



ANNUAL REPORT



2024



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2024 BUSINESS REPORT
AND FINANCIAL STATEMENTS OF
THE MAGYAR NEMZETI BANK

2024

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Part A)
2024 Business Report
of the Magyar Nemzeti Bank

1 Executive Summary

In 2024, global inflation continued to decline and approached central banks' targets in several countries, while consumer price indices rose slightly in the third quarter. Leading global economies have moved on various economic growth paths. In the EU, growth started to slowly accelerate, but remained moderate. Economic growth in the US and China weakened, but nevertheless remained brisk. The main factors determining the global growth and inflation outlook were the poor prospects for European industrial production, the continuing war between Russia and Ukraine, the tense geopolitical situation and intensifying global trade disputes. International investor sentiment was highly volatile.

The world's leading central banks started interest rate cuts during the year, but the international monetary policy environment remained tight overall. Among the CEE central banks, the Czech central bank continued the interest rate cuts it started in December 2023, while the Romanian central bank implemented two interest rate cuts of 25 basis point each. The Polish central bank held its base rate unchanged.

In Hungary, inflation declined significantly compared to 2023 and remained within the MNB's tolerance band, in the upper portion thereof, for most of the year. By the end of 2024 Q3, inflation fell to 3 percent, in line with the Bank's target, before rising to 4.6 percent in December 2024. Average inflation in 2024 was 3.7 percent year-on-year. Hungary's economic performance was subdued in 2024. In 2024 Q1 and Q2, GDP showed moderate year-on-year growth, with a slight decline registered in 2024 Q3. Economic growth remained sluggish in 2024 Q4.

The Monetary Council is committed to achieving the inflation target in a sustainable manner. In the current economic environment, the most effective way for the MNB to ease economic agents' increased precaution and restart economic growth is to maintain price stability and financial market stability. To achieve this, the Monetary Council continued to lower the base rate in 2024 in a careful and cautious manner, implementing cuts totalling 425 basis points by the end of September, from 10.75 percent to 6.5 percent. From October 2024, geopolitical tensions, volatile financial markets and the various risks to the inflation outlook warranted a pause in interest rate cuts. Based on the macroeconomic data, the inflation outlook and developments in the risk environment, the Monetary

Council took cautious, data-driven decisions on the extent and scheduling of interest rate cuts. Throughout the year, a sufficiently restrictive monetary policy ensured a positive real interest rate, in order to maintain financial market stability and achieve the inflation target in a sustainable manner.

The MNB's main instrument is the minimum reserve requirement, the rate of which was set at 10 percent in a uniform manner from the start of 2024. The primary sterilisation instrument for the liquidity of the banking system is the reserve account requirement, with the MNB paying interest equal to the base rate on the interest-bearing parts of the reserves. In 2024 H1, the MNB amended certain technical rules of the minimum reserve system: in January 2024, it abolished the optional rate, and from March 2024 the reserve requirement is determined based on banks' monthly average balance sheet data.

As a result of the interest rate cuts, the base rate declined to 6.5 percent during the year. The 2-percent band of the interest rate corridor remained unchanged, and thus, at end-2024, the Bank's interest rates were 5.5 percent on overnight deposits and 7.5 percent on overnight collateralised loans.

In 2024, the MNB supported efficient monetary transmission with a 1-week discount bill and a FX swap tender providing euro liquidity. The discount bill was offered at a rate aligned with the base rate, and the FX swaps were priced in alignment with the lower half of the interest rate corridor. In an effort to simplify the monetary policy toolkit, the variable rate deposit facility with a maturity of up to six months was phased out at the end of January 2024.

In the 2024 Financial Stability Reports, which contain regular, comprehensive assessments of the stability risks in the financial intermediary system, the MNB provided detailed descriptions of the risks affecting the functioning of the domestic banking system and how to address them. While changes in the international environment had a significant impact on the functioning of the Hungarian economy, the domestic banking system remains stable and its resilience against shocks is strong, in terms of both liquidity and loss-absorbing capacity. Hungarian banks are able to provide economic agents with the necessary funds on an ongoing basis, thereby helping the economy to run

smoothly. In 2024, the annual growth rate of the corporate loan portfolio reached 1.6 percent, while the outstanding amount of household loans increased by 9.7 percent. Extended housing subsidies played a significant role in the growth of household lending.

In both the corporate and household segments, the ratio of non-performing loans in the banking system remained low in 2024. At the end of December 2024, the NPL rate was 3.7 percent in the corporate segment, 2 percent in the household segment and 2.9 percent in the private sector as a whole. The total Hungarian credit institution sector recorded an exceptionally high after-tax profit of almost HUF 1,600 billion in 2024, showing an increase of HUF 119 billion compared to the previous year, based on individual, non-consolidated data. This increase was supported by specific volatile items, primarily dividend income from foreign subsidiaries, as well as higher fee and commission income, but also by a lower extra profit tax relative to the previous year, while operating expenses, higher impairment and the interest rate cap measures reduced the profit. While all credit institutions managed to meet the regulatory capital requirements, the free capital buffers were concentrated across the sector.

In 2024, the MNB's macroprudential policy focused on monitoring the impacts on financial stability and lending exerted by the high interest rate environment, which arose as a result of the disinflationary measures and uncertain geopolitical and macroeconomic trends, and concentrated on further strengthening financial stability by supporting relevant efficiency improvement measures. Given the substantial macroeconomic and geopolitical uncertainties, from 1 July 2024, a countercyclical capital buffer rate of 0.5 percent was imposed by the MNB for domestic exposures, and from 1 July 2025, the Bank will operate the domestic countercyclical capital buffer framework on a so-called positive neutral basis and will increase the countercyclical capital buffer rate to 1 percent. To facilitate access to housing loans for first-time home buyers, in line with the associated risks, the MNB increased the loan-to-value ratio to 90 percent for this borrower group from 1 January 2024. Furthermore, from 1 January 2025, borrower-based measures will also include green criteria, allowing more favourable DSTI and LTV limits for loans that meet green criteria. As part of the fine-tuning of its macroprudential funding requirements, in 2024 the compliance requirement was lifted for institutions that were not systemically important. Furthermore, the MNB continued to monitor international regulatory developments in 2024 and organised the conference "*Financial Stability Conference: Turbulent Times*", which addressed current and upcoming issues affecting the stability of the financial intermediary

system, with the participation of a number of renowned financial stability experts from around the world.

The MNB also published the FinTech and Digitalisation Report in 2024, providing a more detailed analysis of digitalisation in the financial sector. The mobile apps "Student Safe" and "Money Museum" ran successfully during the year. The first semester of the "*Cross-University Startup Management*" course was completed, and the MNB also collaborated in various research projects on innovative technologies. Throughout the year, the Bank participated actively in various international and domestic events related to financial innovation and the FinTech ecosystem. The MNB Innovation Hub helped financial institutions and FinTech companies to clarify legal interpretation issues related to financial innovation.

In December 2024, the MNB published the Ethical Insurance 2.0 package, which regulates the insurance market. The Ethical Regulatory Framework was published by the MNB in 2016–2017 and has significantly improved the value for money of insurance products and increased customer lifetime value. However, further action was needed to address changes in the EU legislative framework and the persistence of products and selling practices in the market that are not favourable for consumers. The Ethical Insurance 2.0 package aims to increase the value provided by insurance products through a number of measures mostly coming into force on 1 January 2026 to ensure adequate preparation time, including a strict customer-focused regulation of the development of insurance products and a requirement to test value for money.

The Home Insurance Campaign launched in March 2024 was more successful than expected. According to the insurers' disclosed data, by April 2024, 20 percent of the total domestic home insurance portfolio, i.e. more than 640,000 contracts were affected. Of these, for 330,000 contracts a new home insurance policy was requested by customers, while for 310,000 contracts customers requested the revision of the existing contract. As a result of the national campaign, many customers were able to have their existing insurance policies reviewed, increasing the coverage and thereby reducing the potential underinsurance of their property.

The CyberShield programme launched in the autumn of 2022 was extended for another three years from January 2024. In addition to educational activities, the prevention of financial fraud needs to be strengthened at the operational level as well, and accordingly the programme is also working to prevent phone number fraud, as well as online and card fraud: it has proposed legislative amendments to the

legislators and started discussions on the use of technical controls to support prevention.

The relevant parts of the EU Crypto-assets Regulation (MiCA)¹ applicable to stablecoins apply from 30 June 2024, while the parts relating to the issuance of other tokens and the licensing of crypto-asset providers and other topics apply from 30 December 2024 in the EU, including Hungary.

In connection with the rotating EU Presidency and the 100th anniversary of the founding of the MNB, the Bank hosted a series of European and global financial supervisory authority conferences and committee meetings.

In 2024, the MNB's activities in the field of resolution planning – acting in its capacity as the resolution authority – focused on reviewing resolution plans, conducting the resolution assessment procedures and reviewing the MREL requirements, as well as monitoring compliance with such, both for institutions based in Hungary and international groups, acting as the resolution authority for both groups and subsidiaries.

During the year, the MNB placed great emphasis on developing the practical application of its instruments used in resolution procedures. The MNB also published a number of resolution-related policy papers, to help the institutions meet their resolution planning obligations.

The MNB calculated the regular 2024 annual contributions for the member institutions of the Resolution Fund, participated in the work of the Board of Directors of the Resolution Fund and the National Deposit Insurance Fund, and fulfilled its duties as the owner of MSZVK Zrt., which acts as the fund manager of the Resolution Fund.

The MNB continued to develop domestic electronic payment methods in 2024, placing great emphasis on overseeing the reliable, secure operation of the payment infrastructure and on the supervision of payment service providers. As a result of these developments, a new mobile payment solution based on instant payments, called “qvik”, was made automatically available in the mobile banking app of all customers from September 2024. Qvik payments include QR code, NFC and deeplink payment solutions, as well as instant transfers made in response to payment requests. Consumers can make free-of-charge transfers with the use of these services. As part of its payment system regulatory activities, the MNB amended MNB Decree No. 35/2017 (XII. 14.) on the processing of

payment transactions, which clarified the requirements for the uniform design elements of instant transfers and made technical clarifications to the rules on the crediting of instant transfers within the State Treasury system and the sending of information on the completion or rejection of instant transfers initiated using the uniform data entry solution.

In order to combat the growing number of fraudulent transactions, the MNB and Giro Zrt. started implementing the Central Fraud Detection System, which will use AI to assess the fraud risks of transactions in real time for credit institutions, starting from 1 July 2025. In addition, in the course of its payment system audits, the MNB also examined the effectiveness of the systems implemented by service providers to stop abuses.

During the Hungarian Presidency of the EU, the Bank played an important role in the preparation of new legislation, namely the Payment Services Regulation (PSR), the directive on payment services and electronic money services in the internal market (PSD3) and the regulation on the creation of the digital euro, which is also in the preparatory phase.

In 2024, the MNB conducted payment system audits at several credit institutions, including checking compliance with certain provisions of new laws and new MNB recommendations. The MNB found a wide range of infringements in the course of these audits. Seven audits were completed in 2024, and in two cases a total fine of HUF 278 million was imposed, in addition to certain measures being applied.

The MNB considers it important to keep consumers and payment service providers informed about recent developments. Therefore, in June 2024 the MNB published the 2024 Payment System Report, which describes the main trends affecting domestic payments and the functioning of the payment and securities settlement systems. Using the Online Cash Register (OCR) database, the first two parts of a series of articles on “*The ratio of electronic transactions in physical purchases and the related trend*” were published in 2024 Q1. In July 2024, the MNB also published a technical paper on the pricing of payment services, in which it drew attention to problems in the current pricing structure and the potential negative effects of the continuous fee increases.

In 2024, the MNB's international reserves increased by around EUR 3.2 billion, reaching EUR 44.6 billion at the end

¹ Regulation (EU) No 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets.

of December 2024. During the year, reserves rose to a new historic high, with the highest annual average level since statistics were first published. In 2024, the level of foreign exchange reserves was increased by the Government Debt Management Agency (ÁKK) issuing foreign currency bonds and by EU transfers arriving from the European Commission. The increase was reduced by the government's debt repayments and the foreign currency expenses of the Hungarian State Treasury (MÁK).

On 31 December 2024, the total value of cash in circulation was HUF 8,897.5 billion, reflecting an increase of 10.3 percent versus end-2023. Cash in circulation increased throughout the year. The growth in cash in circulation was mainly due to an increase in precautionary cash demand, rising real wages and falling interest rates.

Total cash in circulation as a share of GDP and household consumption expenditure showed a slight increase again in 2024, breaking the downward trend seen in previous years. At end-2024, cash in circulation was equivalent to 11 percent of GDP and 23.3 percent of consumption.

In line with the trend from previous years, the counterfeiting of HUF banknotes remains insignificant: only 808 counterfeit banknotes were detected in the cash circulation, with a total damage of HUF 9.3 million in 2024. The number of counterfeit banknotes per million genuine banknotes in circulation during the year was 1.1 in 2024, which is a very good figure by international standards.

In February 2024, the MNB Decree on the processing and distribution of banknotes and protection against counterfeits (the "Banknote Decree") was amended, with new rules added on the restriction of the operation of cashier desks in bank branches and their closure. Thanks to the new rules, the Hungarian ATM network expanded by 312 machines in 2024, growing to 4,451 ATMs from 4,139 ATMs at the end of 2023.

In 2024, the Bank issued 31 commemorative coins in 17 themes, including three gold, eleven silver and 17 non-ferrous metal coins. Commemorative coins used in circulation were also issued in two themes: two million commemorative HUF 100 coins to mark the 100th anniversary of the founding of the MNB and one million HUF 200 commemorative circulation coins in honour of Lajos Batthyány.

In January 2024, the MNB released the publication "*Financial data of households*", which provides a detailed description of the characteristics and distribution of

Hungarian households' wealth, income and consumption, based on the results of the household wealth survey "*What do we live from?*" conducted in 2014, 2017 and 2020, as well as other household statistics.

Another new publication, "*Preliminary balance sheet and profit and loss statement of credit institutions*", available since January 2024, provides statistical balance sheet and profit and loss data for credit institutions on the 18th working day of the month following the month under review, thus providing external users with preliminary data for the credit institution sector five working days earlier than in the past.

The MNB also issued a decision in 2024, imposing a quarterly data reporting requirement on designated credit institutions to the deposit register (BETREG). According to the new data reporting decree, starting from June 2025 data must be provided on a monthly basis, with a shorter deadline and extended information content.

In 2024, the MNB carried out a comprehensive data review of the balance of payments statistics and financial accounts, resulting in improved consistency between the sub-statistics of the national accounts and enhancing the level of detail in the publications.

Due to the impact of the central bank's programmes that expanded the balance sheet, which were launched in order to fulfil its primary function, and the interest rate increases carried out to combat inflation, the central bank recorded a loss in 2024. In 2024, the MNB recorded a loss of HUF 788.7 billion, which is HUF 974.5 billion lower than the loss recorded in 2023. The improvement in the result was mainly due to a reduction in forint interest and interest-related losses, as a result of interest rate cuts, and an increase in foreign exchange interest income and realised foreign exchange gains. The rise in realised loss arising from financial operations had a negative impact on the results. Pursuant to the MNB Act in force and the resolution of the Fiscal Council, the central government had no reimbursement obligation in 2024 due to the central bank's capital position.

Actual operating expenses amounted to HUF 86,991 million in 2024, which was 4.6 percent lower than the approved budget (excluding the central reserve) and 6.9 percent higher than the 2023 expenses.

The MNB launched its Green Programme in 2019, which aims to promote the green financing environment, while also improving the resilience of the financial system against

environmental risks. In the first five years of the Green Programme, the MNB achieved a number of pioneering and internationally outstanding results in promoting the greening of the financial sector, in improving prudential supervision from an environmental risk perspective and in greening its own operations.

Within the framework of the Green Programme launched in 2019, the achievement of operational objectives is supported by medium-term environmental strategies, which are reviewed and updated every three years. The strategy was reviewed in 2023, and for the period 2023 to 2025, the MNB is committed to further reducing its operational carbon footprint, with a target of a 75-percent reduction by end-2025.² The MNB is also committed to maintaining carbon neutrality in the period 2023 to 2025, which is to be achieved by real carbon footprint reductions and offsetting the remainder.

In order to improve the financial literacy and awareness of the adult population, the MNB operates a complex information system called Financial Navigator, in line with the MNB's financial stability and financial consumer protection objectives. This system aims to provide the public with credible, understandable information on the

aspects and risks to be considered when making financial decisions, through a variety of channels.

The Hungarian Money Museum and Visitor Centre, which offers interactive experiences, was opened in March 2022 and by the end of 2024 it had welcomed more than 300,000 visitors. The Museum offers a wide range of knowledge about money not in a traditional museum setting, but through games and personal experiences. Thanks to its innovative approach, the Museum not only provides information about money, but also helps visitors to come to certain realisations through direct experiences.

In 2024, the MNB continued to attach great importance to the continuous, transparent presentation of its activities, results, reports and proposals. To ensure full information and communication on its professional work, the MNB held 38 press conferences and published 263 press releases, and organised and broadcast 19 conferences and major events live on its YouTube channel. It also published 118 professional articles during the year, mostly on online economic portals and its own website, in order to maintain its reputation achieved through its high-quality professional work and to reinforce the positive public perception.

² The MNB measures the reduction of its carbon footprint for its operational activities relative to the 2019 baseline (6,021 tonnes).

2 Brief Description of the Magyar Nemzeti Bank

Company name: Magyar Nemzeti Bank

Seat: 1054 Budapest, Szabadság tér 8-9.

Company form: public company limited by shares. When displaying the name of the Magyar Nemzeti Bank, its company form (company limited by shares) or its abbreviation ("Zrt.") does not need to be indicated.

Year of establishment: 1924

Owner (shareholder): the Hungarian State – represented by the minister in charge of public finances (hereinafter: the Minister of Finance)

Fields of activity: as defined in Act CXXXIX of 2013 on the Magyar Nemzeti Bank (hereinafter referred to as the "MNB Act")

Subscribed capital: HUF 10 billion

2.1 PURPOSE, PRIMARY AND OTHER TASKS OF THE MNB

The Magyar Nemzeti Bank (hereinafter referred to as the "MNB" or "central bank") is a legal entity operating in the form of a special company limited by shares, which carries out the activities defined in the MNB Act.

In accordance with Article 127 of the Treaty on the Functioning of the European Union, the MNB Act, which regulates the primary objectives, basic and other tasks, as well as the institutional, operational, personal and financial independence of the MNB and its functioning, declares that the primary objective of the MNB is to achieve and maintain price stability. Without prejudice to its primary objective, the MNB is also responsible for supporting the stability of the financial intermediary system and the enhancement of its resilience, its sustainable contribution to economic growth, and supporting the government's economic and environmental sustainability policies using instruments at its disposal.

In accordance with Article 130 of the Treaty on the Functioning of the European Union, the MNB Act also stipulates that the central bank is independent. On the basis of the principle of independence of the central bank, the MNB and the members of its bodies are independent in carrying out their

task and meeting their obligations conferred upon them by the MNB Act and neither seek nor take instructions from the government, or – with the exception of the European Central Bank and except for the tasks arising from its membership in the European System of Financial Supervision – from the institutions, bodies and offices of the European Union and from the governments of the Member States or any other organisation or political party. The Government and any other body shall adhere to this principle and shall not attempt to influence the MNB or the members of its bodies in the course of the performance of their tasks.

The basic tasks of the MNB are as follows:

- to define and implement monetary policy;
- as the sole right-holder, to issue banknotes and coins, including commemorative banknotes and coins, which are the legal tender of Hungary;
- as the sole right-holder, to create and manage the official foreign exchange and gold reserves, in order to preserve the external stability of the Hungarian economy;
- as the sole right-holder, to conduct foreign exchange operations in connection with the management of the foreign exchange reserves, while implementing exchange rate policy;
- as the sole right-holder, to oversee the payment and securities settlement systems, including the operations of the system and the organisation performing central counterparty activity, in order to ensure the sound, efficient operation of the systems involved and the smooth circulation of money, and within the scope of these powers and the legislative powers to participate in the development of the payment and securities settlement systems;
- to collect and publish the statistical information required for the performance of its tasks and for the fulfilment of the statistical reporting requirements of the European Central Bank, as laid down in Article 5 of Protocol (No 4) on the Statute of the European System of Central Banks and of the European Central Bank, annexed to the Treaty on the Functioning of the European Union;
- to establish the macro-prudential policy for the stability of the entire system of financial intermediation, with

the objective of enhancing the resilience of the system of financial intermediation and ensuring its sustainable contribution to economic growth. As part of this, to explore the business and economic risks threatening the financial intermediary system as a whole, within the framework set out in the MNB Act, to promote the prevention of the development of systemic risks and the reduction or the elimination of evolved systemic risks; in the event of disturbances in the credit market, to contribute to the balanced implementation of the function of the system of intermediation in financing the economy by stimulating lending and by restraining lending in the event of excessive credit outflow.

Beyond its basic tasks, the MNB also has the following tasks:

- to act as the resolution authority;
- to exercise exclusive responsibility for the supervision of the financial intermediary system
- a) to ensure the smooth, transparent and efficient functioning of the financial intermediary system,
- b) to facilitate the prudent operation of persons and entities that are part of the financial intermediary system and supervise the prudent exercise of the rights of the owners,
- c) to discover undesirable business and economic risks threatening certain financial institutions or certain sectors of the financial institutions, to reduce or eliminate evolved specific or sectoral risks, and to apply preventive measures to ensure the prudent operation of individual financial institutions,
- d) to protect the interests of the users of the services provided by the financial institutions, with a view to strengthening public confidence in the financial intermediary system;
- to settle out-of-court disputes— via the Financial Arbitration Board – between consumers and financial intermediaries, concerning the establishment and performance of legal relations – relating to the use of the services.

Furthermore, the MNB may be assigned other tasks by law, or by other legislation issued on the basis of a statutory mandate in connection with the supervision of the financial intermediary system, which must be consistent with the MNB's basic tasks and responsibilities, as defined in the MNB Act.

Pursuant to Act CXCV of 2011 on the Economic Stability of Hungary (hereinafter: Stability Act), the Governor of the

MNB is a member of the Fiscal Council, and accordingly the information and expertise available in the MNB supports the work of the Fiscal Council. The MNB prepares background analyses for the tasks of the Fiscal Council as defined in the Stability Act and makes them available to the Fiscal Council.

2.2 BODIES AND MANAGEMENT OF THE MNB

The MNB is a legal entity operating in the form of a single-member company limited by shares. The general rules applicable to companies limited by shares and the relevant provisions of the Civil Code apply to the MNB with the derogations set out in the MNB Act.

The Hungarian State, as the sole shareholder, is represented by the Minister of Finance. The MNB does not hold General Meetings.

The **Shareholder** has the right to decide on the establishment and amendment of the Statutes, as well as on the appointment, dismissal and remuneration of the auditor, by a shareholder resolution.

The remuneration of the Governor, the Deputy Governors, the other members of the Monetary Council and the members of the Supervisory Board of the MNB is determined by the MNB Act, not by the Shareholder, as opposed to the rules applied to other companies limited by shares – in order to guarantee its independence.

The MNB's bodies, such as the Monetary Council, the Financial Stability Board, the Executive Board and the Supervisory Board, are also defined by the MNB Act.

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

The responsibilities of the Monetary Council:

- to take strategic decisions on the following: monetary policy, the issuance of legal tender, the holding and management of foreign exchange and gold reserves, the conduct of foreign exchange operations in the context of the management of foreign exchange reserves and implementation of exchange rate policy, and statistical tasks, in particular decisions on the minimum reserve and the interest rate payable on reserves, as well as decisions on the exchange rate regime and determining the base rate;
- to take decisions on the strategic framework within which the Financial Stability Council decides on the macroprudential, supervisory authority tasks, oversight and resolution authority proceedings;

- to establish its own rules of procedure;
- to take decisions on all other matters which the Monetary Council has exclusive competence to decide by law.

The members of the Monetary Council are: the MNB's Governor as the Chairman of the Monetary Council, the MNB's Deputy Governors and the members elected by the Parliament for 6-year terms. The Monetary Council has 5 to 9 members.

At the first meeting of the year, the Monetary Council elects a Deputy Chairman from among the MNB's Deputy Governors, who substitutes for the Chairman in the event of him/her being prevented from attending, except when a decree is issued. The Monetary Council elected Barnabás Virág, Deputy Governor to act as the Deputy Chairman in 2024.

Members of the Monetary Council in 2024:

- Dr György Matolcsy, Governor of the MNB since 4 March 2013 and Chairman of the Monetary Council, reappointed from 4 March 2019;
- Dr Mihály Patai, Deputy Governor from 22 April 2019;
- Dr Csaba Kandrás, Deputy Governor from 2 October 2019;
- Barnabás Virág, Deputy Governor from 22 June 2020;
- Dr Péter Gottfried, from 1 January 2021;
- Dr Kolos Kardkovács, re-elected from 13 September 2022;
- Gyula Pleschinger, re-elected from 5 March 2019;
- Dr Éva Búza, from 6 April 2023;
- Zoltán Kovács, from 27 March 2023.

Within the strategic framework set by the Monetary Council, the **Financial Stability Council** acts on behalf of the MNB in decision-making on supervisory, macroprudential and resolution authority tasks, as well as oversight.

Within these powers, the Financial Stability Board has the following tasks:

- to monitor the stability of the financial intermediary system as a whole and of the financial markets, in order to maintain the stability of the financial intermediary system as a whole;
- to identify risk factors threatening the financial intermediary system as a whole;
- to analyse the risks associated with certain types of institutions or products or with the spread of such, which may represent a threat to the financial intermediary system as a whole;

- to monitor events on the international and European markets and risks to the stability of the financial intermediary system as a whole, and to decide on the necessary measures, within the strategic framework defined by the Monetary Council;

- to discuss the strategic, regulatory and risk related issues affecting the financial intermediary system as a whole, and to take a position where necessary;

- in a situation threatening the stability of the financial intermediary system as a whole, to assess the systemic risks and decide on the measures necessary to reduce or eliminate such;

- where necessary, to place on the agenda the recommendations, resolutions and risk warnings of the European Systemic Risk Board, which are relevant to the financial intermediary system as a whole;

- to discuss, as appropriate, the recommendations and decisions issued by the European Supervisory Authorities, including decisions calling for specific action by the national supervisory authorities, where there is a serious threat to the stability of the European financial system, and to take a position on the resulting tasks;

- to issue recommendations on fundamental aspects of the MNB's law enforcement practice, which are not binding on the persons and entities supervised by the MNB;

- to set out the priority areas for the MNB's control activities each year;

- to make decisions in respect of MNB decisions ordering a resolution or applying resolution measures, in exercising the MNB's resolution powers, and to exercise the powers related to certain official decisions of the MNB, as well as in official proceedings relating to exercising resolution tasks, in accordance with the MNB Decree on the detailed rules governing the exercise of powers in relation to certain official decisions of the MNB and the substitution and exclusion of the persons exercising such powers;

- to make decisions in administrative proceedings related to the exercise of supervision of individuals, organisations and activities falling under the scope of the laws specified in Articles 39–41 of the MNB Act and the directly applicable EU legal acts, as well as in administrative proceedings related to the exercise of supervision pursuant to the MNB Decree on the detailed rules governing the exercise of powers in relation to certain decisions of the MNB as an authority and the substitution and exclusion of the body exercising such powers; and

- to make decisions in administrative proceedings related to the exercise of macroprudential powers, in accordance with the MNB Decree on the detailed rules governing the exercise of powers in relation to certain decisions of the MNB as an authority and the substitution and exclusion of the body exercising such powers.

The members of the Financial Stability Council are:

- the MNB's Governor, as Chairman;
- the MNB's Deputy Governors;
- the Executives Directors responsible for licensing and law enforcement; digitalisation and FinTech sector development, the MNB's toolkit, financial stability and foreign exchange reserve management, and the prudential and consumer supervision of the financial market institutions, as managers appointed by the MNB's Governor; and
- the Director General.

In accordance with the MNB Act, the **Executive Board** is responsible for implementing the decisions of the Monetary Council and the Financial Stability Council, and for managing the MNB's operations.

The responsibilities of the Board of Directors:

- to manage the implementation of decisions by the Monetary Council and the Financial Stability Council;
- to approve the MNB's accounting reports, decide on the payment of dividends pursuant to Article 166(1a) of the MNB Act and approve the draft year-by-year forecast for the preliminary level of equity at the end of the previous year and the expected developments;
- to approve the draft report to be sent to the Shareholder on the management and assets of the MNB;
- to approve the matters relating to the organisation and internal management of the MNB;
- to approve the study plans and programmes related to the operation of the MNB and the performance of its tasks, including the development budget and operating expenses;
- to manage the MNB's internal audit organisation regarding tasks not falling within the competence of the Supervisory Board and to discuss the findings and plans of the internal audit;

- to amend the collective agreements relating to the rights and obligations arising from employment, the way in which such rights are exercised or such obligations are fulfilled and the related procedure; and

- to take decisions related to the MNB's entitlement to manage accounts and other financial services, ancillary financial services and certain services supplementing the investment services.

The members of the Executive Board, acting as the MNB's executive body, are: the MNB's Governor, as the Chairman of the Executive Board, and the MNB's Deputy Governors.

The tasks and operating procedures of the Monetary Council, the Financial Stability Council and the Executive Board are regulated by the MNB Act, the MNB's Statutes, the Organisational and Operational Rules as well as the rules of procedure established by these bodies.

The **auditor** of the MNB may be appointed for a maximum of five years, and his/her appointment and recall, as well as the determination of his/her remuneration, shall be decided by a shareholder resolution. Before appointing of the auditor or proposing the dismissal of such, the MNB's Governor shall seek the opinion of the President of the State Audit Office.

In addition to the auditor appointed by the shareholder, the State Audit Office and the MNB's Supervisory Board also have the right to control the MNB's operations.

The power of control of the **State Audit Office** over the MNB is regulated by Act LXVI of 2011 on the State Audit Office. The State Audit Office audits the MNB's financial management and its activities that do not fall within the basic tasks. In this regard, the State Audit Office checks whether the MNB is operating in accordance with the laws and its Statutes.

The MNB's body for continuous ownership control is the **Supervisory Board**, as regulated by the MNB Act. The supervisory powers of the Supervisory Board, as defined in the MNB Act, do not extend to the following areas: the MNB's basic tasks, the MNB's resolution authority procedures, the MNB's activities supervising the financial intermediary system and the impact of such on the MNB's profit and loss. Accordingly, the Supervisory Board prepares its report related to the MNB's annual accounts, as required under Act C of 2000 on Accounting, taking account these restrictions.

The members of the Supervisory Board as defined in the MNB Act are: the Chairman, who is elected by the Parliament, three additional members elected by the Parliament, a representative of the Minister of Finance and an expert

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



Dr György Matolcsy
Governor,
Chairman of the Monetary Council



Dr Csaba Kandrás
Deputy Governor,
Member of the Monetary Council



Dr Mihály Patai
Deputy Governor,
Member of the Monetary Council



Barnabás Virág
Deputy Governor,
Member of the Monetary Council

Members of the Monetary Council of the Magyar Nemzeti Bank



Dr Éva Búza
Member of the Monetary Council



Dr Péter Gottfried
Member of the Monetary Council



Dr Kolos Kardkovács
Member of the Monetary Council



Zoltán Kovács
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: Viktor József Asztalos, Péter Benő Banai, Dr Ferenc Papcsák, Dr Gábor András Szényei, László Madarász, Dr László Nyikos

appointed by the Minister of Finance. The Chairman of the Supervisory Board, elected by the Parliament, is nominated by the parliamentary panels of the governing parties, while the other members elected by the Parliament are nominated by all of the parliamentary panels.

Members of the Supervisory Board in 2024:

- Dr Ferenc Papcsák, Chairman,
- László Madarász,
- Dr László Nyikos,
- Dr Gábor András Szényei,
- Péter Benő Banai, and
- Viktor József Asztalos.

2.3 ORGANISATION OF THE MNB

The MNB's organisation structure is designed in accordance with the operating and operational management system introduced for the MNB on 1 July 2013 and for the integrated organisation on 1 October 2013. Although the organisational structure has since been altered several

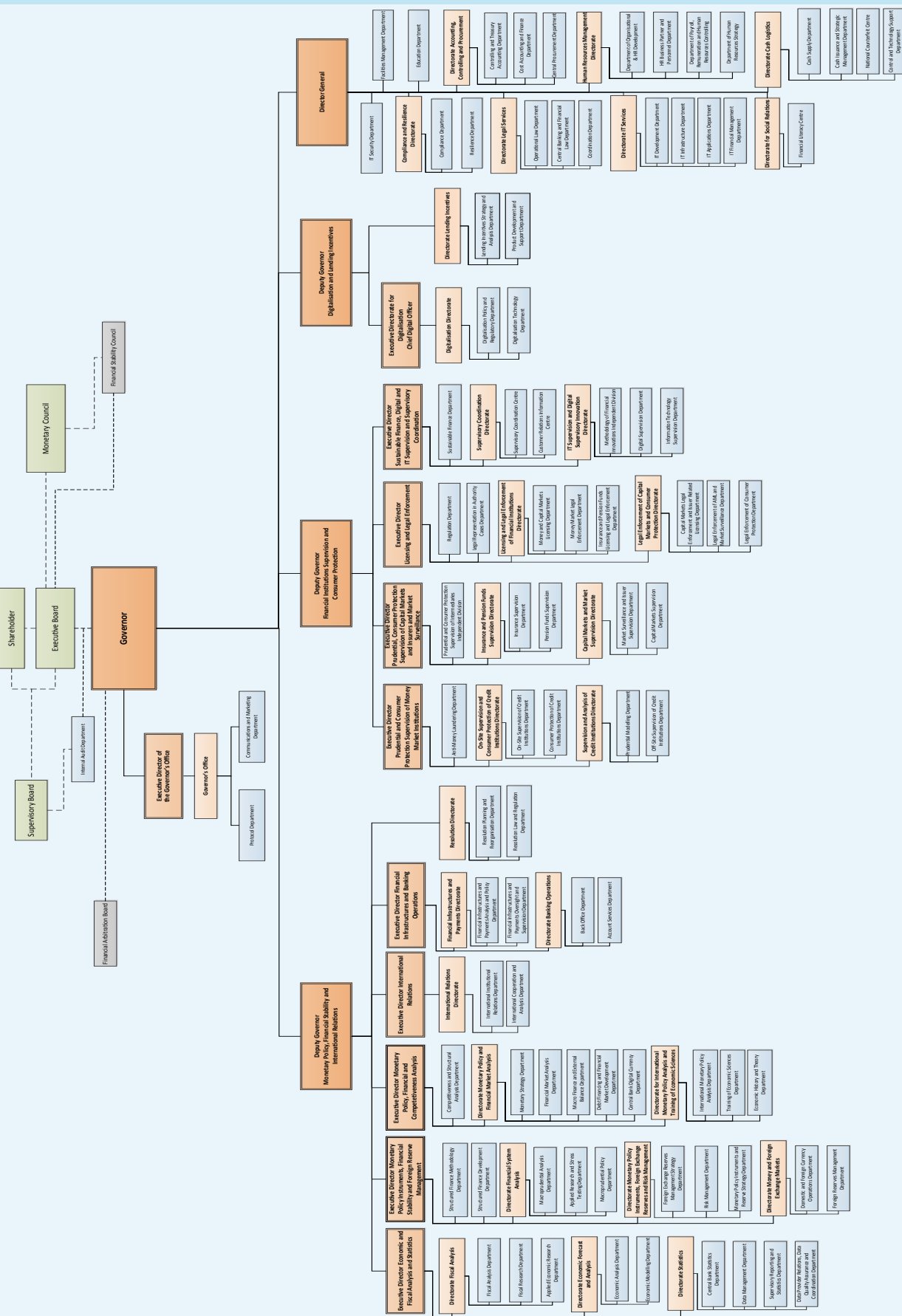
times, the main organisational structure established in 2013 has not been fundamentally changed.

The performance of the MNB's statutory tasks and the tasks related to its operations are directed and supervised by the members of the Executive Board, the Director General and the Executive Directors, who are the highest-level authorities implementing the decisions.

Some changes were made to the MNB's organisational structure in 2024, in the areas governed by the MNB's Governor, the Deputy Governor in charge of monetary policy, financial stability and international relations, the Deputy Governor in charge of the supervision of financial institutions and consumer protection, the Deputy Governor in charge of digitalisation and the promotion of lending and the Director General. The changes were primarily related to efficiency improvements.

The structure of the organisation as a result of these organisational changes as of 31 December 2024 is illustrated on the **organisational chart** below.

Organisation Chart of Magyar Nemzeti Bank – 31 December 2024



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

Hungary's accession to the EU also entailed the MNB's membership in the European System of Central Banks (ESCB). The ESCB consists of the ECB, which was established in June 1998 with its registered office in Frankfurt, and the national central banks of the EU Member States. The ECB's governing bodies are the Executive Board and the Governing Council, the latter consisting of the members of the ECB's Board of Directors, 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 ensures an institutional link between the Eurosystem and the central banks of the non-euro area Member States. The General Council meets quarterly and is composed of the ECB's President, Vice-President and the central bank governors from each EU Member State. The key responsibilities of the General Council include consultancy concerning preparations for euro area accession, approval of the ECB's Convergence Reports and monitoring the functioning of the ERM II system. As part of the latter, the General Council assesses the sustainability of the bilateral exchange rates of the non-euro area currencies participating in ERM II and of the euro, and provides a forum for the coordination of monetary and exchange rate policies, and for the management of intervention and financing mechanisms of ERM II. The General Council is also involved in verifying whether the EU central banks 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 function and in the collection of statistical data, and must be consulted on changes in the ECB's accounting and financial reporting rules, 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 when all EU Member States have adopted the euro.

The number of ESCB members and euro area central banks remained unchanged in 2024.

ESCB members are also the owners of the ECB. Their share in the ECB's capital is established on the basis of the

respective EU Member State's share in the total population and GDP of the EU (based on the statistics compiled by the European Commission). Since 1 July 2013, the subscribed capital of the ECB amounts to EUR 10.825 billion.

In 2024, 82 percent of the ECB's capital was subscribed by euro area central banks, with the remaining 18 percent was divided among the central banks of the non-euro area Member States. The latter central banks are required to contribute to operating costs incurred the ECB in relation to their participation in ESCB by paying up a predetermined minimum ratio of their share in the ECB's subscribed capital. The rate of contribution is 3.75 percent of the respective shares the capital since 29 December 2010 (previously it was 7 percent). In accordance with the Statute of the ESCB and the ECB, the capital keys are adjusted every five years, or whenever there is a change in the number of national central banks contributing to the ECB's capital. The capital keys were last adjusted with effect from 1 January 2024, as part of the normal five-year review. As a result of the adjustment, the MNB's capital key was increased to 1.5819 percent, and the amount of paid-up capital was increased to EUR 6.4 million.

The ESCB committees play an important role in the work of the ECB's decision-making bodies. The basic role of the committees is to prepare decisions and facilitate coordination as per the horizontal division of various central bank functions, covering all areas of central banking operations, from monetary policy to communication and statistical reporting. Experts from the central banks of the non-euro area Member States are present at the committee meetings where issues concerning the ESCB as a whole or falling within the competence of the General Council are on the agenda. The committees meet on average four to five times a year, according to a pre-defined schedule, and discuss the current issues in their own area of expertise within the ESCB (the activities of the ESCB committees and the other support forums are described in Chapter 3.14).

The senior executives and relevant experts of the MNB continue to actively participate in the work of these committees and the working groups established by them. The ESCB committees continued to be a useful forum for professional work and exchange of experience in 2024.

3 Report on the 2024 Activities of the MNB

3.1 MONETARY POLICY

International Financial Market Developments

In 2024, the outlook for global growth and inflation was determined by the unfavourable industrial production expectations in Europe, the continuation of the Russia-Ukraine war, the tense geopolitical situation and mounting global trade disputes. International investor sentiment was highly volatile during the year. In the first half of the year, global investor sentiment was mainly driven by expectations regarding the interest rate policies of the world's leading central banks, the European Parliament elections and geopolitical conflicts. At the beginning of August, global financial markets briefly experienced high volatility, mainly due to recession-related fears about the US economy, financial market developments in Japan and geopolitical tensions in the Middle East. The significant, temporary increase in financial market volatility also impacted Hungarian financial markets. Starting from the autumn, uncertainty increased in relation to geopolitical developments, the macroeconomic outlook for the advanced economies and the future interest rate paths of the world's leading central banks. As international investor sentiment deteriorated due to rising uncertainty, risk aversion towards emerging markets started to increase, in parallel with strengthening of the USD.

International Monetary Policy Environment

The world's leading central banks started interest rate cuts during the year. At its September policy meeting, the Fed cut the target range for the federal funds rate by 50 basis points, which was more than expected. The Fed then continued to reduce the target range by 25 basis points in November and December, bringing it to 4.25–4.50 percent. The European Central Bank (ECB) started easing monetary conditions in June. With four reductions of 25 basis points each, the ECB lowered its key deposit rate by 100 basis points to 3 percent. The balance sheet totals of the world's leading central banks continued to shrink in 2024.

Among the central banks in the CEE region, the Czech central bank continued the interest rate cuts it started in December 2023. It lowered its key policy rate from 6.75 percent to 4 percent in larger steps of 50 basis points between February and June 2024, and in smaller steps of 25 basis points from August onwards. The Polish central bank kept its base rate unchanged at 5.75 percent throughout the year. The Romanian central bank cut its base rate by 25 basis points in both July and August and then lowered the rate to 6.5 percent by the end of the year.

Domestic Macroeconomic Environment

In Hungary, inflation declined significantly compared to 2023 and remained within the tolerance band set by the MNB, in the upper part thereof, for most of the year. The rapid disinflation that started in early 2023 continued at a slower pace in 2024 Q1. In line with European developments, inflation in Hungary was slightly higher from April, mainly due to price increases for fuels and regulated products as a result base effects. In 2024 Q3, inflation developed in accordance with regional trends, falling to 3 percent by the end of the third quarter, in line with the MNB's target. Prior to this, the last time inflation was at a level consistent with the Bank's 3-percent target was in early 2021. The consumer price index then rose to 4.6 percent by December, driven by faster fuel and food price increases. The combined impact of global commodity price increases and HUF market movements was reflected in prices of imported products. Average inflation in 2024 was 3.7 percent year-on-year. In 2024 H1, core inflation fell gradually, before stabilising above 4 percent. During the year, the inflation of market services started to slowly decrease from a high level, with service prices increasing by 9.6 percent on average in 2024. The Monetary Council placed special emphasis on monitoring pricing decisions in the services sector.

