per cent since 2012 and the public debt ratio gradually declining since 2011. The MNB's publication "Public Finance Report", which was renewed in 2015, supports both the decisions of the Fiscal Council and the communication of information to the general public.

Monetary policy, functioning in accordance with its objectives and tasks established in the MNB Act, has become a full strategic partner of fiscal policy since 2013. The central bank's programmes have contributed significantly to the improvement in budget balance, the reduction in public debt rate and economic growth as well. Nevertheless, an improvement in Hungary's competiveness is needed in order to realise the country's long-term real economic convergence while preserving the achievements made so far. The professional experience accumulated in the central bank might help in some fields to identify barriers standing in the way of competiveness, and to develop measures which aim to remove those obstacles.

II. IN SUPPORT OF THE STABILITY OF THE FINANCIAL SYSTEM

6 Achievements in supervisory integration and supervisory activity

At its session on 16 September 2013, the Parliament approved Bill T/11474 on the Magyar Nemzeti Bank, which provided for the integration of the financial supervision function into the central bank to ensure that **central bank and supervisory activities are performed by a single organisation**; i.e. that the **Hungarian financial sector is supervised by way of harmonised application of interconnected micro- and macroprudential instruments**.

Integration was implemented on 1 October 2013, pursuant to Act CXXXIX of 2013 on the Magyar Nemzeti Bank. With the new MNB Act, the **legislator established an institution** that guarantees the stability of the entire financial system and the safe operation of individual financial institutions within the bounds of a single organisation, and consequently, it is **more efficient and expedient** in addressing both macro and microprudential **risks** and guarding against problems that impede the balanced functioning of the real economy or carry risks to financial stability. In addition, in reaching its monetary policy decisions the central bank can consider the experiences gained during its supervisory activity and rely on the unique institutional knowledge accumulated in the microprudential area.

As a supervisory authority, the MNB has taken numerous steps in the past period to **become an authority acknowledged and recognised in the supervisory community of the European Union**, one that is capable of shaping the financial system consciously and effectively. To achieve this goal, first and foremost, **it brought its strategic objectives in line with its central bank duties**. The market objectives specified in the document "Stability and Confidence" – the supervisory and consumer protection strategy for the period 2014–2019 – address the problems and risks arising from the financial crisis both at the level of individual institutions and at the sector level, handling these issues in cooperation with the departments responsible for the macroprudential function aimed at the stability of the financial system as a whole, giving equal weight to prudential oversight, consumer protection surveillance and market surveillance.

The aim of the supervisory strategy is a stable, competitive, prudently operating, transparent and credible financial sector. In order to achieve this, it is indispensable to have a central bank that **deploys a renewed and extended set of instruments to ensure proactive supervision, imposes strict sanctions for the violation of rules, but provides full support to the legal and fair activities of the supervised sectors, while also playing a strong consumer protection role.** With this renewal in mind, the previous organisational structure has been completely transformed (e.g. rapid operative units were established in 2015) and the personnel of the MNB has been reinforced.

In accordance with the content of its supervisory strategy, the MNB needs to ensure the prudent operation of the entire financial sector and supervise a large number of market participants. Accordingly, the practice of prudential inspections has been changed: **the previous comprehensive inspections which covered a broad spectrum were largely replaced by more in-depth, detailed inspections mainly focused on risks relevant to the activity and operation of individual institutions**.

Table 6.1
Number of prudential on-site inspections

Number of on site investigations	2014		2015		2016 (scheduled)	
	comprehensive	other	comprehensive	other	comprehensive	other
Total	81	45	53	78	94	59

Source: MNB

With the amendment of the MNB Act, the supervisory authority is entitled to conduct targeted inspections at any supervised entity without prior notification when deemed necessary for the protection of market stability or the interests of financial sector participants or customers. It is, however, not enough to detect deficiencies and risks; they also need to be eliminated. **To that end, the supervisory authority applies a strict and deterrent penalty policy, and monitors the fulfilment of expectations in a comprehensive manner.** If an institution fails to meet the prescribed obligations by the required deadline or in the required quality, the MNB takes action against the institution promptly and with due strictness.

In consideration of the large number of supervised entities and inspections, a comprehensive review of the earlier supervisory practices and methods was necessary for the optimal use of the resources available to the MNB. **The efficient and proactive supervision of institutions now reflects a new, forward-looking approach,** which is focused on **active market shaping through statements and recommendations** while also applying maximum stringency against deviations.

Table 6.2
Supervisory regulatory instruments issued

Issued tools of supervisory regulation	2014	2015
Recommendations	5	23
Supervision and regulation letters	2	3
Commitments	135	133
Q&A's in connection with the CRR	66	32
Other tools of supervisory regulation	5	

Source: MNB

The new approach entails the redefinition of supervision: **the MNB defined and implemented an innovative methodology that responds rapidly and flexibly to potential negative trends** both in prudential and market surveillance. In contrast to the earlier supervisory practice which was typically limited to addressing the risks arising from the past activity of institutions, the new approach concentrates on the **proactive, timely prevention of the build-up of risks** and on their **comprehensive management** by way of supervisory measures, adopted promptly, as required.

In the context of renewing its methodology of prudential off-site supervision, the MNB complies with the requirements and recommendations of the European supervisory authorities (EBA,[16] EIOPA,[17] ESMA,[18] ESRB[19]) and

[16] European Bank Authority
[17] European Insurance and Occupational Pensions Authority
[18] European Securities and Markets Authority
[19] European Systemic Risk Board

monitors the activity of international partner authorities, integrating their best practices into Hungarian supervision. Accordingly, **the business model-based approach** that enables the supervisory authority to explore potential risks by analysing the individual business models of the institutions **is gradually gaining ground in Hungarian supervisory activity**. With the business model analyses, **the MNB can gain a forward-looking, more comprehensive insight into the sustainability** and vulnerability **of the profitability, strategy and business model of the supervised institutions**. Starting from 2015, comprehensive business model analyses performed on the basis of the continuously developing framework became an integral part of the supervisory inspections conducted at domestic large banks, and developments are set to commence in 2016 in relation to insurance companies.

Responsible administrative operation is also assisted by the **basic monitoring system and the early warning system** which was developed based on it. Based on the data regularly disclosed by the supervised entities, the early warning system generates hundreds of indicators to **signal potential problems and the necessity of supervisory intervention. Preventive intervention is facilitated** by the **collection of more information** compared to the previous practice (e.g. by more frequent attendance at board meetings or requests for reports) and **feedback from consumers integrated into the process of supervision.** By processing the data, supervisors can monitor the activity and operation of the given company and intervene to prevent risks and infringements as required.

In parallel with off-site supervision, **the methodology of on-site supervision has changed considerably** in line with the expansion of the supervisory instruments provided for by law and based on practical experience. As a result of the methodological changeover, in addition to controlling the data supplies of the supervised entities, the MNB **places more emphasis on the on-site inspection of market participants, requiring and requesting the generation of registration data and analytical records on the site** to prevent the modification and falsification of data. Moreover, the MNB has introduced the immediate archiving ("mirror copy") of the complete IT dataset of market participants – a proven practice in market surveillance procedures.

In addition to the off-site inspection of institutions and products, the **inspection of the conduct (due care) of executive officers of the sector became a key priority in the past period**. It has been declared as an objective that **persons violating the law** (such as the responsible leaders of the institutions causing grave damages in the recent scandals) **should be kept away from the Hungarian financial market and capital market altogether**. To that end and to amend the existing regulations and establish a new regulatory framework which is more aligned to changed lifestyles, the MNB submitted proposals to the legislator and the relevant regulations have been amended. By virtue of its statutory mandate, **the MNB takes strict action against persons involved in market abuse** as the damages caused by them imply a significant loss of reputation and severely erode the confidence of investors and consumers in financial markets.

An integral part of the MNB's renewed supervision is a **far more strict and vigorous legal enforcement activity** by the full application of the expanded supervisory instruments and by following a stricter policy of measures primarily concentrating on objectives linked to the stable functioning of the financial system and on social interests. With the same objectives in mind, **the gatekeeper role of supervisory activity** – as the first line of defence for prudential supervision – **was strengthened in licensing procedures** as well. Since 1 October 2013, in the context of its prudential and market surveillance activity the MNB has **issued thousands of resolutions and rulings of a preventive or sanctioning nature.** From these should be highlighted the immediate measures taken for protecting the stability of the financial sector or customers, such as the delegation of supervisory commissioners who take control over the affected institutions from their boards of directors on-site and ensure the adequate operation of the institution. In 2014 and 2015, the MNB appointed supervisory commissioners on 8 and on 12 occasions, respectively.

Stronger supervisory action combined with **strict sanctioning is also reflected in penalties significantly exceeding those imposed in previous years:** the MNB has levied total penalties of HUF 450 billion for violations detected in the context of prudential activity, and nearly HUF 3.4 billion in the area of market surveillance. Examples for the latter include a penalty of HUF 250 million imposed on Civis Globál Brókerház for unlicensed portfolio management, a market surveillance penalty of HUF 500 million on Biztonság Trade Kft, while the MNB levied an unprecedented HUF 1.25 billion penalty on Fortress for unauthorised activity.

The results of the renewed supervision are tangible already; **the cleaning of the financial sector as a whole has begun, with a prominent role played by**

the MNB in the process. After the introduction of the integrated supervisory instruments inspection activity became more efficient, and institutional supervision has **detected critical problems in the case of several credit institutions.** The MNB applied the expanded set of measures firmly and took more forceful actions, **taking exceptional measures in the case of certain institutions**, such as revoking the operating licenses of Körmend és Vidéke Takarékszövetkezet and Széchenyi Bank. These resolutions already reflected the new supervisory approach in that the supervisory commissioner had been appointed and licenses had been withdrawn even before the development of illiquidity or the build-up of further risks. The integration of cooperative banks facilitated consolidation of this sector as well. As a result of the relevant inspections, the **MNB revoked the operating licenses of several institutions**: Széchenyi István Hitelszövetkezet, Alba Takarékszövetkezet, Tisza Takarékszövetkezet and Orgovány és Vidéke Takarékszövetkezet.

Thanks to the **consistent series of inspections and the new methodology** of the newly integrated supervision aimed at cleaning up the financial markets, in February 2015 the central bank – having assumed the duty of financial supervision only 16 months earlier – **detected a series of fraud transpiring at Buda-Cash Brókerház for a decade and a half.** The unlawful conduct of the affected institutions was detected by the MNB during the first comprehensive inspection carried out after the assumption of sectoral supervisory duties. While the inspections did not identify sector-level risks, in certain cases they **revealed fraud in the magnitude of hundreds of billion forints** and as a result, the MNB revoked the operating licenses of three investment companies: Buda-Cash Brókerház, Hungária Értékpapír and Quaestor Értékpapír, filing criminal complaints with the competent investigating agencies. In addition, since the legislative conditions were in place, it initiated the liquidation of the affected investment companies. This demonstrates that only a strong supervision integrated into a strong central bank is capable of cleaning the financial system of problems accumulating for 10–15 years in a matter of 10–15 months.

Removing unlawfully operating participants from the market is a prerequisite for strengthening the confidence of customers and facilitating fair competition. In addition to credit institutions and capital market institutions, the transformation of supervision has also begun for **insurance companies, funds, financial enterprises and intermediaries in recent years**. The prevention of the build-up of risks and the enforcement of desirable market conduct have become key considerations in this regard. With a view to establishing a transparent range of services, promoting the spread of up-to-date pension savings solutions and stimulating market competition, **the MNB held several consultations and issued a number of recommendations**, in which it formulated its expectations with respect to market participants and certain activities. Examples include the **MNB recommendation** that came into effect in September 2015, offering guidance **regarding the sale of insurance products on electronic platforms**, which was intended to ensure that consumers not only have access to the price of insurance services, but also receive comprehensive, easy-to-understand information enabling them to compare the contents of different services and select the product best suiting their needs. Coming into force on 1 January 2016, another significant event was the **introduction of the Solvency II system**, which fundamentally transformed regulation of the insurance sector. **The MNB managed the preparation process** and assisted market players by issuing recommendations and holding consultations.

With the integration of supervisory duties into the central bank, **the MNB re-evaluated its consumer protection role** as well, having recognised that prudently operating institutions alone are not enough to maintain a stable, reliable financial system: the confidence of consumers is also essential. The strengthening of public confidence, as a task of the central bank, is highlighted specifically in the MNB Act, and it also appears in the supervisory strategy as a central value. Consumer-friendly, "fair" institutional conduct is a business interest; there are no sustainable institutions without satisfied consumers. **Powerful financial consumer protection action and efficient control over the enforcement of consumer protection rules** and institutions' uniform compliance are prerequisites for establishing and maintaining confidence. To this end, in addition to handling individual infringements, the MNB shifted its focus to the **comprehensive, systemic management of consumer protection issues**: targeting the problems identified on the basis of the complaints and requests received, the supervisory authority has conducted numerous thematic inspections covering all financial institutions of the sector. **Public interest lawsuits, where the MNB initiates court proceedings on behalf of consumers are of particular significance**: if the MNB wins the lawsuit, all institutions are required to observe the court's ruling and perform all related obligations towards all affected customers. In 2015, for example, due to authorisation in the Settlement Act, the MNB initiated a public interest lawsuit against 16 financial institutions, which ended with the court's legally binding ruling that granted the supervision its claim in each case.

Official **consumer protection activities are characterised by a proactive attitude, an ability to respond rapidly, inspection activity focused on market phenomena, quick and efficient expert analysis of consumers' feedback, reinforced consumer protection**, active, predictable, strong and exemplary legal enforcement, timely prohibition of infringements and proportionate sanctioning. The MNB explores and addresses risks threatening the financial system resolutely and in an uncompromising manner; it stands up against abuses and unlawful behaviour in the financial market with determination and confidence. **It responded to all infringements firmly, ensuring that its response acts as a deterrent.** Under its new and stricter policy on sanctions and fines, the fines currently applied in various cases might entail the imposing of sanctions on institutions committing infringements with amounts twice, five times or even ten times higher than previously. Since the integration, **consumer protection fines of more than HUF 2 billion have been imposed**. In the context of the series of inspections targeting unilateral fee increases, the MNB imposed consumer protection fines amounting to a total of HUF 1.86 billion, obliging the parties concerned to perform reparation. With respect to settlement cases, it imposed fines amounting to HUF 124 million in 2015. As a result of the inspections aimed at the increases of fees and charges and at casco premiums charged in foreign currency, in addition to imposing a substantial amount of fines, the MNB also ordered the entities concerned to refund the extra revenues collected from unlawful conduct to consumers. Thousands of consumers directly perceived the impact of these measures.

Table 6.3
Consumer protection inspections conducted

	2014	2015
Inspections launched upon request	362	549
Inspections launched *ex officio* (targeted, thematic)	193	72
Jointly with prudential inspection	12	14
Total	**567**	**635**

Source: MNB

Obviously, the renewal of consumer protection consists of more than stronger action; both the MNB and service providers need to **provide a broad range of support to consumers using clear, up-to-date information. Continuous cooperation and consultation with the institutions** (Consumer Protection

Forum, professional days) and the **educational-training activities aimed at improving consumer awareness** are important tools in this regard. In parallel with the integration, a Financial Consumer Protection Centre (FCPC) has been set up, as an organisation separate from the administrative area, to efficiently carry out the related tasks. One key objective of the Centre is to handle contacts and submissions effectively, **operate a high quality customer service unit, strengthen the provision of information**, increase national coverage and improve the indirect access of consumers. In this context, **the MNB provided information via personal customer service, its call centre or email in hundreds of cases**. In order to ensure consumers' ability to enforce their interests and to support the broad-based provision of information to consumers nationwide, the MNB cooperates with financial consulting firms in large cities and Government Windows at county seats. Moreover, with a view to establishing national financial consumer protection, **in the framework of the Civil Network, it supported the implementation of nearly 600 financial consumer protection events across the country**. In order to support understandable customer information, financial awareness and financial literacy, by using a wide spectrum of communication channels, **the MNB expanded its educational-training activity continuously through its series of papers entitled "Financial Navigator", the consumer protection microsite and short films on consumer protection**.

The **close cooperation between microprudential** (supervisory) **and central bank** (monetary policy and macroprudential) **areas is perceivable in** the numerous **results** achieved so far in the field of supervision. Examples for the success of the integration include the **settlement** process and the **conversion** of foreign currency loans into forints, both initiated by the MNB, which not only **enforced the rightful interests of consumers**, but also contributed significantly to reducing the banking sector's vulnerability by lowering the payment burdens of customers and by eliminating the exchange rate risk. In its central bank competence, the MNB also mobilised the foreign exchange reserves for the implementation of the conversion. The MNB participated in and provided expert support to the **formulation of the Act on "fair banking"**, which was intended **to foster healthy, sustainable competition** and serves consumers' interests by promoting the transparency of the interest rates and fees associated with loan contracts.

7 Active use of macroprudential instruments

The crisis demonstrated that addressing systemic risks is indispensable for financial stability. In 2013, the MNB was given a clear and strong mandate to manage these risks efficiently. By virtue of this mandate and without prejudice to its price stability objective, the MNB maintains the stability of the financial intermediary system and assists in enhancing the resilience of the financial system and ensuring its sustainable contribution to economic growth. In the past period, even by international standards the MNB actively deployed its risk mitigating tools: it developed efficient policy responses both to address risks that had emerged in the past and to suppress the build-up of future risks.

7.1 WHY IS MACROPRUDENTIAL POLICY NECESSARY?

The magnitude of the economic losses caused by the global financial crisis demonstrated the crucial importance of the stability of the financial system to the viability of a country's economy. The crisis underscored that microprudential (individual banking supervision) intervention alone is unable to prevent the financial disturbances that inflict heavy losses on the real economy. (Galati – Moessner, 2013) The systemic proliferation of foreign currency lending and the economic and social problems stemming from it aptly illustrate the need for a systemic focus of prudential interventions.

Numerous market failures or frictions can be identified as the causes behind the build-up and materialisation of systemic risks. On the one hand, many risks arise from information asymmetry and time-varying risk aversion: the strong control of shareholders over management, relative performance evaluation (De Nicoló et al., 2012) or state assistance in financial crisis (Mariathasan et al., 2014) can all be responsible for sub-optimal risk-taking at the systemic level. On the other hand, systemic risks may arise from the highly interconnected network of market participants in the form of contagion through counterparty risk, fire-sales or the emergence of systemically important institutions. (Claessens, 2014)

7.2 HOW DOES MACROPRUDENTIAL POLICY WORK?

Despite the emergence of numerous risks until as late as 2013, in contrast to most central banks worldwide, in Hungary there were no changes in the approach and regulations that would have provided an adequate response to the challenges of the economic crisis. Since this change in direction took years to materialise, even more profound changes were needed, which could only be implemented after the reform of the MNB Act in 2013.

In 2013, the MNB was provided with a clear, strong mandate to manage systemic risks. The primary objective of the MNB is to achieve and maintain price stability, but without prejudice to this primary objective, the MNB also maintains the stability of the financial intermediary system and assists in enhancing the resilience of the financial system and in ensuring its sustainable contribution to economic growth. Responsible for monetary policy, macroprudential policy and financial supervision, the MNB embodies a complex institutional model where clear responsibility, a strong mandate and institutional synergies provide the means for efficient decision-making processes and consistent communication. The efficiency of decision-making and the ability to consider several points of views simultaneously are facilitated by the fact that internal members of the Monetary Council (MC) are also members of the Financial Stability Board (FSB), the body responsible for the definition and achievement of macroprudential policy objectives.

In the recent past, the management of systemic risks was exceptionally vigorous in Hungary, even by international standards, which was warranted by the significant systemic risks that had built up before and during the crisis. The instruments introduced can be essentially classified into two groups. Some of the instruments are intended to address previously unmanaged or mismanaged risks persisting as a legacy of the crisis, and are aimed at preventing the future build-up of similar risks drawing on the lessons of the crisis. Other instruments are applied by the MNB to avert, in a preventive manner, the build-up of already identified and potentially emerging future systemic risks.

The introduction of the macroprudential instruments required for efficient risk management has been largely completed. During the period ahead, in addition to the active monitoring and possible management of persisting and potentially arising risks, the focus will shift to monitoring the impact mechanism of the existing instruments and to their fine-tuning.

