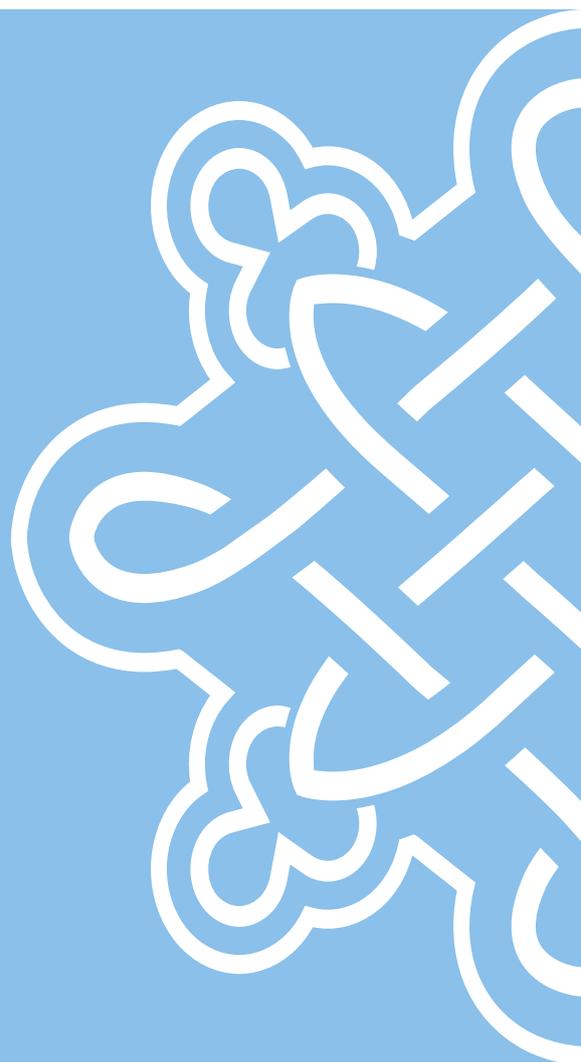




ANNUAL REPORT



2017



ANNUAL REPORT

2017 BUSINESS REPORT AND
FINANCIAL STATEMENTS
OF THE MAGYAR NEMZETI BANK

2017

Kiadja: Magyar Nemzeti Bank

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Contents

Part A)

2017 Business Report of the Magyar Nemzeti Bank	5
1 The Governor's foreword	7
2 A brief overview of the Magyar Nemzeti Bank	11
2.1 Objectives, basic and other tasks of the MNB	11
2.2 Bodies and management of the MNB	12
2.3 Organisation of the MNB	15
2.4 The MNB as a member of the European System of Central Banks	15
3 Review of the MNB's performance in 2017	20
3.1 Monetary policy	20
3.2 Stability of the financial intermediary system	25
3.3 Supervision and consumer protection	30
3.4 Resolution	38
3.5 Payment and securities settlement systems	40
3.6 Foreign exchange reserves management	42
3.7 Cash logistics activity	45
3.8 Statistical services	50
3.9 The MNB's activity in the area of social responsibility	53
3.10 Factors shaping the communication of the MNB	55
3.11 The MNB's income in 2017	55
3.12 Financial performance of the MNB	57
3.13 Introduction of the ESCB Committees	62
3.14 Research activity of the MNB	63
3.15 Publications and conferences organised by the MNB	64
4 Additional information on the supervisory activity of the MNB in 2017	71
4.1 Institution oversight	71
4.2 Inspections completed	71
4.3 Licensing and legal enforcement	72
4.4 Market surveillance	75
4.5 Consumer protection	76
4.6 Administrative representation at proceedings	78
5 Explanation of abbreviations and terms specific to central banking	79

Part B	
Audited financial statements of the Magyar Nemzeti Bank	83
1 Independent auditor's report	85
2 Balance sheet of the Magyar Nemzeti Bank	88
3 Income statement of the Magyar Nemzeti Bank	89
4 Notes to the financial statements	90
4.1 The MNB's accounting policy	90
4.2 Effects of macroeconomic trends on the 2017 balance sheet and income statement of the Magyar Nemzeti Bank	94
4.3 Forint receivables from the central government	95
4.4 Foreign currency receivables from the central government	95
4.5 Forint and foreign currency liabilities of the central government	95
4.6 Net positions vis-à-vis the central government	96
4.7 Forint receivables from and liabilities to credit institutions	97
4.8 Net positions vis-à-vis credit institutions	98
4.9 Gold and foreign exchange reserves of the central bank	99
4.10 Other forint and foreign currency receivables	100
4.11 Other deposits and liabilities	100
4.12 Invested assets	102
4.13 Provisions and impairment losses	109
4.14 Prepaid expenses/accrued income and accrued expenses/deferred income	109
4.15 Changes in equity	110
4.16 Revaluation reserves	110
4.17 Off-balance sheet liabilities and other significant off-balance sheet items of the MNB	111
4.18 Net interest income and realised net income of financial operations	113
4.19 Components of income from the revaluation of foreign exchange holdings	116
4.20 Cost of issuing banknotes and coins	116
4.21 Other income/expenses	117
4.22 Income other than fees and commissions	117
4.23 Income from supervisory activities	118
4.24 Operating income and expenses	119
4.25 Change in staff and payroll cost, Remuneration of executive officers	121

Part A)
2017 Business Report
of the Magyar Nemzeti Bank

1 The Governor's foreword

The Hungarian economy continued to grow dynamically in 2017. Average annual inflation amounted to 2.4 per cent. In 2017, the Monetary Council of the Magyar Nemzeti Bank worked towards achieving the medium-term inflation target in a sustainable manner and the corresponding stimulation of the real economy by applying and expanding the set of unconventional monetary policy instruments, in addition to maintaining the base rate for an extended period.

The Funding for Growth Scheme (FGS) launched by the MNB on 1 June 2013 came to an end on 31 March 2017. In the three phases of the scheme, almost 40,000 micro, small and medium-sized enterprises benefited from financing on favourable terms in the total amount of more than HUF 2,800 billion. Of this, the utilisation in the third, phase-out stage of the scheme, lasting from January 2016 to March 2017, amounted to roughly HUF 685 billion. According to the Monetary Council's decision passed in December, loans (tranches) from this phase may be drawn down until mid-2019. The scheme played an important role in achieving a turnaround in lending: after the launch of the FGS, the annual decline of 5-7 per cent that had previously been observed in lending to SMEs stopped and from 2015 lending started to rise gradually, already reaching the band of 5-10 per cent in 2016 and 2017, the range which is deemed necessary by the MNB for economic growth sustainable in the long run. According to the MNB's estimates, the FGS may have contributed roughly 2 percentage points to economic growth between 2013 and 2016 and boosted employment by around 20,000.

The quantitative restriction on the three-month deposit, which was introduced in autumn 2016, continued in 2017 as well, in addition to steadily maintaining the base rate at 0.9 per cent. In 2017, the Monetary Council determined the size of the three-month deposit portfolio with a smaller amount every quarter: the quantitative limit was set at HUF 750 billion, HUF 500 billion, HUF 300 billion and HUF 75 billion at the end of the first, second, third quarter and in the final fourth quarter, respectively. The quantitative restriction on the three-month deposit efficiently ensured the maintenance of the accommodating monetary conditions, both in the interbank and other relevant markets, thereby facilitating a further pick-up in lending, among other things. In order to supplement the scheme of quantitative restriction, at the end of March 2017 the Monetary Council expanded the range of fine-tuning swap instruments, applied from October 2016, by adding longer term instruments, i.e. with 6-month and 12-month maturity, thereby

contributing to the control of interbank liquidity and efficient operation of the monetary policy framework. According to the assessment of the Monetary Council in September 2017, limitation of the three-month deposits fulfilled its role, and thus looking ahead the three-month deposit portfolio will remain at the end-2017 level of HUF 75 billion. Starting from December 2017, the Monetary Council decides on the volume of liquidity to be crowded out and determines the volume of central bank swap instruments relative to that. The average value of overnight deposits amounted to HUF 451 billion, 324 billion, 528 billion and 428 billion in the first, second, third and fourth quarter of 2017, respectively.

The quantitative restriction achieved its objective, as the liquidity crowded out from the three-month deposits reduced yields and kept them low both in the interbank markets and in other relevant markets. Three-month BUBOR quotes fell by 34 basis points to 3 basis points during the year, while three-month discounted treasury bill yields dropped to -1 basis point by year-end, after a fall of 7 basis points.

In September 2017, the Monetary Council announced that it deemed it important that the loose monetary conditions had an effect not only at the short end, but also at the longer end of the yield curve. To this end, on 21 November 2017 the MNB decided to introduce from January 2018 two unconventional instruments, which will constitute an integral part of the set of monetary policy instruments. According to the decision, an unconditional interest rate swap facility of monetary policy purpose (MIRS) with 5-year and 10-year maturities was introduced, with the Monetary Council setting a facility amount of HUF 300 billion for the first quarter of 2018. The MIRS instrument will be available to counterparty banks from the beginning of January 2018, at regular, biweekly tenders. On the other hand, the central bank also launched a targeted programme aimed at purchasing mortgage bonds with 3-year or longer agreed maturity. Both schemes facilitate growth in loans with longer interest fixation periods, particularly in the fixed-rate household mortgage loans. The MNB published the operative details of both schemes on 21 December 2017, with mortgage bond purchases commencing in January 2018.

The fulfilment of the commitments made by the banks for 2016 under the Market-based Lending Scheme (MLS) was reviewed in February 2017. In 2016, the banks participating in the scheme increased their lending to SMEs by HUF 302 billion, versus their commitments of HUF 195 billion, which

represents fulfilment of 155 per cent at the level of the banking sector. With a view to ensuring that the banks can raise their commitments for 2017, on 24 May the Monetary Council decided to launch the second phase of the Market-based Lending Scheme, in the framework of which at the interest rate swap (LIRS) tender, held at the beginning of July 2017, banks raised their commitments by another HUF 57 billion. The review of the fulfilment of the 2017 commitments took place in February 2018 in light of the lending results of the year.

In 2017, the quarterly maturities of the unconditional swap instruments for the settlement and forint conversion related to the phase-out of households' foreign currency loans reduced the liquidity of the banking sector by more than HUF 330 billion in total; the last of these transactions expired in December 2017.

Both in terms of liquidity and capital stock, the Hungarian banking system's shock-absorbing capacity is robust and continued to strengthen in 2017, with the favourable profitability trends contributing to the maintenance thereof. The domestic operating environment was characterised by a broad-based recovery: continued growth was observed both in lending and in the property market. Lending processes in both the corporate and household segments were characterised by continued growth. In addition to lending to SMEs, lending to the corporate sector as a whole also reached the growth band of 5-10 per cent, supporting sustainable growth, and thus the cyclical growth-curbing impact exerted by the banking sector through its lending activity – which had characterised the post-crisis years to a decreasing degree – disappeared completely.

The MNB's macroprudential activity in 2017 focused on monitoring developments in financial stability risks, fine-tuning the set of previously introduced macroprudential instruments and supporting more efficient operation by the banking sector. In cooperation with the other divisions involved, in spring 2017 the MNB's macroprudential division elaborated the conditions applicable to "Certified Consumer-friendly Housing Loan" products and developed the related website for online comparison. The mortgage funding adequacy ratio (MFAR), which reduces forint maturity mismatch, entered into force in 2017, and two mortgage bond indices were also developed together with Budapest Stock Exchange (BSE) to enhance the deepening of the mortgage bond market. The results of the MNB's comprehensive research on the subject of FinTech showed substantial demand for the establishment of an Innovation Hub and a Regulatory Sandbox. The MNB commenced preparations for establishing these frameworks, and in the case of the Innovation Hub, actual operations started at the beginning of 2018. As part of the follow-up of the macroprudential instruments, in December 2017 the MNB issued its Macroprudential Report for the second time.

The performance of the supervisory duties in 2017 was characterised by a forward-looking, strategic approach and rapid response. Continuing to apply its revised methodology in practice, the MNB performed the oversight of the financial intermediary system in a proactive manner.

The changing – and in certain parts revised – regulatory system and the market ambitions generated new challenges for the MNB. Measures fostering stability and sound growth included the changeover to IFRS, the integration of cooperative credit institutions and the practical application of the oversight strategy adjusted to the integration in the area of credit institutions, the supervision of operations in line with Solvency II in the area of insurance, the measures taken to gain investors' confidence and establish a safely functioning institutional system in the capital market, and the control of institutional compliance with the concept of ethical conduct in the area of consumer protection.

In close cooperation with the major actors in the domestic market, an increasingly broad range of business model analyses are being conducted. With the new approach, the MNB can obtain a more comprehensive picture of the sustainability of the supervised institutions' profitability, strategy and business model. Furthermore, the dialogue conducted during the analyses efficiently supports the institutions' strategy development, planning and risk management processes.

With the introduction of the Certified Consumer-friendly Housing Loan, housing mortgage loans with easy to understand and transparent conditions, favourable pricing available to a broad range of customers with simple, fast administration appeared in the domestic market.

Thanks to the MNB's cooperation with its partner organisations and certain economic agents with a view to enhancing financial literacy, its information materials and messages were delivered through multiple campaigns to a wide range of the members of the public.

In 2017, the MNB achieved major results in the resolution planning process (preparation of individual and group, simplified resolution plans). The group resolution plan applicable to cross-border banking groups was completed under the coordination of the MNB and was unanimously approved by all of the foreign resolution authorities involved. Following the resolution procedure conducted in respect of MKB Bank Zrt., in compliance with its obligation set forth in the Resolution Act, the independent expert appointed by the MNB established that the Resolution Fund had no indemnification obligation to the former owner and to the creditors. With a view to enhancing the methodology of resolution activity, the MNB organised a methodological forum

for the representatives of the authorities of the countries participating in the Visegrád Cooperation (V4).

At the beginning of 2017, the Executive Board of the MNB decided that the central infrastructure of the instant payment system would be developed by GIRO Zrt, which is owned by the central bank. As a result of the development, the core payment system will be up and running by mid-2019; by connecting to this system Hungarian payment service providers will be able to provide instant payment services to their customers. Realisation of the new system will help FinTech companies enter the market, fostering the development of innovative payment solutions.

The MNB actively participated in the implementation of the new Payment Services Directive (PSD2), cooperating with the Ministry for National Economy and the European Banking Authority, among others. The transposition of PSD2 into Hungarian law, the development of the instant payment system and the modification needs resulting from earlier audit experiences justified the framing of a new central bank decree on the execution of payments, which was published in the Hungarian Official Gazette in December 2017.

In February 2017, KELER Zrt. joined the TARGET2-Securities (T2S) platform, the pan-European securities settlement infrastructure, which is operated by the European Central Bank. As a result of this, the T2S harmonisation working group underwent a transformation.

The MNB participates in the ECB's cyber security working group, where it continuously monitors the preparedness of the financial infrastructures in terms of IT security and cooperates with other central banks.

As a result of the wide-ranging activity and intended international expansion of KELER CCP central counterparty, the licensing college led by the MNB – which also has international members – discussed several cases in 2017. Of these the most important was the settlement and guarantee service to be rendered to the Romanian commodity exchange, which will be the first cross-border service of KELER CCP in its capacity as a central counterparty.

The MNB's foreign exchange reserves declined by EUR 1.0 billion during the year, thus at the end of December 2017 the foreign exchange reserves amounted to EUR 23.4 billion. During the year, the decline in the level of foreign exchange reserves was mostly attributable to the repayment of debt, the conversion of household foreign currency loans into forints and payments related to the foreign currency pillar of phase three of the Funding for Growth Scheme. These effects were mostly offset by the EU transfers received from the European Commission, and the volume of foreign currency

received in the forint liquidity providing foreign currency swap tenders.

On 31 December 2017, the total value of currency in circulation amounted to HUF 5,114 billion, representing a 12 per cent year-on-year increase of HUF 533 billion. Forint cash holdings rose substantially in 2017 again, still mainly caused by currency holdings for savings purposes and growth in consumption. The two largest banknote denominations continue to play a dominant role in cash turnover: at the end of 2017 they jointly accounted for 67 per cent and 95 per cent of the volume and value, respectively, of banknotes in circulation.

In 2017, the MNB performed cash transactions for its customers, credit institutions and the Hungarian Post Office, in a value of HUF 4,066 billion.

Similarly to the previous years, the counterfeiting of forint banknotes was extremely low in 2017 as well; the number of forint banknote counterfeits eliminated from cash circulation was merely 716. In 2017, counterfeiting of higher denominations (the 10,000-forint and 20,000-forint banknotes) was once again the most typical, accounting for 83 per cent of counterfeit forint notes.

In the period between 2014 and 2019, in the context of "Progress and tradition", the MNB is redesigning the banknote series presently in circulation. Of the series comprising six denominations, the first redesigned banknote to appear in circulation was the 10,000-forint banknote in 2014, but it is still possible to pay with the old version of this denomination. During 2017, the 2,000-forint and 5,000-forint denominations were completely renewed, as their new versions were issued last year and the old ones were withdrawn from circulation. The old version of the 20,000-forint banknote – the redesigned version of which was put in circulation in December 2015 – was withdrawn from circulation on 31 December 2017. The redesigned 1,000-forint banknotes became legal tender on 24 August 2017 by a decree. The appearance and spread of the new 1,000-forint banknotes in cash circulation starting from 1 March 2018 is expected to take place gradually, in line with the requirements.

Pursuant to the MNB Act, and in the spirit of the sales policy – aimed at fostering coin collection – valid since 2014, the central bank issued 19 commemorative coins on 10 topics in 2017. Two of these were gold coins, seven were silver coins and ten (with two independent designs of coin) were non-ferrous metal collector coins. In 2017, the MNB also put into circulation the commemorative version of a new 50-forint circulation coin. The security elements appearing in the mint mark since 2016 aim to prevent the counterfeiting of commemorative coins.

In culmination of the successful work of the project “Integration of data collection for statistical and oversight purposes”, starting from 2017 the MNB introduced detailed data collection for credit institutions, based on which it publishes the oversight and statistical data of credit institutions in a standard structure, irrespective of whether they apply Hungarian or international accounting standards.

In 2017, a project affecting several functional areas of the MNB was launched for the development of a new, standard central bank credit register, which supports responsible lending with reliable data and provides the central bank with wide-ranging analysis opportunities to monitor developments in lending.

In 2017, the MNB published the most comprehensive statistical information to date on households’ wealth and financing processes in its publication entitled “Financial savings of households based on micro- and macro-statistical data”.

In 2017, the MNB realised a profit of HUF 38.3 billion. Net interest income turned into a profit as a result of the central bank’s self-financing programme.

Actual operating costs amounted to HUF 37,508 million in 2017, which was 6 per cent higher than the expenses incurred in the previous year.

The increase in expenses compared to 2016 was partially due to personnel costs, mostly owing to the rise in the average headcount primarily through the filling of vacancies, and also to the performance of new tasks related to fostering financial literacy and enhancing economic education, as well as tasks related to IT security and the operation of IT systems.

On the other hand, general operating costs rose, which was mostly attributable – within other expenses – to the communication costs, allocable to 2017, of the multi-year media campaign promoting the Certified Consumer-friendly Housing Loan.

The financially realised value of investments implemented in 2017 was HUF 4,980 million – including advance payments for investment purposes – the majority of which were (mostly IT) capital expenditures related to the usual course of business.

In 2017, the Executive Board of the MNB adopted the MNB’s medium-term environmental strategy (2017-2019), the focus of which is on the environmentally sound development of the MNB’s buildings and further improvement in the environmental performance of the cash supply chain. The implementation of the environmental strategy is supported by an environmental protection programme comprising of 15 points (strategic action plan).

In the medium-term strategy, the MNB made the commitment in respect of its buildings to maintain the “Very Good” rating of the international environmental assessment method and rating system (BREEAM In-Use) for the headquarters building, classified as a national monument, and for the Logistics Centre.

In relation to improving the environmental performance of the cash supply chain, complying with the owner’s expectations formulated on the basis of the detailed environmental review of the MNB’s subsidiaries involved in cash production, in 2017 Pénzjegynyomda Zrt. and Diósgyőri Papírgyár Zrt. implemented an environmental management system identical with that operating in the MNB (KÖVHIR) and obtained the EMAS certificate, i.e. the international accreditation recognising environmental-friendly operation. In relation to the further enhancement of the cash supply chain’s environmental performance, in the medium-term strategic period of 2017-2019 the focus will be on the survey of the environmental performance of the third segment of the cash supply chain, i.e. the cash logistics providers.

Based on the Corporate Social Responsibility Strategy, announced in line with the core values and vision outlined in its Statute, the MNB regards it as its mission to serve the public good by utilising its sustainable positive financial result, without jeopardising the fulfilment of its basic tasks, and by supporting the realisation of professional and social goals that create value and strengthen social cohesion. The key components that determine the directions of the activities include the improvement of financial literacy, the development of education and research infrastructure, support for national culture and contribution to charitable initiatives. The results of the central bank’s social responsibility activities in 2017 contributed to the realisation of the strategic goals to a substantial degree.

In order to supply the general public with continuous and comprehensive information, in 2017 the MNB issued in total 355 press releases, held 31 press conferences and published 63 professional articles in the printed press, on online portals and on its own website. The focus of the communication was on the decisions and information regarding monetary policy and financial stability, the presentation of the most important decisions of the central bank, the publication of the outcomes of the Monetary Council’s meetings, and the presentation of the results of the supervisory audits and procedures.

In autumn 2017, the MNB launched a campaign for the “Certified Consumer-friendly Housing Loan” programme with a view to calling public attention to the opportunity of applying for certified loans, and – on the whole and indirectly – to encourage the responsible selection of loan products and financial awareness. In addition, the information of the general public on the steps of the banknote replacement programme also continued.

2 A brief overview of the Magyar Nemzeti Bank

Company name: Magyar Nemzeti Bank

Registered Office: 1054 Budapest, Szabadság tér 8-9.

Form of operation: company limited by shares. The form of operation, i.e. the 'company limited by shares' designation or its abbreviation need not be included in the company name of the Magyar Nemzeti Bank.

Year of foundation: 1924

Owner (shareholder): the Hungarian State, represented by the minister in charge of public finances

Scope of activities: as defined by Act CXXXIX of 2013 on the Magyar Nemzeti Bank (hereinafter: MNB Act).

Subscribed capital: HUF 10 billion

2.1 OBJECTIVES, BASIC AND OTHER TASKS OF THE MNB

The Magyar Nemzeti Bank (hereinafter: MNB, the central bank) is a legal entity operating as a special company limited by shares, which conducts its operations in accordance with the provisions of the MNB Act.

In accordance with Article 127 of the Treaty on the Functioning of the European Union, the MNB Act –which establishes the MNB's primary objectives and basic tasks as well as its institutional, operational, personnel and financial independence and operation– stipulates that the primary objective of the MNB is to achieve and maintain price stability. Without prejudice to its primary objective, the MNB supports the maintenance of the stability of the system of financial intermediation, the enhancement of its resilience and its sustainable contribution to economic growth, as well as the economic policy of the government using the instruments at its disposal.

The MNB Act also stipulates the independence of the central bank in accordance with Article 130 of the Treaty on the Functioning of the European Union. On the basis of central bank independence, the MNB and the members of its bodies shall be independent in carrying out their tasks and meeting their obligations conferred upon them by the MNB Act and shall neither seek nor take instructions from the Government,

the institutions, bodies and offices of the European Union, the governments of its Member States or any other organisations or political parties, except from the European Central Bank and as required based on its membership in the European System of Financial Supervision. The Government or any other organisation shall adhere to this principle and shall not attempt to influence the MNB or any member of its bodies in the course of performance of their tasks.

The basic tasks of the MNB are as follows:

- it defines and implements monetary policy;
- it has the exclusive right to issue banknotes and coins, including commemorative banknotes and coins, which shall be the legal tender of Hungary;
- it has the exclusive right to hold and manage official foreign exchange and gold reserves, in order to preserve the external stability of the Hungarian economy;
- it has the exclusive right to conduct foreign exchange operations in relation to the management of foreign exchange reserves and the implementation of the exchange rate policy;
- it has the exclusive right to oversee payment and securities settlement systems, including overseeing the operation of the system and the operation of the organisation performing central counterparty activities in order to ensure the sound and efficient operation of these systems and the smooth circulation of money. Within the scope of its powers set forth in the MNB Act, it participates in the development of payment and securities settlement systems;
- it collects and publishes the statistical information required for carrying out its tasks and fulfilling its statistical reporting obligations toward the European Central Bank as defined in Article 5 of Protocol (No 4) on the Statute of the European System of Central Banks and of the European Central Bank attached to the Treaty on the Functioning of the European Union;
- it establishes the macroprudential policy for the stability of the entire system of financial intermediation and with the objective of enhancing the resilience of the system of financial intermediation and ensuring its sustainable

contribution to economic growth. To that end and within the limits specified in the MNB Act, the MNB explores the business and economic risks threatening the system of financial intermediation as a whole, promotes the prevention of the development of systemic risks and the reduction or elimination of evolving systemic risks; furthermore, in the event of disturbances to the credit market it contributes to the balanced functioning of the system of intermediation in financing the economy by stimulating lending and – in the event of excessive credit outflow – by restraining lending.

Above and beyond its basic tasks, the MNB has the following duties:

- it acts as a resolution authority;
- it acts as the sole supervisor of the financial intermediary system, in order to
 - a) ensure the smooth, transparent and efficient functioning of the system of financial intermediation;
 - b) facilitate the prudent operation of the persons and organisations forming part of the system of financial intermediation and supervise the prudent exercise of owners' rights;
 - c) discover undesirable business and economic risks to individual financial organisations or individual sectors thereof, reducing or eliminating specific or sectoral risks which have evolved, and taking preventive measures to ensure the prudent operation of individual financial organisations;
 - d) protect the interests of users of the services provided by financial organisations, and strengthen public confidence in the system of financial intermediation;
- it performs, via the Financial Arbitration Board, the out-of-court resolution of disputes related to the establishment and fulfilment of contracts for services, established between the consumer and the organisations of the financial intermediary system.

Any further tasks of the MNB shall be defined by acts and, in relation to the supervision of the system of financial intermediation, by legal regulations adopted pursuant to the authorisation of an act. Such tasks of the MNB shall comply with the basic tasks and responsibilities of the MNB as defined in the MNB Act.

Pursuant to Act CXCV of 2011 on the Economic Stability of Hungary, the Governor of the MNB is a member of the Fiscal

Council (FC), and thus the information and professional expertise available in the MNB supports the work of the FC. The MNB prepares background analyses for the duties of the FC stipulated in the Stability Act and makes such available to the FC.

2.2 BODIES AND MANAGEMENT OF THE MNB

The MNB operates as a legal person functioning in the form of a single-member company limited by shares. The general rules pertaining to companies limited by shares and the relevant provisions of Act V of 2013 on the Civil Code are applicable to the MNB, with the exceptions laid down by the MNB Act.

The Hungarian State as the shareholder is represented by the minister in charge of public finances. The MNB operates without a General Meeting.

The **shareholder** is entitled to pass decisions, by way of a shareholder's resolution, on the establishment and on the amendment of the Statutes as well as on the appointment, dismissal and remuneration of the auditor.

As a guarantee of independence, in contrast to the practice of other companies limited by shares, the remuneration of the MNB's Governor, Deputy Governors and other members of the Monetary Council as well as the members of the Supervisory Board are determined by the MNB Act rather than by the shareholder.

Likewise, the bodies of the MNB are specified by the MNB Act as follows: the Monetary Council, the Financial Stability Council, the Executive Board, and the Supervisory Board.

The MNB's supreme decision-making body is the **Monetary Council**.

The scope of competence of the Monetary Council includes:

- strategic decisions concerning monetary policy, the issue of legal tender, the holding and management of foreign exchange and gold reserves, as well as strategic decisions relating to foreign exchange transactions in the context of foreign exchange reserve management and implementation of exchange rate policy including and strategic decisions concerning statistical tasks, in particular, decisions regarding the level of the reserve ratio, interest rate payable on the minimum central bank reserves, decisions related to the exchange rate regime and determining the central bank base rate;

- in relation to macroprudential tasks, the oversight, the supervision of the financial intermediary system and the MNB's role as a resolution authority, decision on the strategic framework within which the Financial Stability Council makes its decisions;
- establishing the rules of procedure;
- decisions in any other matter in the exclusive competence of the Monetary Council as defined by law.

Members of the Monetary Council are: the Governor of the MNB as Chairman of the Monetary Council, the Deputy Governors of the MNB and the members elected by Parliament for six years. The Monetary Council has at least five and at most nine members.

At the first meeting of each year, the Monetary Council elects a Deputy Chairman from among the Deputy Governors of the MNB, who substitutes for the Governor of the MNB in the event of his absence – with the exception of the issuance of decrees. In 2017, the Monetary Council elected Márton Nagy, Deputy Governor, as Deputy Chairman.

In 2017, the members of the Monetary Council were:

- Dr György Matolcsy, Governor, Chairman of the Monetary Council from 4 March 2013,
- Márton Nagy, Deputy Governor from 1 September 2015,
- Dr Ferenc Gerhardt, Deputy Governor from 22 April 2013,
- Dr László Windisch, Deputy Governor from 2 October 2013,
- Dr Gusztáv Báger, from 6 July 2015,
- Dr János Béla Cinkotai, from 22 March 2011 to 22 March 2017,
- Dr Kolos Kardkovács, from 12 September 2016,
- Dr György Kocziszky, from 5 April 2011, and re-elected from 6 April 2017,
- Gyula Pleschinger, from 5 March 2013,
- Dr Bianka Parragh, from 23 March 2017.

The **Financial Stability Council** acts as the decision-making body of the MNB in relation to oversight, macroprudential tasks and resolution authority duties, as well as prudential supervision within the framework defined by the Monetary

Council. In relation to these responsibilities, the Financial Stability Council acts on behalf of the MNB in administrative proceedings. Within this scope of competence, the Financial Stability Council

- continuously monitors the stability of the system of financial intermediation as a whole and of the financial markets, in order to maintain the stability of the system of financial intermediation as a whole;
- takes account of risk factors threatening the system of financial intermediation as a whole;
- analyses the risks related to certain types of institutions or products or to the spread of these which may represent a threat to the system of financial intermediation as a whole;
- monitors developments on international and European markets and risks which may represent a threat to the stability of the system of financial intermediation as a whole, and makes decisions on the necessary measures within the strategic framework defined by the Monetary Council;
- discusses strategic, regulatory and risk-related issues affecting the system of financial intermediation as a whole and issues opinions if necessary;
- in situations threatening the stability of the system of financial intermediation, assesses systemic risks and decides on the measures required to mitigate or eliminate such risks;
- places on its agenda, as necessary, the recommendations, opinions and risk warnings of the European Systemic Risk Board relevant to the system of financial intermediation as a whole;
- discusses the recommendations and decisions issued by the European Supervisory Authorities as needed, including decisions addressed to national supervisory authorities calling for specific measures in the event of serious risks to the stability of the European financial system and expresses its opinion on the tasks arising from such decisions;
- publishes non-binding recommendations for persons and organisations supervised by the MNB describing the basic principles of the legal enforcement practices of the MNB;
- annually defines the priority target areas of the MNB's control activities; and

– makes decisions in administrative proceedings relating to the exercise of supervision over the system of financial intermediation and to the performance of resolution tasks.

Members of the Financial Stability Council:

- the Governor of the MNB as its chairman,
- the Deputy Governor responsible for monetary policy and lending incentives, and the Deputy Governor responsible for the financial institutions supervision and consumer protection, and
- as an executive appointed by the Governor of the MNB, the Deputy Governor Statistics and Financial Infrastructures,
- as executives appointed by the Governor of the MNB, the Executive Director for Monetary Policy and Economic Analysis and the Executive Director for Financial Institutions Supervision,
- as executives appointed by the Governor of the MNB, from 23 February 2017, the Executive Director for Licensing and Legal Enforcement and the Executive Director for Macroprudential Policy, and
- the Director General.

In accordance with the MNB Act, responsibility for implementing the decisions of the Monetary Council and the Financial Stability Council, as well as for managing the operation of the MNB rests with the **Executive Board**.

The scope of competence of the Executive Board includes:

- managing the implementation of the decisions of the Monetary Council and the Financial Stability Council;
- approving the accounting report of the MNB and adopting decisions on the payment of dividends;
- approving the draft report to be sent to the shareholder on the management and assets of the MNB;
- approving matters related to the organisation and internal management of the MNB;
- approving study plans and programmes relating to the operation of the MNB and the performance of its tasks, including the costs of the development and operational plan;

– managing the MNB’s internal audit organisation in respect of tasks falling outside the scope of competence of the Supervisory Board, and discussing the observations and plans of the internal audit;

- amending the collective agreement in respect of employment rights and obligations, the exercise and performance of these rights and obligations, and the associated procedures; and
- adopting decisions in respect of the central bank’s powers to manage accounts and other financial and auxiliary financial services, as well as certain auxiliary services supplementing investment service activities.

The members of the Executive Board, operating as the executive body of the MNB, are the Governor, as the Chairman of the Board, and the Deputy Governors of the MNB.

Provisions relating to the functions and operational procedures of the Monetary Council, the Financial Stability Council and the Executive Board are set forth in the MNB Act, the MNB’s Statutes, Organisational and Operational Rules as well as the rules of procedure formulated by these bodies.

In addition to the auditor appointed by the shareholder, the MNB is also audited by the State Audit Office and the Supervisory Board.

The supervisory competence of the **State Audit Office** over the MNB is set forth in the Act on the State Audit Office. The State Audit Office supervises the financial management of the Magyar Nemzeti Bank and its activities that are not included in its basic tasks. In this regard, the State Audit Office examines if the MNB operates in accordance with the applicable law, its Statutes and the shareholder’s resolutions.

The **auditor** of the MNB can be appointed for a maximum of 5 years. The shareholder decides on the appointment, dismissal and remuneration of the auditor by way of a shareholder resolution. Prior to the appointment or proposal for the dismissal of the MNB’s auditor, the Governor of the MNB consults the President of the State Audit Office.

As set forth in the MNB Act, the **Supervisory Board** is the body responsible for the continuous supervision of the MNB on behalf of the owner. The supervisory competence of the Supervisory Board defined by the MNB Act does not cover the supervision of the MNB’s performance of its basic tasks,

its actions as a resolution authority and its supervisory activity in respect of the financial intermediary system, or their impact on the MNB's profit and loss. Accordingly, the Supervisory Board compiles the report on the annual accounts as specified in the Act on Accounting within the above limitations.

Members of the Supervisory Board as defined in the MNB Act are its Chairman elected by Parliament, three additional members elected by Parliament, the representative of the minister in charge of public finances and an expert appointed by this minister. The Chairman of the Supervisory Board elected by Parliament is nominated by the parliamentary committees of the governing parties, whereas the other members elected by Parliament are nominated by parliamentary committees. The mandate of the members of the Supervisory Board is for the duration of the mandate of the Parliament and lasts until the end of the mandate of the Parliament.

Parliament elected the members of the Supervisory Board on 6 July 2015, as the mandate of the previous Supervisory Board expired.

Members of the Supervisory Board in 2017:

- Dr Ferenc Papcsák, Chairman,
- László Madarász,
- István Molnár,
- Dr László Nyikos,
- Dr Gábor András Szényei, and
- Dr Attila Simon Tóth.

2.3 ORGANISATION OF THE MNB

The organisation of the MNB is based on the operating and operational governance model introduced on 1 July 2013 and, in respect of the integrated organisation, on 1 October 2013. Although the organisational structure has changed several times since then, these changes did not fundamentally alter the organisational structure developed in 2013.

Fulfilment of the statutory and operational tasks of the MNB is controlled and supervised by, in addition to the Executive Board and the members thereof, the Director General, and, in their capacity as the top level executors of the decisions, the executive directors.

In 2017, modifications of the MNB's organisational structure were introduced in relation to areas controlled by the Governor, the Deputy Governor for Monetary Policy and Lending Incentives, the Deputy Governor for Financial Institutions Supervision and Consumer Protection, the

Deputy Governor for Statistics and Financial Infrastructures, as well as by the Director General. The primary objective of the modifications was to enhance efficiency.

The work organisation as at 31 December 2017, developed as a result of the organisational changes and destined for the fulfilment of the tasks, is illustrated in the **organisation chart**.

2.4 THE MNB AS A MEMBER OF THE EUROPEAN SYSTEM OF CENTRAL BANKS

Hungary's accession to the European Union also entailed the MNB's membership in the European System of Central Banks (ESCB). The ESCB comprises the European Central Bank (ECB), which was established in June 1998 with its registered office in Frankfurt, and the national central banks of the EU Member States. Its governing bodies are the Executive Board and the Governing Council, the latter consisting of the members of the ECB's Executive Board and the governors of the central banks of the euro area Member States. The third decision-making body of the ECB is the General Council, which is responsible for maintaining an institutional relationship between the Eurosystem and the central banks of non-euro area Member States. The General Council holds its meetings quarterly and consists of the President and the Vice-President of the ECB and the governors of the central banks of all EU Member States. The key responsibilities of the General Council include consultancy concerning preparations for accession to the euro area, approval of the convergence reports of the ECB and monitoring the functioning of ERM II. Within the framework of the latter activity, it assesses the sustainability of the bilateral exchange rate of non-euro currencies participating in ERM II against the euro and provides a forum for the alignment of monetary and exchange rate policies and the management of intervention and financing mechanisms in ERM II. In addition, the General Council is involved in verifying whether the central banks of EU Member States and the ECB comply with the prohibition of monetary financing of the budget and privileged access of the public sector to financial institutions. The General Council also participates in the ECB's advisory functions and in the collection of statistical information; it must be consulted in respect of any changes in the rules of accounting and financial data reporting, as well as issues related to the adjustment of the keys for subscriptions to the ECB's capital. The mandate of the General Council will expire on the date when all of the Member States have adopted the euro.

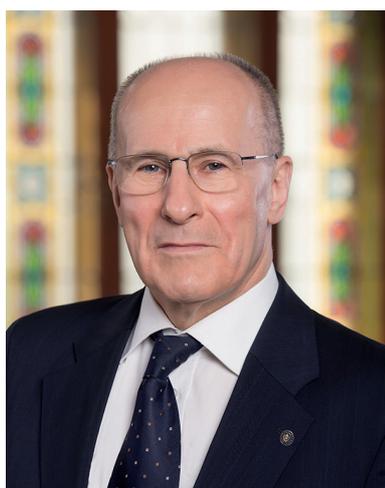
The number of ESCB members did not change in 2017.

The ESCB members are also the owners of the ECB. The respective ownership shares of Member States are

**Members of the Executive Board and the Monetary Council
of the Magyar Nemzeti Bank**



Dr György Matolcsy
Governor,
Chairman of the Monetary Council



Dr Ferenc Gerhardt
Deputy Governor,
Member of the
Monetary Council



Márton Nagy
Deputy Governor,
Deputy Chairman of the
Monetary Council



Dr László Windisch
Deputy Governor,
Member of the
Monetary Council

Members of the Monetary Council of the Magyar Nemzeti Bank



Dr Gusztáv Báger
Member of the Monetary Council



Dr János Béla Cinkotai
Member of the Monetary Council



Dr Kolos Kardkovács
Member of the Monetary Council



Dr György Kocziszký
Member of the Monetary Council



Dr Bianka Parragh
Member of the Monetary Council



Gyula Pleschinger
Member of the Monetary Council

Members of the Supervisory Board of the Magyar Nemzeti Bank



Left to right: Dr Attila Simon Tóth, Dr László Nyikos, László Madarász, Dr Ferenc Papcsák (Chairman), Dr Gábor András Szényei, István Molnár

determined according to their shares in the GDP and total population of the EU (on the basis of statistical data compiled by the European Commission). Since 1 July 2013, the paid-up capital of the ECB amounts to EUR 10.825 billion.

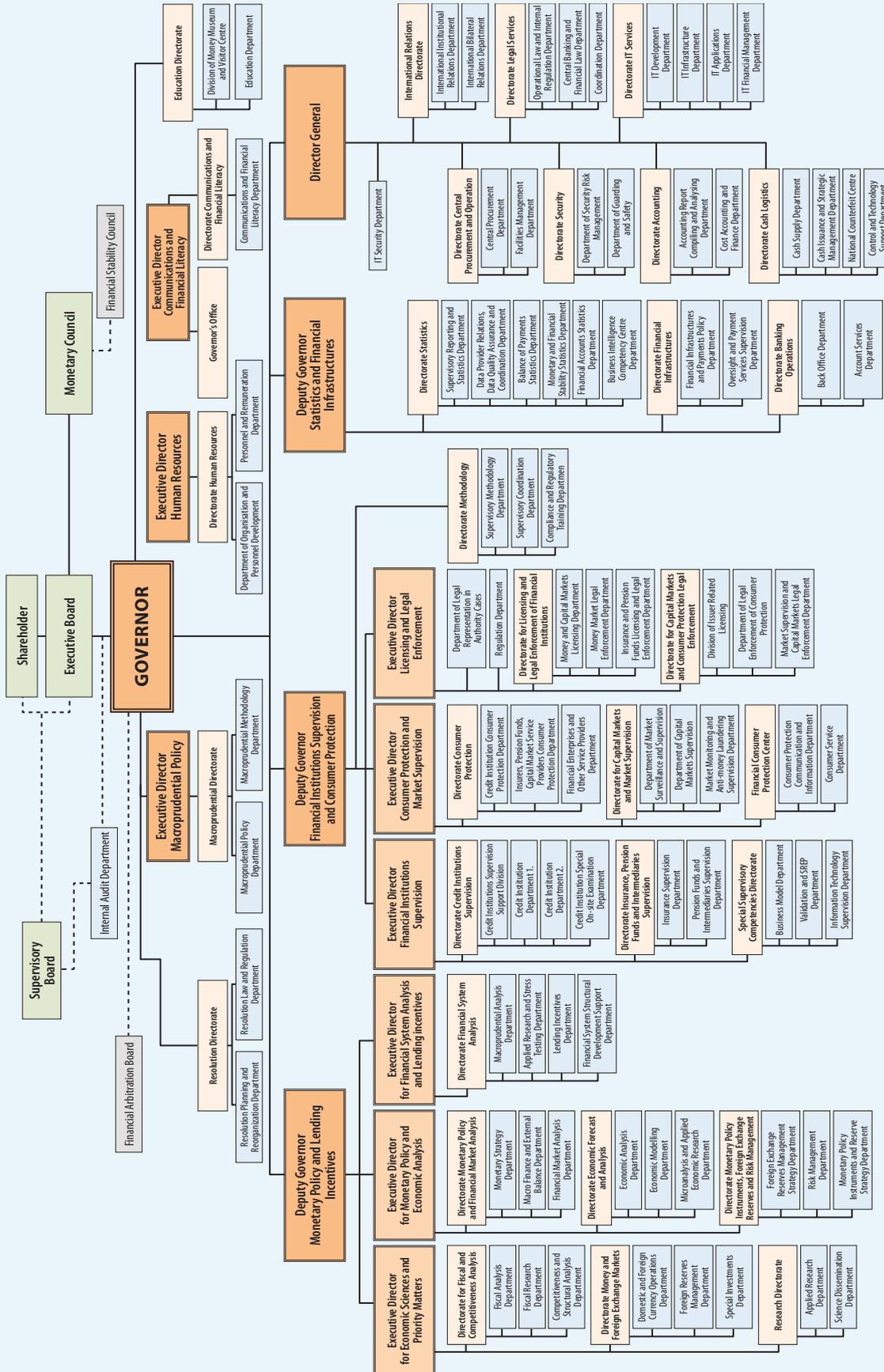
Currently, euro area central banks subscribe 70 per cent of the ECB's capital, while the remaining 30 per cent is divided among the central banks of non-euro area Member States. These latter central banks pay a pre-defined minimum quota of their respective subscriptions to the ECB's capital as a contribution to the operational costs of the ECB which are incurred in connection with their ESCB membership. With effect from 29 December 2010, this contribution was defined as 3.75 per cent of the respective subscriptions (previously it had been 7 per cent). As set forth in the Statute of the ESCB and of the ECB, the capital keys are adjusted every five years, or whenever a new Member State joins the EU. The last adjustment of the capital keys took place in the second half of 2013. Consequently, on 1 January 2014, the share of the MNB in the ECB's paid-up capital increased from 1.3740 per cent to 1.3798 per cent and since then it remained unchanged in 2015-2017.