Hungary's economic growth was subdued in 2024, as GDP expanded by 1.1 percent in 2024 Q1 and 1.5 percent in 2024 Q2, but then contracted by 0.8 percent in 2024 Q3, in year-on-year terms. In 2024 Q4, Hungarian economic activity was

moderate, with year-on-year GDP growth of 0.4 percent. During the year, the output of agriculture and industry was significantly lower than recorded in the same prior-year period, and this was only partly offset by an increase in the value added of services. The construction sector's volume index increased in 2024 Q1 and Q2, but fell in 2024 Q3. In line with rising real wages, household consumption was the main contributor to economic growth in 2024. The volume of investments dropped substantially, mainly due to lower public and corporate investment. Surveys show that the prolonged effects of inflation, anaemic demand and uncertainty restrained corporate development projects. Slack economic activity in Europe hampered Hungarian exports. The lending market also showed contrasting trends, with the household lending market continuing to pick up, while corporate demand for loans remained low.

Monetary Policy Measures

In 2024, the Monetary Council continued to lower the base rate in a careful and patient manner, reducing it by a total of 425 basis points, from 10.75 percent to 6.5 percent. Based on macroeconomic data, the inflation outlook and developments in the risk environment, the Monetary Council made cautious, data-driven decisions on the extent and scheduling of interest rate cuts. The rationale behind the stability-oriented approach was that in the current economic environment the most effective way for the MNB to ease economic agents' increased precaution and restart economic growth was to maintain price stability and financial market stability. Throughout the year, a sufficiently restrictive monetary policy ensured a positive real interest rate, in order to maintain financial market stability and achieve the inflation target in a sustainable manner.

In 2024 H1, a decline in the base rate was made possible by the continued disinflation and the improving country risk assessment. At the same time, risks related to global and domestic disinflation, the volatility of the international investor sentiment and the interest rate policies of the world's leading central banks warranted a careful, patient monetary policy. The Council lowered the base rate each month in 2024 H1, but the size of the cuts was reduced in several steps. Accordingly, the base rate was cut in larger steps in 2024 Q1. In April, monetary policy then entered a new phase, as the Council continued to reduce the base rate at a slower pace of 50 basis points. In June, the monetary policy room for manoeuvre narrowed further, with interest rate cuts then reduced to 25 basis points.

In the new phase, the Council decided on the base rate on a monthly basis, based on the incoming data, paying particular attention to the inflation outlook, the country's risk assessment and financial market stability.

In August, the sharp, temporary increase in volatility in the international financial markets also impacted the domestic financial markets. The Council kept the base rate at 6.75 percent, in line with the stability-oriented monetary policy approach. In September, the lower external interest rate environment, favourable financial market developments and continued domestic disinflation led to a further 25-basis point reduction in the base rate, bringing it to 6.5 percent by the end of September 2024.

In 2024 Q4, volatile international investor sentiment and mounting risk aversion towards emerging markets elevated the upside risks to domestic inflation. The generally tense geopolitical landscape was a major risk factor. Uncertainty remained regarding the expected interest rate paths and future fiscal policies in major economies, with the external interest rate environment remaining tighter than previously expected. Geopolitical tensions, volatile financial market developments and risks to the inflationary outlook warranted a pause in interest rate cuts, and from October onwards the Council held the base rate at 6.5 percent, in line with the careful, patient monetary policy approach.

To ensure the effectiveness of monetary transmission, the MNB held daily FX swap tenders and weekly discount bill auctions. It is crucial for the central bank that short-term interest rates develop consistently with the level of interest rates determined by the Monetary Council in every sub-market and in every period. To this end, the MNB also ensured the stability of the financial markets by using instruments with longer maturities at the end of the quarters. For the year-end FX swap tenders, the Bank announced the measure with a 50-basis point increase in the implied interest rate from 20 December, bringing it to 6 percent, to ensure financial market stability. The central bank swap tenders with an interest rate increase of 50 basis points and strong demand at the discount bill auctions contributed to financial market stability at the end of 2024.

Inflation Trends in 2024

In 2024, the anti-inflationary measures had an effect, and after a wave of increases in global inflation, domestic inflation remained in the upper range of the MNB's

tolerance band for most of the year. The annual average inflation rate was 3.7 percent. Inflation remained within the Bank's tolerance band of 2 to 4 percent for most of the year, and prior to December, it only moved outside this range in July. In September 2024, inflation temporarily fell to 3 percent, before rising to 4.6 percent in December. The year-end increase was explained by faster increases in fuel and food prices. The combined effect of global commodity price inflation and movements in the HUF foreign exchange market rapidly appeared in the prices of imported products.

Core inflation fell to a year-on-year rate of 4.0 percent in May 2024 and then remained between 4.1 percent and 4.8 percent for the rest of the year. In the spring of 2024, in terms of core inflation, monthly price increases were higher than the historical average, due to retrospective repricing of some market services. Average annual core inflation and core inflation excluding indirect tax effects both amounted to 4.6 percent in 2024.

Inflation in the CEE countries was higher than the EU average in 2024. In the EU, the highest harmonised index of consumer prices was registered in Romania (5.9 percent) in 2024. Average inflation was 3.7 percent in Hungary and Poland, 3.1 percent in Slovakia and 2.7 percent in Czechia.

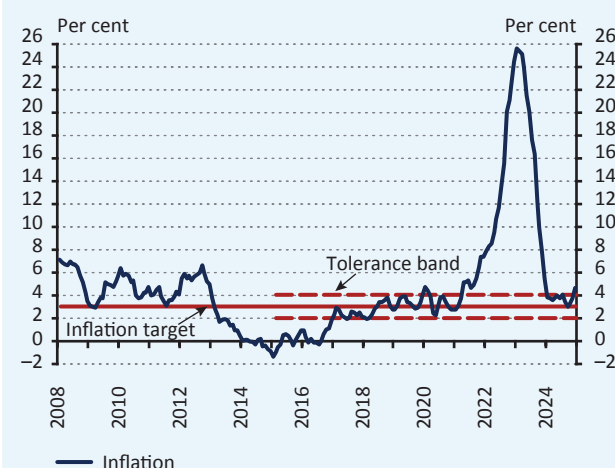
The generally tense geopolitical situation played a significant role in the evolution of the global inflation outlook in 2024. Global energy prices were more moderate than in previous

years, but geopolitical tensions led to considerable volatility. Volatile global oil prices also had an impact on domestic fuel prices, with the related inflation fluctuating between -11.9 percent and +9.2 percent in 2024.

The indicators capturing persistent inflationary trends declined versus 2023. Core inflation excluding indirect tax effects, core inflation excluding processed food and sticky price inflation fell steadily in 2024 H1 and then fluctuated in a narrow range for the rest of the year. Average core inflation excluding processed food was 5.9 percent, while the average inflation of sticky-price products was 5.8 percent in 2024.

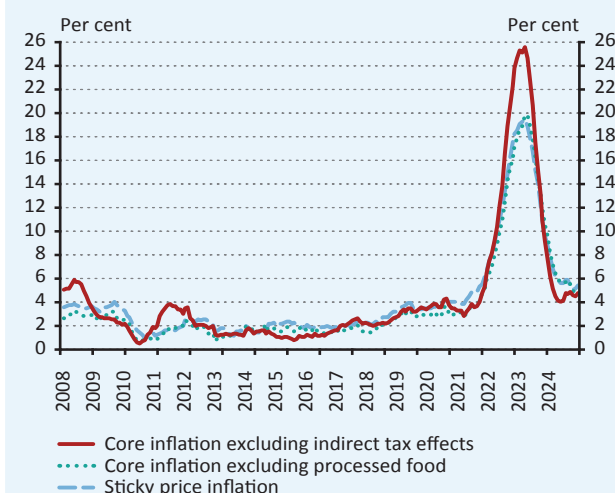
Food price increases were moderate in 2024 H1 and then gradually rose to 4.7 percent by the end of the year. Annual average inflation for food amounted to 0.4 percent in 2024. Inflation for industrial goods was 5.2 percent in January and then fell to 1.6 percent in October, with annual average increase of 2.3 percent. For market services, there was double-digit inflation until April, mainly as a result of the retrospective repricing of telecommunications and banking services; the rate then gradually sank to 8.2 percent in December. As seen globally, disinflation in services was slower than in other product groups after the inflationary surges of the 2020s. Among the different sub-items, services inflation was the highest in the EU in 2024, while in Hungary, inflation was driven by retrospective pricing practices in some service sectors.

Chart 1
Inflation target and inflation trends



Source: HCSO, MNB

Chart 2
Indicators capturing underlying inflation developments



Source: MNB

Table 1
Changes in the consumer prices and their components

	2022	2023	2024	2024			
				Q1	Q2	Q3	Q4
Core inflation	15.7	18.2	4.6	5.2	4.1	4.7	4.5
Unprocessed food	24.3	19.9	1.5	0.2	-1.3	1.4	5.9
Fuel and market energy	12.2	25.8	0.1	-3.7	5.5	-2.2	0.7
Regulated prices	9.5	13.0	2.6	2.2	4.0	2.5	1.5
Consumer price index	14.5	17.6	3.7	3.7	3.8	3.5	3.8
Consumer price index at constant tax rates	14.4	16.7	3.3	3.2	3.3	3.1	3.4

Note: Percentage change year-on-year. When calculating the price index with unchanged tax content, the HCSO corrects the CPI for the technical effect of changes in indirect taxes.

Source: HCSO

Changes in Monetary Policy Instruments

The MNB's main monetary policy instrument is required reserves. The primary sterilisation instrument for the liquidity of the banking system is the reserve account; the MNB pays interest equal to the base rate on the full interest-bearing part of reserves.

From the beginning of 2024, credit institutions have a uniform reserve requirement of 10 percent, which they must comply with on a daily and monthly basis. 2.5 percent of the minimum reserves' base is non-interest bearing. The first time the minimum reserves had to be met on the basis of monthly average data was in March 2024, based on the January 2024 data. After the transition period ended, from March 2024, the reserve requirement fluctuated around HUF 3,900–4,000 billion for the overall banking system.

In 2024, the Monetary Council lowered the base rate in several steps, along with the two boundaries of the interest rate corridor. As a result of the interest rate cuts, the base rate fell to 6.5 percent by the end of the year. The 200-basis point width of the interest rate corridor remained unchanged over the year, and accordingly at the end of the year, the MNB's overnight deposit interest rate was 5.5 percent, and its overnight collateralised lending interest rate was 7.5 percent.

In addition to the minimum reserve system, monetary transmission continued to be supported by the weekly auctioned, 1-week discount bill and the daily FX swap tender, providing euro liquidity. To simplify the MNB's toolkit, the variable rate deposit facility with a maturity of up to six months was phased out at the end of January 2024.

The operational framework for the MNB's instruments used in 2024:

- the optional rate in the minimum reserve system was abolished from the beginning of 2024; therefore, the daily and monthly average minimum reserves were 10 percent throughout the year;
- for excess reserves (reserves kept above the 10-percent minimum requirement, the Bank paid monthly interest equal to the base rate;
- the issue price of the discount bill continued to be aligned with the prevailing base rate;
- 1-day (tomnext) FX swap tenders continued to be announced in a volume of EUR 6 billion;
- at the end of the year, the Bank announced additional discount bill and FX swap tenders, to reduce market volatility.

Usage of the Bank's monetary policy instruments

The monthly average forint liquidity of the total banking system³ ranged from HUF 14,096 billion to HUF 15,365 billion in 2024, decreasing slightly over the course of the year. The decline was mainly due to the increase in cash holdings, the liquidity effect of the State Treasury Single Account (KESZ) and the amortisation of loans granted under the MNB's programmes, notably the Funding for Growth Scheme (FGS), while the central bank's interest payments raised banking system liquidity.

³ The HUF liquidity of the total banking system is the sum of the following items: the balance of reserve accounts and instant payment system accounts, the standing facilities of overnight deposits and loans, long deposits until the end of January, the forint leg of swaps providing euro liquidity and the total value of discount bills.

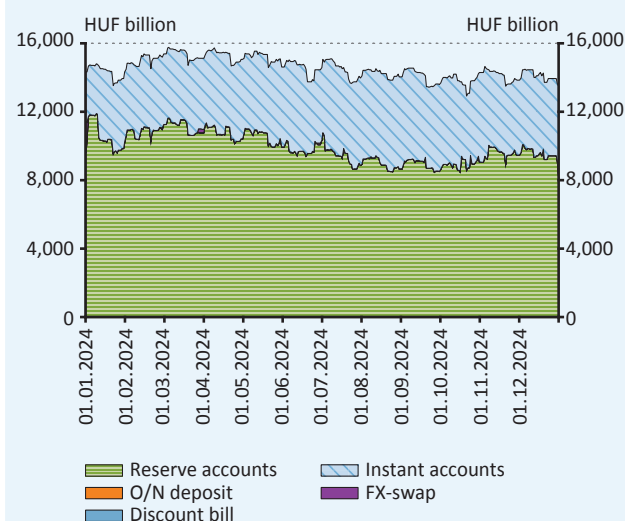
Calculated at the 10-percent rate, the reserve requirement of the total banking system ranged between HUF 3,846 billion and HUF 4,023 billion per month in 2024. As previously announced, from March 2024, the minimum reserve requirement is determined on the basis of the banks' average liabilities subject to reserve requirements during the period, instead of the last calendar day of the period. As seen in previous periods, the amounts deposited by the banks on their reserve accounts were significantly above the required amount, due to the fact that the MNB paid interest on the excess amount in line with the base rate. The total amount of accumulated excess reserves was in the range of HUF 4,971 billion to HUF 7,218 billion during the year, and HUF 5,891 billion per month on average.

The banking system's excess liquidity was mainly held on credit institutions' reserve accounts and in the 1-week discount bills offered on a weekly basis. In terms of standing facilities (O/N deposits and O/N collateralised loans), only a single use was made in case of O/N deposit during the year, in the amount of HUF 59 billion.

The MNB held one-day (tomnext) FX swap tenders providing euro liquidity on a daily basis in 2024, and an additional 2-week tender was announced on 18 December 2024, to ensure smooth year-end money market flows. The maximum implied forint interest rate applied in the tenders was set at 100 basis points below the Bank's prevailing base rate, i.e. equal to the O/N deposit rate, during the year, until 19 December 2024. From 20 December 2024, the maximum announced implied forint interest rate was 50 basis points below the base rate. The total offered amount was EUR 6 billion on all tenders. Credit institutions submitted bids in six tenders, and the banks' bids were made mainly at the end of the month or quarter. In line with previous practice, the MNB accepted all bids received, and the tenders were

Chart 3

Use of the central bank's deposit facilities



Source: MNB

as follows, in chronological order: EUR 180 million (HUF 70 billion) on 30 January, EUR 50 million (HUF 19 billion) on 27 February, EUR 300 million (HUF 117 billion) on 28 February, EUR 550 million (HUF 217 billion) on 27 March, EUR 250 million (HUF 99 billion) on 27 June and EUR 1,395 million (HUF 5,739 billion) on 30 December.

Discount bill auctions were held on a weekly basis, with 1-week maturity and T+1 day settlement. On 20 December 2024, the MNB held an additional 2-week discount bill auction, in parallel with the Bank's FX swap tool. The issue price of the discount bill was always linked to the Bank's prevailing base rate. The MNB held a total of 53 tenders during the year and accepted all bids submitted. The average volume of bills issued in the tenders was HUF 4,518 billion. Banks submitted the largest demand at the 28 August 2024 auction, with HUF 5,387 billion bids accepted.

Table 2

Total volume issued in the discount bill auctions (HUF billion)

Tender period	Number of tenders	Average bid amount	Average allotted amount
January 2024	5	3,814	3,814
February 2024	4	4,208	4,208
March 2024	4	4,225	4,225
April 2024	5	4,528	4,528
May 2024	4	4,707	4,707
June 2024	4	4,713	4,713
July 2024	5	5,113	5,113
August 2024	4	5,287	5,287
September 2024	4	5,082	5,082
October 2024	5	4,962	4,962
November 2024	4	4,386	4,386
December 2024	5	3,387	3,387
Total	53	4,518	4,518

Source: MNB

Total bids – all of which were accepted – at Bank discount bill auctions spanning the end of each quarter of 2024 amounted to HUF 4,134 billion, HUF 4,269 billion, HUF 5,079 billion and HUF 4,860 billion, respectively.

Under the FGS Green Home Programme with a total budget of HUF 300 billion, which was launched on 4 October 2021 as part of the Funding for Growth Scheme, the actual outstanding loan volume – i.e. loans already granted and not yet repaid – shrank to HUF 258 billion by the end of December 2024, as a result of slightly higher overall repayments than disbursements. Total outstanding SME sector loans under the previous phases of the FGS fell to HUF 1,145 billion by the end of 2024 Q4.

Since the launch of the Mortgage Bond Rollover Facility, the MNB has purchased mortgage bonds with a nominal value of around HUF 64 billion, with no purchases made in 2024. The MNB may purchase securities not exceeding a maximum of 50 percent of the maturing bonds. At the end of 2024, the total mortgage bonds held by the MNB amounted to HUF 421 billion at nominal value, including bonds purchased and still outstanding under the previous purchase programmes, the Green Mortgage Bond Purchase Programme and the Mortgage Bond Rollover Facility.

Under the Bond Funding for Growth Scheme (BGS), a total of 89 corporates issued 114 bond series, raising external funding totalling HUF 2,859 billion. On 14 December 2021, the Monetary Council decided to close the BGS, and the last bond issue and Bank purchase under the programme took place in April 2022. In 2024, the MNB only performed portfolio management activities related to its BGS bond portfolio.

3.2 STABILITY OF THE FINANCIAL INTERMEDIARY SYSTEM

Key Developments in the Financial System

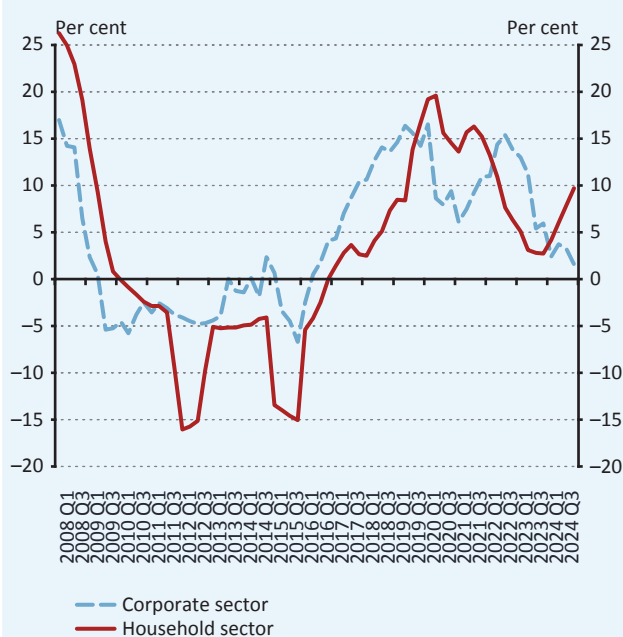
Pursuant to the MNB Act, the primary objective of the central bank is to achieve and maintain price stability. Without jeopardising the primary objective, the MNB is also responsible for supporting the stability and increasing the resilience of the financial intermediary system, providing a sustainable contribution to economic growth, and supporting the government's economic and environmental sustainability policies with its instruments. In addition, the MNB, by virtue of its mandate as a member of the European System of Financial Supervisors, carries out the tasks delegated to it by the European Banking Authority, the

European Insurance and Occupational Pensions Authority, the European Securities and Markets Authority and the European Systemic Risk Board, as well as the supervision of the domestic financial intermediary system, and acts as a resolution authority.

In 2024, credit institutions' total household loan portfolio showed a significant increase of HUF 984 billion, as a result of new disbursements and repayments, with the annual growth rate rising to 9.7 percent (Chart 4). The total amount of new loans extended was HUF 2,752 billion in 2024, showing an annual increase of 66 percent. This increase in lending was also due to home purchase subsidies being expanded in 2024. Within consumer loans, annual disbursements rose by 55 percent for personal loans, 97 percent for car purchase loans and 14 percent for commercial loans versus 2023, while home equity loan disbursements fell by 5 percent. Prenatal baby support loan disbursements were low in 2024, but the total portfolio still amounted to over HUF 2,177 billion at the end of the year, equivalent to 20 percent of total household loans. Subsidised loans linked to family protection and home creation programmes (HPS Plus, Rural HPS, prenatal baby support loans) accounted for 22 percent of the total volume of new disbursements. The volume of new housing loan contracts was HUF 1,350 billion in 2024, which was 128 percent higher year-on-year, with 2024 Q4 showing strong annual growth of 92 percent. In 2024, Certified Consumer-friendly Housing Loan (CCHL) products accounted for 27 percent of personal loans, while Certified Consumer-friendly Personal Loan products accounted for 26 percent.

The annual growth rate of the corporate loan portfolio was 1.6 percent at the end of 2024, while the loan portfolio of the SME sector grew by 1.9 percent. The total corporate loan portfolio grew by almost HUF 200 billion in 2024, which was lower amount than in previous years. This increase in nominal value was supported by the loan and guarantee programmes of public institutions. Demand in the corporate loan market weakened, due to the uncertain growth outlook and the high level of liquid corporate assets. Credit institutions signed new non-overdraft type loan contracts worth of HUF 3,520 billion in 2024, down 11 percent compared to 2023. However, there was a shift in the structure of demand for loans, as demand for FX loans increased slightly, while demand for long-term loans, typically for investment purposes, and for Hungarian forint loans declined. The share of subsidised loans in the total new non-overdraft corporate loans was 19 percent in 2024, significantly lower than the 35-percent share seen in the previous year.

Chart 4
Annual growth rate of the corporate and household loan portfolios



Note: Credit institution sector.

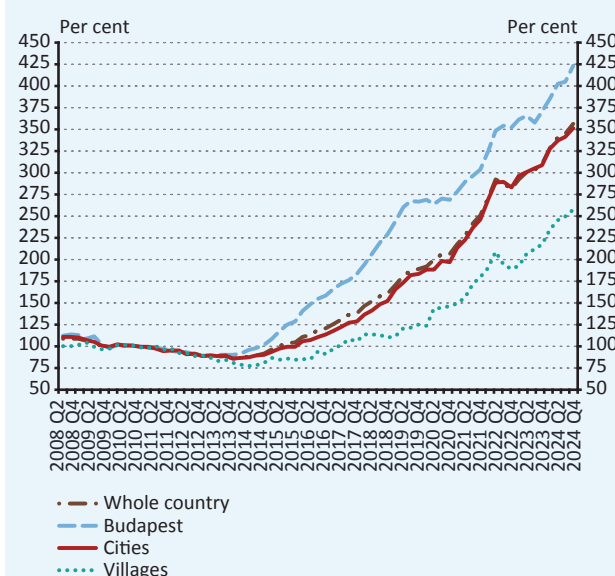
Source: MNB

Annual nominal house price appreciation accelerated steadily, reaching 15.1 percent in 2024 Q4, with house prices rising by 3.4 percent in 2024 Q4 (Chart 5). By type of settlement, residential real estate prices increased by 14.3 percent in Budapest, 13.8 percent in rural towns and 18.4 percent in villages over the year. In real terms, average price appreciation in Hungary was 10.9 percent in 2024. The MNB estimates that in 2024 Q4 house prices exceeded the level justified by the macroeconomic fundamentals by 14.3 percent. This overvaluation remained unchanged throughout the year, but increased by 1.8 percentage points on a quarterly basis.

The total number of new homes completed was 13,300 in 2024, showing a year-on-year decline of 29 percent. The number of new building permits issued for Budapest decreased by 12 percent, while it remained unchanged in rural areas. According to the MNB's estimates, 153,000 housing market transactions were concluded by private individuals in Hungary in 2024, of which 40,000 were in Budapest, reflecting an increase of 29 percent at the national level and 51 percent in Budapest, respectively. Housing market transactions involving borrowing accounted for 35 percent of all sales transactions. The average debt-to-income ratio (DTI) of new housing loans was 35.1 percent in 2024 Q4 (up 1.8 percentage points year-on-year), while

the average loan-to-value ratio (LTV) was 58.7 percent. The latter figure represents an increase of 6 percentage points on an annual basis, facilitated by relaxed LTV rules for young first-home buyers, while the average LTV for borrowers aged 40+ increased by 3.5 percentage points.

Chart 5
Nominal MNB house price index by type of settlement (2010 = 100 percent)



Source: MNB

There has been no increase in yields in the commercial real estate market since 2024 Q2, and the lower-than-expected GDP growth during the year was unable to support domestic commercial property market activity. Looking forward, stronger GDP growth with a broader base would mitigate the cyclical risks, but some segments will continue to face challenges arising from structural changes. From 2024 Q1 to Q3, the vacancy rate in the Budapest office market advanced by 0.7 percentage point to reach 14 percent, while in the industrial-logistics market segment it rose by 1 percentage point to 9.6 percent. These vacancy levels are not particularly high by historical standards, but given the level of demand for office rentals in recent quarters and the planned volume of newly completed office space, the ratio is expected to increase further in both segments. In 2024 Q1 to Q3, the investment volume in the domestic commercial property market amounted to EUR 213 million, which is 35 percent below the already low level seen in the same period of 2023. In contrast to the trend seen in Hungary, investment volumes started to increase on average in the CEE region. The continued high proportion of Hungarian investors (82 percent) and the continued low

and further declining investment volume may pose a risk to the perception of the Hungarian market. According to the MNB's calculations, based on unchanged yields and rents for prime office space, the valuation of these properties has stagnated since 2024 Q2, but in the period of one year until the end of September 2024, the values decreased by another 5 percent and by 24 percent compared to the end of 2022 Q2, when the market cycle turned around. From 2024 Q1 to Q3, credit institutions disbursed 23 percent more commercial real estate-backed project loans than in the same period of 2023, with the industrial-logistics segment as the main growth driver.

In 2024, the total volume of delinquent corporate loans overdue by more than 90 days fell by HUF 17 billion and dropped by HUF 16 billion in the household sector. At the same time, the volume of loans not overdue by more than 90 days but classified as non-performing by the banks grew by HUF 20 billion in the corporate sector and shrank by HUF 55 billion in the household segment. The total volume of non-performing loans stood at HUF 484 billion and HUF 223 billion, respectively, at the end of 2024. In the household sector, the non-performing loan ratio (NPL ratio) declined as a result of growth in lending volumes and banks' portfolio cleaning activities. The NPL rate was 3.7 percent in the corporate segment and 2 percent in the household segment, while in the private sector as a whole it stood at 2.9 percent at the end of December 2024. In the retail shop and office segments, the proportion of problem-free, Stage 1 loans decreased, highlighting the mounting cyclical and structural risks in these segments.

In 2024, the overall credit institution sector realised an exceptionally high profit after tax of nearly HUF 1,600 billion, based on individual, non-consolidated data, up HUF 119 billion on the previous year. This increase was supported by specific and volatile items, mainly dividend income from foreign subsidiaries and one-off accounting effects, as well as a significant increase in the fee and commission income (part of which is technical, as banks partly offset the mid-2024 increase in the transaction fees in the SME segment by increasing their banking fees) and the extra profit tax being lower than in 2023. Overall, interest income fell compared to the previous year due to lower interest income from the MNB and an increase in other (market) interest income, but it still represents a significant proportion of banks' profits. However, the increase in operating expenses and impairment charges had an adverse impact on the results. Along with high growth in nominal profit, the banking sector's return on equity (RoE)

decreased from 24.3 percent at the end of 2023 to 22.5 percent, while the return on assets (RoA) remained at 2 percent, similar to the previous year.

The banking system's consolidated capital adequacy ratio (CAR) increased by 25 basis points in 2024 to reach 20.4 percent by the end of 2024 Q4, while the CET1 ratio⁴ rose by 69 basis points to 18.3 percent. Taking the interim results into account, there was an even larger increase in the CAR: with a 131-basis point increase, the CAR rose to 22.6 percent by the end of 2024 Q4. This improvement was primarily driven by an increase in retained earnings, reflecting strong profitability. Free capital above the capital adequacy ratio of the overall sector contracted by HUF 108 billion to HUF 2,208 billion, which corresponds to 5.1 percent of the Total Risk Exposure Amount (TREA). The banking system's Leverage Ratio (LR) increased by 36 basis points to 9.2 percent in 2024. All members of the sector met the 3-percent leverage requirement.

For the 17th time, the MNB contacted the most important domestic banks in the Market Intelligence Survey to learn about their strategic plans and views on the operating environment in the domestic banking system. Eight universal commercial banks participated in the survey, representing more than 80 percent of the total banking sector on a total assets basis. Based on the banks' responses, the most important risks at sectoral level in 2024 were weaker domestic economic growth, geopolitical tensions, low corporate lending growth, the bank levy remaining in place for years and a deterioration in customer's capacity to pay.

The MNB's Macroprudential Activity

In 2024, the MNB closely monitored the effects of the high interest rate environment, which was due to the efforts to reduce inflation, and the impact of the uncertain geopolitical and macroeconomic conditions on financial stability and lending, as well as the possible ways to further strengthen and improve the efficiency of the financial intermediary system.

Following a one-year postponement, a Countercyclical Capital Buffer of 0.5 percent was required for domestic exposures from 1 July 2024 for the first time since the Countercyclical Capital Buffer (CCyB) framework was implemented in 2016. Due to the high level of geopolitical and macroeconomic uncertainty and in order to maintain and strengthen the long-term resilience of the banking system against shocks, in line with widespread European

⁴ The ratio of Common Equity Tier 1 capital to risk-weighted assets.

practice, in 2024 Q2 the MNB decided to introduce the so-called positive neutral CCyB framework in Hungary from 1 July 2025 and to require a CCyB rate of 1 percent in a neutral risk environment. Introduction of this measure, which is expected to have no negative side effects, was supported by the banks' current outstanding profitability, even by historical standards, and the associated robust capital position. In 2024 Q4, the MNB revised its monitoring framework for cyclical risks, in order to facilitate more efficient operation of the framework, to measure cyclical risks more accurately and to support a more efficient determination of the CCyB rate for cyclical risks.

In June 2024, the MNB set the institution-specific Systemic Risk Buffer (SyRB) requirements for individual banks for a one-year period. Based on the March 2024 balance sheet and capital data, and given the low risk levels and portfolio transparency measures that banks have taken since the reactivation of the SyRB was announced in 2023, no banks were required to create an effective capital buffer as of 1 July 2024.

In its 2024 review, the MNB identified seven banking groups as systemically important institutions (O-SII), similar to 2023. The distribution of the scores measuring systemic importance has not changed significantly. Consequently, the current O-SII buffer rates for 2025, which reached their final value in 2024, are also proportional to the institutions' importance. The capital position and very high profitability of the systemically important banks remain sufficient to allow them to grow in a balanced manner and to perform their critical credit institution functions, while maintaining the required capital buffers.

On 1 January 2024, the preferential borrower-based measures for first-time home buyer borrowers entered into force: the maximum LTV for first-time home buyers was increased from the standard 80 percent to 90 percent for mortgage loans and financial leasing. This amendment will significantly reduce the minimum required down payment for young first-time home buyers, shortening the period needed to save for it. In addition, based on an MNB decision issued in October 2024, starting from 1 January 2025, green aspects will also be included in the borrower-based measures: a preferential, 60-percent DSTI limit and a 90-percent LTV limit will apply to loans financing the purchase or construction of energy-efficient housing or efficiency improvement renovations.

Regarding the rules for the Mortgage Financing Adequacy Ratio (MFAR), the MNB decided to postpone the green requirement for foreign currency mortgage bond issuances, originally planned to come into effect on 1 October 2024,

for an indefinite period, given the uncertain market environment, and the still low ratio and slowly increasing volume of green loans eligible as collateral, as well as the administrative difficulties in raising funds and entering the foreign currency mortgage bond markets.

Regarding the macro-prudential funding requirements that address external vulnerabilities (FFAR, FECR and IFR), the MNB decided to introduce a uniform, *de minimis* HUF 100 billion threshold for the balance sheet total from 1 October 2024, to support small banks and branches entering the market and banks that do not pose a systemic risk. With the amendment, institutions with a negligible combined market share at the sector level below the limit were exempted from compliance requirements without increasing financial stability risks, while maintaining the obligation to provide data.

On 25–26 March 2024, after two years, the MNB once again organised the conference “*Financial Stability Conference: Turbulent Times*”, with professional support of the Center for Latin American Monetary Studies (CEMLA) and the Official Monetary and Financial Institutions Forum (OMFIF), with the participation of renowned financial stability experts from around the world. The conference focused on the systemic financial risk implications of the current macroeconomic turmoil and the challenges ahead, including high inflation and the interest rate hikes used to combat it, risks to banks' business models, geopolitical shifts, financial risks related to digitalisation and climate change, all of which particularly affect the emerging markets.

MNB experts continued to monitor the systemic risk assessments of the financial intermediary system and international regulatory developments in 2024, and also participated in the work of the macro-prudential policy working groups of various European institutions (most importantly, the European Systemic Risk Board, ESRB).

The MNB's Activities to Support Financial Innovation and Digitalisation

The MNB closely monitors and analyses the digitalisation of the financial sector, using its toolkit to support the prudent spread of innovative solutions among domestic market players, thus facilitating a more competitive environment. The MNB conducts a comprehensive annual review of the level of digitalisation of both the Hungarian banking system and the insurance sector. For the first time, the 2024 survey also covered the level of digitalisation of Hungarian investment service providers. In July 2024, the MNB published the findings in its FinTech and Digitalisation Report, together with an analysis of the domestic and

international FinTech sector and the current state of the regulatory environment closely related to technological innovation.

The Student Safe project mobile app – a joint initiative of the MNB and the Money Compass Foundation – was actively used in 2024. The Student Safe app also won two prestigious awards in 2024. The Bank's objectives for the Student Safe project were to enhance the Bank's technological capabilities and research on the possible future of central bank digital currencies on the one hand, and to increase the financial literacy of students and their families, and familiarise them with the use of digital financial services on the other. With the fulfilment of these goals and after gaining widespread international recognition, winding down the project started in December 2024, as planned. Also in relation to the MNB's research on central bank digital currencies, further work was carried out on the Money Museum app, which is suitable for testing blockchain technology. Three NFT games and prize draws took place in 2024, and the app was made available in English.

Cooperation with higher education institutions in the field of innovation was continued successfully in 2024. The first pilot semester of the *"Cross-University Startup Management"* course – launched in collaboration with the Budapest Metropolitan University (METU), the Budapest University of Technology and Economics (BME) and John von Neumann University (NJU) – was completed in mid-2024: more than 70 students successfully completed the course, and the best performing teams received mentoring to further develop their ideas. The innovative solutions created in this programme were proven to be successful in several national and international start-up programmes.

The MNB is committed to researching the practical applications of innovative solutions and technologies. The projects of the Digitisation Workshop also continued, in cooperation with the BME. Research based on deep learning solutions examined the sentiment of financial articles, with the aim of improving the prediction of macroeconomic variables. As a joint project between the National Tax and Customs Administration (NTCA) and the MNB, the project *"Development of an OPG data flow analysis methodology"*, which uses AI to automatically group retail goods and support more informed decisions with OPG data, was also launched. The work also focused on exploring the application of blockchain technology to central bank digital currencies, building on the previous, internationally

recognised results and its further development. The MNB Innovation Hub continued to support financial innovation in 2024, with a particular focus on the FinTech sector, by providing answers to the inquiries received from financial institutions and innovators, also covering the supervisory aspects, and providing answers to questions on legal interpretation.

The MNB aims to present its achievements and learn first-hand about the international trends in the domestic and international forums related to the digitalisation of the financial system.

3.3 SUPERVISORY ACTIVITY AND CONSUMER PROTECTION

Despite the challenging environment, the domestic banking system and non-bank institutional investors remain stable. The banks' lending capacity is adequate, and their capital and liquidity positions are strong. The share of non-performing loans is low, and the banks are prepared for a potential increase in defaults by accounting for impairment. The MNB conducts intensive monitoring, and where necessary, a supervisory authority dialogue with the individual institutions, to ensure that the Hungarian banking system continues to operate safely. The supervision of international banking groups is carried out in an international cooperative framework, with a consistent approach, focusing on market and regulatory effects that may affect the banking groups as a whole or some of their members.

As of 31 December 2024, the MNB was responsible for the full-scale prudential supervision of 1,141 institutions.⁵ The regulatory activity conducted by the MNB now involves much more complex supervisory tasks – full or partial prudential, consumer protection, money laundering and issuer supervision, depending on the characteristics of the individual market participants – and it is therefore appropriate to present the institutions under its prudential supervision as well as the institutions subject to other supervisory activities. Taking this into account, in addition to the institutions under the MNB's prudential supervision, the MNB also exercised some form of supervision over more than 1,000 other institutions. These institutions are not, or are only partially, subject to prudential (financial) supervision by the MNB, but they are subject to other, more limited, consumer protection, money laundering or issuer supervision.

⁵ This group of institutions is under the full scope supervision of the MNB.

In 2024, a total of 100 prudential and 447 consumer protection investigations, 40 market surveillance investigations, four issuer supervision targeted investigations, seven money laundering prevention investigations and 37 thematic investigations covering the entire financial intermediary system were completed. As part of its supervisory and consumer protection activities, the MNB imposed fines with a total value of HUF 2,560.24 million in 2024. Of this, fines imposed in the course of prudential supervision measures amounted to HUF 709.5 million, consumer protection fines to HUF 254.81 million, market surveillance fines to HUF 1,437.6 million, issuer supervision fines to HUF 24.5 million, fines related to the prevention of money laundering to HUF 123.68 million and procedural fines to HUF 10.15 million.

Financial Market Supervision

The MNB duly performs its tasks arising from its comprehensive, statutory inspection obligations, as well as its expert activities supporting the identification and assessment of risks, and continuous surveillance activities. Within this framework, the MNB monitored risks arising in the fields identified in the financial market focal points for 2024. In particular, the MNB reviewed financial institutions' processes for monitoring and dealing with problematic transactions; the management, valuation and documentation of collateral; the proper functioning of ring-fencing; the application of the debt ceiling and the Central Loan Information System (KHR)⁶ rules; and the application of IFRS 9⁷ impairment rules.

Based on experience from reviews carried out in the past period, for a specific group of financial institutions it was necessary to describe the expectations regarding the management of problematic portfolios, and the recovery/workout processes, in a single, separate MNB recommendation, both for the household and corporate sectors. The MNB published this new recommendation⁸ in 2024 H1, to be applied by the institutions from 1 September 2024.

The MNB issued three management circulars in 2024, to support the more effective prevention of payment fraud. The first circular was intended to ensure that payment service providers provide customers with consistent information on their websites, raising awareness. Among other things, the information provision requirements

included that market players present to consumers on their own websites (with a link from the home page) a separate information page, describing the main types of fraud, the means to avoid and prevent such, the contact details for reporting fraud, and to include a reminder about the CyberShield website in their commercial communications and customer information related to cards and bank accounts. In its second circular, in response to cases of fraud through proxies, the MNB required the payment institutions to inform consumers about the risks arising when access is compromised. A third management circular was also issued to domestic banks and financial enterprises, to prevent cyberfraud in online loan applications. According to the experience of the MNB, some phishing scammers, after obtaining the customers' internet or mobile banking identifiers, not only took money from their bank accounts, but also applied for online personal loans in their name, causing further damage. In addition to the measures taken so far by the market participants, the MNB expects the banks to allow their customers to disable the possibility of submitting and managing loan applications online from their online or mobile banking apps, based on their own decision and needs.

The MNB conducted a comprehensive, group-wide audit at Raiffeisen Bank Zrt. and Raiffeisen Corporate Lízing Zrt., covering the period from 31 December 2020 until the closing of the audit. The MNB established that certain provisions of Raiffeisen Bank's remuneration policy and internal audit regulations deviated from the bank's practice and therefore needed to be amended. The audit found that the compliance reports did not satisfy the legal requirements in all respects. Raiffeisen Bank, as the entity governing the Group, had failed to update and approve its risk strategy on an annual basis. In addition, some of the bank's disclosures had certain data quality-related deficiencies. The internal regulations for undertaking loan risks did not comply with the legal and supervisory requirements in several cases. The household sector loan approval process was found to have deficiencies, and the handling of internal loans was also flawed in a number of cases. The bank did not adequately document its annual review of liquidity risks. On the basis of the above, the MNB imposed a supervisory fine of HUF 61.5 million on Raiffeisen Bank and HUF 8.25 million on Raiffeisen Lízing.

In August 2024, the MNB imposed a total fine of HUF 32.5 million on MBH Banking Group for failing to comply with

⁶ Central Loan Information System.

⁷ International Financial Reporting Standards.

⁸ Recommendation No. 6/2024 (VI. 21.) of the Magyar Nemzeti Bank on the management of problematic exposures – <https://www.mnb.hu/letoltes/6-2024-wo-ajanlas.pdf> (in Hungarian only).

the obligations set out in certain previous MNB decisions. In 2022–2023, the MNB conducted a comprehensive, group-wide audit at the MBH Group, including MBH Bank Nyrt. and MBH Befektetési Bank Zrt. Among other things, the MNB decision closing the audit revealed understaffing in the internal control and data reporting department, delays in the submission of liquidity data reports, practical and regulatory weaknesses in the management of the IT vulnerability tests, and risks related to certain inadequately secured IT systems. At MBH Befektetési Bank Zrt., the MNB identified weaknesses primarily in the practices and regulation of handling the IT vulnerability tests. In its decisions issued in December 2024, the MNB reiterated the obligation for MBH Bank and MBH Befektetési Bank to comply with the supervisory authority measures set out in the previous decision. During the review and assessment of the submitted reports, the MNB found that the companies concerned had again failed to fully comply with the requirements set by the MNB by the applicable deadlines. As a result, the MNB imposed a supervisory fine of HUF 27.5 million on the MBH Bank Group for the legal deficiencies remaining unremedied. One of the aggravating circumstances in determining the amount of the fine was the failure of the institutions to fully comply with the supervisory measures imposed in the previous decisions.

On 29 May 2024, the MNB sent a management letter to OTP Bank Nyrt., drawing its attention to the need to take precautionary measures related to the operation of its subsidiary bank in Russia. The MNB believes that there may be risks related to the activities and payment transactions of the bank in Russia, as there are a number of differences between Russia's and the EU's positions on economic sanctions, anti-money laundering and counter-terrorism financing activities, and compliance with the laws and regulations. These risks remain under the close scrutiny of international authorities, including the ECB, which supervises many European banking groups, and has taken similar actions. The proposed measures could also contribute to the continued efficient and reliable operation of the OTP Group, and to further strengthening financial stability in Hungary.