Table 7.1
Macroprudential instruments applied by the MNB

Macroprudential instrument	Application of the instrument
Instruments for the management of the risks built up in the period preceding the crisis	
Debt cap rules	Effective from 1 January 2015, limits are set on the loan amount available to consumer borrowers in proportion to the underlying collateral, and on the committable debt service costs in proportion to disposable income
Systemic Risk Buffer	Applicable from 1 January 2017, the risk buffer is set between 1–2% of risk-weighted assets, depending on the volume of non-performing project loans
Foreign Exchange Funding Adequacy Ratio (FFAR)	As of 1 January 2016, FX assets requiring stable financing shall be fully financed through stable FX funds (the prescribed rate of the indicator is min. 100%)
Instruments for the preventive management of future risks	
Mortgage Funding Adequacy Ratio (MFAR)	As of 1 April 2017, at least 15% of long-term household mortgage loans shall be financed from long-term mortgage-backed liabilities (mortgage bonds, refinancing loans)
Foreign Exchange Covarege Ratio (FECR)	As of 1 January 2016, currency mismatches between the assets and liabilities of credit institutions shall be limited to maximum 15% of the balance sheet total
Tightening of the Liquidity Coverage Requirement (LCR)	The LCR expects the availability of a sufficient quantity and quality of liquid assets for the eventuality of a short-term (30-day) liquidity shock. As of 1 April 2016, the applicable minimum value is 100%
Countercyclical Capital Buffer	As of 1 January 2016, the capital buffer is 0%
Identification of other systemically important institutions and the applicable additional capital requirements	In December 2015 the MNB identified the systemically important institutions operating in Hungary. As of 1 January 2017, the capital surcharge shall range between 0.5–2% of the risk-weighted asset value

Source: MNB

7.3 INSTRUMENTS FOR THE MANAGEMENT OF RISKS BUILT UP IN THE PERIOD PRECEDING THE CRISIS

In Hungary, it was the consequence of pre-crisis economic activity and the high interest rates on forint loans that the household segment accumulated a significant stock of foreign currency loans between 2003 and 2008. Neither households' indebtedness in foreign currency, nor the ensuing negative effects were managed properly and, as a result, households became fully exposed to the risks arising from exchange rate changes. The depreciation of the forint exchange rate in the aftermath of the crisis imposed serious burdens on households, many of which had been at the limits of their load-bearing capacity even before taking out their loans; consequently, they were unable to make their increased monthly payments. This debt trap not only jeopardised the livelihood of customers, but through the deteriorating portfolio quality it also had a negative impact on banks' capital position and implied a significant obstacle, overall, in the country's ability to return to a growth path.

Having been provided a macroprudential mandate, the MNB introduced debt cap rules to prevent the excessive indebtedness of households in the future. The debt cap rules effective from 1 January 2015 consist of two parts. Limits are set on the loan amount available to consumers in proportion to the underlying collateral (loan-to-value ratio) on the one hand, and on the committable debt service costs in proportion to their disposable income (payment-to-income ratio) on the other hand. The limits thus specified can provide protection against excessive indebtedness in the case of a negative change in the economic environment, while they can also contribute to the accumulation of a high quality bank portfolio, without unreasonably restricting lending activity and hence, growth. An added value of the regulation is the fact that only legally acquired revenues can be accepted as income and therefore the regulation encourages the whitening of the economy.

7.4 SYSTEMIC RISK BUFFER AS AN INSTRUMENT TO MITIGATE RISKS FROM NON-PERFORMING PROJECT LOANS

Irresponsible pre-crisis lending left its mark not only on the household sector, but also on the corporate segment. Implying a risk for years, the stock of non-performing project loans amounts to more than HUF 700 billion which, both in terms of percentage share and in terms of concentration between banks, hinders the financial system in fulfilling its role of supporting economic growth. Even the continuous restructuring of loans failed to manage the risks arising from the volume of non-performing project loans, which embarked on a steep rise after the crisis.

The MNB's Financial Stability Board deemed the management of risks stemming from non-performing project loans as a priority task, and consequently, in October 2015 it decided to introduce a Systemic Risk Buffer. Affected domestic credit institutions are required to set aside this capital buffer from 1 January 2017. With respect to the non-performing project loan portfolio, the size of the buffer depends on the credit institution's individual contribution to systemic risks. The long introductory period provides banks with ample time to clean up their non-performing project exposures. Should portfolio cleaning fail, the capital surcharge will strengthen financial stability through the increased shock resilience of the institutions.

7.5 FOREIGN EXCHANGE FUNDING ADEQUACY RATIO AS AN INSTRUMENT TO REDUCE EXTERNAL VULNERABILITY

Foreign currency lending to households required regulatory intervention not only in consideration of the exchange rate risk on the side of households, but also because of the maturity mismatches of credit institutions' foreign currency positions. This is because the maturity of the foreign currency funds used to finance long-term foreign currency assets (typically foreign currency household mortgage loans) was typically far shorter, giving rise to pronounced foreign currency maturity mismatches in the banking sector's balance sheet. As short-term foreign currency debt involves a significant rollover risk and a rapid outflow of funds can cause severe market turbulences, foreign investors expected the increasing volume of short-term foreign currency exposures to be covered by holding foreign exchange reserves corresponding in size.

In order to reduce the risks, the Foreign Exchange Funding Adequacy Ratio (FFAR) was introduced. The indicator defines the amount of required stable foreign currency funds in proportion to the foreign currency assets that require stable financing. While the conversion of households' foreign currency mortgage loans significantly reduced the risks stemming from foreign currency maturity mismatches, maintaining the regulation is still justified in the interest of reducing external vulnerability. Thanks to this instrument, the shock resilience of the financial system has improved, banks' liquidity and business risks have decreased further, and the central bank's foreign exchange reserve requirement may also decline.

7.6 MORTGAGE FINANCING ADEQUACY RATIO AS AN INSTRUMENT TO MANAGE EXCESSIVE FORINT MATURITY MISMATCHES

The conversion of foreign currency household mortgage loans represented an important step in the management of previously accumulated risks. Closely related to this, households' default risk was significantly reduced by the settlement aiming to refund the overpayments of consumers that arose from the exchange rate margin and unilateral contract modifications. As a macroprudential authority, the MNB played an important role in the efficient implementation of this by defining the methodology and detailed rules of the settlement by way of MNB decrees.[20] After the conversion, however, the need arose to apply the MNB's macroprudential tools in a forward-looking manner.

Thanks to the conversion, the exchange rate risks arising from household mortgage loans no longer burden customers; however, in relation to the conversion, significant forint maturity mismatches emerged in the banking sector. This is because the vast majority of the mortgage loans that were converted into forint have a maturity of over 10 years, while the banking sector's forint funds – typically in the form of deposits – are mainly short-term.

With a view to reducing these maturity mismatches, the MNB will introduce the Mortgage Financing Adequacy Ratio (MFAR). The new indicator requires banks to finance at least 15 per cent of the net stock of HUF-denominated household mortgage loans with a remaining maturity of over one year using long-term forint liabilities covered by these loans (e.g. mortgage bonds, mortgage bank refinancing loans). Given that, due to the strong legislative background, mortgage bonds generally have good credit ratings, banks can access longer-term forint funds at relatively low interest rate spreads, thereby strengthening financial stability. Moreover, financing through long-term mortgage bonds may be conducive to promoting mortgage loans with longer interest periods.

[20] For more information, see MNB Decrees No. 42/2014 (XI. 7.), No. 54/2014 (XII. 10.), No. 55/2014 (XII. 10.), and No. 58/2014 (XII. 17.).

Based on preliminary estimates, the regulation may also result in the establishment of new mortgage banks and the issuance of new mortgage bonds worth HUF 300 billion. This may also generate an upswing in the persistently inactive mortgage bond market.

7.7 FOREIGN EXCHANGE COVERAGE RATIO AS AN INSTRUMENT MITIGATING RELIANCE ON OFF-BALANCE SHEET INSTRUMENTS

In addition to the FFAR regulation, the MNB also mitigated the risk of a repeated accumulation of short-term external liabilities by introducing the Foreign Exchange Coverage Ratio on 1 January 2016. The new requirement imposes a limit on on-balance sheet currency mismatches: As of 1 January 2016, the currency mismatches between assets and liabilities may not exceed 15 per cent of the balance sheet total. In conjunction with the FFAR regulation, the Foreign Exchange Coverage Ratio may efficiently reduce reliance on short-term external funds and hence, alleviate the vulnerability of the banking sector. In addition, it also prevents banks' excessive reliance on off-balance sheet instruments through currency mismatches and accordingly, it also mitigates the liquidity risks arising from them.

7.8 LIQUIDITY COVERAGE RATIO AS AN INSTRUMENT STRENGTHENING SHORT-TERM BANK LIQUIDITY

In addition to stable financing, the MNB also ascribes great importance to ensuring short-term back-up liquidity. In the MNB's view – similar to a number of other countries – faster compliance with the Liquidity Coverage Ratio (LCR) requirement is warranted in order to strengthen the shock-absorbing capacity of the banking sector. Accordingly, as of 1 April 2016, the expected level of the LCR shall be raised to 100 per cent. In the best case scenario from a stability and economic perspective, in order to comply with the raised LCR level, banks will essentially purchase government securities, thereby reducing the external vulnerability of the country.

7.9 IDENTIFICATION OF SYSTEMICALLY IMPORTANT FINANCIAL INSTITUTIONS AND THEIR CAPITAL SURCHARGE

Excessive concentrations of wrong incentives and exposures constitute the basis of structural systemic risks. For the purpose of addressing the problems arising from this factor, the MNB has identified systemically important institutions and intends to improve their shock-absorbing capacity by imposing a sufficient level of capital buffer. **Systemically important financial institutions are institutions that, due to their role in the financial system and their weight in the financing of the real economy, deserve special attention.** This stems from the fact that temporary or persisting problems at such institutions might jeopardise the smooth functioning of the entire financial system and, indirectly, might give rise to severe problems in the whole economy. These institutions are generally aware of their special role and this might encourage them to take excessive risks, which distorts competition and increases the probability of a future stress event. As a last resort, systemically important banks were generally compensated for the losses incurred by the central budget of the countries in which they reside via recapitalisation (bail-out), which stretched the solvency of certain countries (e.g. Ireland) to the limit in times of a general financial crisis or when several institutions required assistance. In order to contain these risks, it is important to identify systemically important institutions both at the global at the local, national economy level, and to improve their shock resilience by way of imposing additional capital buffers on the institutions concerned to reduce the moral hazards mentioned above.

The Financial Stability Board of the MNB identified nine banks in Hungary as other systemically important institutions. With a view to increasing the shock-absorbing capacity of these institutions and improving investor and consumer confidence in financial markets, as of 1 January 2017, the credit institutions concerned are required to maintain an additional capital buffer. The sufficiently long preparation period enables market players to meet the new requirement smoothly even while increasing their lending activity.

8 Conversion and settlement of FX denominated mortgages

In the past decade, the income position and financial situation of hundreds of thousands of indebted households hinged upon the exchange rate movements between the forint and foreign currencies, especially the Swiss franc. Although the **indebtedness of Hungarian households** commenced relatively **late** (at the beginning of the 2000s), **from the middle of the decade an increasing number of households became indebted in foreign currency.**[21] Due to the spread of foreign currency lending, the 2008 crisis caught Hungary in a particularly vulnerable position, which was also apparent in the significant weakening of the forint exchange rate. **Exchange rate changes also affected the monthly instalments of households**, the repercussions of which were further exacerbated by the fact that, **in order to offset their increasing losses, banks applied unilateral interest rate increases and began to widen the exchange rate margin**.[22]

Starting from 2014, the legislative process aimed at addressing the situation of foreign currency debtors and responded to the two problems mentioned above: unilateral interest and fee increases and the exchange rate risk of households. The uniformity decision of the Supreme Court (Kúria) in June 2014 set out the principles to be followed by the legislature. It was in accordance with these principles that the Parliament adopted Act XXXVIII of 2015 and Act XL of 2015 regulating the refunding – i.e. settlement – of unfair interest rate and fee increases to consumers.

[21] The reasons for this are described in detail in the study of Csajbók et al. (2010).

[22] During the disbursement and payment of FX-based loans, banks applied disparate exchange rates. For consumers, this meant that upon the disbursement of the loan, the disbursed amount was higher than the foreign currency amount calculated at the HUF/currency mid-rate, while upon payment, the payment of the same currency amount required a higher forint amount.

The regulation of settlement was preceded by a **long period of legal uncertainty**. The previous, often contradictory court rulings were steered into a common direction by the **Supreme Court's uniformity decision** and **subsequently the Government** – in order to avoid mass litigation and an excessive burden on courts – **adopted uniform statutory rules** regarding the process. By contrast, the **conversion of loans** was **fully backed by economic rationale**. **For the first time** since the spread of foreign currency loans, at the end of 2014 **all conditions were in place for phasing out** this product after a period of nearly a decade. (Kolozsi et al., 2015) On the one hand, owing to the measures taken by the central bank since 2012, **forint interest rates had never been so close to those of foreign currencies** as at the end of 2014. On the other hand, the foreign exchange reserves of the central bank were **more than adequate** to provide banks with the foreign currency needed for the conversion of households' foreign currency loans. (Nagy – Palotai, 2014) If the first condition were not fulfilled, the conversion would have resulted in a steep increase in the debt burden due to the higher interest rate level, while an insufficient level of foreign exchange reserves would have rendered the neutralisation of the effect on the forint market impossible. At the same time, it significantly eased the denomination change that **simultaneously with and due to the settlement**, debtors' outstanding debt **decreased considerably** along with their **monthly payment obligations**.

In addition, the MNB also participated in the elimination of foreign currency loans as a **regulatory and audit authority**, as well as an **authority responsible for financial stability**. By fleshing out the framework of the settlement acts with detailed rules, closely supervising the process as a whole and providing the foreign currency required for the conversion, the central bank played a key role in eliminating one of the gravest risks in modern Hungarian economic history.

8.1 MNB AS THE REGULATORY AUTHORITY DEFINING THE SETTLEMENT METHODOLOGY

Pursuant to the settlement acts, banks were required to consider, on a retrospective basis, the overpayments of customers arising from unfair interest rate and fee increases as principal prepayments. At the same time, the law **provided a detailed elaboration of the methodology and the regulation of the precise calculation of consumer claims upon the MNB**.

The methodology formulated by the MNB was defined in several steps. Firstly, MNB Decree No. 42/2014 regulated "theoretical", straightforward cases (performing loans without preferential terms granted by the bank, etc.) by developing three separate methodologies that nevertheless yielded the same results. Secondly, MNB Decree No. 54/2014 covered "problematic" cases and, by proposing a single methodology, it regulated cases where the loan became delinquent or involved preferential terms or any other special circumstances. Finally, MNB Decree No. 55/2014 defined the estimation procedures for those institutions which did not have the information required for the settlement available.

The basic principles were the same for all methodologies: **financial institutions were required to calculate each consumer claim at present value, using the effective interest rate and currency denomination of the prevailing debt**. This meant that consumers typically also realised an exchange rate gain and interest earnings on their previous overpayments. The level of consumer claims, however, showed a significant degree of heterogeneity depending on when and to what extent the interest rates and fees were raised by the relevant financial institution, and on the **discounts** received during the term of the loan.

8.2 MNB'S SUPERVISORY AND CONSUMER PROTECTION ROLE IN THE SETTLEMENT AND CONVERSION PROCESS

Following the adoption of the settlement and conversion acts, in the last quarter of 2014 the MNB commenced preparations for formulating the decree on the **substantive and formal requirements** of the provision of information to consumers (**Decree on Information Provision**), which was intended to ensure the uniform and transparent provision of information to consumers. As part of the preparations, the MNB was **engaged in continuous consultation with the affected institutions** and advocacy groups in order to assist the institutions in their preparation and to facilitate a smooth communication process. In addition to the Decree on Information Provision, **for the smooth execution of the settlement**, the MNB issued numerous guides, document and form templates, and provided guidelines in the form of resolutions and management information circulars. It opened a sub-page on its website for financial institutions affected by the settlement and published its answers under Frequently Asked Questions.

The MNB and the cooperating non-governmental organisations **communicated actively through all communication channels** to provide detailed information to consumers about deadlines, options available for reporting complaints and the most relevant issues affecting consumers. The MNB helped consumers navigate through the settlement and conversion process by offering a well-prepared customer service, detailed information documents, videos and animation films and thematic publications.

The magnitude of the task is demonstrated by the fact that the settlement process as a whole affected around **3.6 million consumer loan contracts** (Table 8.1). The recalculation of such an astounding number of contracts and the execution of logistics and information technology tasks posed an **unprecedented challenge** for the participants of the financial system and the regulatory authorities alike.

Table 8.1
Number of consumer loan contracts affected by the settlement by currency and loan status

	Terminated before the Settlement	Terminated by the Settlement	Live contracts	Canceled contracts	Total
FX-based contracts	975,545	66,196	692,829	131,680	**1,866,250**
FX contracts	4,607	79	6,750	740	**12,176**
HUF contracts	391,804	25,387	891,604	414,854	**1,723,649**
Total	**1,371,956**	**91,662**	**1,591,183**	**547,274**	**3,602,075**

Note: The forint loan contracts row does not include contracts where – for lack of unilateral interest rate or fee increases – the financial institution performed its settlement obligation by disclosure.
Source: MNB

The MNB inspected the pre-settlement preparations in advance at the 15 institutions managing the majority of the contracts affected by the settlement. In this context, it examined the compliance of the calculation method intended to be applied by the institution concerned with the methodological principles of the settlement.

For the comprehensive inspection of the implementation of the settlement and the conversion as prescribed by law, in February 2015 the MNB launched a **thematic inspection** at the 321 institutions involved, verifying, among other things, compliance with deadlines regarding the posting of letters of information, compliance with the substantive and formal requirements of the disclosure obligation, the accuracy of the data included in the information letters, the process of complaint management in relation to the settlement and the adequacy of the settlement methodology.

To ensure the timely detection of potential risks, **the MNB monitors feedback and requests received from consumers on a continuous basis** and, in the case of inadequate practices applied by the institutions, as part of the control process performed in the framework of the thematic inspection, it takes immediate action with consumers' best interest in mind. By the end of 2015, **133 consumer protection warnings and 104 interim injunctions had been issued and 8 court proceedings initiated.** Examples include the late posting of letters of settlement, deviations from the settlement order to the detriment of consumers, or the incorrect calculation of new interest rates. After the detection of the errors, the MNB continuously monitored the corrections made by the institutions.

At the current stage of the thematic inspection, the MNB's preliminary, general conclusion is that at the systemic level, the settlement and conversion process was executed in line with expectations, thanks in part to the proactive and preventive measures of the MNB.

In accordance with the legislation adopted in October 2015, the conversion of more than 320,000 still outstanding foreign currency-based motor vehicle and consumer loans began in December 2015. The **MNB** had already **participated in the preparation of the act as an expert consultant** and after its adoption it issued guidelines and publications to inform consumers and assisted institutions in their preparations by expert consultations and by the publication of its position, resolutions and answers in Frequently Asked Questions. In order to inspect the conversion of motor vehicle and consumer loans, in December 2015 the MNB launched a targeted thematic inspection, in the framework of which it inspects, among other things, the provision of information as prescribed by law, the conversion process, the definition of the interest rate and the instalment amount and complaint management.

8.3 BY PROVIDING THE FOREIGN CURRENCY REQUIRED FOR THE CONVERSION, THE MNB PROTECTED THE EXCHANGE RATE OF THE FORINT

In order to support the phasing-out of households' foreign currency and foreign currency-based consumer loans, the MNB initiated a foreign currency sale programme in the summer of 2014 in relation to mortgage backed FX loans, and in August 2015 in relation to other loans to **provide the banking sector with the foreign currency required for the conversion**. There was a need for central bank's foreign currency tenders because the removal of foreign currency household loans from banks' balance sheets **resulted in open foreign currency positions in the banking system**, and closing these on the market would have exerted considerable pressure on the exchange rate of the forint. The MNB's foreign currency sale programmes were intended to ensure that the settlement of households' foreign currency mortgage loans (HUF 3,000 billion) and the conversion of the loans, as well as the phasing-out of – typically Swiss franc based – motor vehicle and consumer loans (HUF 300 billion) were carried out **quickly and in an orderly manner, while also safeguarding the stability of the financial system and without a significant impact on the exchange rate of the forint**.