The ESCB Committees play an important role in the work of the ECB's decision-making bodies. The basic role of these committees is to prepare decisions and facilitate coordination as per the horizontal division of various central bank duties, covering all areas of central banking operations from monetary policy through communication to statistical data reporting. Experts from the central banks of non-euro area Member States attend committee meetings where the agenda includes items affecting the ESCB as a whole and which fall within the competence of the General Council (for a detailed description of the ESCB Committees and the activities of the various forums assisting them, see Chapter 3.13). The committees meet and discuss current issues relevant to their professional areas in ESCB composition, 4-5 times a year on average, according to a schedule determined for one year in advance.

The senior executives and relevant experts of the MNB continue to play an active role in the activities of these committees and their working groups. In 2017, the ESCB committees continued to be very useful fora for the exchange of professional experience.

Organisation Chart

Organisation Chart of Magyar Nemzeti Bank – 31 December, 2017



3 Review of the MNB's performance in 2017

3.1 MONETARY POLICY

In 2017, the Monetary Council of the MNB, in addition to steadily maintaining the key policy rate, made efforts to respond to the challenges related to the low inflation environment by applying and expanding the set of unconventional monetary policy instruments with a view to achieving the medium-term inflation target in a sustainable manner and adequately stimulating the real economy. Over the long term, the central bank can contribute to economic growth and a predictable macroeconomic environment by achieving and maintaining price stability and by ensuring the stability of the financial system.

International financial market developments

Global financial market sentiment was volatile during the year, but developed positively on the whole. During the first quarter, the investment atmosphere was primarily influenced by the measures of the new US administration as well as by the expectations related to the March decisions of the Fed and the ECB. In the second quarter, the presidential elections in France and the extension of the production cut by OPEC were key factors in terms of market sentiment. During that period, the ECB revised its inflation projection significantly downwards, as a result of which market participants anticipated that the accommodative monetary conditions would be maintained for a longer period. US and European stock price indices rose further, with the S&P 500 and DAX indices reaching new highs. In the third quarter, developments on the market were influenced by certain decisions and statements by central banks and the Brexit negotiations in addition to the strengthening of geopolitical risks. During the quarter, the ECB once again lowered its inflation forecast. As a result of the tensions in the Korean peninsula, risk indicators rose significantly at first, before later adjusting. In the last quarter, the financial and capital markets were characterised by high risk appetite. Market developments were shaped by the decisions of the major central banks and political events in Europe. Major stock exchange price indices reached new historical highs, while risk indicators remained low. The appreciation of the euro may have been mostly attributable to the favourable macro figures published in the euro area. The ECB announced that it would continue asset purchases in a reduced volume until September 2018. At that time, market participants expected the first interest rate hike to take place in mid-2019. The interest rate path priced in did not change

significantly after the interest rate increase by the Fed in December 2017. Due to the inflation paths expected in the countries of the region and to special features of the inflation targeting systems, the market pricings imply central bank responses with different timing (the inflation target of the Czech central bank is 2 per cent, while that of the Romanian and Polish central banks is 2.5 per cent). In April 2017, the Czech central bank ended its exchange rate commitment, which had ensured loose monetary conditions from 2013, and then in August and November it decided to raise the key policy rate by 20 and 25 basis points, respectively. At its rate-setting meetings in October and November, the Romanian central bank decided to narrow the interest rate corridor by 25 basis points on each occasion.

Domestic economic environment

Average annual inflation amounted to 2.4 per cent in 2017. At the beginning of the year, in parallel with the fading out of the inflation-curbing effect of the earlier decline in oil prices, the consumer price index rose to the tolerance band and remained steadily in that range during the year. Underlying inflation indicators capturing the medium-term outlook indicated a stable inflationary environment throughout the year. The Hungarian economy continued to grow dynamically during the year. In addition, fiscal policy remained prudent in 2017, resulting in a decline in the debt ratio as a percentage of GDP. The net lending of the economy continued to provide steady support for the decrease in external debt and the external vulnerability of the economy. In December, the Monetary Council deemed that – in parallel with the upturn in domestic demand – Hungarian economic output was close to its potential level. According to the press release of the December rate-setting meeting, growth of the Hungarian economy will continue to be dynamic in 2018, and then – if the assumptions of the December forecast hold – it will slow down from 2019. The inflation target is expected to be achieved in a sustainable manner by the middle of 2019.

Conventional monetary policy measures

In 2017, the Monetary Council did not change the key interest rate, which has remained at its historic low of 0.90 per cent since the end of May 2016. At the end of the year, the Monetary Council assessed that in order to reach the inflation target in a sustainable manner, it was necessary to

maintain the base rate and the loose monetary conditions at both short and long ends for an extended period. The credibility of steadily maintaining the central bank base rate was also confirmed by market expectations, as yield expectations were at a low level.

Unconventional monetary policy measures

Along with maintaining the base rate for an extended period, the Monetary Council applied several unconventional instruments during the year, as previously announced, and also decided to expand its set of unconventional monetary policy instruments next year. On a quarter-by-quarter basis, the Monetary Council limited the stock of three-month deposits – which amounted to HUF 750 billion at the end of the first quarter – to HUF 500 billion, HUF 300 billion and HUF 75 billion. With this quantitative restriction the central bank achieved the loosening of monetary conditions and also the stimulation of economic growth to a corresponding degree through the decline in money market rates. The three-month BUBOR was essentially close to 0 per cent. In the Monetary Council's assessment, the gradual lowering of the stock of three-month deposits fulfilled its role and thus the HUF 75 billion upper limit on the stock, registered at the end of 2017, will not be reduced further. The MNB managed the uncertainties related to the liquidity trends of the banking sector using the fine-tuning instruments introduced in October 2016 and supplemented in March 2017 with longer, 6-month and 12-month maturities. The Funding for Growth Scheme, adopted as a temporary targeted instrument, achieved the objectives set forth upon the announcement of the scheme, and was thus phased out by 31 March 2017, pursuant to the decision of the Monetary Council.

With a view to mitigating extreme fluctuations in interbank interest rates, the MNB maintains an asymmetric interest rate corridor for the overnight maturity. In response to the multiple postponements of achieving the inflation target, the central bank – as part of its harmonised measures in September – reduced the overnight deposit rate by 10 basis points to -0.15 per cent. Throughout 2017, the Monetary Council's communication stressed that maintaining loose monetary conditions for an extended period was necessary to achieve the inflation target in a sustainable manner. Bearing this in mind, from September the Monetary Council repeatedly noted in the press releases of the rate-setting meetings that it deemed it important to achieve loose monetary conditions not only on the short, but also on the longer end of the yield curve. To this end, the Monetary Council decided to introduce two unconventional instruments from January 2018, which will constitute an integral part of the set of monetary policy instruments in the future. Accordingly, the Monetary Council introduced

the unconditional interest rate swap (MIRS) facilities with 5-year and 10-year maturities and the allocation amount of which has been set at HUF 300 billion for the first quarter of 2018. In addition, the MNB also launched a targeted programme aimed at purchasing mortgage bonds with maturities of three years or longer. Both programmes will also contribute to the increase in the share of loans with long periods of interest rate fixation. By the end of the year, the three-month BUBOR had fallen to 0.03 per cent, while the three-month discount Treasury Bill yield was down to -0.01 per cent. The Monetary Council achieved its goal, as long-term yields declined substantially in the final quarter, which was mostly attributable to the MNB's forward guidance, the central bank's interest rate swap instruments and the announcement of the mortgage bond purchase scheme in November.

Inflation developments in 2017

At the beginning of the year, with the fading of the inflation-curbing effect of the earlier decline in oil prices, the consumer price index rose to the tolerance band and subsequently remained steadily in that range. Annual inflation in December was 2.1 per cent, while average annual inflation amounted to 2.4 per cent in 2017.

Chart 1
Inflation target and inflation developments



Source: HCSO and MNB.

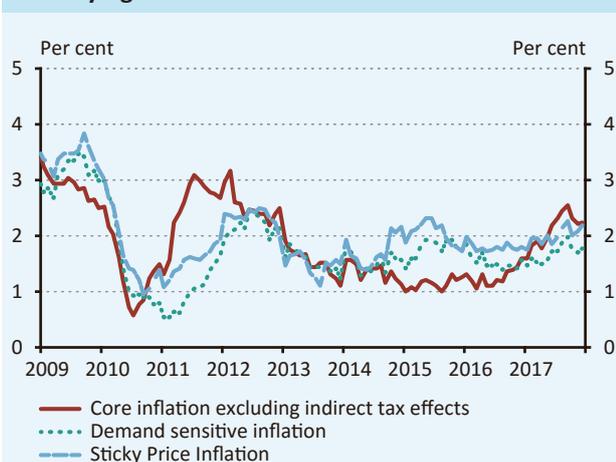
The indices capturing underlying inflation stabilised around 2 per cent throughout 2017, mainly supported by low imported inflation and moderate inflation expectations. The dynamic, double-digit wage increase had a moderate impact on inflation developments, which was partly attributable to the corporate cost-curbing effect of the contribution and corporate income tax cuts at the beginning of 2017. The effect of rising consumption on consumer prices remained moderate due to the structure of the consumption growth, directed to durable industrial goods, which have smaller price effect.

Table 1
Consumer price index and its components
 (percentage change, year-on-year)

	2015	2016	2017	2017			
				Q1	Q2	Q3	Q4
Core inflation	1.2	1.4	2.3	1.8	2.1	2.8	2.7
Unprocessed food	4.8	0.4	0.9	0.0	0.8	0.5	2.2
Fuel and market energy	-11.0	-6.3	7.1	15.6	5.0	4.1	3.6
Regulated prices	-0.7	0.2	0.3	0.4	0.4	0.5	0.0
Inflation	-0.1	0.4	2.4	2.6	2.1	2.4	2.3
Inflation with constant tax rate	-0.2	0.6	2.8	3.1	2.5	2.8	2.8

Note: In the case of price indices with a constant tax rate, the HCSO adjusts the consumer price index for the technical effect of changes in indirect taxes.
 Source: HCSO

Chart 2
Underlying inflation indicators



Source: MNB.

Changes in monetary policy instruments

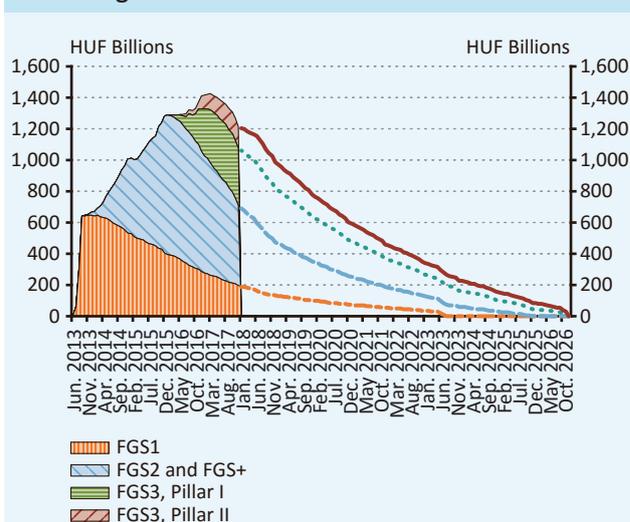
Funding for Growth Scheme

In the three phases of the Funding for Growth Scheme (FGS), which ended on 31 March 2017, nearly 40,000 micro, small and medium-sized enterprises were able to access financing on favourable terms in the amount of more than HUF 2,800 billion within the framework of 78,000 loan and lease transactions in total. In the third, phase-out stage, lasting from January 2016 to March 2017, banks provided Hungarian micro, small and medium-sized enterprises with financing in the amount of HUF 685 billion, thereby utilising 98 per cent of the facility of HUF 700 billion. In the case of the transactions concluded in the phase-out stage, with its decision of December 2017 the Monetary Council extended the availability period for the drawdown of the loans (tranches) until mid-2019 and the MNB also made it possible that if the borrowers changed bank they

could refinance their loan borrowed earlier in this phase also within the framework of the FGS.

The outstanding borrowing peaked in the first quarter of 2017, exceeding HUF 1,400 billion, which accounted for roughly one third of the entire SME loan portfolio. From now on, outstanding borrowing is expected to gradually decrease: by mid-2020 the loan portfolio may fall by one half, i.e. close to HUF 700 billion, and by early 2023 it may fall roughly to one quarter thereof, i.e. close to HUF 350 billion, before it is fully zeroed out at the end of 2026 (Chart 3).

Chart 3
Build-up and expected development of outstanding borrowing under the FGS



Note: the loans extended in the foreign currency pillar of the third phase do not increase the MNB's balance sheet, since forint loans are taken back by the central bank in a swap transaction in exchange for euro, disbursed from the foreign exchange reserves. Source: MNB.

Offering a fixed, favourable interest rate and free of exchange rate risk, the FGS loans were also available for

the long term, providing SMEs with predictability, which helped them expand their business activity and implement the postponed new investments. Together in all phases, loan and lease transactions of roughly HUF 1,700 billion provided finance for new investments. According to the MNB's estimates, the FGS may have contributed to economic growth by some 2 percentage points between 2013 and 2016, and may have increased employment by around 20,000 persons.

The MNB's set of monetary policy instruments

The quantitative restriction of the three-month deposit was introduced in autumn 2016 and continued in 2017 as well, in addition to maintaining the base rate unchanged at 0.9 per cent. Pursuant to the decision of the Monetary Council, the MNB restricted banks' access to the three-month deposits to an increasing degree at the end of each quarter of 2017. In accordance with the Monetary Council's decision, the central bank gradually decreased the accepted volumes at the deposit tenders, as a result of which the portfolio reached the pre-defined value of the quantitative limit by the end of each quarter. With a view to maintaining the steadily loose monetary conditions and the crowding-out effect, in 2017 the MNB held in total 82 forint liquidity-providing fine-tuning swap tenders, of which 40 were for 1-month, 23 for 3-month, 7 for 6-month and 12 for 12-month maturities.

According to the assessment and decision of the Monetary Council in September 2017, the restriction of the three-month deposit fulfilled its role. Accordingly, after December 2017 the three-month deposit portfolio will not decrease further from the level of HUF 75 billion recorded at the end of 2017, which is consistent with maintaining the loose monetary conditions resulting from the quantitative restriction introduced due to the systemic decline in banking sector liquidity.

Based on the Monetary Council's decision of 19 September, the lower boundary of the interest rate corridor (overnight deposit rate) decreased by 10 basis points to -0.15 per cent, while the upper boundary thereof (overnight loan interest rate) remained constant until the end of 2017, at 0.9 per cent.

The quantitative restriction achieved its objective, as the liquidity crowded out from the three-month deposits reduced yields and kept them low both in the interbank markets and in other relevant markets. Similarly to other relevant short-term yields, HUFONIA, which measures the level of interest rates on the overnight market, was close to 0 per cent during the year. The HUFONIA average rose

from 5 basis points recorded in January to 10 basis points by May, and then moved into the negative range, falling to -4 basis points in October and November. The HUFONIA closed the year with an average December value of -1 basis point. The three-month benchmark rates, which are of special significance in interest rate transmission, continued to decline from the beginning of 2017 until the end of the first half-year. The three-month BUBOR quotes fell by 34 basis points to 3 basis points during the year, while three-month discounted treasury bill yields were down to -1 basis point by the end of the year after a fall of 7 basis points. The implied forint yields, calculated from the three-month swaps, closed at 9 basis points, after reaching their trough of -43 basis points at the end of November. The three-month yield derived from forward rate agreements (FRAs) related to BUBOR fluctuated between 19 and 35 basis points in the first quarter of the reporting period, and then between 16 and 20 basis points in the second quarter. The yield dropped to 0-13 basis points in the third quarter and fluctuated around 2-5 basis points in the fourth quarter.

In September, the Monetary Council defined as an objective that loose monetary conditions should prevail not only on the short but also on the longer end of the yield curve. To this end, the MNB decided to introduce two unconventional instruments from January 2018, which constitute an integral part of the set of monetary policy instruments.

- On the one hand, the central bank introduced an unconditional interest rate swap for monetary policy purposes (MIRS) with maturities of 5 and 10 years, in the framework of which the MNB pays 6-month BUBOR against the fixed interest rate paid by the counterparty bank participating in the transaction. The Monetary Council determined the facility amount applicable to the instrument in HUF 300 billion for the first quarter of 2018. The IRS instrument is available to the counterparty banks at regular, biweekly tenders from 18 January 2018.

- On the other hand, the central bank also launched a targeted mortgage bond purchase programme, where it buys mortgage bonds with agreed maturity of 3 years or longer. The MNB makes purchases both on the primary and the secondary mortgage bond markets, giving priority to primary issuance purchases. The facility amount of the scheme is a maximum 50 per cent of the HUF-denominated mortgage bond holding then issued. These mortgage bond purchases commenced in January 2018.

In addition to the declared monetary policy objective, these unconventional programmes also facilitate growth in the ratio of loans with long interest rate fixation, and particularly growth in fixed-rate household mortgage

loans. The MNB published the operative details of the programmes on 21 December 2017.

The fulfilment of the commitments made by the banks for 2016 under the Market-based Lending Scheme (MLS) was reviewed in February 2017. In 2016, the banks participating in the scheme increased their lending to SMEs by HUF 302 billion, in contrast to their commitments of HUF 195 billion, which represents fulfilment of 155 per cent at level of the banking sector. 15 of the 17 participating banks or bank groups exceeded their preliminary commitments, while the performance of 2 institutions fell short of their undertaking. In accordance with the conditions set out in the product information sheet, the MNB closed the LIRS transactions of the respective banks up to the level of the shortfall, i.e. in part at one of the banks and in full at the other one. Also considering the voluntary termination by one bank, by 2017 the LIRS portfolio of banks amounted to HUF 679 billion, while their lending commitment was HUF 170 billion.

In order to enable the banks to raise their lending commitments for 2017, on 24 May the Monetary Council decided to launch the second phase of the MLS. In the second phase, the central bank instruments from the first phase (LIRS and preferential deposit) were available to the banks only in limited volume. The additional facility amount of the conditional interest rate swaps offered by the central bank was HUF 300 billion, while that of the preferential deposits was HUF 150 billion. With a view to raising the individual banks' commitments, the banks that committed to increasing their lending to an outstanding degree in the second phase of MLS, had proportionally higher share in the additional preferential deposit facility. The MNB held the tender of the second phase of MLS on 6 July 2017, at which nine banks committed to raising their lending to SMEs in the amount of HUF 228 billion, which provided them with the opportunity to place preferential deposits in an additional amount of HUF 150 billion. Thus, on the whole, the LIRS portfolio rose to HUF 906 billion, while the potential maximum volume of the preferential deposits increased to HUF 489 billion from 1 August.

Forint liquidity management of the banking system

In terms of liquidity management, 2017 was dominated primarily by the continuation of the quantitative restriction on the three-month deposit, which started in autumn 2016, and the application of the central bank's fine-tuning swap instruments.

In 2017, the net forint liquidity of the banking system (three-month deposit, balance on payment accounts, overnight deposits reduced by the central bank loans) declined in total by

HUF 364 billion to HUF 1,743 billion. The liquidity impact of the Single Treasury Account (STA) related to budgetary processes reduced the banking system's liquidity by HUF 362 billion, while the growth in cash holdings tightened liquidity by HUF 559 billion. In addition, the MNB's foreign exchange operations (including the tightening effect of the forint conversion swaps, which expired during the year in the total amount of EUR 1,082 million and the broadening effect of the fine-tuning swaps) increased the liquidity of the banking system by HUF 518 billion in total. With a view to maintaining loose monetary conditions and the crowding-out effect consistent with that, the MNB offset the autonomous liquidity impacts by increasing the central bank's forint liquidity-providing swap portfolio. The central bank's swap portfolio rose from HUF 400 billion registered at the beginning of the year, to HUF 849 billion by the end of the first half-year and reached its annual maximum on 20 December in the amount of HUF 1,530 billion, while its year-end balance was HUF 1,518 billion.

The three-month deposit portfolio of HUF 900 billion, registered early January, declined to HUF 75 billion by the end of December, in accordance with the prevailing quantitative limit.

Table 2
Aggregated bids submitted and accepted at the three-month deposit tenders, in HUF billions

	Total bid amount	Total amount allotted
25.01.2017	292	75
01.03.2017	533	325
29.03.2017	526	350
26.04.2017	253	50
24.05.2017	406	175
21.06.2017	403	275
19.07.2017	124	50
23.08.2017	248	125
20.09.2017	333	125
25.10.2017	132	25
22.11.2017	132	25
20.12.2017	121	25

The banks participating in MLS actively used the preferential deposit facility throughout the year. The average portfolio of preferential deposits in the first two months of 2017 amounted to HUF 294 billion, with an upper limit of HUF 390 billion. From March until the end of July a stable average deposit portfolio of HUF 298 billion developed with the upper limit reduced to HUF 339 billion. From August, as a result of the preferential deposit facility which was raised due to the results of the LIRS tender held in July, the average utilisation rose substantially, to HUF 438 billion.

The overnight deposit portfolio was HUF 451 billion on average in the first quarter and decreased to HUF 324 billion in the second quarter. In the third quarter, after a vigorous growth, the average value surged to HUF 528 billion, while in the last quarter it amounted to HUF 428 billion. As a result of the liquidity-augmenting effect of the tangible increase in budgetary expenditures in December, the net overnight deposit portfolio closed the year at its annual high, over HUF 1,200 billion.

During the year, as a result of the quantitative restriction and the banking sector's position which was mostly characterised by excess liquidity, the counterparty banks relied on the central bank's loan instruments only to a limited degree. Overnight loans were disbursed on 79 occasions in 2017, with an average amount of HUF 7.1 billion. The one-week loan facility was used by banks on 11 occasions; the highest value of the portfolio was registered at the beginning of January in the amount of HUF 120 billion, while its annual average was HUF 6 billion.

Instruments providing foreign exchange liquidity

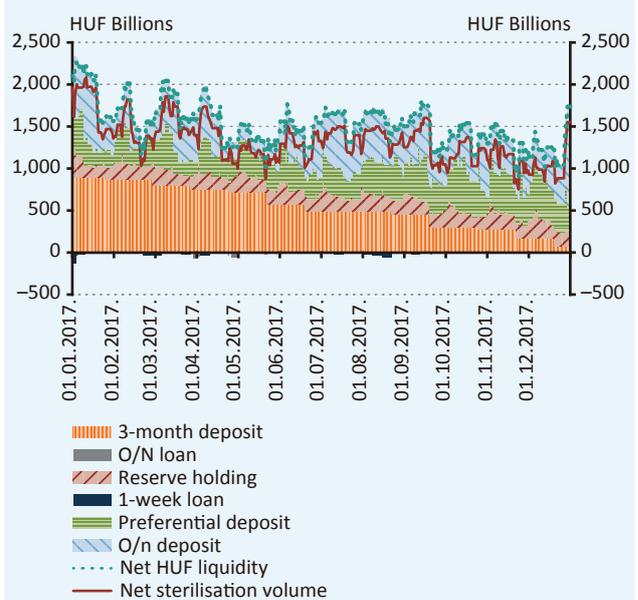
The unconditional swaps, related to the phasing out of household foreign currency loans, expired on 16 March 2017, 21 June, 20 September and 20 December in the amount of EUR 590 million, EUR 180 million, EUR 65 million and EUR 247 million, respectively; with this, all forint conversion-related swap transactions outstanding vis-à-vis the MNB expired in December 2017. Since the end of 2014, banks purchased foreign currency from the MNB in the amount of roughly EUR 9.7 billion in total, of which almost EUR 1.1 billion was purchased in 2017.

Due to the structural changes in recent years in the availability of the central bank overnight swap instrument providing EUR liquidity, the Hungarian banking sector's dependence on the swap market declined substantially, which justified reviewing whether or not it was still necessary to provide daily availability of the overnight swap instrument. As a result of the review, the MNB decided to suspend the swap instrument with effect from 18 July 2017.

Throughout 2017, swap market yield levels were lowered substantially, both by the decline in BUBOR rates and by the more active use of the central bank's swap instruments. For the key maturities, from one month to one year, inclusive, the implied interest rates dropped by almost 80 basis points during 2017. The swap market volatility, typical at quarter ends, remained moderate throughout the year, while the year-end temporarily caused significant volatility, primarily for shorter maturities. In the case of EUR/HUF foreign exchange swap market spreads, short-term quotes were

close to zero on average, similarly to the previous year, or were slightly negative: the annual average spread from the overnight to the three-month maturities was slightly negative, at -1 to -4 basis points. 6-month and 12-month maturities remained in the slightly positive domain, at 1 and 8 basis points, respectively. With lower volatility, prices on the overnight and tomnext maturities showed a few outliers, as usual. The outliers varied, both in the positive and negative direction, around the values of 100-227 basis points, with the exception of the year-end, which was characterised by values many times higher (overnight: 1,600 basis points, tomnext: 1,800 basis points). In the case of longer maturities, spreads were somewhat more volatile compared to the previous year, with larger positive jumps: the annual maximum value on 3-month, 6-month and 12-month maturities was +67, +68 and +82 basis points, respectively, compared to last year's levels of below 50 basis points.

Chart 4
Recourse to the central bank's monetary policy instruments



Note: excluding the forint liquidity providing fine-tuning swaps provided under Pillar III of the Funding for Growth Scheme.

Source: MNB.

3.2 STABILITY OF THE FINANCIAL INTERMEDIARY SYSTEM

Pursuant to the MNB Act, the primary objective of the MNB is to achieve and maintain price stability. Without prejudice to its primary objective, the MNB supports the maintenance of the stability of the financial intermediary system, the enhancement of its resilience and its sustainable contribution to economic growth and the economic policy

of the government using the instruments at its disposal. In addition, based on its mandate linked to its membership in the European System of Financial Supervision, the MNB performs the tasks imposed on it, originating from the competence of the European Banking Authority, the European Insurance and Occupational Pensions Authority, the European Securities and Markets Authority and the European Systemic Risk Board, supervises the Hungarian financial intermediary system, and also acts as a resolution authority.

Key developments in the financial system

The Hungarian banking system’s shock-absorbing capacity is robust both in terms of liquidity and capital adequacy (Chart 5) and strengthened further in 2017, also supported by favourable profitability trends. The domestic operating environment was characterised by a broad-based recovery and continued growth was observed both in lending and in the real estate market. As regards lending developments, growth continued both in the corporate and the household segments, and in addition to lending to SMEs, lending to the corporate sector as a whole also reached the upper part of the growth band of 5-10 per cent, supporting sustainable growth. Based on the Financial Conditions Index, which summarises the supply conditions of developments in lending, the cyclically restraining impact of the banking sector’s lending activity ceased completely. Accordingly, in terms of the annual expansion of the real economy, neither a cycle strengthening, nor a growth restraining impact was experienced. The previously identified external risks eased, but did not cease to exist completely. The banking sectors of several European economies are struggling with problems inherited from the crisis, which can be also traced in their poor lending activity. The globally low interest

rate environment results in a price increase of real assets, including real properties, and, in vulnerable countries, a further increase in indebtedness carries high risks.

The *Financial Stability Reports* provide a regular, comprehensive assessment of risks to financial stability, presenting the main risks, including the management of those risks. In the report released in autumn 2017, the MNB examined the financial vulnerability of households from several aspects and presented the risk-mitigating features of the Certified Consumer-friendly Housing Loans, which were launched in summer 2017. The analyses highlighted the fact that the difference in the spreads appearing in the pricing of fixed and variable rate housing loans was significant even by international standards. The potential risk arising from the variable rate may be mitigated by incentivising customers to use interest rates fixed for the long term.

In the long run, the profitability of the Hungarian banking sector may be deemed satisfactory, while the future level thereof can be ensured by enhancing lending activity and improving operational efficiency. The MNB is committed to innovation opportunities, also in its capacity as a regulatory authority, which may considerably contribute to increasing the efficiency and competitiveness of the Hungarian banking sector.

As regards developments in domestic lending, corporate lending also continued to grow in the period under review, and consequently outstanding lending in an annual comparison rose to the upper band of the 5-10 per cent growth range, based on transactions (Chart 6). Including

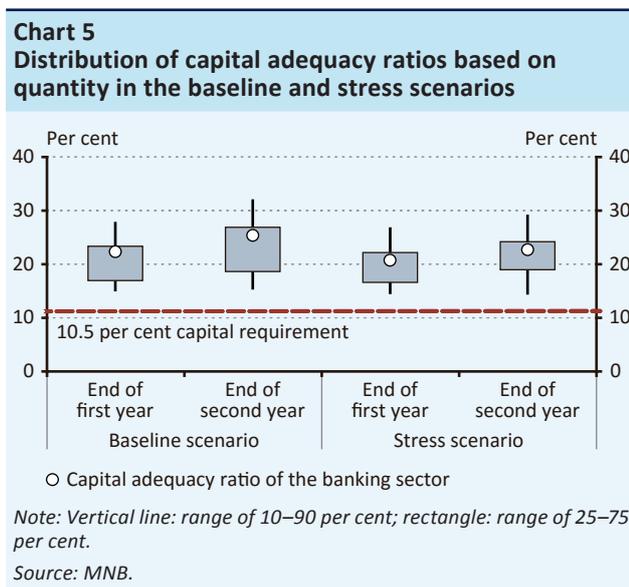
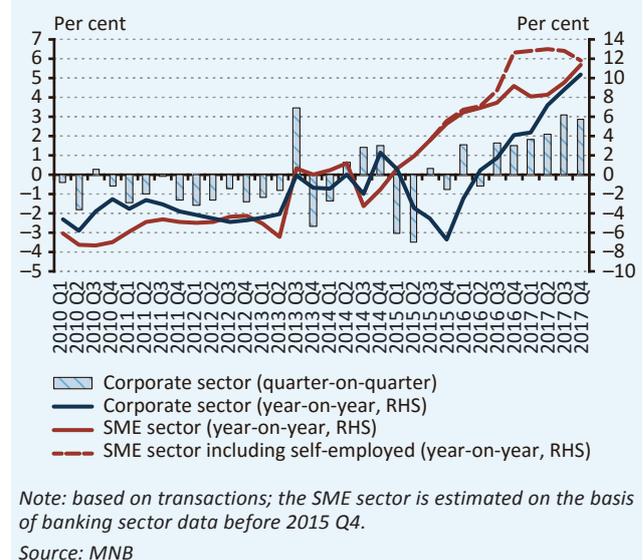


Chart 6
Annual growth rate of the outstanding borrowing of the entire corporate and SME sector



the transactions of the self-employed, the annual growth in lending to SMEs amounted to 12 per cent, but even when excluding the latter group the annual growth rate was 10 per cent. After closing the FGS at the end of the first quarter of 2017, the dynamics of lending to SMEs continued, which also characterised corporate lending as a whole.

In June 2013, the MNB launched the Funding for Growth Scheme (FGS) to mitigate the disorders observed in SME lending, to strengthen financial stability and to facilitate economic growth. The third, and at the same time phase-out, contracting phase of the scheme ended on 31 March 2017; in the three phases together loans on favourable terms were extended to almost 40,000 Hungarian micro, small and medium-sized enterprises in the amount of roughly HUF 2,800 billion. The FGS made a major contribution to the realisation of the turnaround in lending. After the launch of the scheme, the annual contraction of 5-7 per cent observed in lending to SMEs stopped and from 2015 lending started to rise gradually, while in 2016 and 2017 it was already in the band of 5-10 per cent, deemed necessary by the MNB for economic growth sustainable in the long run. The FGS loans outstanding at the end of 2017 – i.e. not including the already repaid loans and the undrawn loans (tranches) – amounted to HUF 1,216 billion, accounting for almost one-third of the total outstanding borrowing of SMEs.

As regards the number of contracts, in the three phases almost 78,000 transactions were concluded in total, and the individual phases were increasingly dominated by new, and in particular, investment loans. New investments were financed by loan and lease transactions in the value of

nearly HUF 1,700 billion. As a result of this, a number of investments were realised from loans taken out under the scheme on favourable and calculable terms, part of which otherwise would have materialised only in smaller volume or not at all (Chart 7). In addition, approaching the end of the scheme, the average size of the forint loans borrowed also decreased, which is consistent with the increase in the proportion of micro enterprises. This means that an increasing ratio of small economic agents were able to finance the expansion and modernisation of their activity relying on the scheme.

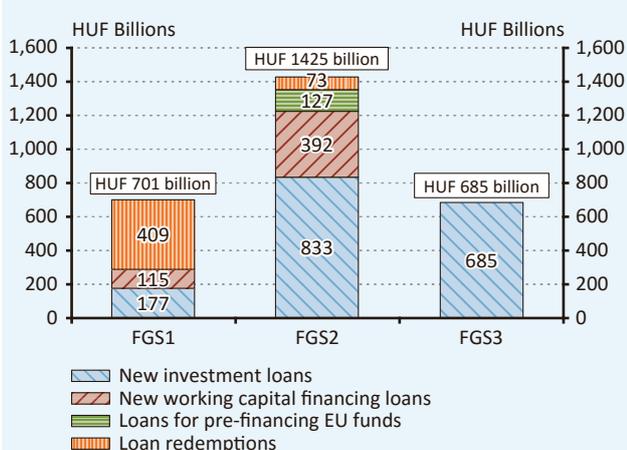
Owing to the interest rate cuts implemented in recent years, even the market-based loans are available to enterprises on favourable terms. In addition, the MNB's Market-based Lending Scheme (MLS) also continues to facilitate the return to market-based lending. Refundable and non-refundable EU funds also ease enterprises' access to funding and they are advised to make use of these opportunities in the coming period. The undertaking of institutional guarantees may play a major role in ensuring increased access to funding for less creditworthy enterprises.

Based on banks' responses to the Lending Survey, in 2017 credit conditions in both the large corporation and SME segments eased, which the banks participating in the survey explained with increasing competition among banks and an improvement in economic prospects. Looking ahead, institutions anticipate that these trends will remain in place, pointing to further easing. In the second half of the year, corporate credit demand increased in excess of market expectations. The rise in demand for commercial real estate loans made a major contribution to the positive surprise. Looking ahead, banks anticipate rising demand for corporate loans and – with the improving prospects on the commercial real estate market – they expect a further increase in demand for loans to finance such transactions.

Domestic house prices continued to rise in 2017, amidst strong market demand and a gradual adjustment in supply. According to the values of the MNB's housing price index, the annual nominal increase in house prices was just over 11 per cent at the end of September, and in real terms the annual increase in house prices was 8.7 per cent in 2017. Despite the continuous rise, on a national average the level of house prices was below the level justified by the macroeconomic fundamentals. House prices in Budapest already reached the equilibrium level, and thus – despite the fact there is not yet any significant overvaluation – the market in the capital must be closely monitored.

The housing market shows a heterogeneous picture both in geographical terms and based on the size of settlements.

Chart 7
Distribution of loan purposes in the individual phases of the FGS



Note: by contracted amount.

Source: MNB.

Whereas after the turnaround on the housing market in 2014, the strongest growth was experienced in Budapest, both in terms of market turnover and house prices, starting from 2017 different trends were observed. The annual price increase in the capital gradually slowed down; the annual price increase of 12.4 per cent measured at the end of the third quarter of 2017 already substantially fell short of the price increase of 20 per cent registered a year ago. In Budapest – also due to the increased prices – the number of housing market transactions also declined. By contrast, in the cities with county authority market turnover grew in an environment of stable increases in house prices.

In 2017, the factors determining the demand side of the housing market continued to improved. The real income of households has been showing stable growth of 3-4 per cent for years, while employment and unemployment ratios reached historic bests. The favourable income and labour market situation of the household sector pointed to a continued recovery on the market, while the intense wage outflow substantially raised the savings of the sector as well.

Favourable demand conditions also prevailed in lending for housing purposes. In 2017, in parallel with the continuous rise in the volume of new housing loans, the role of financing house purchases from loans also increased. The volume of new housing loans rose by 39 per cent in annual terms, while the number of loans taken for the purpose of house purchase, as a ratio of market transactions, stood slightly above 40 per cent after a further rise. Within new contracts, the ratio of loans taken for the purpose of building or purchasing new housing, as well as of the products with interest rate fixed for periods longer than one year, steadily increased. On the whole, the level of lending for housing purposes as a percentage of GDP is low in Hungary, both in a European and a regional comparison, and accordingly there is still plenty of room for growth in lending. According to banks' responses to the Lending Survey, the standards of housing loans have not changed significantly. The average interest rate spread on housing loans decreased somewhat both for variable and fixed rate products, but the spread on the latter still exceeds that of variable rate products, while on the whole, the level of spreads also exceeded the regional average.

The supply side of the housing market was characterised by gradual adjustment. After the 2016 surge in the number of construction permits issued at the national level, the number of completions also increased by about 61 per cent in the second half of year. Based on the anticipated completion dates of new home projects underway at present in the capital, the number of completions may rise substantially at the end of 2018. While in 2017 a total

of 3,200 new homes are expected to be completed in Budapest, by 2018 this number will be as high as 7,700. However, in 41 per cent of the projects the planned completion date was postponed, and new dwellings under construction are completed on average slightly more than six months later than scheduled. On the supply side of the housing market, the labour shortage perceived by construction companies still poses difficulties, while the increase in the probable time to sell new dwellings may signal a minor deterioration in developers' bargaining position. For the time being, the growth rate of house prices exceeds the construction costs, which is favourable for developers. However, the potential acceleration of the increase in costs may reduce this stimulus in the future.

Loans past due over 90 days no longer pose a major risk for the banking sector. Banks' portfolio cleaning, the improving economic environment and the pick-up in lending all suggest that the problem of non-performing loans eased both in absolute and relative terms. The ratio of loans past due over 90 days is already below 10 per cent in both the household and corporate segments. At the end of 2017, the non-performing loan ratio (NPL ratio) calculated with the non-performing definition in the broader sense, was 7.2 per cent and 10.9 per cent in the case of corporate and household loans, respectively. Although the MNB continuously monitors the situation of these households, the social implications of the problem can primarily be addressed by legislative and fiscal means.

Compared to previous years, the banking sector realised an outstanding profit in 2017. Partly due to one-off effects, such as the release of provisions, the return on equity rose to above 17 per cent. At the same time, in the persistently low interest rate environment, banks' structural profitability is under pressure in the medium term due to the narrowing interest margins. Despite the streamlining efforts of past years, there was no substantial improvement in the sector's cost effectiveness. The improvement thereof is key to managing the challenges posed by the persistently low interest environment and technological progress. This could be fostered by consolidation of the banking sector, exploitation of the opportunities inherent in digitalisation and reduction of the non-performing loan portfolio. Cost efficiency can be fostered by competition among banks; especially price competition in the household segment could force banks to take the necessary steps.

Fostering financial awareness

In relation to the "Strategy for the development of the population's financial awareness" which was adopted in December 2017, the MNB organised a conference entitled

“Financial awareness”. In addition to the MNB, the Ministry of Human Capacities, the State Audit Office, the Hungarian Central Statistical Office, the Hungarian State Treasury and the Money Compass Foundation also contributed their professional skills to elaborating the strategy aimed at the enhancement of financial awareness, initiated by the Ministry for National Economy. The stakeholder institutions were represented at the event by their highest ranking officials. The technical round-table discussion was attended by the ministries, professional and non-governmental organisations playing a major role in developing the strategy, and by the representatives of the financial and education sector. The participants discussed the results of the studies on the topic and launched implementation of the strategy.

Macroprudential activity of the MNB

The MNB's macroprudential activity in 2017 focused on monitoring developments in risks, fine-tuning the set of macroprudential instruments introduced earlier and supporting the more efficient operation of the banking sector.

In cooperation with the other affected functional areas, in spring 2017 the MNB's macroprudential division developed the conditions applicable to the “Certified Consumer-friendly Housing Loan” products. The certification can be obtained for products corresponding to the application conditions that are transparent, comparable, available with standardised conditions, longer interest periods and favourable pricing. Since the publication of the call for tender related to the certification, the vast majority of the domestic actors have already successfully applied for the use of the Certified Consumer-friendly Housing Loan label and the related certification mark. With a view to supporting objective comparability of the large variety of certified products marketed by the banks, the MNB also launched an online comparison website from September 2017, which provides those interested with a list of accurate, personalised offers based on the pricing formulas provided by the banks.

The regulation on the Mortgage Funding Adequacy Ratio (MFAR) entered into force in 2017 to restrict forint maturity mismatches. In relation to the MFAR regulation, mortgage bonds in the amount of roughly HUF 360 billion were issued. Due to the increasing volume of the issuances, the MNB developed – in cooperation with the Budapest Stock Exchange and market participants – a family of indices that quantify the expected yield and total return on mortgage bonds. These may facilitate more accurate pricing of mortgage bond holdings, more detailed monitoring of the

banks' funding costs and the assessment of the mortgage bond portfolios' performance.

In 2017, the MNB activated the Systemic Risk Buffer (SRB) aimed at managing the systemic risk related to problem project loans. The MNB prescribed an additional capital requirement for the two banks that lagged behind in the cleaning of the problem portfolios in proportion to their stock at 2017 Q1, which they need to maintain from 1 July 2017. In the period between the announcement of the planned application of the capital buffer and the activation thereof, the banks performed significant balance sheet cleaning, as a result of which the banking sector's portfolio of problem exposures decreased by 71 per cent, while the shock absorbing capacity related to the residual risk is provided by the capital buffers prescribed.

Based on the methodology approved by the Financial Stability Council, the MNB performed the annual review of other systemically important institutions (O-SIIs) in 2017 as well. Considering the consolidated balance sheet data of 31 December 2016, there was no change in the range of systemically important institutions: there are still eight domestic banks that meet the criteria for this classification. With a view to increasing the resilience of the institutions, the MNB prescribed an additional capital buffer for them between 0.5 and 2 per cent, to be built up gradually in the period that commenced on 1 January 2017 and lasts until 2020.

The MNB performs quarterly reviews of the countercyclical capital buffer (CCyB) rate, applicable to the mitigation of the cyclical systemic risk connected to excessive lending. No excessive lending developed in the banking system in 2017, and hence the Financial Stability Council left the CCyB rate applicable to domestic exposures at 0 per cent throughout the year in order to encourage lending.

In line with the international regulatory trends, the MNB actively monitors the spread of financial sector innovations (Financial Technology – FinTech) in the Hungarian financial sector. The objective of the MNB, in addition to maintaining financial stability, is to support the spread of innovations and thereby encourage the actors of financial intermediation to pursue more efficient and competitive operation. Surveying domestic market processes is an important building block in developing the framework; hence in the second half of 2017 the MNB performed a comprehensive survey with regard to the opinion and requirements of consumers, credit institutions, FinTech companies and venture capital companies. According to the results of the market survey, there is significant demand for the establishment of an Innovation Hub and a Regulatory Sandbox. Based on the

survey results, the MNB started to set up the platforms and extended the research to the insurance, fund and intermediary sectors.