The MNB carried out an *ex officio*, targeted audit to examine whether Capital Hitelház Zrt. complied with the statutory requirements for prudent business operation and other laws in its risk taking, in connection with its lending and guarantee provision activities. The audit covered the period from 1 January 2020 until the end of the procedure. The MNB found deficiencies in the areas of collateral valuation, customer rating, monitoring activities, data reporting, impairment and provisioning, caused by inconsistencies between the legislation, the internal regulations and the

company's practices. Due to the deficiencies found, the MNB ordered the company to correct the problems and operate in compliance with the law. Until full proof of the fulfilment of its obligations to the MNB regarding the recognition of impairment losses and proper provisioning, the MNB prohibited the company from carrying out new guarantee transactions. The MNB also imposed a supervisory fine of HUF 24 million on the company.

The MNB carried out a comprehensive group-wide audit at MagNet Magyar Közösségi Bank Zrt. (MagNet Bank) and MagNet Faktor Zrt. (MagNet Faktor). It was found by the MNB that MagNet Bank's group governance activities needed to be improved, in particular in the areas of the level of regulation, group governance and specialist area management. Problems were identified in the application and review of the bank's remuneration policy and in the scope of the bank's outsourcing policy, and there were deficiencies in the transparency of internal audit procedures. The procedures for dealing with conflicts of interest and the practical identification of suspected fraud were found to be inadequate. IT support for data disclosure was also unsatisfactory. The bank did not adequately regulate its internal processes for identifying, measuring and managing large risk exposures and did not provide complete, reliable data to the MNB. The customer group registers needed improvement both at the level of the bank and the group, and the MNB also identified weaknesses in the monitoring activity and in the case management processes related to problematic customers. The bank failed to perform default identification in the area of debt rating and impairment on a group level, and deficiencies were found in the group level regulation of transaction rating. When calculating the regulatory capital, the bank failed to identify and report the loss coverage for non-performing exposures, and incorrectly determined the exposure amount to be deducted and risk-weighted. In determining the capital requirement, the bank repeatedly did not give the correct risk weight to exposures and made calculation errors in aggregating the data. As a result, the MNB imposed a supervisory fine of HUF 46 million on MagNet Bank, and HUF 17 million on MagNet Faktor. The number of significant or high-risk problems detected was considered an aggravating circumstance in determining the fine.

The MNB carried out a limited scope, comprehensive audit at Statosfera Bankszámlainformációs Szolgáltató Kft. (Statosfera Kft.). The main activity of Statosfera Kft. is cashback (ReCash), provided to its customers with bank accounts on their purchases, on the basis of the contracts concluded with its contracted partner trading companies. The MNB found that the company used problematic practices which were not in line with prudent (commercially

sound) operation in relation to the refunds, as it did not establish a system of record-keeping that clearly identified the amount of refunds due to customers. The MNB issued a decision obliging the company to properly segregate the amounts due to customers, to make the relevant payments, or to return any unpaid refunds to its partners. The MNB imposed a supervisory fine of HUF 16.75 million on Statosfera Kft. due to the deficiencies identified. The large number of high, significant risk deficiencies found was an aggravating circumstance in determining the fine.

The licence for factoring activities of Fejérdi Finance Faktor Zrt. (Fejérdi Finance), formerly known as Delta Faktor Zrt., was revoked by the MNB. The financial enterprise failed to comply with the measures required by previous MNB decisions on several occasions. Starting from the spring of 2024, Fejérdi Finance did not have a Chairman of the Board of Directors, a Chairman of the Supervisory Board or a Managing Director authorised by the MNB. The company failed to comply with the legal requirements for prudent (commercially sound) operation, and the MNB decided to take the most serious measure against the company, namely to revoke its operating licence. The MNB also revoked the operating licence of Arthur Bergmann Lízing Zrt. (AB Lízing) for property leasing activities. As part of its supervisory activities, the MNB established that the company was insolvent, which in itself was a reason for the licence to be revoked.

On 27 March 2024, MBH Bank acquired a share of 76.35 percent in Fundamenta-Lakáskassza Zrt. from Bausparkasse Schwäbisch Hall AG, Bausparkasse Wüstenrot AG and Wüstenrot & Württembergische AG, after the MNB gave its approval for the acquisition. On 11 November 2024, MBH Bank also announced that it had signed an agreement for the purchase of a further, 14.88-percent share in Fundamenta-Lakáskassza Zrt. from Generali Biztosító Zrt.

On 22 April 2024, the MNB authorised TiberisDigital Tanácsadó Kft., BDPST Ingatlanforgalmazó és Beruházó Zrt. and a private individual to increase their shareholdings in GRÁNIT Bank Zrt., and to acquire a direct controlling stake (via TiberisDigital Tanácsadó Kft.) and an indirect controlling stake (via BDPST Ingatlanforgalmazó és Beruházó Zrt.) in GRÁNIT Bank Zrt. of more than 50 percent (53.01 percent).

On 16 May 2024, the MNB authorised French-based Cofidis SA and its owners to acquire a controlling stake of more than 50 percent in Magyar Cetelem Bank Zrt., with Cofidis

SA holding 100 percent of it directly and Cofidis GROUP holding 100 percent indirectly.

The Hungarian Branch of Viva Payment Services Single Member S.A. and the Hungarian Branch of KBC Securities have been deregistered by the MNB following a notification of their dissolution by the co-authorities. The MNB registered Bank360 Zrt. as a payment institution providing only account information services.

Among the financial enterprises, one company was granted a licence to be incorporated and an operating licence (Credit Simple Zrt.), while three financial enterprises voluntarily surrendered their licences and are in voluntary liquidation proceedings.

Insurance Market Supervision

Since 2021, the MNB has published an index showing the development of compulsory motor insurance (CMI) premiums and claims⁹ on a quarterly basis. Regular publication of the CMI index helps to provide consumers and the public with accurate, transparent information and also aims to stimulate competition. The published data show the average changes; the extent of the change may vary for individual CMI contracts. If customers are not satisfied with the CMI premium and/or the quality of the services provided, after reviewing the processes or their individual contract, on each anniversary of the insurance contract they can choose a better insurance offer and conclude a new contract. In 2024 Q3, the average annual premium for compulsory motor liability insurance for normal cars increased by 10 percent year-on-year, to HUF 58,000. The expenses of the insurance claims increased by only half of this, due to the lower inflation, and thus a smaller increase would have been justified. Therefore, the adjusted MNB index – without the expenses of insurance claims and tax impacts – increased slightly in each quarter of 2024.

The MNB carried out a comprehensive audit at Alfa Vienna Insurance Group Biztosító Zrt. (Alfa VIG Biztosító), which revealed that Alfa VIG Biztosító's motor insurance claims and home insurance claims registration systems both had deficiencies and were found to be contradictory and inaccurate. The internal regulations of Alfa VIG Biztosító in the area of product supervision and governance also did not cover the full scope, and product reviews were not properly conducted for certain non-life insurance products. The MNB identified problems with the IT controls designed to ensure

⁹ <https://statiztika.mnb.hu/modszertanok/mnb-kotelezo-gepjarmu-felelossegbiztositas-index> (in Hungarian only).

the secure operation of the company's web applications. The MNB audit also focused on compliance with consumer protection provisions and found misleading customer information elements that violate the prohibition of unfair commercial practices. In light of the problems identified, the MNB required the insurer to report in writing on the rectification of the deficiencies and imposed a supervisory fine of HUF 49 million and a consumer protection fine of HUF 48 million.

The MNB conducted a comprehensive audit at Groupama Biztosító Zrt (Groupama). The MNB found that in the field of CMI, the insurer had repeatedly breached its duty to inform the Central Claims and Insurance Policy Registrar and the policyholders. The audit also found several IT security breaches. The MNB also found that no analysis was carried out in the area of product supervision and management before product launches, in compliance with the applicable laws. The insurer's systems for registering the motor and home insurance claims contained incomplete, inconsistent or incorrect information in some cases, and did not adequately support the insurer in complying with the claims settlement legislation in all cases by the statutory deadlines. On the basis of these findings, the Bank imposed a supervisory fine of HUF 49.5 million and a consumer protection fine of HUF 1.6 million on Groupama.

The MNB carried out a comprehensive audit at UNION Vienna Insurance Group Biztosító Zrt. (Union VIG Biztosító) and found that, due to certain deficiencies in the insurer's motor vehicle claims registration systems, in certain cases it was unable to meet its legal obligations to settle claims in a timely manner. The MNB found shortcomings in the key information documents used in the pre-contractual customer information and in the information provided on claims settlement. In the field of handling consumer complaints, the MNB found infringements in failing to respond in time, failing to fully investigate and respond to complaints and handling consumer enquiries containing complaints about the conduct of Union VIG Insurance as non-complaints. Due to the deficiencies found, the MNB imposed a supervisory fine of HUF 12.5 million and a consumer protection fine of HUF 2.16 million on Union VIG Insurance.

The MNB carried out a targeted audit at OVB Vermögensberatung Általános Biztosítási és Pénzügyi Szolgáltató Kft. (OVB) and found several cases (so-called 'policy transfers') in the insurer's practice, where the customer already had a life insurance contract – which was terminated by repurchase, or the insurer decided to waive, suspend or reduce the premium – and a new insurance contract of a similar nature was concluded with

the assistance of multiple agents, without informing the customer of the impact of the policy transfer on savings, in a comparable manner, supported by calculations, before the customer made the decision. As a result, the MNB imposed a consumer protection fine of HUF 50 million and a supervisory fine of HUF 500,000. In determining the amount of the fine, it was an aggravating circumstance that OVB's transfer practice could cause a financial disadvantage to consumers.

The MNB also carried out several significant licensing procedures in the insurance market. A new insurance company, Medicare Biztosító Zrt., was granted an operating licence, and the MNB issued a decision authorising the establishment of Medikon Mutual Accident and Health Insurance Association. In addition, the MNB approved the acquisition of a 15-percent direct and indirect shareholding in Gránit Biztosító Zártkörűen Működő Részvénytársaság by MOL Nyrt. and MOL Vagyonkezelő Kft. as well as the acquisition of 66.9-percent direct shares in Posta Biztosító by Gránit Biztosító Zrt. – with indirect owners (including WABERER'S INTERNATIONAL Nyrt.) acquiring shares simultaneously to a varying degree.

Pension Fund Supervision

In the field of pension fund supervision, the key issue continues to be the long-term sustainability of the funds' operations, with a particular focus on their ability to respond to external environmental impacts and whether their operational resources are at the level prudentially required by the MNB. The MNB's supervisory activity also focused on how environmental sustainability is reflected in the funds' investments and operational activities.

The audits conducted at the funds revealed irregularities and shortcomings mainly in relation to the election of delegates, the activities of the audit committee, IT security, new member admission processes, payments to the members, non-compliance with the rules on outsourcing and complaints handling.

The MNB published its historical fee index for voluntary pension funds in July 2024. In 2023, the traditional fee was 0.69 percent, down from 0.72 percent in the previous year. Of this, the operating fee decreased to 0.27 percent from 0.31 percent. The reason for this was that the operating and liquidity provisioning fee is calculated based on the funds' total assets, and as there was significant asset growth of 21 percent in 2023, the operating fee per member decreased. The investment fee amounted to 0.42 percent in 2023, versus 0.41 percent in the previous year. The adjusted fee index, which is calculated as the total fee charged to

a member compared to the hypothetical savings of an average member with a 30-year accumulation period, adjusted with the total asset impact, remained at 0.73 percent in 2023, similar to 2022. The total cost index of a 30-year fund member (TCI_{NYP}) decreased to 0.9 percent on average in 2023, from 0.94 percent in 2022. The cost indexes calculated using different methodologies therefore show that the average cost level of voluntary pension funds remains consistently below 1 percent.

The private pension fund business line of MBH Gondoskodás Pension Fund merged with Budapest Private Pension Fund by way of a 'split followed by a merger', with effect from 31 March 2024. The MNB authorised the transformation for the successor funds by its decisions dated 31 July 2024 and 1 August 2024. Szövetség Private Pension Fund was merged into Horizont Private Pension Fund on 1 July 2024, and the MNB approved the transformation by its decision dated 7 October 2024. Following the completion of the two mergers, only two funds are left in the private pension fund sector.

The final settlement process by Allianz Foglalkoztatói Nyugdíjnyújtó with its former members was closed. For members with whom the settlement was not successful, a request for depositing the relevant amount was made to the competent court and the notary public. An application was submitted to the MNB for the prior approval of the dissolution of the fund without legal successor. The MNB gave its prior approval on the dissolution of the pension fund without legal successor through voluntary liquidation and revoked the fund's operating licence, with its decision dated 27 September 2024.

The operation of Újszászi Cooperative Pension Fund and Zugliget National Voluntary Mutual Pension Fund was terminated by the MNB, given that they underwent voluntary liquidation, and their operating licence was revoked by the MNB with its decisions dated 11 January 2024 and 17 April 2024.

In December 2024, the MNB issued a management circular for voluntary pension funds on the MNB's requirements on the use of voluntary pension fund savings for property purchase purposes. The circular provides guidance to the pension funds on how to comply with the new legislation published on 29 November 2024, to facilitate prudent operations.

Capital Market Supervision

Government Decree No. 55/2024 (III. 7.) amending Government Decree No. 78/2014 (III. 14.) on the investment and borrowing rules for collective investment schemes, published on 7 March 2024, defines 14 types of investment funds, which is a significant change. The key part of the amendment is that it defines the types of investment funds and requires that the type be displayed in a standardised manner in the fund's name. According to the amendment, each fund must hold a minimum ratio of the specific asset class characteristic to its fund category, and it imposes a requirement for each type of fund to hold 8 percent of its assets in government securities. The amendment does not apply to closed-end investment funds, property funds not open to the public and securities funds that invest at least 80 percent of their assets in assets issued and traded outside Hungary. In order to comply with the new rules, the relevant investment funds had to amend their fund management policies, and have such approved by the MNB. The MNB monitors compliance with the set of limits determined for the new investment fund categories as part of its continuous surveillance activity.

ESMA¹⁰ published guidelines on the naming of funds related to ESG and sustainability terms in May 2024. The translated versions of the *"ESMA Guidelines on funds' names using ESG and sustainability-related terms"* were published on the website of ESMA on 21 August 2024. The MNB will transpose the Guidelines, which are essentially aimed at preventing greenwashing, for the protection of consumers, into the domestic legal environment in the form of a Recommendation in 2025.

The MNB published the 2023 cost index for public investment funds¹¹ in the summer of 2024. At an overall sectoral level, the average TER¹² for investors when buying units was 1.49 percent in 2023, showing a slight decrease from the 2022 level (1.5 percent). For property funds, a slight downward trend was seen since 2020, which continued in 2023.

The MNB conducted a thematic inspection of the sales practices for derivative transactions to households, at eight investment service providers, which was concluded in September 2024. The MNB examined the risk management, customer claim protection and investment advice practices of the service providers in relation to derivative products. Based on the results of the thematic inspection, the MNB

¹⁰ European Securities and Markets Authority.

¹¹ [Report on insurance funds, capital market risks and consumer protection, 2024 | mnb.hu.](#)

¹² Total Expense Ratio (TER).

issued a management circular on its expectations regarding day-to-day risk management practices.

The MNB conducted a targeted audit at SPB Befektetési Zrt. (SPB), examining its pre-trade customer information practices, product management and independent investment advisory processes, and the assessment of the suitability of transactions. The audit focused on the sale of corporate bonds issued by the company's owner, SPB Management Kft. The MNB found that, prior to the investment transactions, SPB, as an independent investment adviser, did not assess and compare a sufficiently wide range of financial instruments for its customers. It was also found that SPB did not adequately inform many of its customers about the legal and economic relationship it has with its owner who was the issuer, the bonds being redeemable bonds, their liquidity characteristics, the risks attached, and that it was a private placement (therefore, restrictions apply to a capital reduction). As a result, the MNB imposed a supervisory fine of HUF 30 million on SPB. The aggravating factors when determining the fine were the systemic nature of some of the infringements, their risk classification and the infringement being repeatedly committed.

In 2022, the MNB conducted a comprehensive audit at Equilor Befektetési Zrt., which found, among other things, that the company had failed to carry out suitability assessments for several of its customers, and had recommended unsuitable financial instruments to certain customers. It was also found that in several cases the company had provided investment advice without an investment advisory contract. To monitor compliance with the provisions of the decision closing the audit, the MNB carried out a number of follow-up inspections regarding the practices that were found problematic. Given that the company did not fully comply with the obligations set out in the decision and did not remedy the deficiencies indicated, the MNB once again called on the company to remedy the problem and to comply with the law, and imposed a supervisory fine of HUF 10 million on the company. Following the measure, Equilor took the necessary steps to remedy the shortcomings, in consultation with the MNB.

A comprehensive audit was conducted at Erste Befektetési Zrt., and the MNB found deficiencies, among others, in the areas of prior disclosure for investment advice, the recording of the relevant communications with the customers, the continuous evaluation of outsourcing, compliance with the remuneration requirements and complaint handling. Due

to these problems, the MNB imposed a supervisory fine of HUF 15 million on the company.

The MNB issued an operating licence to six new property fund managers (Sprint Asset Hungária Alapkezelő Zrt., Merkur Befektetési Alapkezelő Zrt., Chi Fu Real Estate Asset Management Zrt., MPOS Global Zrt., Realis Wam Alapkezelő Zrt. and Citadel Alapkezelő Zrt., with the latter also authorised to manage venture capital funds, private equity funds and securities funds). An operating licence was also issued to six new venture capital fund managers (Aurum Investment Befektetési Alapkezelő Zrt., INITIA CAPITAL Befektetési Alapkezelő Zrt., Infogroup Befektetési Alapkezelő Zrt., Capricornus Kockázati Tőkealap-kezelő Zrt., Atlas Europe Assets Kockázati és Magán Tőkealap-kezelő Zrt. and Polaris Equity Magántőke Alapkezelő Zrt.).

In connection with the acquisition of a controlling stake in Gránit Bank Zrt., the MNB carried out two authorisation procedures for the acquisition of qualified majority influence, concerning Equilor Befektetési Zrt. and Gránit Alapkezelő Zrt. The MNB authorised Zenith Asset Management Zrt. to acquire a 20.18-percent voting share, giving significant indirect control in MBH Alapkezelő Zrt. The MNB also authorised Magyar Takarékszövetkezet Zrt. to acquire a 20.18-percent voting right, Magyar Takarékszövetkezet Holding to acquire a 10.09-percent voting right, and AURUM Magántőkealap to acquire a 10.09-percent voting right, all giving significant control, in MBH Alapkezelő Zrt.

The MNB authorised an exceptionally large number of amendments to fund management policies in 2024, partly aimed at ensuring compliance with the new investment rules and the rules on the categorisation of investment funds in Government Decree No. 55/2024 (III. 7.) amending Government Decree No. 78/2014 (III. 14.) on the investment and borrowing rules for collective investment schemes, and partly related to the revision of the success fee models of funds operating on a success fee basis.

The MNB issued a decision on 22 November 2024, in which it approved the prospectus prepared by Gránit Bank Zrt. for the public offering of its ordinary shares with a total issue value of at least HUF 7 billion and up to HUF 30 billion, and for the admission of its existing ordinary shares and its previously issued and converted ordinary shares to the regulated market operated by Budapesti Értéktőzsde Nyrt. (BSE), which was deemed to be a major IPO in 2024.¹³

¹³ IPO – Initial Public Offering.

Consumer Protection-related Activities

The MNB carried out a thematic inspection to check whether financial institutions provide their customers with the legally required pre-contractual information, when the customers apply for personal loans online, which is becoming more widespread. Compared to applying for a loan at the bank branch, the online application process is faster, which can lead customers to make impulsive decisions. The MNB checked with six credit institutions whether they provided the necessary information documents to the customers in the period up to the conclusion of the loan contract. The MNB identified minor shortcomings in the practices of the institutions and in some of the transactions examined. In addition to violations of the law, the MNB also identified certain elements in the online loan application process of several institutions, and accordingly it decided to issue a management letter, for the purposes of clarification and fine-tuning.

The MNB has made it clear that the transactions initiated by Apple on 26 June 2024 without authorisation, due to technical reasons, are considered as payment transactions not authorised by the customers, i.e. they must be fully refunded to the customers. The MNB was not satisfied with the speed of the process and called on the payment service providers to start compensating the customers without delay.

Also, regarding the problem affecting hundreds of thousands of domestic banking transactions caused by a technical error in the Apple Store overnight on 30 September 2024, the problem was properly resolved, thanks to the prompt joint action of the Hungarian commercial banks, the Hungarian Banking Association and the MNB. Based on the digital data received from Apple, the domestic credit institutions cleared and settled the related customer orders by 3 October 2024. As a result, the costs of the transactions initiated by each customer in Hungary were actually deducted only once.

According to its press release, Revolut Bank UAB had 1.5 million customers in Hungary by mid-August 2024 and plans to have 2 million customers in Hungary by 2025. Despite this, Revolut continues to operate as a cross-border credit institution in Hungary, without opening a Hungarian branch office. Revolut Bank UAB is a member of the Lithuanian deposit insurance scheme, which is much smaller than the OBA. The cross-border mode of operation poses various risks for domestic customers, which could be managed if Revolut were to operate as a subsidiary bank supervised by the MNB, with a bank licence and capital requirement, under the umbrella of the OBA.

In December 2024, the MNB published the Ethical Insurance 2.0 package, which regulates the insurance market. Ethical 1.0, the Ethical Regulatory Framework, was published by the MNB in 2016–2017. However, further action was needed to address the changes in the EU legislative framework and the persistence of products and sales practices in the market that are not favourable for consumers. The Ethical Insurance 2.0 package aims to increase the value provided by insurance products through a number of measures – mostly coming into force on 1 January 2026, to ensure adequate preparation time, including a strict customer-focused regulation of the development of insurance products and a requirement to test value for money.

The main pillars of the Ethical Insurance 2.0 package are the MNB's recently issued regulatory instruments, the Welcome Call Recommendation issued on 24 September 2024 and the Conflict of Interest Recommendation. The Welcome Call Recommendation applies to phone calls made to customers signing a new insurance contract or terminating an existing contract for quality assurance purposes, to ensure full-scope customer information on the prevention of mis-selling and the financial impact of early termination of the insurance contracts. The Conflict of Interest Recommendation sets out the rules to be followed in relation to potential conflicts of interest and the incentive schemes applied for insurance-based investment products.

The MNB issued several management circulars to insurers and insurance brokers on the annual March renewal period for home insurance contracts, to protect the interests of customers and to clarify the information provision practice and the application of the law.

The success of the first home insurance campaign conducted in 2024 exceeded all expectations. The MNB's support for the campaign through a number of innovative instruments contributed to this success. The regular new disclosure required from home insurance market players bi-weekly and quarterly provided an opportunity to analyse the sales practices and intervene where necessary. The MNB publishes the home insurance statistics on its statistical platform on a quarterly basis, in a form more detailed than before, thanks to the home insurance campaign. In addition to this, the MNB also made use of a new instrument and conducted a large number of mystery shopping cases during the campaign, which expanded the MNB's toolkit of continuous supervision through market monitoring activities. The mystery shopping mainly focused on the sales practice of home insurance products, pre-contract information provision and needs assessment, with a special focus on the sales practice of consumer-friendly home insurance products (MFO).

In 2024, similar to the CMI index, the MNB also launched a Home Insurance Index. The latest data are presented by the MNB on a dedicated, colourful and easy-to-use online platform.¹⁴ The Home Insurance Index, which is published quarterly, shows the change in the level of home insurance premiums relative to the reference period of 2022 Q4, and also provides information on the quarterly movements. The MNB also helps customers navigate the home insurance market with the Certified Consumer-friendly Home Insurance and Financial Navigator consumer protection pages on its website. In terms of consumer-friendly home insurance policies, the premium amount and the services provided ensure a significant customer advantage compared to other schemes available on the market: their average premium is 22 percent lower than the average annual premium for occupied, fully-insured properties, amounting to HUF 50,800, according to the MNB's 2024 Q3 Home Insurance Index. Home insurance premiums rose by 19 percent in 2024 Q3 year-on-year, driven by an increase in claims.

In the audit procedures launched as part of the supervision of the insurance market, the MNB identified the following priority areas: to review the regulations on the product supervision and management system, and the adequacy of the electronic communication between the insurers and customers. The MNB considers it important that the insurers give due priority to electronic communications conducted with customers.

Supervisory Activities Related to the Prevention and Combating of Money Laundering and Terrorist Financing as well as the Implementation of Asset- and Finance-related Restrictive Measures

The so-called AML Package,¹⁵ the new EU regulatory framework for the prevention of money laundering and terrorist financing, was published on 31 May 2024. The MNB then started to process the large amount of new legislation, which contains novel elements in many respects, and to organise the related internal training and law harmonisation tasks. Ensuring compliance with the AML Package was

also one of the driving factors behind the revision of MNB Decree No. 26/2020 (VIII. 25.). The Decree was revised, and MNB Decree No. 29/2024 (VI. 24) and MNB Decree No. 30/2024 (VI. 26.) entered into force on 1 July 2024.

The above two decrees were issued by the MNB to prevent and combat money laundering and terrorist financing (AML/CFT¹⁶), for the purposes of revising its previous regulations, incorporating the lessons learned from the changes in the domestic legislation, the guidelines of the European Banking Authority and its own supervisory authority experience. The Bank's new decrees enter into force from July 2024, January 2025 and March 2025 (depending on the subject). One of the decrees¹⁷ introduces a new regulatory topic: the obligation to identify the beneficial owner and the ownership and management structure of legal persons and unincorporated entities. According to the legislation, the service provider must carry out a risk assessment (at the individual customer level and by business line) of the customers, and in this assessment, it must define the necessary information sources and control mechanisms, based on risk-sensitivity. The MNB regulation extends the scope of entities that are subject to enhanced customer due diligence, to include, among others, non-profit organisations with a high risk of terrorist financing, entities with a high proliferation risk, or entities with beneficial owners who are likely to be a straw man, but do not cooperate in the customer due diligence discussion. The decree also sets out the criteria to be taken into account in a simplified customer due diligence process for delayed customer due diligence measures.

The other MNB Decree¹⁸ contains detailed rules on the minimum requirements for audited electronic communications devices and their operation, internal regulations, and the method of auditing and conducting the online customer due diligence processes through such devices. What is new is that the service providers must always consider and assess in a demonstrable way to the MNB the justification for introducing a new type of electronic communication device for the customer due diligence process, and their feasibility, given the risks involved. The service providers must prepare an electronic

¹⁴ <https://statisztika.mnb.hu/publikacios-temak/felugyeleti-statisztikak/biztositasi-piaci-szervezetek/mnb-lakasbiztositas-index> (in Hungarian only).

¹⁵ Regulation (EU) No 2024/1620 of the European Parliament and of the Council, Regulation (EU) No 2024/1624 of the European Parliament and of the Council on AMLR, and the 6th Money Laundering Directive, i.e. Directive (EU) 2024/1640.

¹⁶ Anti-Money Laundering and Countering the Financing of Terrorism.

¹⁷ MNB Decree No. 30/2024 (VI. 24.) on the detailed rules for the implementation of certain obligations of the service providers supervised by the Magyar Nemzeti Bank, under the Act on the Prevention and Combating of Money Laundering and Terrorist Financing, and on the minimum requirements for the development and operation of a screening system by such service providers, under the Act on the implementation of financial and asset restriction measures ordered by the EU and the UN Security Council.

¹⁸ MNB Decree No. 29/2024 (VI. 24.) on the detailed rules of the audited electronic communications devices, and the minimum requirements for their operation, internal regulation, the method of auditing, and the implementation of the electronic customer due diligence process by means of such devices used by the service providers supervised by the Magyar Nemzeti Bank.

customer due diligence policy, and must continuously monitor, and if necessary, modify the functioning of their digital communications devices, to ensure that they comply with the law and their internal regulations, and must have effective controls in place to deal with malfunctions. The decree also contains a number of provisions relating to the timely nature, secure storage and protection of the data obtained through the audited electronic communications devices.

In a targeted investigation concluded at UniCredit Bank Hungary Zrt. in 2024 H1, the MNB found deficiencies in the operation of the company's IT screening system and its reporting practices, and with regard to its fiduciary asset management customers, it found that the enhanced procedure was not applied in practice, and that the company's customer due diligence processes did not comply with the legal requirements in several areas, and that there were also deficiencies at the internal regulatory level. Based on the deficiencies identified, the MNB issued a warning, a requirement to provide additional data and imposed a supervisory fine of HUF 28.2 million.

As part of its continuous surveillance activity, the MNB checked whether MBH Bank and OTP Bank had fully implemented the previous MNB decisions. Among other things, the MNB's previous decisions imposed a number of measures on the two credit institutions, with a deadline of August 2024, for their shortcomings in the field of money laundering and the prevention of terrorism financing, and imposed a supervisory authority fine of nearly HUF 70 million. In its decisions issued in December 2024, the MNB concluded that MBH Bank and OTP Bank had not fully complied with the obligations previously imposed by the MNB. As a result of the deficiencies found, the MNB imposed a supervisory authority fine of HUF 15 million on MBH Bank and HUF 28.125 million on OTP Bank and ordered them to correct the deficiencies. The deficiencies do not jeopardise the safe, sound operation of the two credit institutions.

IT Supervision

The MNB is responsible for the safety and resilience of the Hungarian financial system, and the financial service providers are also responsible for the safety of their customers' financial assets. However, it is also crucial that customers are also prepared for the dangers that are increasingly emerging in the online space. To strengthen

this, the CyberShield programme, which was launched in autumn 2022, was extended for another three years from January 2024. In addition to educational activities, financial fraud prevention needs to be strengthened at the operational level as well, and thus the programme is also working to prevent phone number fraud, as well as online and card fraud: it has proposed legislative amendments to the legislators and started discussions on the use of technical controls to support prevention. In December 2024, Szerencsejáték Zrt., Mastercard and Visa announced at a joint press conference with the MNB that they will join the CyberShield project as supporting professional partners, thus increasing the number of members of the inter-institutional partnership to 13 members.

In preparation for application of the Digital Operational Resilience Act (DORA),¹⁹ applicable from 17 January 2025, the MNB finalised the concept for the IT developments needed in relation to the incident reporting platform and the required disclosures for the Service Provider Register under the DORA Act, on the basis of which the development of the disclosure platforms was implemented in 2024 Q4.

The relevant parts of the EU Crypto-assets Regulation (MiCA)²⁰ applicable to stablecoins apply from 30 June 2024, and the parts relating to the issuance of other tokens and the licensing of crypto-asset providers and other topics apply from 30 December 2024 in the EU, including Hungary. One important exception for the service providers is that there is currently a 6-month transitional period in Hungary, during which crypto-asset providers – already operating under the applicable legislation – can continue to operate without a licence. The transitional period varies from one EU country to another and can be up to 18 months. However, from 1 July 2025, only crypto-asset providers holding a MiCA licence will be entitled to provide services in Hungary. Pursuant to the Crypto-assets Market Act, which sets out the detailed regulations applicable in Hungary, the MNB acts as the supervisory authority. Accordingly, the MNB started supervising the crypto-asset providers and issuers.

Issuer Supervision and Market Supervision Procedures

The MNB took decisions and imposed fines for regular and exceptional breaches of the disclosure obligations, as part of its continuous surveillance activities and targeted inspections conducted at the issuers. With regard to the

¹⁹ Regulation (EU) 2022/2554 of the European Parliament and of the Council of 14 December 2022 on digital operational resilience for the financial sector.

²⁰ Regulation (EU) No 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets.

regular end-of-month disclosure requirements, the MNB sent several letters to the issuers to draw their attention to certain shortcomings and to remedy the infringements.

In March 2024, the MNB imposed a market surveillance fine of HUF 160 million on Budapest-based Car Service Partner Kft. and Prague-based Car Service Partner s.r.o., for unauthorised money lending activities, and permanently banned them from providing unauthorised money lending activities in Hungary on a commercial basis. The MNB's investigation revealed that after March 2021 the companies had collectively granted loans to natural and legal persons in over 300 cases, with a value exceeding several hundred million forints.

The MNB conducted a market surveillance procedure to investigate the circumstances of the placement of bonds issued by Sun Contracting AG in Hungary, against Sun Contracting AG, Green Finance Broker AG and the natural persons involved in their activities in Hungary. The investigation by the MNB found that Sun Contracting AG – as an issuer of bonds with a prospectus approved by the Liechtenstein Supervisory Authority (FMA) with a passport to Hungary – had performed an investment service activity subject to an MNB licence in an unauthorised manner, namely “placing financial assets without a commitment to purchase them”, well above its capacity as the issuer. In its decision, the MNB imposed a market surveillance fine of HUF 400 million on Sun Contracting AG for unauthorised investment service activities, and HUF 250 million on Green Finance Broker AG for unregistered dependent brokerage activities. The private individual involved in the activities of the companies was fined HUF 17 million by the MNB for his brokerage activities carried out without notifying the MNB. In addition, the MNB also banned the unauthorised activities with immediate effect. In view of the breaches discovered, the MNB filed a police report on the suspicion of unauthorised financial activity.

In 2024 Q3, the MNB imposed a market supervision fine of HUF 15 million on an individual, and also filed a police report for breaching the law prohibiting insider trading. The Bank's investigation found that the private individual concerned placed orders to buy WABERER'S shares using insider information. The Bank filed a police report in connection with the suspected insider trading.

In an *ex officio* market supervision procedure, which included several on-site inspections, the MNB investigated whether the conduct of Banus Port Vagyonkezelő Zrt. (Banus Port Zrt.) on the stock exchange with 4iG shares violated the provisions of MAR prohibiting the manipulation of the market. The investigation revealed that Banus Port Zrt. entered into transactions with a total value of several

billion forints in the period from September 2023 to mid-May 2024, giving false or misleading indications about the daily turnover and trading volume of 4iG shares. Due to the detected violation, the MNB issued a decision prohibiting Banus Port Zrt. from renewed violation of the MAR provisions prohibiting market manipulation, imposed a market supervision fine of HUF 250 million and filed a police report for suspected illegal market manipulation. The fact that the company had engaged in the illegal market manipulation over a longer period of time, and that during the relevant period the 4iG share was listed in the Premium stock exchange category, was included in the BUX and BUMIX index baskets and was linked to a futures product, were considered as aggravating circumstances in determining the fine.

The MNB conducted a market supervision procedure, including an unannounced on-site inspection with the assistance of the police, to clarify whether Esztergom-based NORO FINANCIAL INVESTMENTS Zrt. had carried out money lending and borrowing activities – among its other activities – on a commercial basis without an MNB licence. In its decision, the MNB imposed a market supervision fine of HUF 55 million on NORO FINANCIAL INVESTMENTS Zrt. for unauthorised financial service activities and prohibited the company from continuing its unauthorised activities with immediate effect. The MNB also filed a police report for the detected breach of the law, on the suspicion of unauthorised financial activity. When determining the market supervision fine, the MNB took into account the financial gain made by the company, and the fact that NORO FINANCIAL INVESTMENTS Zrt. had been operating without a licence for a longer period of time was considered an aggravating circumstance.

Furthermore, in December 2024, the MNB imposed a market supervision fine of HUF 21 million on a private individual and filed a complaint for violation of the laws prohibiting insider trading and the unauthorised disclosure of insider information. In its decision, the MNB prohibited the individual from renewed violation of the provisions prohibiting insider trading and imposed a market supervision fine of HUF 11 million for trading with insider information, as well as another fine of HUF 10 million for the unauthorised disclosure of insider information.

Customer Service Activity

The MNB's customer service received a total of 25,026 enquiries and requests in 2024. The sectoral breakdown of the customer enquiries did not change significantly compared to previous periods, with the largest share of the notifications related to the financial market, followed by the insurance market. Customers mostly contacted the

MNB's customer service with questions related to lending, non-life insurance, debt collection and management, and payment services.

In 2024 H1, the MNB's customer service received an average of 111 cyberfraud alerts per month, and an average of 103 alerts per month in 2024 H2.

Within cyberfraud, the number of cyberfraud events using the MNB's name – or even including the MNB's public phone numbers – already showed an upward trend in 2023, and this trend further increased in 2024. During the year, the MNB Customer Service Information Centre received 232 customer notifications in this regard. Other significant types of offences include sending phishing messages and e-mails misusing the name of a courier service (173 notifications in 2024) and making fake banking phone calls (126 notifications in 2024).

3.4 RESOLUTION PROCEDURES

Resolution Planning, Assessing Resolvability and Determining the MREL Requirement

In 2024, the focus of the MNB's resolution planning activities was on reviewing the resolution plans, conducting procedures to assess resolvability, reviewing the MREL requirement and monitoring compliance, both for local institutions and cross-border groups, acting as both the group-level resolution authority and the resolution authority responsible for subsidiaries.

In accordance with its annual schedule, the MNB, as the group-level resolution authority, performed the resolvability assessment for a major cross-border banking group based in Hungary, including a review of the group's resolution plan and the consolidated and individual MREL requirements. The assessment of resolvability was not only carried out for the domestic group member institutions, but also for foreign subsidiaries, in a coordinated assessment with the involvement of the resolution authorities of the country concerned. The resolution plan, the outcome of the assessment of resolvability and the MREL requirements were adopted by the resolution authorities concerned in joint decisions.

As the resolution authority responsible for the Hungarian-based subsidiaries of banking union parent companies, the MNB actively participated in the resolution colleges led by the banking union resolution authority, the SRB, and in the

implementation of the related decisions, and in that regard, drafted and provided the SRB with reasoned proposals for the individual MREL requirement and group-level resolution plans for the Hungarian subsidiaries concerned, and following the adoption of the related joint decisions, obliged the institutions concerned to comply with the agreed MREL requirements.

The MNB monitors the compliance status of the institutions subject to the MREL requirements on an ongoing basis. In relation to compliance with the MREL requirements, the MNB continued to grant general prior permission to applications for the call, redemption, repayment or repurchase of certain MREL eligible liabilities in 2024.

In 2024, the resolution planning processes also started for the central counterparty (CCP) under the jurisdiction of the MNB, in line with the EU requirements.²¹ As a first step, the MNB established the CCP Resolution College, which held its first meeting with the participation of the foreign authorities concerned in December 2024.

MNB Publications in Support of the Institutions' Resolution Planning Obligations

The MNB focused on developing the practical application of certain resolution tools in 2024.

In line with the EBA guidelines, the MNB published several resolution policy documents in 2024 to facilitate the institutions' resolution planning obligations. These include:

- The MNB's requirements for capacity building, to provide the information needed for resolution planning, and for a possible resolution in a timely and coherent manner, for which the MNB provided the institutions with a list of required data and the so-called revised bail-in analytics;
- The policy document *"The MNB's principles for setting MREL requirement"*, which has also been updated. This was mainly justified by the need to regulate the imposition of an MREL add-on, in order to minimise the potential spillover effects between the various resolution groups of the banking group in a Multiple Point of Entry (MPE) resolution strategy. Furthermore, the MNB provided detailed rules for the exemption of mortgage credit institutions from the MREL requirement;
- The MNB published two information documents on the requirements set for the institutions regarding the

²¹ Regulation (EU) No 2021/23 of the European Parliament and of the Council of 16 December 2020 on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No 1095/2010, (EU) No 648/2012, (EU) No 600/2014, (EU) No 806/2014, (EU) No 2015/2365 and Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and (EU) 2017/1132.

improvement of resolvability and transfer resolution tools, on its website.

- The MNB published its approach on the write-down or conversion power (bail-in mechanism), which covers both the resolution powers relating to the write-down and the conversion of capital instruments, the write-down or conversion of eligible liabilities, and the implementation process of the bail-in resolution tool.

Tasks Related to Collective Funds, and the Regular Annual Contributions Payable by the Member Institutions of the Resolution Fund

The MNB calculated the regular annual contributions to be paid by the member institutions to the Resolution Fund in accordance with the applicable provisions of the relevant Commission Delegated Regulation²² and the Resolution Act and notified both the member institutions and the Resolution Fund. As a result of the regular annual contribution payments, the top-up level of the Resolution Fund is increasing as planned, in order for the amount of available financial resources to reach the target level (1 percent of the covered deposits of all credit institutions licensed in Hungary subject to the compensation limit) by the deadline set by the Resolution Act, thus strengthening the financial stability safety net. Furthermore, the MNB's representatives continued to participate actively in the work of the Board of Directors of the Resolution Fund and the National Deposit Insurance Fund.

Tasks Relating to the Resolution Asset Management Vehicle

Pursuant to the Resolution Act, the MNB exercises the ownership rights over the resolution asset management vehicle, called MSZVK Zrt., as part of which the MNB approved the individual and consolidated financial statements of MSZVK Zrt. for 2024 and its business plan for 2024.

International Cooperation, Participation in Shaping the EU Regulatory Environment

The MNB's experts continue to participate in the EBA, ESMA and EIOPA resolution working groups. The MNB hosted the May 2024 meeting of the EBA Subgroup on Resolution Planning Preparedness, after which it received significant positive feedback from the experts involved. As part of the annual programme developed by the EBA, aimed at the

convergence of the resolution planning and the execution activities of the resolution authorities (EREP – European Resolution Examination Programme), the MNB provided the necessary information again in 2024 on the resolution authority practices necessary for implementation of the programme.

Furthermore, the MNB's experts also contributed to the revision of the EU Resolution Directive establishing a framework for the recovery and resolution of credit institutions and investment firms, drawing on their experience in the field of bank resolution, and to the work to expand and facilitate transposition of the resolution framework of insurers by the Member States.

3.5 PAYMENT SYSTEMS AND SECURITIES SETTLEMENT SYSTEMS

New Instant Payment-based Solutions were Launched Under the Qvik Brand Name

The new mobile payment solution “qvik”, which is based on instant payments, was made automatically available in all customers' mobile banking apps from September 2024. Qvik payments include QR code, NFC (touch), deeplink (app-based) payment solutions and instant transfers in response to payment requests. The former became available from 1 September 2024, while the acceptance of payment requests became available to all users from 1 April.

The qvik system, which is based on instant payments, creates a new dimension in the Hungarian electronic payments market, forcing the sector to increase its competition efforts. Qvik ensures the country's payment sovereignty vis-à-vis global players, while offering a fast and extremely low-cost acceptance service to all players in the merchant and invoice issuer sector. In addition, for domestic household customers, all transactions initiated with qvik are free of charge, reducing the costs for households and the public and thus laying the foundations for the reduction of financial expenses.