In relation to the settlement of foreign currency household mortgage loans, the MNB held euro sale tenders between October 2014 and March 2015, and the programme was extended to the conversion of mortgage loans in November 2014. In the **settlement** phase banks purchased **EUR 1.1 billion**, while in the **conversion** phase the central bank allocated more than **EUR 8 billion**, also in consideration of the amortisation of the loans. **Banks obtained** the foreign currency required for the phasing-out of foreign currency household mortgage loans almost entirely **from the MNB**. Thanks to the timing of the central bank's tenders, the foreign currency position was covered as early as 2014, which meant that the Swiss National Bank's decision to **abandon the exchange rate cap** on 15 January 2015 – and the ensuing jump in the Swiss franc – **did not affect mortgage debtors and did not cause disturbances** in the functioning of the Hungarian banking system. An important element of the success of the programme was the fact that **the MNB complied with the reserve adequacy requirement throughout the programme.** (Hoffmann et al., 2014) This can be attributed to the condition of short-term external debt reduction in the case of the short-term conditional instrument, and to the restriction of use on shorter maturities in the case of the unconditional instrument.

In relation to the conversion of foreign currency household loans other than mortgage loans, the MNB held tenders from August 2015. The smaller volume allowed the central bank to **sell Swiss franc directly** at tenders related to the **conversion of foreign currency loans other than mortgage loans**, and in addition to the credit institution counterparties of the MNB, financial enterprises were also allowed to participate in the programme through an intermediary umbrella bank. The central bank allocated a total of CHF 605 million at the tenders, which covered a substantial part of CHF-denominated foreign currency loans. Since the MNB had ample of foreign currency reserves, participating credit institutions and financial enterprises were not required to pledge to reduce their short-term external debt, and the central bank made the foreign currency available immediately.

The central bank's foreign currency tenders announced in relation to the phasing-out of foreign currency household loans achieved their objectives: **thanks to the coordinated central bank intervention**, the settlement and conversion of the affected loans took place in such a manner that **phasing-out had no effect on the exchange rate of the forint and financial stability remained intact**.

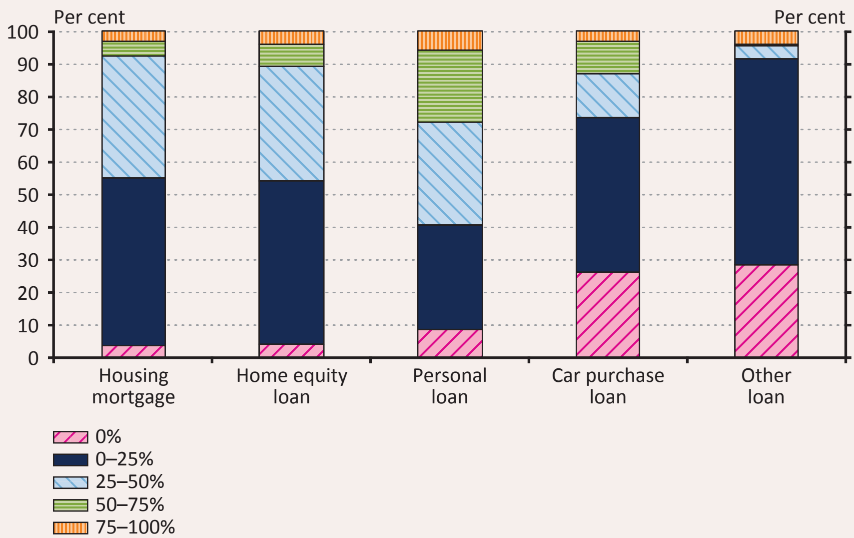
8.4 SIGNIFICANCE OF THE SETTLEMENT AND THE CONVERSION AT THE LEVEL OF HOUSEHOLDS AND THE NATIONAL ECONOMY

The settlement and the conversion had an **extremely significant positive impact on the income and financial standing** of households. As a result of the settlement, **burdens eased** significantly for the majority of debtors **compared to their previous debt service**, while the conversion benefited households by **neutralising the appreciation** of the Swiss franc in January 2015.

Financial institutions **refunded HUF 764 billion in consumer claims** to beneficiaries. The larger part of this amount – around HUF 733 billion – was refunded to debtors with foreign currency-based loans. Of the total amount of consumer claims nearly HUF 200 billion was actually paid out, while HUF 566 billion was credited against the outstanding debt of debtors. In accordance with the magnitude of the settlement, the effects on the real economy were also considerable: according to the MNB's estimate, the measure accounted for a **0.5–0.8 per cent increase in consumption and a 0.2–0.3 per cent increase in GDP**.

The decline in outstanding debt and the restoration of the interest rates to the levels prevailing at the disbursement of the loan brought about improvement not only at the systemic level, but also **perceivably eased the financial situation of individual households**. **On average, monthly payments** for Swiss franc based housing loans **declined by HUF 26,100 (25%)** (Chart 8.1), while **principal debt** shrank to HUF 6.5 million from HUF 8 million (**down HUF 1.5 million**).

Chart 8.1
Distribution of foreign currency based consumer loan contracts according to the decline in monthly payment resulting from the settlement

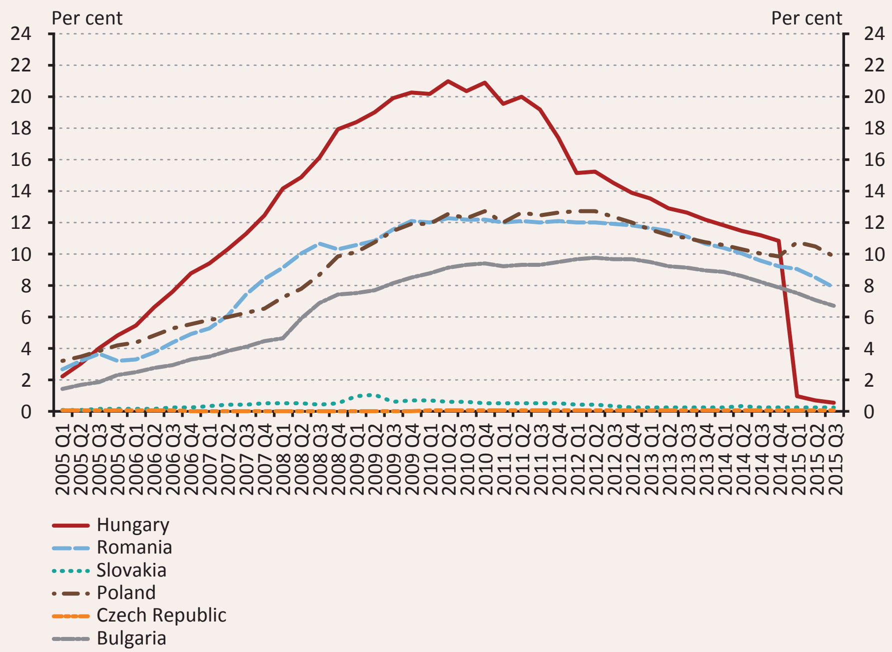


Note: For mortgage loans, values are calculated without the effect of the exchange rate cap scheme.
Source: MNB

In contrast to the settlement, the conversion did not ease monthly payments immediately, but it did **eliminate the volatility stemming from exchange rate changes.** The benefits of conversion at a fixed exchange rate **became all the more apparent in January 2015** when the Swiss National Bank removed the cap on the Swiss franc's euro exchange rate, and – following a series of brief, volatile swings – the exchange rate of the Swiss franc against the forint **stabilised at a level 10–15 per cent stronger** than earlier. (Fábián, 2015; Vonnák, 2015) It should be added that, **without the conversion**, the external vulnerability of the country would have been far more pronounced upon the elimination of the exchange rate cap of the Swiss franc, **causing even more extreme swings in the exchange rate**. Conversion, therefore, is **not an exogenous process** from the perspective of the volatility of the exchange rate: without the measure, foreign currency debtors would have faced a significantly higher exchange rate loss than the actual exchange rate difference they experienced.

The legislation on conversion was originally only applicable to mortgage-backed loans, but after the removal of the Swiss franc's exchange rate cap, the **conversion of remaining foreign currency loans** was also put on the agenda. These loans were eventually converted in the last quarter of 2015, at an exchange rate identical with that applied in the conversion of mortgage loans. Due to market rate changes, the second round of the conversion had cost implications, which were **borne jointly by the state and the banks concerned**. As a result of the measure, the **monthly payments** of the remaining foreign currency debtors **fell by 10–15 per cent.** (Fábián – Zágonyi, 2015)

Chart 8.2
Household foreign currency loans as a percentage of GDP in a regional comparison



Source: Eurostat, MNB, regional central banks

The conversion eliminated **one of the most severe financial risks in Hungary: the open foreign currency position of households**. In 2010, the stock of households' foreign currency loans was over 20 per cent of GDP, around one and a half times the respective values of Poland and Romania – countries with a similarly active history of foreign currency lending. By the end of 2015, however, this stock **had all but disappeared**, and with this Hungary also put an end to the era of household foreign currency loans (Chart 8.2).

8.5 OUTLOOK

The legislative process resolving the predicament of foreign currency debtors has changed the features of the household credit market to an unprecedented degree. Along with the reduction of outstanding debt and the realignment of currency composition, however, the legislation also resulted in a number of **lasting changes.** One such change is the adoption of an act that lays down the **provisions governing the conclusion of consumer loan contracts and the amendments to their terms and conditions**. The MNB also plays a role in this task; indeed, as of January 2015, modification of the price conditions of loan contracts is conditional upon the **interest rate change and interest rate spread change indicators published by the MNB**. These indicators are designed to ensure that banks only modify the terms and conditions of loan contracts to the extent it is economically justified, and that such modifications remain **transparent, predictable and traceable at all times.** The new regulation **prevents** financial institutions from **unfairly and unilaterally modifying** contractual terms.

Although the conversion and the settlement were among the most significant events in recent Hungarian economic history, it should be remembered that **some risks remain** in Hungary's financial system. While foreign currency loans practically disappeared from the Hungarian banking sector, the **legacy of foreign currency lending is still present** in the form of **non-performing loans**. Although the share of such loans declined temporarily in the wake of the settlement, **by the end of 2015 it edged up again to the level preceding the measures**. With outstanding debts amounting to HUF 1,100 billion, **delinquent mortgage loan debtors** represent a particularly severe stability and social risk, and in their case, the **loss of real estate collateral is at stake**.

Considering the significance of this risk, the central bank is continuously monitoring the characteristics of this segment, along with the adequacy of the applicable regulations, and is analysing possible solutions. Relying on a broad-based information base, in 2015 the MNB launched a comprehensive, one-of-a-kind survey in this topic. The backbone of the information base was the so-called mortgage loan database, which included micro-level – anonymous – data on loan contracts, real estate collateral and the features of restructured loans, received from the financial institutions **covering nearly 90 per cent** of the non-performing portfolio. Data of loan contracts were **linked to** those of **the Central Credit Information System**, which allowed the MNB to gain a comprehensive insight into the credit exposures of non-performing mortgage debtors (and co-debtors). Moreover, the MNB added **income data based on tax returns** filed with the National Tax and Customs Administration to the records of the mortgage loan database, and the resulting database, overall, enabled the central bank to create **a far more precise view** of this segment than any previous research. In addition to the general characterisation of the non-performing portfolio, the **anonymous**, micro-level mortgage loan database was a suitable basis for conducting targeted, target-group specific surveys. The main findings of the research were published in October. (Dancsik et al., 2015)

In addition to analysing the mortgage loan database, the survey focused on locating and analysing other sources of information and **exploring the behaviour and experiences of creditors with the tools of qualitative analysis**. The experiences from banks' data supplies on the restructuring of loan transactions were supplemented with thematically structured, in-depth interviews primarily for the purpose of **gaining a deeper insight into banks' workout practices** and identifying the **legal and administrative burdens** hampering the cleaning up of the portfolio. Hungarian and international experiences, tools and good practices were explored using a benchmark analysis coupled with an analysis of legislation and the literature, while the economic and social aspects of the mortgage loan issue were examined through in-depth interviews with external experts. Focusing primarily on the income and wealth position of households with loans, their costs of living and attitudes regarding the loan and their current position, the MNB conducted a **nationwide representative questionnaire-based survey**. Mainly for the purpose of investigating the core causes of non-performance and "probing" the possible solutions, the results of the questionnaire-based survey were supplemented by a focus group study. In examining the efficiency of the existing portfolio cleaning tools, the MNB worked in close cooperation with the National Asset Management Agency to obtain information on the transactions included in the NET programme and the effectiveness of the programme.

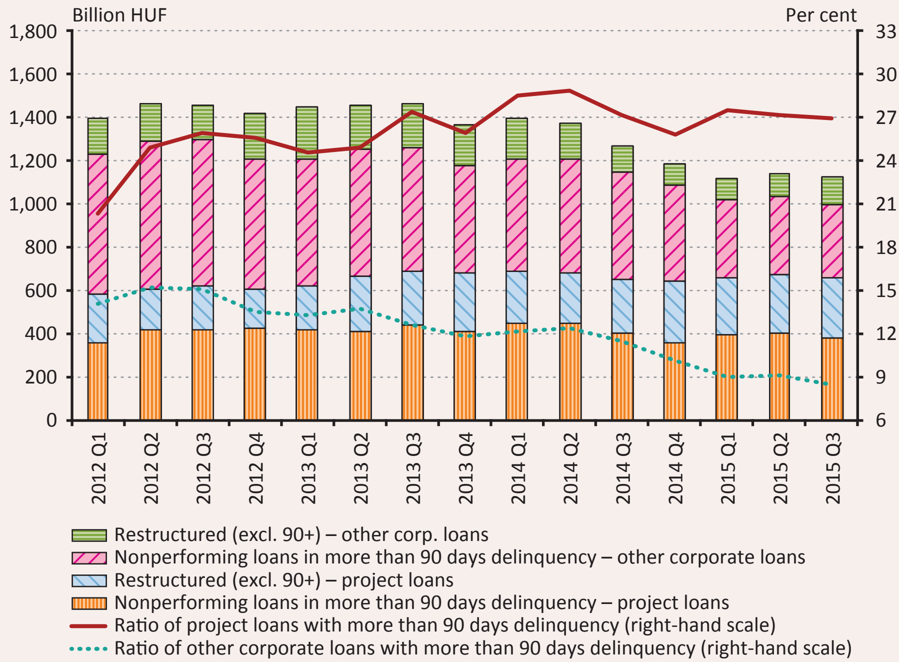
9 MARK Zrt. – Supporting the clean-up of bank portfolios

The ratio of non-performing loans (NPL) to the banking sector's total corporate portfolio has increased drastically since the outbreak of the crisis and fails to show improvement even seven years after the crisis. **The problem can be attributed to the large volume of non-performing loans on the one hand, and to the protracted clean-up process on the other hand.** At the end of the third quarter of 2015, non-performing corporate loans outstanding amounted to HUF 1,128 billion, of which HUF 723 billion is more than 90 days past due. (Magyar Nemzeti Bank, 2015f) Commercial real estate project loans account for almost 60 per cent (about HUF 700 billion) of the portfolio. Project loans and the repossessed commercial real estate collateral of project loans amount to HUF 1,000 billion, more than 3 per cent of GDP.

The corporate portfolio is strongly segmented regarding the pace of the clean-up. **Non-performing loans accounted for 47 per cent of project loans at the end of the third quarter of 2015 (of which the share of loans 90 days past due was 27 per cent), and there has been no significant increase in the annual cleaning ratio since the crisis.** By contrast, the clean-up of other corporate non-performing loans is in progress, and by the end of the third quarter of 2015, the share of non-performing receivables dropped to 14 per cent (of which the share of loans 90 days past due was 8.5 per cent).

The efficient clean-up of project loans is significantly impaired by the inadequate depth of the Hungarian debt management market and a lack of interest on the part of foreign investors with adequate liquidity. In addition, the complicated legal environment and the substantial amount of potential losses arising from the large volume of loans outstanding both encouraged commercial banks to follow a strategy of "wait and see", which impeded the market sale of receivables even more.

Chart 9.1
Non-performing project and other corporate loans in the banking sector



Source: MNB

Based on Hungary's professional evaluation by the European Commission,[23] the IMF[24] and the OECD,[25] the high share of non-performing loans poses a major risk to the stability of the financial system. Banks' lending capacity is reduced because of the funding losses incurred as a result of the large non-performing portfolio, the loss of interest and fee revenues, as well as the fact that the portfolios tie up significant capital and human resources. A cautious attitude to new lending and the uncertainty surrounding future loan loss provisioning prompts banks to assume risk-averse behaviour, reducing their willingness to lend. **Thus, persistently high non-performing ratios exert a negative impact on banks' lending capacity and willingness to lend,**

[23] European Commission: Macroeconomic Imbalances Hungary 2014; http://ec.europa.eu/economy_finance/publications/occasional_paper/2014/pdf/ocp180_en.pdf

[24] IMF Article IV consultations; http://www.imf.org/external/pubs/ft/scr/2015/cr1592.pdf

[25] OECD Economic Outlook Hungary; http://www.oecd.org/hungary/

leading to restrained lending activity. Consequently, the lending activity of the banking sector cannot effectively contribute to economic growth.

One of the greatest challenges of the financial intermediary system's sustainable contribution to economic growth is the clean-up of non-performing portfolios. The MNB establishes the macroprudential policy for the stability of the entire system of financial intermediation, with the objective to enhance the resilience of the system of financial intermediation and to ensure its sustainable contribution to economic growth.[26] The MNB facilitates the clean-up of project loans with commercial real estate collateral by way of cooperation with the EBRD on the one hand, and through the tightening of prudential rules (introduction of a new capital buffer requirement as of 1 January 2017) on the other hand. **The most important step of the MNB was, however, to take an active role – in keeping with its statutory macroprudential mandate – in the foundation of the Hungarian Restructuring and Debt Management Private Company Ltd. (MARK Zrt.) in November 2014.**

Numerous state asset management companies have been established across Europe, such as the one founded by the Swiss National Bank (StabFund), which helped mitigate the vulnerability and turmoil of the Swiss financial system arising from the mortgage loan exposures of UBS Bank in the wake of the 2008 crisis.

The purpose of MARK Zrt. is to effectively clean up the balance sheet of the banking system by removing a substantial part of the banking sector's non-performing loan portfolio. Banks participate in the acquisition programme on a voluntary basis. **The asset management company is advantageous from a macroeconomic perspective in that it offers a market price for such large volumes of non-performing portfolios that have an impact on the banking sector at large, thereby ensuring that the portfolio of the banking sector is cleaned of non-performing assets regardless of quality.**

In addition to expertise in managing bad loans, MARK Zrt. can also achieve economies of scale by purchasing portfolios in the segmented market and as such, it functions as a market catalyst intermediary between the market

[26] MNB Act: Article 4 (7) of Act CXXXIX on the Magyar Nemzeti Bank. Online: https://www.mnb.hu/letoltes/mnb-torveny-2016-01-01-en.pdf

and final investors. In line with its ten-year operation period, MARK Zrt. is capable of addressing the problem of non-performing loans effectively and more efficiently compared to the banking practice.

The Company's modern operating infrastructure, efficient operational functioning and the rapid implementation of its modern integrated enterprise resource planning system all support the Company in achieving its strategic objectives. The professional operation of MARK Zrt. is guaranteed by the fact that it is composed of highly trained, experienced specialists with expertise in Hungarian and international banking and real estate markets (at the end of 2015 the number of employees was 74). The Company has laid the cornerstone of corporate culture, defined the code of ethics for its business operations, and by the beginning of 2016 it was ready to take over large portfolios.

With its experience in the banking and real estate markets, the Company introduced a new service in the Hungarian market in 2015. In the context of its **complex workout services,** the Company offers its expertise and market intelligence to investors that have no or inadequate capacities for non-performing loan (NPL) or real estate investments in Hungary. The Hungarian introduction of this service – which has been in place in countries with more developed workout markets already – **may contribute significantly to the appearance of large institutional NPL investors and to the elimination of market frictions on the Hungarian real estate market.**

The acceptance of the asset purchase methodology of MARK Zrt. by the European Union was an important milestone in the Company's history. After a series of expert consultations lasting nearly a year, the European Commission approved the operation of MARK Zrt. on 10 February 2016. With this decision, **MARK Zrt. set a precedent for being the first state or central bank owned asset management company in the European Union that operates on a market basis and purchases assets at market value. Following the positive decision in Brussels**, in order to make up for the prolonged approval process, MARK Zrt. is set to begin its asset purchase programme as soon as possible. **As a result, the ratio of non-performing corporate loans within the banking sector may decline significantly by as early as the end of 2016, strengthening the stability, lending capacity and willingness to lend of financial institutions, which may contribute greatly**

to further improvement in Hungary's investor perception and benefit the country's competitiveness.