The MNB's macroprudential division contributed a number of methodological developments to the operation of the toolkit aimed at the early recognition and efficient management of financial stability risks. The most important results include the development of the model measuring the undervaluation and overvaluation of the housing market, which is integrated into the MNB's housing market monitoring system, and of the Factor-based Financial Stress Index (FSI), a new indicator suitable for measuring the systemic stress appearing in the Hungarian financial system. The methodology determining the structure of the countercyclical capital buffer was also enhanced in several aspects: the nowcasting of the indicators in the cyclical systemic risk map was completed, which facilitates the real time assessment of the indicators, and the methodology of the identification and monitoring of material third countries for the Hungarian banking sector was also improved.

As part of the follow-up of the applied macroprudential instruments, in December 2017 the MNB issued its Macroprudential Report for the second time. The annual publication presents to the public the measures applied by the MNB to prevent and address the systemic risks identified and communicated by the central bank, as well as the effects of those measures and the adjustment of market participants.

The central bank's experts continued to monitor the assessments of systemic risks and international regulatory developments affecting the financial intermediary system in 2017 as well, and participated in the macroprudential policy related working groups of various European institutions.

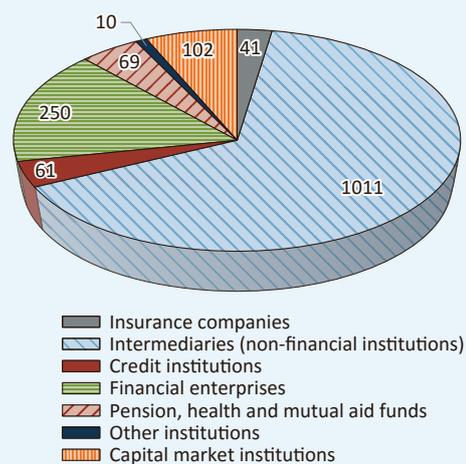
3.3 SUPERVISION AND CONSUMER PROTECTION

Based on the data from 31 December 2017, the MNB is responsible for the prudential supervision of 1,544 institutions; the distribution of the institutions by type is shown in Chart 8. The (≈ 4 per cent) decrease in the number of supervised institutions compared to the previous year is attributable to the concentration processes taking place in the market, of which the integration of cooperative credit institutions should be highlighted both in terms of its topicality and weight. In the reporting year, the MNB launched 141 prudential and 24 market surveillance inspections, and completed 133 prudential and 28 market surveillance inspections. In the review period, the MNB issued a total of 1,272 prudential legal enforcement and

licensing resolutions, while in the market surveillance and issuer oversight areas 1,150 legal enforcement administrative resolutions were passed in total. The measures taken included the imposition of prudential institutional fines amounting to HUF 883.6 million and market surveillance and supervisory fines of HUF 651.6 million.

Chart 8
Number of supervised entities by type on 31 December 2017

(pieces)



Source: MNB.

Supervision of credit institutions

Within the framework of credit institution supervision, the MNB launched a total of 43 inspections, and closed 10 comprehensive, 19 targeted, 1 thematic, 1 supervisory inspection and 7 follow-up audits. During the year, on-site inspections related to liquidity adequacy (ILAAP) were launched at 10 credit institution, and 5 such procedures were closed as well. Inspections related to the internal capital adequacy assessment process (ICAAP) were launched at 10 institutions, of which 7 were closed by the end of the year (Table 3).

As a result of the procedures closed in respect of the credit institutions, in 2017 prudential institutional penalties in the total amount of HUF 326.7 million were imposed, with special regard to the fact that the MNB continues to take firm measures against infringing forms of conduct and institutions which fail to comply with the provisions of earlier resolutions. Of the identified infringements, penalties were imposed particularly due to the breach of legislative provisions related to the prevention and hindrance of money laundering and terrorist financing, the infringement of provisions related to capital requirement, transaction rating, client rating, collateral rating, data supply

Table 3
Number of inspections conducted at credit institutions, financial enterprises and payment institutions

Type of entity	Type of inspection	Closed in 2017		Started in 2017	In progress on 31 Dec 2017
		Started in 2016	Started in 2017		
Credit institutions (and Branches)	Comprehensive	6	4	9	5
	Targeted	9	10	22	12
	Thematic	1	0	1	1
	Follow-up	1	6	9	3
	Validation and SREP	4	7	10	3
	ILAAP	0	5	10	5
	Supervisory inspection	0	1	2	1
Financial enterprises	Targeted	1	2	5	3
	Thematic	0	0	1	1
Payment service providers	Comprehensive	1	1	1	0

and the Central Credit Information System and for the failure to fulfil measures included in previous resolutions.

In accordance with the international trends and the recommendation of the European Banking Authority (EBA), the business model-based approach is also gaining ever greater importance in domestic supervisory activities. The central bank pays special attention to making the supervised institutions aware of the business model analyses performed on the basis of the continuously developing framework and of the identified risks, and this dialogue efficiently supports the banks' strategy development, planning and risk management processes. The MNB's early warning system supports support forward-looking supervision, meant to limit and manage the future build-up of anticipated future risks, which also monitors – in addition to potential infringements – the development in the financial ratios tailored to the operation of the credit institutions.

The supervisory review and evaluation process of large banks' internal capital adequacy assessment process (ICAAP-SREP) and validation of the internal models necessary for calculating the capital requirement are of the utmost importance for the stability of the financial intermediary system. During the year, the MNB conducted the review in respect of all banks with a bearing on the stability of the financial intermediary systems and launched validation processes, at the banks' request, in the case of several risk models. With a view to supplementing the MLS, which supports economic growth, and making it more efficient, the central bank – in its capacity as supervisory authority – provided the credit institutions with an allowance in the capital requirement in proportion to the growth commitments they had made.

The special features of the risk and regulatory environment related to real properties and real property financing project loans raised the need for the MNB to formulate recommendations with regard to the management of financial organisations' risks related to real properties and the valuation of real property project financing loans, to support the application of law by financial organisations and to show good practices. To this end, working together with the sector in the reporting period, the MNB elaborated its recommendation on the management of financial organisations' risk related to real properties, which covers all important aspects of financial organisations' risk related to real properties. The elements of the recommendation which were most emphasised and thus elaborated to the highest level of detail include the requirements related to appraisers, the content of appraisals and the methodology employed for assessing market value, which help to improve the quality and reliability of appraisals. The experiences of recent years highlighted the fact that real property financing project loans are very sensitive to economic cycles, and thus the high concentration and not sufficiently prudent risk management of such loans can lead to substantial losses. In order to manage these risks, with the involvement of the sector, a recommendation was formulated on certain issues involving the valuation and management of real property financing project loans. The recommendation provides guidance on the MNB's expectations in relation to the monitoring, valuation and management of clients with such exposures, with a view to increasing the risk awareness of credit institutions and improving risk management developments with respect to the portfolio concerned. Along with the recommendation issued by the ECB which is currently in the process of being implemented in Hungary, these two recommendations define the expectations for institutions with high non-performing portfolios and are

integrally linked together. Setting out from the lessons learnt from the crisis, the purpose of these recommendations is to prevent the build-up of persistently high non-performing portfolios, which threaten the stability of the system.

The MNB closely monitored the changeover of credit institutions to the IFRS accounting standard: it analysed and assessed the impacts of the changeover in 2017, and monitored the preparatory work performed by the institutions intending to change over in 2018. It cooperated closely in the project with the sector, as well as with the auditing and consulting companies. Within the preparation for IFRS, the 2018 introduction of IFRS 9 bears utmost importance, as it fundamentally changes the recognition of impairments.

The MNB continued to pay special attention to the integration, which involved the largest transformation in the financial sector. On the one hand, the change in the Act on the Integration of Cooperative Credit Institutions distinguished the responsibilities and competences of the cooperative credit institution sector's participants even more clearly, and on the other hand, in 2017 the largest transformation of the sector was completed: with the intensive merger of the institutions 12 cooperative credit institutions were established and a standard IT system was also implemented. Through the Integration Organisation of Cooperative Credit Institutions (IOCCI), which is responsible for prudential supervision, the MNB continuously monitored the changes, and at the same time the supervisory authority also audited the impact of the transformation on the risks and processes of the sector through off-site and on-site inspections.

The central bank also closely monitored the fulfilment of credit institutions' reporting obligations, stressing the reliability of data supply underlying the analyses and the improvement of data quality. As the first step of the announced "zero tolerance", within the framework of consultations conducted across the sector, the MNB communicated its expectations toward the sector and published practical answers to the preliminary questions to the institutions. In the spirit of "zero tolerance", the MNB inspected the topic at several institutions within the framework of off-site and on-site procedures, and took measures on a number of occasions related to the amendment of incorrect data and the correction of the related reporting processes. In determining sanctions, it considered the errors revealed in tables that had been the subject of earlier consultation as an aggravating circumstance.

In addition to data reporting, monitoring compliance with the legislative provisions serving the prevention of households' debt overhang was also a key area, for the purpose of which several on-site targeted inspections were conducted. The MNB has set the goal of taking efficient measures in respect of the problems identified within the shortest possible time; accordingly, when consumers report systemic problems or in the case of suspected fraud, it gathers information on the situation by conducting immediate targeted inspections and takes urgent measures for the elimination of the shortcomings, as necessary.

In 2017, the focus of financial institution licensing activity was again on the acquisition of qualifying holdings, licensing procedures conducted on the basis of CRR,¹ mergers of credit institutions and other licensing procedures related to mergers (e.g. authorisation of the election of senior executives and the amendment of statutes). Transformation of the integration continued, in the framework of which the ownership composition of the individual institutions changed and a large number of cooperative credit institutions merged. Of the acquisitions of qualifying interest, events worth mentioning include the change in the ownership composition of MKB Bank Zrt. and the acquisition of ownership by the Gránit Bank Employee Stock Ownership Plan (ESOP) Organisation in Gránit Bank. Based on the Act on National Home Creation Communities, the MNB issued the licence to the company acting as the first reliable organiser and then also registered the first national home creation community. OTP Bank Plc. executed a number of major acquisitions, authorised by the MNB, in the neighbouring countries through its foreign subsidiaries. The integration of Citibank Europe PLC Hungarian Branch Office's retail business, following the purchase thereof by ERSTE Bank Hungary Zrt, took place in the reporting period.

Supervision of insurance companies, funds and intermediaries

In the **insurance sector**, 17 new inspections were started and 14 ongoing inspections were concluded in 2017. The prudential fines imposed in respect of the insurance market amounted to a total of HUF 234.7 million (Table 4).

In 2017, the MNB conducted business model-based inspections at five institutions. Although the central bank identified minor shortcomings in these inspections, on the whole it can be said that the inspected institutions have strategies which are in line with the external environment, realistically feasible with the available resources, consider

¹ The CRR (Capital Requirement Regulation) is Regulation No. 575/2013/EU of the European Parliament and the Council, defining the prudential requirements for credit institutions and investment firms.

Table 4
Number of inspections conducted at insurance companies, funds and intermediaries

Type of entity	Type of inspection	Closed in 2017		Started in 2017	In progress on 31 Dec 2017
		Started in 2016	Started in 2017		
Insurance companies	Comprehensive	5	7	16	9
	Targeted	1	1	1	0
Pension, health and mutual aid funds	Comprehensive	8	7	13	6
	Targeted	2	0	0	0
	Follow-up	0	2	3	1
Intermediaries	Targeted	3	2	6	4
	Thematic	0	0	1	1

the potential risks and guarantee sustainable profitability for the insurer, and that their business plans are harmonised with the strategy, the fulfilment of which is continuously backtested.

Changeover to Solvency II reached another important milestone in the reporting period: in May 2017 insurers fulfilled the new, annual data supply, standardised across Europe, for the first time. According to data related to 31 December 2016, the capital adequacy ratio of the Hungarian insurance sector is 215 per cent, which is in line with the EU average.

The most important provisions of the MNB's ethical life insurance regulation entered into force this year. In accordance with this, several amendments of the law and a recommendation – issued by the MNB in 2016 concerning unit-linked insurance – formulated new expectations for life insurances that also contain saving elements. As a result of the change in the new regulatory environment, the product offering underwent a transformation, the number of contracts halved, the expensive unit-linked products were phased out and the total expense ratio (TER), serving the comparison of expenses, decreased by one quarter on average. With a view to supporting the decisions of clients, the MNB developed and made available on its website the life insurance cost comparison application, which presents the full product offering of insurers and also warns clients about asset funds that exceed the recommended level. The MNB inspects compliance with the new regulatory environment on a continuous basis: the experiences of the first year in the case of domestic insurers are positive in general, but it should be borne in mind that the effects of the new regulatory environment will only be fully felt over the long run.

During the comprehensive audits, the MNB inspected compliance with the Solvency II regulation, focusing on continuous operation through the corporate governance

topics, key functions and the operation of the institution's own risk and solvency assessment process. In addition, the central bank also inspected the adequacy of the insurers' capital and reserve calculation with special care. In accordance with the Prudent Person Principle related to insurers' investment activity within the framework of the Solvency II rules, the MNB inspected the adequacy of the investment strategy and regulation with special care and assessed the investment activity, also focusing on profitability and liquidity aspects. The supervisory authority treated it as a priority to inspect the composition and quality of the assets constituting the cover for the regulatory capital and for the insurance technical reserves. The inspections revealed shortcomings in the control of supervisory data supply, the investment policies and the assessment of corporate decisions.

In the reporting period, the underlying factors behind the sector-specific findings included infringements related to the contractual terms of the distributed products and customer information documents, as well as to customer information and complaint management. In addition, irregularities were also identified relation to outsourcing contracts, product plans, provisioning and accounting policies, portfolio management and registration systems.

Of the infringements identified, penalties were imposed in particular for the breach of legislative provisions governing the calculation of solvency capital requirement, the operation of the risk management and compliance functions within corporate governance, the optional and mandatory content elements of the insurance terms and conditions and the premium calculation of insurance products; in addition, penalties were also imposed in connection with the adequacy of supervisory reporting, IT security and the portfolio management of insurance contracts.

Of the insurance licensing cases, authorisation of the merger of Pannónia – formerly MKB – Insurers and CIG Insurers

deserves attention. While a large numbers of cases involved various intermediary and personal licensing procedures, it should be noted that the MNB acted as the supervisory authority in the procedure aimed at the authorisation of the calculation of the solvency capital requirement of the UNIQA Group, and the affected insurers (including UNIQA Biztosító Zrt), which was based on a partial internal model.

In the **funds sector**, 13 new and 3 follow-up inspections were started and 19 ongoing inspections were concluded, in the context of which a total of HUF 17.7 million was imposed in fines.

In the course of these inspections, the MNB typically identified problems related to the regulation and organisation of delegate elections, shortcomings in the internal control system, the absence of regulation updates and the violation of accounting rules. Additionally, in a number of cases the inspections found that the institutions failed to comply with their obligation to prepare a mandatory IT security risk analysis every two years. Partly as a result of the MNB's auditing activity focused on this area, the charging of unjustified excess costs occurred less frequently than before in relation to investments executed through investment funds. In these cases, the asset managers reimbursed the excess cost at the behest of the supervisory authority, which was credited to the members' individual accounts.

In relating to the infringements identified, penalties were imposed in particular in connection with the internal regulations, functional shortcomings in the audit committee, breaches of laws related to crediting of yields, the fulfilment of fund services, the settlement with members, the funds' accounting and prevention and hindrance of money laundering and terrorist financing, and also in connection with the adequacy of supervisory reporting.

Within the framework of the oversight methodology, the business model-based approach was introduced at the funds as well. Among other things, this involved examining the long-term sustainability of the institutions with due consideration of the financial planning, the membership fee allocation ratios, the ratio of those defaulting on membership fee payments, and whether the funds have a strategy that conforms to the external environment, is realistically achievable with the available resources and considers the potential risks.

Similarly to previous years, in December 2017 the MNB published a notice presenting the premium charged by the voluntary pension funds, which compares the membership fee deduction for operational and liquidity purposes, and

the level of asset management costs to the members' assets. According to the notice, the value of the sector-level indicators was still below 0.8 per cent in 2016, after a year-on-year decrease, i.e. the degree of deductions charged to members can still be deemed as low. The MNB also published the annual and 15-year average yield rates of pension funds applicable to 2016 and the period of 2002-2016, respectively; based on these, despite the low interest environment, the voluntary pension funds realised a net asset-weighted yield rate of 6.6 per cent at sector level in 2016.

In the fund licensing area, the MOK Funeral Voluntary Mutual Aid Fund obtained a licence as a new institution for providing its members with funeral services as a group service. The MNB authorised Horizont Private Pension Fund to conduct own annuity payment services. In 2017, several procedures took place aimed at the authorisation of the merger or dissolution of smaller funds.

Within the framework of integrated prudential and consumer protection supervision, in addition to 7 new and 5 closed prudential inspections, 17 consumer protection procedures were launched in 2017 in the **intermediary area**. The fines imposed amounted to a total of HUF 76.4 million.

In the reporting period, the inspection of the existence of proper professional care, in particular with regard to new contracts recommended for corresponding needs, was one of the top priorities.

With a view to strengthening the oversight of financial market intermediaries, starting from 2017 the range of entities required to submit regular data reporting was expanded to include independent financial market intermediaries. The MNB facilitated fulfilment of the new obligation with two professional consultations of one day each and by informing the reporting agents in a letter, as well as by publishing the related materials on its website.

Following professional consultations, the Insurance Distribution Directive (IDD) was implemented in Hungary in the second half of the year. The directive led to major changes in Hungarian regulation as well, the purpose of which is to ensure – by enhancing financial awareness – that consumers make more well-founded decisions, that the markets become more transparent and that the quality of the work of agents distributing financial service improves. The goal is to provide customers with an identical level of protection irrespective of the sales channel used for the conclusion of the contract, and to manage the tensions related to the motivation of intermediaries and the form of their remuneration.

Supervision of capital market institutions

In 2017, the MNB launched 31 new inspections and closed 36 audits and administrative inspections at capital market institutions, in the context of which it imposed institutional and personal fines in the amount of HUF 232.9 million (Table 5). During the year, four operative inspections were also conducted, where the MNB obtained data on the individual institutions within the framework of on-site inspections without prior notification. In the case of investment firms, the process of market consolidation continued in 2017, as a result of which the activity licence of several investment firms was withdrawn.

The regulatory framework outlining the requirements applicable to investment firms and regulated markets (MiFIDII/MiFIR), to be applied from 3 January 2018 – the purpose of which is to provide investors with greater protection and ensure larger transparency of financial markets – results in major changes in the operation of the service providers. In 2017, the MNB continuously monitored the preparedness of the institutions rendering investment services for the application of the new regulatory framework. Experiences showed that – although the supervised institutions faced individual challenges – they typically were well-prepared for compliance with the changing legislative environment. Since the MiFID II/MiFIR regulatory framework extended the range of financial instruments to cover commodity derivatives and emission reduction units as well, new institutions were also added to the MNB's supervisory spectrum.

One of the focal points of oversight activity during the year concerned the inspections connected to the prevention

of money laundering and terrorist financing and the implementation of pecuniary and restrictive measures and other administrative duties related to the topic. The new regulatory framework which entered into force in 2017 formulated broader requirements for the financial sector, primarily in relation to the rules pertaining to internal risk assessment, the operation of the internal audit and information system, the cases of simplified and enhanced client due diligence, and the rules pertaining to the supervisory approval thereof, the cases and conditions of the enhanced procedure, and the mandatory education programme. In the context of the aforementioned requirements, the supervisory authority imposed substantial supervisory fines in several cases, in the total amount of HUF 49.8 million.

The MNB continues to treat the protection of investment firms' customer receivables as a key priority. With a view to facilitating compliance with the legislative provisions related to the management of principals' assets, in August 2017 the central bank issued a management circular to the investment service providers managing principals' cash and financial instruments with regard to the supervisory requirements pertaining to the quarterly internal audit report.

In line with the increasing role of investment funds and particularly real estate funds in the financial intermediary system, as part of the audits and continuous oversight activities the MNB inspected liquidity management, compliance with limits and the corporate governance processes with special care. In addition, the MNB continues to place emphasis on the inspection of the risk management activity and investment decisions of investment fund

Table 5
Number of inspections conducted at capital market institutions

Type of entity	Type of inspection	Closed in 2017		Started in 2017	In progress on 31 Dec 2017
		Started in 2016	Started in 2017		
Investment fund managers (excl. venture capital fund managers)	Comprehensive	10	3	12	9
	Targeted	1	2	2	0
	Supervisory inspection	0	0	1	0
Venture capital fund managers	Comprehensive	3	0	3	3
Central depository	Comprehensive	1	0	0	0
Stock exchange	Comprehensive	0	0	1	1
Investment firms	Comprehensive	7	2	3	1
	Follow-up	1	1	1	0
	Thematic	0	0	1	1
	Supervisory inspection	0	2	2	0
	Targeted	2	1	5	4

managers, the assessment of capital adequacy, as well as on compliance with disclosure and client information requirements.

Among the licensing procedures of capital market participants, the activity licensing procedures under the provisions of MiFID II should be highlighted. The number of activity licences issued for investment fund management rose steadily in 2017, and the number of registered non-commercial fiduciary asset management relations also followed a similar trend. As a result of the foundation licence issued to HUPX Hungarian Power Exchange Company Ltd, a new exchange was established in Hungary, which after receiving its activity licence, commenced its exchange activity in respect of gas and electricity transactions under the name of HUDEX Hungarian Derivative Energy Exchange Ltd.

Market surveillance and oversight of issuers

In the reporting year, the MNB launched 24 market surveillance inspections and closed 28, as a result of which it imposed market surveillance penalties amounting to more than HUF 600 million.

The MNB remains committed to immediately suppressing unauthorised money and capital market activities which distort the market and behaviour aimed at damaging investors, in addition to applying temporary measures and criminal charges in the early phase of market surveillance procedures. Supervisory penalties in the amount of HUF 100 million were imposed for the breach of rules pertaining to prohibited market manipulation and insider trading, while roughly HUF 200 million in fines was imposed for prohibited safe deposit services in 2017.

Within the context of its duties related to issuers, the MNB launched 3 targeted inspections and closed 5 targeted inspections related to issuers; in addition, it passed 37 penalty resolutions during the year, in the course of it imposed supervisory penalties of almost HUF 20 million. With a view to establishing a more transparent capital market, as defined among its objectives, the supervisory authority continued its policy of measures aimed at ensuring that investors can reach regular and extraordinary issuer notifications containing the information prescribed by the law, in the shortest possible way. To this end, it obtained the declaration of the issuers in respect of their disclosures on 77 occasions.

In the area of issuance licensing, 2017 was a particularly active year in terms of acquisitions, as public bids for the purchase of five listed companies were approved. In addition to the foregoing, authorisations were granted for the publication of prospectuses for eight bond schemes and for the admission of one equity and bond for listing. 73 new investment funds were registered and three financial groups were exempted from the development of the risk management procedures for the exchange of collaterals under EMIR.²

Consumer protection

The consumer protection activity of the MNB in 2017 was dominated by the development and introduction of the Certified Consumer-friendly Housing Loan (CCHL), the monitoring of institutions' activities as part of ongoing consumer protection oversight and by the identification and elimination of the risks and infringements which were found. Of the regulation tasks, the recommendations issued within the framework of implementing the regulations on the treatment of customers with disabilities and on MiFID II deserve to be highlighted.

With the introduction of the Certified Consumer-friendly Housing Loan, the purpose of the MNB is to ensure that housing mortgage loans with easy to understand and transparent conditions, favourable pricing available to a broad range of customers and simple and fast administration appear in the market. After the announcement on 1 June 2017 of the CCHL tendering framework, which was developed after intensive market consultation and goes beyond legislative provisions with a view to supporting the comparison of the CCHL offers available in the market, the MNB made available on its website a comparison application that provides potential consumers with controlled, highly accurate, retrievable information. The efficiency of the CCHL tendering scheme is evidenced by the fact that all institutions forming the backbone of lending for housing purposes obtained the certification and started distribution of CCHL products.

Within the framework of continuous consumer protection oversight, in addition to the recurring inspection topics, the MNB reviewed and analysed the conduct and procedures of the institutions in relation to almost 40 individual topics. As a result of this – upon identifying undesirable market practices – the supervisory authority issued 363 consumer protection warnings, which resulted in the efficient, immediate elimination of phenomena alarming

² Regulation 648/2012/EU of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories.

for consumers and information content. Inspections of the problematic market practices, which were also detected in the course of continuous oversight, were closed with measures and penalty resolutions in several cases. The investigation of suspected infringements was performed within the framework of 42 targeted inspections aimed at complaint management, the calculation and communication of annual percentage rate of charge, and at the identification of unfair commercial practices to the detriment of consumers. In addition to enterprises with registered offices in Hungary, in the capital market in particular the measures and inspection also impacted non-resident enterprises rendering cross-border services.

In 2017, the MNB launched six thematic inspections at 48 institutions on the subjects of fair lending, information related to MTPL claim settlement, the payment-to-income ratio and the loan-to-value ratio rules, the decree on the content elements of the life insurance needs analysis form and the implementation of the recommendation on fair life insurance. Within the framework of comprehensive inspections – based on risk assessment – consumer protection inspections were conducted in 14 cases. In order to survey the sales techniques, conducts, provision of information and the real market circumstances, the MNB concluded trial transactions in 8 cases.

Consumers' petitions and complaints initiating consumer protection inspections also bore important information for the central bank, which were investigated – if the statutory conditions for launching a procedure were fulfilled – in 306 cases.

In 2017, due to infringements identified during the inspections, the MNB imposed consumer protection fines in the total amount of HUF 211.7 million in 313 cases, while it imposed procedural penalties in an additional amount of HUF 3.7 million due to the institutions' lack of willingness to cooperate and for hindering inspections.

In 2017, the central bank once again regarded it as a priority task to ensure that financial organisations do not apply unfair general terms and conditions in consumer contracts. The robust recovery in the housing market generates further growth in lending for housing purposes, and thus it is extremely important to ensure that the general contractual terms and conditions which are part of consumer mortgage loan contracts comply with the civil law requirements of good faith and fairness to the fullest possible degree. In order to enforce this requirement, the MNB conducted comprehensive analyses in 2017 covering eleven banks, in the course of which it reviewed

all significant effective regulations, lists of conditions and sample contracts with a view to identifying and repealing or amending potentially unfair conditions. As a result of this action, in accordance with the central bank's requirements, the respective financial institutions amended all of the contractual conditions – also covering the existing contract portfolio – that the MNB deemed justified to realise the aforementioned goals.

Financial Consumer Protection Centre

Customers can reach the customer service operated by the MNB's Financial Consumer Protection Centre through five channels, i.e. in person, over the phone, by e-mail, at the e-government customer portal and by petitions submitted on paper. In 2017, the customer service received 29,874 enquiries and 3,053 petitions in total. The breakdown of the customer petitions and the enquiries by sector does not differ substantially from what was observed in previous years: half of them concerned the financial market, almost one quarter of them involved the insurance business, five per cent pertained to the capital market and roughly one per cent concerned the funds sector, while the remaining part cannot be linked to any sector (e.g. bitcoin). The number of enquiries and complaints received in respect of non-resident institutions and representative offices rendering cross-border services and other institutions was negligible. Within the financial market, one third of the enquiries and complaints related to lending, while one quarter of the insurance cases concerned compulsory motor third-party liability insurance. The causes of problems primarily included insufficient information, settlements related to contracts and various administrative errors.

Communications on financial consumer protection continues to be a priority issue in the central bank's consumer protection activity. This is intended to reduce the damages arising from consumers' unfounded decisions, increase consumers' financial awareness and enhance domestic financial literacy. As part of this, the contents on the consumer protection webpage, available through the MNB's website, were expanded, and in addition, a website containing a glossary of financial terms, a collection of useful links and introducing the collaborating partners, was also developed. On the consumer protection micro site, visitors can search for thematic content in almost 200 current articles, covering almost the entire range of financial services. In addition, short films – also available at the MNB's YouTube channel and usable free of charge – dealing with the most important financial topics, also support the provision of consumers with comprehensive information. The central bank also tries to access the widest possible

range of consumers via social media, and thus it shared several hundred contents enhancing financial awareness on its Facebook site.

As one element of the Financial Navigator information system, the MNB's product selection applications help to more easily collect the information necessary for consumers' decisions: they are available at the www.mnb.hu/fogyasztovedelem/penzugyi-navigator-alkalmazasok website (in Hungarian only). Within the framework of the Financial Navigator information paper series, which is already regarded as a classic publication, in total 34 new Financial Navigator papers and 7 Financial Navigator EXTRA notifications were published. The printed booklets were published in more than 5 million copies to foster broadening the financial skills of the general public.

Of the online interfaces and applications operated by the MNB, it is worth noting the new www.minositethitel.hu website (in Hungarian only) and calculator, linked to the Certified Consumer-friendly Housing Loan concept and tender. The design, which satisfies modern trends in all respects, the easy to understand language and the calculator supporting enquiries on customised housing loan offers, are becoming increasingly popular with the general public.

In order to reach the highest possible number of consumers, the MNB is continuously looking for cooperation opportunities with other organisations. As a result of this effort, in the past period key participants in the commercial and service sector joined the MNB's communication activity aimed at the enhancement of financial literacy, providing free access to the channels and interfaces available to them, and supplementing their own corporate social responsibility strategy. In 2017, five thematic campaigns were implemented, in the course of which consumers met seasonal financial consumer protection messages not only on the MNB's consumer protection campaign site and Facebook channel, but also on the partners' online interfaces, and in almost 800 stores and 500 post offices. During the campaigns almost 1.5 million leaflets and 8,000 posters were displayed.

The renewed and continuously expanding Financial Advisory Office Network – operating with the support of the MNB – assumed a major role in the promotion of the campaigns and the delivery of the messages, which provided consumers visiting the offices with free information in more than 13,000 cases at 13 county seats and also within the framework of offsite consultancy services organised twice a month. The new activities of the offices performed during the year included the organisation of poster campaigns,

attending various exhibitions and they also contributed as speakers at conferences aimed at the enhancement of financial literacy.

In spring 2017, the MNB's first creative contest organised for universities on the topic of financial consumer protection, entitled *Financial affairs at an advanced level – be creative*, was successfully concluded. The three most creative concepts were selected by a professional jury and the winning competitors also received a cash award. Within the framework of the Civil Network Programme, the central bank regularly provides NGOs with tender opportunities in traditional financial consumer protection topics; however, in 2017 the tenders were also linked to the award-winning works of the university creative contest. During the year, nine projects of eight NGOs received grants in an amount of more than HUF 50 million. The Financial Consumer Protection Centre organised 5 forums, workshops and trainings for NGOs, in total.

The development of financial literacy and awareness, as well as of the related skills and capacities represent a priority both in Hungary and globally. The domestic and international surveys examining the maturity of households' financial literacy examine the factors that influence the financial decision-making of the adult population living in different geographic, social and economic environments, thereby supporting both international and national policy-makers in setting the strategic goals and determining the means of achieving such goals. Based on the research results, it was found that in Hungary it is necessary to enhance the general financial skills of both the young and the older generation. Considering the significance of the topic, the Government of Hungary commissioned the Minister for National Economy with the duty to prepare, with the involvement of professional organisations, the national strategy for the enhancement of the population's financial awareness for the period of 2017-2023. The MNB assumes a significant role in the development and future implementation of the strategy, adopted in December 2017, in view of the fact that due to its responsibility for financial stability, consumer protection, information and communication duties, it is already a key actor in the enhancement and promotion of financial literacy and awareness.

3.4 RESOLUTION

A resolution plan must be prepared for each credit institution and investment firm under the scope of the Resolution Act. In 2017, significant progress was achieved in the elaboration of such plans. The MNB – in line with its schedule – prepared **individual resolution plans** for

institutions not subject to consolidated supervision and **simplified resolution plans** for the institutions representing minor systemic risk. In the case of banking groups domiciled in Hungary, performing cross-border activity, the MNB in its capacity as **group-level resolution authority**, approved – in cooperation with the affected foreign resolution authorities – the group resolution plan in the first half of 2017 within the framework of the resolution college controlled by it, and coordinated the further development thereof. In respect of the Hungarian subsidiaries of the parent undertakings which are domiciled in the European Union, the MNB participated – with the coordination of the Single Resolution Board (SRB) – in the preparation of the group-level resolution plans in its capacity as **host resolution authority**.

In accordance with the practice of previous years, the MNB again requested data reporting from the banks and banking groups in 2017, to obtain the information necessary for resolution planning which was not available to it, and from all affected institutions to assess the minimum requirement for own funds and eligible liabilities (MREL). With a view to performing the comprehensive resolvability assessment of Hungarian large banks, it also carried out on-site inspections.

Development of the criteria applicable to the selection of the resolution strategy for groups of institutions pursuing cross-border activity in the EU was an important step. Upon selecting the preferred resolution strategy (resolution with one or multiple interventions³), not only the resolvability assessment must be performed, as it is also necessary to evaluate the degree and cost of the adjustment required at the level of the institution under the individual strategies, as well as the broad impact thereof on oversight, the macroprudential framework, the competitiveness of the banking sector and the capital market. To this end, in relation to the resolution planning and strategy selection, the cooperation between the MNB's resolution, macroprudential and supervisory areas became closer and more efficient in 2017 with a view to capitalising on the synergies. The methodology applicable to the assessment of the resolution strategies was also discussed with the peer authorities in a regional workshop, and thus the representation of the MNB's position, acting jointly along common interests, also became more efficient in the resolution colleges.

Following the resolution procedure conducted in respect of **MKB Bank Zrt.**, complying with the obligation prescribed by the Resolution Act, the independent valuer appointed by the MNB assessed whether no former shareholder or creditor incurred greater losses as a result of the resolution procedure than they would have incurred had the institution been wound up under normal insolvency proceedings ("no creditor worse off" assessment). According to the valuation performed by the valuer, the Resolution Fund incurred no compensation obligation to the previous shareholder (the Hungarian State) and the creditors.

As regards the **institutional relations** related to the resolution, the MNB's experts fulfilled the tasks arising from the exercise of the ownership rights over the Hungarian Resolution Asset Management Vehicle (Magyar Szanálási Vagyonkezelő Zrt. – MSZVK Zrt.) and the representatives of the MNB also actively participated in decision-making in the Board of Directors of the National Deposit Insurance Fund and of the Resolution Fund. In line with the relevant EU regulation, the MNB prescribed for each member institution of the Resolution Fund the recurring annual contribution payable to the Fund in 2017.

With a view to deepening **international resolution relations and improving the resolution methodology**, the MNB hosted a methodological meeting with the participation of the representatives from the authorities of the Visegrád Cooperation (V4) countries. During the year, the MNB actively participated in the various working groups of the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA), which handle preparatory work for future resolution regulations. Also in view of the change in the EU legislation, it reviewed and amended the Resolution Handbook in 2017. In addition to the regulatory activity pursued in the working groups, during the development of the future EU regulation aimed at the extension of the resolution framework to insurers and central counterparties, the MNB informed the domestic and EU institutions in charge of the various phases of the legislation process on its professional opinion. The experts of the MNB continuously monitored and assessed international, and particularly the EU, crisis management developments and informed the MNB's management on the lessons that may be drawn from those.

³ The purpose of the Single Point of Entry (SPE) resolution strategy is to restore the sound operation of the entire financial conglomerate in unity in such a way that only the parent company on the top of the conglomerate is entering into resolution. Under the SPE strategy, the ultimate bearer of the loss is the parent bank; the losses of the subsidiaries flow through to the parent bank and in crisis situations it must be able to provide the respective subsidiaries as well with liquidity. To ensuring this, results a strong financial interconnectedness with the parent bank, and it assumes strongly centralised capital and liquidity management and free flow of funds within the banking group. Upon applying the Multiple Point of Entry (MPE) resolution strategy, the authorities controlling the parent bank and the subsidiaries implement the resolution measures individually in the case of each affected institution, which may as well entail severance from the rest of group.

The MNB's experts delivered several lectures on resolution both at domestic and foreign conferences, including the international seminars organised by the EBA and the Banco de Espana.

3.5 PAYMENT AND SECURITIES SETTLEMENT SYSTEMS

Security and efficiency of payments

New MNB Decree on the execution of payment transactions

The revised MNB Decree on the execution of payment transactions was published in December 2017 and was necessary due to several simultaneously occurring factors. The Member States must transpose the provisions of Directive 2015/2366/EU on payment services in the internal market (PSD2) in their national legislation by 13 January 2018. Although the vast majority of the new provisions of the directive are transposed at the statutory level, the rules related to the execution of payment transactions belong to the MNB's legislative competence, and hence the changes in the directive in this area had to be transposed to the MNB Decree. According to the implementation concept adopted back in 2016, the detailed rules pertaining to the execution of instant payment transactions and the supplementary services thereof (use of secondary account identifiers, request to pay) are prescribed at the level of MNB decrees. Although the MNB plans to launch the instant payment system from 1 July 2019, in order to facilitate the preparation of the payments sector as efficiently as possible, it was justified to publish the legal regulation – with effective date of 1 July 2019 – as soon as possible, since implementation of the instant payment system requires the framing of several new laws or the amendment of existing ones. In the end, several rules to clarify or supplement the effective provisions were also integrated into the new MNB Decree with a view to eliminating practices observed during the MNB's payment inspections which hindered the enforcement of the legislator's intentions, as well certain difficulties in interpretation.

The MNB decided on the measures necessary for building the instant payment system infrastructure

In March 2017, the MNB decided that the central infrastructure of the instant payment system will be developed by GIRO Zrt, which is owned by the central bank. As a result of the development, the core payment system will be up and running by mid-2019. By connecting to this system Hungarian payment service providers will be able to render instant payment services to their customers.

Realisation of the new system will help FinTech companies enter the market, fostering the development of innovative payment solutions. In line with this, the MNB expects market participants to make active contribution to the development of the auxiliary services built on the core system.

During 2017, GIRO Zrt. began developing the core system. In parallel with this, finalisation of the technical and business standards describing the basic services of the system is also in progress. Work has also commenced in the interests of achieving the interoperability of the auxiliary services that may be connected to the core system and rendering the wide-ranging usability of instant payments possible. The provision of information to institutions participating in the project and to consumers and enterprises, as the prospective users of the instant payment services, is becoming increasingly intensive, and the elaboration and implementation of the information strategy ensuring this has also commenced. As a result of the project, from 1 July 2019, domestic payments will be executed within 5 seconds, at the most, 24 hours a day on all days of the year, and – based on the foundation of the new payment system – market participants can create auxiliary services that facilitate the use of modern electronic payment solutions in most payment situations.

Approximation of EU laws in connection with the implementation of PSD2

The objective of PSD2 is to boost competition and innovation, increase the transparency of the European payment market and enhance the security of payments over the internet and of the access to payment accounts. The new legislative provisions serving the transposition of PSD2 in national law enter into force on 13 January 2018. In accordance with the provisions of PSD2, certain detailed rules – published in the form of guidelines (7 pcs) and regulatory technical standards (5 pcs) – are prepared by the European Banking Authority (EBH). The SecuRe Pay forum, jointly operated by the ECB and the EBA, participates in the preparatory work, with an active contribution by the MNB in 2017 as well. The Ministry for National Economy, which is in charge of transposing the directive, held consultations with the participation of the MNB and the Hungarian Banking Association on several occasions, to ease the transposition of provisions at the statutory level.

Legal interpretations and inspections

In 2017, the central bank issued 16 legal interpretations and professional opinions on payments based on administrative and customer enquiries. In one case, the MNB provided

an opinion focusing on payment issues in relation to European Union legislation, and in 15 cases it issued legal interpretations or professional opinions based on consumer, institutional, administrative or other requests.

In 2017, the MNB performed the inspection of 15 institutions (13 credit institutions, 1 voucher issuer and 1 payment institution). In addition to scheduled inspections, at the beginning of 2017 the MNB concluded three inspections carried over from 2016, where – in addition to prescribing corrective measures – the MNB imposed fines amounting to a total of HUF 50 million in the case of two inspections. In respect of eight inspections which were concluded in 2016, reporting on the fulfilment of the prescribed obligations was due in the first half of 2017, which was duly fulfilled by the credit institutions – with the exception of one – and thus these administrative inspection procedures were closed without taking further measures. Of the eight credit institutions, in one case, the credit institution fulfilled the prescribed obligations inadequately; the MNB therefore prescribed additional corrective measure and repeatedly imposed a fine of HUF 1 million. In the 15 inspections conducted in 2017, the MNB identified breaches of legislative provisions in 156 cases, prescribed corrective measures in 63 cases and imposed total fines of HUF 76.5 million during the year.

Financial market infrastructures

KELER Zrt. joins the TARGET2-Securities system

KELER Zrt. joined the TARGET2-Securities (TS2) platform, the pan-European securities settlement infrastructure which is operated by the ECB, on 6 February 2017. The system facilitates that cross-border securities operations can be executed in a similarly simple, efficient and cheap way as domestic ones, and thereby supports the mobility of capital and the creation of a capital market union within Europe. The accession project took place with the support of the MNB, acting in its capacity as the owner of KELER Zrt, and it included the transformation of the operating processes of the domestic central depository, in accordance with the international technical and legal harmonisation standards defined by the European Central Bank. The T2S membership of KELER Zrt. opened up new infrastructure development opportunities both for the company and the central bank and the possibility of capitalising on those is under continuous deliberation.

The National User Group of T2S became AMI-SeCo National Stakeholder Group on 5 December 2017

The accession phase of the T2S project led by the ECB ended with the last wave of enlargement of 18 September 2017, and hence the mandate of the National User Groups (NUGs) established for the project had to be revised. In view of the fact that the harmonisation work related to the T2S project continues, the ECB decided to prolong and broaden the mandate of the working groups. In accordance with the decision, the Hungarian T2S National User Group accepted a new mandate in its meeting of 5 December 2017, and continues its operation as the AMI-SeCo National Stakeholder Group (NSG). The support of the T2S project is still one of the top priorities of the working group, but its duties now also include the support of the Advisory Group on Market Infrastructures for Securities and Collateral, (AMI-SeCo), i.e. the European working group dealing with securities infrastructure, including also T2S.

The international licensing college of KELER CCP Zrt. participated in the review and licensing of the events affecting the functioning of the central counterparty in 2017 as well

2017 featured outstanding developments in the wide-ranging activities and international expansion objectives of KELER CCP. At the initiative of the MNB, the paragraphs of Act CXX on Capital Markets (Capital Markets Act) that – in the MNB's opinion – unduly restricted KELER CCP's rendering of commodity market services in respect of the international regulation, were amended. The amendment provides key support for the national central counterparty's domestic and international expansion prospects.

Partially at the initiative of the clearing members, from 1 October 2017 the settlement currency of the CEEGEX⁴ transactions, which are cleared and guaranteed in terms of financial settlement by KELER CCP, changed from Hungarian forints to euros. In addition, in January 2018 CEEGEX natural gas futures are expected to be transferred to the HUDEX⁵ natural gas segment, which qualifies under the MiFID regulation as a regulated market. In respect of the HUDEX natural gas segment, KELER CCP will continue to perform the central counterparty duties. Despite the fact that these changes have an effect on the guarantee scheme operated by the central counterparty, thanks to the preparedness of KELER CCP, the change in the currency did not cause, and the transfer of the futures contracts are not expected to

⁴ Central Eastern European Gas Exchange (CEEGEX) is a trading venue where the members traded in spot and futures natural gas contracts in 2017.

⁵ The HUDEX Hungarian Derivative Energy Exchange is a trading venue where the members can conclude commodity futures.

cause any disturbance, in the MNB's opinion. The annual meeting of the KELER CCP's international licensing college took place in November 2017. The members of the board led by the MNB reviewed the most important events of 2017, the services licensed during the year and confirmed that the operation of the central counterparty complied with the requirements of the international regulation. Nevertheless, the international licensing college discussed KELER CCP's initiative, according to which it would provide clearing and guarantee services to the Romanian commodity market, which would be the first cross-border service of KELER CCP in its capacity as central counterparty.