During the year, the MNB held several meetings with the market participants (payment service providers, merchants, invoice issuers, cash register manufacturers, etc.) on the introduction of qvik payments and the promotion of the use of qvik. Uniform image elements were created for the qvik system, to increase the visibility of the service. The MNB is closely monitoring the developments needed for the introduction of qvik payments, both on the side of GIRO, the central infrastructure operator, and on the side of the banks.

²² Commission Delegated Regulation (EU) 2015/63 of 21 October 2014 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to ex ante contributions to resolution financing arrangements.

The Development Level and Functioning of the Payment Systems

In June 2024, the MNB published its *Payment System Report 2024*,²³ which presented the main trends affecting domestic payments and the functioning of the payment and securities settlement systems. The Payment System Report also includes the updated values for the Payment System Progress Indicator Framework, as defined in the MNB'S payment transaction strategy entitled "Payment Transactions 2030".²⁴ Among other things, the Report described the growing popularity of cross-border payment service providers, the innovations of the qvix payment method, which is based on instant payments, and the latest developments in national and EU payment regulations. The most important messages were also published by the MNB in a separate publication, which provides the key information to a wider audience interested in payment transactions.

Payment System Advisory Body

The MNB held consultations with the main payment transaction providers in June and December 2024. At these meetings, the MNB presented the status of the targets set in its Electronic Payment Transactions Strategy for the period up to 2030, based on the most recent values of the Payment System Development Indicator System, and reported on the latest developments in the ongoing payment system developments. The MNB also presented its action plan for the period 2025–2026, based on the Payment Transactions Strategy, which was finalised by the participants at the December meeting. The participants agreed on the need to continue to support the further take-up of electronic payments, which are of great importance for the competitiveness of domestic market players. The meetings also included presentations by the key players in the payment market on their most recent information.

Regulation of the Payment System

Based on the requests received from the payment service providers, other businesses and individuals, the MNB issued 13 position papers and professional opinion papers related to payment transactions in 2024. Furthermore, MNB Decree No. 35/2017 (XII. 14.) on the processing of payment transactions was amended, and MNB Recommendation No. 5/2024 (VI. 13.) on the immediate crediting of payment transactions to the payees' payment account and making the payment available to the payees without delay was published, which contains the MNB's requirements regarding the expected time for crediting payments on the

payees' bank accounts and making payments available to the payees.

Hungarian Presidency of the EU Council

During the Hungarian presidency of the EU Council, several financial legislative pieces in Council review phase were presented to the working groups. To ensure the professional success of the Hungarian presidency, the Permanent Representation of Hungary to the EU also invited the MNB to cooperate. As part of this, during the Hungarian presidency of the EU, the MNB actively participated in the legislative work on the Payment Services Regulation (PSR), the Directive on Payment Services and Electronic Money Services in the Internal Market (PSD3) and the Regulation on the creation of the digital euro, which is also in the preparatory phase, including providing technical proposals and comments on the proposals published by the European Commission and made by the previous presidencies, and regularly participating in the working group meetings.

Platform Consolidation

A Business Task Force for the Platform Consolidation process was established, led by GIRO, with the participation of payment service providers and the MNB. The Task Force will define the business processes required to migrate transactions from the current daytime and overnight settlement platforms to the Instant Payments Platform. In parallel, the MNB also conducted several rounds of questionnaire surveys to assess the readiness of payment service providers for platform consolidation, and held working group meetings on regulatory issues related to platform consolidation.

Central Abuse Screening System

In order to ensure that the Central Abuse Screening System (CASC) can go live on 1 July 2025 as stipulated by law, technical implementation of the system started in early 2024, in close cooperation between the MNB and GIRO; in parallel with this, the related development work at the banks also started. The system uses AI to assess the fraud risk of transactions in real time and will provide real-time feedback to the credit institutions, thus providing additional information to support their own screening systems that cannot be generated from their own analysis. The MNB and GIRO Zrt. are in continuous consultation with the project stakeholders, including credit institutions, in order to ensure that the recent surge in banking abuse is successfully mitigated.

²³ [Payment System Report 2024 \(mnbb.hu\)](https://mnbb.hu/en/payment-system-report-2024).

²⁴ [Payment Transactions 2030 \(mnbb.hu\)](https://mnbb.hu/en/payment-transactions-2030) (in Hungarian only).

30th Anniversary of the Foundation of KELER and 15th Anniversary of the Foundation of KELER KSZF

Since its foundation on 12 October 1993, KELER has provided central securities depository (CSD) services and performed the clearing of stock exchange transactions on the Hungarian securities market for 30 years, as a solid, reliable service provider. Since its foundation on 8 June 2008, KELER KSZF has been providing clearing and guarantee services in the major European energy markets, in addition to the Hungarian capital and gas markets, ensuring the safe and efficient settlement of market transactions, for more than 15 years. The two companies celebrated their anniversary year with special events.

The Finance Section of the Hungarian Economic Society held a roundtable discussion for KELER's 30th anniversary on 13 February 2024, at which the participating experts discussed the milestones and future challenges of the Hungarian money and capital markets, following a presentation by Gábor Horváth, the CEO of KELER, who presented the 30-year history of the company. The discussion was moderated by Miklós Luspay on behalf of MNB, and could be attended in person, or watched afterwards on MNB's YouTube channel.

Annual Meeting of the Supervisory College of KELER KSZF

The 2024 annual Supervisory College meeting according to EMIR²⁵ was held by KELER KSZF. The meeting of the College, composed of the international supervisory authorities and the European Securities and Markets Authority²⁶ (hereinafter referred to as "ESMA"), was held on 17 October 2024, in a hybrid format. In the first part of the meeting, the supervisory and oversight activities carried out by the MNB in 2024, the results of the comprehensive supervisory audit completed in 2024, the adequacy of the risk management and IT operations of KELER KSZF, and the supervisory and oversight tasks planned for 2025 were presented and discussed in detail. In the second part of the meeting, the most important events concerning KELER KSZF were presented, as well as the main future strategic goals and plans of the CCP. At the meeting, the members of the College assessed the supervisory and oversight activities of the MNB and the functioning of KELER KSZF as satisfactory.

Work of International Committees Related to the Securities Clearing and Settlement Systems

The ESMA CCP Supervisory Committee (CCPSC) is responsible for facilitating the supervisory convergence of the CCPs, and analysing, monitoring and mitigating the systemic risks of CCPs. One of the main tasks of the Committee in 2024 was to conduct the 5th ESMA EU CCP Stress Test exercise with the CCPs, which is held every two years. The Stress Test exercise provided a comprehensive assessment of the performance of the European CCPs' guarantee schemes and the adequacy of their resilience. The Committee focused on the potential for clearing and guaranteeing innovative financial products such as cryptocurrencies, and the impact on the CCPs of shortening the settlement cycle to T+1 days.

ESMA's Post-Trading Working Group (hereinafter "PTWG")²⁷ deals with post-trading processes and regulation, including the CSDs and the securities settlement systems. In 2024, PTWG focused on the T+1 settlement cycle and the additional policy-related ESMA tasks resulting from the amendments to the EU Regulation on central securities depositories (CSDR) that entered into force in January 2024, based on a mandate from the European Commission.

The Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) brings together EU banks and other participants in the TARGET2-Securities, which is the euro area's securities settlement platform, to facilitate a dialogue between market participants and the ECB. In order to intensively engage with local markets, AMI-SeCo established a T2S National Stakeholder Group (NSG) in each T2S market, which in Hungary is called HU-NSG. In 2024, HU-NSG held two meetings, at which the MNB reported on the proposals for the next AMI-SeCo meeting and then conveyed feedback from the Hungarian market participants on the proposals to AMI-SeCo. Between meetings, the members of HU-NSG receive written information published by AMI-SeCo and provide information on how to answer the questionnaires prepared by AMI-SeCo.

²⁵ Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories.

²⁶ European Securities and Markets Authority (ESMA).

²⁷ The PTSC merged with the ESMA Secondary Markets Standing Committee (SMSC) on 1 January 2023, and continues to operate under the name SMA Markets Standing Committee (MSC). The MSC also operates four other ESMA Working Groups, of which only the Post-Trading Working Group will continue to work alongside the MSC on post-trading processes, with a focus on OTC under EMIR, and the CSDs and securities settlement systems under the CSDR.

Amendment of the EMIR Regulation Governing the Operation of the European Central Counterparties (EMIR 3.0)

The revision of the EMIR Regulation, the main regulatory framework for European CCPs, was completed in 2024 and entered into force on 24 December 2024. The proposed amendments aim at developing the Capital Markets Union, strengthening the EU's open strategic autonomy and enhancing the efficiency and effectiveness of the EU-level supervisory authority activities. Safe, competitive clearing services in the EU are essential for the development of the Capital Markets Union, and the proposed legislative changes – including further strengthening of the supervisory framework – would contribute to a more efficient, safer post-trading environment. A strong central clearing system reduces the risks arising from increased reliance on third-country CCPs and supervisory authorities. Recent developments in the energy markets also highlighted the need for further amendments to the EMIR, to further mitigate risks to the EU's financial stability. The main changes include the requirement for an active account for clearing OTC derivatives, changes to the rules on the functioning of the Supervisory College of the CCPs, speeding up the authorisation and approval tasks, increasing transparency and clarifying the rules for the joining requirements of new clearing members.

Amendment of the CSDR, the Regulation Governing CSDs, Entered into Force in January 2024

The amendment of the CSDR, the EU regulation governing CSDs, entered into force on 16 January 2024. For cross-border services, the joint authorisation procedure between the host and home Member States has been replaced by a notification obligation. Similar to other institutions, Supervisory Colleges have been set up. The amendment allows CSDs providing banking type ancillary services to provide certain banking type ancillary services to other CSDs that are not authorised to perform such activities. The rules on settlement discipline were also modified, in particular as regards fines and compulsory purchases. The rules for third-country CSDs were also changed, and they will no longer benefit from the grandfathering clause. The frequency of comprehensive supervisory audits under the CSDR was changed from at least once a year to at least once every three years. Amendment of the Regulation will also

require a number of detailed rules for the CSDR regime to be amended, and this work has been ongoing since the CSDR entered into force.

The MNB was Actively Involved in Developing the Detailed Rules for the CSDR

ESMA²⁸ is continuously working with the competent authorities of the Member States in the relevant working groups and standing committees to develop the details of the main CSDR amendments. The MNB continued to participate in this work in 2024. In addition to the development and amendment of regulatory technical standards, this also involved the development or revision of analyses and lower-level regulatory instruments.²⁹ The MNB progressed with its related mandates in 2024 in the order of priority. Three public consultations were held in 2024, in which stakeholders (with a focus on CSDs) were invited to complete a survey by 9 September 2024 on the following topics: (1) Which settlements should be treated as falling outside the scope of the so-called SDR on settlement discipline; (2) How the scope of data and documents to be submitted by the CSDs should be extended (ESMA was interested in the opinion of CSDs on this topic); and (3) Replacement of the grandfathering of third-country CSDs with a one-off, ongoing notification obligation (in this area, ESMA was primarily interested in the views of third-country CSDs providing core CSD activities in the EEA, such as Switzerland and the United Kingdom). ESMA also reviewed the implementing technical standard on the setting up of colleges and proposed amendments to some technical rules. ESMA forwarded its advice on the issues concerned and the proposed amendments to the RTS to the European Commission for consideration.

T+1 Securities Settlement Cycle to be Introduced in Europe in October 2027

In Europe, the securities settlement cycle for transactions executed in trading environments will be changed from the second business day after the trade day (T+2) to the first business day (T+1) from October 2027. T+1 settlement was already introduced in the US, Mexico and Canada on 28 May 2024, and other countries (such as the UK and Switzerland) also indicated their intention to harmonise with this system. This is a strong motivation for the EU to follow as well. The relevant ESMA working groups and standing committees have been discussing and examining the potential impacts,

²⁸ In addition to ESMA's PTWG and MSC, a new subgroup, the CSDR Refit Task Force, was also set up to deal with the additional tasks arising from the CSDR amendments. More details are available at the following link: <https://www.esma.europa.eu/about-esma/governance-structure/standing-committees>.

²⁹ Lower-level instruments include guidelines, Q&As, technical advice and recommendations.

costs and benefits of the transition for the past two years. Representatives of capital market players were also involved in these discussions. On 15 October 2024, ESMA, the ECB and the European Commission published a joint statement, indicating that the EU intends to move to the T+1 settlement cycle. ESMA subsequently published a cost-benefit analysis on its website, detailing why the move to T+1 is necessary. The project, which started in 2025, will be monitored by the European Commission, the ECB, ESMA and the competent national authorities. The transition will mainly affect the procedures and workflows of capital market participants. Hungarian capital market participants can contact their international representative bodies and the MNB for further guidance on related issues.

Results and Experience of Payment System Audits

As planned, the MNB conducted payment system audits at two banks in 2024. During the course of the year, a decision was made to extend the scope of these two audits, as well as the scope of a third audit that was commenced in 2023, in order to also cover the examination of new

legislation that had since entered into force (laws and MNB recommendations). Another audit was also launched on the basis of information obtained through monitoring activities, and two additional targeted investigations were started due to unexpected events (all of which were carried out at banks).

The MNB detected a wide range of infringements in the payment system audits conducted in 2024 (see Table 3).

Seven audits were closed in 2024, of which six were carried out at banks, while one was conducted at a branch of an EEA credit institution. Of these, in two cases a total of HUF 278 million in fines were imposed, in addition to the measures stipulated in the relevant decisions, and in one case an additional fine of HUF 12 million was also levied for failure to comply with the obligations in the relevant decision by the deadline.

As completion of the audit procedures takes a longer time, for the procedures started in 2024 the decision will be made in 2025, while the decisions in 2024 were for the audit procedures opened in the previous year or before.

Table 3

Total number of violations detected in the payment system audits in 2024, by type of violation

In relation to Act LXXXV of 2009 on the Provision of Payment Services:

III. Framework contract	pre-contract information provision and formal and substantive requirements of the framework contract [Articles 8(2), 10(1), 13 and 14(1)]	4
	amendment and termination of the framework contract [Article 17(4a)]	1
IV. Opening the bank account and control over the account	opening the bank account [Article 18(1)]	2
VII. Common rules for the provision of payment services	free-of-charge submission of instant transfer orders via a single-entry solution or a payment request [Article 36/E]	1
IX/A. Operational and security risks, certification	operational and security risks, certification [Article 55/C(1)]	1
XII. Order of the execution of transactions	rules for the order of execution of collection orders by official authorities [Article 60(1)]	2

In relation to MNB Decree No. 35/2017 (XII. 14.) on the processing of payment transactions:

III. General rules for the processing of payment transactions	starting and closing times of the working day and the final deadline for submission [Article 6(1)]	1
	receipt and identification of payment orders, the rejection of payment orders and payment transactions between payment service providers [Article 7(2), (4) and (6); Article 8]	4
	rejection of payment orders [Article 9(13)]	2
	queuing of payment orders, partial execution [Article 10(1) and (4)]	2
IV. Amounts transferred and made available, execution deadline and value date	execution of payment orders between payment service providers [Article 17(1)–(3)]	7
	value date of payment orders and payment transactions [Article 20(3)]	2
	crediting payment transactions [Articles 21(1), 23 and 26(3)]	20
VI. Detailed rules for each payment method	general rules for transfers [Article 30(1)]	1
	special rules for collections [Article 43(1) of the MNB Decree]	1
	special rules for transfers [Article 34(4)]	1

In relation to Government Decree No. 262/2016 (VIII. 31.) on access to bank accounts, parameters and fees of bank accounts:		
Conclusion of the framework contract for the bank account	disclosure obligation for customers [Article 6(1)]	1
In relation to Government Decree No. 263/2016 (VIII. 31.) on switching bank accounts:		
2. Switching between domestic bank accounts	obligations of the new payment service provider [Article 6]	1
8. No restriction can be applied on switching bank accounts	refusal of the customer's request to switch bank account [Article 16]	1
In relation to Government Decree No. 144/2018 (VIII. 13.) on certain issues of informing consumers of the fees related to bank accounts (hereinafter referred to as the "Fee Decree") and Commission Implementing Regulation (EU) 2018/33 of 28 September 2017 laying down implementing technical standards with regard to the standardised presentation format of the statement of fees and its common symbol (hereinafter referred to as the "Statement of Fees Implementing Regulation"):		
2. Providing the customers with the list of fees	providing the list of fees on the bank's website or, at the consumer's request, on paper or on another durable medium [Article 5(1)]	2
3. Statement of Fees	the provision, completeness, accuracy and detail of the Statement of Fees [Article 6(1) and (2) of the Fee Decree, and Articles 5(2), 6, 10(1), (3), (4), (6) and (8) of the Statement of Fees Implementing Regulation]	8
	details of the interest debited and credited to the account, further information [Article 6(1) of the Fee Decree, and Articles 14(1), 15(1) and 16(1) of the Statement of Fees Implementing Regulation]	4
	the order of the Statement of Fees [Article 6(5) of the Fee Decree]	2
In relation to Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication:		
I. General provisions	general authentication requirements [Article 2(2)]	2
	review of the security measures [Article 3(1)]	1
II. Security measures for the use of strong customer authentication	authentication code [Article 4(3) and (4)]	3
Exceptions to strong customer authentication	information related to the bank account [Article 10(1)]	1
	trusted beneficiaries [Article 13(1)]	1
Confidentiality and integrity of the personal authentication data of the users of payment services	general requirements [Article 22(1)]	1
	linking with the user of the financial services [Article 24(1)]	1
Common and secure open communication standards	obligations concerning the dedicated interface [Article 32(3) and (4)]	2
	exceptional measures for the dedicated interface [Article 33(3) and (4)]	2
	data exchange [Article 36(1) and (2)]	2
In relation to Regulation (EU) 2021/1230 of the European Parliament and of the Council of 14 July 2021 on cross-border payments in the Union:		
Inter-currency conversion fees for transfers	information on the total estimated amount of the transfer [Article 5(2)]	1
Cross-currency conversion fees for card-based transactions	sending information without undue delay [Article 4(5)]	1
In relation to Article 107(1)(d) of Act CCXXXVII of 2013 on Credit Institutions and Financial Enterprises, in relation to the management of risks arising in the provision of payment services:		
53. Corporate governance system – risk management	effective risk mitigation in the payment services – Article 107(1)(d) of the Credit Institutions Act	1
In relation to MNB Decree No. 54/2021 (XI. 23.) on the data reporting obligation to the central bank information system primarily for the performance of the Magyar Nemzeti Bank's basic tasks, in relation to the data reporting obligation under MNB ID code P76		
Completion of the data reporting obligation with MNB ID code P76, as required	incorrect data disclosure	1

Other Publications and Consultations on Payments and the Payment Systems

Series of Articles Published on the Basis of the Online Cash Register Database

Using the Online Cash Register (OPG) database, the MNB produced a series of articles on the share of electronic transactions in the physical purchases and the related trends, the first two parts of which were published in 2024 Q1. In this series, the Bank examined changes over time, use of the electronic infrastructure, and the differences by value category and area. The ratio of shops accepting electronic payments has steadily increased, and an increasing ratio of payments in these shops is made by some form of electronic payment. Shops where cash is the only means of payment only account for a negligible proportion of total payments.

Article on the Pricing of Payment Services

In July 2024, the MNB published a technical paper on the pricing of payment services,³⁰ in which it highlighted the problems of the current banking pricing structure and the potential negative effects of the continuous fee increases. The large fee increases seen in recent years are hindering the spread of electronic payments. As a result of the bank fee increases, in the spring of 2024, payment transaction fees increased by between 5 and 18 percent, which caused several thousand forints additional costs annually for some account packages. In addition, due to this pricing structure, more frequent use of the services automatically increases the costs for customers and makes domestic banks less competitive in international comparison. As set out in the Payment System Strategy, the MNB's objectives in the area of pricing are to reduce the cost level and cost differentials between customers; therefore, it continuously monitors this area and proposes further measures if necessary.

A Paper Entitled "Liquidity of the Payment System in the Light of the Changes in the Central Bank's Toolkit" was Published in the Financial and Economic Review

An analysis by Adrián Kollár published in the Financial and Economic Review, Vol. XXIII No. 1 examined the impact of the changes in the MNB's toolkit on the liquidity of payment system participants in the period of 2020 to the end of 2023 Q1. The starting point for the analysis was that the Bank's toolkit had undergone significant changes over the

period under review, in response to the challenges in recent years. The study focused on the impact of the changes in the Bank's toolkit on the liquidity of the payment system, showing why interbank liquidity was different from payment system liquidity, and which changes to the toolkit typically had a significant impact on the liquidity of the payment system.

3.6 MANAGEMENT OF INTERNATIONAL RESERVES

Objectives of the Reserves

Similar to other central banks, one of the MNB's core tasks, as laid down in the MNB Act, is to manage the country's foreign exchange reserves. The MNB holds foreign exchange reserves to perform several functions:

- to ensure a level of reserves that meets the expectations of market participants ("international collateral");
- to support monetary and exchange rate policy (providing intervention capacity);
- to provide foreign exchange liquidity to the banking system;
- to secure the government's foreign exchange needs for transactions.

The MNB regularly reviews the desirable level of reserves, and if necessary, takes steps to achieve the appropriate level within the permitted limits.

The level of the MNB's international reserves exceeded the reserve ratios most closely followed by the central bank and most investors throughout 2024. Of these, the MNB pays particular attention to the Guidotti-Greenspan rule to ensure that its reserves safely exceed the level of short-term external debt.

Among the transaction-related objectives, supporting government debt management and continuously meeting the foreign exchange needs of budgetary organisations remained the most important in 2024. Transfers received from the EU also flow in through the MNB and were a source of foreign exchange reserves in 2024 and will continue to be in the coming years. The above transaction-related objectives were properly met in 2024.

³⁰ [István Nemeckó – Kristóf Takács: Large fee increases hamper the development of the payment system | MNB.hu](#) (in Hungarian only).

Size of the Reserves

The level of Hungary's international reserves increased by about EUR 3.2 billion in 2024, to reach EUR 44.6 billion at the end of 2024.

The increase was mainly driven by the issuance of foreign currency bonds and the drawdown of foreign currency loans by the Government Debt Management Agency (ÁKK). The ÁKK issued a 12-year USD 2.5 billion bond and a 5.5-year EUR 1.5 billion green bond in January 2024, followed by the issuance of USD 500 million under the ECP (Euro Commercial Paper) programme in March 2024, and the issuance of a 3-year and a 10-year Japanese yen-denominated Samurai bond for around EUR 250 million in September 2024.

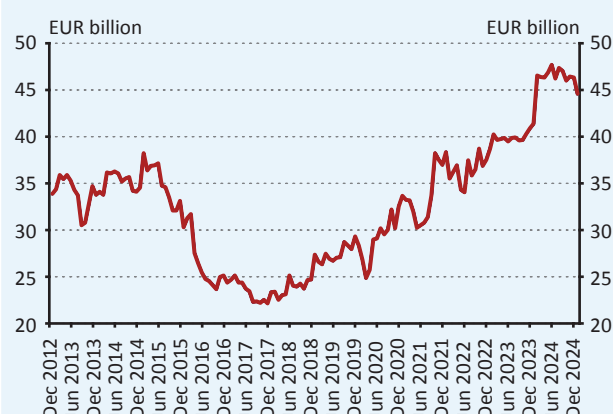
A net transfer of approximately EUR 1.9 billion was received from the European Commission in 2024.

Growth was also driven by the revaluation of foreign currency assets denominated in currencies other than the euro and of gold reserves in euro, which amounted to around EUR 1.8 billion.

This was offset by debt repayments by the ÁKK (the bond maturing in March 2024 with an original nominal value of USD 2 billion, the ECP maturing in September 2024 with a nominal value of USD 500 million and the Panda bond maturing in December 2024 with a nominal value of CNY 1 billion, as well as foreign currency loan repayments).

The foreign currency expenses of the Hungarian State Treasury (MÁK) reduced the reserves by around EUR 3 billion.

Chart 6
International reserves



Financial Performance and Risks of Foreign Exchange Reserves

In the performance of its statutory principal tasks, and in particular, in the management of the country's international reserves, the MNB is necessarily exposed to financial risks. The key principle followed by the Bank is that the level of risks taken should be in line with the primary objectives of its operations, that the extent of the risk should be known and that the risk-taking should be conscious and should be limited in line with its risk-taking capacity. Foreign exchange reserve management must satisfy the threefold objective of liquidity, safety and yield, which means that the MNB strives to achieve the highest possible level of yields, while maintaining a predefined, low level of risks and the necessary liquidity. The MNB is also considering the possibility of integrating climate risk principles into its reserve management activities, without jeopardising the primary objectives of reserve management.

As in relation to its other core tasks, the MNB's Monetary Council is the main decision-making body for the management of foreign exchange reserves, setting the objectives and requirements related to the foreign exchange reserves, such as the level and liquidity of the reserves, the optimisation currency, the risk-taking strategy and the key quantitative strategic parameters for investing the reserves. The operational decision-making powers are exercised and the foreign exchange reserve management strategy is implemented by the MNB's Executive Board, within the framework set by the Monetary Council. The Executive Board approves the limits that provide the framework for risk-taking: the maximum deviations of the risks of the reserve portfolios from the benchmarks, the counterparty limits and the range of investment instruments allowed in the reserve management.

The two main pillars of reserve management are the benchmark system and the limit system. Independent performance measurement is also an important element of the risk policy. In order to measure the success of portfolio management activities, the performance of each reserve portfolio is compared to the performance of a benchmark portfolio. The benchmark portfolios show the yield of a passively managed portfolio representing a broad market segment with the same investment parameters. The performance of the foreign exchange reserve management activity is reported against these benchmark portfolios. The benchmarks, which reflect the MNB's risk-return preferences and are used to measure the performance of the portfolios, are maintained by the risk management unit that is independent of portfolio management.

The main risk categories related to foreign exchange reserve management activities are market risk, liquidity risk and credit risk (settlement and counterparty risk). The tolerable level of financial risks related to foreign exchange reserve management activities is restricted by various limits. In line with the conservative reserve portfolio management that is typical of central banks, the MNB applies a strict limit system that takes into account market indicators and other indicators as well, in addition to the required high level of credit ratings. The foreign exchange liquidity needs of monetary policy instruments are also taken into account in the MNB's reserve management activities. In assessing and limiting the risk exposure of foreign exchange reserves, the MNB also considers climate risk aspects, in addition to traditional risk categories.

In the course of its foreign exchange reserve management activities, the MNB applies various risk minimisation techniques, in order to ensure that the risks assumed are in line with its risk tolerance. For derivative instruments, the MNB enters into ISDA (International Swaps and Derivatives Association) and related CSA (Credit Support Annex) contracts with its counterparties, which keep the potential credit risk exposure to the counterparty low, by means of margining. In the case of repos (repurchase agreements) governed by GMRA (Global Master Repurchase Agreement) contracts, the required margining also helps to limit risks. For foreign exchange transactions, the MNB settles its transactions in the CLS³¹ system, in line with international best practice, in order to minimise its settlement risks.

In 2024, uncertainty continued to be the main driver of the markets and exchange rates. In addition to the prolonged Russia-Ukraine war, the war between Israel and Hamas in the Middle East, which began in 2023 and escalated in 2024, spread to neighbouring Lebanon and to Iran, and the protracted civil war in Syria toppled the ruling Assad regime. In Europe, first the German and then the French governments collapsed, and France was downgraded to "Aa3" by Moody's. In the US, the developments in the presidential election and the anticipated actions of President Donald Trump caused uncertainty. Since the second half of the year, as a result of easing measures by major central banks, short-term yields in the relevant markets typically declined, while longer maturities saw yields rise, leading to a reduction in the inversion of yield curves. The Fed cut interest rates in three steps in 2024, lowering the target range for the base rate to 4.25–4.50 percent by the end of the year from 5.25–5.50 percent at the beginning of the year. The ECB reduced its base rates

four times during the year, trimming the refinancing rate and marginal lending facility rate to 3.15–3.4 percent from 4.5–4.75 percent at the end of 2023.

As a result of market developments, most of the markets relevant for reserve management saw yields fall on short-term maturities and rise on longer maturities, with a reduction (or disappearance) of curve inversions in 2024. The fall in yields improves the performance of bond portfolios in the short term, while in the medium term, falling yields worsen performance by reducing expected yields. In the euro area, in 2024 the yield curve shifted significantly downwards by 90–110 basis points in the one year or less maturity segment, while longer maturities saw an increase of 20–30 basis points. Yields on US Treasury bonds fell by nearly 100 basis points for short maturities and rose by 50–75 basis points for longer maturities, bringing the previously inverted US treasury yield curve back to an upward slope. GBP yields, which are also relevant for reserve management, followed a similar trend. By contrast, the Chinese market saw a decline in yields across the curve, while the Japanese yen market saw a rise in yields.

The gold price in USD rose from 2,063 to 2,626 over the year, driven by geopolitical tensions (e.g. Russian-Ukrainian war, Gaza conflict), inflation and interest rate expectations, central bank (especially Fed) actions, uncertainties related to the US presidential election and central bank purchases. The US dollar strengthened significantly against the euro, to near parity, from 1.10 at the beginning of 2024 to 1.03 by the end of the year.

In 2024, the MNB was once again prepared for the geopolitical risks and the high degree of uncertainty in an elevated inflation environment. The level of the MNB's foreign exchange reserves was substantially above the relevant benchmarks. The international safety net of bilateral swaps and repurchase agreements, previously established and continuously renewed, provides additional foreign exchange liquidity (with the potential to increase foreign exchange liquidity by more than EUR 10 billion in the short term) and increases the MNB's room for manoeuvre, while maintaining a safe level of international reserves, reducing external and internal vulnerabilities. The MNB's international safety net of bilateral swaps and repurchase agreements includes the following elements:

- Repo contracts with the ECB and the Bank for International Settlements (BIS),

³¹ Continuous Linked Settlement.

- Access to the Fed (Federal Reserve) repo facility,
- Currency swap agreement with the People's Bank of China (PBoC).

The MNB, like most central banks, continuously monitors developments that pose a risk to the level and liquidity of its reserves, and regularly reviews the framework for the investment of its reserves.

The MNB continues to apply a conservative approach to reserve management: with strict liquidity limits, the interest rate risk of foreign exchange reserves is relatively low, while the credit quality of the reserve portfolios remains high.

In 2024, the MNB managed its foreign exchange reserve bond exposures in eight currencies (EUR, USD, JPY, GBP, AUD, CNY, PLN, CZK), held in several portfolios. The MNB's main foreign exchange exposure is in EUR, while other currency/EUR cross rate risks are hedged using derivative instruments. The holding of foreign currency assets other than EUR is justified by the need to achieve a higher level of diversification, and in the case of USD, to ensure higher liquidity. The MNB actively manages a total of seven portfolios in EUR, USD, GBP and AUD. The Japanese yen, Czech koruna, Polish zloty and Chinese yuan portfolios are managed as index-linked portfolios, which mainly include government securities, in strict adherence to the benchmarks. From the end of 2012, the MNB's investment strategy also includes US agency mortgage-backed securities (MBS), through third-party asset managers and custodians. The strategic average duration (target duration) of the reserve portfolios remained stable at around 1 year, but the green bond and the MBS exposures had the highest duration during the year: 4.5 to 6.5 years. The liquidity required to meet the monetary policy objectives was available throughout the year, and there were no significant credit risk events affecting the MNB.

The EUR-denominated credit-risk-free portfolio forms the backbone of the MNB's foreign exchange reserves, which can only include highly rated government securities, government-guaranteed securities and (supranational) issues by international institutions. In addition to the above, the EUR investment portfolio – and generally the investment portfolios – may also include highly rated corporate or bank issues and covered securities; government securities are typically included in this portfolio only to adjust the maturity structure. The EUR exposure is the highest in the reserves, followed by the combined share of the USD portfolios, where – along with the investment portfolio – the considerable proportion of agency MBS exposures deserves special mention.

In 2024, the MNB took additional steps to understand climate risks and to take into account the related aspects in its reserve management activities. The MNB published its TCFD report on its climate exposure, including an analysis of the climate risks of its reserves, for 2024 as well. The TCFD report is to be further improved and published annually, providing guidance to banks. Furthermore, the MNB published its Sustainable and Responsible Investment Charter at the end of 2023, which expresses the Bank's commitment to making reserve management more environmentally sustainable and sets medium- and long-term targets for "greening" its reserve management activities, without compromising the traditional objectives of holding reserves. In line with this, the MNB decided to double the size of its dedicated green bond portfolio (to EUR 500 million), which was achieved by the end of 2024. The risk-return parameters of the green bond portfolio are very similar to those of the other reserve items. Given their nature, however, due to the longer time horizon of green investments, there is a difference in the interest rate risk compared to other types of bond investments in the foreign exchange reserve. The primary considerations in the investment decisions are the traditional risk-return characteristics, in addition to green certification.

In May 2024, the Monetary Council decided to increase the MNB's gold reserve by 15.5 tonnes to 110 tonnes. As a result, Hungary has the second highest gold reserves per capita in the CEE region.

Furthermore, in 2024, the Monetary Council decided to offer a contribution to the PRGT DIA (Poverty Reduction and Growth Trust Fund Deposit and Investment Account). In doing so, Hungary contributed SDR 11 million through the yield on the specific investment placed with the IMF through the MNB.

The MNB recorded a return of 7.08 percent on its gold and foreign exchange reserves in 2024. The performance of the bond portfolios, in their own currency, was 37 basis points above the benchmark.

The volatility of yields remains a risk to the future performance of the foreign exchange reserves. A revaluation loss due to the devaluation of existing bonds – as a result on increasing yields – may reduce the performance of the reserves in the short term. At the same time, in the medium term, the impact of yield increases on the MNB's income is positive, due to the short duration of the reserves, as the maturing reserve items can be reinvested at the higher yields. With regard to gold as a safe-haven asset, its price volatility should be mentioned, which may affect the performance on the reserves in the short term.

3.7 CASH LOGISTICS ACTIVITIES

Total Cash in Circulation

As of 31 December 2024, total cash in circulation amounted to HUF 8,897.5 billion,³² reflecting an increase of 10.3 percent, or HUF 827.7 billion in nominal value, compared to the end of 2023. Cash in circulation was increasing throughout the year, after filtering out seasonal effects. The growth in cash in circulation was mainly driven by an increase in precautionary cash demand, rising real wages and falling interest rates. The rise in precautionary cash demand may be explained by the persistently high level of uncertainty among households, which is above the level seen in the EU and in other CEE countries. The increase seen in households' cash demand in 2024 was also reflected by the increase seen in the ATM cash withdrawal and cash deposit data.

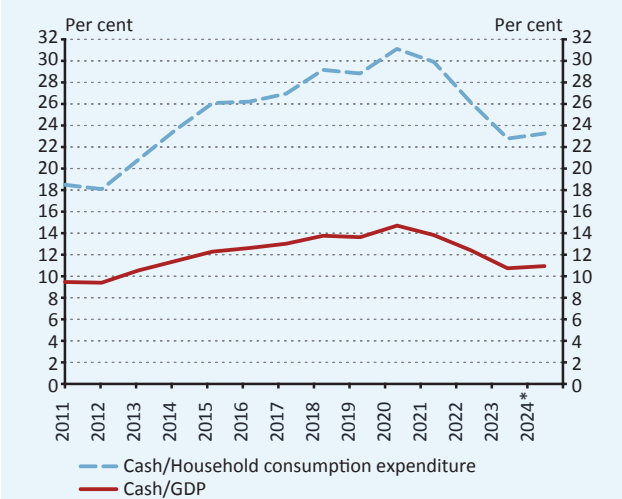
However, as a contrary effect, the increase in cash demand was mitigated by the rising penetration of electronic payments. Cash use for transactions continued to fall in

2024, with a different pattern shown in each county, which can be explained by regional differences in income and cash use preferences.

Total cash in circulation as a share of GDP and household consumption expenditure showed a slight increase again in 2024, breaking the downward trend from previous years (Chart 7). At the end of 2024, total cash in circulation was equivalent to 11.0 percent of GDP and 23.3 percent of consumption. The increase was mainly due to the growing precautionary cash demand by households.

Regarding the breakdown of cash in circulation by banknote denomination, the volume of all denominations increased in 2024. The largest increase was seen in the number of HUF 20,000 banknotes, which grew by 12.7 percent in 2024. The number of HUF 1,000 banknotes in circulation at the end of 2024 was 8.2 percent higher year-on-year, while the number of HUF 500 banknotes was 7.6 percent higher. The number of HUF 5,000 banknotes increased by 7.5 percent, the number of HUF 10,000 banknotes by 3.4 percent and the number of HUF 2,000 banknotes by 1.4 percent.

Chart 7
Total cash in circulation as a percentage of annual GDP and household consumption



* 2024 GDP data, while the household consumption data are MNB estimates.

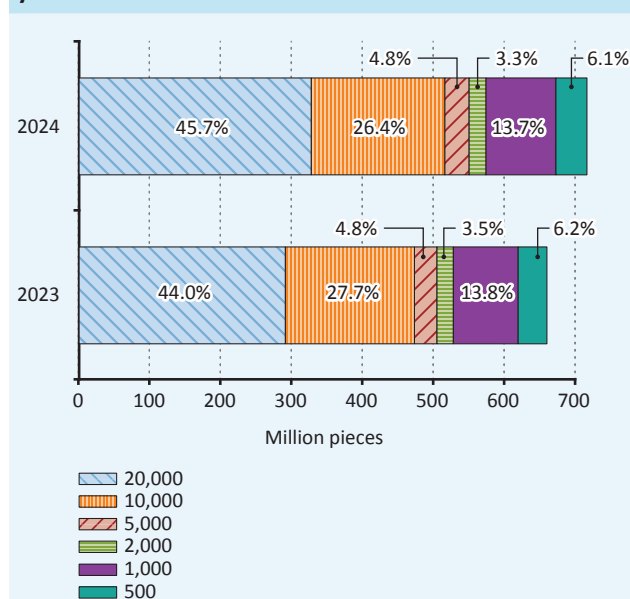
The volume of HUF coins in circulation increased by 4.9 percent year-on-year. The HUF 50 and HUF 20 coins saw the biggest growth, with increases of 5.6 percent and 5.5 percent, while the HUF 5 and HUF 10 coins saw the lowest growth, with increases of 4.7 percent and 4.3 percent. The composition of coins in circulation by denomination is stable, with the ratio of each denomination changing by less than 1 percentage point over the 5-year period between 2019 and 2024 (Table 4).

As a result of the above developments, 716.8 million banknotes were in circulation on 31 December 2024, of which the HUF 20,000 and HUF 10,000 denominations had the largest shares, with 45.7 percent and 26.4 percent, respectively. The two highest denomination banknotes continued to dominate cash circulation, together accounting for 72.1 percent and 96.1 percent of the total number and value of banknotes in circulation at the end of 2024. The HUF 2,000 and HUF 5,000 banknotes had the lowest rates, at 4.8 and 3.3 percent, respectively, at the end of 2024 (Chart 8).

³² This excludes withdrawn banknotes that are still redeemable, which are included in total cash in circulation shown on the MNB's balance sheet. Cash in circulation shown on the MNB's balance sheet was HUF 8,992.1 billion, up HUF 824.0 billion or 10.1 percent year-on-year.

Table 4**Banknotes and coins in circulation (data for 31 December 2024 and 31 December 2023)^{33,34}**

Banknotes and coins	Value, million pieces		Change	
	2023	2024	Million pieces	%
20,000 forint	290,8	327,6	36,9	12,7
10,000 forint	182,8	189,0	6,3	3,4
5,000 forint	31,9	34,3	2,4	7,5
2,000 forint	23,2	23,5	0,3	1,4
1,000 forint	90,9	98,4	7,5	8,2
500 forint	40,8	43,8	3,1	7,6
Total banknotes	660,4	716,8	56,4	8,5
200 forint	193,6	203,1	9,5	4,9
100 forint	247,3	260,2	13,0	5,2
50 forint	242,5	256,0	13,6	5,6
20 forint	451,9	476,6	24,7	5,5
10 forint	493,4	514,6	21,2	4,3
5 forint	824,4	863,1	38,7	4,7
Total coins	2 453,1	2 573,7	120,6	4,9

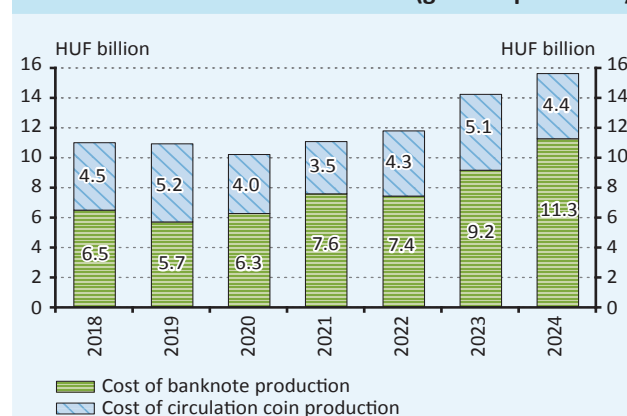
Chart 8
Breakdown of banknotes in circulation, by number at year-end

The breakdown of banknotes in 2024 reflected the polarisation seen in previous years, strongly influenced by precautionary cash demand and the increase in the number of ATMs offering a cash deposit facility, through the composition of the banknotes placed in the machines.

Banknote and Coin Production

It is the central bank's function to have banknotes and coins produced, in order to meet cash circulation needs, and to replace worn-out money, which is therefore removed from circulation or destroyed.

The MNB's gross expenditure in relation to cash production amounted to HUF 15.7 billion in 2024, which was HUF 1.4 billion higher than in the previous year.

Chart 9
Production of banknotes and coins (gross expenditure)

³³ Commemorative coins and banknotes issued by the MNB are not included.

³⁴ Subtotals and totals are separately rounded, and thus the sum of the subtotals may differ from the totals.

Cash Distribution

In 2024, the MNB handled a total of HUF 3,940.9 billion in cash transactions for its customers, credit institutions and the Post Office, as part of which 240.4 million banknotes were provided and 184.7 million banknotes were received from customers. Changes in the macro environment and institutions' cash demand were reflected in the structure of the Bank's cash transaction volume in 2024.

The MNB removed and replaced 78.1 million unfit banknotes in 2024 with new, high-quality banknotes. It was mainly the HUF 1,000, HUF 500 and HUF 10,000 banknotes, which are used for transactions, that were removed.