MARK Zrt. performs the core macroprudential task of the MNB in an efficient and targeted manner and its asset purchase programme for non-performing commercial real estate portfolios significantly accelerates the clean-up of banks' balance sheets. The goal is to ensure that the operation of MARK Zrt. sets a successful precedent for eliminating reliance on the central bank, as it will shift to pursuing its operation on a market basis over the medium term, among other things, by refinancing the existing central bank bridge financing from the market.

10 Resolution and reorganisation activity

During the global financial crisis which started in 2007–2008, a number of countries faced indebtedness after spending substantial amounts of public funds on bailing out distressed financial institutions. To avoid similar situations in the future, deliberations commenced regarding the establishment of a resolution framework in which instead of taxpayers' funds, participants of the financial sector – in particular, the shareholders and creditors of the troubled institutions –would bear the losses of the financial institution or the burdens required for its recovery.

To that end, in June 2014 the European Union adopted Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms, known as the Bank Recovery and Resolution Directive (hereinafter: BRRD). In Hungary, the formulation of a national resolution framework was in progress in parallel with the European Union legislative processes. Consequently, the MNB was designated as the national resolution authority as early as October 2013, which means that the MNB was empowered with resolution powers in addition to its micro and macroprudential competence.

10.1 SUCCESSFUL ESTABLISHMENT OF RESOLUTION DUTIES IN HUNGARY

Only a few weeks after the publication of the BRRD, as one of the first Member States of the European Union, Hungary's General Assembly adopted Act XXXVII of 2014 on the further development of the system of institutions strengthening the security of the individual players in the financial intermediary system (hereinafter: Resolution Act) transposing the BRRD into Hungarian law. As the resolution authority, the MNB was actively engaged in the preparatory work related to the legislation. Certain parts of the Resolution Act, such as the provisions pertaining to the Resolution Fund, came into effect as early as 21 July 2014, while the rest of the legislation – including the entire set of resolution tools – entered into force after a 60-day preparatory period on 16 September 2014. In consideration of the Hungarian and international experiences gained since then, the resolution area of the MNB assisted the legislature with numerous comments aimed at the improvement of the Government Decrees adopted so far (detailed rules on the reorganisation plan, detailed rules on the selection of independent valuers) under the authorisation of the periodical legislative amendments and the Resolution Act.

Under the powers provided for by the Resolution Act, besides the Government, the Governor of the MNB is entitled to issue decrees on certain topics. In this context, MNB Decree No. 59/2014 (XII.19.) was adopted on the quantification of the breaching of the requirements to be examined to assess insolvency and expected insolvency as a condition for resolution; moreover, the preparation of a number of additional Decrees of the Governor of the MNB is currently in progress.

In addition to providing support to Hungarian legislative development, the MNB regularly participated in the European Banking Authority's (EBA) committees and working groups engaged in legislative development in the area of resolution. In this context, the MNB provided textual proposals for the drafted legal acts of the European Union or commented on such drafts. The MNB is proud to state that its representative in the EBA's crisis management working group was the first among European Union Member States to give an account of the transposition of the European Union's resolution framework into national law and of the fact that Hungary was the first in the European Union to launch, in accordance with the BRRD, the resolution college affecting the banking group subject to the MNB's competence.

Regarding the regulatory documents of EBA, the MNB is responsible for the national transposition of recommendations and guidelines. In consideration of implementation deadlines, the EBA guideline on measures to reduce or remove impediments to resolvability was adopted in a form of a Deputy Governor instruction; furthermore on 1 January 2016 the Resolution Handbook entered into force as an internal instruction. The Handbook provides a comprehensive overview of all of the requirements that may arise in relation to the resolution duty of the MNB, including procedures, methodological requirements arising from international expectations and guidelines required for the performance of resolution operative tasks.

In addition to the milestones described above, the resolution area of the MNB is committed to participate actively in Hungarian and international legislative development.

10.2 RESOLUTION OF MKB BANK

Pursuant to the Resolution Act, in December 2014 the MNB placed MKB Bank Zrt. (hereinafter: MKB) under resolution. Although the capital and liquidity position of the MKB was adequate, the Group generated significant losses. Therefore and in order to ensure future compliance with prudential requirements, through the appointed resolution administrators and in cooperation with the management of MKB, the MNB began the reorganisation of the bank with immediate effect in order to accelerate the restructuring required to restore profitability. **With the resolution of MKB, the objective of the MNB is to maintain the stability of the financial intermediary system, to protect customers** and to ensure that the Bank contributes to the restoration of the lending capacity of the Hungarian financial intermediary system as a whole and to the preservation of the growth turnaround. After initiating the resolution procedure, the MNB developed its resolution action plan for MKB and began its implementation upon approval: it carried out a large-scale institutional restructuring, took significant cost-cutting measures at the MKB Group, identified and separated non-profitable portfolio elements and commenced the sale of the restructured Bank.

As the resolution procedure and the reorganisation progressed according to plan, in July 2015 the MNB recalled the resolution administrators appointed upon the commencement of the resolution for managing MKB Bank. At the same time, the new board of directors of MKB was authorised to resume exercising its powers with the provision that the MNB continues to exercise its ownership rights through the Financial Stability Board. During their 7-month mandate, the resolution administrators passed 802 decisions, which – apart from regular business decisions – were aimed at facilitating and implementing the resolution and reorganisation steps.

Resolution steps:

In 2015, the MNB separated the business segments which were not closely related to the core activity of MKB Bank: it sold the credit institution's stake in its insurance companies, reorganised the group engaged in vehicle financing and retained the vehicle financing business segment. As a result of this **reorganisation**, operating expenses declined significantly; among other things, personnel was reduced, including management, and certain branches were closed down.

In addition to restructuring, as part of a two-step process, work commenced on separating toxic portfolio elements. In the first step, a professional external consultant was retained to assist the sale of the bad asset portfolio – which comprised commercial real estate financing transactions – under market conditions. As a result, **for the first time in Hungary and in accordance with the Resolution Act, a resolution instrument (sale of business) was deployed**: comprising numerous syndicated, non-resident and Hungarian real estate financing transactions, the asset portfolio of MKB Bank was sold in the framework of the resolution procedure.

In the second step, the remaining commercial real estate portfolio was separated from the credit institution **(asset separation)**. To ensure compliance of the resolution procedure with European Union rules, the MNB carried out intensive consultations with the competent Directorates General of the European Commission, and as a result, by its decision published on 16 December 2015, the European Commission approved the divestiture of the commercial real estate portfolio in the framework of the asset separation tool. In line with the decision of the European Commission, MSZVK Magyar Szanálási Vagyonkezelő Zrt. (hereinafter: MSZVK) – a resolution asset management vehicle – purchased the divestible assets of MKB at real economic value (which is higher than the current market value), as defined by an independent valuer. The funds required for the acquisition of the assets were provided to MSZVK – at market rate and under the state's statutory guarantee callable on first demand – by a consortium composed of domestic commercial banks. The MNB provided professional assistance to the Resolution Fund for the establishment of MSZVK, the finances and also for the execution of the complex process of the transfer of claims and assets.

The European Commission thoroughly examined and approved the list and the evaluation of the assets to be transferred from MKB to MSZVK, the aid to be provided by MSZVK and the method of compensation for the aid. Moreover, the European Commission evaluated and approved the restructuring steps taken so far in an effort to restore operations, as well as the medium-term business plan ensuring the viability of the cleaned-up bank.

Accordingly, as an important step in MKB's resolution process, at the end of 2015 the commercial real estate loans which had generated substantial losses in recent years were removed from the Bank's balance sheet. After the Bank's **bad portfolio had been cleaned up** and the Bank had achieved efficient operations as a result of the restructuring, the **sale process of MKB** commenced. As part of the reorganisation procedure, the sale of MKB is a transparent procedure supervised by the European Union, which the MNB is to conduct in accordance with regular market standards. To that end, and in accordance with the relevant regulations, potential institutional and private individual investors can participate in the tender procedure by invitation. After a series of investor meetings, non-binding bids for the purchase were received in December 2015, and preparations started for the due diligence of the bank by investors. The sale will be organised and implemented with the participation of international consultants.

Once the necessary resolution steps have been taken and the resolution objectives have been achieved, MKB Bank Zrt. can continue its activity as a stable, competitive and profitable bank.

III. FOSTERING THE EFFICIENT FUNCTIONING OF HUNGARIAN FINANCIAL MARKETS

11 Financial infrastructure and the enhancement of the forint banknote

One of the main responsibilities of the MNB is to promote the smooth execution of payments and to facilitate the reliable, efficient functioning of the payment and settlement systems. The smooth execution of payments and adequate operation of clearing and settlement systems are crucial for the execution of real economic and financial transactions. The purpose of this section is to present a comprehensive view of the tools mobilised by the MNB in the past three years to fulfil its main responsibilities in relation to payments.

11.1 FINANCIAL INFRASTRUCTURES IN STATE OWNERSHIP GUARANTEE MORE EFFICIENT ACTION IN THE SERVICE OF PUBLIC GOOD

In the area of payments, the main goal of the MNB is to leverage its ownership in market infrastructures in order to enforce public interests, to make payment transactions cheaper (reduction of GIRO fees), quicker (increased frequency of intraday clearing cycles), more predictable (CLS eligibility), and to promote the expanded use of electronic payment methods (regulation of interchange fees). Accordingly, electronic payment alternatives should be provided in most payment situations and their use should be actively encouraged. At the same time, owing to the networked nature of the payments market, implementing developments and encouraging electronic payment methods are extremely difficult tasks, as it is not enough to have only one market participant that implements developments. In order to make changes that are perceivable by a wide range of consumers, all participants need to introduce them simultaneously. This also means that sometimes changes are postponed, even though they would be important for the public good as well as for the payments market as a whole, because some market participants have no vested interest in the given development in the short run. (Kajdi – Varga, 2015) Such cases may warrant central bank intervention, where the central bank may take action either as the owner of infrastructures or as a regulatory authority.

In 2014, GIRO Zrt. – the entity responsible for the clearing of interbank payment transactions – was acquired by the MNB. The acquisition of GIRO Zrt. enables the MNB to represent, more efficiently than before, the public policy aspects that had been previously neglected due to GIRO's commercial bank ownership structure and profit-oriented operation. On the one hand, in the previous commercial bank ownership structure, the clearing house was characterised by a significantly higher profit expectation. On the other hand, there were also considerable differences between market participants because of the substantial amounts of dividends paid: with the higher fees charged by the company, larger shareholders fared far better than high-turnover smaller shareholders and the Hungarian State Treasury. Due to the various economic interests at play, it is extremely difficult to carry out developments at each member of the system without external intervention. However, now that the MNB acts as an owner with respect to key financial infrastructures, it has an opportunity to implement comprehensive public policy concepts. It should be also noted that there are numerous international examples for central bank ownership in monopolistic market infrastructures providing basic services.

Since the vast majority of HUF-denominated domestic interbank credit transfers and direct debits are executed through the clearing house and the number of (generally large value, time-critical) transactions submitted directly to the real-time gross settlement system (Hungarian RTGS) is significantly lower, the MNB has become an unavoidable actor in the implementation of payment system developments; consequently, it can enforce public interest far more efficiently than a profit-oriented commercial bank structure. Two elements of this new direction are already in place: firstly, the clearing fees of credit transfers have fallen markedly (by almost 27 per cent since 2014), allowing banks to reduce the fees charged to customers. Secondly, with the increase in the frequency of intraday clearing cycles, beneficiaries can access the funds transferred to their accounts significantly faster.

The central bank also exercised its role as owner, when it signed a Share Purchase Agreement on 20 November 2015 with Austrian CEESEG AG and Oesterreichische Kontrollbank AG which had a 68.8 per cent ownership share in the Budapest Stock Exchange (BSE). As a result of the transaction, the central bank increased its stake in the BSE to 75.75 per cent. The MNB's acquisition of a qualifying holding in the BSE opens up the opportunity of introducing measures that directly support developments in the Hungarian capital market and strengthening the BSE's role in expanding the financing options of Hungarian enterprises. Moreover, with the acquisition of the BSE, all important financial infrastructures of Hungary were brought under the control of the central bank; consequently, they can be clearly put into the service of public interests. **In addition, the acquisition of the stock exchange indirectly raised the total stake of the MNB in KELER Zrt. and KELER CCP Zrt. to 88.7 per cent, which means that the MNB now has a qualifying holding – directly or indirectly – in all Hungarian financial infrastructures, which affords it greater powers to enforce its interests.**

11.2 CENTRAL BANK INVOLVEMENT RESULTED IN CHEAPER CREDIT TRANSFERS

Owing to the transformation of the financial services market in recent years, revenues from payment services are expected to have an increasingly large share in financial institutions' revenues. It is therefore increasingly important for the MNB to monitor the pricing practices of financial service providers and their impact on consumer habits. It is one of the MNB's key priorities in this regard to ensure that the lowest possible fees are charged for electronic payment solutions in order to offer a cheap, widely available alternative to cash transactions.

By acquiring Giro Zrt, the clearing house of interbank transactions, the MNB has an opportunity to directly influence one of the components of the transaction fees charged to customers: the clearing house fees paid by commercial banks for the clearing of credit transfers. While the previous commercial bank owners had an interest in defining these fees relatively high as it increased their dividends, the goal of the MNB is to ensure the lowest possible clearing house fees that can be achieved without jeopardising the safety of payments, smooth clearing operations and the implementation of ongoing developments benefiting consumers.

Accordingly, on 1 January 2015 the fee charged for the clearing services provided by GIRO Zrt. was reduced by 3 forints (20%). This was followed by another fee reduction on 1 January 2016 and as a result, members of

the Interbank Clearing System pay 11 forints for cleared credit transfers, bringing up the level of total fee reduction after the central bank acquisition to 27 per cent. In examining the effect of the first fee reduction by comparing the fourth quarter of 2014 and the first quarter of 2015, the MNB found that 2.2 million accounts – more than one half of the 4.3 million bank accounts in the sample – showed a decline in the fee for domestic credit transfers, and there were typically no fee increases in the rest of the cases.

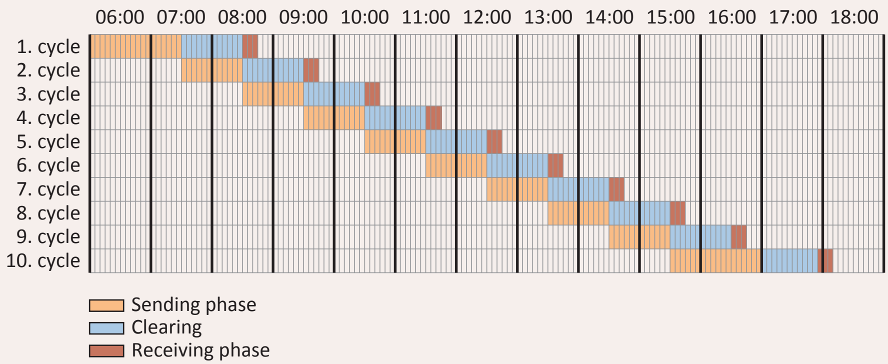
11.3 EFFICIENT RESPONSE TO THE CHALLENGES OF AN ACCELERATING WORLD – INCREASED CYCLE FREQUENCY FOR INTRADAY CLEARING

The intraday clearing of the Interbank Clearing System was launched on 2 July 2012 with five clearing cycles. The legislative requirement regarding the four-hour window available for the execution of domestic forint credit transfers entered into force at the same time. The MNB's analyses (Császár, 2015) found that transfer orders reached the beneficiary client within 2 hours and 5 minutes on average in the case of five daily cycles. Within this time period, the transaction typically spent more than 1 hour waiting for the clearing cycles, during which time the order was pending, with no action taking place. Therefore, it was justified to shorten this time period so that beneficiaries can access their funds sooner.

Accordingly, as adopted in the autumn of 2014, the strategy of GIRO Zrt. also defined the acceleration of payments as an objective. **Consequently, at the initiative of the MNB the number of intraday clearing cycles was raised to ten starting from 7 September 2015, and except for the last clearing cycle, they are executed hourly. This development increased the number of payments that can be executed within the day out of the credits received, which may improve the efficiency of the financial and liquidity management of the business sector, while it also reduces waiting time in the case of transactions where delivery may only take place following payment.**

This development reduced the waiting time during processing, allowing beneficiaries to access their funds sooner, without causing any significant changes in banks' business operations. Thanks to the long-term plans, payment service providers had ample time available to prepare, which kept the resource requirements of the development relatively low. Since the

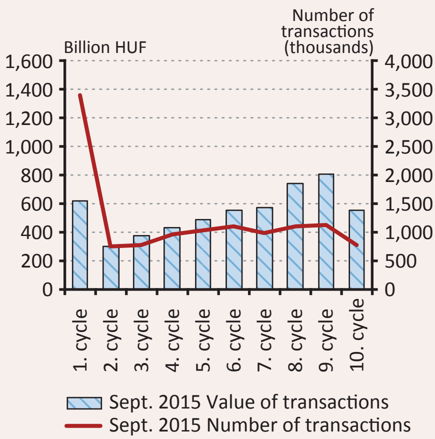
Chart 11.1
Schedule of the ten intraday clearing cycles in the ICS from September 2015

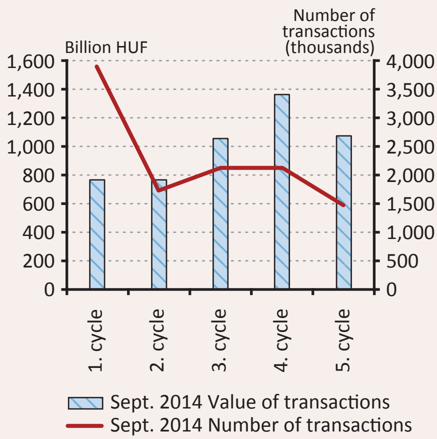


Source: GIRO Zrt.

statutory four-hour execution time also remained unchanged, in the case of any problem, service providers have an opportunity to roll transactions over to the next clearing cycle without the violation of legal provisions. At the same time, thanks to the development, actual average execution time has been reduced, and with adequate operations, the amounts transferred could reach beneficiaries in as little as one hour on average. (Bartha – Kajdi, 2015)

Chart 11.2
Number and value of transactions processed in intraday clearing by cycle
(September 2015 compared to September 2014)





Source: MNB

The increased cycle frequency entailed the extension of the operating hours of the ICS and accordingly, from September 2015 credit transfers are cleared by the system first at 7:30 a.m. and last at 5:00 p.m. The earlier start of the first cycle allows credit transfers initiated after the end of the previous business day to reach beneficiaries earlier the next day. The shifting of the last cycle to a later hour primarily benefits businesses, allowing them to submit credit transfers to be executed on the same day at a later hour. In parallel with the extension of ICS operating hours and in accordance with the MNB's expectations, payment service providers also apply later cut-off times until which customers may submit payment orders for execution on the same day.

11.4 HUNGARY AS A PIONEER IN THE EUROPEAN REGULATION OF THE LEVEL OF INTERCHANGE FEES

In the autumn of 2013, at the initiative of the MNB and with the support of the Hungarian Competition Authority, the Ministry for National Economy amended the sections dedicated to interchange fees in the Act on Payment Services.[27] According to the regulation, interchange fees charged on domestic card payments may not exceed 0.2 per cent of the overall purchase amount for debit cards and 0.3 per cent for credit cards. The measure was based on previous analyses and regulatory proposals produced under the direction of the MNB. In initiating the regulation, the MNB's most important goal was to reduce the costs of merchants accepting card payments through the reduction of interchange fees, thus providing an opportunity to expand the acquirer infrastructure through the decline in merchant fees. This topic is particularly important from the perspective of the short-term improvement of the efficiency of domestic payments as, according to the MNB's surveys (Ilyés – Varga, 2015), payment cards are currently the most important and most widely used alternative to cash payments in retail sales, while in terms of POS terminal coverage Hungary lags far behind the European average.