Participation in the ECB's cyber security working group

The ECB created a working group that deals with cyber security, where the central banks can share their latest experiences related to cyber risks, thereby also enhancing IT security awareness. The MNB joined this working group in January 2017. The working group prepared a self-assessment questionnaire for the financial market infrastructures, which helped to survey their cyber security preparedness. The questionnaire was completed by the operators of all Hungarian financial infrastructures. The MNB continuously monitors the evaluation of the survey and resolution of the resulting tasks. In addition, the creation of an EU framework is also in progress, where the financial infrastructures can test and improve their cyber resilience.

Other information

Publications related to payments and payment systems

The paper entitled *The functioning of TARGET2-Securities and its impact on the Hungarian securities market* was published in the MNB Occasional Paper Series. The paper presents the functioning of the pan-European securities settlement system called TARGET2-Securities (T2S) and also touches upon the criteria to be considered by the operators and members of the domestic financial infrastructure upon the maximisation of the benefits realisable through T2S. The paper warns the reader to consider not only the benefits of accession, but also the business risks arising from T2S, including among others, the challenges of disintermediation.

The analysis entitled *Features of the Hungarian large-value funds transfer system network and its evolution in the past decade* was also published as part of the MNB Occasional Paper series. The paper analyses the network features of

the Hungarian large-value real-time gross settlement system (VIBER) by comparing 3 time windows, and tries to identify critical points in terms of systemic risk using a variety of network theory tools. The study shows that there are two distinct groups in VIBER: the first is comprised of system participants that play a key role in the transmission of liquidity within the system ("core" participants), while the other is the cluster of participants left on the periphery.

Similarly to the previous years, in June 2017 the MNB published the *Payment Systems Report*, which provides a comprehensive view of trends in domestic payments and the operation of the overseen financial market infrastructures, along with the main risks and the measures taken by the MNB to fulfil the aforementioned responsibilities.

Conferences and professional presentations

The experts of the MNB delivered professional presentations on financial infrastructures at several conferences, including, among others, those of the Kansas FED, Bank of Canada, the ECB and Banca d'Italia. The central bank's experts cooperated in the education programmes of the Corvinus University of Budapest and the Budapest Institute of Banking on several occasions.

3.6 FOREIGN EXCHANGE RESERVES MANAGEMENT

Purposes of holding reserves

Similarly to other central banks, one of the key tasks of the MNB – as specified in the MNB Act – is to manage the foreign exchange reserves of the country. The MNB holds foreign exchange reserves for the purpose of fulfilling several functions:

- to ensure the level of reserves expected by market participants ('international collateral'),
- to support the monetary and exchange rate policy (providing intervention capacity),
- to provide foreign currency liquidity for the banking sector,
- to satisfy the state's transaction-related foreign currency requirement.

Market participants continue to pay special attention to monitoring developments in foreign exchange reserves. The MNB also regularly reviews the desirable level of reserves

and, if necessary, takes measures – within the permitted limits – to reach the adequate level. Throughout 2017 the foreign exchange reserves exceeded the safe level, expected on the basis of the Guidotti-Greenspan rule, which is closely monitored by the central bank and by investors as well.

In terms of transaction goals, servicing the management of government debt continued to be the most important objective last year. The Debt Management Agency supported its debt management policy related to the rollover of the expiring foreign currency liabilities essentially based on forint by higher issuances in the forint market. Through the negative net foreign currency issuance the Government Debt Management Agency repaid the expiring foreign currency debt using the foreign currency purchased from the central bank to the debit of its increased forint deposit. In addition, the continuous provision of the budgetary institutions with foreign currency should be mentioned here. The transfers received from the European Union also flow through the MNB; these have been and will be substantial sources of foreign exchange reserves. The aforementioned transaction goals were once again satisfied smoothly in 2017.

On the other hand, in the course of managing the required volume of foreign reserves, the MNB makes efforts, even in the international low interest environment, to enforce yield considerations at all times, i.e. as a responsible asset manager to retain and, if possible, even increase the value thereof.

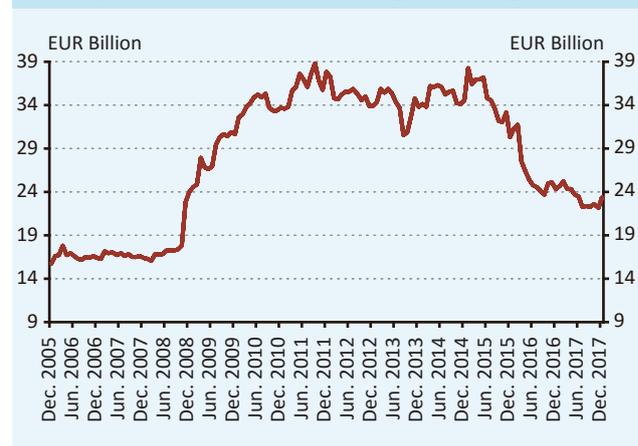
Reserve size

The level of Hungary's foreign reserves fell by EUR 1.0 billion in 2017 and amounted to EUR 23.4 billion at the end of the year.

The Government Debt Management Agency's items serving the repayment of debt, particularly the net foreign currency financing of the government and the net foreign currency interest expenditures, as well as the foreign currency expenses of the Hungarian State Treasury, reduced the foreign reserves by roughly EUR 5.3 billion in total. The change was primarily the combined result of the bond maturities with face values of GBP 500 million in May, almost EUR 800 million in July and JPY 25 billion in October, the foreign currency bond swap in October, the bond issuance in July with a face value of 1 billion renminbi, and other items. The cash movements related to the conversion of the households' foreign currency loans into forint and to the foreign exchange swaps expiring under the foreign currency pillar of the third phase of the FGS, reduced the reserves by almost EUR 1.3 billion. The revaluation of the

reserves in the amount of roughly EUR 800 million, reduced the level of reserves further. The reserve reducing items were mostly offset by the inflow of EU transfers in the amount of roughly EUR 2.8 billion and the reserve increasing effect of the forint liquidity providing foreign exchange swap tenders in the amount of nearly EUR 3.6 billion.

Chart 9
Developments in the size of foreign exchange reserves



Financial performance and risks of foreign exchange reserves

In fulfilling its core tasks as stipulated in the Act, i.e. managing the country's foreign exchange reserves, the MNB inevitably faces financial risks. The basic principles are that the degree of the assumed risks should be aligned with the objectives of the core activity, the size of the risks should be known, and risk assumption should be conscious and limited, in accordance with the institution's risk-taking capacity. In the course of foreign exchange reserve management, the threefold objective of liquidity, security and yield must be satisfied, meaning that the MNB tries to achieve the highest yield level while continuously keeping the risks at the pre-defined low level.

Similarly to the core duties of the central bank, the Monetary Council is also the supreme decision-making body in respect of foreign exchange reserves management: it defines the objectives and requirements related to the foreign exchange reserves, such as the level and liquidity of the reserves, decides on the currency used for optimisation, the risk strategy and the most important numerical strategic parameters of the reserve investment. Operative decision-making powers are exercised and the foreign exchange reserve management strategy is implemented by the Executive Board, within the framework stipulated by the Monetary Council. The Executive Board approves the limit system serving as a framework for risk taking: the permitted maximum deviation of the reserve portfolios from the

benchmarks, the counterparty limits and the range of investment instruments permitted in the field of reserve management.

The two main pillars of the reserve management are the benchmark system and the limit system. Independent performance measurement is an important element of the risk-taking policy. With a view to ensuring measurement of the success of portfolio management, the performance of each reserve portfolio is compared with the performance of a reference (benchmark) portfolio. The benchmark portfolios show the yield that would have been earned by a passively managed portfolio representing a wide market segment with the same investment parameters. The performance of foreign exchange reserve management activity is presented in comparison to these benchmark portfolios. The benchmarks reflecting the risk-return preference of the MNB and serving the performance measurement of the portfolios are maintained by the risk management unit, independently of the business area.

The most important risk categories related to foreign exchange reserve management include market risk, liquidity risk, credit risk, settlement risk and counterparty risk. The MNB controls the possible degree of financial risks related to foreign exchange reserve management with limits. In accordance with the conservative reserve portfolio management characteristics of central banks, the MNB applies a strict limit system, which considers market and other indicators, in addition to the expected high level of credit ratings.

In the course of foreign exchange reserve management, the MNB applies a variety of risk-minimising techniques to ensure that the assumed risks comply with the MNB's risk tolerance. In the case of derivative instruments, the MNB concluded ISDA (International Swaps and Derivatives Association) and related CSA (Credit Support Annex) contracts with its counterparties, which keep the credit risk exposure potentially arising in respect of the counterparty at a low level through the margin arrangement. In the case of the repo transactions regulated by the GMRA (Global Master Repurchase Agreement), the prescribed margin also helps limit risks. In the case of foreign exchange market transactions, the MNB settles its transactions, in accordance with the international best practices, in the CLS system, thereby minimising its settlement risks. In the course of reserve management, the MNB also considers the foreign currency liquidity requirement of the monetary policy instruments.

In the decreasing yield environment resulting from the global crisis that commenced in 2008, most central banks

realised a profit on their foreign exchange reserves as a result of the typically rising prices of the bonds managed in the central banks' portfolios. With the government bonds and other bonds of predominantly high credit rating in its portfolios, the MNB also benefited from this process through the revaluation of the positions as a result of the decreasing yield environment. In the present interest environment, which is close to zero or even negative in certain markets, the largest challenge faced by the central bank in reserve management is to ensure the preservation of capital. In the euro area, the expected yield of the assets relevant for central banks is negative. After the Fed, the ECB also moved towards tightening monetary policy in 2017 by reducing the facility amount of the asset purchase programme. The potential normalisation of the level of interest rates and the rising interest rates are advantageous in the longer run in terms of the profit or loss of the reserve due to the higher level of the anticipated yields, but in the short run it generates losses. Without any modification of the investment strategy, these impacts together would result in a decrease in the reserve level in the short run. Continuously monitoring the processes that represent a risk for the reserve level, the MNB – similarly to most central banks – regularly revises the reserve investment framework. In line with the reserve holding objectives and bearing in mind the conservative investment framework, the MNB continued to diversify its investments.

In 2017, the MNB essentially managed the foreign exchange reserves in six currencies (EUR, USD, JPY, GBP, AUD, RMB), organised in a variety of portfolios. The MNB assumes exchange rate exposure predominantly in euro: it hedges the other currency/euro cross rate risks using derivative instruments. The holding of foreign currency instruments denominated in currencies other than euro is justified by the higher diversification and, in the case of the US dollar, the available higher liquidity. Altogether, the MNB actively manages eight portfolios, in euro, US dollar, British pound, renminbi and Australian dollar. Based on the MNB's previous decision, it allocated a small part of the foreign exchange reserve portfolios to Chinese government securities investments, the first step of which was carried out indirectly, in cooperation with BIS (Bank for International Settlements, Basel). By mid-2016 the building of the internally managed, Chinese renminbi exposure was also completed. The MNB manages the Japanese yen portfolio, containing government securities only, as an index-linked portfolio strictly following the benchmark. From the end of 2012 – in the form of a mandate given to an external asset manager and custodian – US agency mortgage backed securities (MBS) also form part of the MNB's investment strategy. In 2016, a second MBS portfolio was also built, relying on external asset management. In 2017, the MNB

further increased the size of the two external, passively-managed MBS mandates. The strategic average duration (target duration) of the reserve portfolios was around 1 year. The MNB's gold reserves amounted to 98,857 ounces, worth EUR 108.5 million at the end of the reporting period.

The euro risk-free portfolio represents the backbone of the foreign exchange reserves and may only include highly-rated government securities, state-guaranteed securities and the issues of (supranational) international institutions. Highly-rated corporate and bank issues, and covered securities may be purchased for the second largest, euro investment portfolio, and for the investment portfolios in general; this portfolio typically includes government securities only for the purpose of adjusting the maturity structure.

In 2017, the divergence of the ECB's and Fed's monetary policy stance decreased somewhat after the ECB's announcement on the amendment of its asset purchase programme. In the USA, after the end of the quantitative easing and asset purchase programme, the reduction of the Fed's balance sheet commenced in October 2017 and the previously started tightening cycle continued. In 2017, the Fed raised the key policy rate on three occasions, in March, June and December by 25 basis points on each occasion, to the band of 1.25-1.5 per cent. By contrast, the ECB did not change the base rate during the year. According to the expectations of the Governing Council of the ECB, the key ECB interest rate will remain steadily at the present levels. On the other hand, as part of its asset purchase programme, the ECB announced in October that it would reduce the net asset purchase from the monthly volume of EUR 60 billion effective until the end of the year to EUR 30 billion from January 2018. The monetary conditions of the euro area may remain persistently loose. The euro yield curve, which is determinant for reserve performance, shifted upwards during the reporting period by 10-35 basis points, to a varying degree depending on the maturity, and at the end of the year it was in the negative band up to the seven-year maturity. The change in the yield curve had an unfavourable impact on the reserve result. The US dollar yield curve started to flatten: maturities below three years registered a rise of 50-90 basis points, while yields decreased on maturities longer than nine years.

As a result of the processes which were unfavourable for reserve management market (such as the low yield environment and rising yields), in 2017 the MNB realised a mildly negative performance on the foreign exchange reserves in absolute terms. At the same time, the portfolio performance slightly outstripped the performance of the benchmark. The liquidity allocated for the attainment of

the monetary policy objectives was continuously available during the year and no credit risk events occurred that would have had an adverse effect on the MNB's reputation.

In respect of the future performance of foreign exchange reserves, it still represents a risk that the performance of the reserve portfolios may be negative if the yields of the highly-rated assets move from an extremely low level as result of a yield increase, which reduces reserve performance due to the revaluation loss arising from depreciation of the existing bonds over the short run. On the other hand, due to the short duration of the reserves, the medium-term impact of this is already positive, as the expiring reserve components are reinvested at higher yield level.

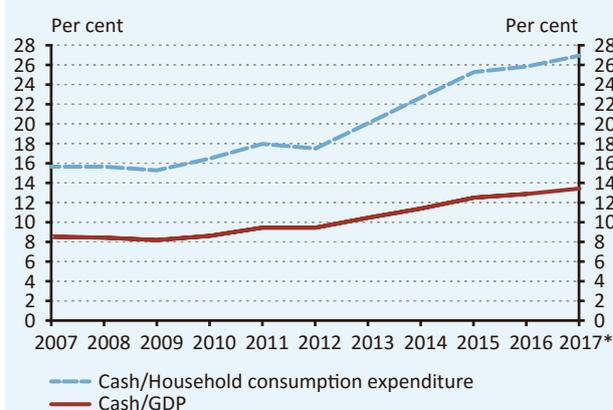
3.7 CASH LOGISTICS ACTIVITY

Currency in circulation

On 31 December 2017, the total currency in circulation amounted to HUF 5,114 billion, representing a 12 per cent increase of HUF 533 billion compared to the end of the previous year.

The intensive increase in cash holdings, lasting since 2012, was observed in 2017 as well, with currency holdings for saving purposes and expanding consumption identified as the main causes thereof. As a result of the growth, the GDP-proportionate value of cash holdings at the end of 2017 reached 13.4 per cent, representing a dynamic increase compared to the 12.9 per cent registered at the end of 2016.

Chart 10
Cash/GDP and cash/household consumption expenditure



* The 2017 GDP figure and the household consumption expenditure are MNB estimates

Source: MNB.

The change in the volume of banknotes in circulation varies by denomination, which is partly attributable to the one-off effect of the withdrawal of old banknotes resulting from the replacement of banknotes. The dynamic growth in the stock was limited almost exclusively to the 20,000-forint banknotes, the volume of which rose by 24 per cent. The growth in the stock of 500-forint banknotes was negligible, at only 2 per cent, while in the case of all other denominations the volume

in circulation decreased to varying degrees: in the case of the 10,000-forint, 5,000-forint, 2,000-forint and 1,000-forint denomination declines of 5, 11, 6 and 1 per cent, respectively, were registered last year.

The two largest banknote denominations still play a dominant role in the cash turnover: at the end of 2017 they jointly accounted for 67 per cent and 95 per cent of the

Chart 11
Breakdown of banknotes in circulation by quantity at the end of 2017

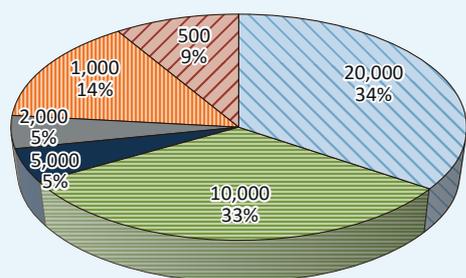


Chart 12
Banknote and circulation coin manufacturing (gross expenditure)

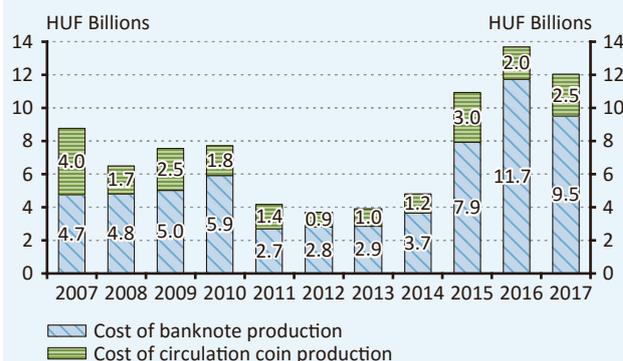


Table 6
Banknotes and coins in circulation⁶

(figures from 31 December 2017 and 31 December 2016)

	2017				2016			
	Volume	Value	Ratio (%)		Volume	Value	Ratio (%)	
	Million pieces	Billion HUF	Volume	Value	Million pieces	Billion HUF	Volume	Value
Banknotes								
20 000 forint	162.1	3,242.5	34.4	64.4	130.7	2,613.8	28.9	58.0
10 000 forint	154.1	1,540.6	32.6	30.6	162.3	1,622.8	35.9	36.0
5 000 forint	24.4	122.2	5.2	2.4	27.5	137.8	6.1	3.1
2 000 forint	22.1	44.1	4.7	0.9	23.4	46.8	5.1	1.0
1 000 forint	67.5	67.5	14.3	1.3	67.9	67.9	15.0	1.5
500 forint	41.5	20.7	8.8	0.4	40.5	20.3	9.0	0.4
Total	471.7	5,037.8	100.0	100.0	452.3	4,509.4	100.0	100.0
Coins								
200 forint	139.8	28.0	8.0	41.7	130.1	26.0	8.0	41.5
100 forint	181.7	18.2	10.5	27.1	170.9	17.1	10.5	27.3
50 forint	165.2	8.3	9.5	12.3	153.0	7.6	9.4	12.2
20 forint	310.6	6.2	17.9	9.3	289.6	5.8	17.9	9.3
10 forint	358.1	3.6	20.6	5.3	336.6	3.4	20.7	5.4
5 forint	581.0	2.9	33.5	4.3	544.4	2.7	33.5	4.3
Total	1,736.3	67.1	100.0	100.0	1,624.6	62.6	100.0	100.0

⁶ The table does not include holdings of commemorative coins and commemorative banknotes issued by the central bank, which – as legal tender – form part of the means of payment in circulation, but in accordance with their role, do not participate actively in the execution of cash turnover.

volume and value, respectively, of banknotes in circulation. This is due to the fact that in addition to their payment role in the cash turnover, they also fulfil a capital formation function.

Compared to the end of previous year, the volume of forint coins in circulation increased by 7 per cent on average.

The MNB's expenditures related to the cash production reached the gross amount of HUF 12 billion in 2017.

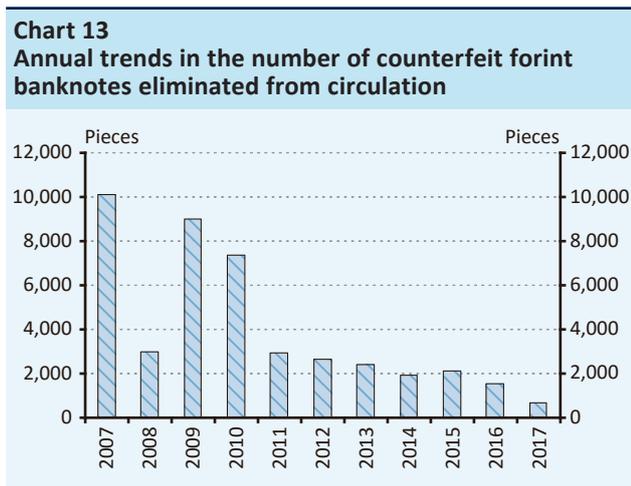
Distribution of cash

In 2017 – primarily in connection with the replacement of banknotes – the MNB managed cash turnover for its clients, i.e. credit institutions and the Hungarian Post, in the total amount of HUF 4,066 billion; within that it distributed 266 million banknotes to its clients, while 236 million banknotes were delivered to the central bank.

In the past year, the MNB scrapped 100 million end-of-life banknotes and replaced them with new, high quality means of payment.

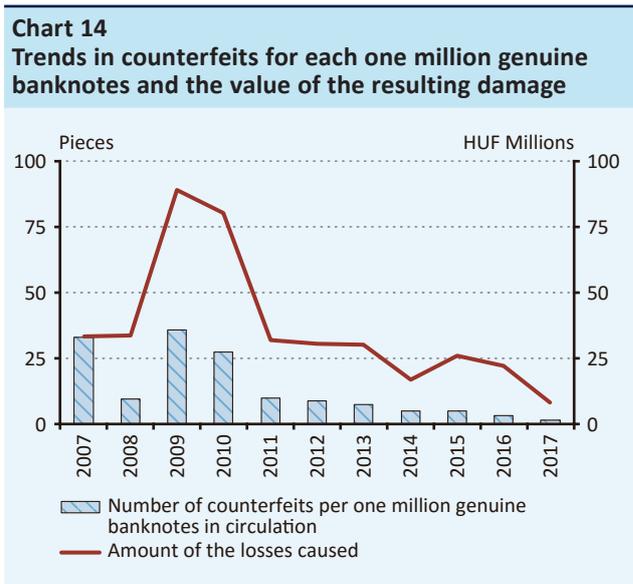
Prevention and reduction of counterfeiting

Similarly to previous years, the counterfeiting of forint banknotes was extremely low in 2017 as well; the number of forint banknote counterfeit eliminated from cash circulation was merely 716.



Last year, the number of counterfeit banknotes for each one million genuine banknotes in circulation was 1.5, which is an extremely favourable value by international standards.

The free educational activity performed by the MNB in respect of banknotes also significantly contributes to



maintaining the low counterfeit indicator. In addition to the printed educational materials provided by the central bank and also published on the internet, in 2017 the MNB's experts trained more than 3,000 retail cashiers on the features of banknotes and the possibilities of verifying the genuineness of banknotes, thereby also ensuring the efficient identification of counterfeit banknotes.

In 2017, the counterfeiting of higher denominations (10,000-forint and 20,000-forint) was the most common, accounting for 83 per cent of all counterfeit banknotes.

Table 7
Denomination breakdown of discovered forint banknote counterfeits in 2017

Denominations	500	1,000	2,000	5,000	10,000	20,000
Breakdown (%)	3.5	2.9	2.8	7.5	56.0	27.2

No considerable change took place in the counterfeiting methods, which are still characterised by the use of office reproduction equipment (colour copy machines, printers).

Persons familiar with the features of authentic banknotes can detect the counterfeits using simple checks (touching, holding up to light or moving) or in a cash office environment using combined checks, i.e. with the use of UV-A and UV-C light.

The occurrence of counterfeit foreign currency is still negligible, albeit it shows a slightly increasing trend. The central bank's experts examined 1,578 various foreign currency counterfeits in 2017. Of these, the number of counterfeit euro banknotes was 970.

Cash distribution administrative inspections

In 2017, the MNB inspected compliance with the provisions of the MNB Act on cash issuance, the Banknote Decree⁷ and of the MNB Decrees⁸ on the central bank data supply at six banks, one EEA branch office of credit institution type, six cooperative credit institutions, three cash processing providers and one intermediary rendering currency exchange services. The purpose of the cash distribution administrative inspections was to ensure the proper quality of the forint banknotes in circulation, the mitigation of operational risks to ensure smooth cash circulation and the provision of fair services by the credit institutions to households. The MNB launched 18 administrative inspection procedures in 2017, nine of which were closed in 2017, while the remaining nine procedures were completed in 2018. Of these, in 15 cases in a letter of warning the MNB called upon the inspected institutions to eliminate the identified shortcomings, while it found no infringement in three procedures. Of the inspections launched in 2016, one administrative procedure was closed early 2017, without identifying any infringement.

During the administrative inspections, the MNB identified the violation of certain rules⁹ applicable to the recycling of banknotes, the operation of banknote handling machines, the classification of credit institution branches as critical in terms of cash distribution, the action plan for the management of extraordinary situations occurring in cash distribution, the handling of incomplete or damaged banknotes, the content of the institutions' internal regulations and the denomination exchange and exchange of forint banknotes fit for circulation and banknotes qualifying as legal tender, but unfit for circulation, as well as forint banknotes withdrawn from circulation. The most common infringements related to the violation of the provisions of the MNB Act and the Banknote Decree related to the handling of incomplete and damaged banknotes.

Redesign of Hungarian banknotes

In the period of 2014–2019, the MNB is renewing the banknote series currently in circulation and issues redesigned banknotes that will also satisfy the cash distribution requirements of the cash processing machines and automated teller machines, while at the same time providing state-of-the-art protection against counterfeiting.

Of the series comprising six denominations, the first banknote redesigned by the MNB was the 10,000-forint bill in 2014, followed by the 20,000-forint banknote in 2015. The 2,000- and 5,000-forint denominations were issued as legal tender in 2016 and released to circulation in March 2017. The redesigned 1,000-forint banknotes became legal tender on 24 August 2017 by a decree, while the denominations will appear in cash circulation from 1 March 2018, gradually, in line with the requirements.

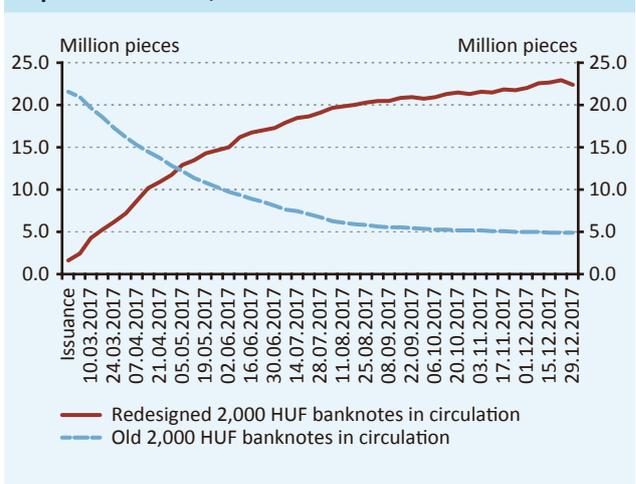
Good progress in the exchange of banknotes withdrawn in 2017

On 1 March 2017, the MNB put the redesigned 2,000- and 5000-forint banknotes in circulation. The old versions of the two denominations were withdrawn by 31 July 2017, and thus from 1 August 2017 only the redesigned banknotes can be used for payment.

Five months after the withdrawal, at the end of 2017 almost 82 per cent and already 88 per cent of the old 2,000-forint and 5,000-forint banknotes, respectively, flowed back to the central bank.

Chart 15

Replacement of 2,000-forint banknotes



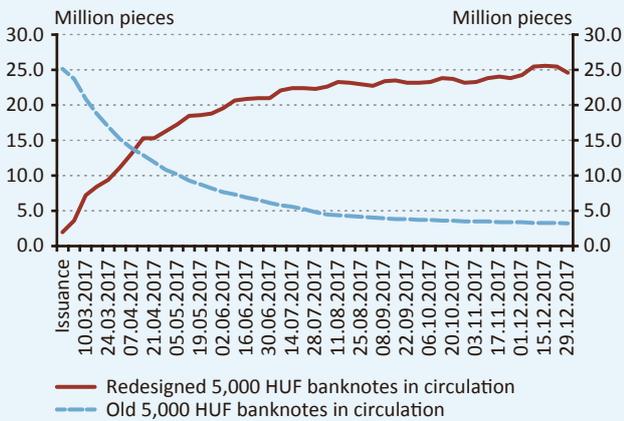
The old 20,000-forint banknotes, issued before 2015, were in circulation until 31 December 2017, and thus from 1 January 2018 the actors participating in cash circulation can only use the redesigned banknotes for payment. By the date of withdrawal 96 per cent of the old 20,000-forint banknotes had already been returned to the central bank.

⁷ MNB Decree 11/2011 (IX.6.) on the processing and distribution of banknotes and on technical tasks relating to the protection of banknotes against counterfeiting.

⁸ MNB Decrees 50/2016 (XII.12) and 50/2015 (XII.9.) on the data reporting obligations to the central bank's information system primarily to enable the MNB to carry out its basic duties.

⁹ Article 23 (8) of the MNB Act, Sections 4(2), 5 (1)-(3), 14, 19 and 23 of the Banknote Decree, Subsection 2.1.1 of Annex 2 and Annex 4, Annex II of the MNB Decrees on central bank data reporting.

Chart 16
Replacement of 5,000-forint banknotes

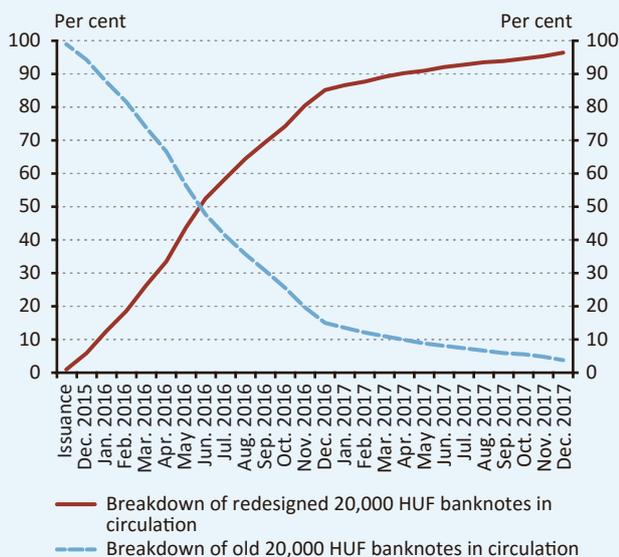


During the exercise, the MNB modelled the procedures necessary for providing the population with cash should any unexpected, extraordinary situation occur; this exercise is performed regularly, every few years.

Issue of commemorative coins and commemorative versions of circulation coins

Pursuant to the MNB Act, the central bank has the exclusive right to issue banknotes and coins, also including the commemorative banknotes and commemorative coins, which are also legal tender of Hungary. The MNB – in line with the practice of foreign central banks – issues commemorative coins with the aim of creating a worthy memorial of Hungary’s major historic, cultural and scientific anniversaries, events and persons in a lasting form for succeeding generations. The commemorative coins are not meant for circulation.

Chart 17
Ratio of old and redesigned 20,000-forint banknotes in circulation



Since 2014, the MNB issues all commemorative coins made of precious metal also in a cheaper, non-ferrous metal version, with a view to promoting the coins’ value-conveying, attention-raising and educational roles in a wider circle. The MNB’s decision with regard to the distribution of silver commemorative coins – for 3 months after issue – and non-ferrous metal commemorative coins at face value also serves the purpose of expanding the scope of conveying value.

Based on the statutory powers and in the spirit of the sales policy in place since 2014, in 2017 the central bank issued 19 commemorative coins on 10 subjects. Two of these were gold coins, seven were silver coins and ten (of two independent designs of coin) were non-ferrous metal collector coins.

After the date of withdrawal the cash-desks of the credit institutions and the Hungarian Post will exchange the withdrawn forint banknotes for legal tender for another three years and the MNB for 20 years, free of charge.

Successful cash transportation BCP exercise

On 8 November 2017, in cooperation with the Intervention Police, the commercial banks critical in terms of cash supply and the Hungarian Post, the MNB carried out a successful business continuity test, characterised by comprehensive and thorough preparatory works and professional execution. The test affected a few districts of Budapest and four provincial towns.

The technological innovation introduced in the 2016 commemorative coin programme is the security feature appearing in the mint mark: ‘B’ and ‘P’ letters in microlettering on the mint mark are indiscernible, they are visible only if magnified minimum ten times and serve as protection against the counterfeiting of the commemorative coins. The new security features appeared on almost all commemorative coins issued in 2017, except for the mini gold coins with diameter of 11 mm.

The MNB’s commemorative coin issuance programme of 2017 commenced on 17 February 2017 with the issuance of a silver collector coin with a face value of HUF 10,000 and its nonferrous metal version with a face value of HUF 2,000, to commemorate the 200th anniversary of the birth of Zsuzsanna Kossuth. A key figure in Hungarian healthcare,

the first head nurse in Hungary, Lajos Kossuth's sister was the first female nurse to establish and supervise field hospitals.

The gold collector coin of the commemorative coin issuance programme with a face value of HUF 50,000 was issued on 24 February 2017 on the occasion of the 775th anniversary of the birth of Margaret of Hungary. By issuing the collector coin dedicated to the model of self-discipline and Christian love, the central bank launched a new series presenting the saints of the House of Árpád. The non-ferrous metal version of the coin was also issued with a face value of HUF 2,000.

On 3 March 2017, the MNB issued a gold collector coin with a face value of HUF 5,000, a silver coin with a face value of HUF 10,000 and a non-ferrous metal coin version of the latter with a face value of HUF 2,000 on the occasion of the memorial year to commemorate the 200th anniversary of the birth of János Arany. The gold collector coin was issued as part of the 'Smallest Gold Coin in the World' collector programme, while the silver coin was issued as part of a series presenting Hungarian poets.

On 21 April, as part of the Earth Day commemoration, the central bank continued its collector coin series, launched in 2010, presenting Hungary's national parks, by issuing silver coins with a face value of HUF 10,000 and non-ferrous metal versions with a face value of HUF 2,000. The coin issued in 2017 features the Bükk National Park to mark the 40th anniversary of the designation of the Bükk Mountains as a national park. The special, rectangular collector coins were issued as the fourth piece of the series, following the coins presenting the Órség, the Duna-Dráva and the Duna-Ipoly National Parks.

The MNB issued a non-ferrous metal coin with a face value of HUF 2,000 on 18 May 2017 to commemorate the 200th anniversary of the birth of János Irinyi, the chemist who patented the noiseless, non-explosive match. The special, rectangular collector coin is the eleventh piece of the popular commemorative coin-series presenting the technical novelties and inventions of Hungarian engineers and inventors. With microlettering and a laser finish producing a rainbow effect, the technical novelties make this coin special.

The MNB issued a silver commemorative coin of extra wide diameter (52.5 mm), with a face value of HUF 20,000 and the non-ferrous metal version thereof with a face value of HUF 2,000 on 29 May 2017 on the 150th anniversary of Austro-Hungarian Compromise. Their inner, fold-back edge of the commemorative coins represents a novel design.

By putting into circulation the commemorative version of the 50-forint circulation coin on 14 June 2017, the MNB wanted to call the attention of the population to the 17th FINA World Championships held in Hungary. The commemorative version of the circulation coin was put into circulation in 2 million copies.

On 24 June 2017, the MNB issued a silver collector coin with a face value of HUF 5,000 and a non-ferrous metal coin with a face value of HUF 2,000 to mark the 125th anniversary of the birth of and pay tribute to László Lajtha, composer, ethnomusicologist, music pedagogue and the most important person of inspiration for the world-famous Dance House Movement, who is remembered as the dominant figure of a generation of Hungarian composers that entered the musical scene in the footsteps of Bartók and Kodály.

To celebrate the 650th anniversary of the founding of the University of Pécs, the central bank issued a silver commemorative coin with a face value of HUF 10,000 and its non-ferrous metal version with a face value of HUF 2,000 on 29 September 2017, to pay tribute to the University of Pécs and the 650-year history of higher education in Hungary.

To mark the 500th anniversary of the start of the Reformation, the MNB issued a silver collector coin with a face value of HUF 10,000 and a non-ferrous metal coin with a face value of HUF 2,000. By issuing the collector coin, the central bank wishes to call attention to the importance of the Reformation and its influence on culture, science and the economy.

The commemorative coin issuance programme of 2017 ended on 30 November 2017, with the issuance of a non-ferrous metal commemorative coin named Kossuth tér, with a face value of HUF 2,000 in a bronze-coated finish. This issuance is a valuable contribution to the series depicting Hungarian national memorial sites – launched at the initiative of the Hungarian Heritage Institute in 2014 – and follows the presentation of Somogyvár-Kupavár, Mohács and the New Public Cemetery in Rákospalota.

3.8 STATISTICAL SERVICES

For the purpose of fulfilling its duties as specified in the MNB Act, the MNB collects statistical information for the analysis of financial developments, the preparation of monetary policy decisions, oversight of the operation payment and settlement systems to ensure the smooth execution of payments, supporting the stability of the financial system, as well as for the fulfilment of the micro

and macroprudential supervisory activity, and publishes the statistics compiled from those.

The MNB publishes statistical information, analyses and time series on its website for the public, in accordance with the release calendar for statistics. In relation to the individual statistical areas the MNB also issues methodological publications.

In 2017, the MNB issued 5 decrees related to data reporting in 2018; one of these primarily contains data reporting ordered for the fulfilment of the MNB's basic tasks¹⁰, supplemented by four decrees ordering data reporting necessary primarily for the fulfilment of the supervisory tasks.¹¹ In 2017, the effective MNB Decrees related to the data supplies were modified on two occasions due to changes in the domestic legislative environment and to ensure the receipt of data necessary for the analysis and decision support activity required for the fulfilment of the MNB's fundamental duties.¹²

Result of the MNB's credit institution data collection projects

The introduction of the data supplies in new structure, ordered as a result of the Data Collection Integration Project and completed successfully at the end of 2016, was implemented smoothly in the first half of 2017. The credit institutions submitted the statistical balance sheet and profit and loss account, as well as the data collections detailing such, in early 2017 for the first time. The renewed balance sheet and the detailed credit institution data request related to loans, deposits and derivatives ensures – in addition to making it possible to replace several previous data collections – that credit institutions applying the Hungarian accounting standards and those that changed over to the international accounting standards (IFRS) can both fulfil the reporting obligations in accordance with standard reporting principles, in a comparable manner.

For many years both at international and national level, there has been an increasing demand for individual-level credit data in the field of statistical data collection, central bank analyses and the fulfilment of supervisory duties. At present, the data (which are anonymous in the case of natural persons) come from two sources: from the Central Credit Information System (CCIS) taken over from BISZ Zrt. and from the supplementary data collection directly

ordered for the credit institutions; these are linked in the MNB. The two different data sources raise data quality issues, which can only be managed by a uniform central bank credit register. To this end, in 2017, pursuant to the decision of the MNB's Executive Board, a Central Bank Credit Register project was launched, synthesising the central bank's analytical and supervisory requirements, with the goal of implementing the uniform central bank credit register in 2019. The project involves continuous consultations with the reporting entities, as a high quality uniform central bank credit register is common interest, which better fulfils its function related to responsible lending and provides wide-ranging opportunities for the monitoring of lending developments. In the longer run, it also facilitates the replacement of aggregated statistics. The ECB's new project for a Credit Register (AnaCredit) data collection harmonised across Europe, which will start with a reference date of 30 September 2018 and has to be joined by the euro area countries on a mandatory basis, is moving in the same direction. The MNB is committed to joining the AnaCredit system at a later date, and hence it is making efforts to create a credit register data collection compatible with AnaCredit, which will also provide access for domestic users to the European data.

Survey of households' wealth and financing developments

In June 2017, the MNB published the most comprehensive statistical information to date on households' wealth and financing developments. The publication entitled *Financial savings of households based on micro- and macro-statistical data* presents households' wealth based on the national accounts and the data of the Household Finance and Consumption Survey (HFCS) coordinated by the European Central Bank. The results of the household survey, published at the end of 2016, were analysed in several previous papers. However, it was the first time that micro data from the survey and the sector-level macro data presented in the national accounts were aligned, the sector's net worth was presented and detailed on the basis of a variety of household attributes.

According to the survey results aligned with the Hungarian macro data, the top ten per cent of households held 56 per cent of net worth, while the share of households with negative net worth was 5 per cent. This is attributable to the fact that the distribution of financial assets among

¹⁰ MNB Decree 27/2017 (X. 21).

¹¹ MNB Decrees 28/2017.(XI. 22), 29/2017 (XI. 22), 30/2017 (XI. 23) and 31/2017 (XI. 23) - amending decrees.

¹² The amendments affected the MNB Decrees enacted for the fulfilment of the MNB's core and supervisory duties [MNB Decrees 15/2017 (V. 26) and 20/2017 (VIII. 10)].

households is much more uneven in any economy than that of non-financial assets. The wealth ranking of the households in the countries that participated in the HFCS was essentially determined by the value of residential properties.

On the whole, it can be stated that the asset composition of Hungarian households is balanced: in addition to bank deposits, various securities and equity stocks play outstanding role, accounting for a major part of wealthier households' assets. The spread of the holding of debt securities in the Hungarian households' assets deserves special attention.

In the second half of 2017, a new round of the household data survey, which occurs every three years, was completed successfully. With answers from almost 6,000 households, the questionnaires will be processed in the first half of 2018, while the first analyses, also containing more up-to-date data, are expected to be published at the end of 2018.

Supervisory statistics

In 2017, the most important task within the credit institutions' supervisory data supply was represented by the accounting change, as 14 credit institutions – mostly banking groups – changed over to the application of IFRS (International Financial Reporting Standards), replacing the Hungarian accounting standards also at the level of the individual reports. The new IFRS-based, non-consolidated reporting tables were developed – and introduced from 2017 – for the credit institutions changing over to IFRS; with regard to supervisory data reporting, which is standardised at EU level (hereinafter: EU data reporting standard) these are the supplemented and amended versions of the data reporting containing consolidated financial information (FINREP), adjusted to the needs of Hungarian users and adapted to the individual level. In addition, a number of other data supplies had to be modified to a minor degree to ensure that they can be interpreted and completed uniformly at the level of the credit institution sector, irrespective of the accounting rules applied.

In 2017, preparatory work also continued for the implementation of the consolidated FINREP data reporting according to the IFRS 9 standard, which is uniform at the EU level and will be implemented from January 2018. The new national, individual FINREP data reporting was also revised in accordance with IFRS 9, aligned with the consolidated FINREP data reporting.

In 2017, the MNB started preparations to ensure that from 2019 the supervisory reporting package for the entire

credit institution sector (based on the EU standard) is regularly sent to EBA, after closure of the project targeting the development of the European central information system (EUCLID) which it had launched. Compliance with the requirements of the project generates substantial development needs at the MNB as well. The control and ensuring of data quality is the responsibility and duty of the MNB, in its capacity as the national authority, and this – with the expansion of the range of reporting entities and the content of supervisory reports – ties down internal resources to an increasing degree and requires complex IT solutions.

Solvency II (SII) – a standard EU regulation in the insurance sector – entered into force on 1 January 2016, including data reporting, which is standardised at EU level. In 2017, insurers submitted quarterly reports with restricted content for four periods and also successfully fulfilled the first comprehensive (comprising more than 70 tables) annual data reporting for 2016. The major change in insurers' data reporting resulting from the introduction of SII necessitated the transformation of the supervisory risk assessment system, the first phase of which was implemented in 2016, while the second phase –supplemented with indicators built on annual data and measuring the reserve risk – was completed by the time of the 2017 Q2 risk assessment. The full version of the risk assessment will be developed by the time of the 2018 Q1 risk assessment, with the proviso that the monitoring system will be supplemented with the indicators assessing market risk, and thus the monitoring system covering all risks – measurable by indicators – will be in place in respect of the insurance sector.