Activities to Prevent and Reduce Money Counterfeiting

In line with the trend from previous years, the counterfeiting of HUF banknotes is still not significant, with only 808 counterfeit banknotes detected in the cash circulation, with a total damage of HUF 9.3 million caused in 2024. As in previous years, the counterfeiting of higher denominations (HUF 10,000 and 20,000) was also typical in 2024, accounting for 94 percent of all counterfeits.

Table 5
Breakdown of counterfeit HUF banknotes by denomination, in 2024

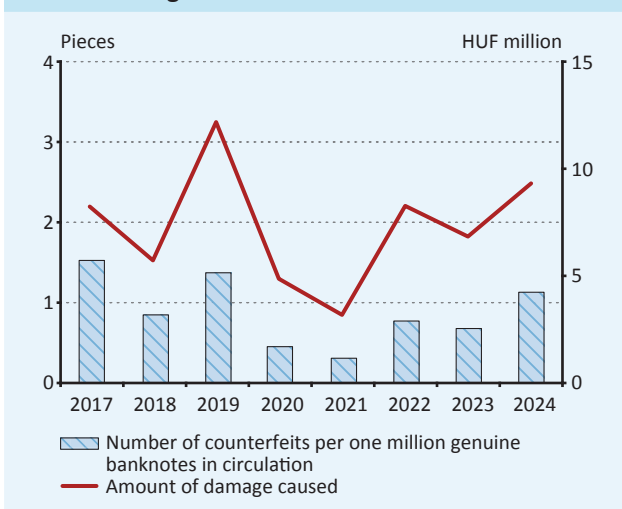
Denominations	500	1,000	2,000	5,000	10,000	20,000
Breakdown (%)	0.5	4.0	0.5	1.0	74.0	20.0

The number of counterfeit banknotes per million genuine banknotes in circulation during the year was 1.1 in 2024, which is a very good figure by international standards.

No significant changes were seen in counterfeiting methods, which are still characterised by the use of office copiers (colour copiers, printers). Counterfeits can be detected by simple inspection (by touch, holding up to the light or by moving the banknote) if the characteristics of genuine banknotes are known, and by a combined UV-A and UV-C lamp inspection by cashiers.

The MNB's experts identified 1,212 counterfeit banknotes in 2024, of which 994 were counterfeit EUR banknotes. With regard to total domestic cash transactions, the rate of counterfeit money is not significant.

Chart 10
Number of counterfeits per million genuine banknotes and the damage caused



The MNB conducted 45 free banknote awareness training programmes in 2024, with almost 820 participants.

Regulation of Cash Transactions

The Banknote Decree³⁵ was amended in February 2024, to include additional rules on the restriction and closure of bank branches, in order to facilitate uniform application of the law. By clarifying the requirements for the filling up and availability of ATMs, the MNB increased the conditions guaranteeing the availability of the ATM infrastructure, which is the primary channel for banknote distribution. A new provision was also added to the Banknote Decree, to facilitate access to cash for the rural population, and at the same time to promote compliance with the requirements set for credit institutions. The new provision requires the credit institutions issuing the largest number of cards, i.e. those with a large customer base, to operate a certain percentage of ATMs with a cash withdrawal function in towns and cities, and the amendment allows them to do so not only in cities but also in other settlements, if justified by customer demand, traffic data or population size.

The MNB monitors the implementation of the new provisions of the Banknote Decree and thus how the objective of maintaining the smooth functioning of cash circulation is met. The Hungarian ATM network expanded by 312 machines to 4,451 machines in 2024, compared to 4,139 ATMs at the end of 2023. Thus, by the end of 2024, the number of ATMs returned to its pre-pandemic level, and

³⁵ MNB Decree No. 1/2023 (I. 17.) on the processing and distribution of banknotes and on technical tasks related to the protection of banknotes against counterfeiting. Prior to the issue of the Decree, in 2022 the MNB was given a statutory mandate to define the operating conditions for the cash infrastructure operated by credit institutions and the Post Office.

the network coverage has become more robust and better aligned with customer needs.

The MNB issued new decrees on imitation banknotes and coins³⁶ with effect from 5 October 2024, as part of its legislative review function. The professional reason for the issue of the decrees was primarily the amendment of the MNB Act by Act LXXVII of 2022, which extended the MNB's regulatory, licensing and control powers over imitations of HUF banknotes and coins to also cover the imitations of HUF banknotes and coins already withdrawn from circulation and no longer convertible into legal money. According to the new legislation, HUF coins withdrawn from circulation and non-convertible may only be reproduced into an imitation without the MNB's permission from precious metal base material if they bear the inscription "imitation" – or its abbreviation clearly indicating the imitation character – or from other metal base material not classified as precious metal, if in addition to this inscription or abbreviation, the size and material composition of the HUF coin is also different from that of standard HUF coin on which the imitation is based. The new regulation on imitations of HUF banknotes extends the scope of application of the MNB Decree and its interpretative provisions, and it is also stipulated that the authorisation obligation applies both to the production of the imitation banknotes and to the actual date of use.

Cash System Audits

In 2024, the MNB checked compliance with the provisions of the MNB Act on the issuance of money, the Banknote Decree, and the provisions on cash distribution and cash processing related disclosure obligations.³⁷ The MNB commenced audits at six credit institutions and EEA branches of credit institutions, and two cash processing organisations, of which three were closed down by the MNB in 2024, and three in early 2025. As part of its monitoring activities, the MNB also checked compliance with the revised list of infrastructure network elements critical for cash distribution, the assessment of operational risks to cash distribution and events threatening the continuity of cash supply, and the revised contingency plan for dealing with emergency situations at three other credit institutions and one payment service provider.

Of the three procedures that were opened and closed in 2024, measures such as a warning letter were applied,

requesting that a related training be held and that full compliance with the legislation be ensured in the future. In one case, the MNB ended the audit procedure with an administrative order, as no infringement was identified.

An audit procedure launched in 2023 was also closed by the MNB in 2024, during which the MNB sent a warning letter to the audited institution to hold a training and to ensure full compliance with the legislation in the future.

During the audit procedures closed in 2024, the MNB found violations of certain rules³⁸ on the distribution of banknotes, the operation of banknote validation machines, the exchange and conversion of HUF banknotes and the handling of incomplete and damaged HUF banknotes.

Issuance of Commemorative Coins, and Commemorative Coins in Circulation

According to the MNB Act, only the MNB is entitled to issue banknotes and coins, including commemorative banknotes and coins. The MNB issues commemorative coins to commemorate historical, cultural and scientific anniversaries of general social significance, to commemorate contemporary events and to honour famous people, who are national role models. In order to promote the educational role of the commemorative coins as widely as possible, the MNB also started issuing non-ferrous versions of commemorative precious metal coins in 2014, with the same design but a lower denomination.

In 2024, the Bank issued 31 commemorative coins in 17 themes, of which three were gold, eleven silver and 17 non-ferrous (four in separate themes and 13 as non-ferrous versions of precious metal commemorative coins). Six previously started series continued, and no new series were started. The [collector coin issuance programme in 2024](#) can be found on the MNB's website, including images of the coins.

Commemorative coins used in circulation were also issued in two themes in 2024: two million [HUF 100 commemorative coins](#) to mark the 100th anniversary of the founding of the Magyar Nemzeti Bank, and one million [HUF 200 commemorative circulation coins](#) in honour of Lajos Batthyány.

³⁶ MNB Decree No. 42/2024 (IX. 19.) on the imitations of HUF and EUR coins, and MNB Decree No. 43/2024 (IX. 19.) on the imitations of HUF and EUR banknotes.

³⁷ Chapter 16 of the MNB Act, the Banknote Decree, and the provisions of MNB Decree No. 54/2021 (XI. 23.) on the data reporting obligations to be fulfilled primarily to ensure that the Magyar Nemzeti Bank can perform its primary tasks, related to the Bank's information provision system, which were in force in 2024, concerning the disclosures with MNB ID codes P23, P24, P26, P50 and P81.

³⁸ Article 23(8) of the MNB Act, and Article 4(2) and (4), Article 5(1), (3) and (8), Article 8(1), Article 29(4), Article 31(1) of the Banknote Decree.

Table 6

The MNB's 2024 collector coin issuance programme*

Theme and date of issue of the collector coin	Specification						
	Material used	Weight g/pc	Diameter/size mm	Edges	Design	Nominal value (HUF)	Total number issued
Pécs, Baranya County "Hungarian Counties and County Seats" series – item No. 2 ①Date of issue: 5 March 2024	Ag .925	40	42	fine-grained with edge lettering	PP	20,000	6,000
	Cu90Zn10	29.50			patinated	3,000	10,000
Kincsem ①Date of issue: 12 March 2024	Ag .925	31.46	39.60 x 26.40 rectangular	smooth	PP	15,000	5,000
	Cu75Ni25	27			BU	3,000	7,000
XXXIII. Summer Olympic and XVII. Paralympic Games ①Date of issue: 6 May 2024	Ag .925	24	37	milled	PP	15,000	5,000
	Cu75Ni25	23.70			BU	3,000	7,000
Blessed Sára Salkaházi ①Date of issue: 11 May 2024	Ag .925	31.46	38.61	milled	PP	15,000	5,000
	Cu75Ni25	30.80			BU	3,000	5,000
100 years of the Magyar Nemzeti Bank ①Date of issue: 16 May 2024	Ag .925	100	60	milled (100 reeds)	PP	50,000	6,000
	Cu75Ni25	30.80	38.61	milled	BU	3,000	8,000
Katalin Karikó "Nobel Prize Winners of Hungarian Descent" series – item No. 8 ①Date of issue: 19 June 2024	Ag .925	12.50	30 x 25 oval	smooth	PP	7,500	6,000
	Cu75Ni25	10.30			BU	3,000	6,000
Ferenc Krausz "Nobel Prize Winners of Hungarian Descent" series – item No. 9 ①Date of issue: 19 June 2024	Ag .925	12.50	30 x 25 oval	smooth	PP	7,500	6,000
	Cu75Ni25	10.30			BU	3,000	6,000
Hungarian Presidency of the Council of the European Union – 2024 ①Date of issue: 1 July 2024	Ag .925	12.50	30	milled	PP	7,500	5,000
	Cu75Ni25	12.50			BU	3,000	5,000
50th years of the Rubik's Cube™ ①Date of issue: 13 July 2024	Cu89Al5Zn5Sn1	20	37.18 hexagonal	smooth	Proof-like	3,000	20,000
Saint Kinga of Hungary "Saints of the Árpád dynasty" series – item No. 4 ①Date of issue: 24 July 2024	Ag .986	6.982	22	smooth	PP	100,000	2,000
	Cu75Ni4Zn21	4.20			BU	3,000	5,000
Royal Guard "National Hauszmann Programme" series – item No. 3 ①Date of issue: 20 August 2024	Cu89Al5Zn5Sn1	20	37.18 hexagonal	smooth	Proof-like	3,000	20,000
Benedictine Archabbey of Pannonhalma "National Memorial Sites" series – item No. 11 ①Date of issue: 28 August 2024	Cu90Zn10	18.40	37	milled	patina added	3,000	10,000
Lajos Batthyány and the 13 Martyrs of Arad ①Date of issue: 6 October 2024	Ag .925	77.76	52.50	milled	PP	30,000	6,000
	Cu75Ni25	76.50			BU	3,000	8,000
The Hungarian Paediatricians Association ①Date of issue: 14 November 2024	Cu75Ni4Zn21	16	34	milled	Proof-like	3,000	10,000
The Golden Florin of Ladislaus V "Hungarian Gold Florins from the Middle Ages" series – item No. 8. ①Date of issue: 20 November 2024	Ag .986	13,964	20	smooth with edge lettering	brilliant uncirculated	50,000	500
		3,491		smooth	brilliant uncirculated	50,000	2,000
	Cu75Ni4Zn21	2.70			BU	3,000	5,000
George Olah "Nobel Prize Winners of Hungarian Descent" series – item No. 9 ①Date of issue: 10 December 2024	Ag .925	12.50	30 x 25 oval	smooth	PP	7,500	6,000
	Cu75Ni25	10.30			BU	3,000	6,000
150 Years of the Hungarian Chamber of Notaries ①Date of issue: 12 December 2024	Ag .925	31.46	38.61	milled	PP	15,000	5,000
	Cu75Ni25	30.80			BU	3,000	5,000

*Colour coding:

 gold
 silver
 non-ferrous metal

3.8 STATISTICAL SERVICE

For the purpose of fulfilling its duties as specified in the MNB Act, the MNB collects statistical information and publishes the statistics thus compiled for the analysis of financial developments, the preparation of monetary policy decisions, oversight of the operation of the payment and settlement systems to ensure the smooth execution of payments with a view to supporting the stability of the financial system, and for the performance of micro and macroprudential supervisory activities.

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 and thematic publications.

Six new MNB decrees on data reporting were issued in 2024: the MNB decree on the data reporting required for the fulfilment of the MNB's basic tasks,³⁹ the MNB decrees on the data reporting requirements meant to assist the MNB in performing its supervisory tasks,⁴⁰ which both entered into force on 1 January 2025, while the new MNB decree on the data reporting requirements of the data on deposit transactions, loans taken, credit lines received and funds raised under repo transactions⁴¹ will enter into force on 1 June 2025.

Due to changes in the regulatory environment, an interim amendment to the MNB decree on data reporting⁴² was issued in June 2024, which affects the MNB decrees on data reporting for capital market organisations⁴³ and insurance market organisations.⁴⁴

Granular Data Collections, Register of Entities

2024 was a milestone for the Central Bank Credit Register (HITREG), which has now been in operation for five years: on the one hand – taking into account the needs of the data reporting entities – the structure of the data model remained stable, as the MNB decree requiring data

reporting was not amended in 2024, and on the other hand, as a result of several years of preparatory work, some previous data collections ordered by the Bank, and other supervisory authorities and partner bodies are no longer needed, as they were replaced by data of HITREG. The stability of the data model has greatly contributed to the fact that resources can be focused on further improvement of data quality and on the replacement of other data collections.

The range of external and internal data transfers and publications based on HITREG continued to expand. A third statistical publication based on HITREG was also introduced in 2024, presenting quarterly corporate project finance loan data in a time series format with interactive graphs. The content and format of the other two HITREG-based publications⁴⁵ were also slightly extended to meet user needs.

In response to the growing demand seen for many years, in 2024 the MNB decided to also require data on deposits and certain other liabilities-side data (BETREG) on a quarterly basis. From June 2025, BETREG will be imposed on the entire credit institution sector by an MNB decree, with an extended information content. Under the new provisions, the relevant data must be provided on a monthly basis.

The sectoral classification of economic activities (NACE codes) was revised from 1 January 2025. The introduction of the new system and its implementation in the data collections was carried out in close cooperation with the Hungarian Central Statistical Office, with the simultaneous information and involvement of the data providers.

Supervisory Statistics

In 2024, the range of EU-level standardised and mandatory reporting requirements was further extended. In addition to the previous reporting requirements, ESG (Environment, Social, Governance) reports, remuneration data including gender pay gap data, as well as reporting regarding interest rate risk in the banking books were required to be submitted for the end of 2023 by the nominated banks.⁴⁶

³⁹ MNB Decree No. 54/2024 (XII. 3.).

⁴⁰ MNB Decree No. 55/2024 (XII.3.), MNB Decree No. 56/2024 (XII.3.), MNB Decree No. 57/2024 (XII.3.), MNB Decree No. 58/2024 (XII.3.).

⁴¹ MNB Decree No. 59/2024 (XII. 3.).

⁴² MNB Decree No. 20/2024 (VI. 10.).

⁴³ MNB Decree No. 58/2023 (XI. 24.).

⁴⁴ MNB Decree No. 53/2022 (XII. 22.).

⁴⁵ "Changes in the household loan portfolio" and "LTV ratio of household mortgage loans at the time of the loan approval".

⁴⁶ IRRBB – Interest rate risk in the banking book.

The time series and statistics compiled from the data reported by financial institutions for supervisory purposes were published on the MNB's website within the deadlines set in the publication calendar. The interactive, user-friendly graph presenting the non-consolidated income statement of credit institutions was extended with further details. The annually published Golden Book was upgraded to show the time series by sectors, and the data were illustrated in interactive charts, with the publications thus allowing an easier analysis of the data. The modifications caused by the CRR3 to the EU-level standardised supervisory reporting were discussed and finalised in the EBA working groups, which will enter into force from 2025 Q1.

The provisions set out in MNB Recommendation No. 19/2022 (XII. 1.),⁴⁷ effective from 1 January 2024, contribute to the consistent and timely fulfilment of the increasingly more complex reporting obligations of credit institutions and further improve data quality. The related self-assessment was completed by the credit institutions in a timely manner.

In order to measure credit institutions' compliance with the data provision requirements, the MNB developed a data quality dashboard, which uses the queries for statistical data available in the data collection system. Given the large number of queries, the queries are assisted by a processing robot.

The data quality of EU-level standardised supervisory reporting data is adequately ensured on the Hungarian side, thanks to which the quality of the Hungarian data sent by the MNB was deemed to be outstanding within the EU.

The insurance sector and funds-related publications based on the quarterly disclosures were published by the MNB on its website in accordance with the applicable publication deadlines in 2024. In the case of the insurance sector, the taxonomy-based data collection applicable to both quarterly and annual data submissions was completed following revision of the EU-level harmonised supervisory reporting requirements that was launched in 2019 and coordinated by the European Insurance and Occupational Pensions Authority (EIOPA), which is now aligned with the newly established provisions.

In the case of fund managers, the mid-year amendment of Government Decree No. 78/2014 (III. 14.) necessitated

a rapid transition both on the part of data providers and the MNB. As a result of changes in the classification system based on investment policy, it became necessary to amend the relevant MNB Decree⁴⁸ governing data reporting, and both the published time series and their underlying methodology were revised. Among EU-level data reporting obligations, the review of the EMIR reporting requirements covering derivative transactions was concluded in 2024, leading to an expansion in the scope of reportable data. The MNB successfully carried out the IT developments required for the implementation of these changes.

Changes in the Publication of MNB Statistics

From January 2024, prior to the publication of *"Balance sheets of monetary financial institutions and monetary aggregates"* on the 23rd working day of the month following the reference month, the credit institutions' preliminary balance sheets and profit and loss statements are made available earlier, on the 18th working day of the month following the reference month, in the publication entitled *"Preliminary balance sheets and profit and loss statements of the credit institutions"*, thus providing external users with preliminary information on the credit institution sector five working days earlier.

The time series in the Payment system publication published on 17 June 2024 already included the following additional information for the payment accounts held by Hungarian payment service providers: account number, account owners and how the accounts were used, under the infrastructure time series. The following new data were added to the Frauds time series: attempted and successful frauds committed with cards issued in Hungary and in the Hungarian card acceptance network, and the details of successful frauds committed in the electronic payment transactions, by type of fraud.

Cooperation with the Hungarian Central Statistical Office

In January 2024, the MNB published *"Financial data of households"*, which provides a detailed description of the characteristics and distribution of Hungarian households' wealth, income and consumption, based on the results of the household wealth survey *"What do we live from?"*

⁴⁷ Recommendation No. 19/2022 (XII. 1.) of the Magyar Nemzeti Bank on the development, operation, framework and control functions of the compilation process of the credit institutions' data reporting, and the related data asset management tasks.

⁴⁸ MNB Decree No. 58/2023 (XI. 24.)

conducted in 2014, 2017 and 2020, as well as other household statistics.

The 2023 “*What do we live from?*” household wealth survey was processed in 2024, with the necessary data corrections and data entries. The “*What do we live from?*” survey is the Hungarian version of the Household Finance and Consumption Survey (HFCS), which is coordinated by the ECB and conducted every three years, and which measured the income, consumption and wealth of households in Hungary for the fourth time in 2023. The results of the 2023 survey are expected to be published in 2025 Q1.

In the area of balance of payments statistics and national accounts, a benchmark revision was carried out in 2024, as a result of which the balance of payments statistics had reviewed data with retroactive effect to 2008, and the same for the national accounts back to 1995, with the need to develop new estimates, and applying the new estimation methods with a retroactive effect, and incorporating the data previously published in various primary statistics, to ensure consistency with the financial and non-financial accounts. The relevant MNB publications were fundamentally revised and expanded. The data of Eximbank are now presented only in the general government sector, while the statistics on government debt became more detailed, and for the financial accounts, the Bank also publishes a complete statement of assets, with the incorporation of non-financial assets.

International Data Supply, international Cooperation

Pursuant to its status, the expectations arising from international cooperation and its membership obligations, the MNB regularly supplies data and information to the ECB, the Statistical Office of the European Communities (Eurostat), the European supervisory authorities (EBA, EIOPA), the 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.

The work on updating the international statistical methodological standards continued in 2024, in relation to the preparation of the updated versions of the System of National Accounts (SNA), the Balance of Payment Manual (BPM) and the Benchmark Definition of Foreign Direct Investments (BD). The MNB’s employees actively participated in the various international working groups organised for the review, which were set up by the ECB, the IMF and the OECD. The specialised working groups were involved in the preparation, checking and commenting on the newly added and revised parts of the statistical standards.

The requirement for disclosure under the title “The statistical balance sheet of investment funds” was modified and applicable from 1 January 2025, in compliance with the MNB requirements and the ECB’s new Regulation on investment funds.⁴⁹ Written and oral consultations were held with the data providers prior to making the amendments, to help the sector prepare for the new requirements.

Data Quality, Administrative Inspections

In accordance with the MNB decrees stipulating a reporting requirement for the central bank’s information system, the MNB levied 85 fines in 2024, on the basis of its continuous monitoring of compliance with reporting requirements, i.e. timely fulfilment and adequate data quality, and used other measures, such as sending management letters, warnings, repeated warnings and resolutions imposing measures and notices. A total of HUF 36,500,000 in fines was imposed on 68 data providers.

A thematic investigation at seven credit institutions, which was launched in 2023 to examine the accuracy of certain data reported under MNB ID codes K21, K23, M03 and M04 of MNB Decree No. 54/2021 (XI. 23.) and HITREG, was completed in 2024. The closing decisions of the procedures imposed measures on all of the institutions involved, and fines were imposed on three institutions (of HUF 13 million, HUF 12.5 million and HUF 18 million).

In March 2024, a thematic investigation was launched at ten institutions (seven credit institutions and three EEA credit institution branches) to verify the accuracy of certain data reported to the Bank’s information system under MNB ID codes M01-M05, in the supervisory authority report with table code SF02 and in the HITREG system based on the

⁴⁹ Regulation (EU) No 2024/1988 of the European Central Bank of 27 June 2024 concerning statistics on investment funds and repealing Decision (EU) 2015/32 (ECB/2014/62) (ECB/2024/17).

applicable MNB decrees of the reference periods. The proceedings were terminated by administrative order for four credit institutions, as no infringements were found, while certain measures and a fine (HUF 5 million) was imposed on one credit institution. The investigations were closed in January 2025 for one credit institution and one EEA credit institution branch, and the procedure will be closed in 2025 Q1 for one credit institution and two EEA credit institution branches.

In October 2024, a targeted investigation was launched to examine the accuracy of certain data reported in the disclosure with MNB ID code M06 of MNB Decree No. 54/2021 (XI. 23.). The investigation phase was closed in 2024, and the decision closing the procedure, including the measures and the fine imposed (HUF 19.5 million), was taken in January 2025.

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

In the course of implementing its Corporate Social Responsibility Strategy, the MNB is committed to the development of financial literacy and financial awareness, as well as the underlying economic and social thought processes, and the related institutional framework and infrastructure. In order to achieve its objectives, the MNB works to support education (primarily higher education), the renewal and development of the system of economics and financial education, scientific activity and the dissemination of information for financial education purposes. The improvement of Hungarian economic expertise and economic science is considered to be a priority task by the MNB. The subsidised programmes are partly MNB-led initiatives and partly implemented through partnerships with the participating institutions.

Higher Education Programmes and Cooperations

The MNB Excellence Scholarship Programme, run eight times in various BA and MA degree programmes related to the MNB's activities, closed in 2024. In the 2023/2024 academic year, the scholarship was awarded to 591 students from 25 Hungarian higher education institutions. In total, nearly 5,000 scholarships were awarded under the MNB Excellence Scholarship Programme.

The MNB renewed its cooperation with its key university partners, namely the METU, BME and NJE in 2024. Under the renewed cooperation with the University of Debrecen (DE), international conferences and case studies were organised in 2024.

With the professional assistance of the MNB, a scholarship programme called "*Tiszaroff Scholarship*" was launched in 2015, to support students in higher education in the Tiszaroff region. In 2017, the programme was extended to support the studies of secondary school students as well, under the title "*Tiszaroff Scholarship for Further Education*". In the spring semester of the 2023/2024 academic year, 56 university students (including five PhD students) and 23 secondary school students received the scholarship.

The cooperation between the MNB and the TDK Non-Profit Foundation continued in 2024, with the main aim of promoting financial awareness and interdisciplinary fields of study.

Financial Education for the Public

In order to improve the financial awareness of the adult population, the MNB operates a complex information system called Financial Navigator, in line with the MNB's financial stability and financial consumer protection objectives, the aim of which is to provide the population with credible, understandable information on the aspects and risks to be considered when making financial decisions, through a variety of channels. The Bank regularly updates and expands the content, keeping up with changes in the legislation and market developments. Free-of-charge product finders and calculators are provided by the MNB to facilitate informed financial decisions and compare products and services; in this regard the MNB's Deposit and Loan Calculator was updated extensively in 2024, with a new content and design focus.

In order to improve the public's financial awareness, the MNB operates a Financial Navigator Advisory Office Network (PNTI),⁵⁰ with offices in all county seats. The offices are run by NGOs independent of the financial institutions and financial service providers. The advisers provide impartial, professional, free financial advice to consumers in person, by phone, electronically and by post. Operating under the continuous professional control and support of the MNB, the aim of the advisory services is to enable consumers to seek the opinion of independent experts

⁵⁰ <https://www.mnb.hu/fogyasztovedelem/tanacsado-irodak> (in Hungarian only).

before making financial decisions, and to help them draft and submit official documents, applications and complaints.

In 2024, PNTI advisers administered nearly 26,000 cases. As in previous years, the majority (56 percent) of the enquiries were related to financial services rather than complaints. The vast majority of the enquiries were received by the offices in relation to Certified Consumer-friendly Products, enforcement proceedings, the transfer of debt to debt collection agencies, the Home Purchase Subsidy Scheme for Families (HPS) and cyberfraud.

In order to disseminate financial knowledge as widely as possible and raise the level of financial awareness in Hungary, the main objective of the MNB's 2024 public communication was to provide consumers with prompt practical advice and tips that are easy to use. To achieve this, the Bank launched a series of thematic consumer protection campaigns in 2024, to help people manage their finances, on topics such as switching bank accounts and banks, home insurance products, holidays, starting school, savings and preparing for Christmas.

A significant part of the Financial Navigator content is also available on a mobile app, which provides up-to-date news and exchange rate data, and includes the embedded versions of online search engines and calculators, a customer service appointment booker and a financial glossary.

Hungarian Money Museum and Visitor Centre

Since opening in March 2022, the Hungarian Money Museum has welcomed over 300,000 visitors. In 2024, more than 100,000 visitors visited the permanent exhibition "*The Path of Money*", making it the most visited Money Museum in Europe.

The interactive financial knowledge centre, with 53 spectacular installations, hosted 251 museum education sessions with eleven different themes in 2024. The priority target group of pupils in grades 7–12 typically visit the Museum in the context of an out-of-school lesson, accompanied by a teacher.

A mobile app is also available to help visitors access the services related to the Money Museum.

Support Activities

The Bank also helped to achieve value-creating social goals by providing individual grants. Among the objectives set out in the CSR Strategy, the following areas were given priority in 2024: strengthening financial literacy, education (especially higher education), the development of economics and financial education, and support for scientific activity.

3.10 THE MNB'S ENVIRONMENTAL SUSTAINABILITY ACTIVITIES

The MNB's Green Programme

The MNB launched its Green Programme in 2019, which aims to promote the green finance environment, while also improving the resilience of the financial system against nature risks. In the first five years of the Green Programme, the MNB achieved a number of pioneering and internationally outstanding results in promoting the greening of the financial sector, in improving prudential supervision from an environmental risk perspective and in greening its own operations.

At the end of December 2024, within the framework of the Green Preferential Capital Requirement Programme that aims to support the transition to the green economy, the participating institutions had HUF 987 billion worth of corporate loans, HUF 242 billion worth of household loans, and HUF 116 billion in corporate bond exposures at market value, based on the outstanding loan amount. The majority of these domestic corporate loans financed renewable energy production (HUF 434 billion) and sustainable commercial properties (HUF 197 billion). The majority of the green housing exposures financed the construction of new energy-efficient houses, but loans to finance energy efficiency modernisation also appeared.

For the fourth time in 2024, the MNB prepared the *Green Finance Report*, which assesses the financial system from an environmental sustainability point of view. The Report presents the main sustainability-related actions abroad and in Hungary in 2023 and also describes the quantitative methodological steps. In terms of green financing, the report not only gives an insight into the stock data, but also looks at the opportunities and challenges to green finance. It also provides an overview of the current and expected

future international and domestic financial regulations concerning sustainability.

In parallel with the publication of the Green Finance Report, the MNB also launched its renewed Green website (<https://zoldpenzugyek.mnb.hu/>), which is another milestone in the development of a green finance culture in Hungary. From July 2024, the website is also available in English.

Another element of the MNB's Green Recommendations was published on 27 September 2024 on the use of a minimum questionnaire to assess ESG information. During the preparatory period, which lasted around one and a half years, the MNB consulted a number of professional organisations on the Recommendation and the related questionnaire. The Recommendation aims to enable Hungarian financial institutions and through them credit applicants to assess their ESG risks and to integrate an ESG risk assessment into the risk management processes of the financial institutions. The Recommendation will enter into force in several steps, starting from 1 January 2025, and will help both banks and the companies completing the questionnaire to prepare.

In August 2024, the MNB, in cooperation with WWF Hungary, published a Value certificate presenting the results of the habitat restoration projects. As part of the third pillar of the Green Programme, the Bank is not only taking steps in the area of carbon offsetting by restoring natural habitats, but also aims to promote environmental protection in a number of ways, and to integrate biodiversity conservation as a credible element of its corporate climate strategy. The reconstruction projects increase the natural value of the nationally protected areas of Hungary: the Geszt project is meant to improve the natural character of the Körös-Maros National Park, while the Drávaszentes project is to improve the Danube-Drava National Park.

The Bank achieved outstanding results even in an international comparison in the area of financial risks arising from biodiversity loss in 2024. The pioneering international work to assess these risks in Hungary and develop the MNB's supervision framework was completed in June 2024. The project, funded by the EU's Technical Support Instrument (TSI), was implemented by the OECD as an implementing partner in cooperation with the European Commission's Directorate General for Structural Reform (DG Reform). The results of the 2-year research and analysis were presented by the MNB at a conference on 7 June 2024.

The MNB was the first CEE region country to join the CASI (Capacity-building Alliance of Sustainable Investment), an

international organisation that aims to build a global pool of experts in the field of sustainable investments. As a first step in the cooperation, the two institutions organised a joint financial webinar focusing on climate risk management.

The MNB held its 6th Green Finance Conference in November 2024, which aimed to put biodiversity-related risk management in the spotlight, alongside a number of other sustainability challenges, such as the need to reduce energy dependence.

The new version of the *Green Finance Data* publication was published on 10 December 2024, containing information as of 30 September 2024. To reduce the data gap in terms of transparency and green finance, new tables have been added to the time series, providing information on the development of green housing finance, the energy quality of residential properties used as collateral for housing loans, the list of products available in the Green Finance Product Platform and climate risk trends.

The MNB's green finance activities have been recognised by the World Wide Fund for Nature (WWF), the world's largest sustainability NGO, as the MNB was ranked among the top institutions in all three categories (banking supervision, insurance sector supervision, central bank activities) in its 2024 annual report, which includes the sustainability assessment of central banks and financial supervisory authorities. The WWF also cites the MNB as an example for good practices in several parts of the report, while the analysis backing the report cited the MNB's clear and regular communication of its supervisory authority requirements, as well as the transparency and high quality of its own reporting practices, as further strong points.

Environmental Factors in the MNB's own Operations

The MNB has been operating an Environmental Management System since 2011, which provides a formalised framework to ensure that the environmental impacts of its operations are under constant control and efficiently contributes to the continuous improvement of the MNB's environmental performance. As part of this, the MNB prepares a medium-term Environmental Strategy every three years and supports its implementation with an Action Plan.

In its Environmental Strategy for 2023–2025, the MNB committed to further reducing its operational carbon footprint, targeting a 75-percent reduction by the end of 2025, relative to the 2019 baseline. The MNB also

committed to maintaining carbon-neutral operations over the strategic time horizon of 2023–2025, which it intends to achieve by offsetting the remaining part in addition to further, actual carbon footprint reduction. By the end of 2024, the Bank's carbon footprint per employee had decreased by 68.1 percent, relative to the baseline.

Construction work on the MNB Logistics Centre solar park project was started at the end of 2024. The project is expected to provide around 20 percent of the electricity demand for the cash logistics process from renewable sources, through own generation. Based on the plans to upgrade the lighting in the Logistics Centre, a public procurement procedure for the construction work is expected to be launched in 2025.

In addition to the quantified targets, the Environmental Strategy also includes an examination of new environmental conscious technologies. The MNB also tested "chemical-free" cleaning technology and office composting in 2024. The technologies tested are promising in terms of feasibility, efficiency and environmental benefits, and their deployment is in preparation.

Carbon Footprint of the MNB's Operational Activities

In relation to its operational activities, the MNB has committed to further reducing its own carbon footprint by 75 percent by the end of 2025, relative to the baseline. To achieve this, the Bank elaborated an Environmental Programme (Action Plan) for the period 2023–2025; implementation of this Programme is ongoing, on schedule and on time. The MNB's carbon footprint per employee was reduced by 2.4 percent in 2024. By the end of 2024, the carbon footprint per employee had decreased by 68.1 percent relative to the 2019 baseline.

In 2024, energy use had the largest impact on the carbon footprint. Increasingly extreme weather conditions due to climate change are leading to higher energy use. The rise in the 2024 carbon footprint associated with the increase in energy use could not be fully offset by the decrease in the carbon footprint for business travel and other areas (e.g. paper use, waste, etc.), resulting in an overall increase in the carbon footprint associated with the MNB's operations of 5.8 percent in 2024.

Table 7
Carbon footprint from the MNB's operational activities

Carbon footprint/cause	MNB's carbon footprint in 2024 (tons CO ₂)		Change in 2024 (%)
	2023	2024	
Electricity	7	105	1,373.2
Natural gas and district heating	1,127	1,323	17.4
Total carbon footprint from energy use	1,134	1,428	25.9
Vehicle fleet	122	118	-3.28
Air travel	811	649	-20.0
Car travel abroad	3.9	3.1	-20.5
Domestic car travel	10.3	15.0	45.9
Taxi usage	2.3	1.8	-21.7
Total business travel	950	787	-17.1
Refrigerants	2	2	0.0
Banknote briquettes for energy purposes	14	14	-0.1
Recycled office paper	1	0.5	-9.1
Waste	57	52	-8.8
Total other emissions	74	69	-6.8
Total carbon emissions (tons CO₂)	2,158	2,283	5.8
Unit carbon footprint (tons CO₂/person)	1.503	1.467	-2.389

Due to the increasingly extreme weather conditions, the only way to currently maintain or reduce energy use in buildings would be to take measures that would result in a significant reduction in the workplace comfort level.

The table shows that energy use accounted for nearly two-thirds of the overall carbon footprint in 2024; therefore, the MNB is continuing to look for ways to further green the energy mix and boost the share of renewable energy. Government Decree No. 215/2024 (VII. 29.) was issued in relation to this, regulating the certification of origin of renewable gases. The product (gas from renewable sources) stipulated by the legal requirements is not yet available on the energy market. The MNB is monitoring the developments in the energy market and intends to make use of the greening opportunities seen in this area in its future energy purchases.

Energy indicators

To a large extent, the direct environmental impact of the MNB is due to its energy use, and energy use related to the

operation of buildings is a major factor in this. In 2024, total energy use increased by 21.1 percent, while energy use per employee rose by 11 percent.

As an important fact, the main driver behind the increase in energy use is the increased demand for cooling during the summer, as a result of the record-breaking heatwaves not seen for centuries. This increased electricity use by almost 30 percent (less visible in the carbon footprint, as the buildings are mainly powered by electricity from renewable sources). The 13.3-percent increase in heating energy use is mainly due to the 1.3-degree colder autumn-winter weather compared to the previous year.

Examining the background of the constant annual increase seen in heating energy use, it was found that despite the increase in the average annual temperatures due to global warming, there are months during the heating season when a relatively short period of extreme cold (lasting a few days) can increase monthly consumption by up to 15–20 percent, but this is not reflected in the monthly average temperature.

Table 8
Total energy use in 2024

Total energy consumption (kWh)	2024				Change in 2024 (%)
	MNB's Buda Centre	MNB Logistics center	MNB's Supervisory Centre and Money Museum	Total	
Electricity consumption (kWh)	2,316,591	2,852,414	4,284,446	9,453,451	28.9
Heating, hot water energy consumption (kWh)	5,055,980	1,011,802	827,959	6,895,741	13.3
Fuel energy consumption (kWh)	436,187			436,187	-2.9
Total energy consumption (kWh)				16,785,379	21.1
Unit energy consumption (kWh/person)				10,786	11.7
Unit energy consumption (kWh/used area m²)				361	21.1

Table 9
Temperatures

Average temperature/period			
period	Average temperature 2023 (°C)	Average temperature 2024 (°C)	Change in 2024 (°C)
October	15.8	13.6	-1.3
November	7.5	5.6	
December	3.7	3.9	

Source: www.metnet.hu

Table 10
Water use in 2024

Water consumption (m ³)	2024				Change in 2024 (%)
	MNB's Buda Centre	MNB Logistics center	MNB's Supervisory Centre and Money Museum	Total	
Water consumption (m ³ /year)	14,987	1,638	9,862	26,487	25.2
Unit water consumption (m ³ /person/year)				17,020	15.5
Own well water consumption (m ³ /year)	-	11,316	-	11,316	22.6
Total (m³)	14,987	12,954	9,862	37,803	24.4

Water Management

The water consumption of the MNB's own buildings rose by nearly 25 percent in 2024. This increase affected both the use of utility company supplied water and water from private wells.

In the area of comfortable office environment, the fresh air supplied by the ventilation system must have a sufficient level of humidity, and there are also strict requirements for cash processing rooms and IT equipment rooms. These requirements are met using humidifiers, the water demand of which increases significantly as the summer heatwaves become longer and longer.

Waste Management

The volume of MNB-produced municipal waste fell 9.6 percent in 2024, with a daily amount generated of 14.7 dkg per employee.

65.1 percent of the total annual waste was collected selectively in 2024. The share of hazardous waste in total waste amounted to just 0.03 percent.

The changes in the Hungarian waste management system in 2024 (the introduction of the HUF 50 deposit fee for plastic bottles) had the biggest impact on the volume of selectively collected plastic waste in the MNB, resulting in a 25.8-percent decrease.

There was no change to the system of selective waste collection in the MNB in 2024, and the selective collection of aluminium coffee capsules and tetrapak cans continued to be provided for employees. Many people again took the opportunity to bring used batteries and lightbulbs to the selective collection points placed in the MNB buildings in 2024.

3.11 KEY FACTORS IN THE MNB'S COMMUNICATION

In its communication activities, the MNB gives priority to communicating and explaining its most important decisions concerning monetary policy and financial stability that affect the Bank's primary tasks. The MNB regularly published the content and background of key decisions, the results of Monetary Council meetings and the results of the supervisory authority audits and proceedings, the measures taken, and the names of the institutions responsible for the breaches identified. In 2024, the MNB's communication activity once again included raising awareness of the precautions to be taken in financial transactions to detect risks and communicating the Certified Consumer-friendly product range. In March 2024, an intensive information campaign was carried out, focusing on consumer-friendly home insurance products (MFO) and highlighting the option of switching to another insurance provider, to raise consumer awareness. Each product in the consumer-friendly product line has a dedicated thematic page and calculator on the MNB website.

There was a noticeable increase in the amount of financial fraud in 2024. The trend persists that certain groups of consumers are unable to keep pace with the rapid development of digitalisation and the risks emerging in the cyberspace. The Bank continued its financial awareness campaigns in 2024, with intensive social media presence. Preventive communication for educational purposes also continued in 2024, so that the Financial Navigator brand, which is already well known by the public, and the communication of the CyberShield (inter-institutional cooperation), launched at the end of 2022, covered all segments of the target population.

The Bank continued to focus on introducing new services based on the Instant Payment System (AFR) in 2024, raising

market awareness and communicating its benefits and results.

In its corporate social responsibility, supervisory, market surveillance and consumer protection activities and communication activities, the Bank sought to raise financial awareness and knowledge among the corporate sector and the general public. Broadening consumer awareness remained the focus of the Bank's communication activity in 2024, not only through supervisory authority press relations, but also in the form of campaigns. The MNB is committed to maintaining positive communication about the Certified Consumer-friendly brand, and in 2024 continued to place a strong emphasis on promoting the consumer-friendly product range that is in the best interest of the customers.

3.12 THE MNB'S INCOME IN 2024

In 2024, the MNB recorded a loss of HUF 788.7 billion. During the year, the following main factors had an effect on the balance sheet and the profit:

- the level and composition of international reserves defined by monetary policy, transactions carried out based on risk management considerations, and foreign currency purchases and sales affecting the level of reserves: the net foreign exchange inflows from EU transfers, operations performed by the Government Debt Management Agency in relation to debt management, and foreign exchange conversions performed by the Hungarian Treasury for purposes other than debt financing;
- developments in instruments absorbing forint liquidity, which are correlated with the changes in foreign

exchange reserves and the MNB's net foreign currency receivables, as well as with the evolution of the central bank's liquidity and growth support instruments and cash holdings;

- changes in forint interest rates and international foreign exchange interest rates; and

- changes in exchange rates.

Net interest and interest-related losses amounted to HUF 701.2 billion. The substantial reduction in the loss was caused by a rise in net forint interest income and a rise in net foreign exchange interest income. The former was a result of the declining forint interest rates, while the latter mainly stemmed from higher foreign exchange reserves and higher average interest rates.