The next step in the regulation of interchange fees was the European regulation[28] entering into force in 2016, which brought about several important changes. On the one hand, it introduced the mandatory limit of interchange fees, a constraint already adopted in Hungary. On the other hand,

[27] Act LXXXV of 2009 on Providing Payment Services

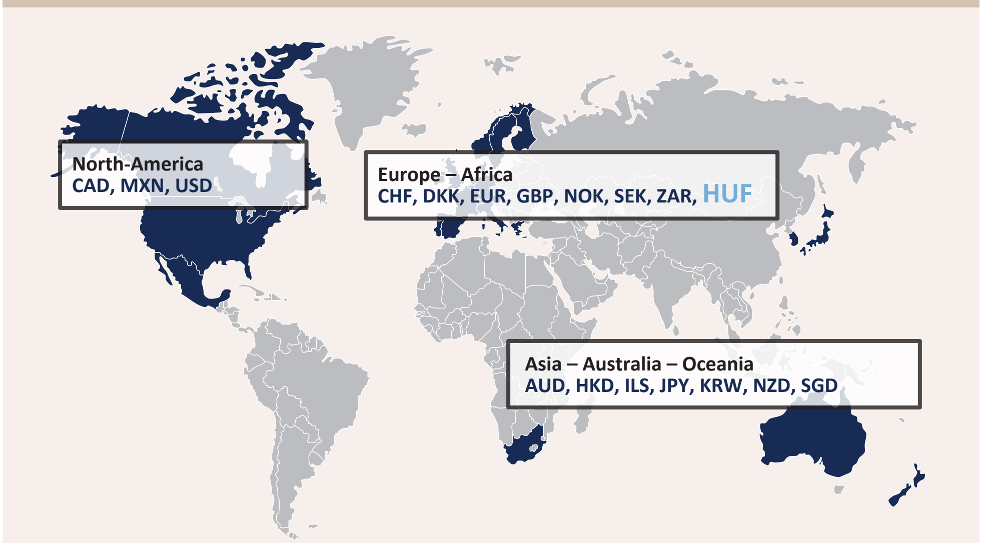
[28] Regulation (EU) 2015/751 of the European Parliament and of the Council of 29 April 2015 on interchange fees for card-based payment transactions

numerous new obligations were introduced with respect to the business rules of the card business. Under the regulation, neither Member States nor card companies can impose regional restrictions regarding the payment service providers participating either in card acceptance or card issuance. In addition, payment card schemes and processing entities must be independent of each other, and processing services must be made technically interoperable. It is a favourable change for merchants that payment service providers are required to offer merchant service charges individually specified for different card brands and card categories, and provide an itemised statement on the transactions executed and the amounts charged.

11.5 HUNGARIAN FORINT WAS FIRST IN THE REGION TO JOIN THE ELITE CLUB OF CURRENCIES

In early 2014, the MNB and CLS launched a joint project to make the forint a settlement currency for users of the Continuous Linked Settlement service provided by CLS. **With the entry of the forint on 16 November 2015, credit institutions can now offer multilateral net settlement for interbank foreign exchange transactions in 18 currencies; in other words, bringing the Hungarian currency on board provided an opportunity to**

Chart 11.3
Currencies settled in the CLS system



Source: CLS

execute transactions between the forint and other CLS currencies without foreign exchange settlement risk. During the preparations for accession, the amendment to the Act on Settlement Finality established the legal environment expected by CLS; in addition, the MNB's account management policy and business terms were modified and the opening of VIBER shifted from 8 a.m. to 7 a.m. in August 2015.

Thanks to the successful preparations, the Hungarian forint was the first currency in the region to join the CLS system and to become a settlement currency in the system. As part of day-to-day operations since accession, as a first step, CLS members pay to the central bank of the given currency – in the case of the forint, to the MNB – the foreign currency amount required for the settlement of the transactions of the given day. The CLS system then calculates multilateral net positions; thus the actual payment obligation of members will be smaller than would be if they had to cover each individual transaction in gross terms. Individual trades are settled between 7 a.m. and 9 a.m. CET, which might imply a change in the liquidity management of banks migrating to CLS, given that forint payments linked to foreign currency transactions are concentrated at the beginning of the day. (Balla – Pintér, 2015)

CLS provides its services in several countries under various jurisdictions; therefore, international cooperation is indispensable in the oversight of the system. Participants of the so-called cooperative oversight are the central banks of CLS currencies and accordingly, the MNB became a member of the international Oversight Committee of CLS in November 2015.

11.6 NEW ERA IN PAYMENT INSPECTIONS

After the supervisory integration in October 2013, the inspection of Hungarian payment regulations[29] was taken over by the MNB and with that, an integrated payment inspection system emerged encompassing the entire payment chain. Due to the changes, it is now far more simple and efficient to ensure the safe, stable, customer protection-oriented operation of payment services and to strengthen confidence in the financial sector. Since the market of payment services is characterised by significant information asymmetry which hinders the enforcement of consumer interests, it is important to concentrate the control of the entire payment chain in a single hand. Emerging

[29] Act LXXXV of 2009 on Providing Payment Services and Decree No. 18/2009 (VIII. 6.) MNB of the Governor of the Central Bank of Hungary on Execution of Payment Transactions

through the interaction of various participants (payer, payee, clearing house, settlement banks on occasion, etc.), the payment chain can be extremely complex. As a result, understanding the rules applicable to each participant – and hence, legal enforcement – is extremely difficult for consumers; therefore, centralising payment inspections is an important step forward in this rapidly progressing area. After the supervisory integration, a new regulatory task was added to payment inspection, which involves the basic safety rules of online purchases. Recognising the security risks behind online purchases and their cross-border nature, on 19 December 2014 the European Banking Authority issued its Guidelines on the Security of Internet Payments, which the MNB integrated into Hungarian payment regulations after consultations with domestic stakeholders and market participants.[30] It expects the financial organisations concerned to comply with the relevant provisions from 15 November 2015. The new regulation strengthens the protection of customers against fraud and protects the safety of sensitive payment data, which on the whole creates an even more secure online environment for bank customers, banks and online merchants. In the MNB's opinion, compliance with the rules on the security of electronic payments is particularly important in view of the fact that recent years have seen a boom in electronic (bankcard or internet bank) payments both in Europe and in Hungary.

11.7 RENEWAL OF THE FORINT BANKNOTE SERIES – DEVELOPMENT AND TRADITION

Issuance of the forint banknote series currently in circulation began in 1997 with the 10,000 forint banknote and was completed in 2001 when the 20,000 forint banknotes were put into circulation. Thus, certain denominations of the series were issued more than 20 years ago including the period of their design. The then contemporary banknotes, also in consideration of the enhancements carried out in the interim, are becoming obsolete from a technical point of view or reflect adherence to user requirements of a past era.

In the period that has elapsed since the issue of these banknotes, the cash payment environment in which banknotes are required to fulfil their role has been subject to extremely profound and rapid technological changes, mainly as a result of new computer technology solutions. Since cash handling and the

[30] Guidelines on financial services provided on the internet

previously manual task of checking the authenticity and fitness of banknotes have been largely taken over by machines, it is extremely important – not only for the population but also for the automated environment in which banknotes are handled – to ensure the possibility of clear identification.

Meanwhile, even the counterfeiting of notes has changed in terms of methods, and although the volume of counterfeited notes has been fairly unsubstantial in recent years by international standards, the surge in the development and quality of counterfeiting devices should draw the issuer's attention to the importance of prevention. **It was also with this issuer responsibility in mind that the Magyar Nemzeti Bank decided to enhance and renew the banknote series in circulation. This process is expected to be completed in 2018 by which time each denomination will be renewed, the motto of the process is: "Development and tradition".**

Hungarian banknotes traditionally have a sophisticated graphic design. Encased in a frame, the portraits depicted on the front side and the pictures found on the reverse side of individual denominations could stand alone as independent pieces of art. **While adhering to the requirements of our times, each renewed forint banknote is a worthy continuation of this tradition; the system of visible and invisible technical safety solutions is seamlessly aligned with the environment of the familiar, expertly designed graphic motives.**

Replacing the old banknotes issued from 1997, the re-designed notes contain – in consideration of the above requirements – state-of-the-art technical solutions that support easy identification by the public, as well as cashiers working in the retail or banking sectors, cash processing machines or ATM operators. **Indeed, the difference between the old and the new banknotes is not only noticeable in terms of the dimensions visible to the general public; it can be also verified by equipment or by the sensors of different devices even with respect to the contemporary elements that are designed to serve the security of cash handling and to thwart forgery.**

The first denomination to be renewed during the replacement process was the 10,000 forint banknote. The MNB commenced the preparation of cash circulation professionals for the gradual distribution in December 2014. As a result of careful preparations, the majority (more than 75 per cent) of the 10,000 forint banknotes currently in circulation are the new notes.

Put into circulation in December 2015, the second renewed denomination was the 20,000 forint banknote. The release of the note, once again, was preceded by a period of careful user preparation supported technologically by the central bank. The initial experiences of the issue are positive; the improved 20,000 notes are expected to gain prominence in 2016.

During the renewal process that lasts until 2018, the central bank will strive to take full advantage of the enhanced features protecting against counterfeiting and promoting automated handling; to that end, after a brief parallel presence, the old versions of individual denominations will be withdrawn by the MNB. In order to ensure that all users have sufficient time to replace the old versions in their possession with the new ones, the old banknotes will be exchanged free of charge by credit institutions and by the Post Office for a period of 3 years, and by the MNB for a period of 20 years from the date of their withdrawal. **As a result of the developments, by the end of the replacement period all participants of the cash cycle will have access to an optimal circulation environment where each denomination will only have a single version in circulation, one that efficiently protects against forgery and is easy to handle by machines and ATMS.**

Chart 11.4
Renewed 10,000 and 20,000 forint banknotes

12 By acquiring majority ownership in the BSE, the MNB targets strategic development of the Hungarian capital market

The borrowing activity of the corporate sector as a whole is still subdued, despite the fact that the MNB's instruments (e.g. the FGS) managed to induce a positive turnaround in the SME sector. For the time being, capital market financing is not able to replace the loss of credit-based financing. **The downturn on the Hungarian stock market was continuous between 2008 and 2015. The significance of the stock exchange decreased, and the number of IPOs and stock market turnover also declined.** In the context of subdued lending and capital market financing, the efficiency of monetary policy transmission decreased.

At its 29 September 2015 meeting, **the Board of Directors of the Magyar Nemzeti Bank decided to increase the influence of the MNB in Budapest Stock Exchange Ltd., in order to support the economic policy of the Government and in the interest of strategic responsibility taking**. On 20 November 2015, the MNB signed a Sale and Purchase Agreement with Austrian CEESEG AG and Oesterreichische Kontrollbank AG which held a 68.8 per cent ownership share in the Budapest Stock Exchange (BSE) at the time, thus increasing the MNB's existing 6.95 per cent stake to 75.75 per cent in the BSE. After obtaining the authorisation of the Hungarian Competition Authority (GVH), the MNB acquired a qualifying majority holding in the BSE.

The purchase price of the BSE was determined by the evaluation of an independent, internationally acclaimed consulting firm. In addition to future profitability, the purchase price of the stock exchange also reflects the BSE's nearly 47 per cent stake in the KELER Group. The purchase price was HUF

3,550 per share, meaning that the central bank paid HUF 13.2 billion for the entire package.

In the long run, the MNB will strive to ensure that the largest issuers and dealers on the Budapest Stock Exchange show an interest in developing the capital market, and it intends to define its future ownership structure with that in mind. **The MNB wishes to establish a long-term cooperation with the largest issuers and domestic security dealers still holding a stake in BSE Ltd.**

With the acquisition of the majority interest, the MNB's objective is to develop the Hungarian capital market, broaden the investor basis and improve the transmission mechanism by making demand, supply and liquidity conditions more attractive. As the majority shareholder, MNB is set to introduce numerous strategic innovations fostering the development of the capital market, while providing adequate incentives to Hungarian stock exchange issuers and investors. The development of the BSE may contribute to expanding the financing options of the entire Hungarian corporate sector and to widening the saving options of the Hungarian households, while at the same time supporting financial stability and economic growth. The MNB wishes to cooperate with existing influential co-owners in developing and implementing the new market development strategy.

Regarding the development of the stock exchange, three important objectives can be defined. Firstly, it is aimed at increasing market capitalisation. Secondly, it is intended to increase the number of IPOs, and thirdly, to increase turnover.

The more active listing of Hungarian firms can be supported from several aspects. On the one hand, it can be facilitated by the creation of a regulatory environment that imposes significantly lower costs on IPOs and on listed status itself. On the other hand, stock exchange entry itself can be eased by developing instruments that support the listing process. **The supply side may be stimulated by the admission of the shares of selected state-owned companies for listing, by the creation of a special SME platform and by incentives to privately-owned large corporations ready for listing. A large step forward could be the establishment of a consulting team** which would be responsible for identifying, ranking and contacting companies ready for listing, and providing **complimentary business and legal consulting services** to the companies concerned **for the initial public offering**.

On the investor side, demand can be increased by strengthening the groups of institutional investors, households and dealers. The demand side may be encouraged by discounts offered to investors and by increasing market liquidity (e.g. development of the analyst coverage and the market maker system).

IV. ACTIVITIES FOR THE PUBLIC GOOD AND OTHER CORE CENTRAL BANK ACTIVITIES

13 Active corporate social responsibility for the public good

The Fundamental Law and the MNB Act guarantee the central bank's organisational, operational and financial independence. At the same time, the independence, significance and social recognition of the MNB and the public assets under its management entail social responsibility. Published in May 2014, the **MNB's Statute** laid down the principles of the MNB's corporate social responsibility, and the **Corporate Social Responsibility Strategy** issued in June determined the central bank's key objectives and presented the details of the programme for their implementation. The focal point of the programme is professional activity which, aligned with the MNB's fundamental tasks, serves broader social interests, reflects credibility and professionalism, creates value, strengthens social cohesion, facilitates scientific thinking and develops financial literacy. The corporate social responsibility strategy of the central bank was developed with the practice of major foreign central banks in mind.

In the implementation of the Pallas Athena Public Thinking Programme announced in line with the mission, vision and fundamental values set forth in its Statute, the MNB considers the enhancement of financial literacy, financial awareness, the underlying economic and social thinking, as well as the related institutional system and infrastructure to be its mission and strategic task. The central bank has set up six foundations to realise these goals.

The primary objective of the **Pallas Athena Domus Animae Foundation** (PADA) is to promote social science-oriented thinking and interdisciplinary studies, to provide professional and financial support to the activity of higher education institutions and to strengthen Hungary's international cooperation in education and research. In order to meet its objectives, the Foundation has announced numerous grants and engaged in professional cooperation; it has sponsored the publication of books, journals and studies, as well as the implementation of curriculum development projects, study trips and research programmes. The Foundation supports the talent management programme of Mathias Corvinus Collegium, helps Hungarian scholarship students of the University of Cambridge and contributes to the financing of the Hungarian linguistic and cultural training programme commenced at Sao Paulo University. In cooperation with the College of Szolnok, PADA announced a scholarship programme aimed at the convergence of settlements in the Tiszaroff micro-region and to support the higher education studies of students from these settlements. Setting up an English-language Professional Doctorate Programme (a one-of-a kind project in Hungary) in the building of the old Buda City Hall is also among the plans of the Foundation. In another of its building (Villa Budapest) PADA runs an academic life workshop.

The primary objective of the **Pallas Athena Domus Scientiae Foundation** (PADS) is to support the training and development of economic and finance professionals. This goal is served primarily by the operation of a science and education centre, which ensures the widespread dissemination of financial knowledge while maintaining high professional standards and elevates the training and development of banking professionals to an international level. In order to meet its objectives, the Foundation announced scholarship opportunities in the fields of macroeconomics, finance and methodology and established cooperation with Hungarian and foreign organisations. The Foundation launched its PhD support and scholarship programme and training in September 2014. With new groups started every academic year, the programme expects applications of students interested in macroeconomics and finance. In this programme, scholarship students receive financial support and attend courses for three years. Their educational and research activities are assisted by a personal consultant with expertise in their fields of research. The objective of the programme is to transfer knowledge to participants that is competitive both in Hungarian and international academic life. In its property located in Kálmán Imre utca Budapest, PADS has set up a Training Centre for the PhD scholarship programme.

The task of the **Pallas Athena Geopolitical Foundation** (PAGEO) is to facilitate the development of Hungarian public thinking, financial awareness, global literacy, and economic and geopolitical professional training. The most popular programme of the Foundation is its publication and research grant. Supported by the Foundation, numerous Hungarian and foreign books and studies were made available to the Hungarian public, including three books by the world-renowned geopolitical expert of Hungarian origin George Friedman. In addition to traditional geopolitical research, a number of research projects dedicated to urban development and cyberspace are also implemented with the support of PAGEO. The Foundation endorses numerous professional and scientific events. Professional work is assisted by a 10-person geopolitical and geoeconomics research institute, which publishes its research findings on a regular basis. The Foundation has established a Hungarian centre for geopolitics and geostrategy in the Buda Castle District and in Mátyás király út in District XII (Budapest).

In cooperation with the Pallas Athena Foundations (PADA, PADS, PAGEO), the Doctoral School of Earth Sciences of the University of Pécs launched the Pallas Athena Geopolitics Doctoral Programme in 2015.

The purpose of the **Pallas Athena Domus Concordiae Foundation** (PADOC) is to support and develop public and higher education, public thinking and social discourse beyond Hungary's borders, in particular, in the Carpathian Basin. In 2015, the Foundation concluded long-term cooperation agreements with Sapientia Hungarian University of Transylvania, Partium Christian University, the Selye János University in Slovakia, the Hungarian-language Faculty of Humanities and Natural Sciences of Uzhhorod National University and the Hungarian-language Teacher Training Faculty of the University of Novi Sad. In addition, it set up a partnership cooperation with the Ferenc Rákóczi II Transcarpathian Hungarian Institute and the Babeş-Bolyai University of Cluj-Napoca. In addition to cooperation with higher education institutions, in order to further its goals, the Foundation has developed an extensive partnership network in the Carpathian Basin. Thanks to its support, Master's programmes and doctoral schools in finance have been launched in cross-border partner institutions. New opportunities have opened up, including workshops and training in foreign languages, and preparatory programmes for university admission have been offered to secondary school students.

The main objectives of the **Pallas Athena Domus Mentis Foundation** (PADMA) are to facilitate the training of economists and finance professionals, and to promote research programmes in economics, finance and interdisciplinary studies across Bács-Kiskun County and primarily in Kecskemét. PADMA supports the elevation of the Kecskemét College to the rank of a university, allowing for the employment of recognised teachers and researchers, the implementation of curriculum development projects and participation at international and Hungarian conferences, fairs and exhibitions. Within the framework of the sponsorship programme, the Foundation participates in the development and implementation of the "adventure-based education, adventure university" concept. The Foundation's support facilitated the broad-based promotion of the new Faculty of Business Administration, which assists in the admission programme of the Kecskemét College. Moreover, targeting secondary school students, Hungarian and foreign teachers, researchers and PhD students, the PADMA Foundation has also launched a scholarship and grant programme to ensure participation in the work of the training and research centre established during the development.

The objective of the **Pallas Athena Domus Innovationis Foundation** (PADI) is to foster the competitiveness of small and medium-sized enterprises and strengthen high value-added employment. An important part of this is the expansion of entrepreneurial knowledge and the promotion of innovation and entrepreneurial knowledge creation. One key element of the Foundation's activity is the creation of an innovation space within the Carpathian Basin. In December 2015, more than ten recognised presenters attended the conference entitled *"Innovative Enterprises in the Carpathian Basin".* Topics of the presentations included *"Hungarian Foundation for Enterprise Promotion programme for promoting the entrepreneurship of cross-border youth"* and *"Assistance for the market entry of innovative enterprises in the Carpathian Basin".* The future basis of the Carpathian Basin innovation space and the Research and Knowledge Centre of the Foundation will be the buildings of the former chemical research institute of the Hungarian Academy of Sciences in District II and the office building in Döbrentei utca in District I (Budapest).