International data supply, international cooperation

As follows from its status, the expectations arising from international cooperation and its membership obligations, the MNB regularly supplies data and information to the European Central Bank, the Statistical Office of the European Communities (Eurostat), the European supervisory authorities (EBA, EIOPA), the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the World Bank and the Organisation for Economic Co-operation and Development (OECD).

With a view to complying with the international recommendations and requirements, and monitoring the changes therein, the MNB regularly participates in international forums related to the central bank's statistical activity and plays an active role in the work of the international working groups dealing with methodological developments and current statistical issues.

Data quality, administrative inspections

The MNB audited the compliance – i.e. the timely submission of the reports and the data quality – with the reporting requirements specified on the basis of the MNB decrees prescribing data supply to the central bank information system and by the directly applicable EU legal acts (hereinafter together: reporting regulations) in the form of continuous inspections in 2017 as well. During the reporting year, the MNB launched no administrative inspection procedures.

In 2017, due to the infringements identified on the basis of the continuous inspections of the fulfilment of data supplies, measures were taken in 881 cases, mostly due to the omission or late performance of the reporting obligations (erroneous reporting justified measures in 4 cases). Based on the audit evidence, the MNB obliged the reporting agents to eliminate the identified errors, submit the omitted reports retrospectively and fulfil the statutory requirements in the future. The measures affected certain statistical data supplies with regard to the balance of payments, monetary, securities and financial intermediary system statistics, as well as supervisory reports.

In 2017, penalties were imposed on five occasions – on five reporting agents – due to their failure to comply with the reporting requirements or for late fulfilment.

3.9 THE MNB'S ACTIVITY IN THE AREA OF SOCIAL RESPONSIBILITY

The Pallas Athena Public Thinking Programme forms a key element of the Social Responsibility Strategy based on the MNB's Statute, in the implementation of which 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 task. With a view to achieving the set goals, the MNB works to renew and enhance education (primarily tertiary education) and the system of economist and financial training and to support scientific activity and financial literacy. The educational programmes supported by the MNB and its foundations are partly its own initiatives, and in part realised through institutional partnerships. In the spirit of the international extension of the educational programmes, the students of the universities backed by the MNB had several opportunities – thanks to the support of the MNB – to attend summer universities abroad and international conferences.

Under the auspices of the education programmes, the MNB Excellence Scholarship programme was announced for the

second time in 2017. Within its framework more than 400 students of 25 higher education institutions received awards and benefited from scholarship grants.

The strategic partnership between the Corvinus University of Budapest and the MNB is the most important cooperation project of the central bank supporting tertiary education. In 2017, the central bank analyst specialisation course was joined by another 24 students, and thus together with the first year, in total 45 students attend the course, which was launched at the Corvinus School of Economics as part of the Master's in Economic Analysis (MEA) programme in 2016, under the supervision of the Department of MNB. In the Faculty of Social Sciences and International Relations, the curriculum was substantially extended in the area of economic geography and geopolitics: owing to its innovative, practice-oriented new methodology and content enhancement, the re-launched regional and environmental economics masters programme provides outstandingly high quality education, to which 66 students were admitted in 2017. A comprehensive research, analysing the New Silk Road initiative from economic, geographic and political aspects was also realised with the MNB's support. Supported by the MNB, the Corvinus University of Budapest started an English-language Geopolitical Doctoral Programme within the framework of the International Relations Multidisciplinary International Multidisciplinary Doctoral School; in the 2017-2018 academic year 11 persons were enrolled.

With the professional cooperation of the Corvinus University of Budapest, the MNB Summer School of Economics was organised for the first time in 2017. The purpose of the summer school is to implement a programme – which is also competitive by international standards – for foreign students, and to develop further bilateral professional cooperation through the event with a variety of international universities.

The MNB also supports the introduction of a novel form of education – i.e. dual education – in cooperation with the John Von Neumann University, where at present more than 30 dual students can obtain professional skills at the Mechanical Engineering and the Business Management bachelor courses.

The first year of the Oriental Business and Innovation Centre (OBIC), established through the cooperation of the MNB and the Budapest Business School, ended successfully. The MNB supports, also in the 2017-2018 academic year, the education of young experts speaking East Asian languages who are familiar with the economies and culture of the East Asian countries and regions, as well as the development of

the educational, research and cultural relations between Hungary and the countries of East Asia.

With the professional support of the MNB, students are educated in the 2017-2018 academic year at three grades within the framework of the doctoral programme entitled Geopolitics, geo-economics and political geography from a Central European perspective. The PhD education commenced in September 2017 with 25 students, and thus more than 110 students in total are pursuing doctoral studies.

The Széchenyi István University of Győr launched a Transdisciplinary doctoral sub-programme in September 2016 with the MNB's support. The English-language transdisciplinary sub-programme, using a new approach, was launched within the framework of the Sciences of Management and Organisation doctoral programme of the Regional and Economics Doctoral School. In the 2017-2018 academic year almost 40 students commenced their studies at two grades.

Within the framework of the institutional partnership supporting the social responsibility strategy, in 2016 the MNB concluded a cooperation agreement and support contract with the University of Miskolc, and then in 2017 with the Károli Gáspár University of the Reformed Church in Hungary and the University of Sopron for the support of the institution's Lámfalussy Sándor Faculty of Economics. The objective of the MNB is to improve the quality of economic education at the universities through scholarship programmes, the organisation of conferences, encouraging domestic and international mobility and supporting research projects, and to contribute to the development of economics and financial skills, financial literacy and to the widening of the intellectual horizon of students pursuing studies outside economics.

The "Tiszaroff Scholarship Tender" continued in 2017 with the professional cooperation of the MNB, which is aimed at the convergence of the sub-region by supporting the studies of university students living in this region. In the autumn semester of the 2017-2018 academic year, 65 students benefited from scholarship, of whom one student continues his studies in the doctoral programme. In the autumn semester of the 2017-2018 academic year the "Tiszaroff Further Education Scholarship Tender" was announced for the first time, within the framework of which 53 secondary school graduates and undergraduates won a scholarship.

As a continuation of the travelling exhibition entitled *70 years of the forint*, the MNB launched a new series of exhibition, entitled *From the dénár to the forint*, in

connection with the festive events organised in Pécs in honour of the 650-year old Hungarian university education. The exhibition walks visitors through the thousand-year history of Hungarian minting, from the age of Stephen I of Hungary until now. The exhibition, which is based on the MNB's own collection (including almost 600 coins and banknotes), presents the history of Hungarian currencies, and also provides numismatic and technological points of interest, as well as information on circulation and banknote security.

With the implementation of its Depository Programme, the MNB contributes to the preservation of cultural heritage. The goal of the programme is to regain for Hungary the largest possible amount of art treasures of significant artistic value, created by Hungarian or foreign artists and brought abroad or under foreign ownership in previous historical periods, and to prevent the dispersion of the most important works of art held in domestic estates by purchasing them. Within the framework of the Programme, in 2017 the central bank purchased 6 paintings by Tibor Csernus, the monumental painting by Gyula Benczúr – The royal family under siege October 1789, the Rakovszky 65-piece document collection and the six-piece Art deco drawing room suite of Gyula Tornai. Thanks to the Depository Programme, documentary films and brochures were also prepared on the art treasures obtained for public collections in 2017, which can be viewed on the MNB's website.

In addition, to the best of its capacity, the MNB participates in value creation, the preservation of national values, intellectual and cultural heritage (e.g. Museum of Fine Arts, Kecskemétfilm, Hungarian Academy of Sciences - Research Centre for the Humanities), and supports the training of professionals and scientific activities (e.g. Hungarian Economic Association, Pro Talenti Universitatis Foundation) under strategic agreements or via ad hoc grants. Through charitable donations, it contributes to improving the equal opportunities of disadvantaged groups and to alleviating the difficulties arising from extraordinary life situations (e.g. International Children's Safety Service, Hungarian Red Cross, Hungarian Association of the Deaf and Hard of Hearing). On the basis of the objectives set forth in the corporate social strategy, the central bank is open to expanding the group of its cooperating partners.

To support the Pallas Athena Public Thinking Programme the number of the Pallas Athena Foundations founded by the MNB – in line with its duties and primary objectives –, decreased from the previous six to four after the merger of the Pallas Athena Domus Scientiae Foundation with the Pallas Athena Domus Concordiae Foundation, and the Pallas

Athena Domus Innovationis Foundation with the Pallas Athena Geopolitical Foundation.

3.10 FACTORS SHAPING THE COMMUNICATION OF THE MNB

In order to supply the general public with continuous and comprehensive information, in 2017 the MNB issued a total of 355 press releases, held 31 press conferences and published 63 professional articles in the printed press, on online portals and on its own website.

The key objective of the information was to present and introduce the targeted central bank programmes and measures supporting the economic policy of the government and the economic growth of Hungary, along with the demonstration and description of important professional decisions. The focus of the communication was on the decisions and information regarding monetary policy and financial stability, the presentation of the most important decisions of the central bank, the publication of the outcomes of the Monetary Council's meetings, and the presentation of the results of the supervisory audits and procedures. Warnings about the necessary precautions to identify risk related to financial operations also formed part of the supervisory communication. The MNB continuously provided the general public with the most important statistical data, and regularly informed the population on the process of the banknote replacement programme and the particulars of the commemorative coin issuances.

The MNB regularly published professional articles in 2017 again, in cooperation with the major and competent professional and economic portals and official papers. The purpose of these professional articles is to present the MNB's activity more thoroughly and with a higher level of detail, to describe the background of professional decisions and processes in an easy to understand form, and to bring closer the work and achievements of the various functional areas to those interested.

In autumn 2017, the MNB launched a campaign on the "Certified Consumer-friendly Housing Loan" scheme to call the attention of households to the opportunity of taking out certified loans, to popularise the MNB's own calculator, which facilitates searching among the certified loans, and to indirectly encourage responsible loan selection and financial awareness. The MNB launched an open European public procurement tender for the communication campaign. The preparation and publication of the advertisements in television and radio broadcasts, as well as in the online and printed press, occurred on the basis of the contract concluded with the winner of the tender.

The communication of the information related to the steps of the banknote replacement programme continued in 2017 as well. The central bank provided information on the new issuance and withdrawal dates through the press, in the form of notices and press conferences, by directly displaying posters in commercial premises, as well as in the form of television and radio ads. The purpose of the communication was to make the population aware of the dates of new banknote issuance and their appearance in circulation, the withdrawal of the old notes, and to present their security features and the elements necessary for identification.

With a view to enhancing the financial awareness and knowledge of consumers, the MNB also provided the population with a range of important, useful information through its seasonal campaigns, brochures and short films.

The MNB provided regular and detailed information on its value creating initiative, supplementing the traditional central bank activities, including the educational programmes implemented through university cooperation and the activities performed with a view to adding to the domestic art treasures within the framework of the Depository programme.

3.11 THE MNB'S INCOME IN 2017

In 2017, the MNB recorded a profit of HUF 38.3 billion. In 2017, the following main developments had an effect on the balance sheet and profit:

- the level and composition of foreign exchange reserves defined by monetary policy, and foreign currency purchases and sales affecting the level of reserves: net foreign exchange inflows from EU transfers, operations performed by the Government Debt Management Agency in relation to debt management, the foreign exchange conversions performed by the Hungarian State Treasury for purposes not related to debt financing;
- developments in instruments absorbing forint liquidity, which are correlated with changes in foreign exchange reserves and the MNB's net foreign currency receivables;
- monetary policy instruments supporting the banks' lending activity: the Funding for Growth Scheme, interest rate swap tenders;
- changes in forint interest rates and international foreign exchange interest rates; and
- changes in the forint exchange rate.

Table 8
Abbreviated income statement and individual balance sheet items of the MNB
(HUF Billions)

No.	Description (P/L line)	2016	2017	Change
1	Net interest and interest-related income (I+II)-(X+XI)	-15.6	10.7	26.3
2	net forint interest and interest-related income (I-X)	-28.4	11.8	40.2
3	net foreign exchange interest and interest-related income (II-XI)	12.8	-1.1	-13.9
4	Realised gains/losses arising from financial operations (IV-XIV)	16.8	1.2	-15.6
5	Income arising from exchange rate changes (III-XII)	95.1	61.4	-33.7
6	Other constituents of net income* (V+VI+VII+VIII)-(XIII+XV+XVI+XVII+XVIII)	-42.0	-35.0	7.0
7	Profit/loss for the year (1+4+5+6)	54.3	38.3	-16.0
	Selected items of equity in the balance sheet			
8	Retained earnings	107.9	162.2	54.3
9	Revaluation reserves due to unrealised foreign exchange gain/loss	182.5	28.0	-154.5
10	Revaluation reserves due to changes in the market value of the foreign currency securities	17.4	3.9	-13.5

* Revenues on supervisory activities, net profit/loss of banking operations, costs of issuing banknotes and coins, net creation and release of provisions, income/expenses from commission and from other items.

Net interest and interest-related profit amounted to HUF 10.7 billion, which represents an improvement of HUF 26.3 billion compared to the previous year. The improvement in net interest income and its return to a profit can be attributed to the central bank's self-financing programme and to the balance sheet contraction resulting from the conversion of households' foreign currency loans into forint, which – in parallel with the decline in foreign exchange reserves – resulted in a decrease in forint liabilities predominantly financing reserves. In addition, the decline in the average level of forint interest rates also contributed to the favourable development in net interest income.

Net forint interest and interest-related profit amounted to HUF 11.8 billion, surpassing the 2016 result by HUF 40.2 billion. The average balance of interest-bearing forint liabilities (forint deposits of the budget, reserve requirement, liquidity-absorbing instruments) declined further in 2017 by roughly HUF 1,200 billion – primarily as a result of the gradual decrease in the 3-month deposits in accordance with the quantitative restriction – which resulted in lower forint interest expenditures. The central bank base rate did not change in 2017, but the average level thereof declined and due to the transformation of the monetary policy instruments, the role of the lower, overnight interest rates increased, which also pointed to more favourable net interest income. As a result of the decrease in the level of domestic interest rates, the monetary policy instruments of the central bank – aimed at reducing the banks' interest risk and supporting their lending activity – also contributed to the favourable developments in net forint interest and interest-related income.

Foreign currency net interest and interest-related income showed a loss of HUF 1.1 billion, which fell short of last year's profit by HUF 13.9 billion, mainly due to the decline in interest income on foreign exchange reserves. The average level of foreign exchange reserves declined further, accompanied by the low yield environment, and interest revenues on foreign exchange reserves thus continued to fall.

In 2017, the realised gains from financial operations amounted to HUF 1.2 billion, marking a shortfall of HUF 15.6 billion relative to 2016. This profit/loss category primarily contains gains and losses realised from changes in the market prices of securities – generated upon the sales of securities – included in the foreign exchange reserves. The modest result arising from financial operations is mostly attributable to the moderate rise in foreign exchange market yields that was registered in 2017.

One factor determining developments in income from exchange rate changes is the difference between the official and the cost rates. In 2017 the difference decreased, which is attributable to the rise in the cost rate, mostly linked to the inflow of EU transfers. The other component of income from exchange rate changes is the volume of foreign currency sales. In 2017, foreign currency sales primarily took place in connection with the debt management transactions of the Government Debt Management Agency, the volume of which was lower than in the previous year. The realised income from exchange rate changes declined in 2017 compared to 2016 and amounted to HUF 61.4 billion.

Other components of net income include operating income, costs and expenses, the costs of issuing banknotes and coins, creation and release of provisions, income from supervisory activity and income/expenses from fees and commissions and other income/expenses. The net expenditure resulting from these items decreased by HUF 7.0 billion and amounted to HUF 35 billion in 2017.

The MNB's equity amounted to HUF 242.4 billion on 31 December 2017. The size thereof was determined by the volume of retained earnings, the level of the revaluation reserves and the developments in the profit/loss for the year.

Revaluation reserves due to forint exchange rate changes fell by HUF 154.5 billion compared to end-2016. The difference between the official and the cost rates decreased, and due to the contraction of the balance sheet, the portfolio of foreign currency assets subject to revaluation became lower. Revaluation reserves due to forint exchange rate changes stood at HUF 28 billion on 31 December 2017.

On 31 December 2017, unrealised gains on foreign currency-denominated securities marked to market amounted to HUF 3.9 billion, which falls short of the previous year's level due to the moderate increase in foreign currency yields.

3.12 FINANCIAL PERFORMANCE OF THE MNB

The internal operations of the MNB were essentially aimed at providing the resources required for the efficient discharge of the duties stipulated by the MNB Act.

Operating costs

Actual operating costs in 2017 amounted to HUF 37,508 million, which was 7.2 per cent below the approved budget and 6 per cent above the expenditures incurred in 2016.

The shortfall compared to the 2017 plan was mainly due to the fact that in the case of personnel expenditures the reductions of the contributions, recommended by the Government for 2017, but not approved until the completion of the plan (e.g. social contribution tax) were not enforced in the MNB's financial plan. The shortfall in general operating costs in 2017 was mostly determined by the fact that the organisations performing armed security guarding reviewed their service charges mid-year and then reduced them. On the other hand, due to the derecognition of the value of the Eiffel Palace property, which was sold in the second half of the year, and of the related assets, the depreciation charge was lower than planned in 2017.

The increase in costs compared to the previous year was incurred partly in personnel expenditures, mostly due to the fact that the average headcount rose by 85.5 persons (6.4 per cent) primarily as a result of filling some of the vacancies.

On the other hand, general operating costs also increased, mostly due to the rise in the communication costs, within operating expenditures. This was primarily attributable to the cost – allocable to 2017 – of the multi-year media campaign promoting the Certified Consumer-friendly Housing Loan, based on the contract concluded in August 2017. The increase in costs incurred under other titles (e.g. depreciation charge, IT costs) was mitigated by the fact that the costs of armed security guarding services were lower than in the previous year, due to the mid-year decrease in the service fees and in the number of guarded buildings.

Personnel costs

In 2017, personnel costs (HUF 22,347 million) exceeded the previous year's costs by 5.7 per cent (by HUF 1,201 million).

Compared to 2016, the closing headcount was up by 23 persons (1.7 per cent), while the change in average

Table 9
Operating costs of the MNB in 2017

Description	Actual data for 2016	Budget for 2017	Actual data for 2017	Index (2017 actual / 2017 budgeted)	Index (2017 actual / 2016 actual)
	HUF millions			Per cent	
1. Staff expenditures	21,146	23,437	22,347	95.3	105.7
2. General operating costs	14,249	16,994	15,161	89.2	106.4
Total	35,395	40,431	37,508	92.8	106.0

headcount was over 6 per cent, i.e. it rose from 1,326 registered in 2016 to 1,411 in 2017. This was primarily the result of filling some of the vacancies.

In addition to the change in costs due to effects of the change in the headcount, the implemented organisational changes and the wage adjustments within the limits of the wage bill management scheme also impacted personnel costs in 2017.

General operating costs

In 2017, general operating costs (HUF 15,161 million) were 6.4 per cent higher than in 2016 (up HUF 912 million); the changes in the components were attributable to the following reasons.

IT costs increased by HUF 253 million (12 per cent) compared to the previous year. This was mostly attributable to the rise in software costs resulting from the support and operation costs of the completed investments (new IT systems); in addition, consulting costs related to IT security systems also increased. The surplus costs were mitigated by the minor decrease in data transmission and news service fees.

Compared to 2016, *operating costs* were materially lower (by HUF 959 million, i.e. 13.8 per cent), which mostly resulted from the fall in the costs of armed security guarding. This is attributable to the fact that – as result of the amendment of the contracts concluded with MNB-Biztonsági Zrt. and the Intervention Police, i.e. the entities performing the activity – the service fee decreased substantially and there was also a decline in the volume of guarding duties.

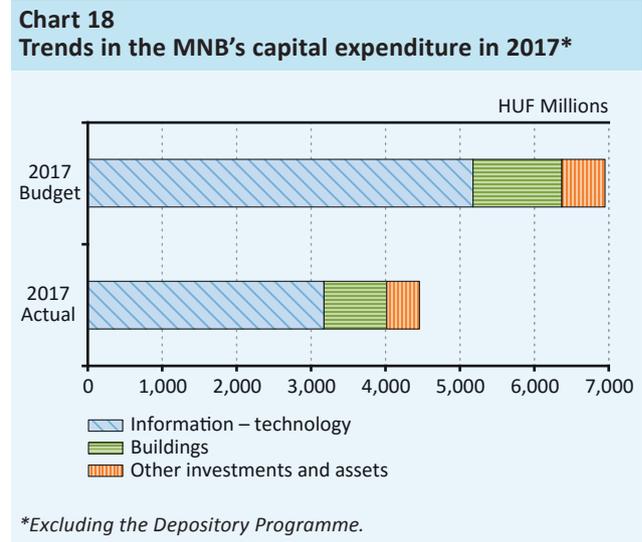
The annual amount of the *depreciation charge* of tangible and intangible assets in 2017 exceeded that of the previous year by 11.8 per cent (HUF 348 million), primarily as a result of the dominance of software developments (the useful life of intangible assets is usually shorter – i.e. their gross value depreciates faster – than that of other assets).

Other expenses in 2017 rose by 35.2 per cent (HUF 1,141 million) compared to the expenses recorded in 2016, mostly due to the increase in communication costs. This was primarily attributable to the media campaigns launched in September (e.g. currency withdrawal and banknote issuance, financial consumer protection campaigns) and particularly to the 2017 costs of the multi-year campaign promoting the Certified Consumer-friendly Housing Loan. On the other hand, within other expenses there was a decline in legal costs, as the legal expert activity

performed in 2015 in relation to the operation of the Financial Arbitration Board was no longer required in 2017.

Capital expenditure

In order to achieve the MNB’s objectives and maintain the volume and quality of tangible assets, development projects and asset procurements became necessary. In relation to the normal operations, the approved capital expenditure budget for 2017 amounted to HUF 6,937 million. In relation to the Corporate Social Responsibility Programme, the MNB supported the purchase of art treasures as part of the Depository Programme, for the implementation of which the approved capital expenditure plan includes a separate appropriation. In 2017, HUF 4,980 million was paid for capital expenditures, of which HUF 543 million was linked to the Depository Programme.



IT developments and the procurement of equipment accounted for the vast majority of the MNB’s capital expenditures. The largest amount in 2017 was spent on investments ensuring business continuity, such as the timely replacement of the obsolete server pool and workstations, the capacity expansion of the central data storage units and the procurement of Microsoft licences for the use of office software. Investments aimed at the enhancement of IT security also continued, as part of which the existing systems were supplemented with useful extra functions to comply with the challenges of our days. The priority STAFIR project, to be implemented in several years, aimed at the integration of the statistical and supervisory systems, is on schedule.

The procurement procedure related to the replacement of the security technology system of the building at Szabadság square and of the Logistics Centre, as part of

the enhancement of the security technology environment, was closed successfully. The investments provide assistance for the work of the armed security guards by the complex replacement of the bank security electronic and mechanical systems, and they are also aimed at preventing extraordinary situations. At the end of 2017 a few alterations were completed on the building (main entrance) and part of the security equipment to be installed were also purchased.

As a more significant capital expenditure related to the properties, in 2017 the replacement of the windows on the third and fourth floors of the national monument building at Szabadság continued. A few engineering investments were also performed here. In the Eiffel Palace building, additional workplaces were developed.

Personnel management at the MNB

The MNB continues to treat human resource management as a strategic issue with a view to fostering efficient and profitable operation. The MNB provides stable employment and has developed a work culture where employees are able to perform their tasks efficiently, focusing on performance, in a value-driven atmosphere. They acquire and enhance the knowledge, skills and competence necessary for efficient work, and the productive work performed by the employees is supported by incentives and moral appreciation. All of this helps the employees realise their individual interests in harmony with the interests of the institution.

Based on the human resource strategy, highly educated and motivated employees can be secured in the required number. The MNB strives not only to hire excellent employees, but also retain them and to this end it also helps support the individual ambitions in line with the objectives of the organisation. The MNB still considers it important to employ highly qualified, knowledgeable, dedicated and loyal employees, who enable the central bank to take part in the changes in accordance with the renewing domestic economic and social interests and values.

The MNB also elaborated a training plan in 2017, as part of which it prepared a Training Catalogue with a view to providing a pool of highly qualified employees. Employees typically attended professional, personal skills development programmes and language trainings, which – tailored to individual needs – served the participants' development in terms of efficiency, approach as well as the development cooperation skills.

With the extension of its internship system, also incorporating international best practices, the MNB

continued to support university students in the acquisition of professional skills. Within the framework of the internship system, the MNB received higher-education students for the period of their field practice and also within the framework of the dual training. New graduates and career starters also had the opportunity to participate in the internship programme, which helped them integrate into the labour market and also provided the MNB with the opportunity to select students showing outstanding performance and employ them in the bank.

In 2017, the human resource area continued the development of HR systems, which supported the integration of new entrants, the relations between the employee and the organisation during the existence of the legal relationship, and supported the process of leaving the organisation.

The heads of the functional areas play a dominant role in the determining the headcount and wages necessary for fulfilling the tasks. The MNB's wage and income policy reflects its special position and supervisory function. The wages recognise the special knowledge and professional skills that the staff of the individual functional areas possess for the performance of these functions.

The wage bill management system operating in the MNB provides the opportunity, in accordance with the objectives specified upon the implementation thereof, to manage changes and requirements arising in the various functional areas in a fast and flexible manner by – if necessary, temporary – regrouping of employees. In addition, the wage bill management also supports executives in the most complete performance of the tasks of the areas managed by them in a way that the heads of the various areas can directly evaluate excellent work and the relevant achievements, which may be reflected in the remuneration of the employees as well. Accordingly, the system that was introduced became suitable for the long-term retention of high-quality, highly qualified personnel and also for the strengthening of responsible financial management by granting much wider possibilities for the heads of wage management areas to give proposals.

With its multi-component fringe benefit system, the MNB provided a wide range of benefits to its employees in 2017 as well, and also preserved its family welfare scheme. Within the framework of this, it provided special support for families with children and contributed to the mitigation of burdens related to the occurrence of unexpected situations in life. For the preservation of the personnel's health, a complete check-up programme was available for each employee once a year.

It is of key importance in the MNB's organisational culture that employees can fulfil their family roles as well and can perform their workplace tasks with a balanced family background. As a result of a number of measures and successful initiatives and as an acknowledgement of its Child-focus and Family-friendly Programme, the MNB won the title of 'Family-friendly Workplace' presented by the Ministry of Human Capacities in 2017 as well. With this title, the Ministry honoured the efforts, programmes, initiatives and system-level solutions undertaken by the central bank voluntarily and irrespective of competition, in order to support employees with family and children.

Changes in staff number

Changes in the staff number of the MNB in 2017 were determined by the labour-intensiveness of the tasks to be completed and by measures related to the transformation of the organisation.

As a result of the natural migration and quality-driven replacements, 183 employees were removed from the statistical headcount.

In order to secure an adequate workforce for the operating structure aligned with the challenges and the MNB's expanded tasks to fill vacant or new positions, together with the employees returning from the inactive payroll, 206 persons were recruited and added to the MNB's statistical headcount in 2017.

As the combined balance of the decreases and increases, the closing headcount of 2017 was 1,407, exceeding that of 2016 by 23.

In 2017, the average staff number of the MNB was 1,411.3 employees, exceeding that of the previous year by 85.5 people.

In dual education, the MNB supported and accepted 51 students as trainees.

The average age of employees in 2017 was 40.

Procurement

Like other central banks in the European Union, the MNB conducts public procurement procedures in respect of purchases where the value reaches the value limits of national public procurements. The MNB is still subject to public procurement jurisdiction based on Commission Decision 2008/963 amending the Annexes to Directives 2004/17/EC and 2004/18/EC of the European Parliament

and of the Council on public procurement procedures, as regards their lists of contracting entities and contracting authorities.

The procurement processes of the MNB are regulated by the internal regulations of the Director General and the Business Management Manual, in accordance with the effective Act on Public Procurement.

As regards the procurements in 2017, there were three types of procurement procedures at the MNB:

- other low-value procurement below a net amount of HUF 5 million,
- other procurement reaching a net amount of HUF 5 million, but not reaching the public procurement value limit (in 2017 this included procurements between the net amount of HUF 5 and 15 million based on value); and
- public procurement.

Procurement procedures below the net amount of HUF 5 million are conducted by the organisational units within their own sphere of responsibility, while procurements and public procurements reaching the value of net HUF 5 million are arranged by the Central Procurement Department of the Central Procurement and Operation Directorate with support from the organisational units concerned.

In 2017, 236 procurement requests were received and procedures launched, of which 28 procedures were carried over to 2018.

Number of procedures in 2017 (closed with the conclusion of a contract): 138:

- public procurement: 67; with net value of HUF 11,218.5 million;
- other procurements exceeding the value of net HUF 5 million: 71; with net value of HUF 758.1 million.

In addition to the foregoing, the number of low-value procurements, below HUF 5 million, in 2017: 610; with net value of HUF 679.8 million.

Environmentally-conscious operation

In 2017, the environmental activity of the MNB was determined by the review and updating of the environmental strategy. The strategy for the period of 2017-2019 set no new directions, and the focus of the strategy is still on the

environmentally-conscious development of buildings, and the further enhancement of the environmental performance of the cash supply chain. To ensure the realisation of the strategy, the Executive Board of the MNB adopted an environmental programme consisting of 15 points, i.e. the strategic action plan, the implementation of which has commenced.

In 2014, the MNB set the goal for its head office to achieve, by the end of 2016, the 'Very good' building certification in the international environmental rating system (BREEAM In-Use), which was one grade higher than the rating at that time. The external audit of the comprehensive building rating (MNB Head Office, Logistics Centre) was performed at the end of 2016 and the MNB managed to obtain the 'Very good' rating. In 2017, in connection with the review of the Environmental Strategy, additional opportunities related to the development of the respective buildings, for the purpose of formulating new objectives, were taken into consideration and analysed. The objective formulated on the basis of the analyses was to maintain the 'Very good' obtained for the Logistics Centre and to confirm it in the case of the Head Office building. In 2017, the MNB successfully renewed the certificates of the buildings, which in the case of the head office building – in view of its national monument status – is an outstanding achievement even by international standards.

In relation to improving the environmental performance of the cash supply chain, complying with the owner's expectations formulated on the basis of the detailed environmental review of the MNB's subsidiaries involved in cash production, in 2017 Pénzjegynyomda Zrt. and Diósgyőri Papírgyár Zrt. implemented an environmental management system identical with that operating in the MNB and obtained the EMAS certificate, i.e. the international accreditation recognising environmental-friendly operation. In relation to the further enhancement of the cash supply chain's environmental performance, in the medium-term strategic period of 2017-2019 the focus will be on the survey of the environmental performance of the third segment of the cash supply chain, i.e. the cash logistics providers. The first phase of the "Carbon footprint of cash supply chain", launched in the context of this, was implemented in 2017, where a single environmental performance assessment scheme was developed for the logistic supplier firms. In the subsequent part of the project, the environmental burden related to the operation of the automatic teller machines will be identified, followed by the quantification of the carbon footprint of the entire cash supply chain.

The trends in the MNB's environmental performance are mostly determined by energy consumption, and particularly

by energy consumption related to the operation of the buildings. As regards the total energy consumption of the properties included in the environmental management system (Head Office, Logistics Centre, business site at Krisztina krt.), it can be stated that during the past years the hidden reserves of the system were identified, and a number of measures, resulting in energy savings, were implemented. In the case of the targets set for the reduction of energy consumption, it is difficult to formulate a responsible undertaking due to the extreme weather conditions accompanying global warming; nevertheless, continuous efforts should be made to improve specific energy consumption. In 2017, the total energy consumption rose by 2.5 per cent compared to the base of 2016. The growth is primarily linked to the increased energy consumption resulting from the extremely cold winter of 2016-2017. The decrease in the per capita total energy consumption that characterised the previous years continued, with a 4.9 per cent decrease registered in 2017.

Operating the environmental management system (KÖVHIR) allows the MNB to monitor on a continuous basis the environmental factors that result in significant environmental impacts and intervene, as necessary, to improve its environmental performance year by year. The MNB intends to maintain and – as circumstances permit – enhance this system in the 2017-2019 strategic period as well. In relation to this, it examines the possibility of integrating the environmental management systems implemented in 2017 by the subsidiaries involved in banknote production in the MNB's system.

Operational risk management

The successful implementation of the MNB's strategic objectives and the protection of its good reputation and assets are crucially important values. An efficient operational risk management system plays an important role in the protection of these objectives and values. With that in mind, the identification, assessment and continuous in-house monitoring of operational risks and the implementation of the appropriate response measures constitute an integral part of the MNB's corporate governance. In order to continuously maintain the operational risk management activity at a high level, it is essential to monitor international best practices and to improve the MNB's systems in line with such practices.

In order to be able to adequately discharge its fundamental tasks in critical situations as well, the MNB has efficient business continuity management. Within that, it continuously updates its business continuity and disaster recovery plans, the reliability of which is tested every year.

The one-week live integrated test performed in respect of the operation of the payment system and foreign reserve management bears the utmost importance.

3.13 INTRODUCTION OF THE ESCB COMMITTEES

Since Hungary's accession to the European Union, the MNB's management and experts have been participating in the work of the ESCB committees and their working groups. This membership and cooperation provides an opportunity for national central banks to work together and formulate joint positions and also enables the representatives of national central banks to obtain information on the ECB's activities on a regular basis.

On 31 December 2017, fifteen ESCB committees and two other committees assisting the work of the ESCB were in operation. In connection with the launch of the Single Supervisory Mechanism (SSM) in November 2014, in addition to the two existing configurations (euro area composition and ESCB composition) some committees have held meetings in SSM composition since 2014 as well, with the attendance of representatives of the supervisory authorities operating as organisations independent of the central banks of the Member States participating in the SSM.

The following provides a brief summary of the fields of activity (mandates) of each ESCB committee:

Accounting and Monetary Income Committee (AMICO):

This Committee develops and regularly reviews the accounting policy principles which define the framework of financial statements in accordance with the Statute of the ESCB and the methodology of the preparation of regular financial reports, facilitating their co-ordination at an international level. It monitors the calculation of monetary income in accordance with the risk management process developed by the security framework system of accounting.

Banknote Committee (BANCO):

This Committee determines the euro banknote needs of euro area countries, coordinates the production of banknotes and works out the stockpiling and banknote processing policies of euro banknotes. Its tasks include sharing experience in the production of euro banknotes, the examination and development of security features to prevent euro banknotes from being counterfeited, and the assessment of security risks related to the production of the euro. It contributes to the harmonisation of practices applied in the euro area, the development of the system which monitors counterfeiting and the verification of statistics regarding euro banknotes and coins.

Committee on Controlling (COMCO): COMCO has been an ESCB committee since July 2007 (only euro area NCBS participate in the work of this committee). It contributes to the application and enhancement of the Common Eurosystem Cost Methodology and prepares analyses on the cost data and cost structure of certain functions and products of the Eurosystem/ESCB. In the area of management information systems, it serves as an important forum for co-operation and information exchange on issues concerning the ESCB as a whole.

Eurosystem/ESCB Communications Committee (ECCO):

This Committee contributes to the development of the external communication policy of the Eurosystem, the ESCB and the ECB, with the aim of making the objectives defined by the Eurosystem/ESCB more transparent and understandable, and informing the public of the tasks and activities of the Eurosystem and the ESCB.

Financial Stability Committee (FSC):

The FSC has been operational since 2011, when the Banking Supervision Committee (BSC) ceased to operate. Its task is to provide professional support to the decision-making bodies of the European Central Bank in their functions relating to financial stability and macroprudential policy issues.

Internal Auditors Committee (IAC):

By reviewing the relevant common projects, systems and activities and by providing for co-operation in certain auditing issues which are of 'common interest' for the ECB and national central banks, this Committee assists the ESCB in achieving its targets.

International Relations Committee (IRC):

The IRC assists in carrying out those tasks of the ESCB that are related to international cooperation and contributes to formulating the position of the Eurosystem regarding the various areas of relations with non-EU countries.

Information Technology Committee (ITC):

This Committee contributes to the development of the information technology policy and strategy of the Eurosystem and the ESCB, as well as the related guidelines with special regard to security concerns and provides technical advice to other committees. Furthermore, it initiates and implements Eurosystem and ESCB level developments and independent projects.

Legal Committee (LEGCO):

LEGCO provides legal assistance for the work of the ESCB; in particular, it contributes to the maintenance of the regulatory framework of the Eurosystem and the ESCB and to the review of the transposition of legal regulations into national law, and monitors and reports on

how national authorities and EU institutions comply with their consultation obligations relating to draft legislation in areas falling within the ECB's competence.

Market Infrastructure and Payments Committee (MIPC): The group operates under the name of MIPC since 1 April 2016; previously it was known as the Payment and Settlement Systems Committee (PSSC). This Committee assists the ESCB in the smooth operation of payment systems and in connection with the cross-border use of collaterals. Furthermore, it supports the ESCB in general and 'oversight' issues relating to payment systems, as well as in strategic decisions related to securities clearing and settlement systems. It pays special attention to the strengthening of the oversight activity, the fostering of pan-European developments in the area of high- and small-value payments, securities and collateral management.

Market Operations Committee (MOC): The MOC assists the ESCB in the implementation of the single monetary policy and the execution of foreign exchange transactions, the management of the ECB's foreign reserves and in the appropriate adaptation of the monetary policy tools applied by the central banks of Member States where the euro is yet to be introduced, as well as in the implementation of ERM II.

Monetary Policy Committee (MPC): This Committee assists the ESCB in the implementation of the single monetary and exchange rate policy of the Community. In addition, it provides assistance in the execution of the ESCB's tasks related to the coordination of the monetary and exchange rate policies of the NCBs of non-euro area Member States and the ECB.

Organisational Development Committee (ODC): The ODC was set up in July 2013 with only euro area members. It assists the work of ECB decision-makers with proposals regarding the planning and organisational issues related to the operation of the Eurosystem and the Single Supervisory Mechanism (SSM). In addition, it also coordinates the work of the Eurosystem Procurement Coordination Office (EPCO) and runs the operational risk management and business continuity system of the Eurosystem/ESCB.

Risk Management Committee (RMC): The RMC was set up in September 2010 and consists of euro area members only. Its task is to assist the work of ECB decision-makers in managing and controlling risks arising from the market operations of the Eurosystem by means of analyses and proposals.

Statistics Committee (STC): The STC assists in the collection of statistical information required for carrying out the tasks

of the ESCB. It contributes, inter alia, to the elaboration and cost-effective application of necessary modifications in statistical data collection.

Other committees assisting the work of the ESCB:

Budget Committee (BUCOM): This Committee assists the Governing Council of the ECB in issues concerning the budget of the ECB; its members are the central banks of the euro area Member States.

Human Resources Conference (HRC): The objective of this committee, established in 2005, is to serve as a forum for the central banks of the Eurosystem/ESCB in the exchange of information, opinion and experiences on issues concerning the management of human resources.

3.14 RESEARCH ACTIVITY OF THE MNB

The MNB's research activity provides extensive support for the preparation of the central bank's decisions. Academic research is ultimately published in international and domestic scientific journals. Applied research is mostly presented in the dedicated publications of the MNB: the *MNB Working Papers* (issued in English only), the *MNB Occasional Papers* series and the *Financial and Economic Review*. In addition to the publications, active participation in international conferences and in the research networks and working groups coordinated by the European Central Bank all form part of the MNB's research activity.

Publications

In 2017, three papers prepared by the MNB's researchers were published in highly ranked international journals. The MNB papers were published in the *Journal of International Money and Finance*, the *Journal of Economic Dynamics and Control* and the *Journal of Financial Stability*. In addition, seven papers written by MNB authors were published in the *Economic Review*, while the *Statistical Review* published one and the *Financial Review* two central bank studies. Several applied research results were also published in the MNB's publications. Nine papers were published both in the *MNB Working Papers* series and in the *MNB Occasional Papers* series, while the MNB's employees contributed to the 2017 issues of the *Financial and Economic Review* with fifteen studies, ten book reviews and six conference reports.

Conferences and lectures

The MNB organised the Budapest Economic Seminar Series (BESS) in 2017 again, with internationally acknowledged

economists presenting their studies to those interested. In 2016, presentations were made at the MNB by Judit Temesváry (Federal Reserve Board), Jon Hoddenbagh (John Hopkins University), Előd Takáts (Bank for International Settlements), Isaiah Hull (Riksbank) and Wilko Bolt (De Nederlandsche Bank).

The MNB's researchers gave presentations at a number of international conferences as well as at several central banks and universities. Of the main conferences, the ones that deserve mention include the conference organised jointly by the European Economic Association (EEA) and the Econometric Society (ES) in August in Lisbon, the programme of which included presentations by two researchers from the MNB. In addition, one speaker from the MNB made a presentation at each of the 2017 conference of the Society for Economic Dynamics (SED) in Edinburgh (as one of the most highly ranked international conference on macroeconomics globally), at the New York conference of Computing in Economics and Finance (CEF), at the London conference of Money, Macro and Finance, and at the Cluj conference of the Romanian Association of Economics. The macroprudential policy workshop conference organised by the MNB in Budapest – jointly with the Centre for Economic Policy Research (CEPR) and the European Systemic Risk Board (ESRB) – deserves special mention, where – in addition to two speakers from the MNB – a number of papers were discussed by colleagues from the MNB. In addition to these conferences, the MNB's researchers held seminars in the Austrian central bank, at the BI Norwegian Business School of Oslo, the Babes-Bolyai University of Cluj, and also at the Ecomod conference in Ljubljana.

Several MNB experts participated in the research networks coordinated by the ECB. The analysts and researchers participated in the EAGLE and Real and Financial Cycles sub-working group of the Working Group on Econometric Modelling (WGEM) and in the Price-setting Micro-data Analysis working group.

3.15 PUBLICATIONS AND CONFERENCES ORGANISED BY THE MNB

Regular publications

Inflation Report

The Inflation Report is published quarterly in order to enable the public to understand and follow the Bank's policies. The Report provides a regular presentation of past and expected future trends in inflation, evaluates the macroeconomic developments that determine inflation, and

provides a summary of the forecasts and considerations on the basis of which the Monetary Council takes its decisions.

Report on Financial Stability

Published twice a year, this Report outlines the position of the Bank regarding the changes experienced in the financial system and describes the effect of these changes on the stability of the financial system. The analysis in the Report focuses on the forward-looking assessment of long-term trends and risks.

Growth Report

The annually published Growth Report is intended to present, by using standard and alternative indicators as well, Hungary's longer-term growth path (occasionally encompassing an entire business cycle) and its determinants. The Report provides an annual overview of the most important trends shaping economic growth over the short, medium and longer term.

Housing Market Report

The MNB's publication entitled *Housing Market Report* presents the current trends in the Hungarian housing market semi-annually since spring 2016. The purpose of the publication is to provide a comprehensive overview of the short- and long-term trends affecting the residential property market and to present the regional differences in the domestic market. The Housing Market Report presents a topic which has special relevance for the central bank as well. The housing market represents a key area at the level of the individual economic operators (households, financial institutions), as well as at the level of national economy. Housing market developments are closely related not only to the financial stability issues, but also fundamentally determine the short- and long-term prospects of economic activity. Housing market developments and in particular the volatility of housing prices influence the sector's savings and consumption decisions through households' wealth, while influencing the portfolio, profitability and lending activity of financial institutions via mortgage loan collateral. Overall, we can state that the housing market is integrally linked to all areas of the national economy.

Macroprudential Report

The purpose of the annual Macroprudential Report is to present the macroprudential instruments applied by the MNB to prevent and address the systemic risks identified and communicated in the Financial Stability Report, as well as their effects and the adjustment of market participants.

In line with the MNB's Statute and macroprudential strategy, the publication intends to make the MNB's macroprudential measures easier to follow and understand both for the actors of the sector and the general public.