Net forint interest and interest-related income reflected a loss of HUF 1,095.7 billion in 2024, HUF 895.9 billion less than in 2023. The base rate was gradually cut from 10.75 percent at the beginning of 2024 to 6.5 percent. The average stock of interest-bearing forint liabilities (forint deposits of credit institutions, MNB discount bills and forint deposits of the central government) expanded, due to a rise in net foreign currency claims and the central bank's interest payments, which increased bank liquidity. However, the lower interest rates led to a significant fall of more than HUF 800 billion in interest expenses on interest-bearing forint liabilities compared to 2023. The increase in net forint interest and interest-related income also resulted from the fact that the loss on interest rate swaps with credit institutions decreased, explained by the lower interest rates and lower average level of stocks, due to maturities in 2023.

Table 11
The MNB's aggregate income
(HUF Billions)

No.	Description (P/L line)	2023	2024	Change
1	Net interest and interest-related income (I+II)-(X+XI)	-1,758.9	-701.2	1,057.7
2	Net forint interest and interest-related income (I-X)	-1,991.6	-1,095.7	895.9
3	Net foreign exchange interest and interest-related income (II-XI)	232.7	394.5	161.8
4	Realised gains/losses arising from financial operations (IV-XIV)	-42.7	-329.7	-287.0
5	Income arising from exchange rate changes (III-XII)	90.6	393.4	302.8
6	Other constituents of net income* (V+VI+VII+VIII)-(XIII+XV+XVI+XVII+XVIII)	-52.2	-151.2	-99.0
7	Profit/loss for the year (1+4+5+6)	-1,763.2	-788.7	974.5

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

Net foreign exchange interest and interest-related income in 2024 showed a gain of HUF 394.5 billion, an increase of HUF 161.8 billion versus 2023. Interest income on international reserves rose by HUF 105.6 billion, due to higher reserve holdings and higher average interest rates on the portfolio. There was also an increase in the result of derivative transactions related to reserves, and in the gain realised on the amortisation of the securities' purchase price difference of the securities held in the reserves.

Realised gains arising from financial operations contain the gains and losses realised from changes in the market price of securities generated upon the sale of forint and foreign exchange securities and showed a net loss of HUF 329.7 billion in 2024. As a result of changes in foreign exchange yields, the MNB realised a loss of HUF 8.7 billion on selling securities related to foreign exchange reserve management transactions, which was lower than in 2023. However, a significant loss was realised on the repurchase of government securities by the Government Debt Management Agency at the end of 2024, due to the difference between the book value and the market value of the – long-term – government securities repurchased, as a result of the increase in yields since the securities were purchased. The repurchase of government securities decreased the central bank's balance sheet and reduced the banking system's liquidity surplus. This will lead to continuous savings on interest payments by the central bank, due to the difference in the interest rates. As such, the loss realised at the end of 2024 will be offset by better results in later years.

Income arising from exchange rate changes is determined by the difference between the forint's official exchange rate and the average cost rate on the one hand, and by

the volume of foreign currency sales on the other hand. While in 2023 the forint strengthened on average against the euro year-on-year, it depreciated in 2024. Thus, the average difference between the daily official euro exchange rate and the average cost rate was larger than in 2023. Foreign currency sales in 2024 were mostly connected to conversion transactions by the State and the European Commission, and to risk management considerations for international reserves. Realised net gains on exchange rate changes amounted to HUF 393.4 billion in 2024, which was HUF 302.8 billion higher than in 2023. The increase was mainly due to the weaker forint exchange rate and higher conversion volumes.

Other components of net income include banking operating income, costs and expenditures, costs of issuing banknotes and coins, creation and release of provisions and impairment, income from supervisory activities, income/expenses from and commissions and from other items. The net expenditures resulting from these items amounted to HUF 151.2 billion in 2024, with the change mostly due to provisioning and impairment.

The MNB's equity showed a negative balance of HUF 1,665.2 billion as at 31 December 2024, but the negative balance decreased by HUF 189.4 billion compared to the end of 2023. The following items increased equity: the change in revaluation reserves due to exchange rate changes (larger effect), and the change in revaluation reserves of foreign currency securities (smaller effect), while the annual loss for 2024 decreased equity. Pursuant to the MNB Act in force and the resolution of the Fiscal Council, the central government had no reimbursement obligation in 2024 due to the central bank's capital position.

Table 12
The MNB's equity
(HUF Billions)

Description (B/S line)	31 Dec 2023	31 Dec 2024	Change
Equity (XI.)	-1,854.6	-1,665.2	189.4
of which: Retained earnings (XI.2.)	-250.7	-2,014.0	-1,763.3
Revaluation reserves due to exchange rate changes (XI.4.)	258.0	1,233.2	975.2
Revaluation reserves of foreign currency securities (XI.5.)	-108.6	-105.7	2.9
Profit/Loss for the year (XI.6.)	-1,763.2	-788.7	974.5

The revaluation reserve due to exchange rate changes increased by HUF 975.2 billion in 2024, due to the weakening of forint exchange rate and the increasing net foreign currency receivables, and stood at HUF 1,233.2 billion on 31 December 2024.

Unrealised losses on foreign currency securities marked to market amounted to HUF 105.7 billion at the end of 2024, which improved the balance of revaluation reserves by HUF 2.9 billion compared to the prior-year figure.

3.13 THE MNB'S FINANCIAL MANAGEMENT IN 2024

The internal operations of the MNB are 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 2024 amounted to HUF 86,991 million, which is 4.6 percent below the approved budget (excluding central reserves) and 6.9 percent above the expenditures incurred in 2023.

Personnel costs and general costs of banking operations (mainly IT and depreciation) both increased compared to 2023, while operating expenses decreased. The rise in personnel costs in 2024 was mainly due to salary increases, and to a lesser extent the increase in basic benefits, welfare costs, and payroll taxes and contributions.

Personnel Expenses

In 2024, personnel expenses (HUF 43,493 million) exceeded the previous year's expenses by 10.7 percent (by HUF 4,219 million).

The difference mainly reflects the fact that, pursuant to the decision of the MNB's Executive Board, in order

to ensure and retain highly qualified personnel over the long term, the 2023 wage bill limits within the wage bill management scheme were raised by 6 percent from 1 January 2024. Additionally, the Balatonakarattya Education and Conference Centre was opened in 2023 Q3, and the related service costs for the full year are now included in the 2024 personnel expenses.

General Operating Costs

Bank operating overheads (HUF 43,498 million) were 3.3 percent (by HUF 1,404 million) higher in 2024 than in 2023, due to the following changes in components.

IT costs rose by HUF 1,260 million (18.1 percent) versus the previous year, mainly due to the impact of additional costs from IT investments already implemented (functional extensions, higher availability and security levels). Data transmission, other telecommunications service fees and news service fees showed a smaller increase.

Operating costs fell by HUF 474 million (2.2 percent) relative to 2023, primarily due to lower property-related costs, and within that utility fees (mainly electricity), material costs, maintenance costs, and the costs of the armed security guards and security services were mainly reduced. The decline in operating costs was mostly driven by a significant decrease of the electricity price. Property rental costs also fell significantly, as from 1 November 2023, the rent payable for two properties (Bölcs Vár and MNB Buda Centre) was changed, due to an amendment of the rental contracts (rent was previously charged in EUR and is now charged in HUF, based on the calculated HUF cost price). As a result, in 2024 the MNB paid the lower, HUF cost price based rent for the whole year. Due to the takeover of the security business unit of MNB-Bankjóléti Szolgáltatások Zrt. (formerly MNB-Biztonsági Zrt.) on 1 December 2024, the costs of armed guards and security services in 2024 were also lower than in 2023 (part of the costs were stated under personnel expenses). At the same time, property

Table 13
Operating costs of the MNB in 2024

Description	Actual data for 2023	Budget for 2024	Actual data for 2024	Index (2024 actual / 2024 budgeted)	Index (2024 actual / 2023 actual)
	HUF millions			Per cent	
1. Staff expenditures	39,274	44,424	43,493	97.9	110.7
2. General operating costs	42,094	46,807	43,498	92.9	103.3
Total	81,368	91,231	86,991	95.4	106.9

maintenance and cleaning costs rose significantly, mainly due to higher operating fees for the following properties: Bölcs Vár, the MNB Buda Centre and the Logistics Centre. The repair and maintenance costs of buildings and property security systems, as well as the cost of gas and other energy consumption also increased compared to the previous year.

Depreciation and amortisation of tangible and intangible assets increased by 7.5 percent (by HUF 538 million) versus 2023. This can mainly be attributed to the value of the investments, mostly in IT, and in particular intangible assets (software), that were implemented in 2023 H2 and in 2024.

Other expenses remained almost unchanged in year-on-year terms in 2024, with a decline of 0.4 percent, or HUF 31 million.

The absolute value of transfer of costs, which reduces operating costs to ensure that the total amount of operating costs reflects only the actual costs incurred by the MNB, remained unchanged compared to the previous year.

Investment Projects

To achieve the Bank's objectives and to ensure the quantity and quality of its assets, various development projects and asset acquisitions were necessary. The approved investment budget for 2024 amounted to HUF 14,047 million. Investment-related payments totalled HUF 10,482 million in 2024.

Most of the 2024 investments were related to the purchase of IT hardware and software products, and various IT projects. The MNB purchased servers, data storage, workstations and Microsoft licences, and significant expenses were also incurred in relation to ongoing software development projects.

Investments related to properties and security systems were mostly related to the Logistics Centre building.

HR Activities

To ensure efficient and effective operations, HR management is considered a strategic issue by the MNB. The MNB ensures stable employment and has created a work culture where employees can perform their tasks effectively, in a performance-oriented manner, in a values-driven environment. The MNB supports the acquisition and development of the knowledge, skills and competences needed to work effectively, and provides appropriate means

to encourage and reward effective performance. The MNB expects high standards of work and ethical behaviour from its employees. All of the above helps to ensure that the individual interests of the employees are also taken into account, in line with the MNB's own interests.

The MNB gives all support the employees need to do their job to the highest possible standard. To support this, the MNB continued to focus on staff development in a variety of subjects and methodologies. It provided development opportunities that enhance work efficiency, creative thinking and innovative solutions, and in addition to various professional training, language training and well-being programmes, the internal training programmes also included trainings to support and develop employees' mental strength, physical health and emotional well-being. The MNB provided development opportunities for its employees and managers through a series of tailored programmes, in areas such as collaboration, wellbeing and leadership excellence.

The MNB continued to support trainees in higher education by extending its internship programme, which incorporates international good practices. The internship programme welcomes students who have completed their higher education studies, for the duration of their compulsory internships, or as part of a dual training programme. In cooperation with the Neumann János University, the MNB participated as a corporate partner in the university's dual training programme for mechanical engineering students specialising in economics, and later for students specialising in business administration and management, international financial management, and finance and accounting. The MNB further expanded its dual training programme from 2023 to include BA and MA degree courses in other higher education institutions, reaching a new pool of university students eligible for the programme. As a result, from 2023, selected students of the Budapest Metropolitan University were also able to spend their dual internship at the MNB. A total of 87 students from the participating universities spent their dual internships in the various MNB fields of expertise and MNB subsidiaries. As a further milestone in the expansion of the dual training system, the Budapest University of Technology and Economics signed a cooperation agreement on the dual training of the MA degree programme in Applied Mathematics (specialisation in Finance and Mathematics) with the MNB in September 2024.

Recent graduates and new graduates were also given the opportunity to be employed as trainees by the MNB, which helped their integration into the labour market and gave

the MNB the chance to select students with outstanding performance. As part of this, nine students completed their compulsory internships in different areas at the MNB, as part of their education in 2024.

The MNB continued to develop and digitise its HR systems in 2024, to support the integration of newly hired employees, the relationship between the employees and the organisation during the employment, and to help manage employment termination processes.

Area managers play a crucial role in determining the number of staff and salaries needed to carry out the tasks. The MNB's salary and income policy reflects the MNB's specific position and supervisory authority function. The salaries reflect the unique knowledge and expertise that employees in each field possess in order to perform the tasks described above.

The optional fringe benefits scheme was discontinued as of 1 January 2020, while the MNB retained or restructured some of the previous fringe benefits, and new elements were introduced, which were also retained in 2024. The MNB continued to provide extensive support for its employees and maintained the family welfare benefits in 2024. In this context, the MNB has given priority to supporting family formation, having children and raising children, helping to alleviate the burden of unexpected life events, as well as to support the self-care of its employees and to promote employee recreation. In order to keep its staff healthy, an annual comprehensive health check-up programme was available to all staff in 2024 as well.

In the MNB's organisational culture, it is of paramount importance that employees are able to also fulfil their family role, and carry out their work duties with a balanced family background. To support the return to work after the birth of a child, the MNB runs a Workplace Nursery.

The MNB received several awards during the year in recognition of its family-friendly organisational policy. The Ministry of Culture and Innovation awarded the MNB the title of *"Family Friendly Workplace 2024"*, which was the ninth time the Bank has won this title.

The MNB renewed its Family Friendly Workplace Certification Mark in the Family Friendly Workplace Certification Mark Competition 2024, announced by the Government of Hungary in the framework of the Family Friendly Country Programme. The Mark reflects the

MNB's commitment to a family-friendly approach, and the measures taken to achieve this.

For the first time, in 2024 the MNB applied for the Family Friendly Company of the Year Award, organised by the "Three Kings, Three Queens Movement", where the Bank was awarded the Family Friendly Company title.

It was also great honour for the Bank in 2024 to receive the Excellence Award of the ECB's HR Committee for the "Thousand Faces of the MNB" programme. The ECB's recognition is positive feedback on the MNB's series of activities carried out in the field of employee community building.

The MNB's staff number increased significantly (by 144 employees) on 1 December 2024, as a result of a legal transaction, when the MNB took over the security business unit from its subsidiary MNB-Biztonsági Zrt (current name: MNB-Bankjóléti Zrt.). With the takeover of the business unit, the MNB became the employer of the security staff, as the successor employer.

Staff Number

The number of staff at the MNB was influenced by the need to ensure the necessary staffing to fulfil its tasks in 2024.

As a result of natural fluctuation, the replacement of employees with higher quality staff members, and changes in the legal staff number, the MNB's statistical staff number was reduced by 101 employees in 2024.

To ensure the necessary staffing to meet the challenges and operational structure of the MNB, 149 new employees were recruited into vacant or new positions in 2024. In addition, the MNB's staff number increased significantly (by 144 employees) on 1 December 2024, as a result of a legal transaction, when the MNB took over the security business unit from its subsidiary MNB-Biztonsági Zrt (current name: MNB-Bankjóléti Zrt.).

As a result of the above decreases and increases, the total staff number was 1,758 at the end of 2024, 192 more than at the end of 2023.

The average number of staff was 1,607.3 in 2024, up 45.8 compared to 2023.

The average age of the employees was 43.4 years at the end of 2024.

Procurement Activities

Like other central banks in the EU, the MNB is obliged to carry out public procurement procedures for its purchases above the national public procurement thresholds. The MNB is subject to public procurement obligations under Directive 2014/24/EU of the European Parliament and of the Council on public procurement and repealing Directive 2004/18/EC, and Act CXLI of 2015. The procurement processes of the MNB are regulated by its internal instructions, in line with the Public Procurement Act. New procurement requests in 2024, and the (21) requests carried over from 2023 resulted in a total of 931 procurement procedures. As a result of the successful procurement procedures, the total value of concluded contracts was HUF 18.54 billion (including long-term contracts). No appeals have been lodged in respect of procurement procedures launched and carried out in 2024. The MNB carried out the procurement tasks in compliance with the deadlines, with due transparency and keeping in mind its reputation and prestige.

Operational Risk Management and Business Continuity

The successful implementation of the MNB's strategic objectives, and the preservation of its reputation and assets are of paramount importance. Effective operational risk management plays a key role in achieving these goals. Identifying, assessing, monitoring and responding to operational risks within the organisation is therefore an integral part of the MNB's corporate governance. Maintaining a high level of operational risk management requires keeping up with international best practices, and aligning the MNB's procedures and systems accordingly.

As part of the continuous improvement of the operational risk framework, the MNB's operational risk management and business continuity activities ensure its continued ability to flexibly respond to risk exposures, in coordination with the compliance function. The MNB also applies the internationally accepted IAP (Integrated Assurance Program) methodology, which is based on the cooperation of the internal control areas.

To ensure that its primary tasks are adequately performed even in critical situations, the MNB operates an effective business continuity management system. As part of this, it regularly updates its business impact analyses, and its business continuity and disaster recovery plans, the reliability of which is tested annually. The tests related to the cash supply, the operation of the payment system and

the management of the foreign exchange reserves are of particular importance in this regard.

The system for recording the business continuity plans and disaster recovery plans was replaced and expanded in 2024, resulting in an integrated, single system for the entire operational risk management cycle.

As a result of the measures taken in 2024, the MNB was able to continue its operations and perform its tasks as defined in the MNB Act to a high standard.

3.14 THE ESCB COMMITTEES

Since Hungary's accession to the EU, the MNB's management and experts have been members of the ESCB Committees and the working groups established by the Committees. These memberships provide opportunity for central banks to formulate coordinated positions and enable the representatives of national banks to obtain information on the ECB's activities on a regular basis.

On 31 December 2024, there were 15 ESCB Committees and two other committees supporting the work of the ESCB. Since the Single Supervisory Mechanism (SSM) was launched in November 2014, in addition to the two existing configurations (euro area and ESCB composition), certain Committees have been meeting in SSM format as well since 2014, with representatives of the supervisory authorities of the Member States participating in the SSM, acting as entities independent of the central banks.

The scope of activities and mandate of each ESCB Committee are as follows:

Accounting and Monetary Income Committee (AMICO): Develops and regularly reviews the accounting policy principles and the methodology for the preparation of the regular financial reports under the Statute of the ESCB, and promotes their harmonisation at the international level. It also monitors the calculation of monetary income, in accordance with the risk management process established by the Accounting Security Framework.

Banknote Committee (BANCO): Determines the euro banknote needs of the euro area countries, coordinates the production of euro banknotes, and develops a policy for the stocking and processing of euro banknotes. Its tasks include exchanging experience on the production of euro banknotes, testing and developing security features to prevent the counterfeiting of euro banknotes, and

assessing the security risks related to the production of the euro. It also contributes to the harmonisation of the practices applied in the euro area, to the development of a counterfeit monitoring system, and to the monitoring of the statistics on euro banknotes and coins.

Committee on Controlling (COMCO): Contributes to the application and further development of the Eurosystem's common cost methodology, and provides analyses of the cost data and cost structure of certain Eurosystem and ESCB functions/products. In the field of management information systems, it provides a forum for the exchange of information and experience on issues of interest to the ESCB as a whole. The COMCO committee only meets in a euro area format.

Eurosystem/ESCB Communications Committee (ECCO): Contributes to the development of the external communication policy of the Eurosystem, the ESCB and the ECB, in order to ensure that the objectives of the Eurosystem and the ESCB are transparent and clear, and to inform the public about the tasks and activities of the Eurosystem and the ESCB.

Financial Stability Committee (FSC): Its role is to support the work of the ECB's decision-making bodies on financial stability and macro-prudential policy issues.

Internal Auditors Committee (IAC): It assists the ESCB in achieving its objectives, by reviewing the relevant joint projects, systems and activities, and by ensuring cooperation between the ECB and the national central banks on audit issues of "common interest".

International Relations Committee (IRC): Assists in carrying out those tasks of the ESCB that are related to international cooperation, and contributes to the development of the Eurosystem's position in various areas of relations with countries outside the EU.

Information Technology Committee (ITC): Contributes to the development of the Eurosystem's and the ESCB's IT policy, strategy and guidelines (in particular on security aspects) and provides technical advice to the other committees. In addition, it launches and implements Eurosystem/ESCB-level developments and stand-alone projects.

Legal Committee (LEGCO): Provides legal support for the ESCB's tasks, in particular by contributing to the maintenance of the Eurosystem's and the ESCB's regulatory framework, examining the transposition of legislation into

national law, and monitoring and reporting on the extent to which the national authorities and EU institutions comply with their obligation to consult on draft legislation, in areas within the ECB's fields of competence.

Market Infrastructure and Payments Committee (MIPC): Assists the ESCB in the smooth operation of the payment systems and the cross-border use of funds. Also supports the ESCB in general and "oversight" matters relating to the payment systems, and in strategic decisions on the securities clearing and settlement systems. It pays particular attention to strengthening its oversight activities and promoting pan-European developments in the areas of small and large-value payments, securities and funds management.

Market Operations Committee (MOC): Assists the ESCB in the implementation of the single monetary policy and foreign exchange operations, the management of the ECB's reserves, the appropriate adaptation of the monetary policy toolkits applied by the central banks of the non-euro area Member States and the application of ERM II.

Monetary Policy Committee (MPC): Helps the ESCB to implement a single monetary and exchange rate policy for the community. In addition, assists the ESCB in fulfilling its tasks of coordinating the monetary and exchange rate policies of the central banks of the non-euro area Member States and the ECB.

Organisational Development Committee (ODC): Assists the ECB's decision-makers with proposals on planning and organisational issues related to the functioning of the Eurosystem and the SSM. It also coordinates the work of the Eurosystem Procurement Coordination Office (EPCO) and operates the Eurosystem/ESCB operational risk management and business continuity system. The ODC only meets with a euro area composition.

Risk Management Committee (RMC): Provides ECB's decision-makers with analyses and recommendations on the management and control of risks arising from Eurosystem market operations. The RMC only meets with a euro area composition.

Statistics Committee (STC): Assists in the collection of the statistical information necessary to fulfil the ESCB's tasks. In doing so, it contributes, inter alia, to the development of the necessary changes in the statistical data collection and their cost-effective implementation.

Other committees supporting the work of the ESCB:

Budget Committee (BUCOM): Assists the ECB's Governing Council, which consists of the ECB and the central banks of the euro area Member States, on matters relating to the ECB's budget.

Human Resources Committee (HRC): Its objective is to serve as a forum for the exchange of experience, views and information between the Eurosystem/ESCB central banks, in the field of human resources management.

3.15 THE MNB'S RESEARCH ACTIVITIES

The research activities conducted by the MNB in several professional areas are intended to support the preparation of the Bank's decisions. Results of the research are published in international and domestic academic journals and in various MNB publications: the *Financial and Economic Review* and the *MNB Working Papers* series, which are typically published in English, and in various *MNB studies*. In addition to publications, research activities also include representing the MNB at international conferences and in the research networks and working groups coordinated by the ECB.

In 2024, MNB expert authors published 20 articles in the top half of the most prestigious international scientific journals, nine of them in the first quartile (Q1). In the June issue of the *Journal of Finance*, the authors investigated the extent of estimation-related uncertainty arising from choosing specific models. In *Nature Sustainability*, the role of company-level supply chains in rapid decarbonisation scenarios is analysed. In a study published in the journal *PNAS Nexus*, an MNB co-author analyses the extent to which the knowledge of inter-company relationships increases the reliability of economic models. In the November issue of the *Journal of Business and Economic Statistics*, another group of researchers examines the applicability of threshold regression models under different assumptions.

MNB authors also published papers on the link between green innovation and energy efficiency, the link between democracy and economic growth, the impact of a green orientation on central bank policy, and the link between the financial risk factors and macroeconomic vulnerability. The titles of other studies published on a wide range of topics are listed in Tables 14 and 15.

Table 14
Publications by MNB authors in 2024, in Q1-ranked international journals

Author(s)	Title	Journal
Albert J. Menkveld, Gábor Neszveda et al.	Nonstandard Errors	<i>Journal of Finance</i>
Johannes Stangl, András Borsos et al.	Firm-level supply chains to minimize unemployment and economic losses in rapid decarbonization scenarios	<i>Nature Sustainability</i>
Christian Diem, András Borsos et al.	Estimating the loss of economic predictability from aggregating firm-level production networks	<i>PNAS Nexus</i>
Jianhan Zhang, Chaoyi Chen et al.	Endogenous Kink Threshold Regression	<i>Journal of Business and Economic Statistics</i>
Chaoyi Chen et al.	Green Innovation and Energy Efficiency: Moderating Effect of Institutional Quality Based on the Threshold Model	<i>Environmental and Resource Economics</i>
Chaoyi Chen, Thanasis Stengos	Threshold Nonlinearities and the Democracy-Growth Nexus	<i>The Econometrics Journal</i>
Eszter Baranyai et al.	The impact of the green direction in central banking on the general public's trust: Evidence from Hungary	<i>International Review of Financial Analysis</i>
Katalin Varga, Tibor Szendrei	Non-stationary financial risk factors and macroeconomic vulnerability for the UK	<i>International Review of Financial Analysis</i>
Zlata Tabachová et al.	Estimating the impact of supply chain network contagion on financial stability	<i>Journal of Financial Stability</i>

Table 15**Publications by MNB authors in 2024, in Q2-ranked international journals**

Author(s)	Title	Journal
Barna Bakó , Gábor Neszveda	An aspirational perspective on the negative risk-return relationship	Finance Research Letters
Palma Filep-Mosberger, Lorant Kaszab	The endogenous growth and asset prices nexus revisited with closed-form solution	Finance Research Letters
Boglárka Bianka Kovács, Gábor Neszveda et al.	ESG unpacked: Environmental, social, and governance pillars and the stock price reaction to the invasion of Ukraine	Eurasian Business Review
Marton Kovacs et al.	Opening the black box of article retractions: exploring the causes and consequences of data management errors	Royal Society Open Science
Ónozó Livia Réka et al.	Leveraging LLMs for Financial News Analysis and Macroeconomic Indicator Nowcasting	IEEE Access
Chaoyi Chen et al.	Public Debt and Economic Growth: A Panel Kink Regression Latent Group Structures Approach	Econometrics
Chaoyi Chen et al.	Bribery, Regulation and Firm Performance: Evidence From a Threshold Model	Empirical Economics
Csaba Burger, Dariusz Wojcik	The geography of climate change risk analysis at central banks in Europe	GeoJournal
Lajos Tamás Szabó	The effect of labour tightness on wages at the regional level in Central Europe	Journal for Labour Market Research
Nikolett Vágó et al.	The impact of automotive industry investments on local property prices – The case of Mercedes-Benz in Kecskemét Hungary), 2010–2017	Regional Statistics
Mohammad Hosseini et al.	Group authorship, an excellent opportunity laced with ethical, legal and technical challenges	Accountability in Research

3.16 MNB PUBLICATIONS, MNB CONFERENCES AND THE MNB TECHNICAL ASSISTANCE PROGRAMME

2024 was an important year for the Magyar Nemzeti Bank, as the Bank celebrated its 100th anniversary, operating as the independent central bank of Hungary. In the centenary commemorative year, the MNB paid tribute by publishing books and organising events worthy of the history of the Bank and its key role in the economic life of Hungary.

Regular Publications

Inflation Report

The Inflation Report is published four times a year, to ensure that the public can understand and clearly follow the Bank's policy. In this publication, the MNB regularly reports on the past and expected developments in inflation, assesses macroeconomic developments that determine inflation, and summarises the forecasts and considerations on the basis of which the Monetary Council makes its decisions.

Financial Stability Report

Published twice annually, this report presents the Bank's views on changes in the financial system and their impact on the stability of such. The analytical focus of the report is on a forward-looking assessment of long-term trends and risks.

Growth Report

The annual Growth Report aims to directly present the longer-term growth trajectory and its determining factors, sometimes for a full business cycle, using both standard and alternative indicators. The report reviews the trends that are most important for economic growth in the short, medium and longer term, and presents an annual assessment.

Productivity Report

The Productivity Report, published once a year, helps to understand the drivers, characteristics, distribution and dynamics of the key factor (productivity) of economic growth and convergence, thus aiding the formulation and

implementation of productivity improvement reforms. The report provides a complex analysis, looking at a wide range of efficiency indicators, such as labour productivity, innovation, digitalisation and ecological innovation.

Housing Market Report

The MNB's Housing Market Report provides updates on the domestic housing market on a semi-annual basis. The aim of the report is to provide a comprehensive overview of short-term and long-term trends in the residential property market, and to present the regional differences in the domestic market. Housing market developments are not only closely linked to financial stability issues, but also fundamentally determine short-term and long-term economic growth prospects.

Commercial Property Market Report

This publication analyses commercial property market developments on a semi-annual basis, describing the macroeconomic factors affecting the market, and the supply and demand-side trends in the various market segments. It also looks at the banks' property financing activities, which is the main link between property market trends and financial stability.

Macroprudential Report

The aim of the annual Macroprudential Report is to present the macroprudential instruments used by the MNB to prevent and manage the systemic risks identified and communicated in the Financial Stability Report, their mechanisms of action and how the market participants adopt to them. In line with the Statute and the Macroprudential Strategy of the MNB, the publication aims to make the MNB's macroprudential measures more understandable and accessible not only to industry players, but to the wider public as well.

Competitiveness Report

This report provides a comprehensive, objective picture of certain aspects of Hungary's competitiveness that are less focused on in the Bank's traditional macroeconomic analyses, although they play a crucial role in economic trends. It measures and assesses Hungary's competitiveness in 14 areas, using more than 160 indicators – 95 percent of which are objective – in comparison with the EU, the Visegrad countries and the most advanced Nordic countries.

Competitiveness Review

This publication provides structured monitoring of the implementation of the competitiveness directions and proposals formulated by the MNB, which will contribute to the turnaround required in the field of competitiveness, by supporting implementation. The Competitiveness Review annually assesses the progress of Hungary's competitiveness, on the basis of the 330 proposals set out in the Competitiveness Programme published in 2019. The monitoring system uses both descriptive and analytical methods to measure compliance with the Bank's proposals.

FinTech and Digitalisation Report

This annual publication provides insights into domestic and international trends in financial innovation, digitalisation and the development of supporting technologies, which are becoming increasingly important in the domestic financial markets. The MNB intends to contribute to strengthening the level of digitalisation of the domestic financial system, a process in which it intends to continue to play a key supporting role.

Insurance, Money Market, Capital Market Risk and Consumer Protection Report

The report covers the key characteristics and risks of the markets for insurance, funds, intermediaries, non-bank financial enterprises and capital market participants. The aim of this annual publication is to inform the public and financial system players about current prudential and consumer protection issues, thereby raising risk awareness among stakeholders, and maintaining and strengthening confidence in the financial system. The Bank's regulatory activities aimed at identifying and mitigating risks, its awareness-raising and educational activities, and its work to promote the development of Hungarian financial culture, all contribute to ensuring that the right information is available to all stakeholders for decisions affecting the financial institutions and products, thus strengthening the stability of the financial system as a whole.

Lending Processes

The aim of this publication is to provide a comprehensive overview of the latest trends in lending, and to help the public to properly understand them. It provides a detailed description of loan aggregates, demand for loans observed by the banks, and changes in lending terms and conditions.

Balance of Payments Report

This report is published four times a year and informs market participants about trends in the balance of payments, with a particular focus on the broader economic context. The evolution of external balance is of key importance for financial stability, as developments in the balance of payments can provide indications on the sustainability of economic growth and the related risks. The MNB conducts a comprehensive and regular analysis of external balance developments, examining macroeconomic imbalances through a number of indicators.

Payment System Report

The report is published annually and provides a comprehensive analysis of trends in domestic payment transactions, the operation of the payment and securities settlement systems supervised, the main risks, and the instruments used by the MNB, where necessary, to maintain the smooth flow of payments and to facilitate the sound and efficient operation of the payment and settlement systems that support it.

Fiscal Report

To support the performance of its primary tasks as defined in Act CXXXIX of 2013 on the Magyar Nemzeti Bank, in particular its tasks related to the determination and implementation of monetary policy, the MNB analyses the development of the budget deficit and government debt, monitors public finances, analyses the impact of financing on monetary processes and the developments of the financial market and liquidity, and conducts research on fiscal policy issues. 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 professional knowledge and accumulated information available in the MNB can indirectly support the work of the Fiscal Council. The MNB prepares background analyses for the tasks of the Fiscal Council as defined by law and makes such available to the Fiscal Council. The wider public can read about the main results of these expert analyses in the Fiscal Report.

Annual Report

The Annual Report is published annually, in Hungarian and English. It presents the Bank's business report for the previous year and its audited annual accounts prepared in accordance with the Accounting Act.

Half-yearly Report on the MNB's activities

The Half-Yearly Report is published once a year, in September, with the same content as the Annual Report. It contains the Bank's business report and accounts for the first half of the year (unaudited).

Interim Report on the MNB's current quarter's activities

The Interim Report is published twice a year, in the period between the Annual and the Half-Yearly Report, in April and November. It reports on the primary activities of the Bank's specialist areas in Q1 and Q3, as laid down in the MNB Act: monetary policy, financial system overview, foreign exchange reserves, payment transactions, cash logistics activities, statistical changes.

Report on the Annual Activities of the Financial Arbitration Board

The Financial Arbitration Board, operated by the MNB, publishes a summary of its operations and activities, entitled the Report on the Annual Activities of the Financial Arbitration Board, online and in printed form once a year. The annual report, prepared on the basis of the criteria set out in Article 130(1) of the MNB Act, includes, inter alia, an analysis of the applications received and the cases settled, as well as the recurring or significant problems that often give rise to disputes between consumers and financial service providers. It also includes recommendations on how to avoid or solve such problems in the future. The report also shows the average time taken to resolve consumer disputes, and includes data on compliance by service providers with the recommendations, and decisions containing binding obligations and approvals on settlement agreements.

Supervisory Board Report

The MNB Act stipulates that the members of the Supervisory Board have an obligation to provide information to the Parliament, which elects them, and to the Minister who appoints them. The Supervisory Board focuses on monitoring the Bank's ongoing operations. The Supervisory Board carries out its activities in accordance with the laws applicable to it, its own rules of procedure and the internal operating principles defined by its members. It carries out its audit activity mostly at the Supervisory Board meetings, the topics of which are set out in an annual rolling work plan based on the audit universe. The Supervisory Board Report is a summary prepared on the Supervisory Board's activities.

Environmental Statement

The fight against and adaptation to climate change and the worsening environmental problems in general have a major impact on the economy as a whole, and through this on the financial intermediary system. The MNB launched its Green Programme in 2019, in due consideration of the above. The Green Programme aims to reduce the risks associated with climate change and other environmental problems, to expand green financial services in Hungary, to broaden the domestic and international knowledge based on green financial services, and to further reduce the ecological footprint of the financial market participants and of the MNB itself. The MNB is at the forefront of international best practices to continuously reduce the environmental impact of its own operations. In accordance with the requirements of Regulation (EC) No 1221/2001 of the European Parliament and Council, and Regulation (EU) 2017/1505, the MNB publishes an annual certified Environmental Statement in accordance with the requirements of the EMAS (Eco-Management and Audit Scheme) environmental management system. The statement presents the MNB's efforts taken to improve the environmental performance and the results achieved.

Green Finance Report

The MNB publishes the Green Finance Report on an annual basis, in Hungarian and English. The aim of the report is to increase transparency on environmental sustainability and finance, and through this, to foster market awareness and contribute to a better understanding of the financial aspects of climate change by the financial system and economic operators, as well as by Hungarian society in general. Since the consequences of climate change and environmental anomalies can also translate into financial risks, bridging the data gaps in the financial system is particularly important. By raising awareness of sustainable finance, the report can also indirectly help to make sustainability efforts more successful.

Climate Change-related Financial Report

The MNB was among the first central banks and domestic financial institutions to produce a climate change-related financial report (TCFD). The aim of the report is to identify, measure and publish in a transparent manner the climate risks related to the MNB's operational activities and financial instruments as widely as possible, thereby providing guidance to the domestic financial sector. The report is published annually, in Hungarian and English.

Household Financial Data Report

Every three years, in cooperation with the HCSO and coordinated by the ECB, the MNB conducts a Household Wealth Survey, which is the most comprehensive source of statistical data on household income, consumption and wealth. Detailed data from the survey were presented together with the sector-level macro data in the publication "Household Financial Data 2023", which summarises the results of the 2014, 2017, 2020 and 2023 surveys, supplemented by the main indicators for household statistics, national accounts and financial accounts. The publication covers the trends in the distribution of income and wealth across the various household segments, and the overall financial situation of different household groups.

Analyses, Studies, Statistics*MNB Occasional Papers*

The MNB Occasional Papers series presents practical (applied) research mainly related to the Bank's specialist areas, summarising existing theories and international results on specific topics, as well as analyses that help to understand the Bank's decision-making.

MNB Working Papers

The MNB Working Papers series publishes the results of theoretical research at the Bank. The studies published in the series are of interest primarily to academic, central bank and other researchers, and are intended to encourage readers to make observations that the authors can use in their further research.

Financial and Economic Review

The Financial and Economic Review is a social science journal that has been published for more than a decade. The publication is edited and published quarterly by the MNB, in Hungarian and English, and once a year a Chinese-language compilation of the most important studies is also prepared. The journal publishes peer-reviewed articles, essays, book reviews, conference reports and other reports on scientific activities.

Other Publications

MNB specialist books

The MNB considers the improvement of financial literacy in Hungary to be a priority task; therefore, it intends to support economic education and the expansion and development of financial literacy with the available instruments. The MNB published the following new books on economics and monetary policy in 2024:

- Sustainable GDP – Global Discussion Paper (Gergely Baksay – György Matolcsy – Barnabás Virág)
- The Green Booklet of Sustainability – a holistic guide to achieve a sustainable path for society & economics (György Matolcsy)
- MNB Essay on the economic processes of the 1970s (Zsolt Kuti – Kristóf Lehmann – Balázs H. Váradi)
- 75th anniversary of the financial relations between Hungary and China (Marcell Horváth – Levente Horváth)
- Eurasia's economic policy – Sustainable and innovative economic policy strategies for Eurasia

Events Organised by the MNB

The MNB pursues a strategy of openness with its associate and partner institutions, which is aimed at strengthening professional and collegial partnership. The MNB's objective is to further strengthen its relations with the partner institutions through professional cooperation, to actively participate in the international dialogue, to achieve broad recognition through its international role, and to integrate its work into the international professional community. In order to achieve this goal, the MNB organises events on a regular basis.

International Conferences

Most of the international conferences, involve 80 to 100 participants, but major events can attract 300 to 500 participants. The international conferences are primarily held on the premises of the MNB. The events are held in person, sometimes in a hybrid format, ensuring online accessibility as well.

The main international professional events held in 2024:

European Association for Banking and Financial History (eabh) annual general meeting and conference

The MNB hosted the annual general meeting, workshop and conference of the European Association for Banking and Financial History (*eabh*), a non-profit organisation based in Frankfurt, which focuses on banking and monetary history research, in Budapest on 12–14 June 2024. The event was part of the series of jubilee programmes celebrating the 100th anniversary of the establishment of the MNB. On the first day of the 2-day event, speakers discussed the use of AI in archives, while the focus of the conference on the following day was on hyperinflation.

Joint MNB-NBP Conference

The sixth high-level conference jointly organised by the MNB and the National Bank of Poland (Narodowy Bank Polski, NBP) took place on 10 June 2024 in Budapest, under the title “*Central bank policies amid structural shifts in the global economy*”. The event was of particular significance in the history of both central banks, as 2024 was the centenary year for the establishment of both the MNB and the predecessor of the NBP. The conference brought together Hungarian and Polish central bank officials and leading financial experts from the region to discuss the transition of global and local economies, integration and convergence, and the changing role of central banks.

MNB – Bank of Korea joint workshop

As another step in the professional cooperation between the MNB and the Bank of Korea (BoK), the two institutions held a joint workshop on 25 June 2024 in Budapest. The event “*Digital Money and Green Economy: New Challenges for Central Banks*” focused on the active sharing of knowledge between the two central banks in relation to new challenges such as digital finance and sustainable economic transition.

Budapest Renminbi Initiative Conference

In the 2024 centenary year, the MNB held the Budapest Renminbi Initiative Conference for the eighth time, jointly organised with the Bank of China CEE Limited. The MNB launched the Budapest Renminbi Initiative Conference

series nearly ten years ago, to help broaden the range of investment and financing sources in Hungary, to exploit the advantages of the renminbi's growing international significance and to strengthen Budapest's role as a regional financial centre. The 2024 event focused on two themes: the role of green finance in the internationalisation of the renminbi, and the present situation and future outlook for Sino-Hungarian financial cooperation under the Belt and Road Initiative (BRI).

75th anniversary of the establishment of diplomatic relations between Hungary and China

In 2024, Hungary and the People's Republic of China celebrated the 75th anniversary of the establishment of diplomatic relations between the two countries, which was commemorated by presenting a book and a commemorative coin.

International Green Finance Conference

The MNB held its sixth International Green Finance Conference on the financial implications of environmental sustainability, focusing on biodiversity conservation and its role in economic processes and the day-to-day operations of companies and organisations on 6 November 2024. The Green Finance Science Awards, which reward the best academic achievements in this field, were also awarded at the conference.

Budapest Eurasia Forum

The MNB organised its flagship international event, the Budapest Eurasia Forum, for the fifth time in 2024. The original aim of organising the forum was to enhance the dialogue between European and Asian decision-makers, industry players, experts and academics, and to provide a platform for deepening transcontinental cooperation.

Supervisory authority cooperation and conferences

The MNB hosted a series of EU conferences to mark the rotating presidency of the EU Council and the 100th anniversary of the establishment of the independent central bank. These included the annual conference of the

Central and Eastern European Banking Supervisors Group (CEBS), the 11th Joint Financial Consumer Protection Day of the EU's financial supervisory authorities, the EBA Board of Supervisors Strategy Day and the Central and Eastern European (CEET) regional seminar of the International Association of Insurance Supervisors (IAIS).

MNB Technical Cooperation Programme

In addition to its strong partnership with the central banks of the EU Member States and the major Asian countries, the MNB also places considerable emphasis on cooperation with central banks in emerging markets outside the EU. The MNB regularly hosts professional training courses and knowledge-sharing events (study visits), attended by experts and managers from the central banks of partner countries. In addition, the MNB is also actively involved in a regional project for the Western Balkans, funded by the European Union (EU), carried out in the period 2022–2025.

Following several years of preparatory work, the MNB launched its own Technical Cooperation Programme in 2023. As knowledge is the most important asset of the 21st century, the MNB intends to contribute to knowledge sharing through the exchange of experience and dialogue between central banks. The programme presents the good practices of the MNB and aims to strengthen the MNB's international network and develop closer professional relations with partner central banks. The programme targets the central banking community in the Western Balkans and the Caucasus, the Middle East and North Africa, Central Asia and South-East Asia.

In 2024, four professional seminars were held within the framework of this Programme. With the theme "*From Tradition to Innovation*", the MNB introduced new topics such as cash logistics, monetary policy toolkit and crisis management.