Founded by the Magyar Nemzeti Bank, the Student Loan Centre and the Hungarian Banking Association, the Money Compass Foundation for Financial Awareness was established for the purpose of implementing programmes enhancing financial literacy in cooperation with state institutions, NGOs and market participants. The mission of the Foundation is to assist individuals and families in making informed financial decisions and to raise the financial awareness of the population through attitude-shaping programmes. Through its public benefit activity, the Foundation has gained significant recognition and reputation.

Based on the five-year strategic plan adopted in December 2014, the long-term agenda of the Foundation was significantly renewed and expanded, with the central bank providing professional and financial support for its implementation. In the context of implementing its programme, the Foundation cooperates with several strategic partners (Ministry of Human Capacities, Education Office, Hungarian Banking Association, Student Loan Centre, the Budapest Stock Exchange, the Hungarian Competition Authority and the State Audit Office of Hungary).

Primarily aimed at primary school students, the BankVelem ("BankWithMe") financial awareness programme was launched in the 2014/2015 school year. Almost 6,000 students from more than 500 schools participated in the programme, learning practical financial information in a playful form. From September 2015, the programme is supplemented by the "Visiting School" programme, which is expected to reach about 100 schools through on-site classes by the middle of 2016.

As part of the "MoneyWeek" programme series implemented in March 2015 with the participation of 24 European countries, the goal of the "Pénz7" programme supported by the Foundation was to lay the foundations of the financial literacy of primary and secondary school students. 660 primary schools and secondary schools, 1,000 teachers and 90,000 students joined the thematic week.

In September 2015, the operating framework of the Money Compass School Network coordinated by the Foundation was restructured. The network targeting secondary school students is a multi-pillar – teacher training, contemporary curriculum and knowledge base – training model that provides up-to-date, practical, ready-to-use financial information and know-how to teachers and students alike. Any Hungarian secondary school can join the programme free of charge if it pledges to incorporate financial/economic training into its own curriculum as best fits its local characteristics. Starting from the 2015/2016 school year, the Foundation offers free of charge 30-hour accredited teacher training for 500 secondary school teachers in the subjects of finance and economy. Besides the training activity, the Foundation conducted two surveys in 2015 and renewed its website. Users can also download a free financial planning application from the MNB's website. Educational media presence is continuous (including Facebook).

By launching the **Depository Programme** in January 2014, the MNB joined the group of major central banks that contribute to the protection of cultural heritage through artwork purchases and collections. To coordinate the Depository Programme and to determine the authenticity, artistic significance and value of the art treasures, the MNB has established a Consultative Body consisting of the directors of Hungarian national public collections, other renowned experts and the Deputy Governor of the central bank.

Thanks to the Programme, the MNB has purchased such masterpieces as Tiziano Vecellio's Virgin Mary with Child and St. Paul; Lajos Gulácsy's The Mulatto and the Sculpturesque White Woman; János Vaszary's Christianity; Dezső Orbán's Great Nude; Gábor Bachman's collection of architecture and design; Mihály Munkácsy's Christ Before Pilate; a collection of silver tolar coins minted in 14-17th century Transylvania; the rendering of the Transylvanian Region of the Szentendre Open-Air Museum of Ethnography; István Kövesi's collection of paintings; documents related to the early works and oeuvre of László Moholy-Nagy; Júlia Klaniczay and György Galántai's Artpool document collection; and Abraham van Beijeren's Still-Life with Fruit, Sea Food, and Precious Tableware.

In addition to the above, within the constraints of available resources, the MNB participates, directly or through its foundations, via strategic agreements or ad hoc grants, in value creation, the preservation of national values, intellectual and cultural heritage (e.g. strategic partnerships with the Hungarian State Opera, the Palace of Arts, the Museum of Fine Arts), and supports the training of professionals and scientific activities (e.g. Corvinus University of Budapest, Hungarian Economic Association, Kodolányi János College). Through charitable donations, it has contributed to improving the quality of life and equal opportunities of disadvantaged groups and to alleviating the difficulties arising from extraordinary life situations (e.g. Three Princes Movement, Csodalámpa Wish Fulfilling Foundation, International Children's Safety Service). Within the framework of its corporate social responsibility programme and aligned with its designated strategic objectives, the central bank is open to enlarging the group of its cooperating partners.

14 Structured training activity in the service of the future

In the MNB's view, the central bank can support the realisation of economic policy objectives, among other things, by renewing and developing education – primarily higher education – and the system of economist and financial training and by supporting scientific activity and financial literacy. To that end, the MNB has developed a training strategy, the implementation of which is facilitated by the Pallas Athena public thinking programme. The Pallas Athena Foundations have the necessary financial and professional background to ensure – in cooperation with the MNB – the execution of various training and research activities, as well as those aimed at the enhancement of financial awareness, at the highest level.

At the international level, many central banks pursue or coordinate training activities. For instance, the British and the Swiss central banks operate high-quality training centres which, however, are not available for university students; they are mainly intended to provide a continuing education opportunity to central bank employees. The German central bank has even set up its own higher education institution, the Hochschule der Deutschen Bundesbank, which offers training programmes in economics. The German central bank can also serve as an example regarding the steps it has taken toward the introduction of a dual type training system.

In 2015, the MNB concluded cooperation agreements with 9 Hungarian higher education institutions. Below is a presentation of five priority education projects.

14.1 GEOPOLITICS, GEOECONOMY AND POLITICAL GEOGRAPHY FROM A CENTRAL EUROPEAN PERSPECTIVE DOCTORAL PROGRAMME

Under the cooperation agreement with the University of Pécs and with the participation of the Pallas Athena Foundations, a one-of-a-kind, completely novel geopolitics doctoral programme was launched in 2015. It justifies the existence and demonstrates the importance of the programme that geopolitical and geoeconomic considerations often play a significant role in economic and financial decisions. The programme can also be conducive to improving the long-term competitiveness of the financial sector of a country. The medium-term objective is to set up a geopolitics and geoeconomics doctoral school as a unique initiative in Central Europe.

The operation of the doctoral programme – which involves a remarkably high number of doctoral students – is supported financially and intellectually by the Pallas Athena Foundations (PAGEO, PADS, PADA), mainly financing the improvement of the education environment, student and teacher scholarships, research and the recruitment of recognised international professors.

The doctoral programme is built on the teachers of the University of Pécs, MNB experts and renowned international professors whose participation is made possible thanks to the professional network and the financial support of the MNB's foundations.

In this programme, various programme groups are available for students to select the lectures which best support the progress and implementation of their research. On the one hand, there is a wide variety of basic subjects (e.g. Mathematics, Statistical methods in geography, Introduction to automated mapping); on the other hand, students may also choose from a broad range of programme-level lectures on geopolitics (e.g. Modern theories of international relations, Geoeconomics as the enforcement of geopolitical objectives through the means of economics), which allow for the analysis of complex issues in geopolitics and geoeconomics.

A special tutoring system is in place to help students put into practice their theoretical knowledge. In the framework of the system, students can conduct research and develop under the guidance of the most experienced

Hungarian and international experts. The lectures of the programme feature presentations by such renowned, recognised Hungarian and foreign experts as György Matolcsy, György Szapáry, János Martonyi, Argentinian researcher Mercedes Botto, Dr. Valentin Inzko, the International Community's High Representative for Bosnia and Herzegovina, or Eyal Winter, Professor of Economics, Hebrew University of Jerusalem and University of Leicester.

14.2 COOPERATION WITH THE CORVINUS UNIVERSITY OF BUDAPEST

On 20 July 2015, the Magyar Nemzeti Bank signed a Cooperation Agreement with the Corvinus University of Budapest (BCE). Under the agreement the central bank provides support to high-quality economics training and research, which are indispensable for improving the economic and financial competitiveness of Hungary over the long term.

As part of the cooperation, an **MNB Department** was launched within the Institute of Economics and the Faculty of Economics. MNB experts with academic degrees and/or decades of professional experience also participate in the work of the Department. The Department developed the subject entitled **Economic Governance**, which was offered for the first time in February 2016 to undergraduates of the Economic Analysis Master's programme. As part of the Master's programme, a Central Bank Analyst Specialisation was developed, which will be incorporated into the curriculum – upon approval by the University Senate – from the autumn of 2016.

In 2015, the **Institute for Economic Geography, Geoeconomics and Sustainable Development** started its operations within the Faculty of Social Sciences of BCE. The Institute has two primary goals: to strengthen the role of training on the one hand, and to support research/professional presence within the Institute on the other hand. In keeping with these objectives, the MNB supported the resumption of the Regional and Environmental Economic Studies Master's programme. This initiative was successful as the Master's programme was relaunched, for the first time in two years, in February 2016 with 28 students. In 2015, a Geostrategy Centre was also established within the Institute.

The MNB has put in place a multi-faceted **scholarship programme** to support the economic analyst, insurance and financial mathematics, regional and environmental economics and mathematical economics analyst Master's courses, the basic training courses of applied economics and the state scholarship and fee-paying students of the Doctoral School of Economics. In the first half of the 2015/2016 academic year around 100 scholarships were granted, which translates into a total MNB grant amount of around HUF 40 million, provided directly to students.

In addition to the areas listed above, the MNB–BCE cooperation also covers the renewal of professional publications and journals, a conference support programme, the infrastructure developments required for new training programmes and the support of higher education in economics in the Carpathian Basin.

14.3 COOPERATION WITH THE KECSKEMÉT COLLEGE

Raising the quality of Hungarian education in economics and improving economic literacy are among the priority goals of the MNB. With a view to achieving these objectives, it supports the renewal of tertiary specialist training and the establishment of a modern research, development and training centre in economics in Kecskemét which also addresses real economic developments. The project is implemented by the Pallas Athena Domus Mentis Foundation (PADMA) in close cooperation with the Kecskemét city council and Kecskemét College. Objectives of the strategic agreement between the MNB and the College:

- Strengthening economics-oriented engineer vocational training.
- Strengthening the active role of the Magyar Nemzeti Bank's available monetary policy instruments for the support of the economic policy of the Hungarian Government.
- Ensuring the availability of trained employees for the national economy; increasing the prestige of industrial careers and professions.
- Facilitating the deeper integration of higher education into the economy and promoting the appearance of research and training centres in the global market.

The largest higher education investment of the city's history was launched in 2015 when the cornerstone of the new university campus was laid, and construction of a world class campus on the west side of Kecskemét began. The investment is expected to be completed by the autumn of 2017. After completion of the project, a new campus and a group of university buildings will be in place, including training and administrative buildings, libraries, dormitories, as well as a cultural centre. Around 1,500 students will have an opportunity to study in the high-quality, modern university campus.

A **dual course in mechanical engineering** was launched in September 2014, which also offers students an opportunity for specialising in economics. Dual students have commenced their internships at the MNB and its "subsidiaries". The hearing of dual applicants for the 2015/2016 school year took place in February 2015 at the Magyar Nemzeti Bank. The number of applicants tripled compared to the previous year, of which 11 dual students have been selected. The MNB was approved as a dual tertiary training site by the Dual Training Council.

The start-up documentation of the Business administration and management **bachelor's programme** was submitted in 2015, and the programme can start in September 2016. The MNB staff assisted in the preparatory work for the new training course by offering comments and recommendations. The MNB participates in the training as a dual higher education training site.

14.4 TISZAROFF PROJECT

In the framework of the Tiszaroff action plan, the "Tiszaroff Scholarship Tender" was announced and implemented in 2015. Its goal is to facilitate the convergence of the micro region and to alleviate its disadvantaged situation by supporting the higher education studies of students from Tiszaroff, Tiszabura, Tiszagyenda, Kőtelek, Tiszasüly and Tiszabő.

Announced in conjunction with the College of Szolnok and supported by the Pallas Athena Domus Animae Foundation, the evaluation of the Tiszaroff Scholarship Tender for the first semester of the 2015/2016 school year has been completed. Based on the evaluation of the applications received, 45 persons have obtained a scholarship. A new set of terms and conditions has been developed for the next semester, and the tiered scholarship system to be introduced from the spring semester of the 2015/2016 school year will also take into account the performance of students, thereby encouraging young people to learn.

15 Wide-ranging international activity

Since the current management of the MNB took office in March 2013, not only have the monetary policy and other policy frameworks changed substantially, the international activity of the MNB has also expanded significantly. Before 2013, the main emphasis was on cooperation with the institutions and Member States of the European Union; the new management of the MNB, however, initiated the extension of the MNB's international relations to numerous new areas.

15.1 RELATIONS WITH INTERNATIONAL INSTITUTIONS

Similarly to its previous activity, the MNB continues to devote special attention to its multilateral international professional relations and to the active participation in the professional fora of international economic institutions and financial organisations. This commitment is aptly demonstrated by the fact that the MNB has membership in nearly 250 international bodies (councils, committees, working groups, etc.), where the management and experts of the MNB effectively represent the interests of Hungary and the central bank.

Cooperation with the institutions of the European Union and the central banks of Member States continues to be an important element of the MNB's international relations, but due attention is paid to the relationship with global institutions as well. Following the integration of the duties of the former HFSA into the MNB's activity as of 1 October 2013, the central bank's international responsibilities have expanded to include a number of new elements, including cooperation with the European Supervisory Authorities and some global standard-setting bodies. With respect to relations with international institutions, the MNB achieved the following results in the past period.

- The MNB maintains a close relationship with the **European Central Bank** (ECB) and with the national central banks of the **European System of Central Banks** (ESCB). The Governor of the MNB is a member of the General Council of the ECB, the most important coordination forum of senior central bank officers of the EU that holds its meetings on a quarterly basis. The ESCB Committees play an important role in the work of the ECB's decision-making bodies. Their basic role is to prepare decisions and facilitate coordination as per the horizontal division of core central bank functions. The management and experts of the MNB actively participate in the work of these committees and their working groups, and effectively represent the position of the Hungarian central bank in various issues.

- The Governor of the MNB is a voting member of the General Board of the **European Systemic Risk Board** (ESRB) which also holds its meetings on a quarterly basis. Furthermore, representatives of the MNB participate in the work of the ESRB' Advisory Technical Committee and other working groups, facilitating the efficient macroprudential oversight of financial systems across the EU and Hungary. The MNB's responsibilities in this regard were further strengthened by the new MNB Act of September 2013 that assigned to the MNB the formulation of macroprudential policy as regards the stability of the whole financial intermediary system.

- In addition to ministries of finance, central banks are also active members of the **Economic and Financial Committee** (EFC), i.e. the committee responsible for preparing the meetings of the ECOFIN Council, a body composed of the finance ministers of Member States. Accordingly, in recent years the MNB has had several opportunities to take successful steps in important issues such as the country-specific economic policy recommendations which assess the annually submitted stability and convergence programmes.

- The MNB works in cooperation with the **Directorate General for Economic and Financial Affairs** (DG ECFIN) **of the European Commission**, the most important aspects of which include intensive preparatory consultations for the Commission's Economic Forecast published three times a year and for the Country Report issued in the spring.

- Hungary is represented in the Board of Governors of the **International Monetary Fund** (IMF) by the Governor of the MNB, while it participates in the Executive Board, the body responsible for day-to-day business of the IMF, through the Central and Eastern European constituency established in November 2012. The constituency was established with the active participation of the MNB, and as an outcome of the negotiations, Hungary is able to hold the positions of executive director or deputy executive director for more than half of the 2012-2020 period. As a result, the MNB has more opportunity to actively shape the activity of the IMF for a total of 6 years. Another important development was that the MNB accelerated the repayment of the EUR 8.7 billion loan drawn down during the crisis in 2008-2009 from the EUR 12.5 billion Stand-By Arrangement, and in August 2013 it prepaid the entire outstanding amount. As a result, Hungary was removed from the group of countries under close scrutiny and post-programme monitoring, and its relations with the IMF returned to the usual context of annual economic policy consultations. In 2016, the IMF's 2010 quota increase entered into force, which nearly doubled the quota to be paid by Hungary. The quota increase is typically paid from the central bank's own funds, partly in domestic currency and partly in reserve currency. Consistent with its stable international reserve position, the MNB fulfilled its quota increase during the first week following its entry into force. This act did not change the amount of the MNB's international reserves, only their structure, and Hungary's voting power remained basically the same, at 0.4 per cent. Furthermore, the MNB and the IMF cooperates closely in other professional areas as well, e.g. experts of the IMF provided technical assistance to the MNB as regards the establishment and operation of its asset management company on 14-16 January and on 2-4 June 2015.

- The MNB cooperates actively with the **European Bank for Reconstruction and Development** (EBRD) in the framework of the Vienna Initiative. As a result of the joint work, a document entitled „Analysis of Corporate Restructuring and Insolvency in Hungary" was published on 23 February 2015 that intends to provide a theoretical and methodological background for addressing non-performing loans. On this topic, an expert forum was organised in Budapest on 3 March 2015 where interested parties discussed specific and sustainable steps that help banks and authorities to solve the issue of non-performing loans.

- The most important forum of cooperation with central banks outside the EU is the **Bank for International Settlements** (BIS). Its bi-monthly meetings are regularly attended by the Governor of the MNB. In addition to inspiring and refined professional discussions about the latest issues and trends in the global economy, these meetings provide an excellent opportunity for bilateral and informal consultations with senior officials of central banks outside the EU.

- The MNB regularly participates in the work of the relevant committees of the **Organisation for Economic Co-operation and Development** (OECD), and contributes to the preparation of selected professional publications of the OECD. For instance, the bi-annually published economic survey, which contains a comprehensive analysis of Hungarian economic policy developments, is prepared with the active professional participation of the central bank, and the MNB also contributes to the economic reviews of other member countries (currently Slovenia and the Netherlands). The MNB is also engaged in the work of the OECD National Council which is responsible for coordinating Hungary's participation in the OECD. Currently, the main task of this body is to coordinate a series of events commemorating the 20th anniversary of Hungary's accession to the OECD, in the context of which several events of key significance for the MNB will be arranged in May and June 2016 in Budapest and Paris.

- Since the supervisory integration, the MNB has been an active member of the **European Supervisory Authorities** (ESAs), i.e. the **European Banking Authority** (EBA), the **European Securities and Markets Authority** (ESMA) and the **European Insurance and Occupational Pensions Authority** (EIOPA). The ESAs play an important role in the standard-setting process concerning the financial sector and in strengthening supervisory convergence: the EBA in relation to the banking sector, the ESMA in relation to capital and securities markets, and the EIOPA in relation to the insurance and pension sectors. The MNB participates in the work of the Board of Supervisors, the main decision-making body of all three authorities, and its experts are actively involved in the working groups of the ESAs and their Joint Committee. Working group membership enables the MNB to influence the shaping of the European supervisory practice, to ensure that certain Hungarian characteristics (e.g. specific risks related to FX-based loans) are properly addressed in the documents prepared by the ESAs, and to ensure that the knowledge gained from expert consultations is continuously integrated into Hungarian supervisory practice.

- It is important for the MNB to have a wide range of global supervisory relations, in addition to the intensive, European-level supervisory cooperation; therefore, as the legal successor of the HFSA, the MNB has been in close cooperation with numerous standard-setting global institutions since October 2013. These include the **International Association of Insurance Supervisors** (IAIS), the **International Organisation of Pension Supervisors** (IOPS) and the **International Organization of Securities Commissions** (IOSCO). The MNB is a member of several bodies of these organisations, including the Technical and Implementation Committees of the IAIS, the strategic decision-making body of the IOPS, as well as the European Regional Committee and one of the regulatory committees of the IOSCO.

15.2 INTERNATIONAL MEETINGS AT THE MNB

With a view to strengthening the international professional role and relations of the MNB, the central bank has proactively initiated the hosting of meetings of various international committees and working groups in Budapest. From the perspective of the professional work with other EU central banks, one key event in 2015 was the Budapest meeting of the Working Group on Forecasting of the Monetary Policy Committee in June. The tasks of the working group include the preparation of EU-wide macroeconomic forecasts, the thematic analysis of macroeconomic developments and the enhancement of the forecast methodology. The working group is composed of heads and senior experts of departments of EU central banks in charge of macroeconomic forecast. Another important professional event is the June 2016 meeting of the Monitoring Working Group of the Market Operations Committee in Budapest. The working group prepares monthly reports on the most important asset classes, as well as current market developments and processes. It is composed of heads and senior experts of the departments of EU central banks responsible for the operating of monetary policy instruments, management of the foreign exchange reserves and the preparation of financial analyses.