Competitiveness Report

The purpose of the Competitiveness Report is to provide a comprehensive, objective picture of dimensions of Hungary's competitiveness that usually are given less attention in the Bank's traditional macroeconomic analyses, although they are determinants in terms of economic developments. The MNB published the book entitled 'Competitiveness and Growth' in 2016 in order to analyse the changes in Hungary's competitiveness and to explore the possibilities of further progress. In addition, the MNB considered it necessary to prepare a regular, thematic report, which examines and evaluates Hungary's competitiveness position along the principles and proposals laid down in the book. This publication is released once a year, in Hungarian and in English.

Financial Consumer Protection Report

Since 2016, the MNB has published its Financial Consumer Protection Report once a year, online and in printed form. The purpose of the publication is to inform the institutions of the financial system and the public on current financial consumer protection issues, thereby also enhancing the risk awareness of the stakeholders, while at the same time maintaining and strengthening confidence in the financial system. The objective of the MNB is to ensure that the administrative activity performed to identify and mitigate risks, the central bank's informative and educational activity and its work aimed at the improvement of financial literacy in Hungary all contribute to ensuring that the necessary information is readily available for stakeholders to make financial decisions, and to strengthening the stability of the financial system as a whole. After summarising the priorities, the report presents the MNB's financial consumer protection, administrative and customer service activities, the priority cases that affected a wide range of consumers in the period under review, as well as the risks identified by the MNB, which may bear special importance in terms of consumer protection. Previously, the publication was issued under the title of Financial Consumer Protection and Market Supervision Report.

Insurance, Funds and Capital Market Risk Report

Since 2015, the risk report on the non-banking financial markets has been published once a year, under the name of 'Risk outlook for non-bank financial sectors'. Starting

from 2017 its title is '*Insurance, funds and capital market risk report*'. The publication is limited to the presentation of the risks of insurers, funds, non-banking group financial enterprises and intermediaries. The *Insurance, funds and capital market risk report* provides primarily a more in-depth analysis of the sectors which are not or only briefly discussed by the *Financial Stability Report*, and therefore it does not contain findings about the credit institution sector discussed in detail in the former. The main objective of this publication is to increase the risk awareness of those active in the supervised markets and to strengthen confidence in these sectors. The report provides an overview of the key observations from official investigations and continuous supervision broken down by areas, highlighting the main prudential risks identified in the period under review.

Trends in Lending

The objective of the publication Trends in Lending is to present a detailed picture of the latest trends in lending and to facilitate the appropriate interpretation of these developments. To this end, it elaborates on developments in credit aggregates, the demand for loans perceived by banks and credit conditions.

Report on the Balance of Payments

The Report is published four times annually to inform market participants on developments in balance of payments and to provide deeper insight into the correlations in the economy. Developments in the external balance are key to financial stability, as processes relating to the balance of payments allow for conclusions to be drawn concerning the sustainability of economic growth and the relevant risks. The MNB carries out comprehensive and regular analyses of trends relating to Hungary's external balance, examining a number of indicators to assess macroeconomic imbalances.

Payment Systems Report

Once a year, the Report provides a comprehensive review of the trends in payments and the functioning of the overseen payment and securities settlement systems in Hungary, the main risks and any measures taken by the MNB which are necessary to maintain the smooth provision of payment services and facilitate the reliable and efficient operation of the supporting payment and settlement systems.

Public Finance Report

With the aim of supporting the fulfilment of its fundamental duties stipulated in the MNB Act, and particularly the

task related to the definition and implementation of monetary policy, the MNB analyses the developments in the budgetary deficit and debt, monitors the financing of the general government, analyses the impact of financing on the monetary processes, on the capital markets and on liquidity, and researches fiscal policy issues. Pursuant to Act CXCIV of 2011 on the Economic Stability of Hungary, the Governor of the MNB is a member of the Fiscal Council (FC), and thus the professional expertise and accumulated information available in the MNB can indirectly support the work of the FC. The MNB prepares background analyses for the duties of the FC stipulated in the Stability Act and makes them available for the FC. The general public can learn about the most important results of these expert analyses from the publication entitled *Fiscal Report* (formerly entitled: *General government analysis*).

Annual Report

Published once a year, this publication presents the Bank's business report on the previous year and its audited annual financial statements.

Semi-annual Report: Semi-annual Report on the MNB's Activities

The Semi-annual Report is published once a year, in September. The report is the central bank's business report related to the first half of the year.

Interim Report: Quarterly Report on the MNB's Activities

The Interim Report is published twice a year, in April and November, between the annual and semi-annual reporting periods. It gives account of the basic activities of the operating units of the Bank as stipulated in the MNB Act, in respect of the first and the third quarters: monetary policy, overview of the financial system, FX reserves, payment transactions, cash logistics activities, and statistical changes.

Supervisory Board Report

The MNB Act prescribes that the members of the Supervisory Board have reporting obligation to the National Assembly that elects them and the Minister who appoints them. In respect of the reporting obligation, the rules of procedures of the MNB's Supervisory Board, adopted in 2015, state the following: "The chairman and members of the Supervisory Board prepare – in line with the obligation set forth by the MNB Act – a joint report on their activity annually, and send it to the National Assembly and the Minister. Beyond this, the chairman and members of the Supervisory Board also have ad-hoc reporting obligation

to the National Assembly and the Minister electing and appointing them, respectively." The focus of the Supervisory Board's duties specified in the MNB Act is on the control of the central bank's continuous operation. The Supervisory Board performs its activity based on the laws applicable to it, its own rules of procedure, and the internal operational principles defined by the members jointly during the operation of the board. The main form of the control activity is the meetings of the Supervisory Board, the topics of which are determined by the annual rolling work-plan based on the audit universe. The Supervisory Board's report is a presentation of the Supervisory Board's activity.

Central Bank Almanac

In a comprehensible format, the Central Bank Almanac provides a retrospective summary of the most important events of economic life and the main steps of monetary policy in the year under review. The volume, which gives a comprehensive presentation and evaluation of decisions and results already published earlier, allows a review and reassessment of the events of the past months for the public that is interested in the subject. The Central Bank Almanac is also designed to summarise all the professional MNB articles published during the year the messages of which – although they may not be eternal – aid in the understanding of the main economic developments and central bank decisions over the longer term. This publication is released once a year, in Hungarian.

Analyses, studies, statistics

MNB Occasional Papers

This series presents economic analyses related to the MNB's monetary policy decision-making process. It aims at increasing the transparency of monetary policy. Accordingly, in addition to studies describing technical details of forecasting, the publication also covers economic issues surrounding the preparatory work for decision-making. The Occasional Paper series of the MNB primarily presents practical (applied) research related to the central bank's professional areas, summarises theories and international findings in relation to specific topics, and provides analyses facilitating the understanding of central bank decision-making.

MNB Working Papers

The MNB Working Papers series presents the results of theoretical research conducted at the MNB. The studies published in this series primarily address the audience of academic, central bank and other researchers, with the goal

of encouraging readers to offer comments that the authors may use in their future research. Since the autumn of 2005, this series has been available only in English.

Financial and Economic Review

With a history of over a decade, the Financial and Economic Review is a recently rejuvenated social and scientific journal offering an increasing range of content and a gradually developing set of topics, with contemporary typography. It is published in separate volumes in Hungarian and in English. Since the end of 2014, the journal has been edited and published by the MNB. The writings published in the journal include revised studies, essays, book reviews, conference reports and reports on other scientific activities. It is available on the website of the Financial and Economic Review (<http://english.hitelintezetiszemle.hu/>).

Educational Booklets

The MNB considers the development of financial literacy in Hungary as one of its priority tasks, hence, relying on the available means, it intends to facilitate education in the field of economics as well as the widening and enhancement of financial literacy. In May 2016, the central bank launched a series of educational booklets on economic, financial and monetary policy matters in Hungarian and in English.

Financial savings of households based on micro- and macro-statistical data

The surveys on the wealth of households provide long-needed information, paving the way for the household-level examination of stock data. In Hungary, the first comprehensive statistical survey of households' financial and non-financial assets, liabilities and other financial characteristics was conducted in 2014. In addition to the household sector's macro-level data derived from the national accounts, the publication presents the distribution of income and wealth among households based on the results of that survey.

Other publications

Budapest Institute of Banking (BIB)

No competitive financial system could be managed without cutting-edge market information. And neither can such knowledge be maintained in the absence of internationally recognised quality education. The first issue of the BIB publication, which came out in autumn 2017, contained an educational and scientific booklet on a diversified spectrum of education, supplemented with modern financial and

economic information, which will be followed by additional issues in 2018.

Financial Navigator Papers

This series of printed booklets is published by the Financial Consumer Protection Centre to provide thematic assistance on financial issues. The series of booklets are available in the branches of banks and cooperative credit institutions, and in the customer service offices of insurers.

The MNB's publications are available on its website (<http://www.mnb.hu/en/publications>).

Series of books published by the MNB

In March 2015, the central bank launched a new series of books on the subjects of economic and monetary policy. The third volume of the series was published in 2017, titled *The Hungarian way – Targeted central bank policy*, thanks to the editorial contributions of Kristóf Lehmann, Dániel Palotai and Barnabás Virág.

In *The Hungarian way – Targeted central bank policy*, the MNB presents the central bank measures implemented since 2013 and the impact thereof in detail, at the same time providing a comprehensive overview of the changes in the central banks' practice in the past decade. The importance of the book lies in the fact that it presents the significant and lasting economic results of the Hungarian central bank's innovative, properly targeted – at times regarded as unconventional – measures. The targeted instruments, considering the special features of the economy and the lessons of the crisis causing a paradigm shift, successfully supplementing the traditional central bank approaches, efficiently managed the severe challenges of the Hungarian economy and financial system.

The MNB is planning to publish further volumes of the series of books.

Alexandre Lámfalussy: Selected essays

As a result of the cooperation between the National Bank of Belgium (BNB) and the MNB, the book was published in English in January 2017 and also in Hungarian in October. The publication pays tribute to extraordinary career of the late Alexandre Lámfalussy, as economist, member of the Academy, central banker and philosopher and to his outstanding contribution to the most important economic policy issues of his age, i.e. to the issues of financial markets, exchange rates, debt crises, monetary policy and financial stability.

Events organised by the MNB

The MNB pursues a strategy of openness with its associate and partner institutions, which strengthens professional partnership. The events organised by the MNB include international conferences, internal events and cultural events as well.

International conferences

The majority of the international, professional conferences that typically last for several days usually involve 50–60 persons, although the number of participants in some events may reach 150–200 guests. The international conferences are primarily held in the building of the MNB.

The most important international conference events organised in 2017 were as follows:

Lamfalussy Lectures Conference

The objective of this annual event launched in 2014 under the name ‘*Lamfalussy Lectures Conference*’ is to invite distinguished lecturers to Hungary to share with and present to the audience and fellow professionals their views on current issues in global economic policy, specifically in monetary policy and the financial system. Parallel to launching the conference, the Governor of the MNB established the Lámfalussy Award to recognise outstanding international professional performance and lifetime achievements that influence the MNB’s activity and have a major long-term impact on developments in international monetary and financial policies. The award is presented annually at a gala ceremony linked to the conference.

The conference, organised for the fourth time in January 2017 reviewed, in two sections, the economic cooperation opportunities between Europe and Asia and the current issues related to the future of European integration. Lectures and opening speeches were delivered by Jacques de Larosière, former president of the EBRD, former Managing Director of the IMF and former Governor of Banque de France (also the awardee of the Lámfalussy Award in 2017), Tian Guoli, Chairman of the Bank of China Ltd. (at the time of the conference) and Sir Paul Tucker, former Deputy Governor of the Bank of England. These were followed by discussions with the participation of renowned experts such as Yang Bin, Vice President of the Tsinghua University in Beijing; Dr Chen Zhimin, Dean and Professor of the Fudan University in Shanghai; Dr Yan Xuetong, Dean and Professor of the Tsinghua University in Beijing; Erik F. Nielsen, Group Chief Economist and Global

Head of CIB Research at UniCredit Bank AG; Professor Paul De Grauwe, John Paulson Chair in European Political Economy at the London School of Economics and Political Science.

The conference was held at an external location in Budapest and was attended by more than 400 guests.

Meeting of the regional monetary policy working group of the BIS

The annual meeting of the *BIS (Bank for International Settlements) Working Party on Monetary Policy in Central and Eastern Europe* was held in February 2017 in Budapest. In addition to representatives of the BIS and the ECB, the meeting was attended by the senior executives in charge of monetary policy from 18 central banks of the CEE region. During the professional discussions current issues of monetary policy were reviewed.

Budapest Renminbi Initiative conference

In April 2017, the MNB organised its international conference within the framework of the Budapest Renminbi Initiative for the third time, during which domestic and foreign policy-makers, senior executives of the economic and financial sectors and recognised experts of the topic discussed current issues in Sino-Hungarian economic, commercial and financial relations and possible further directions for their development.

ESRB-ECB macroprudential working group meetings and related research workshop

The annual offsite meeting of the European Systemic Risk Board’s (*ESRB Instruments Working Group*) and the European Central Bank’s (*ECB Macroprudential Policy Group*) was hosted by the MNB in July 2017. The three-day event was attended by, in addition to representatives of the ESRB, ECB and the MNB, the senior executives in charge of macroprudential policy from 27 European central banks and/or supervisory authorities. Further to the meetings, a researcher workshop was also organised, where the participants discussed – in addition to the costs and benefits of macroprudential policy – the challenges posed by the residential housing market and the low interest rate environment.

MNB-EBRD joint conference

Since 2014, the MNB and the European Bank for Reconstruction and Development (EBRD) have been cooperating closely in the field of efficient management

of non-performing loans (NPL). As a result of the common work, the MNB issued a recommendation on 9 June 2017 on the restructuring of jointly financed non-performing corporate loans.

The professional conference organised in October 2017 introduced the international best practice related to the restructuring of non-performing corporate loans through practical case studies and expert panel discussions, and presented the expectations and legal interpretation of the MNB recommendation to the addressees affected by it. The conference was attended by the representatives of domestic banks, international investors, financial and legal advisors and public institutions.

Adam Smith seminar

In November 2017, the Autumn meeting of the Adam Smith Seminar was organised in Budapest, at which policy-makers active in the field of international economics and finances reviewed and discussed the current developments and outlook of the global economy at an informal gathering. This was the third time that the MNB hosted the event, which looks back on a history of twenty-five years. During the seminar, lectures were delivered by the senior executives of foreign peer institutions, including – among others – the ECB, the US Fed, the Brazil, Czech, Japanese and German central banks. The two-day programme also included several round-table discussions with the active involvement of the participants.

Chinese-Hungarian workshop on the international use and role of RMB

The *Workshop on Hungary and RMB Internationalisation* was jointly organised by the MNB and the China-CEE Institution established under the auspices of the Chinese Academy of Social Sciences (CASS) in November 2017. The event was attended by around 70 researchers from China and Central and Eastern Europe. During the workshop, Hungarian and Chinese authors presented the results of their research in three panels. The proceedings of the workshop will be published in a joint volume of essays and studies in the first quarter of 2018.

AFCA Central and Eastern European Regional Financial Forum

The regional forum of the Asia Financial Cooperation Association (AFCA), organised for the first time outside China, took place in Budapest in November 2017 under the title "*AFCA CEE Financial Summit Forum*". The meeting was attended by Asian and Central and Eastern European financial managers and key representatives of the sector.

The opening event of the forum, hosting 260 persons, was organised with the active contribution of the Hungarian Banking Association and the MNB. During the forum, Hungarian and Chinese bank managers held professional presentations on current issues of joint interest.

Other international events

BESS at MNB lectures

14 March 2017: Judit Temesváry (Federal Reserve Board) – The Transmission of Foreign Monetary Policy Shocks into the United States through Foreign Banks

21 March 2017: Jon Hoddenbagh (Johns Hopkins University) – Fiscal Stabilisation in a Monetary Union

6 April 2017: Előd Takáts (BIS) – The Currency Dimension of the Bank Lending Channel in International Monetary Transmission

24 May 2017: Isaiah Hull (Riksbank) – Monetary Normalisations and Consumer Credit: Evidence from Fed Liftoff and Online Lending

14 June 2017: Wilko Bolt (De Nederlandsche Bank) – Competition and Price Conduct by Bank Service Line

Courses of the central bank's "Budapest School for Central Bank Studies" Training Centre

Spring courses 2017

Junior Maih (Norges Bank) – **The macroeconomics of agent based models**, 3-7 April 2017

– How can policy-makers utilise the agent-based models?

– Simple modelling strategies

– Programming of agent-based models, simulations

– Efficient presentation and communication of agent-based models

– Example-based modelling

Fabio Canova (BI Norwegian Business School) – **The econometrics of banking data**, 10-13 April 2017

– Static and dynamic panel data

– Partial grouping techniques

– Panel vector autoregression with or without mutual dependencies

– Mixed micro-macro models

Summer courses 2017

Dean Corbae (University of Wisconsin) – **The micro and the macroeconomics of banking**, 24–28 July 2017

– Aggregate and cross sectional facts on banks

– Mainstream banking theories: bank runs, delegated monitoring, networks, risk-taking

– Dynamic stochastic general equilibrium (DSGE) modelling of the banks' operation

– Structural models that consider the heterogeneity of banks

– Bank regulation

Domenico Giannone (Federal Reserve Bank of New York) – **Econometric and policy analyses with large macroeconomic data**, 31 July - 4 August 2017

– Forecast and nowcasting

– Scenario analysis

– Bayesian vector autoregression (BVAR) models estimated on large databases

– Dynamic factor models

4 Additional information on the supervisory activity of the MNB in 2017

4.1 INSTITUTION OVERSIGHT

As of 31 December 2017, the MNB performed oversight of 1,544 institutions according to the breakdown in Table 10.

4.2 INSPECTIONS COMPLETED

The MNB carries out the inspections on the basis of an annual planning system, according to detailed daily schedules.

In preparing the inspection plans, the MNB considers the following criteria:

- the cycle plan of supervisory inspections defined in the MNB Act;
- the risk rating of the institutions and the resource requirement and inspection duration determined accordingly;
- the supervisory scoring system designed to establish the order of institutions to be inspected, also in consideration of other individual characteristics of the institutions concerned; and
- the available resources.

The number of prudential on-site inspections and their breakdown by sector and inspection type are summarised in Table 11.

Table 10	
Number of institution supervised as at 31 December 2017	
Capital markets	102
Investment fund manager	76
Investment firm	15
Trust (Fiduciary asset manager)	6
Clearing house	1
Tied agent	1
Central counterparty	1
Stock exchange	2
Funds	69
Private pension fund	4
Voluntary funds	64
Voluntary health fund	4
Voluntary pension fund	38
Voluntary mutual fund	7
Voluntary health and mutual fund	15
Occupational pension provider	1
Financial market	881
Non-financial institution	569
Electronic money issuer	1
Independent intermediary	561
Payment service provider	7
Financial institutions	311
Credit institution	61
Bank	28
Specialised credit institution	11
Cooperative credit institution	22
Financial enterprises	250
Financial enterprise equivalent to credit institutions	2
Other financial enterprises	248
Organiser (NOK)	1
Insurance	492
Insurance institutions	41
Insurance association	17
Insurance company	24
Insurance intermediaries	450
Insurance broker	405
Insurance multiple agent	45
Advocacy	1
Total	1,544

Table 11						
Inspection statistics						
Number of prudential on-site inspections	2016		2017		2018 (planned)	
	Comprehensive	Other*	Comprehensive	Other*	Comprehensive	Other*
Large banks and bank groups	3	14	3	33	7	19
Small and medium-sized banks	2	5	5	7	6	3
Integration (acceded credit institutions)	10	7	0	4	2	2
Specialised credit institutions	5	4	0	8	1	5
Branch of banks	0	1	1	2	0	0
Non-banking group financial enterprises	0	3	0	4	0	0
Financial enterprises	0	0	0	2	0	0
Payment service providers	2	0	1	0	3	0
Insurance companies	6	2	9	0	5	3
Insurance associations	1	0	7	1	5	0
Intermediaries	0	4	0	7	0	4
Funds	13	2	13	3	13	0
Capital market institutions	30	9	19	12	25	0
Occupational pension provider	1	0	0	0	0	0
Total	73	51	58	83	67	36

**Including the ICAAP-BMA and ILAAP inspections.*

4.3 LICENSING AND LEGAL ENFORCEMENT

The licensing and legal enforcement activity of the MNB comprises the entire spectrum of legal activities linked to the supervision of the financial intermediary system, including the execution of all authorisation procedures

related to the overseen institutions and the performance of the legal enforcement tasks of the prudential inspection activity.

The statistics on the licensing and prudential legal enforcement activities of the MNB are shown in the Tables 12-15, broken down by sector.

Table 12	
Measures taken in the financial market sector	
<i>(pieces)</i>	
Prudential measures	
Resolutions closing supervisory proceedings	37
out of which: resolutions imposing fines	30
Other prudential measures, resolutions	301
Rulings	45
Total amount of fines (million HUF)	358.1
Authorisation resolutions/rulings	
Authorisation of the foundation of credit institutions	0
Refusal of the foundation of credit institutions	0
Authorisation of the operation of credit institutions	0
Refusal of the operation of credit institutions	0
Withdrawal of authorization for the foundation of credit institutions	1
Authorisation of the operation of payment service provider	1
Authorisation of the electronic money issuing activity of electronic money issuers	0
Authorisation of the foundation and the operation of financial enterprises	9
Refusal of the foundation and the operation of financial enterprises	0
Authorisation of the operation of financial enterprise equivalent to credit institutions	0
Withdrawal of authorisation for operations of financial enterprises	4
Resolutions concerning the amendment of the scope of activities	20
Authorisation of the election of senior executives	259
out of which: credit institutions' senior executives	135
Refusal of the election of senior executives	0
Approval of the amendment of agency contract	182
Authorisation of multiple special services intermediary	0
Authorisation of multiple agents	28
Authorisation of brokers	2
Resolutions concerning mortgage credit intermediaries	87
Authorisation of the employment of intermediaries	37
Resolution withdrawing the activity license of intermediaries	62
Authorisation of the amendment of the bylaws	59
Authorisation of other regulations	19
Authorisation of the acquisition of qualifying holdings	33
Refusal of the acquisition of qualifying holdings	1
Authorisation of merger and division	4
Authorisation of transformation	1
Authorisation of the acquisition of qualifying holdings in a nonresident enterprise	5
Authorisation of the transfer of client accounts	3
Resolutions issued under CRR	38
out of which:	
Resolution concerning the calculation of capital adequacy of operational risk	4
Resolution concerning the calculation of capital adequacy of credit risk	3
Resolution concerning Tier1, additional Tier1 and Tier2 capital instruments	5
Resolution concerning supervision on a consolidated basis	4
Other resolutions	41
Rulings	120
Total amount of resolutions and rulings	1,399

Table 13	
Measures taken in the capital market sector	
<i>(pieces)</i>	
Prudential measures	
Resolutions closing supervisory proceedings	32
out of which: resolutions imposing fines	27
Other prudential measures, resolutions	13
Rulings	79
Total amount of fines (million HUF)	249.7
Authorisation resolutions/rulings	
Authorisation for activities	29
Withdrawal of authorisation for operations	7
Authorisation of regulations	27
Authorisation of senior executives	134
Authorisation of the acquisition of qualifying holdings	1
Cancellation of intermediaries	181
Rulings	146
Other resolutions	116
Total amount of resolutions and rulings	765

Table 14	
Measures taken in the insurance sector	
<i>(pieces)</i>	
Prudential measures	
Resolutions closing supervisory proceedings	24
out of which: resolutions imposing fines	23
Other prudential measures, resolutions	55
Rulings	25
Total amount of fines (million HUF)	321.2
Authorisation resolutions/rulings	
Authorisation of executive officers	61
Authorisation of professional executives	19
Withdrawal of authorisation for operations at request	13
Other resolutions	38
Authorisation of activities closely related to insurance activities	3
Authorisation of the activities of insurance intermediaries	15
Conditional decision	0
Rulings	29
Total amount of resolutions and rulings	282

Table 15	
Measures taken in the funds sector	
<i>(pieces)</i>	
Prudential measures	
Resolutions closing supervisory proceedings	19
out of which: resolutions imposing fines	17
Other prudential measures, resolutions	4
Rulings	12
Total amount of fines (million HUF)	17.7
Authorisation resolutions/rulings	
Authorisation of executive officers	0
Authorisation of professional executives	0
Withdrawal of authorisation for operations at request	0
Other resolutions	21
Conditional decision	0
Rulings	3
Total amount of resolutions and rulings	59

4.4 MARKET SURVEILLANCE

The summary data on measures required within the framework of the MNB's market surveillance activity in 2017 are presented in the Tables 16-17.

Table 16	
Market surveillance and supervision related measures	
<i>(pieces)</i>	
Market surveillance and supervisory measures	
Resolutions related to market surveillance	31
out of which: resolutions imposing fines	21
Rulings related to market surveillance	243
Resolutions related to issuers supervision	37
Rulings related to issuers supervision	3
Other resolutions and rulings	6
Fines - market surveillance (million HUF)	605.8
- related to unauthorised and unreported activities	465.0
- related to insider dealing and unlawful market manipulation	140.8
- related to compliance with company takeover rules	0
Fines - supervisory (million HUF)	45.8
- related to issuers supervision	26.5
Total amount of fines (million HUF)	651.5
Total amount of resolutions and rulings	320

Table 17**Licensing related to securities issuance***(pieces)***Licensing related to securities issuance**

Number of issues	8
- stock	0
- bonds and mortgage bonds program	8
Number of stock exchange listings	2
- stock	1
- bonds and mortgage bonds	1
Number of resolutions related to issuers	854
Number of rulings	19
Number of applications to be put in order	310
Total amount of resolutions and rulings	1,183

4.5 CONSUMER PROTECTION

Tables 18-19 contain a summary related to the MNB's administrative activity performed in 2017 in the area of financial consumer protection.

Table 18**The MNB's consumer protection administrative activity, number of procedures**

Type of entities	Targeted inspections ex officio	Targeted consumer protection inspections ex officio	Inspected entities	Inspections along with prudential inspections	Consumer protection inspections by request
Credit institutions: Bank	20	1	9	0	164
Credit institutions: Cooperative credit institution	5		7	0	6
Financial enterprise equivalent to credit institutions	9	2	16	0	32
Independent intermediary (financial market)	0	0	0	0	6
Insurance	5	3	16	8	93
Capital market	3	0	0	5	4
Funds	0	0	0	1	1
Total:	42	6	48	14	306

Table 19					
The MNB's consumer protection administrative activity, result of the procedures					
Sector/measures	Financial market	Insurance	Capital market	Funds	Total
Rulings	359	181	13	6	559
out of which: substantive	178	116	6	2	302
non substantive	181	65	7	4	257
Resolutions	279	128	11	6	424
out of which: without breach of law	73	38	4	1	116
with breach of law	206	90	7	5	308
Total amount of consumer protection fines (million HUF)	145.7	64.2	1.3	0.5	211.7

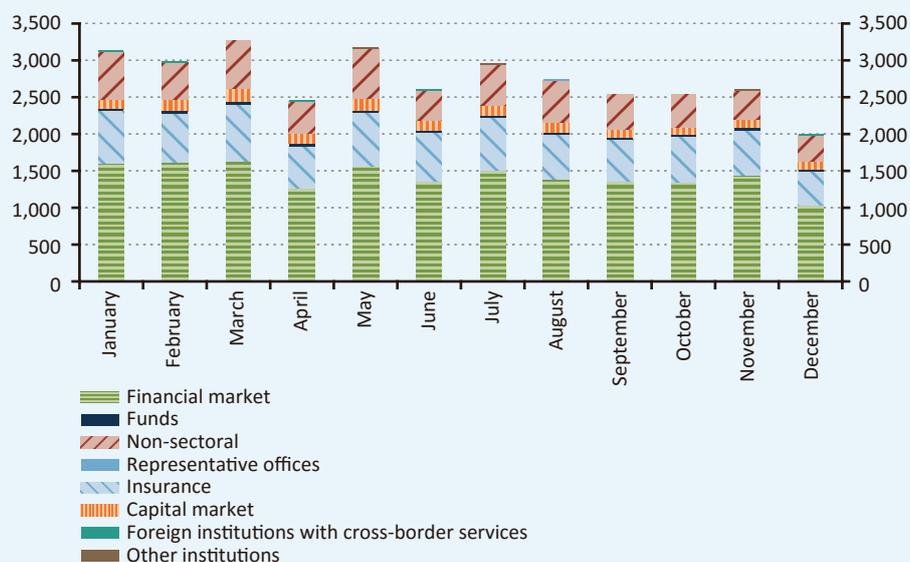
Tables 20-22 show the main data related to the activity of the Financial Consumer Protection Centre.

Table 20		
Distribution of customer inquiries and requests received by channel of submission		
Channel of receipt	No.	%
Mail	3,053	9.3
E-mail	5,546	16.8
Personal	3,085	9.4
Phone	21,243	64.5
Total	32,927	100.0

Table 21		
Customer inquiries and requests broken down by sectors		
Sector	No.	%
Financial market	16,973	51.5
Insurance	7,858	23.9
Funds	254	0.8
Capital market	1,732	5.3
Non-sectoral	6,093	18.5
Foreign institutions with cross-border services	12	0.0
Representative offices	1	0.0
Other institutions	4	0.0
Total	32,927	100.0

Table 22					
Number of customer inquiries and requests broken down by sector and quarter					
Sector	Q1	Q2	Q3	Q4	2017 - Total
Financial market	4,799	4,167	4,216	3,791	16,973
Insurance	2,202	2,005	1,945	1,706	7,858
Funds	86	72	45	51	254
Capital market	488	459	407	378	1,732
Non-sectoral	1,788	1,481	1,622	1,202	6,093
Foreign institutions with cross-border services	5	4	1	2	12
Representative offices	0	0	1	0	1
Other institutions	0	2	1	1	4
Total	9,368	8,190	8,238	7,131	32,927

Chart 19
Number of customer inquiries and requests in a sectoral and monthly breakdown



4.6 ADMINISTRATIVE REPRESENTATION AT PROCEEDINGS

Administrative representation at proceedings comprises the representation of the MNB in the assertion of claims of public interest, as well as litigation and non-litigious

proceedings related to the MNB's administrative decisions passed in the context of its supervisory and consumer protection activities, and also the representation of the Financial Arbitration Board in litigation launched for the abrogation of the FAB's resolutions or recommendations, and keeping records pertaining to such procedures.

Table 23
Cases commenced in 2017, by type and sector

Type	No.	%	Sector	No.	%
Judicial review of administrative decisions (litigious)	37	69.8	Financial market	24	45.3
Non-litigious	10	18.9	Capital market	16	30.2
Non-litigious (rulings imposing fines)	3	5.7	Insurance	12	22.6
Financial Arbitration Board	3	5.7	Non-sectoral	1	1.9
Total	53	100.0	Total	53	100.0

5 Explanation of abbreviations and terms specific to central banking

ABBREVIATIONS

AFCA: Asia Financial Cooperation Association

BSE: Budapest Stock Exchange

BIS: Bank for International Settlements

BISZ Zrt.: BISZ Central Credit Information Plc.

ICS: Interbank Clearing System

BREEAM: Building Research Establishment Environmental Assessment Methodology

CCB: Countercyclical Capital Buffer

CEBS: Committee of European Banking Supervisors

EBA: European Banking Authority

EIOPA: European Insurance and Occupational Pensions Authority

ECB: European Central Bank

ESRB: European Systemic Risk Board

GIRO: Giro Clearing House Ltd.

EMU: Economic and Monetary Union

LIRS Interest rate swap (IRS) conditional on lending activity

IMF: International Monetary Fund

ISDA: International Swaps and Derivatives Association

ESCB: European System of Central Banks

KELER: KELER Central Clearing House and Depository Ltd.

TSA: Treasury Single Account

CCIS: Central Credit Information System

HCSO: Hungarian Central Statistical Office

LCR: Liquidity Coverage Ratio

MIRS: Interest rate swap (IRS) facility of monetary policy purpose

MNB: Magyar Nemzeti Bank

MNE: Ministry for National Economy

FGS: Funding for Growth Scheme

GSP: Growth Supporting Programme

OECD: Organisation for Economic Co-operation and Development

FCPC: Financial Consumer Protection Centre

MLS: Market-Based Lending Scheme

FSC: Financial Stability Council

SRB: Systemic Risk Buffer

SRM: Single Resolution Mechanism

SSM: Single Supervisory Mechanism

IOCCI: Integration Organisation of Cooperative Credit Institutions

VIBER: real-time gross settlement system, a payment system operated by the MNB

GLOSSARY

CLS (Continuous Linked Settlement): A clearing and settlement model that enables the elimination of FX settlement risks. It is based on a multi-currency payment versus payment (PvP) mechanism. The CLS is operated by the CLS Bank.

CRR (Capital Requirement Regulation): Regulation No. 575/2013/EU of the European Parliament and the Council, defining the prudential requirements for credit institutions and investment firms.

Foreign exchange funding adequacy ratio (FFAR): The ratio of the sum of stable foreign exchange funds and net foreign exchange swap stock with a maturity over one year and the weighted foreign currency denominated assets to be financed.

Foreign exchange swap: Usually a short-term transaction involving the exchange of different currencies and, when the transaction is settled, exchange of the currencies again at the price determined in the contract by the cross rate and the interest rate of the currencies.

Duration: Average remaining maturity of bonds. It is an indicator measuring the level of risk associated with the bond portfolio.

Clearing: Control and transmission of payment transactions, calculation of interbank balances in accordance with specified rules; in the case of securities transactions: matching and confirmation of positions, calculation of accounts receivable/payable and managing the arising financial risk.

ERM II, Exchange Rate Mechanism II: An exchange rate mechanism for establishing the conditions for an exchange rate policy co-operation between euro area countries and EU Member States not participating in the third stage of EMU. The ERM II is a multilateral system of fixed but adjustable exchange rates, where the mid-rate is surrounded by a normal, +/-15 per cent fluctuation band. All decisions in relation to the mid-rate and, as the case may be, a narrower fluctuation band, are made on the basis of a joint agreement between the Member State concerned, the euro area countries, the ECB and the other Member States participating in the mechanism.

Payment System Forum: An independent, self-organising, open professional organisation with consultative character committed to the matters of the domestic payment system and operating on the MNB's initiative, with the support of

the Hungarian Banking Association and the involvement of market participants that play a decisive role in payment transactions as well as the Hungarian State Treasury, GIRO Zrt. and KELER Zrt. The supreme body of the Forum is the Payment System Council, which consists of the representatives of the members and operates under the co-chairmanship of the MNB and the Hungarian Banking Association.

Payment System Council: The decision-making body of the Payment System Forum.

FX swap: See Foreign exchange swap.

IMF reserve quota: the freely drawable, i.e. not yet drawn portion of the IMF quota paid to the International Monetary Fund in SDR (Special Drawing Right).

Interest rate futures: A stock exchange transaction where the basis of future settlement is a certain amount of standardised (expressed-in-contract) deposits with interest rate specified at the time of the deal.

Currency interest rate swap (CIRS): usually a medium or long-term transaction involving the exchange of different currencies, a series of interest payments on the principal and repayment of principals when the transaction is settled.

Interest rate swap (IRS): The exchange of fixed rate and variable rate interest on principal at pre-determined intervals, adjusted to certain market rates and conditions.

Cash turnover: The sum of exchanges and payments to and from the central bank.

Revaluation reserve: The revaluation reserve of the forint exchange rate and the revaluation reserve of foreign exchange securities are reserves that are part of the equity of the MNB. If the sum of the revaluation reserves is negative and exceeds the sum of the retained earnings and the profit for the year, the central government is liable to reimburse the difference by 31 March of the year following the current year. The amount of the reimbursement is recorded in the balance sheet of the current year as a receivable from the central budget.

Revaluation reserve due to forint exchange rate changes: Unrealised exchange rate gains and losses on the forint exchange rate changes of foreign currency assets and liabilities are indicated in the forint exchange rate revaluation reserve, which constitutes a part of the equity.

Revaluation reserve of foreign exchange securities:

The valuation difference between the market value and cost rate of foreign exchange assets based on securities (except for repurchased foreign exchange bonds) is indicated in the revaluation reserve of foreign exchange securities, which constitutes a part of the equity.

MNB Act: Act CXXXIX of 2013 on the Magyar Nemzeti Bank.

Monetary financial institutions: The central bank, financial institutions and money market funds together constitute this institutional category within financial corporations.

Omnibus II directive: See Solvency II directive.

O/N: Overnight deposit/loan.

Option contract: For the owner of the foreign exchange option this means a right, but not an obligation, to buy or sell a certain amount of currency against another currency at a pre-determined rate, at or before a pre-determined date. If the holder of the option exercises this right, it will become an obligation for the seller (writer) of the option.

Money market funds: Money market funds are investment funds, the mutual fund shares of which are similar to bank deposits from the aspect of liquidity. Money market funds invest 85 per cent of their assets in money market instruments or transferable debt securities with a remaining maturity of maximum one year or instruments with a return similar to that of the interest rate of money market instruments.

Money market instruments: Low-risk, liquid securities traded in large amounts on markets where they can be exchanged for cash immediately at a low cost.

Repurchase and reverse repurchase transaction: An agreement on the transfer of the ownership right of a security with a repurchase obligation at a pre-determined price at a future date specified or to be specified at the time when the contract is concluded. During the term of the contract the buyer may either obtain the security which is the subject of the transaction and freely dispose over it (delivery repo transaction) or may not obtain it and may not freely dispose over it, in which case the security is deposited as a bail to the benefit of the buyer during the term of the contract (hold-in-custody repo).

ROA: Return on assets.

ROE: return on equity.

SEPA: Single Euro Payments Area, an area within which economic operators can effect and receive payments in euro anywhere, using one single payment account, in the same manner as in their own respective countries. Geographically, the Area covers the 28 EU Member States, Iceland, Liechtenstein, Norway, Switzerland and Monaco.

Solvency II directive: Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance. A new, risk-based regulatory framework for insurers which is based on three pillars, namely, quantitative requirements, qualitative requirements and public disclosure. It is a European standard based on which the supervisory authorities can create standard rules for capital in order to reduce/avoid the risk of insolvency. Applicable from 1 January 2016. The Omnibus II directive (Directive 2012/23/EU of the European Parliament and of the Council) includes the amending provisions of the Solvency II directive – which has been approved but it is yet to become valid and applicable – and the Prospectus directive (Directive 2003/71/EC of the European Parliament and of the Council).

TARGET2-Securities (T2S):The single technical platform of the Eurosystem through which central depositories and national central banks can provide basic, cross-border and neutral securities settlement services in central bank funds across all Europe.

Settlement: Final settlement of interbank liabilities and receivables on an account managed by a common bank, typically the MNB.

Tomnext transaction: overnight deposit or FX transaction, which starts on the first working day after the trade date (T+1) and ends on the following working day.

VaR: Value at risk – a method for measuring risks. VaR quantifies the maximum amount of loss to be expected at a given confidence level for a specific time horizon.

Part B
Audited financial statements
of the Magyar Nemzeti Bank

1 Independent auditor's report

Deloitte.

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Registered by the Capital Court of Registration
Company Registration Number: 01-09-071057

INDEPENDENT AUDITOR'S REPORT

To the Owner of Magyar Nemzeti Bank

Opinion

We have audited the financial statements of Magyar Nemzeti Bank (the „Bank”) for the year 2017 which comprise the balance sheet as at December 31, 2017 – which shows an equal amount of total assets and total liabilities of million HUF 9.307.752 and profit for the year of million HUF 38.293 –, as well as the related profit and loss account for the year then ended and the notes to the financial statements including a summary of significant accounting policies.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Bank as at December 31, 2017 and its financial performance for the year then ended in accordance with Act C of 2000 on Accounting (the „Accounting Act”) effective in Hungary.

Basis for Opinion

We conducted our audit in accordance with the Hungarian National Standards on Auditing and the effective Hungarian laws and other regulations on audits. Our responsibilities under these standards are further described in the "The Auditor's Responsibilities for the Audit of the Financial Statements" section of our report.

We are independent of the Bank in compliance with the relevant effective Hungarian regulations and the “Rules of conduct (ethical rules) of the auditor profession and the disciplinary process” of the Chamber of Hungarian Auditors and, in respect of matters not regulated therein, the “Code of Ethics for Professional Accountants” (the IESBA Code) issued by the International Ethics Standards Board for Accountants, and we have fulfilled our other ethical responsibilities in accordance with the same ethical requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Matters

The annual report of the previous year was audited by another auditor. The auditor's report dated April 24, 2017 contained an unqualified auditor's opinion.

Other Information: The Business Report

Other information includes the business report of the Bank for 2017. Management is responsible for the preparation of the business report in accordance with the relevant provisions of the Accounting Act and other regulations. Our opinion on the financial statements provided in the section of our independent auditor's report entitled „*Opinion*” does not apply to the business report.

Our responsibility in connection with our audit of the financial statements is to read the business report and, in doing so, consider whether the business report is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Furthermore, in accordance with the Accounting Act, our responsibilities also include assessing whether the business report was prepared in accordance with the relevant provisions of the Accounting Act and other regulations, and to express an opinion on the above and on whether the business report is consistent with the financial statements.

In our opinion, the business report of the Bank for 2017 corresponds to the financial statements of the Bank for 2017 and the relevant provisions of the Accounting Act in all material respects. As the Bank is not subject to additional requirements under any other regulation in connection with the business report, we have not formulated an opinion on this matter.

In addition to the above, based on the information obtained about the Bank and its environment, we must report on whether we became aware of any material misstatements in the business report and, if so, on the nature of such material misstatements. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Accounting Act, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to the going concern principle, and preparing the financial statements using the going concern basis of accounting. Management must apply the going concern principle, unless the use of this principle is precluded by any provision, or if any fact or circumstance prevails, which precludes the Bank to continue as a going concern.

Those charged with governance are responsible for overseeing the Bank's financial reporting process.

The Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives during the audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue, on the basis of the above, an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Hungarian National Standards on Auditing and the effective Hungarian laws and other regulations on audits will always detect a material misstatement when it exists. Misstatements can arise from fraud or error, and they are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the Hungarian National Standards on Auditing and the effective Hungarian laws and other regulations on audits, we exercise professional judgment and maintain professional scepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's preparation of the financial statements in accordance with the going concern principle and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify the opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in the Bank's internal control that we identify during the audit.

Budapest, 23 April, 2018

The original Hungarian version has been signed.