The success and usefulness of the Programme is reflected in the increased interest by partners: in 2024, a total of 108 central bank experts from 26 countries attended the 16 training days. The professional programme was also improved, with a total of 57 presentations and 14 interactive group work sessions and round table discussions.

4 Supplementary Information on the MNB's Supervisory Authority Activities in 2024

Table 16	
Institutions subject to full supervision¹	
Money market	669
Financial institution	265
Credit institution	29
Bank limited company	17
Bank branch ²	1
Specialised credit institution	10
Building society	3
Mortgage bank	5
Other specialised credit institution	2
Cooperative credit institution	1
Non-financial institution	235
Financial enterprise equivalent to credit institution	2
Financial enterprise belonging to a banking group	13
Payment system operator (GIRO Zrt.)	1
START Garancia Zrt., MKK Magyar Követeléskezelő Zrt.	2
Independent financial enterprise	217
Financial holding company	–
Organiser (NOK)	1
Non-financial institution	404
Independent intermediary ³	385
Money market broker	15
Money market multiplier	4
Money market multiple agent	274
Money market trade multiple agent	92
Payment service provider	17
Electronic money issuer	2
Insurance	365
Insurance undertaking	27
Insurance company	22
Mutual undertaking	5
Insurance intermediary ⁴	338
Insurance broker	305
Insurance multiple agent	33
Funds	45
Occupational pension provider	–
Private pension fund	2
Voluntary fund	43
Voluntary healthcare and mutual fund	11
Voluntary healthcare fund	3
Voluntary mutual fund	2
Voluntary pension fund	27
Capital market	62
Investment fund manager	49
Alternative investment fund manager	41
UCITS fund manager	8
Investment firm	9
Bank providing investment services ⁵	15
Clearing house, central counterparty	2
Stock exchange	2
Total	1,141

¹ The members of the institutional group are under direct supervision of the MNB on 31 December 2024.

² Hungarian branch of a financial institution not domiciled in another third-country state.

³ Independent intermediaries include registered intermediaries and those whose principal activity is money market intermediation.

⁴ Insurance intermediaries include registered intermediaries and those whose principal activity is insurance intermediation.

⁵ Not included in the total number due to duplication.

Table 17**Number of inspections carried out, by type of inspection and by sector***(pieces)*

Number of audits/inspections (closed in 2024)		639
Prudential	Total	100
	Money market	22
	Insurance	13
	Funds	11
	Capital market	17
	Thematic audit	37
Consumer protection	Total	447
	Money market	304
	Insurance	122
	Funds	2
	Capital market	13
	Thematic audit	6
Market surveillance and issuer supervision	Total	44
	Related to market surveillance	40
	Related to issuer oversight	4
Anti-Money Laundering	Total	14
ICAAP/ILAAP/BMA	Total	34

Table 18**Fines levied***(HUF millions)*

Prudential fines	709.5
<i>Money market</i>	433.5
<i>Insurance</i>	161.5
<i>Funds</i>	22.7
<i>Capital market</i>	91.8
Consumer protection fines	254.81
Anti-Money Laundering fines	123.68
Market surveillance fines	1,437.6
Issuer supervision fines	24.5
Procedural fines	10.15
Summary	2,560.24

Table 19**Measures taken in the financial market sector***(pieces)*

Number of prudential decisions and orders	1,353
Number of authorisation resolutions/rulings	550
Number of foundation permits	2
Number of operating licences	1
Number of operating change licences	3
Number of portfolio transfer licenses	3
Number of acquisition of holding licences	25
Senior executives/ board members licences	191
Number of withdrawal licences by an institution	47
Allow and approve amendment of Articles of Association and other regulations	88
Resolutions issued under CRR	23
Number of other authorisation decisions	146
Number of substantive orders for authorisation	21
Number of enforcement decisions	803
Number of decisions related to investigations	20
Number of revocation and suspension decisions by MNB sanctions	11
Ongoing supervisory decisions/number of decisions containing measure	234
Money laundering prevention decisions and orders, number of reports	14
Number of consumer protection decisions and orders	496
Number of other enforcement decisions	28

Table 20**Measures taken in the capital market sector***(pieces)*

Number of prudential decisions and orders	710
Number of authorisation resolutions/rulings	661
Number of operating licences	9
Number of operating change licences	12
Number of acquisition of holding licences	4
Senior executives/ board members licences	122
Number of withdrawal licences by an institution	2
Allow and approve amendment of Articles of Association and other regulations	10
Resolutions issued under CRR	0
Number of other authorisation decisions	476
Number of substantive orders for authorisation	26
Number of enforcement decisions	49
Number of decisions related to investigations	20
Ongoing supervisory decisions/number of decisions containing measure	2
Money laundering prevention decisions and orders, number of reports	1
Number of consumer protection decisions and orders	25
Number of other enforcement decisions	1
Number of other enforcement orders	0

Table 21**Measures taken in the insurance market sector***(pieces)*

Number of prudential decisions and orders	405
Number of authorisation resolutions/rulings	141
Number of operating licences	3
Number of portfolio transfer licences	0
Number of acquisition of holding licences	16
Senior executives/ board members licences	84
Number of withdrawal licences by an institution	14
Number of other authorisation decisions	4
Number of substantive orders for authorisation	20
Number of enforcement decisions	264
Number of decisions related to investigations	12
Number of revocation and suspension decisions by MNB sanctions	1
Ongoing supervisory decisions/number of decisions containing measure	82
Decision on the secondment of a supervisory commissioner	0
Number of consumer protection decisions and orders	169
Number of other enforcement decisions	0

Table 22**Measures taken in the funds sector***(pieces)*

Number of prudential decisions and orders	33
Number of authorisation resolutions/rulings	18
Number of operating licences	3
Number of portfolio transfer licences	0
Number of withdrawal licences by an institution	3
Allow and approve amendment of Articles of Association and other regulations	7
Number of other authorisation decisions	1
Number of substantive orders for authorisation	4
Number of enforcement decisions	15
Number of decisions related to investigations	11
Number of orders granting an interim measure	0
Number of consumer protection decisions and orders	4

Table 23**Market supervision and issuer supervision measures taken***(pieces)*

Number of enforcement decisions and orders issued	707
Number of market surveillance decisions	28
Market surveillance enforcement orders	664
Number of issuer supervision decisions	11
Number of Issuer supervision orders	4
Substantive rulings, orders, number of resolving discrepancies	3
Number of Issuance decisions	3
Number of Issuance orders	0
Number of supplementary information requests	0

Table 24**Authorisations for the issue of securities***(pieces)*

Number of issues and stock exchange listings	2
Number of initial public offers	1
– <i>stocks</i>	1
– <i>bonds and mortgage bonds</i>	0
Purchase Offers	1

5 Abbreviations, MNB-related Terminology

Abbreviations

BÉT: Budapest Értéktőzsde Nyrt.

BGS: Bond Funding for Growth Scheme

BIS: Bank for International Settlements

BPM: Balance of Payments Manual

CAR: Capital adequacy ratio

CCHL: Certified Consumer-friendly Housing

CCyB: Countercyclical Capital Buffer

CET1: Common Equity Tier 1 capital

CMI: compulsory motor insurance

DSTI: Debt-service-to-income ratio

EBA: European Banking Authority

ECB: European Central Bank

EIOPA: European Insurance and Occupational Pensions Authority

EMIR: Unified Monitoring and Information System

EREP: European Resolution Examination Programme

ESCB: European System of Central Banks

ESMA: European Securities and Markets Authority

FECR: Foreign exchange coverage ratio

FFAR: Foreign exchange funding adequacy ratio

FGS: Funding for Growth Scheme

GIRO: GIRO Clearing House Ltd.

HCSO: Hungarian Central Statistical Office

HITREG: Central bank credit register

HPS: Home Purchase Subsidy Scheme for Families

IFRS: International Financial Reporting Standards

IMF: International Monetary Fund

ISDA: International Swaps and Derivatives Association

KELER: KELER Central Clearing House and Depository Ltd.

KESZ: Treasury Single Account

KHR: Central Loan Information System

LR: Leverage ratio

LTV: Loan-to-value ratio

MFAR: Mortgage Financing Adequacy Ratio

MFO: Certified Consumer-friendly Home Insurance

MIRS: Interest rate swaps (IRS) for monetary policy purposes

MNB: Magyar Nemzeti Bank

MSZVK Zrt.: MSZVK Magyar Szanálási Vagyonkezelő Zártkörűen Működő Részvénytársaság

NPL: Non-Performing Loan

OECD: Organisation for Economic Co-operation and Development

O-SII: Domestic institutions of systemic importance

PNTI: Financial Navigator Advisory Network

PST: Financial Stability Council

RoA: Return on assets

RoE: Return on equity

SNA: System of National Accounts

SRB: Single Resolution Board

SSM: Single Supervisory Mechanism

SyRB: Systemic risk capital buffer

TREA: Total risk exposure

Terminology

AFR: The domestic payment platform for the clearing and settlement of instant transfer orders.

AML/CFT: Anti Money Laundering and Combating the Financing of Terrorism

Cash flow: the sum of deposits and withdrawals from the MNB, and currency exchanges.

CLS (Continuous Linked Settlement): A clearing and settlement model that allows the elimination of foreign exchange settlement risk, based on a payment-versus-payment (PvP) mechanism in several currencies. The CLS is operated by the CLS Bank.

CSDR (Central Securities Depositories Regulation): Regulation (EU) No 909/2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012

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

DORA (Digital Operational Resilience Act): Regulation (EU) 2022/2554 on digital operational resilience for the financial sector and amending Regulations (EC) 1060/2009, (EU) 648/2012, (EU) 600/2014, (EU) 909/2014 and (EU) 2016/1011.

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

ERM-II (Exchange Rate Mechanism II): an exchange rate mechanism between the euro area countries and EU Member States not participating in Stage Three of EMU, which creates the conditions for exchange rate policy

cooperation. ERM-II is a multilateral system of fixed but adjustable exchange rates, with a normal fluctuation band of +/-15 percent around the mid-rate. Decisions on the mid-rate or a narrower fluctuation band are taken by mutual agreement between the Member State concerned, the euro area countries, the ECB and the other Member States participating in the mechanism.

FinTech: FinTech is a technology-driven financial innovation that can lead to new business models, applications or products, and can have a significant impact on the financial markets and institutions, as well as on the financial services themselves.

FGS Green Home Programme (FGS GHP): A programme launched under the Funding for Growth Scheme (FGS) – as part of the MNB's green toolkit strategy – that supports the energy modernisation of the domestic housing market and the consideration of green aspects in lending, by providing funding for the construction of new high energy efficiency apartments and family houses.

Foreign exchange futures: A stock exchange transaction where the future settlement is based on a fixed amount of standardised (contractually agreed) foreign exchange, specified at the time the transaction is concluded.

Foreign exchange swap: A transaction – usually short-term – involving the exchange of different currencies and their exchange back at the close of the transaction at a price specified in the contract (by the cross rate and the interest rate of the currencies).

FX swap: see foreign exchange swap.

IMF reserve quota: the freely-drawable – yet undrawn – share of the IMF quota paid into the IMF in SDRs (Special Drawing Right).

Interest rate swap (IRS): the exchange at specified intervals of a fixed interest calculated based on a fix interest rate, and a variable interest calculated at a variable interest rate – adjusted to a certain market rate or condition – on a specified principal amount.

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

O/N: overnight deposit/loan

Option transaction: gives the holder of the currency option the right, but not the obligation, to buy or sell a certain amount of foreign currency against another foreign currency at a predetermined rate at a predetermined time,

or by a predetermined date. For the seller (writer) of the option, if the option is exercised by the option holder, it is an obligation.

MBS (Mortgage-Backed Security): mortgage-backed security

MREL requirement: Minimum Requirement for own funds and Eligible Liabilities.

Payment system: In the case of supervised systems, the form of cooperation agreed between the cooperating parties for the operation of the system as defined in Article 6(1), Section 27 of the Credit Institutions Act. It is part of the financial infrastructure. It includes payment instruments, banking procedures and interbank payment systems, which together enable the processing of payments.

Repurchase and reverse repurchase agreement: an agreement that provides for the transfer of ownership of a security, subject to an obligation to repurchase it at a specified or to be determined future date, at a specified repurchase price. During the term of the transaction, the

buyer may acquire the security that is the subject of the transaction and may freely dispose of it (delivery repo), or may not acquire it and may not freely dispose of it, in which case the security is placed as deposit in favour of the buyer during the term (hold-in-custody repo).

Revaluation reserves: The revaluation reserve of the forint exchange rate and the revaluation reserve of foreign currency securities are reserves that are part of the equity of the MNB.

– **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 currency securities:** The valuation difference between the market value and cost rate of foreign exchange assets based on securities is indicated in the revaluation reserve of foreign currency securities, which constitutes a part of the equity.

Part B)
Audited Financial Statements of
the Magyar Nemzeti Bank

1 Independent Auditor's Report



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Independent Auditor's Report

To the Shareholder of Magyar Nemzeti Bank

Opinion

We have audited the accompanying 2024 annual financial statements of Magyar Nemzeti Bank ("the Company"), which comprise the balance sheet as at 31 December 2024 - showing a balance sheet total of HUF 27,929,741 million and a loss after tax for the financial year of HUF 788,693 million and -, the related profit and loss account for the financial year then ended and notes to the annual financial statements, including a summary of significant accounting policies.

In our opinion, the annual financial statements give a true and fair view of the equity and financial position of the Company as at 31 December 2024 and of the results of its operations for the financial year then ended in accordance with the Act C of 2000 on Accounting ("Hungarian Accounting Law").

Basis for opinion

We conducted our audit in accordance with Hungarian National Auditing Standards and with applicable laws and regulations in Hungary. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the annual financial statements section of our report.

We are independent of the Company in accordance with the applicable ethical requirements according to relevant laws in effect in Hungary and the policy of the Chamber of Hungarian Auditors on the ethical rules and disciplinary proceedings and, concerning matters not regulated by any of these, with the International Ethics Standards Board of Accountants (IESBA) International Code of Ethics for Professional Accountants' (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

Other information

Other information consists of the 2024 business report of the Company. Management is responsible for the preparation of the business report in accordance with the Hungarian Accounting Law and other relevant legal requirements, if any. Our opinion on the annual financial statements does not cover the business report.

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

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Concerning the business report it is our responsibility also, in accordance with the Hungarian Accounting Law, to consider whether the business report has been prepared in accordance with the Hungarian Accounting Law and other relevant legal requirements, if any.

In our opinion, the business report of the Company for 2024 is consistent, in all material respects, with the 2024 annual financial statements of the Company and the relevant requirements of the Hungarian Accounting Law.

Since no other legal regulations prescribe for the Company further requirements with regard to its business report, we do not express opinion in this regard.

Further to the above, based on the knowledge we have obtained about the Company and its environment in the course of the audit we are required to report whether we have identified any material misstatement in the business report, and if so, the nature of the misstatement in question. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the annual financial statements

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

In preparing the annual financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting. Management is required to apply going concern principle unless the applicability of that principle is precluded by other provisions or there are facts and circumstances that contradict with the continuance of the Company's business activity.

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

Auditor's responsibilities for the audit of the annual financial statements

Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue 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 Hungarian National Auditing Standards and with applicable laws and regulations in Hungary will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and 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 annual financial statements.



As part of an audit in accordance with Hungarian National Auditing Standards and with applicable laws and regulations in Hungary, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- ▶ Identify and assess the risks of material misstatement of the annual 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 Company'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 use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our Auditor's report to the related disclosures in the annual financial statements or, if such disclosures are inadequate, to modify our 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 Company to cease to continue as a going concern.
- ▶ Evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual 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 internal controls of the Company that we identify during our audit.

Budapest, 30 May 2025

(The original Hungarian version has been signed.)

Dr. Attila Hruby
Ernst & Young Kft.
1132 Budapest, Váci út 20.
Nyilvántartásba-vételi szám: 001165

Dr. Attila Hruby
Kamarai tag könyvvizsgáló
Kamarai tagsági szám: 007118

2 Balance Sheet of the Magyar Nemzeti Bank

HUF millions

Note	A S S E T S	31 Dec 2023	31 Dec 2024	Change
1	2	3	4	4-3
	I. RECEIVABLES DENOMINATED IN FORINTS	9,982,660	8,338,646	-1,644,014
4.3.	1. Receivables from the central government	3,306,780	2,242,740	-1,064,040
4.7.	2. Receivables from credit institutions	5,123,800	4,607,986	-515,814
4.10.	3. Other receivables	1,552,080	1,487,920	-64,160
	II. RECEIVABLES DENOMINATED IN FOREIGN CURRENCY	16,691,678	19,115,404	2,423,726
4.9.	1. Gold and foreign exchange reserves	15,810,687	18,236,785	2,426,098
4.4.	2. Receivables from the central government	0	0	0
4.8.	3. Receivables from credit institutions	14,591	16,902	2,311
4.10.	4. Other receivables	866,400	861,717	-4,683
	III. BANKING ASSETS	344,509	302,565	-41,944
4.12.	of which: invested assets	340,474	299,749	-40,725
4.14.	IV. DEFERRED EXPENSES/ACCRUED INCOME	195,147	173,126	-22,021
	V. TOTAL ASSETS (I+II+III+IV)	27,213,994	27,929,741	715,747
Note	L I A B I L I T I E S A N D E Q U I T Y	31 Dec 2023	31 Dec 2024	Change
1	2	3	4	4-3
	VI. LIABILITIES DENOMINATED IN FORINTS	23,923,971	25,138,364	1,214,393
4.5.	1. Central government deposits	681,695	1,080,444	398,749
4.7.	2. Deposits by credit institutions	10,129,536	8,118,799	-2,010,737
	3. Banknotes and coins in circulation	8,069,795	8,897,530	827,735
4.11.	4. Other deposits and liabilities	5,042,945	7,041,591	1,998,646
	VII. LIABILITIES DENOMINATED IN FOREIGN CURRENCY	4,878,592	4,251,536	-627,056
4.5.	1. Central government deposits	958,568	251,685	-706,883
4.8.	2. Deposits by credit institutions	92,906	59,338	-33,568
4.11.	3. Other deposits and liabilities	3,827,118	3,940,513	113,395
4.13.	VIII. PROVISIONS	540	2,381	1,841
	IX. OTHER BANKING LIABILITIES	106,258	102,252	-4,006
4.14.	X. ACCRUED EXPENSES/DEFERRED INCOME	159,223	100,390	-58,833
4.15.	XI. EQUITY	-1,854,590	-1,665,182	189,408
	1. Share capital	10,000	10,000	0
	2. Retained earnings	-250,714	-2,013,959	-1,763,245
	3. Valuation reserves	0	0	0
4.16.	4. Revaluation reserves due to exchange rate changes	258,009	1,233,168	975,159
4.16.	5. Revaluation reserves of foreign currency securities	-108,641	-105,698	2,943
	6. Profit/Loss for the year	-1,763,244	-788,693	974,551
	XII. TOTAL EQUITY AND LIABILITIES (VI+VII+VIII+IX+X+XI)	27,213,994	27,929,741	715,747

28 May 2025, Budapest

Mihály Varga
Governor of the Magyar Nemzeti Bank

3 Income Statement of the Magyar Nemzeti Bank

HUF millions

Note	I N C O M E	2023	2024	Difference
1	2	3	4	4-3
4.18.	I. INTEREST AND INTEREST-RELATED INCOME DENOMINATED IN FORINTS	229,432	203,504	-25,928
	1. Interest on receivables from the central government	92,326	90,717	-1,609
	2. Interest on receivables from credit institutions	70,897	47,357	-23,540
	3. Interest on other receivables	55,763	54,838	-925
	4. Interest-related income	10,446	10,592	146
4.18.	II. INTEREST AND INTEREST-RELATED INCOME DENOMINATED IN FOREIGN CURRENCY	557,077	641,190	84,113
	1. Interest on foreign exchange reserves	264,163	369,738	105,575
	2. Interest on receivables from the central government	0	0	0
	3. Interest on receivables from credit institutions	0	1	1
	4. Interest on other receivables	0	0	0
	5. Interest-related income	292,914	271,451	-21,463
4.19.	III. INCOME ARISING FROM EXCHANGE RATE CHANGES	128,950	404,130	275,180
4.18.	IV. REALISED GAINS ARISING FROM FINANCIAL OPERATIONS	3,907	11,392	7,485
4.21.	V. OTHER INCOME	37,871	44,328	6,457
	1. Fees and commissions	2,638	2,818	180
4.22.	2. Income other than fees and commissions	4,140	8,281	4,141
4.23.	3. Income from supervisory activities	31,093	33,229	2,136
4.13.	VI. PROVISIONS RELEASED	762	250	-512
4.13.	VII. REVERSED IMPAIRMENT	27,164	10,144	-17,020
4.24.	VIII. OPERATING INCOME	551	829	278
	IX. TOTAL INCOME (I+II+III+IV+V+VI+VII+VIII)	985,714	1,315,767	330,053
Note	E X P E N S E S	2023	2024	Difference
1	2	3	4	4-3
4.18.	X. INTEREST AND INTEREST-RELATED EXPENSES DENOMINATED IN FORINTS	2,221,013	1,299,194	-921,819
	1. Interest on central government deposits	167,966	138,893	-29,073
	2. Interest on deposits by credit institutions	1,678,481	712,928	-965,553
	3. Interest on other deposits	186,713	356,340	169,627
	4. Interest-related expenses	187,853	91,033	-96,820
4.18.	XI. INTEREST AND INTEREST-RELATED EXPENSES DENOMINATED IN FOREIGN CURRENCY	324,337	246,685	-77,652
	1. Interest on central government deposits	19,254	35,879	16,625
	2. Interest on deposits of credit institutions	3,884	5,053	1,169
	3. Interest on other liabilities	69,898	65,275	-4,623
	4. Interest-related expenses	231,301	140,478	-90,823
4.19.	XII. EXPENSES RESULTING FROM EXCHANGE RATE CHANGES	38,392	10,713	-27,679
4.20.	XIII. COST OF ISSUING BANKNOTES AND COINS	15,766	17,392	1,626
4.18.	XIV. REALISED LOSSES ARISING FROM FINANCIAL OPERATIONS	46,634	341,095	294,461
4.21.	XV. OTHER EXPENSES	7,778	11,431	3,653
	1. Fees and commissions	2,781	3,045	264
4.22.	2. Expenses other than fees and commissions	4,997	8,386	3,389
4.13.	XVI. PROVISIONS CHARGED	392	2,091	1,699
4.13.	XVII. IMPAIRMENT	12,118	87,257	75,139
4.24.	XVIII. OPERATING COSTS AND EXPENSES	82,528	88,602	6,074
	XIX. TOTAL EXPENSES (X+XI+XII+XIII+XIV+XV+XVI+XVII+XVIII)	2,748,958	2,104,460	-644,498
	XX. PROFIT/LOSS FOR THE YEAR (IX-XIX)	-1,763,244	-788,693	974,551

28 May 2025, Budapest

Mihály Varga
Governor of the Magyar Nemzeti Bank

4 Notes to the Financial Statements

4.1 MNB ACCOUNTING POLICIES

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

The MNB has been a member of the European System of Central Banks (ESCB) 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 accounting policies of the MNB are 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).

The following sections present a brief description of the MNB's accounting system 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, in particular foreign exchange sales and purchases. Spot foreign currency transactions which involve foreign exchange conversions are recorded in the books on the transaction date. 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 the revaluation of its foreign assets and liabilities and off-balance sheet derivative transactions recorded for hedging purposes;
- amortisation of 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 policies.

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

- the market valuation of foreign currency securities;
- the breakdown and recording of realised and unrealised portions of foreign exchange gains and losses derived from daily revaluation; and
- the 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. It also measures the receivables and securities in the balance sheet, and additionally measures the financial investments at the end of the year and reviews them at the second quarter based on the final annual reports. As a result of this measurement, the MNB recognises impairment losses as necessary and forms provisions for off-balance sheet liabilities.

The balance sheet preparation date is the 15th working day of January in the year following the reporting year. For this report, the balance sheet preparation date was 22 January 2025.

By law, the MNB is also required to report to Parliament. The MNB submits a single report to both Parliament and the Ministry in charge of public finances, which 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 in Hungarian and in English. The website is accessible at: <http://english.mnb.hu>.

Additionally, the Governor of the MNB also reports to the parliamentary 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 half-year activity, as well as the half-year financial statements as defined by the Act on Accounting and compiled by the Board of Directors. The Half-year Report is also published on the internet in Hungarian.

Pursuant to the 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 Dr Attila Hruby (Ernst & Young Kft.), Chamber membership number: 007118.

The person authorised to sign the Annual Report is Mihály Varga, Governor of the Magyar Nemzeti Bank.

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

4.1.2 Major Valuation Principles

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 Credit Institutions

Mortgage bonds and securities issued by credit institutions with government guarantees are recorded in the balance sheet under 'Receivables from credit institutions' 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.

Interest-free refinancing loans within the framework of the Funding for Growth Scheme (FGS) and the base rate fixed loans provided to credit institutions with collateral (securities, large entity loan receivables) are recorded in the balance sheet at the disbursed amount.

Other Receivables

Corporate bonds are recorded in the balance sheet under 'Other receivables' 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.

Receivables from supervisory activities are stated in the balance sheet, along with any related impairment. The MNB records supervisory fees imposed in line with the incoming data reported by the institutions and reports, and the penalties imposed are recorded in accordance with the final resolutions. Supervisory fees, penalties levied and fees from public proceedings are recognised 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'.

Valuation of Receivables

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

'Receivables from credit institutions' and 'Other receivables' are tested for impairment and if the book value of the receivable is higher than its expected recovery value, an impairment loss is recorded, in line with the MNB's impairment policy. This does not apply to receivables with market valuation and collateralised monetary policy receivables.

With the exception of government bonds and bonds issued with government guarantees, securities denominated in forints and purchased for monetary policy purposes are tested for impairment in line with the corresponding rules, and impairment is recorded in proportion to the risk of losses. Other forint-denominated securities held for monetary policy purposes (mortgage bonds, corporate bonds) are tested for impairment separately for each portfolio (held-for-sale portfolio, held-to-maturity portfolio). With regard to the held-for-sale portfolio, the appropriate amount of impairment is defined as the negative difference between the book value and the market value, provided that such difference (loss) appears to be a permanent, material amount. With regard to the held-to-maturity portfolio, the impairment methodology is based on the risk of non-performance and the related expected loss, ignoring the materiality criteria.

Valuation of Foreign Currency Assets and Liabilities and Recognition of Exchange Rate Gains

In its books, the MNB records all foreign currency assets, including the precious metals held for central bank purposes based on the MNB Decree, 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 and the official exchange rate is recorded by the MNB as conversion income for that particular date and is stated under 'Gains/losses from exchange rate changes' in the income statement.

The MNB carries out a 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 at the 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 the revaluation.

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

Daily accounting for accrued income is preceded by reversing the accrued income from 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, only 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 (prices applied by the instrument facilitating portfolio management) prevailing on the date of valuation and the amortised purchase value is recorded in 'Revaluation reserve of foreign currency securities' as part of 'Equity'. Exchange rate gains or losses realised on sales 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 in respect of a certain foreign currency, the valuation of securities is based on the market prices available on the previous working day.

Foreign currency securities managed by external trustees based on 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, future receivables or liabilities on securities 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 recognised as off-balance sheet items. Non-cash collaterals and investments from cash collateral must be recorded as contingent liabilities under off-balance sheet items and, in the event that their market value is negative, a provision of an equal amount must be created for the investments on a quarterly basis.

Accounting Rules Relating to the IMF Quota

The 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 forints and recorded 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 forints. 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. The amount received increases the MNB's foreign exchange reserves and creates a liability to the IMF without a maturity date on the liability side of the balance sheet. This transaction has an effect on profit and loss (interest must be paid on the SDR amount received) if it is utilised.

Starting from 2024, the MNB has contributed to IMF programmes supporting low-income countries through a PRGT (Poverty Reduction and Growth Trust) Deposit and Investment Account (DIA), which is part of the foreign exchange reserves. The invested amount will be returned to the MNB upon maturity, and only the income generated thereon – reduced by the SDR interest paid quarterly to the MNB during the term – will be used as support by the IMF. The interest-bearing deposit in SDR is revalued daily due to changes in the exchange rate. In addition, the PRGT deposit must be revalued quarterly based on the market value reported by the IMF.

Accounting Rules Relating to Derivatives

Based on the transaction purpose, the MNB distinguishes between two groups of derivative transactions: hedging transactions and derivatives 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, derivatives with the government or non-resident counterparties to hedge these transactions are also regarded as hedging transactions. FX transactions for the purpose of setting the benchmark FX structure or decreasing in absolute terms the remaining average duration of the interest-bearing assets and liabilities are deemed macro hedging transactions.

Derivatives are stated under off-balance sheet assets and liabilities. The aggregate revaluation difference of foreign currency assets and liabilities arising from hedging transactions is reported on the balance sheet (depending on the balance of such, either in '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 is 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 preparation date, a provision is formed 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);
- liabilities arising from banknotes no longer accepted as legal tender but not yet exchanged;
- investments; and
- assets required for operating the organisation (such as intangible assets, tangible assets, 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 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 2024
Concessions, licences and similar rights	14.5–17
Trademarks, patents and similar assets	10–50
Buildings	3
Vehicles (cars) *	20
Telecommunication devices, office equipment, machines	10–50
Office equipment	5–50
Computer hardware	13–33
Cash-processing equipment	5–50
Instruments	20
Bank security devices	2–50
Other equipment and devices	3–50
* Residual value of vehicles: 20 per cent	

The depreciation rates are determined individually based on estimated useful economic life. Depreciation is charged on a straight-line basis in every case. The MNB 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 2024 BALANCE SHEET AND INCOME STATEMENT OF THE MAGYAR NEMZETI BANK

In 2024, the MNB incurred a loss of HUF 788.7 billion. The most significant item was interest and interest-related losses, the negative balance of which declined compared to 2023. The realised net gains on exchange rate changes improved, while the realised loss arising from financial operations undermined the result. As at 31 December 2024, the balance sheet total amounted to HUF 27,929.7 billion, showing an increase of HUF 715.7 billion compared to the end of 2023.

On the assets side, the increase in gold and foreign exchange reserves contributed to the expansion of the balance sheet total to a greater extent than would have been justified by the increase in foreign exchange, due to the weakening of the forint exchange rate. At the same time, the balance sheet total decreased owing to the year-end repurchase of government bonds by the Government Debt Management Agency (ÁKK), as well as the maturities of FGS loans, mortgage bonds and corporate bonds during the year. On the liabilities side, the volume of the MNB's discount bonds rose significantly. The total value of currency in circulation and the stock of the central government's forint deposit also increased during the year. However, forint deposits by credit institutions decreased, and the long-term floating rate deposit no longer had a balance at the end of the year due to the suspension in January 2024. Liabilities in foreign currency also fell, largely related to the decrease in the foreign currency deposits of the central government and, to a lesser extent, to the decline in the stock of repo transactions concluded with international organisations. The negative balance of the MNB's equity diminished; its development was determined by the loss in 2024 and the change in the aggregate balance of revaluation reserves.

Net interest and interest-related income showed a loss of HUF 701.2 billion in 2024, an improvement of HUF 1,057.7 billion compared to the loss registered in 2023. Forint interest and interest-related income reflected a loss of HUF 1,095.7 billion, which was HUF 895.9 billion smaller than the previous year's loss. This was largely due to the fact that the forint interest loss gradually declined as a result of the central bank's interest rate cuts, while the favourable effect of the lower interest rate level was mitigated by the higher stock of interest-bearing liabilities. Due to the declining forint interest rate level, the result of the interest rate swap transactions concluded with credit institutions also improved between the two periods. Net foreign exchange interest and interest-related income rose by HUF 161.8 billion to HUF 394.5 billion from 2023 to 2024. The average higher level of foreign exchange reserves and the higher average interest rate on such resulted in an increase in interest income on international reserves between the years under review. The result of forward transactions related to reserves and the result arising from the amortisation of exchange rate differences on foreign currency securities also increased.

The realised loss arising from financial operations rose by HUF 287 billion to HUF 329.7 billion from 2023 to 2024, primarily due to the year-end repurchase of government bonds by the ÁKK. At the same time, the realised loss on selling securities related to foreign exchange reserve management declined by HUF 33.8 billion due to the foreign exchange yield changes.

The development of net income arising from exchange rate changes is determined partly by the volume of foreign currency sales and partly by the difference between the official exchange rate and the average cost rate of the given currencies. Realised gains on exchange rate changes amounted to HUF 393.4 billion in 2024, exceeding the previous year's gains by HUF 302.8 billion. This was driven by both the weaker forint exchange rate and the higher conversion volume compared to 2023.

For more details on the factors affecting net income, see Section 3.12. of the Business Report.

4.3 FORINT RECEIVABLES FROM THE CENTRAL GOVERNMENT

HUF millions

B/S line	Remaining maturity	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Government bonds maturing within 1 year	0	1,992	1,992
	Government bonds maturing within 1 to 5 years	369,786	763,532	393,746
	Government bonds maturing in over 5 years	2,936,994	1,477,216	-1,459,778
I.1.	Total receivables from the central government	3,306,780	2,242,740	-1,064,040

The balance of forint receivables from the central government decreased by HUF 1,064 billion to HUF 2,242.7 billion versus end-2023. At the end of 2024, in two instalments, the ÁKK repurchased government bonds with a face value of HUF 1,077.3 billion from the MNB. After the transactions, government bonds worth HUF 2,201.1 billion remained with the MNB. The difference shows the amortised purchase value of Hungarian government bonds and the change in such.

4.4 FOREIGN CURRENCY RECEIVABLES FROM THE CENTRAL GOVERNMENT

Neither at end-2023 nor at end-2024 was any amount listed in the item for foreign currency receivables from the central government. The balance of currency swaps with the central government showed a net 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

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Single Treasury Account (KESZ)	675,726	1,078,380	402,654
	Deposit by Government Debt Management Agency (ÁKK Zrt)	286	397	111
	Public sector instant payment accounts	5,625	1,609	-4,016
	Other	58	58	0
VI.1.	Forint deposits of the central government	681,695	1,080,444	398,749

The balance of central government forint deposits rose by HUF 398.7 billion. This change mainly stemmed from the KESZ account, due to budgetary and financing processes. The balance of the instant payment accounts declined by HUF 4 billion.

Foreign Currency Liabilities of the Central Government

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Foreign currency deposits of the central government	842,613	185,850	-656,763
	Currency swaps with the central government	115,955	65,835	-50,120
VII.1.	Foreign currency liabilities of the central government	958,568	251,685	-706,883

The total amount of the foreign currency deposits and currency swaps of the central government was HUF 251.7 billion on 31 December 2024, down HUF 706.9 billion versus the end of 2023. Of the change, HUF 656.8 billion was due to the decrease in the stock of government foreign currency deposits, which was triggered by the debt management activities

of the Government Debt Management Agency. Of the forward transactions with the central government, interest-bearing currency swaps concluded to set the interest and currency structure of foreign currency debt had an open position at the times under review.

Foreign Currency Liabilities of the Central Government, Broken Down by Remaining Maturity

HUF millions

B/S line	Remaining maturity	Balance		Change
		31 Dec 2023	31 Dec 2024	
	- within 1 year	910,210	185,850	-724,360
	- within 1 to 5 years	0	0	0
	- over 5 years	48,358	65,835	17,477
VII.1.	Foreign currency liabilities of the central government	958,568	251,685	-706,883

4.6 NET POSITIONS VIS-À-VIS THE CENTRAL GOVERNMENT

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
I.1.—VI.1.	Net forint position	2,625,085	1,162,296	-1,462,789
II.2.—VII.1.	Net foreign currency position	-958,568	-251,685	706,883
	Total	1,666,517	910,611	-755,906

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 2023	31 Dec 2024	
	FGS refinancing loans	1,817,527	1,403,692	-413,835
	Covered mortgage bonds	553,901	421,695	-132,206
	Collateralised loans	2,574,873	2,574,873	0
	Securities issued with government guarantees	153,213	153,318	105
	Other receivables	32,690	57,395	24,705
	Total gross receivables from credit institutions	5,132,204	4,610,973	-521,231
	Impairment loss for receivables from credit institutions	-8,404	-2,987	5,417
I.2.	Total receivables from credit institutions	5,123,800	4,607,986	-515,814

Forint receivables from credit institutions decreased by HUF 515.8 billion to HUF 4,608 billion in one year. The balance of FGS loans changed to the largest extent, falling by HUF 413.8 billion overall. Due to maturities there was a decrease of HUF 420.3 billion, while the stock of loans drawn under the FGS Green Home Programme increased by HUF 6.5 billion. The decline of HUF 132.2 billion in the volume of mortgage bonds was the effect of several maturities during the year and one ad-hoc repurchase. In relation to the HUF 24.7 billion rise in other receivables from credit institutions, HUF 29.4 billion is explained by the change in the receivable-type balance of collaterals (margins) placed due to changes in the market value of forward transactions concluded with credit institutions, while the difference of HUF 4.7 billion is related to the write-off of a claim classified as irrecoverable from a bank under liquidation; a 100-per cent provision was previously recognised for this, which was used at the same time.

Gross Forint Receivables from Credit Institutions by Remaining Maturity

HUF millions

Remaining maturity	Balance		Change
	31 Dec 2023	31 Dec 2024	
- matured	5,252	541	-4,711
- within 1 year	354,438	2,377,864	2,023,426
- within 1 to 5 years	3,415,689	1,079,875	-2,335,814
- over 5 years	1,356,825	1,152,693	-204,132
Total gross receivables from credit institutions	5,132,204	4,610,973	-521,231

Forint Liabilities of Credit Institutions

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Current accounts	9,397,069	7,715,294	-1,681,775
	Variable rate deposit tender	531,000	0	-531,000
	O/N deposits	22,730	58,963	36,233
	Instant payment accounts	178,737	344,542	165,805
VI.2.	Deposits of credit institutions	10,129,536	8,118,799	-2,010,737

The liquidity-absorbing deposits of credit institutions declined by HUF 2,010.7 billion (about 20 per cent) compared to end-2023 and amounted to HUF 8,118.8 billion on 31 December 2024. The balance of required reserves as the MNB's policy instrument decreased by HUF 1,681.8 billion to HUF 7,715.3 billion, while the stock of longer-term variable rate deposits expired due to the suspension of the instrument at the end of January 2024. In contrast to the above, the balance of instant payment accounts rose by HUF 165.8 billion to HUF 344.5 billion, and the stock of the overnight deposits increased by HUF 36.2 billion to HUF 59 billion.

4.8 NET POSITIONS VIS-À-VIS CREDIT INSTITUTIONS

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
I.2.—VI.2.	Net forint position	-5,005,736	-3,510,813	1,494,923
II.3.—VII.2.	Net foreign currency position	-78,315	-42,436	35,879
	Total	-5,084,051	-3,553,249	1,530,802

In total, net liabilities to credit institutions decreased by HUF 1,530.8 billion to HUF 3,553.2 billion by end-2024. This was mainly caused by an improvement of HUF 1,494.9 billion in the net forint position (see Section 4.7).

Net foreign currency liabilities to credit institutions dropped by HUF 35.9 billion to HUF 42.4 billion from the end of 2023 to the end of 2024. Within this, the decrease in foreign currency deposits placed by credit institutions at the MNB improved the net foreign exchange position to a larger extent, while the aggregate change in the balance of foreign currency swaps with credit institutions improved it to a lesser extent.

Foreign Currency Receivables from and Liabilities to Credit Institutions, Broken Down by Remaining Maturity

HUF millions

B/S line	Remaining maturity	Balance		Change
		31 Dec 2023	31 Dec 2024	
	- within 1 year	4	3	-1
	- within 1 to 5 years	2	4,133	4,131
	- over 5 years	14,585	12,766	-1,819
II.3.	Foreign currency receivables from credit institutions	14,591	16,902	2,311
	- within 1 year	92,906	59,338	-33,568
	- within 1 to 5 years	0	0	0
	- over 5 years	0	0	0
VII.2.	Foreign currency liabilities to credit institutions	92,906	59,338	-33,568
II.3.-VII.2.	Net foreign currency position	-78,315	-42,436	35,879

4.9 GOLD AND FOREIGN EXCHANGE RESERVES OF THE CENTRAL BANK

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Gold reserve	2,174,160	3,640,559	1,466,399
	Reserve position in the IMF	139,992	154,599	14,607
	Foreign currency deposits	4,508,585	4,843,058	334,473
	Foreign currency securities	7,834,103	9,322,481	1,488,378
	Foreign currency repo transactions	1,153,847	276,088	-877,759
II.1.	Gold and foreign exchange reserves	15,810,687	18,236,785	2,426,098

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 foreign exchange reserves differ in amount according to statistical and accounting rules.

Excluding accrued interest, foreign exchange reserves rose by HUF 2,426.1 billion to HUF 18,236.8 billion as of 31 December 2024. The amount of foreign exchange reserves was increased by foreign currency bonds issued by the state, euro transfers from the European Commission, the yield earned by portfolios, as well as the revaluation of foreign currency assets other than euro and the value of gold denominated in euros due to exchange rate changes. The increase was offset by the net foreign exchange expenditures of the Hungarian State Treasury and by the Government Debt Management Agency's disbursements to repay debt. The difference between the value of the swap transactions providing euro liquidity announced at the end of 2024 and the repurchase agreements used to finance such had a temporary effect on the evolution of the reserve level. As a result of the combined effect of the above items, the amount of foreign exchange reserves denominated in euros rose by EUR 3.2 billion to EUR 44.5 billion as of 31 December 2024. The stock of reserves denominated in forints increased by a larger amount due to the weakening of the forint exchange rate versus the euro.

During the year, the MNB continued the gold purchases it had started in previous years, increasing its gold reserves to 3.6 million ounces (110 tons), which did not change the size of the reserves, but only their composition.

The end-2024 balance of foreign currency securities contained the securities managed by an external trustee based on a mandate amounting to HUF 1,077.9 billion (11.6 per cent in total).