The organisation of these important professional events required intensive teamwork with both international partners and the relevant internal departments, and provided excellent opportunities to put topics on the meeting agendas that are of key significance for the MNB. In addition to professional work, these events provided great opportunities for networking with fellow central bankers, bilateral consultations and informal discussions as well.

15.3 STRENGTHENING BILATERAL RELATIONS WITH FOREIGN CENTRAL BANKS

In addition to maintaining intensive relations with the central banks of EU Member States, the MNB has always placed emphasis on cooperation with the central banks of emerging countries outside the European Union. One form of this is participating in bilateral technical assistance programmes, in the context of which the MNB regularly receives delegations from central banks outside the EU with the aim of presenting selected professional areas. Likewise, the MNB also sends experts to these countries in order to offer professional advice. The number of these programmes has increased in recent years: beneficiaries included the central banks of Ukraine, Russia, Kazakhstan, Azerbaijan, India, Algeria, Moldova and Serbia. The main advantage of these two-day study tours organised for 2-4 participants is that the MNB can transfer professional knowledge and experience, while also increasing the professional prestige of the MNB, contributing to the widening of the central bank's international relations, and strengthening cooperation with domestic partner institutions.

Another aspect of bilateral relations with partner central banks is the fact that since the spring of 2013 the MNB has been closely monitoring the economic developments and central bank activities of several countries which have achieved significant results either in the domestic market or in the international field, or those that can serve as an important example for Hungary from a monetary policy, financial stability or supervisory perspective. Based on this concept, the MNB has developed an international network system composed of nine European and nine non-European central banks. The MNB cooperates with these central banks in numerous areas both at the management and expert level. This has resulted in joint publications, study visits, and mutual participation in events hosted by the MNB and its counterparts.

15.4 OPENING OF REPRESENTATIVE OFFICES ABROAD

In order to further strengthen the MNB's bilateral relations, foreign presence and relationship network abroad, in 2014 the management of the MNB decided to open representative offices abroad. By opening these offices, the MNB would like to achieve dual purpose. On the one hand, the MNB wishes to return to its previous practice, as it had maintained offices in Beirut, Frankfurt, London, New York, Paris, Tokyo and Zurich from the 1970s; these offices, however, were closed shortly after the beginning of the political transition. On the other hand, following the example of several European central banks, including the central banks of France, Germany, Italy and Austria, it strives to bolster relations with leading global and regional financial institutions and to set up an international cooperation network.

Offices in selected economic and cultural centres of the world – corresponding to the changed international environment, at this time in **Beirut, Buenos Aires, Hamburg, New York, Paris and Rome** – integrate the MNB's analytical work into an international scientific environment and strengthen professional cooperation with partner institutions. In addition to expanding partnerships, the offices are intended to facilitate the understanding of economic, social, cultural and other processes of the given region and the target country, to prepare regular and ad hoc reports and information documents in this regard, and to represent the MNB at local events and fora.

The first office opened on 20 July 2015 in Hamburg, with the Paris office starting its operation two weeks later, on 3 August. The Rome office commenced its activity on 19 January 2016. Preparations for the opening of overseas offices are under way; their staff are currently performing research and analysis regarding the given region (excluding local, personal contacts) at the central bank.

15.5 COOPERATION WITH INTERNATIONAL RESEARCH CENTRES

Cooperation with international research centres and think-tanks is intended to expand the MNB's international relationship network and establish new channels for liaising with foreign partners. This is beneficial for the MNB for several reasons: its management and experts are invited to events organised by the research centres where, in addition to deepening their professional expertise, they have the opportunity to develop personal relationships with the most recognised international experts, furthermore, its analysts gain access to the information and intelligence accumulated by the think-tanks, thereby supporting the central bank's professional work.

Special attention is paid to the cooperation with the **Official Monetary and Financial Institutions Forum** (OMFIF), of which the MNB has been a member since May 2014. Based in London, the activity of the OMFIF is primarily focused on the areas of economic and monetary policy, public asset and reserve management, financial supervision and regulation, as well as the role and governance of central banks. In December 2014, the MNB hosted an important OMFIF event, the Economists Meeting.

Another important partner is the **European Association for Banking and Financial History** (EABH) which is engaged – both for its membership and for the general public – in the extremely useful yet complex task of processing the history of the banking, financial and insurance sectors (e.g. in the form of books and other professional publications) and organises conferences and meetings on relevant subjects. As a committed supporter of financial literacy and awareness, the MNB has undertaken an active role in the professional events and annual conferences of the EABH; moreover, the Governor of the MNB was elected to be a member of the EABH Board of Patrons at the 2014 General Meeting of the EABH.

15.6 LAMFALUSSY LECTURES INTERNATIONAL CONFERENCE

In 2013, the management of the MNB decided to launch an international conference series named after Baron Alexandre Lamfalussy, "the father of the euro". The purpose of the annual **Lamfalussy Lectures Conference** is to invite to Hungary distinguished lecturers who have earned international recognition with their views on current issues in global economic policy, specifically in monetary policy and the financial system, to share and present their opinion to the audience and the professional community. The MNB aims to develop the Lamfalussy Lectures into a pivotal forum for European and global theories on economic policy in the years to come.

The Lamfalussy Lectures Conferences are held early each year at an external venue in Budapest, with the participation of hundreds of invited guests. The main topics of the first conference held in 2014 included the economic, monetary and financial integration of Europe and the future of this integration, the causes of the euro crisis, monetary policy challenges, euro accession strategies and issues related to the Banking Union. The second conference was held in February 2015, and the main conclusion of the presentations and the following roundtable discussion was that the objectives and duties of central banks need to be reconsidered based on the lessons drawn from the mistakes leading up to the crisis. The third, commemorative conference in 2016 paid tribute to the work of Professor Lamfalussy, who passed away in 2015.

Along with launching the Lamfalussy Lectures Conference, the Governor of the MNB also established the **Lamfalussy Award** to recognise internationally outstanding professional performance and lifetime achievements that influence the MNB's activity as well as international monetary and financial policy. The award has been presented on three occasions so far, in conjunction with the Lamfalussy Lectures Conferences. The award winners are Ewald Nowotny, Governor of the Oesterreichische Nationalbank (the central bank of Austria), Benoît Coeuré, member of the Executive Board of the European Central Bank, and the Bank for International Settlements (BIS).

15.7 INITIATIVES RELATED TO THE MNB'S RENMINBI PROGRAMME

China has implemented numerous foreign trade reforms in recent decades and has become one of the most important trading partners of the European Union. The weight of China and its currency, the renminbi, has increased significantly in international trade settlements – as is well demonstrated by the inclusion of the Chinese currency in the SDR basket – and the MNB has launched several initiatives over the past three years to benefit from this trend by expanding Hungarian-Chinese relations and by strengthening the regional role of Budapest.

As the first, and so far the only, central bank in Central and Eastern Europe, on 9 September 2013 the MNB concluded an agreement with the People's Bank of China (PBC) on the establishment of a **bilateral foreign currency swap line with a nominal value of CNY 10 billion** to foster trade and investment relations between the two countries, to support market liquidity and to strengthen financial stability.

In this context, on 19 February 2015 the MNB announced its **Renminbi Programme** with the purpose of developing the financial infrastructure and institutional system. As part of the programme and pursuant to the decision of the Monetary Council, the MNB commenced the setting-up of a renminbi denominated foreign reserve portfolio; it joined the investment fund of the BIS in May 2015, and in June 2015 the MNB and the PBC signed an agreement according to which the PBC would support the MNB's investments in the Chinese interbank bond market by providing agency services. The MNB and the PBC also agreed on Hungary's participation in the RQFII (Renminbi Qualified Foreign Institutional Investor) programme with an investment quota of CNY 50 billion. For the purpose of enhancing the CNY settlement infrastructure, on 27 June 2015 the MNB and the PBC concluded an agreement on establishing the renminbi settlement mechanism in Hungary, then on 1 July the PBC designated the Hungarian branch of the Bank of China as an official clearing bank for renminbi business. As a result, Budapest has become the fifth renminbi centre in Europe, facilitating access to the Chinese financial system and transactions between Chinese and Hungarian firms, while also supporting the activity of investors using the Chinese currency. As part of the Renminbi Programme, the MNB continuously monitors the financial stability risks arising from the use of the renminbi and the cross-border activity of Chinese banks, and also cooperates with Chinese supervisory authorities.

Under the Renminbi Programme, in 2015 the MNB launched the **Budapest Renminbi Initiative** which held its kick-off meeting on 26 March 2015. The objectives of the initiative are to expand Hungary's investment range and funding sources, to outline interoperability options between the offshore and onshore markets, to identify the most important CNY/HUF transaction types and to obtain license for appearing among the listed currencies of the trading systems in the Chinese onshore market. By means of the programme, the MNB aims to establish money, foreign exchange and capital market infrastructures, to enhance the settlement system and to support negotiations in respect of Chinese capital market licenses with the inclusion of the financial, corporate and government participants involved in renminbi settlements.

16 Central Bank statistics

Pursuant to the authorisation granted by the MNB Act, in order to carry out its tasks, the MNB collects statistical information (not qualifying as personal data) and publishes the statistics derived from such.

In addition to meeting the constantly developing and changing Hungarian and international requirements, the strategic objectives of the central bank's statistical activity are aimed at ensuring the quality of data, strengthening cooperation with Hungarian and international partner institutions, resolving the new tasks arising from the supervisory integration and, with respect to data suppliers, enhancing social-level cost awareness.

Essentially, the MNB ensures the availability of data required for the execution of its tasks from three sources: directly by way of data supplies prescribed by MNB decrees and resolutions; directly applicable data supplies or data supplies prescribed by international regulations; and data collection from other institutions. Following the integration of the HFSA and the MNB on 1 October 2013, pursuant to the authorisation of the MNB Act, the MNB orders the data supplies required for carrying out its duties in relation to the supervision of the financial intermediary system by way of five MNB decrees a year, one related to its core tasks and four supervisory decrees relevant to the money market, the credit market, the capital market, the insurance market and funds.

16.1 DATA COLLECTION INTEGRATION PROJECTS

The integration of the MNB and HFSA in 2013 gave an opportunity to rationalise and modernise the two institutions' data requests. In particular, from 1 January 2017 the MNB will implement a new, more integrated data request framework, in parallel to the changeover to the new international accounting standards by credit institutions.

In 2013, after the HFSA-MNB integration, the Board of Directors of the MNB approved two priority projects of the Statistics Directorate: "**Integration of**

statistical and supervisory data collection” and “**Integration of statistical and supervisory IT systems**”.

The main goal of the **data collection integration project** is to rationalise and consolidate statistical and supervisory data collections after the integration, to eliminate overlaps, and to develop a new, integrated, international quality data collection system which facilitates the creation of a database suitable for satisfying supervisory and central bank statistical requirements. Changing the data collection model will take place over a period of several years, and in parallel, the project entitled “**Integration of statistical and supervisory IT systems**” addresses the required IT support system. The first step of the **Data collection integration project** was to develop a data collection method for the credit institution sector based on the international accounting standards (IFRS) to be introduced as of 1 January 2017. The deadline for introducing the new data collection system – which is designed to satisfy more detailed and harmonised supervisory and central bank statistical objectives – is consistent with the first milestone of the integration of the information technology systems: 1 January 2017.

After consultations in 2015, the MNB's new data collection decree applicable to the credit institution sector from 2017 is scheduled to be issued in the spring of 2016, which will provide sufficient time for the preparations of credit institutions. After 2017, the data collection project will integrate the data collection rules of additional sectors and linked to this effort, the IT project will ensure the comprehensive integration of the relevant information technology systems.

16.2 PARTICIPATION OF THE MNB IN THE METHODOLOGICAL CHANGEOVER OF STATISTICS, CHANGES IN RELEVANT STATISTICAL PUBLICATIONS

In 2014, the MNB implemented a successful changeover to the new accounting standards in its statistical area and secured its place among the leading group of European central banks. The range of available data has been extended significantly, while special attention is given to ensuring their quality on a continuous basis.

The international methodological standards of the compilation of balance of payments and national accounts statistics (Balance of Payments and International Investment Position Manual Sixth Edition: BPM6, System of National Accounts: SNA 2008, European System of Accounts: ESA 2010) are subject to a comprehensive review every 15 years and were renewed in recent years. The Statistics Directorate of the MNB participated in the review of international methodological standards in numerous areas, in the context of which it provided comments on new regulations and participated in sharing best practices. Application of the new standards (BPM6, SNA2008, ESA2010) in the EU Member States and institutions became mandatory in the relevant statistical data supplies in 2014. In the first half of 2014, the MNB concluded the preparation process launched in 2009 for the application of the new international methodological requirements in the area of balance of payments statistics and financial accounts statistics. In this context, consultations with international institutions and the HCSO on methodology were concluded; new methodological and information technology developments were completed; and the first statistics with new contents and structure were released. The revised balance of payments statistics and financial accounts were published on the MNB's website on 24 June and 30 June 2014, respectively. As of these dates, the central banks also provides statistical data to international institutions in accordance with the new methodological standards. In preparation for the new data disclosures, in order to provide advance information to users and present the changes, in March 2014 the MNB dedicated a new page to the methodological changeover on its website, and provided information to external and internal users of statistics on several occasions.

On the whole, data disclosures related to both the balance of payments and the financial accounts have been released with shorter deadlines and more details since the methodological changeover. In addition, in July 2014 a new monthly publication was launched on balance of payments statistics for the faster, more regular provision of information, and the revised Methodological Manual on balance of payments statistics was published on the MNB's website at the end of the year.

As regards monetary statistics, the range of data disclosed has expanded since 2014, with more detailed breakdowns allowing for more in-depth analysis. In the areas of balance sheet and monetary statistics, the effects of the methodological changeover related to the 2014 renewal of national accounts and financial statistics were first reflected in 2015, both in the central bank's publications and in international data supplies.

For the support of macro and microprudential analyses, the significance of developing and operating databases containing the individual credit information of non-financial corporations and households has increasingly come into focus both in Europe and in Hungary. With a view to supplementing the data of the central credit information system, the credit register, in 2015 the MNB introduced a supplementary report to the credit register, containing credit risk data and other relevant credit data.

16.3 SUPERVISORY STATISTICS

Following the institutional integration, supervisory data collections have become a part of the central bank's information system, expanding the data assets available to analysts and supervisors for their work. In parallel with the preparatory work for the data collection integration project, the statistics area devoted substantial resources and attention to the verification of data received through new data collections, which are flexibly aligned with existing and changing data requirements, and to ensuring adequate data quality. Audit processes have improved, and owing to the implemented IT developments, the reconciliation of various data collections and the efficiency of the correction of deficient data supplies improved as well.

As a result of regulatory changes, supervisory reports have changed significantly and standardised data collections have been introduced at the European level to facilitate the harmonisation of prudential oversight in the sectors of credit institutions, investment firms and insurance companies. Since 2014, as a national competent authority, the MNB has implemented continuously expanding EBA data supply standards and prepared for the application of EIOPA's data supply standards for insurance companies. In accordance with these standards, the MNB consistently performs its data supply obligations vis-à-vis European authorities.

17 Communication activity of the MNB

From March 2013, the communication of the MNB was renewed. Stronger emphasis was placed on new monetary policy instruments and measures and tasks that are aimed at supporting the more efficient operation of the central bank, fostering economic growth in Hungary and serving broad social interests. The Hungarian and international relationship network of the central bank was transformed: by selecting the most suitable communication tools, the activity of the central bank can be presented to the Hungarian and international financial community in a more targeted manner.

In the past three years, the communications of the MNB were dominated by the presentation of central bank programmes supporting Hungarian economic growth and activities serving broad social interests. The communications covered such topics as the easing cycle, the Funding for Growth Scheme, the Self-Financing Programme, the Pallas Athena Public Thinking Programme, the Depository Programme, the Corporate Social Responsibility Programme, the broadening of international relations, the support for the conversion of household foreign currency loans and supervisory measures protecting consumers.

The MNB is committed to stimulating socio-economic thinking and providing information to those interested in economic and financial issues. To that end, in the form of easy-to-understand professional articles, the central bank formulates messages that are linked to its core tasks and primary objective as defined in the MNB Act. The central bank has **published nearly 200 professional articles by more than 100 authors** in the media or on its website. The number of papers grew year after year: by 2015, the number of articles – which were published primarily on leading online economic news portals – reached 90 compared to 67 in 2014. The articles addressed such issues as monetary policy, inflation, the Funding for Growth Scheme, foreign currency loans, investments and savings, banknotes and coins and sustainable growth.

Special emphasis was placed on communications dedicated to programmes aimed at improving small and medium-sized enterprises' access to credit – **the Funding for Growth Scheme (FGS), the FGS+ and the Growth Supporting Programme** – which reached the general public in the form of press releases, online news, presentations, radio and television interviews and advertisements.

Following the 1 October 2013 supervisory integration, the MNB also harnessed the communication tools available to **stand up against unfair commercial practices and deficient, inaccurate or misleading information included in public announcements and notices**. Information on the central bank's thematic, comprehensive and targeted inspections received positive feedback, as did the stricter market surveillance measures implemented and fines imposed on infringements. The MNB launched **a series of professional articles** on households' foreign currency loans to offer an adequate set of criteria for resolving the issue. The press also concentrated on topics related to the **MNB's new role in supervision** and the fact that it **detected fraud at a number of investment service providers**, took the measures necessary to protect investors and their interests, and continuously communicated the progress of these cases.

The MNB launched a comprehensive communication campaign to **facilitate the smooth introduction of the new, enhanced 10,000 and 20,000 forint banknotes.**

Communications also placed more emphasis on central bank programmes aimed at the **development and renewal of economic and financial education**. The new publications of the MNB have garnered great media attention, along with its books entitled *Balance and Growth* and *Competitiveness and Growth,* which ushered in the central bank's new book series on economics and monetary policy in March 2015.

After the monetary policy turnaround, relying on innovative methods, the MNB endeavoured to stabilise the economy and ensure a sustainable growth path. Non-conventional instruments and novel solutions were frowned upon by some economists and political participants. That notwithstanding, **the MNB firmly and consistently stood up to the attacks and political pressure that weakened confidence and attempted to curtail the central bank's independence**.

The MNB disseminated its main messages primarily through press releases and professional articles, issuing **more than 500 press releases** in the past three years.

In August 2013, the MNB introduced a **new corporate image,** which resulted in a renewed and more transparent website; in addition, the central bank set up its own page on Facebook.

18 Central Bank results

The MNB recorded a profit throughout the period of 2013–2015.[31]This favourable result can be attributed to two key factors: firstly, the improving net forint interest income resulting from the central bank's easing cycle and secondly, from the profit realised on exchange rate changes. Owing to the MNB's programmes, in the second half of the period the balance sheet of the central bank started to contract, and this process may well continue in future as the impact of the measures takes hold, which may ensure the profitability of the central bank over the longer term.

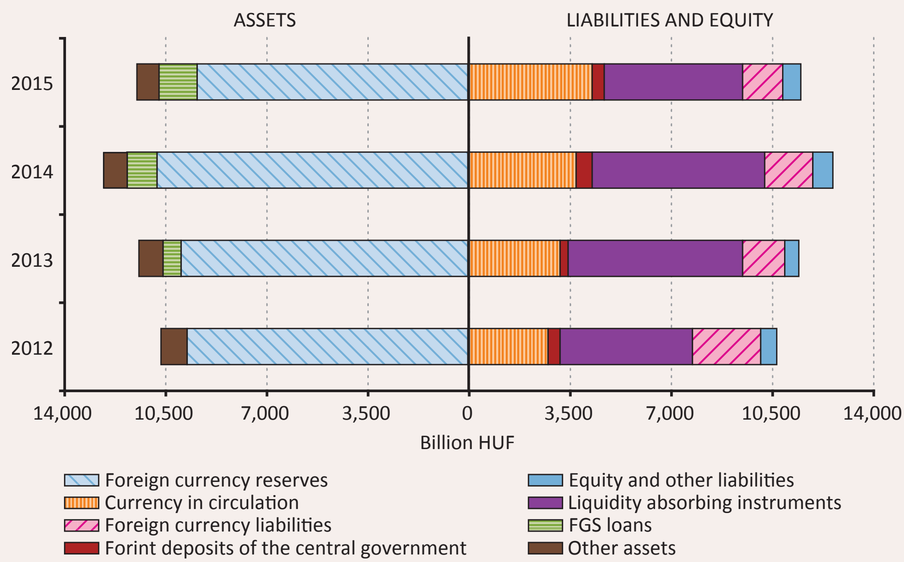
The balance sheet structure of the MNB underwent significant changes in the past three years. In addition to the foreign currency reserves comprising more than 80 per cent of the balance sheet total, by the end of 2015 the share of FGS loans surpassed 10 per cent. Against the backdrop of transfers from the European Commission and the weakening of the forint exchange rate, the stock of foreign currency reserves continued to increase until 2014. At the same time, favourable external debt indicators enabled the MNB to reduce the level of the reserves. As a result of the conversion of foreign currency household loans and the Self-Financing Programme announced by the MNB, in 2015 the level of the **foreign currency reserves declined, and the MNB's balance sheet started to contract**.