Horváth Tamás
Deloitte Auditing and Consulting Ltd.
1068 Budapest, Dózsa György út 84/C.
Registration number: 000083

Nagyváradiné Szépfalvi Zsuzsanna
Statutory registered auditor
Registration number: 005313

2 Balance sheet of the Magyar Nemzeti Bank

HUF millions

Reference number to notes on the Accounts	ASSETS	31 Dec 2016	31 Dec 2017	Change
1	2	3	4	4-3
	I. RECEIVABLES DENOMINATED IN FORINT	1,590,537	1,285,030	-305,507
4.3.	1. Receivables from the central government	39,178	39,178	0
4.7.	2. Receivables from credit institutions	1,548,530	1,242,519	-306,011
4.10.	3. Other receivables	2,829	3,333	504
	II. RECEIVABLES DENOMINATED IN FOREIGN CURRENCY	8,286,460	7,879,638	-406,822
4.9.	1. Gold and foreign exchange reserves	7,557,282	7,228,962	-328,320
4.4.	2. Receivables from the central government	0	0	0
4.8.	3. Receivables from credit institutions	62	2,490	2,428
4.10.	4. Other receivables	729,116	648,186	-80,930
	III. BANKING ASSETS	108,684	79,533	-29,151
4.12.	of which: invested assets	108,271	75,361	-32,910
4.14.	IV. PREPAID EXPENSES/ACCRUED INCOME	69,220	63,551	-5,669
	V. TOTAL ASSETS (I+II+III+IV)	10,054,901	9,307,752	-747,149
Reference number to notes on the Accounts	LIABILITIES AND EQUITY	31 Dec 2016	31 Dec 2017	Change
1	2	3	4	4-3
	VI. LIABILITIES DENOMINATED IN FORINT	7,833,804	7,521,201	-312,603
4.5.	1. Central government deposits	785,648	380,874	-404,774
4.7.	2. Deposits by credit institutions	2,408,122	1,963,446	-444,676
	of which: the main policy instrument*	899,987	74,977	-825,010
	3. Banknotes and coins in circulation	4,580,614	5,113,983	533,369
4.11.	4. Other deposits and liabilities	59,420	62,898	3,478
	VII. LIABILITIES DENOMINATED IN FOREIGN CURRENCY	1,798,115	1,454,373	-343,742
4.5.	1. Central government deposits	544,616	397,402	-147,214
4.8.	2. Deposits by credit institutions	75,866	16,599	-59,267
4.11.	3. Other deposits and liabilities	1,177,633	1,040,372	-137,261
4.13.	VIII. PROVISIONS	689	641	-48
	IX. OTHER BANKING LIABILITIES	17,847	45,318	27,471
4.14.	X. ACCRUED EXPENSES/DEFERRED INCOME	32,483	43,847	11,364
4.15.	XI. EQUITY	371,963	242,372	-129,591
	1. Share capital	10,000	10,000	0
	2. Retained earnings	107,869	162,150	54,281
	3. Valuation reserves	0	0	0
4.16.	4. Revaluation reserves due to exchange rate changes	182,459	28,010	-154,449
4.16.	5. Revaluation reserves of foreign currency securities	17,354	3,919	-13,435
	6. Profit/Loss for the year	54,281	38,293	-15,988
	XII. TOTAL EQUITY AND LIABILITIES (VI+VII+VIII+IX+X+XI)	10,054,901	9,307,752	-747,149

* The main policy instrument became the three-month MNB deposit from 23 September 2015.

23 April 2018, Budapest

Dr György Matolcsy
Governor of the Magyar Nemzeti Bank

3 Income statement of the Magyar Nemzeti Bank

HUF millions

Reference number to notes on the Accounts	INCOME	2016	2017	Difference
1	2	3	4	4-3
4.18.	I. INTEREST AND INTEREST-RELATED INCOME DENOMINATED IN FORINT	17,406	25,568	8,162
	1. Interest on receivables from the central government	329	59	-270
	2. Interest on receivables from credit institutions	3,981	1,070	-2,911
	3. Interest on other receivables	124	29	-95
	4. Interest-related income	12,972	24,410	11,438
4.18.	II. INTEREST AND INTEREST-RELATED INCOME DENOMINATED IN FOREIGN CURRENCY	154,036	132,003	-22,033
	1. Interest on foreign exchange reserves	78,010	57,291	-20,719
	2. Interest on receivables from the central government	0	1	1
	3. Interest on receivables from credit institutions	0	0	0
	4. Interest on other receivables	0	0	0
	5. Interest-related income	76,026	74,711	-1,315
4.19.	III. INCOME ARISING FROM EXCHANGE RATE CHANGES	117,716	70,306	-47,410
4.18.	IV. REALISED GAINS ARISING FROM FINANCIAL OPERATIONS	23,700	6,743	-16,957
4.21.	V. OTHER INCOME	17,250	17,082	-168
	1. Fees and commissions	941	1,087	146
4.22.	2. Income other than fees and commissions	1,634	4,055	2,421
4.23.	3. Income from supervisory activities	14,675	11,940	-2,735
4.13.	VI. PROVISIONS RELEASED	1,569	265	-1,304
4.13.	VII. IMPAIRMENT RELEASED	520	193	-327
4.24.	VIII. OPERATING INCOME	1,337	20,977	19,640
	IX. TOTAL INCOME (I+II+III+IV+V+VI+VII+VIII)	333,534	273,137	-60,397
Reference number to notes on the Accounts	EXPENSES	2016	2017	Difference
1	2	3	4	4-3
4.18.	X. INTEREST AND INTEREST-RELATED EXPENSES DENOMINATED IN FORINT	45,866	13,823	-32,043
	1. Interest on central government deposits	5,680	4	-5,676
	2. Interest on deposits by credit institutions	32,853	11,189	-21,664
	of which: interest on the main policy instrument	23,535	5,024	-18,511
	3. Interest on other deposits	89	36	-53
	4. Interest-related expenses	7,244	2,594	-4,650
4.18.	XI. INTEREST AND INTEREST-RELATED EXPENSES DENOMINATED IN FOREIGN CURRENCY	141,203	133,074	-8,129
	1. Interest on central government deposits	-1,845	-2,201	-356
	2. Interest on deposits of credit institutions	-173	-118	55
	3. Interest on other liabilities	3,233	8,149	4,916
	4. Interest-related expenses	139,988	127,244	-12,744
4.19.	XII. EXPENSES RESULTING FROM EXCHANGE RATE CHANGES	22,627	8,913	-13,714
4.20.	XIII. COST OF ISSUING BANKNOTES AND COINS	14,163	12,544	-1,619
4.18.	XIV. REALISED LOSSES ARISING FROM FINANCIAL OPERATIONS	6,854	5,571	-1,283
4.21.	XV. OTHER EXPENSES	5,263	5,366	103
	1. Fees and commissions	693	689	-4
4.22.	2. Expenses other than fees and commissions	4,570	4,677	107
4.13.	XVI. PROVISIONS CHARGED	280	218	-62
4.13.	XVII. IMPAIRMENT	5,966	15	-5,951
4.24.	XVIII. OPERATING COSTS AND EXPENSES	37,031	55,320	18,289
	XIX. TOTAL EXPENSES (X+XI+XII+XIII+XIV+XV+XVI+XVII+XVIII)	279,253	234,844	-44,409
	XX. PROFIT/LOSS FOR THE YEAR (IX-XIX)	54,281	38,293	-15,988

23 April 2018, Budapest

Dr György Matolcsy
Governor of the Magyar Nemzeti Bank

4 Notes to the financial statements

4.1 THE MNB'S ACCOUNTING POLICY

The Magyar Nemzeti Bank (MNB), the central bank of Hungary, is owned by the Hungarian State. Ownership rights are exercised by the minister in charge of public finances (the shareholder).

The accounting policy of the MNB is based on the Act on Accounting (Act C of 2000), Act CXXXIX of 2013 on the Magyar Nemzeti Bank (hereinafter: the MNB Act) and Government Decree 221/2000 (XII. 19) on the special reporting and accounting requirements applicable to the Magyar Nemzeti Bank (hereinafter: the MNB Decree). Since the effective date of the Act promulgating the international treaty on the accession of Hungary to the EU, i.e. 1 May 2004, the MNB has been a member of the European System of Central Banks (ESCB).

The following sections present a brief description of the accounting system of the MNB, and the valuation and profit recognition rules, insofar as these differ from the general rules.

4.1.1 The MNB's accounting framework

One of the key accounting principles of the MNB is that transactions are booked for the period in which they occur, unless the financial year is already closed. This is especially important for the accurate measurement of exchange rate gains and losses, with special regard to foreign exchange sales and purchases. Spot foreign currency transactions which involve foreign exchange conversions are recorded in the books at the date of the transaction. Assets and liabilities arising from such transactions affect the MNB's foreign currency position from the date of entering into the transaction. The same procedure is applied to recording the revaluation difference in the balance sheet relating to derivative transactions for hedging purposes.

On a daily basis, the MNB records:

- exchange rate differences arising from revaluation of its foreign assets and liabilities and derivative transactions for hedging purposes recorded off-balance sheet;
- amortisation of the securities' price gains and losses; and
- accrued/deferred interest arising from on and off-balance sheet assets and liabilities from hedging transactions.

Pursuant to the MNB Decree, for the purpose of reporting data to the owner, the MNB must close accounts relating to its assets, liabilities and income and prepare trial balances on a quarterly basis, in accordance with the procedures specified in its accounting policy.

For internal use, the MNB compiles a balance sheet and income statement on a monthly basis; these are supported by:

- market valuation of foreign currency securities;
- breakdown and recording of realised and unrealised portions of foreign exchange gains and losses deriving from daily revaluation; and
- charging of depreciation and amortisation.

Upon the quarterly closing of accounts, the MNB measures its off-balance sheet contingent and future liabilities arising from derivative transactions for other purposes and securities lending operations based on international agreements (in this case, the liabilities are equal to the purchase value of the collateral received) and other off-balance sheet liabilities. On a quarterly basis, the MNB also grades the claims and securities in the balance sheet; in addition to the foregoing, it measures the investments at the end of the year and at the second quarter. As a result of this measurement, the MNB recognises impairment losses as necessary and forms provisions for liabilities and expected losses.

The balance sheet date is the 15th working day of January of the year following the reporting year. With regard to this report, the balance sheet date was 22 January 2018.

By law, the MNB is also required to report to Parliament. The MNB submits a single report to both Parliament and the Ministry for National Economy, which – as it is in charge of public finances – exercises the rights of ownership as laid down in the MNB Act. This takes the form of an Annual Report, which contains a business report describing the MNB's structure, operations and state of affairs during the reporting year, and the MNB's annual financial statements defined by the Act on Accounting, as adopted by the Board of Directors with the auditor's opinion. The Supervisory Board submits an opinion on the Annual Report and a report on such to the shareholder. The Annual Report is published in unabridged form on the internet. The website is accessible at: <http://english.mnb.hu>.

The Governor of the MNB also reports to the Parliament's committee responsible for economic affairs on the half-year activity of the MNB. This report is the Half-year Report which contains a business report describing the MNB's structure, operations and state of affairs during the reporting period, and the MNB's half-year financial statements as defined by the Act on Accounting. The Half-year Report is also published on the internet.

Pursuant to MNB Decree, the MNB is not obliged to draw up consolidated financial statements.

The financial statements of the MNB must be audited by the statutory auditor in compliance with the Act on Accounting. The registered auditor of the MNB is Zsuzsanna Szépfalvi Nagyváradiné (Deloitte Kft.), Chamber membership number: 005313.

The person authorised to sign the Annual Report is Dr György Matolcsy, Governor of the Magyar Nemzeti Bank.

The person responsible for accounting services is Gábor Kalina, registration number: 194599.

4.1.2 Major principles of valuation

Receivables from the central government

Securities stated under receivables from the central government are recorded in the balance sheet at amortised purchase price and include no interest. The difference between the purchase price excluding interest and the face value is shown in the MNB's income statement as a valuation gain or loss in proportion to the time elapsed.

Receivables from the central government also include any receivables associated with the reimbursement of revaluation reserves at year-end.

Impairment losses may not be recorded in connection with receivables from the central government.

Receivables from credit institutions

Mortgage bonds stated under receivables from credit institutions are recorded in the balance sheet at amortised purchase price net of interest. The market value difference at acquisition is shown in the MNB's interest related income as a valuation gain or loss in proportion to the time elapsed.

Impairment losses on mortgage bonds are accounted in proportion to the risk of losses, if the difference (loss) appears to be a permanent, significant amount.

Interest-free refinancing loans within the framework of the Funding for Growth Scheme (FGS) and the base rate fixed security-backed loans provided to credit institutions are recorded in the balance sheet at the disbursed amount.

Other receivables

Receivables from supervisory activities are recorded in the balance sheet with any related impairment. The MNB records supervisory fees imposed in line with the incoming data reported by the institutions, and penalties imposed are recorded in line with the finalised resolutions. Supervisory fees, penalties levied and used for support purposes defined by the MNB Act and fees from public proceedings are recorded as 'Income from supervisory activities'.

The balance of 'Other receivables' also contains employee loans and loans provided to other legal entities in the amount of the disbursements. The related interest income is stated under 'Interest on other receivables'.

'Other receivables' must be measured and subject to impairment if necessary.

Valuation of foreign currency assets and liabilities and the recording of exchange rate gains

In its books, the MNB records all foreign currency assets and liabilities at the official exchange rate prevailing on the date of acquisition. If a foreign currency asset or liability is created as a result of foreign exchange conversion, the exchange rate gain or loss arising from the difference between the actual rate and the official rate is recorded by the MNB as conversion income for that particular date and is recognised under gains/losses from exchange rate changes in the income statement.

The MNB carries out daily revaluation of foreign currency assets and liabilities as well as off-balance sheet assets and liabilities arising from derivative transactions for hedging purposes, taking account of variations in the official exchange rate. As a result of this revaluation, balance sheet items denominated in foreign currency are stated in an amount converted at the official exchange rate prevailing on the balance sheet date. Banking assets and banking liabilities in foreign currencies (with the exception of foreign investments) and foreign currency accruals and derivative transactions for purposes other than hedging do not form part of revaluation.

Income received in foreign currency is stated at the official exchange rate prevailing on the date in question.

Daily accounting for accrued income is preceded by reversing the accrued income on the previous day. As a result, foreign currency accruals are recorded in the balance sheet at the official exchange rate without revaluation.

In respect of foreign exchange gains and losses arising in the course of daily revaluation, realised exchange rate gains and losses can be stated as a profit item, while the unrealised result is reported under 'Equity', in the item 'Revaluation reserve due to exchange rate changes'.

Realised income in a particular currency arises as a result of a decrease in the net foreign currency position (in absolute terms). Realised income arises as the difference between the value of the change in the net foreign currency position at the official exchange rate and the average cost rate prevailing on that particular date.

Foreign currency securities

Foreign currency securities are stated at market price. The difference between the market value (mid prices applied by the instrument facilitating portfolio management) prevailing on the date of valuation and the amortised purchase value is recorded in the revaluation reserve of foreign currency securities as part of equity. Exchange rate gains or losses realised on selling or upon maturity are stated under 'Realised gains/losses arising from financial operations'.

The MNB measures its securities on the basis of market prices prevailing on the last working day of each month. However if adequately liquid prices are not ensured on this day, the valuation of securities is based on the market prices available on the previous working day.

The foreign currency securities managed by the external trustee on the grounds of a mandate are also stated at market price, applying the prices received from the custodian.

Security repurchase transactions, based on international agreements, are recorded as credit/deposit transactions, while the related receivables or liabilities are stated as off-balance sheet items.

Securities lent through securities lending operations based on international agreements need not be removed from foreign exchange reserves; they are recorded as off-balance sheet items. Non-cash collateral and investments from cash collateral must be recorded as contingent liabilities under off-balance sheet items and if their market value is negative, a provision of equal amount must be created for the investments on a quarterly basis.

Accounting rules relating to the IMF quota

Part of the IMF quota subscribed in foreign currency and denominated in SDR as a callable loan is stated under foreign exchange reserves.

The part of the quota paid in forint, subscribed in SDR, is presented under 'Other foreign currency receivables' in the balance sheet. The related IMF forint deposit is reported on the liabilities side of the balance sheet. It is the MNB's duty to ensure at least annually that the amount of the IMF's forint deposit is equal to the amount of the quota paid in forint. As this deposit account is only formally a HUF account, it is reported under 'Other foreign currency payables' in the balance sheet.

The SDR allocation aims to increase the foreign exchange reserves of the IMF's members and creates an unmatured liability vis-à-vis the IMF on the liability side of the balance sheet. This transaction has an effect on profit or loss (interest must be paid on the SDR amount received), if it is utilised.

Accounting rules relating to derivatives

On the basis of transaction purpose, the MNB distinguishes between two groups of derivative transactions: hedging transactions and derivative transactions for purposes other than hedging.

Hedging transactions are defined as transactions which reduce the risk arising from changes in the exchange rate or market value of a specific asset or liability or open position, are directly related to such, are announced as hedging transactions at the start of the contract and neutralise or significantly mitigate the risk that is intended to be hedged. Furthermore, derivative transactions with the government or non-resident counterparts to hedge these transactions are also regarded as hedging transactions.

Derivative transactions must be stated under off-balance sheet assets and liabilities. The aggregate revaluation difference of foreign currency assets and liabilities arising from hedging transactions are stated in the balance sheet (depending on their balance, either in the item 'Other foreign currency receivables or liabilities', or 'Foreign currency receivables from or liabilities to the central government or credit institutions'), including the interest accrued in proportion to the time elapsed (as accrued income or accrued expenses).

When derivative transactions for purposes other than hedging are closed, the income from such transactions must be stated in the lines of income and expenses arising from exchange rate changes when foreign exchange transactions are involved, and in the lines of interest-related income and interest-related expenses for transactions linked to interest rate changes. While such transactions are not revalued, consistent with the principle of prudence, in reasonable cases – based on the information available at the balance sheet date – a provision is set aside on a quarterly basis, equal to the negative market value of the transaction.

Banking assets and liabilities

Banking assets and liabilities are stated on the respective sides of the balance sheet. These consist of the following:

- assets and liabilities not directly related to central bank functions and bank operations (such as settlements relating to taxes, contributions, payments to employees, creditors, unsold precious metals held for non-central bank purposes); as well as
- liabilities arising from banknotes no longer accepted as legal tender but not yet exchanged;
- investments; and
- assets required for operating the organisation (such as intangibles, tangibles, and inventories).

The MNB's balance sheet does not state cash among liquid assets. The central bank is the exclusive issuer of banknotes and coins. Notes and coins held at the Cashier and the Depository are not in circulation and are therefore deducted from banknotes and coins on the liabilities side of the balance sheet.

Depreciation rates applied by the Magyar Nemzeti Bank:

Per cent

Description	31 Dec 2017
Concessions, licences and similar rights	17
Trademarks patents and similar assets	10-50
Capitalised value of reorganisation	20
Owned and managed buildings	2-3
Vehicles*	20
Telecommunication devices, office equipment, machines	9-50
Office equipment	14.5–33
Computer hardware	9-33
Emission machinery	5-33
Instruments	9-33
Bank security devices	2-33
Other equipment and devices	3-33

* Residual value 20 per cent of the vehicles.

The depreciation rates are determined individually based on estimated useful economic life. Depreciation is charged on a straight-line basis in every case. The Bank records no depreciation if the assets do not lose their value in use or if the value increases from year to year, given the particular nature of the assets (e.g. land, works of art, art treasures).

4.2 EFFECTS OF MACROECONOMIC TRENDS ON THE 2017 BALANCE SHEET AND INCOME STATEMENT OF THE MAGYAR NEMZETI BANK

In 2017, the MNB recorded a profit of HUF 38.3 billion. The contraction of the central bank's balance sheet and the low central bank base rate both contributed to this profit. In 2017, the most significant profit item was once again income arising from exchange rate changes. The official euro exchange rate quoted by the MNB was weaker than the average cost rate during 2017, the difference between the two rates decreased by the end of 2017, and the average level of this difference was also lower. Owing to the aforementioned factors and the decreasing volume of foreign currency sales, the MNB realised lower exchange rate and conversion gains (amounting to HUF 61.4 billion) in the course of 2017.

The balance of revaluation reserves due to exchange rate changes, as an unrealised foreign exchange result, decreased by HUF 154.4 billion compared to 31 December 2016 to HUF 28 billion at end-2017. The total exchange rate change effect was a loss of HUF 93.1 billion.

The balance sheet total according to Hungarian Accounting Standards (HAS) was HUF 9,307.8 billion on 31 December 2017, representing a 7.4 per cent year-on-year decrease compared to HUF 10,054.9 billion at end-2016. On the assets side, the decline in foreign currency reserves and the maturities of forint-denominated loans (security-backed loans and FGS refinancing loans) induced a contraction in the central bank's balance sheet. On the liabilities side, the stock of the 3-month MNB deposits of credit institutions decreased significantly in line with the volume limitation, which was mitigated by the increase in the other deposits of credit institutions. The stock of the forint- and the foreign currency deposits of the central government fell, as well as the amount of other foreign currency liabilities. The MNB's equity declined because of the revaluation reserves due to exchange rate changes compared to the end of 2016. However, the total value of currency in circulation showed an increase.

The net interest and interest related result changed to gain after the losses registered in earlier years. The HUF 10.7 billion gain in 2017 represented an improvement of HUF 26.3 billion relative to end-2016. The contraction of the balance sheet due to the Self-financing Programme and the maturity of swap transactions in connection to conversion of FX loans into forints resulted in a decrease in foreign currency reserves and a fall in the forint liabilities financing the reserves, and thus these factors favourably influenced the interest result. In addition, the decline in the average forint interest rate also improved the result. The forint interest result turned positive, yielding a profit of HUF 11.7 billion. The decrease in FX interest income of HUF 13.9 billion was caused mainly by the decline in foreign currency reserves and by the lower interest income due to lower FX yields.

A gain of HUF 1.2 billion was realised on financial operations in 2017. The decline of HUF 15.7 billion was caused by the modest increases in FX interest rates.

For more details on the impacts on net income, see Section 3.11 of the Business Report.

4.3 FORINT RECEIVABLES FROM THE CENTRAL GOVERNMENT

The item for forint receivables from the central government contains government bonds, the amount of which did not change and amounted to HUF 39.2 billion at the end of 2017. The portfolio consists of a government debt bond with a maturity over 5 years.

4.4 FOREIGN CURRENCY RECEIVABLES FROM THE CENTRAL GOVERNMENT

Neither at end-2016 nor at end-2017 was any amount listed in the item for foreign currency receivables from the central government. The net balance of currency swaps with the central government showed a credit balance, and thus these items were stated as 'Foreign currency liabilities of the central government' (see Section 4.5.).

4.5 FORINT AND FOREIGN CURRENCY LIABILITIES OF THE CENTRAL GOVERNMENT

Forint deposits of the central government

<i>HUF millions</i>				
B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Single Treasury Account (KESZ)	785,157	380,383	-404,774
	Deposit by Government Debt Management Agency (ÁKK Zrt)	433	433	0
	Other	58	58	0
VI.1.	Forint deposits of the central government	785,648	380,874	-404,774

The total balance of forint deposits of the central government amounted to HUF 380.9 billion at the end of December 2017, representing a decline of HUF 404.8 billion relative to end-2016. The change was caused in the stock of KESZ, which was explained partly by the higher-than-usual balance at end-2016, and partly by developments in 2017. Among others, the stock declined due to the replenishment of the foreign currency deposit of the government, repayment of the ÁKK foreign currency bond which matured in May and advances of EU funds, while transfers from the EU Commission caused a temporary increase in the stock in December.

Foreign currency liabilities of the central government

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Foreign currency deposits of the central government	354,385	308,685	-45,700
	Currency swaps with the central government	190,231	88,717	-101,514
VII.1.	Foreign currency liabilities of the central government	544,616	397,402	-147,214

The balance of the foreign currency deposits of the central government was HUF 308.7 billion, with a decrease of HUF 45.7 billion compared to the end of 2016. The ÁKK continuously increased the amount of the foreign currency deposits to the debit of the forint account during the year, and the decline was a consequence of the repayment of foreign currency bond expiring in July.

Among the hedging transactions concluded with the central government, only the euro/US dollar currency swaps had outstanding amount at the times under review. The cross-rate changes were the main cause of the decline of HUF 101.5 billion.

Foreign currency liabilities of the central government in a breakdown by remaining maturity

HUF millions

B/S line	Remaining maturity	Balance		Change
		31 Dec 2016	31 Dec 2017	
	- within 1 year	354,385	319,190	-35,195
	- within 1 to 5 years	44,840	26,840	-18,000
	- over 5 years	145,391	51,372	-94,019
VII.1.	Foreign currency liabilities of the central government	544,616	397,402	-147,214

4.6 NET POSITIONS VIS-À-VIS THE CENTRAL GOVERNMENT

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
I.1.—VI.1.	Net forint position	-746,470	-341,696	404,774
II.2.—VII.1.	Net foreign currency position	-544,616	-397,402	147,214
	Total	-1,291,086	-739,098	551,988

4.7 FORINT RECEIVABLES FROM AND LIABILITIES TO CREDIT INSTITUTIONS

Forint receivables from credit institutions

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Security-backed loans	120,000	13,225	-106,775
	Covered mortgage bonds	10,823	10,326	-497
	FGS refinancing loans	1,415,028	1,216,725	-198,303
	Other receivables	2,679	2,243	-436
I.2.	Total receivables from credit institutions	1,548,530	1,242,519	-306,011

The amount of receivables from credit institutions was HUF 1,242.5 billion at the end of 2017. Compared to the previous year, this item declined by HUF 306 billion, due to the joint effect of several factors.

Initiated on 1 June 2013 as a temporary instrument, the Funding Growth Scheme (FGS) successfully fulfilled the growth and market development objectives established upon the announcement of the programme, and therefore the FGS was phased out from the beginning of 2016, and was closed on 31 March 2017. Simultaneously with the FGS, the Growth Supporting Programme (GSP), was announced in November 2015, launched with the aim of ensuring that banks return to market-based lending. Within the framework of the programme, the MNB grants interest-free refinancing loans to credit institutions. The amount of refinancing loans granted under Pillar I and Pillar II of FGS, after deducting repayments, totalled HUF 1,216.7 billion on 31 December 2017. Within the overall volume – considering repayments – the amount of the first phase was HUF 194 billion, the second phase was HUF 503.1 billion, the third phase was HUF 507 billion and the FGS+ was HUF 12.6 billion. The MNB accepted SME loans financed by credit institutions as collateral, in addition to the normal securities eligible for the central bank. The value of the collateral blocked in favour of the MNB which was accepted must be covered by the MNB's credit receivables vis-à-vis the credit institution in question.

The balance of security-backed loans showed a decline of HUF 106.8 billion compared to end-2016. There was no stock of tender loans on 31 December 2017, which represented a decrease of HUF 120 billion, while the stock of overnight loans amounted to HUF 13.2 billion. The balance of mortgage bonds fell due to maturity. The item 'Other receivables' contains the amount of the receivable of a bank under liquidation, which was reduced by impairment loss.

Forint receivables from credit institutions by remaining maturity

HUF millions

No.	Remaining maturity	Balance		Change
		31 Dec 2016	31 Dec 2017	
1.	- matured	2,679	2,243	-436
2.	- within 1 year	186,791	127,616	-59,175
3.	- within 1 to 5 years	610,148	371,173	-238,975
4.	- over 5 years	748,912	741,487	-7,425
5.	Total receivables from credit institutions (1+2+3+4)	1,548,530	1,242,519	-306,011

Forint liabilities of credit institutions

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Current accounts	631,835	673,186	41,351
	Three-month MNB deposits	899,987	74,977	-825,010
	Other deposits	876,300	1,215,283	338,983
VI.2.	Deposits of credit institutions	2,408,122	1,963,446	-444,676

The line 'Deposits of credit institutions' contains the liquidity-absorbing instruments and minimum reserves of domestic credit institutions, both of which are pegged to the base rate and mature within one year. The aggregate balance of deposits was HUF 1,963.4 billion on 31 December 2017. The stock of 3-month fixed-rate deposits functioning as the main policy instrument fell by HUF 825 billion. These fixed-rate instruments are sold at tenders by the MNB, and the interest rate on deposits is the same as the current central bank base rate. As of September 2016, the MNB set a volume cap on the 3-month deposit, the size of which has gradually declined, and the stock amounted to HUF 75 billion by the end of 2017. The balance of overnight central bank deposits rose by HUF 339 billion compared to end-2016.

4.8 NET POSITIONS VIS-À-VIS CREDIT INSTITUTIONS

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
I.2.—VI.2.	Net forint position	-859,592	-720,927	138,665
II.3.—VII.2.	Net foreign currency position	-75,804	-14,109	61,695
	Total	-935,396	-735,036	200,360

The decrease in net liabilities to credit institutions improved the net position by HUF 200.4 billion, with the net position showing a net liabilities balance of HUF 735 billion at end-2017. Within this, the net forint position improved by HUF 138.7 billion to HUF 720.9 billion. The improvement in the position was basically linked to the decrease in the 3-month deposits in line with the volume cap, and this was offset partly by the rise in the overnight deposits, and partly by the decline in FGS refinancing loans and in security-backed loans due to maturities.

In addition to fixed foreign currency deposits, the net foreign currency liabilities to credit institutions included the outstanding amount of FX swaps in the end of period under review. The aggregate balance of the former items improved by HUF 61.7 billion relative to end-2016 and amounted to HUF 14.1 billion on 31 December 2017. Within this, the amount of foreign currency deposited in interest-bearing accounts at the MNB by domestic credit institutions was HUF 55.9 billion lower at end-2017, and thus improved the net foreign currency position.

Foreign currency receivables from and liabilities to credit institutions in a breakdown by remaining maturity

HUF millions

No.	Remaining maturity	Balance		Change
		31 Dec 2016	31 Dec 2017	
1.	- within 1 year	62	2,490	2,428
2.	- within 1 to 5 years	0	0	0
3.	- over 5 years	0	0	0
4.	Total foreign currency receivables from credit institutions (1+2+3)	62	2,490	2,428
5.	- within 1 year	75,507	15,903	-59,604
6.	- within 1 to 5 years	-9	-3	6
7.	- over 5 years	368	699	331
8.	Total foreign currency liabilities to credit institutions (5+6+7)	75,866	16,599	-59,267
9.	Net foreign currency position (4-8)	-75,804	-14,109	61,695

4.9 GOLD AND FOREIGN EXCHANGE RESERVES OF THE CENTRAL BANK

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Gold reserve	0	33,185	33,185
	Reserve position in the IMF	117,772	110,034	-7,738
	Foreign currency deposits	1,648,649	1,966,459	317,810
	Foreign currency securities	5,787,115	5,037,808	-749,307
	Foreign currency repo transactions	3,746	81,476	77,730
II.1.	Gold and foreign exchange reserves	7,557,282	7,228,962	-328,320

For statistical purposes, the MNB regularly publishes the amount of foreign exchange reserves. According to the statistical rules, foreign exchange reserves also include accrued interest, and consequently, gold and foreign exchange reserves differ in amount according to the statistical and accounting rules.

Foreign exchange reserves not including accrued interest amounted to HUF 7,229 billion at 31 December 2017, down HUF 328.3 billion compared to the end of 2016. In the course of 2017, EUR transfers from the European Commission and the forint-liquidity providing fine-tuning FX swap tenders with credit institutions increased the amount of foreign exchange reserves. The level of reserves was reduced by the overall effect of the debt management and other activities of the Government Debt Management Agency, by the net balance of foreign currency inflows and payments managed by the Hungarian State Treasury, by the maturity and termination of part of the FX swaps related to conversion of household foreign currency loans into forint and to the foreign currency pillar of phase three of the FGS, and by changes in cross rates. As a consequence of the aforementioned effects, the stock of foreign exchange reserves denominated in euro decreased by EUR 1 billion by 31 December 2017.

The reason for the change in the gold reserve is that a gold-currency swap concluded instead of receivables in connection with gold in December of 2016 matured at the beginning of 2017, and a new transaction has not been concluded. (The derivative-type gold receivables appeared under item II.4. 'Other foreign currency receivables' at the end of 2016; see Section 4.10.)

The end-2017 balance of foreign currency securities contained the securities which are managed by the external trustee on the ground of a mandate in a total amount of HUF 318.4 billion (6.3 per cent altogether).

4.10 OTHER FORINT AND FOREIGN CURRENCY RECEIVABLES

Other forint receivables

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Receivables from supervisory activities	8,996	8,817	-179
	Employee loans	2,552	3,044	492
	Total other receivables in HUF in gross value	11,548	11,861	313
	Impairment loss for other receivables	-8,719	-8,528	191
I.3.	Other forint receivables	2,829	3,333	504

The balance of receivables from supervisory activities amounted to HUF 8.8 billion at 31 December 2017, and an impairment loss was recognised for 96.7 percent of this, in line with the internal rules of the MNB. The amount of personal loans and preferential property loans granted by the MNB to its employees rose to HUF 3 billion at end-2017.

Other foreign currency receivables

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Forint payment of IMF quota	645,754	603,324	-42,430
	Foreign hedging transactions*	81,951	44,862	-37,089
	Other	1,411	0	-1,411
II.4.	Other foreign currency receivables	729,116	648,186	-80,930

* The revaluation difference of hedging derivative transactions is stated in net terms, in accordance with the MNB Decree.

The forint payment of the IMF quota decreased owing to the 6.6 per cent appreciation of the forint exchange rate against the SDR.

The item 'Foreign hedging transactions' includes the net debit balance of swap and forward transactions with non-resident counterparties concluded by the MNB, including the gold-currency swap in the end of 2016, as mentioned in Section 4.9.

4.11 OTHER DEPOSITS AND LIABILITIES

Other forint liabilities

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	International financial institutions' forint deposits	50,029	55,169	5,140
	Other liabilities	9,391	7,729	-1,662
VI.4.	Other forint deposits and liabilities	59,420	62,898	3,478

The item 'International financial institutions' forint deposits' mainly includes the forint deposits of the European Commission.

Other foreign currency liabilities

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	IMF deposit	1,035,803	967,744	-68,059
	Foreign deposits and loans	141,112	70,957	-70,155
	Hedging transactions*	4	1,306	1,302
	Other liabilities	714	365	-349
VII.3.	Other foreign currency liabilities	1,177,633	1,040,372	-137,261

* The revaluation difference of hedging transactions is stated in net terms, in accordance with the MNB Decree.

The balance of other foreign currency liabilities amounted to HUF 1,040.4 billion on 31 December 2017, down HUF 137.3 billion compared to end-2016. Exchange rate changes of the IMF deposit's amount caused a decline of HUF 68 billion. The total decrease of HUF 70.2 billion in the balance of foreign deposits resulted from a fall in the volume of hedging transactions marked to market, and it was reflected in the change in the amount of the mark-to-market deposit, which is for the market price differences of transactions.

Other foreign currency liabilities by remaining maturity

HUF millions

B/S line	Remaining maturity	Balance		Change
		31 Dec 2016	31 Dec 2017	
	- within 1 year	787,152	674,749	-112,403
	- within 1 to 5 years	0	1,203	1,203
	- over 5 years	0	0	0
	- without maturity	390,481	364,420	-26,061
VII.3.	Other foreign currency liabilities	1,177,633	1,040,372	-137,261

The item 'Liabilities without maturity' includes the liabilities amounting to SDR 991.1 million, which derived from the SDR allocation carried out by the IMF in 2009. Exchange rate changes caused the decrease.

Currency structure of other foreign currency liabilities

HUF millions

No.	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
1.	- USD	103,687	13,479	-90,208
2.	- EUR	19,740	9,162	-10,578
3.	- JPY	-14,619	-125,982	-111,363
4.	- SDR	429,720	361,661	-68,059
5.	- Other	639,101	780,746	141,645
6.	Other foreign currency liabilities	1,177,629	1,039,066	-138,563

The item 'Other' amounted to HUF 780.7 billion at the end of 2017 and mainly contains the revaluation-corrected forint coverage of the IMF quota.

4.12 INVESTED ASSETS

In addition to intangibles, tangibles and capital expenditure (HUF 27.4 billion), invested assets include shares in investments (HUF 9 billion in foreign investments and HUF 38.9 billion in domestic investments).

Changes in the gross value, depreciation, and net value of intangibles, tangibles and capital expenditure

HUF millions

	Assets							Intangibles, tangibles and capital expenditure
	Immaterial goods		Tangible assets				Capital expenditure and advances given	
	Intangible assets	Software under development	Buildings and accessories	Equipment	Depository Programme	Assets of banknote and coin		
Gross value								
31 Dec 2016	12,815	528	28,076	17,158	9,430	241	325	68,573
Commissioning/ acquisition	2,349	38	251	1,410	538	1	386	4,973
Acceptance of assets free of charge			20	146				166
Other addition/ reclassification	212							212
Scrapping	-188			-1				-189
Selling			-15,382	-3,177				-18,559
Transfer free of charge				-422				-422
Other disposal/ reclassification	-1	-21		-284				-306
31 Dec 2017	15,187	545	12,965	14,830	9,968	242	711	54,448
Details of depreciation								
31 Dec 2016	10,384	0	5,566	10,866	0	0	0	26,816
Ordinary depreciation	1,203		716	1,380				3,299
Other addition due to reclassification	61							61
Derecognition	-189		-1,425	-1,494				-3,108
Decrease due to reclassification				-61				-61
31 Dec 2017	11,459	0	4,857	10,691	0	0	0	27,007
Balance								
31 Dec 2016	2,431	528	22,510	6,292	9,430	241	325	41,757
31 Dec 2017	3,728	545	8,108	4,139	9,968	242	711	27,441
Change	1,297	17	-14,402	-2,153	538	1	386	-14,316

In September 2017, because of the Eiffel Palace building sale, its net book value HUF 14 billion was removed from buildings and a net book value of HUF 2.1 billion in tangible assets was also removed from equipment.

The net value of the state-owned, managed buildings (3 buildings and 2 plots of land) was HUF 63 million at 31 December 2017.

Foreign investments and dividends from investments

HUF millions

Description	Ownership share (%)		Book value		Dividends received	
	31 Dec 2016	31 Dec 2017	31 Dec 2016	31 Dec 2017	2016	2017
BIS	1.43	1.43	7850	7264	734	977
<i>SDR millions</i>			10	10		
<i>CHF millions</i>			13.5	13.5		
European Central Bank	1.38	1.38	1742	1737	-	-
<i>EUR thousands</i>			5601	5601		
SWIFT	0.03	0.03	14	14	0	0
<i>EUR thousands</i>			46.4	46.4		
Total investments			9606	9015	734	977

Ownership distribution in the ECB at 31 December 2017

National Central Banks (NCBs)	Subscribed capital	Paid-up capital	Capital key (%)
	EUR thousands		
Nationale Bank van België/ Banque Nationale de Belgique	268,222	268,222	2.4778
Deutsche Bundesbank	1,948,209	1,948,209	17.9973
Eesti Pank	20,871	20,871	0.1928
Central Bank of Ireland	125,646	125,646	1.1607
Bank of Greece	220,094	220,094	2.0332
Banco de España	957,028	957,028	8.8409
Banque de France	1,534,900	1,534,900	14.1792
Banca d'Italia	1,332,645	1,332,645	12.3108
Central Bank of Cyprus	16,378	16,378	0.1513
Latvijas Banka	30,537	30,537	0.2821
Lietuvos banka	44,729	44,729	0.4132
Banque centrale du Luxembourg	21,975	21,975	0.2030
Central Bank of Malta	7,015	7,015	0.0648
De Nederlandsche Bank	433,379	433,379	4.0035
Oesterreichische Nationalbank	212,506	212,506	1.9631
Banco de Portugal	188,723	188,723	1.7434
Banka Slovenije	37,400	37,400	0.3455
Národná banka Slovenska	83,623	83,623	0.7725
Suomen Pankki – Finlands Bank	136,005	136,005	1.2564
Subtotal for euro area NCBs	7,619,885	7,619,885	70.3915
Bulgarian National Bank	92,987	3,487	0.8590
Česká národní banka	174,012	6,525	1.6075
Danmarks Nationalbank	161,000	6,038	1.4873
Hrvatska narodna banka	65,199	2,445	0.6023
Magyar Nemzeti Bank	149,363	5,601	1.3798
Narodowy Bank Polski	554,565	20,796	5.1230
Banca Națională a României	281,710	10,564	2.6024
Sveriges riksbank	246,042	9,227	2.2729
Bank of England	1,480,244	55,509	13.6743
Subtotal for non-euro area NCBs	3,205,122	120,192	29.6085
Total NCBs	10,825,007	7,740,077	100.0000

The Republic of Hungary joined the European Union on 1 May 2004. Consequently, the MNB became a member of the ESCB. The ESCB comprises the European Central Bank (ECB) and the national central banks of the 28 EU Member States. The Eurosystem is composed of the ECB and of the national central banks of Member States which have already adopted the euro.

Pursuant to the provisions of Article 28 of the Statute of the ESCB and the ECB (hereinafter referred to as 'the Statute'), the MNB has become an owner of the ECB. Subscriptions depend on shares which are fixed in accordance with Article 29 of the Statute and must be adjusted every five years based on demographic and GDP data provided by the European Commission. Shares can additionally change with a new accession to the EU or with capital increase.

Pursuant to Article 47 of the Statute, non-euro area NCBs are required to pay 3.75 per cent of their subscribed capital to the ECB as a contribution to the operational costs of the ECB. As a non-euro area NCB, the MNB is not entitled to receive any share of the distributable profits of the ECB, nor is it liable to fund any loss of the ECB.

The MNB's participation in the ECB is presented in the sub-item 'Invested assets' under 'III. Banking assets' in the balance sheet of the MNB. The value of the investment (i.e. paid-up capital) amounted to EUR 5.6 million (HUF 1.7 billion) in the MNB's balance sheet as at 31 December 2017.

Domestic investments and dividends from investments

HUF millions

Description	Ownership share (%)		Book value		Dividends received	
	31 Dec 2016	31 Dec 2017	31 Dec 2016	31 Dec 2017	2016	2017
Pénzjegynyomda Zrt. 1055 Budapest, Markó utca 13–17.	100.0	100.0	10,627	11,827	0	0
Magyar Pénzverő Zrt. 1239 Budapest, Európa u. 1.	100.0	100.0	575	575	80	0
Pénzügyi Stabilitási és Felszámoló Nkft. 1055 Budapest, Bajcsy-Zsilinszky út 78.	100.0	100.0	50	50	-	-
MARK Magyar Reorganizációs és Követeléskezelő Zrt. 1055 Budapest, Bajcsy-Zsilinszky út 78.	100.0	0.0	19,298	0	0	0
MNB-Jóléti Kft. 1054 Budapest, Szabadság tér 8–9.	100.0	100.0	569	665	0	0
MNB-Biztonsági Zrt. 1054 Budapest, Szabadság tér 8–9.	100.0	100.0	740	740	0	863
GIRO Elszámolásforgalmi Zrt. 1054 Budapest, Vadász utca 31.	100.0	100.0	9,779	9,779	0	0
Budapesti Értéktőzsde Zrt. 1054 Budapest, Szabadság tér 7.	81.4	81.4	14,619	14,619	0	0
KELER Zrt. 1074 Budapest, Rákóczi út 70–72.	53.3	53.3	643	643	0	0
KELER KSZF Zrt. 1074 Budapest, Rákóczi út 70–72.	0.2	0.2	7	7	0	0
Total investments			56,907	38,905	80	863

Participations of domestic investments

HUF millions

Description	Participations		
	Name Headquarter	Ownership share (%)	Share capital (HUF millions)
		31 December 2017	
Pénzjegynyomda Zrt.	DIPA Diósgyőri Papírgyár Zrt. 3535 Miskolc, Hegyalja út 203/1.	100.0	4,196
GIRO Elszámolásforgalmi Zrt.	BISZ Központi Hitelinformációs Zrt. 1205 Budapest, Mártonffy utca 25–27.	100.0	217
Budapesti Értéktőzsde Zrt.	KELER Zrt. 1074 Budapest, Rákóczi út 70–72.	46.7	4,500
	KELER KSZF Zrt. 1074 Budapest, Rákóczi út 70–72.	0.1	1,823
	Budapest Institute of Banking Zrt. 1054 Budapest, Szabadság tér 7.	100.0	80
KELER Zrt.	KELER KSZF Zrt. 1074 Budapest, Rákóczi út 70–72.	99.7	1,823

In addition to forint banknotes, **Pénzjegynyomda Zrt.** (Hungarian Banknote Printing Shareholding Company) produces documents, tax stamps and securities for domestic and foreign clients. Developments and investments were implemented to ensure the modern, secure production of forint banknotes and documents. The main strategy of the company is focused on enhanced banknote production in adequate quantity and excellent quality, and increased penetration in market segments other than banknote production based on competitive advantages. As part of the programme for changing and developing Hungary's banknotes (between 2013 and 2018), the company applies all of its resources for the production of the developed banknotes. Beyond that it has stabilised its presence in the production and personalisation of important domestic documents for the contracting period until 2022. In the new site set up in 2015, in addition to producing cards, printed documents, manufacturing tax stamps/banderoles, as a new activity the personalisation of passports and other domestic documents, as well as the production of electronic identity cards was started from the fourth quarter of 2017. The value of the investments changed to HUF 11.8 billion in January 2017, resulting from the increase in the share capital of HUF 1.2 billion, which was necessary for investment in equipment. The subsidiary of the printing company is **Diósgyőri Papírgyár Zrt.** (DIPA, Diósgyőr Papermill), the sole security paper manufacturer in Hungary. The primary function of DIPA is to produce banknote base paper in adequate quantity, quality, and timing. At the centre of the product strategy of the company are quality products applied with high-level security elements. In addition to banknote base paper, DIPA produces a significant share of base papers for documents used in public administration, base papers for tickets, as well as the base papers for the passports of several countries and for documents, for which it offers complex solutions. In its international relations as well, the company strives to strengthen customer satisfaction, based on tradition and innovative solutions, and to stabilise or improve its results, thereby ensuring an efficient investment for the shareholder. From September 2017 a unified guideline, complying with the practices of the MNB, was developed in relation to the operation and management of the companies.