On the liabilities side, consistent with the above changes in the foreign currency reserves and as a result of the take-off of FGS lending, the stock of liquidity absorbing instruments[32] rose dynamically in 2013 before a smaller decline in 2014 and a more substantial fall in 2015. The significant drop observed in the stock of foreign currency liabilities can be partly attributed to the repayment of the MNB's IMF loan in 2013 and to the maturing of the foreign currency bonds issued by the MNB before 1999. Currency in circulation increased significantly, reflecting, in part, the decreasing opportunity costs of holding money in the low inflation environment, the declining deposit rates

[31] The MNB's (as yet unaudited) profit for 2015 is HUF 94.5 billion.

[32] Liquidity absorbing instruments are the MNB's two-week bond, two-week deposit, and three-month deposit, and the required reserves and O/N deposits of credit institutions.

Chart 18.1
The MNB's balance sheet
(year-end data)



Source: MNB

stemming from the central bank's interest rate cuts and increasing household consumption. **The MNB's measures point to the further contraction of the central bank's balance sheet**: the conversion of foreign currency loans and the reform of monetary policy instruments – also in support of the Self-Financing Programme – are expected to exert downward pressure on the level of foreign currency reserves and significantly reduce surplus liquidity in 2016.

In contrast to previously projected losses in excess of HUF 200 billion in 2013, **the MNB recorded a profit at the end of all three years under review: Profits exceeded HUF 25 billion both in 2013 and 2014, and the profit realised in 2015 approached HUF 100 billion.** Since the MNB credited the profits of 2013 and 2014 to retained earnings, by 2015 the level of retained earnings was above HUF 60 billion. The MNB's equity – together with the revaluation reserves – amounted to around HUF 400–600 billion in the period.

Net interest income and the losses arising from financial operations have improved markedly in recent years, and by 2015 the losses realised fell to very low values. The net interest income of the MNB is negative, because foreign currency reserves are only partly financed by interest free funds (cash), and there are forint liabilities bearing the central bank base rate against them. The central bank realises a loss due to the margin between the average forint interest rate and the average foreign exchange interest market rate. The category of gains/losses arising from financial operations mainly includes the gains and losses realised from changes in the market price of securities included in the foreign currency reserves. These two P&L categories are closely related and the favourable developments observed in the past three years primarily reflect the continuous improvement in net forint interest income. Although the average stock of forint liabilities with interest pegged to the base rate (forint deposits of the central government, minimum reserves and liquidity absorbing instruments) increased both in 2013 and 2014, this effect was offset by the reduction in the central bank base rate. As regards 2015, in addition to the low base rate, the decline in the stock of interest-bearing forint liabilities also contributed to the favourable net interest income result.

Typically, net foreign currency interest income amounts to a positive figure as it reflects the interest income from foreign currency reserves. The decline in euro yields continuously lowered the level of interest income between 2013 and 2015, which pushed down the level of net foreign currency interest income. This was exacerbated by a changeover in accounting methodology in 2014: at the initiative of the MNB, the relevant decree was amended to better reflect the international accounting practice, and as a result, the interest income from foreign currency reserves was brought more in line with yields in the economic sense, thereby mitigating the unwarranted fluctuation of the central bank result.[33] Alongside the resulting temporary decline in the interest income from the foreign currency reserve, the losses arising from financial operations – which fell drastically compared to the previously recorded substantial losses – contributed positively to the MNB's result.[34]

[33] In line with the new methodology, the premium on high-coupon securities purchased over face value will be recognised evenly until the maturity of the security, reducing interest revenues. As a result, no losses will be recognised upon the maturity of the security to deteriorate the income from financial operations.

[34] Fixed-income, high-coupon securities – which comprise a substantial part of the foreign currency reserves – continuously earn above-market interest income. These securities are purchased above par value, incurring a loss upon maturity or sale according to the accounting rules in effect before December 2014. This is the reason behind the losses arising from financial operations in 2013 and 2014. The new accounting practice has eliminated this problem by the depreciation of the bid-ask spreads (premium), and the income from financial operations turned positive in 2015.

Income arising from exchange rate changes was the largest component of the central bank's result between 2013 and 2015. This was mainly shaped by two factors: the difference between the official and the cost rate, and the volume of foreign exchange sales. With depreciating forint exchange rates, there was a significant divergence between the official rate and the cost rate in certain periods. In addition, the volume of foreign currency sales increased, primarily in response to the debt management operations of the Government Debt Management Agency, but the prepayment of the Hungarian state's IMF loan in 2013 and the conversion of households' foreign currency (mortgage and consumer) loans in 2014 and 2015 also contributed to the increase.

Other constituents of net income include general operating income, costs and expenses, the costs of issuing banknotes and coins, the creation and release of provisions, income from supervisory activity and income/expenses from fees and commissions and other income/expenses. The increment in the resulting net expenditures in 2014 primarily reflects the transfer of assets by the founder to foundations under the Pallas Athena Public Thinking Programme (for more details on the education support programmes, see Chapter 14).

References

[1] Baksay, G. – Kicsák, G. (2015): A jegybanki programok hatása az államháztartás kamatkiadásaira – Mit mutatnak a tények? (The impact of central bank programmes on the interest expenditures of the general government – What do the facts reveal?). Online: http://www.mnb.hu/letoltes/kicsak-gergely-baksay-gergely-a-jegybanki-programok-hatasa-az-allamhaztartas-kamatkiadasaira.pdf

[2] Balla, G. P. – Pintér, C. (2015): Az MNB és a CLS új eszközt ad a hazai devizapiac kezébe (The MNB and the CLS offer the Hungarian foreign exchange market a new instrument). Online: napi.hu, 5 November 2015.

[3] Balog, Á. – Matolcsy, Gy. – Nagy, M. – Vonnák, B. (2014): Credit crunch in Hungary between 2009 and 2013: is the creditless period over? *Financial and Economic Review,* 13 (4), pp. 11–34.

[4] Bartha, L. – Kajdi, L. (2015): Meddig lehet még fokozni az átutalások sebességét? (Can money transfers speeded up further)? Online: origo.hu, 11 September 2015.

[5] Bódi-Schubert, A. – Leszkó, E. – Pataki, T. – Réthy, B. (2014): Megújul a forint – Közérthetően a bankjegygyártásról és fejlesztésről (2.) (Renewal of forint banknotes – A comprehensible overview of banknote production and development [2]). Online: MNB.hu, Bankjegy- és érme, Publikációk. 6 October 2014.

[6] Bódi-Schubert, A. – Pataki, T. – Réthy, B. (2015a): Megújul a forint – Mit kell tudnunk a régi 20 000 forintosok bevonásáról? (Renewal of forint banknotes – Guidance on the withdrawal of 20,000 forint banknotes). Online: MNB.hu, Bankjegy- és érme, Publikációk, 11 December 2015.

[7] Bódi-Schubert, A. – Pataki, T. – Réthy, B. (2015b): Megújul a forint – A bankjegykibocsátási program folytatása a megújult 20 000 forintossal (Renewal of forint banknotes – Continuation of the currency issue programme with the new 20,000 forint banknote). MNB.hu, Bankjegy- és érme, Publikációk, 16 December 2015.

[8] Csajbók, A. – Hudecz, A. – Tamási, B. (2010): Foreign currency borrowing of households in new EU member states. *MNB Occasional Papers,* No. 87, Magyar Nemzeti Bank.

[9] Császár, P. (2015): Four hours is actually how many hours? – The actual time required for intraday transfers. *Financial and Economic Review,* 14 (1).

[10] Csávás, Cs. (2015): A devizatartalék-megfelelés értékelésének nemzetközi trendjei (International trends of assessing the adequacy of foreign exchange reserves). https://www.mnb.hu/letoltes/csavas-csaba-a-devizatartalek-megfeleles-ertekelesenek-nemzetkozi-trendjei.pdf

[11] Claessens, S. (2014): An Overview of Macroprudential Policy Tools. *IMF Working Paper*, Washington, IMF, WP/14/214.

[12] Dancsik, B. – Fábián, G. – Fellner, Z. – Horváth, G. – Lang, P. – Nagy, G. – Oláh, Zs. – Winkler, S. (2015): Comprehensive analysis of the nonperforming household mortgage portfolio using micro-level data. *MNB Occasional Papers, Special Issue,* Magyar Nemzeti Bank.

[13] De Nicoló, G. – Favara, G. – Ratnovski, L. (2012): Externalities and Macroprudential Policy, IMF Staff Discussion Note.

[14] Endrész, M. – Harasztosi, P. – Lieli, R. (2015): The Impact of the Magyar Nemzeti Bank's Funding for Growth Scheme on Firm Level Investment. *MNB Working Papers,* 2015/2.

[15] European Commission (2014): Macroeconomic Imbalances Hungary 2014. Online: http://ec.europa.eu/economy_finance/publications/occasional_paper/2014/pdf/ocp180_en.pdf

[16] Fábián, G. (2015): Mit úsztak meg pontosan a deviza-jelzáloghitelesek (What exactly foreign currency mortgage debtors escaped from). MNB study, June 2015.

[17] Fábián, G. – Zágonyi, Á. (2015): Átfogó segítség a megmaradt lakossági devizahitelek forintosítása (Conversion of outstanding household foreign currency loans is an overarching assistance). MNB study, October 2015.

[18] Fábián, G. – Vonnák, B. (eds.) (2014): Átalakulóban a magyar bankrendszer (Hungarian banking system in transformation). *MNB Occasional Papers,* Special Issue, No. 112. MNB.

[19] Felcser, D. – Lehmann, K. – Váradi, B. (2015a): Az inflációs cél körüli toleranciasáv bevezetése (Introduction of the tolerance band around the inflation target). Online: vg.hu, 29 April 2015

[20] Felcser, D. – Soós, G. D. – Váradi, B. (2015b): The impact of the easing cycle on the Hungarian macroeconomy and financial markets. *Financial and Economic Review,* 14 (3) pp. 39–59.

[21] Galati, G. – Moessner, R. (2011): Macroprudential policy – a literature review. *BIS Working Papers,* Bank for International Settlements, No. 337.

[22] Hoffmann, M. – Kolozsi, P. P. (2014): Az önfinanszírozási program stabilabb állampapírpiacot eredményezett (The self-financing programme resulted in a more stable sovereign market). http://www.mnb.hu/letoltes/hoffmann-mihaly-kolozsi-pal-peter-az-onfinanszirozasi-program-stabilabb-allampapirpiacot-eredmenyezett.pdf

[23] Hoffmann, M. – Kolozsi, P. P. – Nagy, M. (2014): A forintosítás időben elnyújtva csökkenti a jegybank mérlegét és így a forintlikviditást (Extended conversion reduces the central bank balance sheet, hence, forint liquidity). MNB study, December 2014.

[24] Ilyés, T. – Varga, L. (2015): Show me how you pay and I will tell you who you are – Socio-demographic determinants of payment habits. *Financial and Economic Review,* 14 (2).

[25] IMF Article IV consultations (2015): Staff report; press release; and statement by the executive director for Hungary. Online: http://www.imf.org/external/pubs/ft/scr/2015/cr1592.pdf

[26] Kajdi, L. – Varga, L. (2015): Készpénzmentes társadalom – Álom vagy valóság? (Cashless society – Dream or reality?). Online: origo.hu, 30 October 2015

[27] Kicsák, G. (2015a): Az MNB lépései megtakarítást hoztak az államnak (The steps of the MNB generated savings for the government). Online: vg.hu, 29 June 2015

[28] Kicsák, G. (2015b): Az állami kamatmegtakarítások jelentősen megnövelik a költségvetés mozgásterét (Interest savings of the government increase fiscal leeway significantly). http://www.mnb.hu/letoltes/kicsak-gergely-az-allami-kamatmegtakaritasok-jelentosen-megnovelik-a-koltsegvetes-mozgasteret.pdf

[29] Kolozsi, P. P. (2014): Stabilabb és olcsóbb finanszírozást hozhatnak az MNB új eszközei (The new instruments of the MNB may bring more stable and cheaper financing). Online: https://www.mnb.hu/letoltes/kolozsi-pal-peter-jegybanki-eszkozok.pdf

[30] Kolozsi, P. P. (2015): Önfinanszírozási program: jegybanki eszközökkel az ellenállóbb magyar gazdaságért (Self-financing programme: with central bank instruments for a more resilient Hungarian economy). *Polgári Szemle,* December 2015.

[31] Kolozsi, P. P. – Banai, Á. – Vonnák, B. (2015): Phasing out household foreign currency loans: schedule and framework. *Financial and Economic Review,* 14 (3), pp. 60–87.

[32] Madarász, A. – Novák, Zs. (2015): Level of interest rates in the light of the changing interest rate policy in Hungary between 1924 and 2015 – How did the central bank base rate get to its historic low levels? *Financial and Economic Review,* 14 (3), pp. 87–107.

[33] Magyar Nemzeti Bank (2014a): A kétéves kamatcsökkentési ciklus hatásai (Impacts of the two-year easing cycle). Magyar Nemzeti Bank, 22 July 2014.

[34] Magyar Nemzeti Bank (2014b): Press release on the Monetary Council meeting of 22 July 2014. Magyar Nemzeti Bank, 22 July 2014.

[35] Magyar Nemzeti Bank (2014c): The Monetary Council's statement in the December issue of the *Inflation Report.* Magyar Nemzeti Bank, 18 December 2014.

[36] Magyar Nemzeti Bank (2015): Returning to market-based lending: traits of optimum. MNB.

[37] Magyar Nemzeti Bank (2015): A Piaci Hitelprogram (PHP) alapösszefüggései és eszközei (Basic correlations and instruments of the Market-Based Lending Scheme [MLS]). MNB.

[38] Magyar Nemzeti Bank (2015): Restoring market-based financing and achieving a lasting turnaround in lending are priorities. MNB press release.

[39] Magyar Nemzeti Bank (2015a): The Magyar Nemzeti Bank's self-financing programme – April 2014 – March 2015. Online: http://www.mnb.hu/letoltes/the-magyar-nemzeti-bank-s-self-financing-programme-april-2014-march-2015.pdf

[40] Magyar Nemzeti Bank (2015b): Statement of the Monetary Council on the revision of the inflation target. 24 March 2015.

[41] Magyar Nemzeti Bank (2015c): Renewal of the Magyar Nemzeti Bank – Achievements of the Magyar Nemzeti Bank 2013–2015.

[42] Magyar Nemzeti Bank (2015d): The Monetary Council's statement in the March issue of the *Inflation Report.* Magyar Nemzeti Bank, 24 March 2015.

[43] Magyar Nemzeti Bank (2015e): Central Bank Almanac. Magyar Nemzeti Bank.

[44] Magyar Nemzeti Bank (2015f): Financial Stability Report. Online: https://www.mnb.hu/letoltes/stabilitasi-jelentes-2015-november-eng.pdf

[45] Magyar Nemzeti Bank (2016): Notice on the terms and conditions of the three-year floating rate forint interest rate swaps conditional on lending activity. MNB.

[46] Magyar Nemzeti Bank (2016): Notice on the terms and conditions of the preferential deposit facility. MNB.

[47] Magyar Nemzeti Bank (2016a): Press release on the loans granted in the second phase of the Funding for Growth Scheme.

[48] Mariathasan, M. – Merrouche, O. – Werger, C. (2014): Bailouts And Moral Hazard: How Implicit Government Guarantees Affect Financial Stability.

[49] Matolcsy, Gy. (2015): Equilibrium and Growth. Kairosz Kiadó, 2015.

[50] MNB (2014a): Improving Hungary's debt profile. Banks can contribute to Hungary's self-financing through government security purchases (Background material). Online: https://www.mnb.hu/letoltes/banks-can-contribute-to-hungary-s-self-financing-through-government-security-purchases-background-material.pdf

[51] MNB (2014b): Notice on the terms and conditions of the three-year floating rate collateralised loan transaction linked to the central bank base rate. MNB. Online: https://www.mnb.hu/letoltes/t-and-c-ltro-en.pdf

[52] MNB (2014c): Notice on the terms and conditions of securities swap transactions. MNB. Online: https://www.mnb.hu/letoltes/t-and-c-secswap-en.pdf

[53] MNB (2015a): The Magyar Nemzeti Bank's self-financing programme – April 2014 – May 2015 (Evaluation). MNB. Online: http://www.mnb.hu/letoltes/the-magyar-nemzeti-bank-s-self-financing-programme-april-2014-march-2015.pdf

[54] MNB (2015b): Restoring market-based financing and achieving a lasting turnaround in lending are priorities. The MNB's monetary policy instruments promote sustainable lending to the SME sector. Online: https://www.mnb.hu/en/pressroom/press-releases/press-releases-2015/restoring-market-based-financing-and-achieving-a-lasting-turnaround-in-lending-are-priorities

[55] MNB (2015c): Renewal of the Magyar Nemzeti Bank – Achievements of the Magyar Nemzeti Bank 2013–2015 (Publication). Online: https://www.mnb.hu/letoltes/achievements-of-the-magyar-nemzeti-bank-2013-2015.pdf

[56] MNB (2014d): The Funding for Growth Scheme – The first 18 months – Essays and studies on the results of the funding for growth scheme achieved to date.

[57] MNB (2016): Press release on the loans granted in the second phase of the Funding for Growth Scheme. Online:https://www.mnb.hu/letoltes/fgs2-utilization-05-01-2016-final.pdf

[58] MNB Act: Article 4 (7) of Act CXXXIX on the Magyar Nemzeti Bank. Online: https://www.mnb.hu/letoltes/jegybanktorv-hu.pdf

[59] Moody's (2015): The Evolution of Emerging Market Sovereign Debt: Dramatic Growth in Local Currency Sovereign Debt Is Reducing Emerging Market Financial Vulnerabilities. Report.

[60] Nagy, M. (2015): Az önfinanszírozási program költségei eltörpülnek az előnyei mellett (The benefits of the self-financing programme dwarf its costs). http://www.mnb.hu/letoltes/nagy-marton-az-onfinanszirozasi-program-koltsegei-eltorpulnek-az-elonyei-mellett-1.pdf

[61] Nagy, M. – Palotai, D. (2014): A devizatartalék óvatosan csökkenthető (FX reserves may be reduced cautiously). Study, April 2014, MNB.

[62] Nagy, M. – Palotai, D. (2015): The MNB further reduces Hungary's vulnerability by reforming its policy instruments. Online:https://www.mnb.hu/letoltes/marton-nagy-daniel-palotai-the-mnb-further-reduces-hungary-s-vulnerability-by-reforming-its-policy-instruments.pdf

[63] Nagy, M. – Vonnák, B. (2014): Egy jól működő magyar bankrendszer 10 ismérve. Átalakulóban a magyar bankrendszer (The 10 measures of a well-functioning Hungarian banking system. Hungarian banking system in transformation). *MNB Occasional Papers,* Special Issue.

[64] OECD (2015): Economic Outlook Hungary. http://www.oecd.org/hungary

[65] Tamási, B. – Világi, B. (2011): Identification of credit supply shocks in a Bayesian SVAR model of the Hungarian economy. *MNB Working Papers,* 2011/7.

[66] Sóvágó, S. (2011): Identifying supply and demand in the Hungarian corporate loan market. *MNB Occasional Papers,* No. 94.

[67] Vonnák, B. (2015): Mennyit nyertek a forintosítással a devizahitelesek, és mennyit az ország az elmúlt napokban (How much have foreign currency debtors and Hungary won by the conversion of FX loans in recent days)? MNB study, January 2015.

List of charts and tables

CHARTS

TABLES

MID-TERM REPORT 2013-2016

2016

Print: Prospektus-SPL consortium
H-8200 Veszprém, Tartu u.6.