Pursuant to the MNB's order, the primary duty of **Magyar Pénzverő Zrt.** (Hungarian Mint Ltd.) is to produce circulation coins for cash turnover and commemorative coins issued by the MNB as legal tender. Utilisation of the company's free capacity allows for the production of non-legal tender commemorative coins as well and other medals on the basis of its own coin programme and customised orders. Within the range of its commercial activities, the company sells commemorative coins, collector banknotes, medals and gold investment products in Hungary and abroad, both as a wholesaler and retailer.

Pénzügyi Stabilitási és Felszámoló Nonprofit Kft. (PSFN Kft., Financial Stability and Liquidator Non-profit Ltd.) has exclusive right to perform the liquidation or winding-up proceedings of financial institutions, to phase out venture capital funds, and – if necessary – to perform coordinating and advisory tasks related to the resolution of financial institutions. Furthermore, it performs supervisory commissioner work for financial institutions with suspended authorisation for operations. PSFN Kft. performs tasks related to the administration and therefore to the operative management and if necessary to the

organised market derecognition of financial institutions in crisis. Within the frame of its public function, the company designates, if necessary, the supervisory commissioners assuming partial or overall management of financial institutions which need direct professional control and review by the supervisory measures of the MNB. If it is found that – in spite of the supervisory measures of the MNB or the designation of supervisory commissioners – the prudent and legal operation of the financial institution is not ensured, the experts of the company provide for liquidation or for winding-up proceedings of the institution. The purpose of these procedures is to realise creditors interests, to satisfy their claims after the withdrawal of authorisation for operations of the institution, prior to the end of resolution proceedings. PSFN Kft. performs its functions for the public good, protecting the interests of the users of financial services. The expressed aim of PSFN Kft. is to perform the termination of credit institutions, financial enterprises, insurance companies, capital market institutions, funds and other financial institutions in a unified approach and methodology, emphasising prudence and transparency; and to complete resolution as soon as possible keeping in mind their complexity and the interests of financial customers. Continuous organisational, regulatory and infrastructure developments ensure that PSFN Kft. provides adequate and efficient information to the public and strengthens confidence in the financial intermediary system.

The MNB sold its investment in **Magyar Reorganizációs és Követeléskezelő (MARK) Zrt.** (MARK Hungarian Restructuring and Debt Management Private Company Limited by Shares, MARK Ltd.) on 30 June 2017 and the investment was removed from the balance sheet. In recent years, the central bank supported the banking system with several targeted measures to clean up the corporate credit portfolio. As part of this, the MNB established MARK Zrt., which catalysed the market on the demand side, attracting the attention of investors and significantly increasing demand for Hungarian non-performing assets. Launching MARK Zrt. improved the quality of information and the service capacity required was built up, which are key factors on this market. This ultimately facilitated the removal of non-performing commercial loans from the banking system to a great extent. As the rate of non-performing corporate loans in the banking sector has almost halved and now represents a low level, and the market was able to handle the remaining stock, the MNB decided to sell MARK Zrt. on the market. As a result of the tender, APS Investment s.r.o. was selected. Before the sale, the MNB decreased the authorised capital of MARK Zrt. to the statutory minimum amount, to HUF 50 million. HUF 19.3 billion arising from the proportional withdrawal of the share capital was paid in May to the account of the MNB.

MNB-Jóléti Humán Szolgáltató és Üzemeltető Kft. (MNB-Welfare Human Services and Operating Ltd.) is responsible for the maintenance and operation of the Tiszaroff Training and Recreation Centre and for the provision of recruitment and other services determined by the MNB at high level on-site (conferences, trainings, courses, external assemblies). In addition, the company operates the buffets at workplaces for employees of the MNB and provides other services (e.g. catering, operation of Teátrum) for the MNB as the owner. The book value of the investment increased to HUF 665 million by the end of 2017 due to the share capital increase of HUF 96 million during the year.

MNB-Biztonsági Zrt. (MNB-Security Services Ltd.) performs active personal guarding and protection activities in accordance with the contents of the service contract. The company carries out the personal guarding and protection of the office objects and premises of the MNB with armed security guards under legal obligation. Additionally, it is involved in performing the tasks of money and valuables transport and the maintenance tasks of CIT vehicles. MNB-Biztonsági Zrt. carries out tasks of guarding and protecting and securing events for the MNB with personal and property protection guards on ad hoc basis, beyond its main activity with armed security guards. The personal and property protection activity of the company was integrated in 2016 with the convoy of consignments that require security surveillance. In 2017, in accordance with the modification to the service contract, the services provided by the MNB Biztonsági Zrt. to the MNB added two new activities. Starting from 1 April 2017, the company performs evaluative-analytical and advisory activity related to the guarding and protection activity and to the protective services to be performed by the central bank. From October 2017, it provides security support for the central bank. MNB-Biztonsági Zrt. does not provide services to third parties outside the MNB. In cooperation with the Directorate Security, MNB-Biztonsági Zrt. restructured the system of guarding and protection and as a result the guarding places were separated into locations to be guarded with armed security guards and locations to be guarded with personal and property guards in the presence of physical security enhancements. Owing to the restructuring of the guarding and protection system, the number of armed security guards decreased, which was approved by the decision of the National Police Headquarters.

By becoming the sole owner of **GIRO Zrt.**, the MNB has the opportunity to directly implement its ideas for developing electronic money circulation. The company operates the payment system for domestic interbank forint credit transfers

and direct debits, the so-called Interbank Clearing System. The key objectives in its strategy include stable and safe operation, development of the existing clearing services, implementation of new clearing services, and increasing the competitiveness of clearing fees. In line with this, the company decreased clearing transaction fees in two steps in 2015 and in 2016 by 27 percent in total, compared to the prices before the acquisition by central bank; moreover, it carried out more developments aimed to accelerate payment transactions and introduce new services. Implementation of the instant payment infrastructure was started in the first half of 2017 to further accelerate payment transactions and broaden the use of electronic payment methods in most possible payment situations. Using the new payment system, it will be possible to effect payments within 5 seconds 24 hours a day, on every day of the year and the system will make it possible to implement additional services relying on this. Customers will be able to initiate transfers applying secondary account IDs, e.g. mobile phone numbers, e-mail addresses or other national IDs, instead of the currently used account numbers. According to the plans, the instant payment system will be launched in June 2019.

The ownership share of the MNB in **Budapesti Értéktőzsdé Zrt.** (BÉT, Budapest Stock Exchange) did not change up to 31 December 2017 and thus remained at 81.35 percent. The aim of the MNB is to develop the market and achieve an adequately sized, effectively operating capital market in Hungary, as a developed capital market and diversified financial intermediary system is a fundamental basis for a competitive economy and sustainable growth. The new strategic policy of the BÉT until 2020 consists of the following: successful official listings on the stock exchange, renewal of the market structure, strengthening investors and international relations, as well as intensification of government support related to these. The strategy focuses on widening the investor base and making more attractive the conditions of supply and demand and liquidity in the domestic stock exchange, contributing to establishing a healthier structure of the financial system and improving interest rate transmission. This strategy can assist the further reduction of the shadow economy by ensuring the transparency of the listed companies. In 2017, growth in stock market volume was realised by two official listings and by share capital increases. Beyond the stock market transactions, in 2017 a number of debt securities, structured products and investment bills were also listed on the stock exchange. BÉT launched an analysing-quotation programme aimed at increasing the information supply of investors and providing liquidity support, and it created new mortgage bond indices, in cooperation with the MNB. Moreover, the launch of Xtend platform, the new market supporting medium-sized enterprises, the implementation of the institution of Nominated Advisors (NOMADs) and the regulation of the legal background of regulated real estate investment companies also assisted the development of the market structure. BÉT carried on with launching the Stock Exchange Development Fund to assist potential companies in entering the stock market. In addition, BÉT organised international forums and conferences to stimulate the supply side of new issues, encouraged the demand side by educational activities and established the Budapest Institute of Banking Ltd. (BIB). The company has a minority participation in the KELER Group consisting of **KELER Zrt.** and **KELER KSZF Zrt.**, in which the MNB holds a majority share, therefore, as the majority owner of the BÉT, the MNB has strategic share in the KELER Group as well. As the operator of the post-trade infrastructure in the Hungarian securities market, the KELER Group accounts, guarantees and settles the stock exchange transactions traded on the BÉT and transactions involving dematerialised securities issued in Hungary.

KELER Központi Értéktár Zrt. (KELER Zrt., KELER Central Depository Ltd.) is the sole company providing central depository services in the Hungarian capital market and beyond this function it acts as specialised credit institution. Due to its market position, KELER is the issuer of Hungarian ISIN codes and participates as a provider in all domestic securities issues. On 6 February 2017, KELER entered the TARGET2-Securities (T2S) securities settlement platform operated by European Central Bank across Europe, which aims to make cross border security trading more efficient. Low T2S rates for international transactions may contribute to higher foreign demand for Hungarian securities and to rendering the foreign securities markets more attractive for domestic customers. In order to enable the participants of the domestic capital market to fully enjoy all the advantages offered by T2S, KELER is currently implementing the company's Strategic Modernisation Programme, in which the IT infrastructure of the company will be renewed. In 2017, the re-licensing procedure was started in accordance with the new European regulation related to central depositories (CSDR). Following a successful licensing process, KELER will ensure its services essential to the secure functioning of the Hungarian capital market in accordance with the strictest European standards.

KELER KSZF Zrt., as part of the KELER Group, attends to the clearing service and the CCP function. As a clearing house, the company accounts the spot and derivative transactions traded on the BÉT, and as a CCP guarantees the transactions are completed. In addition to the capital market segment, dynamic growth was registered in transactions with power and natural gas trading in recent years. In the power markets (e.g. the Hungarian power exchange HUPX), KELER KSZF provide

its services as a member of European Commodity Clearing AG, headquartered in Leipzig. In other markets, the company as a CCP supports smooth transports, for example on the Central-European gas exchange CEEGEX.

Transactions concluded with domestic investments are services or purchases of goods regulated by contracts and are priced on a market basis or with regard to own cost. The charging of fees with domestic investments is based on the valid regulatory fee schedules (MNB decree, public notices). The costs of banknote and coin production are presented in Section 4.20., and expenses related to support are presented in Section 4.22.

Equity of domestic investments

The latest data available upon compilation of the Annual Report are shown in the following table.

HUF millions

Investment	Share capital	Reserves	Profit/loss for the year	Equity
	31 Dec 2017			
Pénzjegynyomda Zrt.	11,827	5,748	640	18,215
Magyar Pénzverő Zrt.	575	839	143	1,557
Pénzügyi Stabilitási és Felszámoló Nkft.	50	3	0	53
MNB-Jóléti Kft.	785	-113	5	677
MNB-Biztonsági Zrt.	210	530	3	743
GIRO Elszámolásforgalmi Zrt.	2,496	6,861	838	10,195
Budapesti Értéktőzsde Zrt.	541	5,505	176	6,222
KELER Zrt.	4,500	24,414	915	29,829
KELER KSZF Zrt.	1,823	3,990	185	5,998

MNB's receivables from and liabilities to affiliated companies

HUF millions

Investment	Receivables	Liabilities
	31 Dec 2017	
Pénzjegynyomda Zrt.	0	864
Magyar Pénzverő Zrt.	6	1
MNB-Jóléti Kft.	76	0
MNB-Biztonsági Zrt.	0	174
GIRO Elszámolásforgalmi Zrt.	1	1
Budapesti Értéktőzsde Zrt.	0	1
KELER Zrt.	0	6
Total	83	1,047

The above table presents short-term receivables and liabilities. Liabilities to Pénzjegynyomda Zrt. derive from the invoicing of banknotes produced. The net receivables from MNB-Jóléti Kft. are advance payments provided in connection with the operation of the company and from cost accounting. Liabilities to MNB-Biztonsági Zrt. result from guarding and protection activities invoices.

4.13 PROVISIONS AND IMPAIRMENT LOSSES

HUF millions

B/S line	Description	31 Dec 2016	Interim changes in 2017		31 Dec 2017
		Impairment losses / provisions	Increase (+)	Reversal (-)	Total impairment losses / provisions
1	2	3	4	5	3+4+5
I.2.	Forint receivables from credit institutions	5,489	15	0	5,504
I.3.	Other forint receivables	8,719	0	-191	8,528
III.	Invested financial assets	2,651	0	-2,402	249
III.	Other receivables	27	0	-23	4
VIII.	Off-balance sheet liabilities	689	218	-266	641
	- litigation related liabilities	540	120	-264	396
	- FGS+ refinancing loans	149	57	-2	204
	- derivative transactions for purposes other than hedging	0	41	0	41
	Total	17,575	233	-2,882	14,926

In 2017, provisions and impairment losses decreased by HUF 2.6 billion to HUF 14.9 billion in net terms.

Based on the expected recovery, at 31 December 2017 an impairment loss of HUF 5.5 billion was still justified for an overdue forint receivable stemming from a resolution procedure against a credit institution.

In relation to forint receivables from supervisory activities, in total an impairment loss of HUF 0.2 billion was reversed during the quarterly impairment testing in 2017.

In relation to invested financial assets, an impairment loss of HUF 2.4 billion was written back due to the sale of an investment.

In connection with litigation-related contingent liabilities, a provision of HUF 0.4 billion was necessary as of 31 December 2017; compared to end-2016; in total there was a formation of a provision of HUF 0.1 billion and a reversal in the amount of HUF 0.3 billion.

Within the framework of the FGS+, up to a maximum of 50 per cent of credit institutions' capital losses arising from SME loans are reimbursed by the MNB, within the loss compensation limit. In 2017, provision and release was also created for the compensation of expected loans in relation to FGS+.

4.14 PREPAID EXPENSES/ACCRUED INCOME AND ACCRUED EXPENSES/DEFERRED INCOME

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
	Due to banking transactions	68,837	61,819	-7,018
	Due to internal operation	383	1,732	1,349
IV.	Prepaid expenses/accrued income	69,220	63,551	-5,669
	Due to banking transactions	31,814	43,012	11,198
	Due to internal operation	669	835	166
X.	Accrued expenses/deferred income	32,483	43,847	11,364

Prepaid expenses, accrued income, accrued expenses, and deferred income include interest received/charged and interest related income/charges and expenses incurred in the reporting period, independently of the date of financial settlement. The prepaid expenses due to internal operations increased by HUF 1.3 billion. This was mostly caused by a financial money transfer, which was paid at the end of 2017 to the PSFN Kft. for its operating expenses in 2018, and the expenses prepaid in the audit period.

4.15 CHANGES IN EQUITY

HUF millions

B/S line	Description	31 Dec 2016	Interim changes	31 Dec 2017
XI.1.	Share capital	10,000	0	10,000
XI.2.	Retained earnings	107,869	54,281	162,150
XI.3.	Valuation reserves	0	0	0
XI.4.	Revaluation reserves due to exchange rate changes	182,459	-154,449	28,010
XI.5.	Revaluation reserves of foreign currency securities	17,354	-13,435	3,919
XI.6.	Profit/loss for the year	54,281	-15,988	38,293
XI.	Equity	371,963	-129,591	242,372

The share capital consists of a single registered share with a nominal value of HUF 10 billion.

For more details on revaluation reserves, see Section 4.16.

4.16 REVALUATION RESERVES

HUF millions

B/S line	Description	31 Dec 2016	31 Dec 2017	Change
XI.4.	Revaluation reserves due to exchange rate changes	182,459	28,010	-154,449
XI.5.	Revaluation reserves of foreign currency securities	17,354	3,919	-13,435
	Total revaluation reserves	199,813	31,929	-167,884

The revaluation reserves due to exchange rate changes are determined by the amount of revaluated foreign exchange holdings and the difference between the official and average cost rate. In 2017, both of these factors lowered revaluation reserves due to exchange rate changes, with the balance changing by HUF 154.4 billion to HUF 28 billion. The MNB undertook foreign exchange rate exposure mainly in euro: the exchange rate was EUR/HUF 310.14, the average cost rate was EUR/HUF 303.18 at 31 December 2017.

Revaluation reserves of foreign currency securities are calculated as the difference between the market value and the amortised book value of securities. Market value differences on the foreign currency securities in the MNB's portfolio showed a positive balance of HUF 3.9 billion as at 31 December 2017.

4.17 OFF-BALANCE SHEET LIABILITIES AND OTHER SIGNIFICANT OFF-BALANCE SHEET ITEMS OF THE MNB

Hedging transactions and derivative transactions for purposes other than hedging

HUF millions

No.	Description	31 Dec 2016			31 Dec 2017		
		Receivables	Liabilities	Net market value	Receivables	Liabilities	Net market value
1.	Interest rate swap transactions	3,870,739	3,870,739	36,358	3,875,715	3,875,715	55,046
	– IRS conditional on lending activity (LIRS)	779,560	779,560	–8,994	906,350	906,350	–2,238
	– IRS contracted with domestic credit institutions	1,731,290	1,731,290	50,438	1,731,290	1,731,290	63,597
	– IRS contracted with foreign partners	1,359,889	1,359,889	–5,086	1,238,075	1,238,075	–6,313
2.	Bond future transactions	0	260,719	–2,738	0	88,930	314
3.	FX swap and forward transactions	2,874,990	2,793,117	82,832	3,583,417	3,534,119	46,852
	– Forint liquidity providing FX swaps	400,487	400,283	126	1,519,637	1,515,344	1,274
4.	Currency swap transactions (including transactions without capital replacement)	2,052,883	2,105,756	–172,066	1,921,702	1,964,947	–87,405
	– Currency swap transactions linked to FGS	84,783	85,143	10,094	140,946	141,642	7,674
5.	Total hedging transaction (1+2+3+4)	8,798,612	9,030,331	–55,614	9,380,834	9,463,711	14,807
6.	Options	0	0	0	28,509	0	–40
7.	TBA transactions	6,880	0	13	13,943	0	15
8.	Total derivative transactions for purposes other than hedging (6+7)	6,880	0	13	42,452	0	–25
9.	Total (5+8)	8,805,492	9,030,331	–55,601	9,423,286	9,463,711	14,782

* The table from 2017 includes all types of derivative transactions; accordingly, in contrast to the 2016 financial statements, it contains data on TBA transactions for the comparison period.

The above table includes all types of off-balance sheet receivables and liabilities arising from derivative transactions; it also includes FX swaps, currency swaps and forward transactions for hedging purposes, which are part of the foreign currency position and are recorded in the balance sheet, except for currency swaps without capital movement. Hedging transactions reduce risks related to the net foreign currency position and risks arising from cross-rate fluctuations and interest rate changes, and support the creation of the benchmark foreign currency structure determined by the Monetary Council.

The aim of interest rate swap transactions for hedging purposes linked to specific bond issuance is to achieve the interest structure deemed desirable by the MNB. Since 2014, the MNB has concluded interest rate swap tenders with domestic credit institutions to reduce their interest rate risk, and in 2016 interest rate swaps conditional on lending activity (LIRS) were concluded. Most of the approved transactions have a maturity of 1 to 5 years, while almost 2 percent have 10-year maturity.

The aim of bond futures transactions is to reduce the duration of the reserve portfolio; these are hedging transactions maturing within 1 year.

FX swap and forward transactions are the main instruments for hedging foreign exchange risk, based on expectations related to foreign exchange rate changes; their aim is to achieve the targeted foreign currency position, and their maturity is less than 1 year. In the fourth quarter of 2016, in relation to the quantitative limit for the 3-month deposit a new, fine-tuning FX swap transaction was created for monetary policy purposes, which provides forint liquidity for domestic credit institutions.

Currency swap transactions are used to manage foreign exchange and interest rate risks jointly over the long term. The amount of these transactions decreased in 2017, as some of the transactions related to the phase-out of households' foreign currency loans matured. Of the end-2017 balance, 34 per cent of the currency swap transactions consisted of transactions without capital replacement concluded in February and November 2013 with a maturity of 10 years.

The derivative transactions for purposes other than hedging have a maturity within 1 year (1-2 month maturity).

Liabilities from derivative transactions by remaining maturity

HUF millions

No.	Remaining maturity	Balance		Change
		31 Dec 2016	31 Dec 2017	
1.	- within 1 year	3,390,360	4,335,034	944,674
2.	- within 1 to 5 years	2,829,416	2,458,141	-371,275
3.	- over 5 years	2,810,555	2,670,536	-140,019
	Liabilities from hedging transactions (1+2+3)	9,030,331	9,463,711	433,380

Other off-balance sheet liabilities

HUF millions

No.	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
1.	FGS residual drawable credit facilities	121,583	98,715	-22,868
2.	FGS+ related contingent liabilities	149	204	55
3.	Litigation-related contingent liabilities	716	786	70
4.	Guarantees	1,804	1,592	-212
5.	Other off-balance sheet liabilities	15	15	0
6.	Total (1+2+3+4)	124,267	101,312	-22,955

In connection with the FGS, the MNB reports the following items as off-balance sheet liabilities: the still available credit facilities originally allocated in the framework of FGS+, but now drawable both in the additional phase of FGS Pillar I at the request of the banks, as well as the credit facilities drawable in the 3rd phase of FGS Pillar I and Pillar II originating from 2016.

In accordance with the contracts concluded in the framework of FGS+, up to a maximum of 50 per cent of the capital loss of credit institutions arising from SME loans are reimbursed by the MNB to the credit institutions within a limit. FGS+ related contingent liabilities are used to record the expected reimbursement for which provisions have been formed, in line with the rules of qualification.

The majority of the proceedings are proceedings against penalty resolutions connected to the supervisory activities and include indemnity cases. The related contingent liabilities are used to record paid but litigated penalties and other expected compensations connected to legal proceedings for which provisions have been formed.

The item 'Guarantees' consists of export guarantees, to which an irrevocable indemnity bond is always linked. When exercising a guarantee, the MNB has the right to a reverse guarantee if needed. In 2017, the decrease in the balance was caused by exchange rate changes.

Recording off-balance sheet security transactions

HUF millions

No.	Description	Balance		Change
		31 Dec 2016	31 Dec 2017	
1.	Face value of securities lent	364,807	146,283	-218,524
	- automatic securities lending	24,457	9,573	-14,884
	- agency securities lending	340,350	136,710	-203,640
2.	Purchase cost of the non-cash hedge arising from security lending transactions	89,298	0	-89,298
3.	Investment of cash hedge arising from security lending transactions			
	- at purchase cost	236,400	138,528	-97,872
	- at market value	236,400	138,528	-97,872
4.	Not invested cash hedge arising from security lending transactions	27,199	1,293	-25,906
5.	Face value of securities bought under repo transactions	3,670	77,954	74,284

4.18 NET INTEREST INCOME AND REALISED NET INCOME OF FINANCIAL OPERATIONS

Net forint and foreign currency interest and interest-related income

HUF millions

P/L line	Description	2016	2017	Change
1	2	3	4	4-3
(I.1.+II.2.)-(X.1.+XI.1.)	Central government	-3,506	2,257	5,763
(I.2.+II.3.)-(X.2.+XI.2.)	Credit institutions	-28,699	-10,001	18,698
(I.3.+II.1.+II.4.)-(X.3.+XI.3.)	Other	74,812	49,135	-25,677
	Net profit/loss from interest	42,607	41,391	-1,216
	Forint securities	122	114	-8
	Foreign currency securities	-52,584	-30,804	21,780
	Derivative transactions for hedging and other purposes*	-5,786	-61	5,725
	Other	14	34	20
(I.4.+II.5.)-(X.4.+XI.4.)	Net interest-related profit/loss	-58,234	-30,717	27,517
(I.+II.)-(X.+XI.)	Net interest and interest-related income	-15,627	10,674	26,301

* For details on derivative transactions for hedging and other purposes, see the last table in this section.

In 2017, the MNB recorded a net interest and interest-related profit of HUF 10.7 billion, representing an increase of HUF 26.3 billion compared to the figure for end-2016, when a loss of HUF 15.6 billion was reported.

Net interest income decreased by HUF 1.2 billion in comparison to end-2016, due to the decline in interest income on foreign exchange reserves.

Positive factors in net interest income were:

- interest expenses on the main policy instruments (on 3-month MNB deposits) were HUF 18.5 billion lower;

– interest paid on the forint deposits of the central government decreased by HUF 5.7 billion compared to 2016, due to the falling forint interest rates.

Negative factors in net interest income were:

- a decline of HUF 20.7 billion in interest income on foreign exchange reserves relative to 2016 in correlation with the persistently low, partially negative yield environment;
- a decrease in interest income on loans to credit institutions and mortgage bonds of HUF 2.9 billion stemming from the decline in security-backed loans.

Net interest-related income increased by HUF 27.5 billion. This item mainly includes the amortisation of the purchase price difference (premium) of securities and the net gain or loss on derivative transactions which are not related to exchange rate changes.

Negative sums for interest income/expenses in the net forint and foreign currency interest and interest-related income

HUF millions

P/L line	Description	2016		2017	
		Total	of which: Negative sums for interest	Total	of which: Negative sums for interest
	INCOME				
I.	Interest and interest-related income denominated in forint	17,406	0	25,568	-706
I. 4.	Interest-related income	12,972	0	24,410	-706
II.	Interest and interest-related income denominated in foreign currency	154,036	-2,943	132,003	-5,204
II. 1.	Interest on foreign currency reserves	78,010	-2,908	57,291	-2,924
II. 5.	Interest-related income	76,026	-35	74,711	-2,280
	EXPENSES				
X.	Interest and interest-related expenses denominated in forint	45,866	-17	13,823	-360
X. 2.	Interest on deposits by credit institutions	32,853	-17	11,189	-360
XI.	Interest and interest-related expenses denominated in foreign currency	141,203	-4,258	133,074	-6,060
XI. 1.	Interest on central government deposits	-1,845	-1,848	-2,201	-2,249
XI. 2.	Interest on deposits by credit institutions	-173	-178	-118	-119
XI. 3.	Interest on other liabilities	3,233	-410	8,149	-438
XI. 4.	Interest-related expenses	139,988	-1,822	127,244	-3,254

Details of income from derivative transactions for hedging and for purposes other than hedging represented in interest-related income

HUF millions

No.	Description	2016	2017	Change
1.	Net interest on currency swaps	-14,414	-20,616	-6,202
2.	Interest margin on hedge interest rate swaps	11,047	22,371	11,324
3.	Net interest gains on hedge FX swaps	-2,203	727	2,930
4.	Net interest gains on hedge forward transactions	-1,015	144	1,159
5.	Net interest gains on hedge futures transactions	-2,956	-4,309	-1,353
6.	Net interest-related income on hedge swap transactions	3,270	1,461	-1,809
7.	Net interest-related income on hedge option transactions	95	0	-95
8.	Net interest and interest-related income on other transactions	390	161	-229
9.	Net income from derivative transactions (1+2+3+4+5+6+7+8)	-5,786	-61	5,725

Currency swap transactions include derivative transactions concluded with foreign partners, with the Government Debt Management Agency (ÁKK) and with domestic credit institutions. The average amount of transactions concluded with the Government Debt Management Agency increased in 2017, but changes in FX market yields (euro and US dollar yields) had an unfavourable impact on the result. The transactions concluded with foreign partners mainly serve to hedge transactions concluded with the Government Debt Management Agency. The average amount of transactions rose in 2017, and changes in FX market yields caused an increase in net interest income. The average amount of transactions concluded with domestic credit institutions decreased compared to 2016, which was partially offset by the increase in the amount of the currency swaps related to Pillar II of the FGS. Both of these factors resulted in a lower net interest result. The net interest result of currency swaps was a loss of HUF 20.6 billion, representing deterioration of HUF 6.2 billion compared to 2016.

The increase of HUF 11.3 billion in the interest result on interest rate swaps arose from transactions concluded with domestic credit institutions, due to the decline in forint (market) yields.

Hedge FX swaps include short-term transactions concluded with foreign partners, with the Government Debt Management Agency and with domestic credit institutions. Net interest gains on these swaps increased by HUF 2.9 billion. The increase in net interest gains was related to the rise of the amount of the forint liquidity-providing FX swap launched for monetary policy purposes and the change in the composition of transactions concluded with foreign partners.

Hedge forward transactions include transactions concluded with foreign partners. The amount of transactions decreased and their foreign exchange composition changed in 2017. Net interest gains on hedge forward transactions increased by HUF 1.2 billion, resulting from the more favourable difference in interest.

Net interest loss on hedge futures transactions increased by HUF 1.4 billion, due to higher net interest expenses on bond futures transactions.

Net interest-related income on hedge swap transactions includes the exchange rate gains or losses of the transactions. The net interest-related result on hedge swaps was mainly caused by the exchange rate gains which in 2016 arose from the termination of interest rate swaps concluded with credit institutions and in 2017 from the termination of interest rate swaps conditional on lending activity (LIRS).

Realised gains/losses from financial operations

HUF millions

P/L line	Description	2016	2017	Change
	Realised gains on bonds issued by the Hungarian Government	132	15	-117
	Realised gains on coupon bearing bonds denominated in foreign currency	23,568	6,728	-16,840
IV.	Realised gains from financial operations	23,700	6,743	-16,957
	Realised losses on coupon bearing bonds denominated in foreign currency	6,123	5,571	-552
	Realised losses related to CDS transactions	731	0	-731
XIV.	Realised losses from financial operations	6,854	5,571	-1,283
IV. - XIV.	Net financial gains/losses	16,846	1,172	-15,674

Realised gains and loss from financial operations include gains and losses arising from sales of bonds issued by the Hungarian Government and bonds denominated in foreign currency, as well as gains and losses related to CDS transactions. Net realised gains from financial operations amounted to HUF 1.2 billion in 2017. The slight increase in the foreign exchange market yields mainly explains the deterioration in net realised gains compared to the previous year.

4.19 COMPONENTS OF INCOME FROM THE REVALUATION OF FOREIGN EXCHANGE HOLDINGS

HUF millions

Description	2016	2017
Net income from exchange rate changes (realised and conversion spread)*	95,089	61,393
Change in revaluation reserves in the balance sheet** (due to unrealised revaluation net income)	-130,140	-154,449
Total effect of exchange rate changes	-35,051	-93,056

* P/L line: III.-XII.

** Revaluation reserves due to exchange rate changes (balance sheet line XI.4.).

In 2017, the total exchange rate change effect was a loss of HUF 93.1 billion, due to changes in the exchange rate of the forint. The MNB realised a gain of HUF 61.4 billion on sales related to decreasing the daily net FX position and on FX conversions, while the amount of revaluation reserves was lowered by the unrealised exchange rate changes losses of HUF 154.4 billion during the year.

4.20 COST OF ISSUING BANKNOTES AND COINS

HUF millions

P/L line	Description	2016	2017	Change
	Cost of banknote production	11,712	9,517	-2,195
	Cost of coin production	1,988	2,507	519
	Cost of production of commemorative and collector coins	463	520	57
XIII.	Cost of issuing banknotes and coins	14,163	12,544	-1,619

The total cost of issuing banknotes and coins amounted to HUF 12.5 billion in 2017, down HUF 1.6 billion compared to the figure for 2016. This decline originated in particular from the fact, that in the fourth year of the programme for changing and developing the new banknotes, the manufacturing needs for banknotes dropped, lowering the cost of banknote production by HUF 2.2 billion. The cost of coin production increased by HUF 0.5 billion in 2017 compared to the previous year as a result of the slightly stronger demand for coins. Demand for commemorative coins continued to rise, which implied an increase of the cost of production of commemorative and collector coins.

4.21 OTHER INCOME/EXPENSES

HUF millions

P/L line	Description	2016	2017	Change
V.1.	Income from fees and commissions	941	1,087	146
XV.1.	Expenses of fees and commissions	693	689	-4
	Net income from fees and commissions	248	398	150
V.2.	Income from other than fees and commissions	1,634	4,055	2,421
XV.2.	Expenses of other than fees and commissions	4,570	4,677	107
	Net income from other than fees and commissions	-2,936	-622	2,314
V.3.	Income from supervisory activities	14,675	11,940	-2,735
V. - XV.	Other net results	11,987	11,716	-271

Income from fees and commissions mainly relates to payment services. In 2017, the income from fees and commissions increased in particular because of the raise of the fee per item for submitted orders.

For more details on income other than fees and commissions, see Section 4.22; in respect of income related to supervisory activities, see Section 4.23.

4.22 INCOME OTHER THAN FEES AND COMMISSIONS

HUF millions

P/L line	Description	2016	2017	Change
	Dividends from investments	814	1,840	1,026
	Income related to coins and commemorative coins	609	638	29
	Income related to invested financial assets	24	244	220
	Recommitment of financial money transfer	93	187	94
	Income from assets assigned free of charge	0	37	37
	Other income	94	1,109	1,015
V.2.	Income from other than commissions and charges	1,634	4,055	2,421
	Expenses related to coins and commemorative coins	569	577	8
	Financial money transfer	3,697	3,899	202
	Expenses related to public proceedings	217	141	-76
	Expenses from assets assigned free of charge	18	23	5
	Other expenditures	69	37	-32
XV.2.	Expenses from other than commissions and charges	4,570	4,677	107
V.2. - XV.2.	Net income/expenses from other than commissions and charges	-2,936	-622	2,314

Dividends from investments increased by HUF 1 billion compared to 2016. In 2017, MNB-Biztonsági Zrt. paid a dividend of HUF 0.9 billion to the MNB, and BIS paid a dividend of EUR 3.2 million (HUF 1 billion) to the MNB (see Section 4.12).

Net income related to coins and commemorative coins depends on the commemorative coin programme and arises mainly from the difference between the income from sales of commemorative coins and the expenses related to the removal of the coins' face value. Related income and expenses are almost equal, since by agreement, the sale of commemorative coins is accounted with the Pénzverő Zrt. at face value, except when the production cost exceeds the face value (the latter is typical for gold coins).

The item 'Income related to invested financial assets' includes the gain arising from the sale of the investment in MARK Zrt.

The item 'Financial money transfer' includes donations to professional organisations, foundations, as well as to organisations for charitable and other purposes. In 2017, the MNB gave HUF 3.9 billion as donations and HUF 0.2 billion was remitted to the MNB after the settlement as donations not allocated. For the operation of PSFN Kft. in 2017 HUF 1.3 billion was paid as a donation, of which HUF 0.7 billion is expected to be paid back in 2018 as unused operating donation according to the preliminary financial statements of the company.

Expenses related to public proceedings arose mainly from remittance of penalties related to inoperative decisions and accounted earlier as income, as well as to the cancellation of penalties.

The largest item among 'Other income' was income of more than HUF 0.6 billion from the penalty paid by credit institutions for not complying with the conditions of LIRS for 2016. Furthermore, a liability in foreign currency of USD 1.5 million was removed from the balance sheet and was recognised in profit.

4.23 INCOME FROM SUPERVISORY ACTIVITIES

HUF millions

P/L line	Description	2016	2017	Change
	Supervisory fee and default interest	9,119	9,530	411
	Received penalties and reimbursement from public proceedings	5,255	2,075	-3,180
	Administrative servicing fee from public proceedings	281	325	44
	Late payment surcharge for supervisory claims	10	4	-6
	Other income arising from administrative procedures	10	6	-4
V.3.	Income from supervisory activities	14,675	11,940	-2,735

The main item of income from supervisory activities is the supervisory fee received from the supervised institutions obliged to pay this fee. In 2017, the income arising from the assessment of the minimum charges for the entire year and of the quarterly payable variable-rate fees amounted to HUF 9.5 billion, while in 2016 the calculated obligation amounted to HUF 9.1 billion. Penalties imposed by the MNB, which became final and from reimbursements added up to HUF 2.1 billion. Administrative servicing fees and magisterial exam fees amounted to HUF 0.3 billion in 2017.

4.24 OPERATING INCOME AND EXPENSES

HUF millions

P/L line	Description	2016	2017	Change
	Income from assets and inventories	20	20,104	20,084
	Income from subcontracted services	224	93	-131
	Income from invoiced services	1,052	756	-296
	Other income	41	24	-17
VIII.	Total operating income	1,337	20,977	19,640
	Expenses of materials	12,372	12,795	423
	Cost of materials	432	408	-24
	Services contracted	11,899	12,348	449
	- Maintenance, operation and rent of properties	1,806	2,021	215
	- Maintenance and rent of equipments	675	708	33
	- Postal and telecommunication services	684	617	-67
	- Consultancy services	1,138	1,014	-124
	- IT security services	1,375	1,667	292
	- Membership fees	606	623	17
	- Guarding services, transport of banknotes and coins	4,132	2,959	-1,173
	- Advertisements, market research	505	1,549	1,044
	- Other, non significant services*	978	1,190	212
	Other services	41	39	-2
	Personnel-related costs	21,146	22,347	1,201
	Depreciation	2,954	3,299	345
	Transfer of costs of other activities	-1,077	-933	144
	Total operating costs	35,395	37,508	2,113
	Expenses incurred on assets and inventories	30	16,400	16,370
	Expenses incurred on subcontracted services	223	89	-134
	Expenses incurred on invoiced services	1,013	777	-236
	Other expenses	370	546	176
	Total operating expenses	1,636	17,812	16,176
XVIII.	Total operating costs and expenses	37,031	55,320	18,289
VIII.–XVIII.	Net operating expenses	-35,694	-34,343	1,351

* 'Other, non-significant services' contains in particular preparation of publications, travel and hotel services, services for education, translation and audit, as well as distribution of commemorative coins.

In 2017, net operating expenses amounted of HUF 34.3 billion, representing a decline of HUF 1.4 billion (3.8 per cent) compared to the figure for 2016.

Revenue from assets and inventories includes the gain of HUF 3.7 billion arising from the sale of the Eiffel Palace building. On 1 September 2017, upon transfer of the ownership sales revenue of HUF 16.4 billion was recorded as income and the book value of HUF 16.1 billion, as expenditure, was removed. Deductible VAT of HUF 3.6 billion and additional payable VAT of HUF 0.2 billion was recognised in relation to the real estate transaction (i.e. acquisition, investments, sale).

Revenue from invoiced and subcontracted services primarily stems from property rental income. The amount of these items decreased in 2017 as a result of the sale of the Eiffel Palace building. Rents and re-invoiced operating costs are reported as revenue, while operational and amortisation costs – related to rental activity – transferred from operating activities are reported as expenditures.

In 2017, operating expenses were 6 per cent (HUF 2.1 billion) higher than in the previous year. The main reason for this cost increase was the higher cost of materials and personnel-related expenses.

The *expenses of materials* in 2017 was 3.4 per cent (more than HUF 0.4 billion) higher than 2016.

Within the expenses of materials, advertising, market research costs, IT services and consultancy costs, maintenance, operation and rent of properties and costs of other services increased. Costs of guarding activities, transport of banknotes and coins, and consultancy costs also fell.

- Within the costs of advertising and market research, communication costs increased in 2017. The main reason behind this increase was the media campaigns started in the third quarter (withdrawn and emission of banknotes and coins, financial consumer protection campaigns), the largest item here was the cost of the “certified consumer-friendly home loan” campaign.
- Costs of services and consultancy associated with IT systems increased, mainly due to the support and operating costs of the realised investments (including new IT systems). The advisory costs related to IT security systems was also higher.
- Increasing facility management costs were mainly incurred according to rental fees, (foreign representation offices, renting a part of the Eiffel Palace sold in 2017), and the rental of property (Capital Square) which started in 2016 and the full effect of which was felt in 2017.
- Within other services group training costs rose, as a higher number of colleagues participated in language and skill improvement training. The other reason for the rising costs was the MNB Manager Training Program, based on the Board of Directors’ decision.
- The notable decrease in costs related to armed guarding and protection were mainly observed in the modification of contracts with the guarding and protection organisation because of the lower volume of guarding service.
- Compared to 2016, consultancy and expert costs fell considerably in 2017, because compared to the previous year less legal expert services were required in connection with the operation of the Financial Arbitration Board.
- The MNB’s audit fee for 2017 amounted to HUF 23.9 million.

Personnel-related costs increased by 5.7 per cent (HUF 1.2 billion) compared to the previous year. The average headcount rose by 6.4 percent, due to hiring for unfilled positions.

Depreciation in 2017 rose by more than HUF 0.3 billion compared to the previous year, mainly due to software developments (the useful lifetime of intangible assets is generally shorter and the gross value is written down more quickly as compared to tangible assets).

The *transfer of costs* is intended to ensure that the total amount of operating expenses reflects only actual expenses incurred by the MNB. The absolute value of transfers in 2017 was HUF 0.9 billion, amounting to 86.6 percent of the total in 2016. On the one hand, the transferred depreciation of the leased areas of the Eiffel Palace office building purchased during the year appears in this item before the third quarter sale, along with expenses directly related to payment transactions (VIBER software costs), and on the other hand this item also includes the rent paid by Magyar Pénzverő Zrt. to the MNB for partial use of the Logistics Centre. Self-developed software costs also appear in this item, as these costs will be part of assets upon software activation. The transfer of costs from November 2017 from the introduction of gross accounting for inventories also include the cost of producing books published by MNB.

4.25 CHANGE IN STAFF AND PAYROLL COST, REMUNERATION OF EXECUTIVE OFFICERS

Information on wages and number of staff

HUF millions

Description	2016	2017	Change (%)
Payroll costs incurred on staff	13,144	14,482	10
Other wage costs*	530	558	5
Payroll	13,674	15,040	10
Other payments to personnel	2,853	3,082	8
Social contribution tax	3,749	3,361	-10
Health contribution	595	553	-7
Contribution to vocational training	208	229	10
Contribution to rehabilitation	61	76	25
Sick-allowance	6	6	0
Taxes on personnel-related payments	4,619	4,225	-9
Payments to personnel	21,146	22,347	6

* Other wage costs include payments on termination and in exchange for vacation time used and amounts paid to non-staff and non-MNB workers.

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Description	2016	2017	Change (%)
Average number of staff	1,326	1,411	6

Remuneration and loans of executive officers

HUF millions

Bodies	Compensation
Monetary Council*	450
Supervisory Board	222

* Includes the salaries and other payments to personnel of internal and external members of the Monetary Council in an employment relationship with the MNB, pursuant to Article 9 (4) c) of the MNB Act.

Bodies	Amount of loans	Outstanding at 31 Dec 2017	Final maturity	Rate of interest
	HUF millions			
Monetary Council	48	6	1 Dec 2018	Floating*
Supervisory Board	-	-	-	-

* The preferential interest rate for housing loans is the central bank base rate, the interest rate for personal loans is the central bank base rate +1 per cent.

23 April 2018, Budapest

Dr György Matolcsy
Governor of the Magyar Nemzeti Bank

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