4.10 OTHER FORINT AND FOREIGN CURRENCY RECEIVABLES

Other Forint Receivables

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Total other gross forint receivables	1,676,585	1,645,356	-31,229
	Impairment loss for other receivables	-124,505	-157,436	-32,931
I.3.	Other forint receivables	1,552,080	1,487,920	-64,160

The stock of other forint receivables amounted to HUF 1,487.9 billion as of 31 December 2024, down HUF 64.2 billion compared to the end of 2023. The aggregated balance of other gross forint receivables was HUF 1,645.4 billion, 99 per cent of which was accounted for by the central bank's purchases of securities as part of the monetary policy instruments. The balance of receivables from supervisory activities amounted to HUF 8.1 billion at end-2024, and an impairment loss was recognised for 96.4 per cent of this, in line with the MNB's regulations. The item 'Impairment loss for other forint receivables' also contains impairment on securities, representing 9.7 per cent of the portfolio. The total amount of preferential property loans and personal loans granted by the MNB to its employees amounted to HUF 9.9 billion as of 31 December 2024.

Other Foreign Currency Receivables

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Forint payment of IMF quota	761,740	841,223	79,483
	Foreign hedging transactions*	103,479	19,705	-83,774
	Other	1,181	789	-392
II.4.	Other foreign currency receivables	866,400	861,717	-4,683

* 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 rose, owing to the 10.4 per cent depreciation 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.

4.11 OTHER DEPOSITS AND LIABILITIES

Other Forint Liabilities

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	International financial institutions' forint deposits	2,092,897	2,171,120	78,223
	Discount Bills issued by the MNB	2,941,000	4,860,334	1,919,334
	Other legal entities' bank accounts	6,719	5,745	-974
	Other legal entities' instant payment accounts	1,600	3,647	2,047
	Other liabilities	729	745	16
VI.4.	Other forint deposits and liabilities	5,042,945	7,041,591	1,998,646

The stock of other forint deposits and liabilities increased by HUF 1,998.6 billion (about 40 per cent), amounting to HUF 7,041.6 billion as of 31 December 2024. Central bank discount bills played a dominant role in the change, as the balance of such was HUF 1,919.3 billion higher at end-2024 than at end-2023. The aggregated forint deposits of the European

Commission and other foreign financial institutions also increased by HUF 78.2 billion, as well as the balances of the instant payment accounts of payment institutions and foreign legal entities by HUF 2 billion, while the balance of domestic and foreign other legal entities declined by HUF 1 billion.

Other Foreign Currency Liabilities

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Repo transactions	1,571,029	1,225,679	-345,350
	IMF deposits	2,087,546	2,305,322	217,776
	Foreign deposits	130,318	314,511	184,193
	Foreign hedging transactions*	38,177	94,724	56,547
	Other liabilities	48	277	229
VII.3.	Other foreign currency liabilities	3,827,118	3,940,513	113,395

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

As of 31 December 2024, the balance of other foreign currency liabilities was HUF 3,940.5 billion, up HUF 113.4 billion compared to the balance at end-2023. This change was the result of several large volume items. The stock of IMF deposits rose by HUF 217.8 billion due to revaluation. The increase of HUF 184.2 billion in foreign deposits can basically be explained by the temporary rise in the European Commission deposit. The aggregate credit balance of derivative transactions with non-resident counterparties for hedging purposes increased by HUF 56.5 billion. Contrary to the above, the total amount of repo transaction concluded with foreign partners and international organisations decreased by HUF 345.4 billion (to HUF 1,225.7 billion).

Other foreign Currency Liabilities by Remaining Maturity

HUF millions

B/S line	Remaining maturity	Balance		Change
		31 Dec 2023	31 Dec 2024	
	- within 1 year	2,502,198	2,444,256	-57,942
	- within 1 to 5 years	0	33,090	33,090
	- over 5 years	0	0	0
	- without maturity	1,324,920	1,463,167	138,247
VII.3.	Other foreign currency liabilities	3,827,118	3,940,513	113,395

The item 'Liabilities without maturity' includes liabilities derived from SDR allocations carried out by the IMF in 2009 and 2021 in the amount of SDR 2,850.5 million; the increase was due to exchange rate changes.

Currency Structure of other Foreign Currency Liabilities – without Foreign Hedging Transactions

HUF millions

Description	Balance		Change
	31 Dec 2023	31 Dec 2024	
- EUR	1,336,657	1,390,087	53,430
- USD	3,400	14,784	11,384
- SDR	1,481,374	1,699,104	217,730
- Other	967,510	741,814	-225,696
Other foreign currency liabilities	3,788,941	3,845,789	56,848

Most of the item 'Other' amounting to HUF 741.8 billion on 31 December 2024 consists of the forint coverage of the IMF quota adjusted by revaluation.

4.12 INVESTMENT ASSETS

In addition to intangible assets, tangible assets and capital expenditure (HUF 50.1 billion in total), investment assets also include shares in investments (HUF 13.7 billion in foreign investments and HUF 236 billion in domestic investments).

Changes in the Gross Value, Depreciation and Net Value of Intangible Assets, Tangible Assets and Capital Expenditure

								HUF millions
	Assets							Intangible assets, tangible assets and capital expenditure
	Intangible assets		Tangible assets				Capital expenditure and advances given	
	Rights and intellectual property	Software under development	Buildings and accessories	Equipment	Cultural goods	Money Museum collection		
Gross value								
31 Dec 2023	30,138	2,959	15,994	31,124	10,281	1,368	1,197	93,061
Commissioning/acquisition	4,615	-478	84	2,367		7	3,942	10,537
Acceptance of assets free of charge								0
Other addition/reclassification						3		3
Retirement	-285	-8		-652				-945
Selling				-142				-142
Transfer free of charge			-28	-235				-263
Other disposal/reclassification	-912	-1		-250				-1,163
31 Dec 2024	33,556	2,472	16,050	32,212	10,281	1,378	5,139	101,088
Details of depreciation								
31 Dec 2023	22,416	0	6,930	16,330	0	0	0	45,676
Ordinary depreciation	3,169		277	4,303				7,749
Other addition due to reclassification								0
Derecognition	-1,159		-24	-1,249				-2,432
Decrease due to reclassification								0
31 Dec 2024	24,426	0	7,183	19,384	0	0	0	50,993
Balance								
31 Dec 2023	7,722	2,959	9,064	14,794	10,281	1,368	1,197	47,385
31 Dec 2024	9,130	2,472	8,867	12,828	10,281	1,378	5,139	50,095
Change	1,408	-487	-197	-1,966	0	10	3,942	2,710

Capital expenditure and advances provided increased mainly due to the network equipment to be installed in the headquarters on Szabadság tér.

Foreign Investments and Dividends from Investments

HUF millions

Description	Ownership share (%)		Book value		Dividends received	
	31 Dec 2023	31 Dec 2024	31 Dec 2023	31 Dec 2024	2023	2024
BIS	1.43	1.43	10,223	11,022	1,105	1,533
<i>SDR millions</i>			10	10		
<i>CHF millions</i>			14	14		
European Central Bank	1.55	1.58	2,407	2,634	-	-
<i>EUR thousands</i>			6,287	6,422		
SWIFT	0.03	0.03	18	44	0	0
<i>EUR thousands</i>			46	108		
Total investments			12,648	13,700	1,105	1,533

The investment in SWIFT increased by EUR 62 thousand in 2024 as the MNB was obliged to purchase 8 new shares (in addition to the 28 shares it already owned) as the result of the share reallocation process in the first half of the year, due to the increased usage of SWIFT's services. SWIFT reviews the adequacy of the shareholding at least every three years and, under a share reallocation mechanism, it orders the affected shareholders to purchase or sell shares based on the changes of their role in the global payment system. For the changes in the ECB investment, please see the next section.

Ownership Distribution in the ECB as of 31 December 2024

National Central Banks (NCBs)	Subscribed capital	Paid-up capital	Capital key %
	EUR thousands		
Nationale Bank van België/ Banque Nationale de Belgique	324,804	324,804	3.0005
Deutsche Bundesbank	2,357,134	2,357,134	21.7749
Eesti Pank	26,381	26,381	0.2437
Central Bank of Ireland	192,804	192,804	1.7811
Bank of Greece	199,981	199,981	1.8474
Banco de España	1,046,670	1,046,670	9.6690
Banque de France	1,770,701	1,770,701	16.3575
Hrvatska narodna banka	68,511	68,511	0.6329
Banca d'Italia	1,418,000	1,418,000	13.0993
Central Bank of Cyprus	19,507	19,507	0.1802
Latvijas Banka	34,304	34,304	0.3169
Lietuvos banka	52,241	52,241	0.4826
Banque centrale du Luxembourg	32,215	32,215	0.2976
Central Bank of Malta	11,399	11,399	0.1053
De Nederlandsche Bank	522,913	522,913	4.8306
Oesterreichische Nationalbank	261,695	261,695	2.4175
Banco de Portugal	205,827	205,827	1.9014
Banka Slovenije	43,744	43,744	0.4041
Národná banka Slovenska	101,788	101,788	0.9403
Suomen Pankki – Finlands Bank	160,784	160,784	1.4853
Subtotal for euro area NCBs	8,851,403	8,851,403	81.7681
Bulgarian National Bank	105,901	3,971	0.9783
Česká národní banka	212,419	7,966	1.9623
Danmarks Nationalbank	192,652	7,224	1.7797
Magyar Nemzeti Bank	171,241	6,422	1.5819
Narodowy Bank Polski	659,979	24,749	6.0968
Banca Națională a României	312,713	11,727	2.8888
Sveriges riksbank	318,699	11,951	2.9441
Subtotal for non-euro area NCBs	1,973,604	74,010	18.2319
Total NCBs	10,825,007	8,925,413	100.0000

Hungary joined the European Union on 1 May 2004, as a result of which the MNB became a member of the ESCB. The ESCB comprises the European Central Bank (ECB) and the national central banks of the EU Member States. The Eurosystem is composed of the ECB and the national central banks of Member States that 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 became 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 also change with a new accession to the EU, a Member State leaving the EU, or due to a capital increase.

As of 1 January 2024, the key subscription was adjusted again, due to the five-year review. The MNB's key for subscription rose to 1.5819 per cent, and its share increased to EUR 171.2 million.

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 'Investment 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 6.4 million (HUF 2.6 billion) in the MNB's balance sheet as of 31 December 2024.

Domestic Investments and Dividends from Investments

HUF millions

Description	Ownership share (%)		Book value		Dividends received	
	31 Dec 2023	31 Dec 2024	31 Dec 2023	31 Dec 2024	2023	2024
Pénzjegynyomda Zrt. 1055 Budapest, Markó utca 13-17.	100.0	100.0	11,827	11,827	0	0
Magyar Pénzverő Zrt. 1239 Budapest, Európa u. 1.	100.0	100.0	1,309	1,309	200	200
Pénzügyi Stabilitási és Felszámoló Nonprofit Kft. 1012 Budapest, Vérmező út 4. V. em.	100.0	100.0	50	50	-	-
MNB-Bankjóléti Zrt. 1123 Budapest, Alkotás utca 50.	100.0	100.0	3,067	3,467	0	0
GIRO Zrt. 1054 Budapest, Vadász utca 31.	100.0	100.0	14,779	14,779	0	0
MNB-Ingatlan Kft. 1013 Budapest, Krisztina körút 32.	100.0	100.0	225,075	181,256	0	0
MNB-EduLab Nonprofit Kft. 1122 Budapest, Krisztina körút 6-8.	100.0	100.0	12,119	7,986	-	-
Budapesti Értéktőzsde Nyrt. 1013 Budapest, Krisztina körút 55.	81.4	81.4	11,555	14,619	449	493
KELER Zrt. 1074 Budapest, Rákóczi út 70-72.	53.3	53.3	643	643	459	3,734
KELER KSZF Zrt. 1074 Budapest, Rákóczi út 70-72.	0.1	0.1	17	17	0	4
Total investments			280,441	235,953	1,108	4,431

Participations of Domestic Investments

Description	Participations		
	Name Headquarters	Ownership share (%)	Share capital (HUF millions)
		31 Dec 2024	
Pénzjegynyomda Zrt.	DIPA Diósgyőri Papírgyár Zrt. 3535 Miskolc, Hegyalja út 203/1.	100.0	4,196
GIRO Zrt.	BISZ Központi Hitelinformációs Zrt. 1205 Budapest, Mártonffy utca 25-27.	100.0	217
Budapesti Értéktőzsde Nyrt.	KELER Zrt. 1074 Budapest, Rákóczi út 70-72.	46.7	4,500
	KELER KSZF Zrt. 1074 Budapest, Rákóczi út 70-72.	0.1	3,423
	EuroCTP B.V. 1013 KS Amsterdam, Grote Bickerstraat 74-78.	0.1	0 (EUR 100.03)
KELER Zrt.	KELER KSZF Zrt. 1074 Budapest, Rákóczi út 70-72.	99.9	3,423
MNB-Ingatlan Kft.	Optimum-Gamma Ingatlanbefektetési Kft. „v.a.” 1013 Budapest, Krisztina körút 32.	100.0	4
	Optimum-Omega Ingatlanbefektetési Kft. 1013 Budapest, Krisztina körút 32.	100.0	21
	WINDIRECT Kft. 1013 Budapest, Krisztina körút 32.	100.0	3

Pénzjegynyomda Zrt. (Hungarian Banknote Printing Plc.) produces forint banknotes, secure documents in paper and plastic booklet and card format, banderole and securities, and provides document personalisation services for domestic and foreign clients. It operates in accordance with the medium-term shareholder's strategy. In line with this, its primary aim is to produce banknotes in adequate quantity and excellent quality based on the MNB's orders. In market segments other than banknote production, its main goal is to increase foreign penetration and to develop integrated IT systems and services related to the given products. The company was once again a prominent player in the production and personalisation of domestic documents in 2024, and thus the fulfilment of civil orders for documents, beside the production of banknotes, was also high priority. Pénzjegynyomda Zrt.'s subsidiary, **DIPA Diósgyőri Papírgyár Zrt.** (DIPA Zrt., Diósgyőr Papermill Plc.), is the sole security paper manufacturer in Hungary, the primary function of which is to produce forint banknote papers. At the centre of the company's product strategy are quality products featuring up-to-date security elements. In addition to banknote papers, DIPA Zrt. produces papers for a significant share of documents used in public administration, as well as papers for passports and documents for numerous countries, in relation to which it also offers solutions providing complex protection against forgery.

Based on MNB orders, the primary duty of **Magyar Pénzverő Zrt.** (Hungarian Mint Plc.) is to produce circulation coins for secure cash turnover, as well as the collector and commemorative coins issued by the MNB as legal tender. The company is operating in accordance with the shareholder's strategy for 2021–2025. Utilisation of the company's free capacity allows for the production of non-legal tender and other medals, on the basis of its own coin programme and customised orders, and of the national awards on behalf of the Sándor Palace. As part of its commercial activities, the company is the primary distributor of commemorative and collector coins in Hungary and abroad, both as a wholesaler and retailer, with a growing proportion of online sales. In addition, the company sells collector banknotes, packaged circulation coin series and commemorative coin versions, MNB packaged coins in roll and imported gold investment products. The company met the orders and deadlines related to the circulation coin and collector coin issuing programme of the MNB covering 17 thematic schemes in 2024.

Pénzügyi Stabilitási és Felszámoló Nonprofit Kft. (PSFN Kft., Financial Stability and Liquidator Non-profit Ltd.) is a company exercising public service functions with the exclusive right to perform the liquidation or, in case of designation, winding-

up proceedings of financial institutions and to phase out venture capital funds. It participates in the resolution process of financial institutions and, in the case of an MNB measure or temporary measure, performs supervisory commissioner work at the financial institutions concerned. When assigned to a financial institution as a supervisory commissioner, PSFN Kft.'s main duty is to perform tasks related to administration and operational management. If the prudent and legal operation of the financial institution is not ensured, despite the supervisory measures by the MNB or the designation of supervisory commissioners, the company performs the liquidation or winding-up proceedings for the institution following the withdrawal of its authorisation for operation by the MNB, in the interests of a smooth exit from the market. The primary purpose of these procedures is to enforce creditors' interests and to satisfy their claims, prior to the end of the termination proceedings. PSFN Kft. performs its functions for the public good, protecting the interests of the customers of financial services. Its express objective is to terminate financial institutions in accordance with a uniform approach and methodology, emphasising prudence and transparency. Furthermore, it works to complete resolutions as quickly as possible, bearing in mind the complex nature of the undertaking and the interests of customers, and to maximise creditors' recovery.

MNB-Bankjóléti Zrt. (MNB-Bankwelfare Plc.), formerly MNB-Biztonsági Zrt. (MNB-Security Services Plc.), was responsible for personal guarding and protection activities, i.e. 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, and also performed the tasks of money and valuables transport until 1 December 2024. The company provided security for events for the MNB and performed evaluative/analytical and advisory activities, as well as company and business security activities. It also provided information security and technical security services for the MNB, undertook operating tasks related to the reception and call centre as well as to personal, physical and information security of the MNB's subsidiaries, and performed personal guarding and protection activities of the Money Museum and Visitor Centre. In accordance with the decision of the Executive Board, from 1 December 2024, the MNB performs the above mentioned tasks itself, and thus the name and the main activity of the subsidiary changed. After 1 December 2024, MNB-Bankjóléti Zrt. runs the MNB's nursery and the Balatonakarattya Oktatási és Konferencia Központ (Balatonakarattya Education and Conference Centre), organising events for the MNB, and also operates the workplace buffets and provides catering services for the MNB and its employees. The book value of the investment amounted to HUF 3.5 billion as at 31 December 2024, following a HUF 0.4 billion addition to capital and reserves.

GIRO Zrt. 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, safe operation, the development of clearing services, the implementation of new services and increasing the competitiveness of clearing fees. The company's most important development so far has been the implementation of the instant payment system, which ensures the settlement of domestic electronic payments up to HUF 20 million within 5 seconds 24 hours a day, every day of the year. The scope of the innovative payment solutions based on the central infrastructure provided by GIRO and the MNB is constantly expanding, offering customers an improving service quality in more and more payment situations. This mission is also served by the central infrastructure of unified data entry solutions launched in September 2024, which enabled, among other things, QR code payments based on the instant payment system. Additionally, in relation to payment requests and qvik payments based on unified data entry solutions, GIRO coordinates the dispute resolution procedure as well. The central fraud filtering system, currently under development, is expected to support the monitoring system of the payment service providers starting from 1 July 2025.

MNB-Ingatlan Kft. (MNB-Real Estate Ltd.) leases and operates real estate, and provides real estate management and development services for the MNB and its subsidiaries. Based on a contract with the MNB, the company is coordinating the reconstruction of the building of the headquarters on Szabadság tér. The net approved budget for the entire reconstruction project is HUF 82.6 billion (the total net cost of the construction works, including advance payment, amounted to HUF 75.4 billion up to end-2024, with HUF 37.6 billion of this amount incurred in 2024). After completion, the project will be recorded in the MNB's books in the year of capitalisation (in the amount of the total gross book value of the project delivered by MNB-Ingatlan Kft., increased by the coordination fee paid and other costs incurred up to the day of capitalisation). The MNB financed the reconstruction by increasing the capital and reserves of MNB-Ingatlan Kft. The company owns the Bölcs Vár, the MNB Felügyeleti Központ és Pénzmúzeum (MNB's Supervisory Centre and the

Money Museum, the MNB Budai Központ (MNB's Buda Centre), the Balatonakaratya Oktatási és Konferencia Központ, as well as the Pallas Athéné Konferencia Központ (Pallas Athéné Conference Centre) via the investment in Optimum-Omega Ingatlanbefektetési Kft. (Optimum-Omega Real Estate Investment Ltd.). The equity of the company decreased to HUF 181.3 billion as at 31 December 2024 due to the reduced value of real estate recognised on the basis of market valuation conducted in line with international standards. This caused a material negative difference between the equity of the company and the book value of the MNB's investment in the company, at the valuation of domestic investments, and resulted in an impairment of HUF 43.8 billion.

MNB-EduLab Nonprofit Kft. (MNB-EduLab Nonprofit Ltd.) is responsible for the Money Museum, which presents economic and financial processes, the fundamentals of money usage and the MNB's activities. This national, specialised museum also operates a research service, performs educational and museum pedagogical tasks, and safeguards and expands the Museum's collection. In line with the MNB's objective, it promotes financial consciousness. MNB-EduLab Kft. has been operating as a nonprofit company since November 2023. The financing model of the company changed in 2024, as the operating expenses (except depreciation) related to the Museum are offset by reimbursement from the founder MNB. The book value of the investment changed to HUF 8 billion as at 31 December 2024 due to the write-down of HUF 4.1 billion.

With the strategic ownership of **Budapesti Értéktőzsde Nyrt.** (BÉT, Budapest Stock Exchange Plc.), the basic aim of the MNB is to develop the market and achieve an adequately sized, effectively operating capital market, as a developed capital market and diversified financial intermediary system form the basis for a competitive economy and sustainable growth. The main elements of its strategic policy for the period 2021–2025 are: BÉT IPO, a focus on profitability, making the most of core business growth potential and creating secure IT operations to support the business strategy. BÉT celebrated its 160th anniversary in 2024 and published its Sustainability Report for the second time in the first half of the year. The report presents the environmental, social and governance (ESG) achievements of the year, emphasising BÉT's commitment to sustainability. In the second half of the year, the company launched its sustainability reporting guideline, which provides support to the issuers of listed securities in preparing sustainability reports. At the beginning of 2024, BÉT successfully launched its index related to the Xtend market specialised for medium-sized companies. In parallel with this, the new, real-time CETOP index was also launched, which allows investors to obtain up-to-date information on the performance of the segment, and the index can also have an indirect beneficial effect on liquidity. With the launch of the index, the BÉT provides a reference point for investors interested in the Central European region. In the second half of the year, the index family was expanded with the CETOP/5/10/40, which provides the possibility to meet the investment limits stated in the EU directive on undertakings for collective investment in transferable securities (UCITS). The company holds a minority interest 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 Budapest Stock Exchange, the MNB holds a strategic share in the KELER Group as well. As the operator of the back-office infrastructure of the Hungarian securities market, the KELER Group settles, guarantees and clears BÉT stock exchange transactions and transactions with dematerialised securities issued in Hungary. The book value of the investment increased to HUF 14.6 billion as at 31 December 2024, as the previously recorded impairment was reversed in full on the basis of the year-end valuation of the investment.

KELER Zrt. (KELER Plc.) provides central depository services in the Hungarian capital market and acts as a specialised credit institution. KELER issues the Hungarian ISIN codes and keeps the central registry, and performs the issuance, modification and cancellation of dematerialised securities. The company has a CSDR licence, in accordance with the European regulation on central depositories. The company is a member of the TARGET2-Securities (T2S) securities settlement platform operated by the ECB, which aims to make cross-border securities trading more efficient.

As a subsidiary of KELER, **KELER KSZF Zrt.** (KELER KSZF Plc.) handles the clearing service and CCP function in Hungary. As a clearing house, the company accounts the spot and derivative transactions traded on the Budapest Stock Exchange and the spot government security transactions traded on MTS Hungary, and as a CCP, it also guarantees that the transactions are completed. Transactions with electricity and natural gas trading is also a significant branch. In several markets (e.g. the Hungarian power exchange HUPX), KELER KSZF Zrt. provides its services as a member of ECC AG, headquartered in Leipzig, while in other markets (e.g. the Central European gas exchange CEEGEX) it acts as a CCP.

Equity of Domestic Investments

The latest data available upon the compilation of the Annual Report are shown in the following table.

HUF millions

Investment	Share capital	Reserves	Profit/loss for the year	Equity
	31 December 2024			
Pénzjegynyomda Zrt.	11,827	14,987	4,613	31,427
Magyar Pénzverő Zrt.	1,309	3,080	635	5,024
Pénzügyi Stabilitási és Felszámoló Nonprofit Kft.	50	3	0	53
MNB-Bankjóléti Zrt.	1,096	1,989	-101	2,984
GIRO Zrt.	7,496	10,614	1,699	19,809
MNB-Ingatlan Kft.	15	228,505	-47,264	181,256
MNB-EduLab Nonprofit Kft.	50	11,940	-4,662	7,328
Budapesti Értéktőzsde Nyrt.	541	20,057	5,839	26,437
KELER Zrt.	4,500	21,133	9,797	35,430
KELER KSZF Zrt.	3,423	13,508	5,338	22,269

MNB's Receivables from and Liabilities to Affiliated Companies

HUF millions

Investment	Receivables	Liabilities
	31 December 2024	
Pénzjegynyomda Zrt.	430	921
Magyar Pénzverő Zrt.	39	49
MNB-Bankjóléti Zrt.	125	583
GIRO Zrt.	0	20
MNB-Ingatlan Kft.	2,272	143
MNB-EduLab Nonprofit Kft.	710	9
Budapesti Értéktőzsde Nyrt.	0	1
KELER Zrt.	20	34
KELER KSZF Zrt.	5	0
Total	3,601	1,760

Receivables from Pénzjegynyomda Zrt., Magyar Pénzverő Zrt. and MNB-Bankjóléti Zrt. arose solely from the refinancing of employee real estate loans, while receivables from MNB-EduLab Nonprofit Kft. were due partly to this factor. Receivables from MNB-EduLab Nonprofit Kft. were mostly due to the amount of reimbursement for 2024 to be retransferred (HUF 0.6 billion) based on the preliminary calculation. Receivables from MNB-Ingatlan Kft. resulted from deposits related to rents. Receivables from KELER Zrt. and KELER KSZF Zrt. contained the collateral required for BÉT trading. Liability items are essentially from the invoicing of contract-based services provided to the MNB.

Receivables from the collaterals required for BÉT trading will exist until the end of the MNB's clearing membership. Receivables from rent-related deposits and real estate loans of subsidiaries' employees will be settled in accordance with the conditions of the underlying contracts. All other receivables and liabilities in the table are short-term in nature.

4.13 PROVISIONS AND IMPAIRMENT LOSSES

HUF millions

B/S line	Description	31 Dec 2023	Interim changes		31 Dec 2024
		Impairment / Provisions	Charge/ Formation	Reversal / Utilisation	Total impairment / Provisions
1	2	3	4	5	3+4+5
I.2.	Forint receivables from credit institutions	8,404	0	-5,417	2,987
I.3.	Other forint receivables	124,505	39,305	-6,373	157,437
III.	Invested financial assets	12,689	47,952	-3,064	57,577
III.	Other receivables	71	0	0	71
VIII.	Off-balance sheet liabilities	539	2,091	-249	2,381
	- litigation related liabilities	458	207	-194	471
	- FGS+ refinancing loans	26	0	0	26
	- derivatives	55	1,884	-55	1,884
	Total	146,208	89,348	-15,103	220,453
	Use of impairment loss	0	0	4,711	0
	Effect of the recognition of impairment/provisions on the profit/loss (VI.+VII.)-(XVI.+XVII.)	0	-89,348	10,392	-78,956

On 31 December 2024, the cumulated balance of provisions and impairment losses was HUF 220.5 billion, owing to the increase during the year.

In relation to forint receivables (B/S line I.2 and I.3), the impairment was HUF 27.5 billion higher at 31 December 2024, mainly due to the qualification of monetary policy securities denominated in forint, and as a result of the use of HUF 4.7 billion impairment losses linked to receivables that were qualified irrecoverable and written down.

The impairment of invested financial assets increased by HUF 44.9 billion in total due to qualifications in 2024, stemming from the higher impairment of the investment in MNB-Ingatlan Kft. and MNB-EduLab Nonprofit Kft., and reversal of the impairment of the investment in BÉT Nyrt.

A provision of HUF 0.5 billion was linked to litigation-related contingent liabilities.

The provision formed for the negative market value of open derivative transactions amounted to HUF 1.9 billion at 31 December 2024.

4.14 DEFERRED EXPENSES/ACCRUED INCOME AND ACCRUED EXPENSES/DEFERRED INCOME

HUF millions

B/S line	Description	Balance		Change
		31 Dec 2023	31 Dec 2024	
	Due to banking transactions	188,298	168,622	-19,676
	Due to internal operation	6,849	4,504	-2,345
IV.	Deferred expenses/accrued income	195,147	173,126	-22,021
	Due to banking transactions	158,257	99,216	-59,041
	Due to internal operation	966	1,174	208
X.	Accrued expenses/deferred income	159,223	100,390	-58,833

Deferred expenses, accrued income, accrued expenses and deferred income primarily include interest received/charged and interest related income/charges and expenses incurred during the reporting period because of banking transactions, independently of the date of financial settlement.

4.15 CHANGES IN EQUITY

HUF millions

B/S line	Description	31 Dec 2023	31 Dec 2024	Change
XI.1.	Subscribed capital	10,000	10,000	0
XI.2.	Retained earnings	-250,714	-2,013,959	-1,763,245
XI.3.	Valuation reserves	0	0	0
XI.4.	Revaluation reserves due to exchange rate changes	258,009	1,233,168	975,159
XI.5.	Revaluation reserves of foreign currency securities	-108,641	-105,698	2,943
XI.6.	Profit/loss for the year	-1,763,244	-788,693	974,551
XI.	Equity	-1,854,590	-1,665,182	189,408

The subscribed capital consists of a single registered share with a nominal value of HUF 10 billion.

The decrease of HUF 1,763.2 billion in retained earnings was the effect of the transfer of the 2023 loss.

Equity showed a negative balance of HUF 1,665.2 billion as at 31 December 2024, an improvement of HUF 189.4 billion compared to the end of 2023.

The amount of MNB's equity is below the subscribed capital. Pursuant to the MNB Act and the Stability Act,⁵¹ the Fiscal Council examines the MNB's equity position on an annual basis. Similarly to 2024, it is not necessary to provide reimbursement by the central budget for recapitalisation of the MNB in 2025.⁵²

For more details on revaluation reserves, see Section 4.16.

4.16 REVALUATION RESERVES

HUF millions

B/S line	Description	31 Dec 2023	31 Dec 2024	Change
XI.4.	Revaluation reserves due to exchange rate changes	258,009	1,233,168	975,159
XI.5.	Revaluation reserves of foreign currency securities	-108,641	-105,698	2,943
	Total revaluation reserves	149,368	1,127,470	978,102

Revaluation reserves due to exchange rate changes are determined by the amount of revalued foreign exchange holdings and the difference between the official and average cost rate. On 31 December 2024, the average cost rate of the MNB's euro position was 374.76 HUF/EUR and the official exchange rate was 410.09 HUF/EUR. The weaker exchange rate compared to the previous year-end increased the revaluation reserves, with the balance changing by HUF 975.2 billion to HUF 1,233.2 billion.

Revaluation reserves of foreign currency securities are calculated as the difference between the market value and the amortised book value of securities. The market value difference on the securities in the MNB's portfolio showed a negative balance of HUF 105.7 billion as at 31 December 2024.

⁵¹ Act CXCV of 2011 on the Economic Stability of Hungary

⁵² KVT/34-2/2024 – adopted by Council decision No. 6/2024.11.07.

4.17 OFF-BALANCE SHEET MNB LIABILITIES AND OTHER SIGNIFICANT OFF-BALANCE SHEET ITEMS

Hedging Transactions and Derivatives for Purposes other than Hedging

HUF millions

No.	Description	31 Dec 2023			31 Dec 2024		
		Receivables	Liabilities	Net market value	Receivables	Liabilities	Net market value
1.	Interest rate swap transactions	1,132,473	1,132,473	-140,954	1,107,932	1,107,932	-121,546
	- IRS facility of monetary policy (MIRS)	726,457	726,457	-127,492	726,457	726,457	-112,233
	- IRS contracted with domestic credit institutions	175,200	175,200	-13,843	175,200	175,200	-6,822
2.	Futures	0	261,801	-1,122	8,014	152,271	860
3.	FX swap, FX futures and forward transactions	11,768,753	11,681,333	-67,283	9,592,570	9,672,333	-241,171
	- FX swaps with domestic banks providing EUR liquidity	1,823,564	1,827,422	-2,253	572,076	573,298	-1,112
4.	Currency swap transactions	1,058,032	1,148,995	-56,154	627,482	660,013	-758
	- Currency swap transactions linked to FGS	79,074	64,486	26,527	70,836	53,937	26,610
5.	Total hedging transactions (1+2+3+4)	13,959,258	14,224,602	-265,513	11,335,998	11,592,549	-362,615
6.	TBA transactions	85,387	46,189	703	142,636	81,919	-613
7.	Futures	88,667	0	520	100,011	0	-244
8.	Interest rate swap transactions	36,364	36,364	118	0	0	0
9.	Total derivative transactions for purposes other than hedging (6+7+8)	210,418	82,553	1,341	242,647	81,919	-857
10.	Total (5+9)	14,169,676	14,307,155	-264,172	11,578,645	11,674,468	-363,472

The above table includes all types of off-balance sheet receivables and liabilities arising from derivative transactions; it also includes FX swaps, interest-bearing currency swaps, FX futures and forward transactions for hedging purposes, which are part of the net foreign currency position and are recorded in the balance sheet. Hedging transactions reduce risks related to the net foreign currency position arising from cross-rate fluctuations and from interest rate changes, and support the creation of the benchmark foreign currency structure.

The interest rate swap transactions with foreign partners for hedging purposes linked to specific bond issuances are concluded with the aim of achieving the interest structure deemed desirable by the MNB. By 31 December 2024, the balance of the monetary policy interest rate swaps (MIRS) and the balance of the interest rate swap transactions concluded with domestic credit institutions to reduce their interest rate risk in relation to the self-financing programme remained unchanged.

Bond futures transactions are hedging transactions maturing within 1 year to reduce the average remaining duration of the reserve portfolios.

FX swap, FX futures and forward transactions are primarily 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. FX swaps providing EUR liquidity are for monetary policy purposes; the MNB holds these tenders on an ad-hoc basis depending on liquidity.

Currency swaps are used to manage foreign exchange and interest rate risks jointly over the long term. As at 31 December 2024, from the currency swap transactions the EUR/HUF swaps linked to FGS refinancing loans amounted to 8 per cent.

The remaining maturity of hedging transactions and derivatives for purposes other than hedging is presented in the following table.

Liabilities from Derivative Transactions by Remaining Maturity

HUF millions

Remaining maturity	Balance		Change
	31 Dec 2023	31 Dec 2024	
- within 1 year	10,685,666	7,837,414	-2,848,252
- within 1 to 5 years	3,035,519	3,190,658	155,139
- over 5 years	503,417	564,477	61,060
Liabilities from hedging transactions	14,224,602	11,592,549	-2,632,053
- within 1 year	82,553	81,919	-634
- within 1 to 5 years	0	0	0
- over 5 years	0	0	0
Derivative transactions for purposes other than hedging	82,553	81,919	-634
Total (1+2)	14,307,155	11,674,468	-2,632,687

Other Off-balance Sheet Liabilities

HUF millions

Description	Balance		Change
	31 Dec 2023	31 Dec 2024	
FGS credit facilities	123,181	10,415	-112,766
Credit facilities to subsidiaries	2,145	2,597	452
FGS+ related contingent liabilities	26	26	0
Litigation-related contingent liabilities	535	637	102
Guarantees	2,283	2,575	292
Other off-balance sheet liabilities	2	2	0
Total	128,172	16,252	-111,920

Contracts concluded but not yet disbursed in the framework of FGS are reported as off-balance sheet liabilities, as credit facilities. The availability period of the FSG GO! expired in December 2024, and therefore the balance as at 31 December 2024 shows the credit facilities of FSG Green, the availability period for which will conclude at the end of September 2026.

Credit facilities to subsidiaries include the funds still available from the contracted amount for the employee housing loans of Pénzjegynyomda, Pénzverő, MNB-Bankjóléti Zrt., MNB-EduLab Nonprofit Kft. and PSFN Kft. The total value of these credit facilities is HUF 3.3 billion; they expire between the years 2028 and 2034. The credit limit changed based on the mid-year lending and repayment as well as the credit agreement concluded with PSFN Kft.

In accordance with the contracts concluded in the framework of FGS+, the MNB reimburses credit institutions up to 50 per cent of the capital loss of credit institutions arising from SME loans, subject to a portfolio-level limit. FGS+ related contingent liabilities are used to record the expected reimbursement for which provisions have been formed, in line with the qualification rules. Based on data provided by the credit institutions, the amount for the loss compensation remained unchanged as of 31 December 2024.

The legal proceedings are mostly proceedings against penalty resolutions connected to supervisory activities and include other compensation proceedings. The related contingent liabilities are used to record paid but litigated penalties and in connection to the other proceedings the expected compensation amounts for which provisions were formed. In 2024, the other compensation proceeding terminated, however the amount increased overall due to the newly initiated and the concluded supervisory cases.

The item 'Guarantees' includes on the one hand the HUF 0.2 billion owner's guarantee related to the collateral required in a subsidiary contract, and on the other hand the export guarantees amounting to HUF 2.4 billion. An irrevocable

indemnity bond is always linked to the export guarantees, and when exercising a guarantee, the MNB has the right to a reverse guarantee if needed. The increase in the forint value of the guarantees is the result of the exchange rate change.

Recording Off-Balance Sheet Securities Transactions

HUF millions

Description	Balance		Change
	31 Dec 2023	31 Dec 2024	
Face value of securities lent - automatic securities lending	4,661	4,092	-569
Face value of securities lent - agency securities lending	117,448	141,358	23,910
Purchase cost of the non-cash hedge arising from security lending transactions	33,736	21,035	-12,701
Purchase cost of investment of cash hedge arising from security lending transactions	78,110	118,260	40,150
Market value of investment of cash hedge arising from security lending transactions	78,110	118,260	40,150
Face value of securities bought under repo transactions	1,206,081	298,800	-907,281
Face value of securities sold under reverse repo and blocked for ECB repo transactions	1,661,408	1,259,896	-401,512

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	2023	2024	Change
(I.1.+II.2.)—(X.1.+XI.1.)	Central government	-94,894	-84,055	10,839
(I.2.+II.3.)—(X.2.+XI.2.)	Credit institutions	-1,611,468	-670,623	940,845
(I.3.+II.1.+II.4.)—(X.3.+XI.3.)	Other	63,315	2,961	-60,354
	Net profit/loss from interest	-1,643,047	-751,717	891,330
	Forint securities	-21,188	-19,999	1,189
	Foreign currency securities	22,850	52,832	29,982
	Derivative transactions for hedging and other purposes*	-117,456	17,699	135,155
	Other	0	0	0
(I.4.+II.5.)—(X.4.+XI.4.)	Net interest-related profit/loss	-115,794	50,532	166,326
(I.+II.)—(X.+XI.)	Net interest and interest-related income	-1,758,841	-701,185	1,057,656

* For details on derivative transactions for hedging and other purposes, see the related table in this section.

In 2024, the MNB recorded a net interest and interest-related loss of HUF 701.2 billion, which was HUF 1,057.7 billion lower compared to end-2023.

Net interest income improved by HUF 891.3 billion compared to the previous year, as a combined effect of the following:

The main positive factors in net interest income were:

– a decrease of HUF 965.6 billion in interest expenses on the forint deposits of credit institutions, stemming from the lower interest paid on liquidity-absorbing instruments. In relation to such, the most significant items were the HUF

910.6 billion decrease in interest paid on the deposit quick tenders and the HUF 170.7 billion decrease on variable rate deposit tenders due to termination of the instrument. At the same time, interest expenses on required reserves rose by HUF 119.7 billion as required reserves became policy instruments of the MNB;

- an increase of HUF 105.6 billion in interest income on foreign exchange reserves compared to 2023, resulting from the higher level of reserves and the increase in average interest rate of foreign currency securities;
- interest paid on the forint deposits of the central government fell HUF 29.1 billion due to the lower interest rates, in spite of the rise in the average volume of deposits.

The main negative factors in net interest income were:

- an increase of HUF 169.6 billion in interest expenses on other forint deposits arising from the higher amount of discount bills issued by the MNB;
- a decrease in interest income on loans to and on bonds issued by credit institutions (mortgage bonds and securities issued with government guarantees or sureties) in the amount of HUF 23.5 billion, primarily as a result of interest income on margin deposits with banks related to derivative transactions concluded with credit institutions. The shrinking of margin deposits was caused by the change in market value of the derivative transactions due to the decrease in forint interest rates;
- a rise in interest paid on the foreign currency deposits of the central government of HUF 16.6 billion resulting from the increase of the average amount of deposits.

Net interest-related income improved by HUF 166.3 billion; this item mainly includes the amortisation of the purchase price difference of securities and the net gain or loss on derivative transactions which are not related to exchange rate changes. The change was mainly attributable to the result of derivative transactions and, in addition to this, the amortised net purchase price gain of foreign currency securities also increased.

For details on derivative transactions, see the table below in Section 4.18.

Negative Interest Income/Expenses in Net Forint and foreign Currency Interest and Interest-Related Income

HUF millions

P/L line	Description	2023		2024	
		Total	Of which: Negative sums for interest	Total	Of which: Negative sums for interest
II.	INCOME				
	Interest and interest-related income denominated in foreign currency	557,077	-1,662	641,190	-1,081
II. 1.	Interest on foreign currency reserves	264,163	-465	369,738	0
II. 5.	Interest-related income	292,914	-1,197	271,451	-1,081
XI.	EXPENSES				
	Interest and interest-related expenses denominated in foreign currency	324,337	-18	246,685	0
XI. 1.	Interest on central government deposits	19,254	-18	35,879	0

Note: Table includes only P&L lines affected by negative sums for interest.

In accordance with the interest structure stated in the MNB Decree, negative interest income and expenses are recorded in the original P&L lines related to assets/liabilities (in net terms). For example, interest income on deposits of the central government, arising from negative yields, is recorded in the line 'XI. 1 Interest expense on central government deposits'.

Details on Income from Derivative Transactions for Hedging and for Purposes other than Hedging Represented in Interest-related Income

HUF millions			
Description	2023	2024	Change
Interest margin on interest rate swaps	-160,345	-56,977	103,368
Net interest result of currency swaps	-1,246	135	1,381
Net interest result of FX swaps, FX futures and forward transactions	45,036	67,316	22,280
Net interest result of futures transactions	764	5,356	4,592
Net interest-related result of hedging transactions	-1,137	310	1,447
Net interest and interest-related result of other transactions	-528	1,559	2,087
Net result of derivative transactions	-117,456	17,699	135,155

Interest rate swaps include derivative transactions concluded with domestic credit institutions and with foreign partners. The increase of HUF 103.4 billion in interest income on interest rate swaps stemmed predominantly from the improvement of interest income on interest rate swaps concluded with domestic credit institutions (IRS facility of monetary policy and IRS facility related to self-financing programme) due to the decline in market interest rates.

Currency swap transactions comprise derivative transactions concluded with the Government Debt Management Agency, with foreign partners and with domestic credit institutions. The transactions concluded with foreign partners are mainly hedging transactions concluded with the Government Debt Management Agency. The transactions concluded with domestic credit institutions include the currency swaps related to Pillar II of the FGS. Net interest income on currency swaps showed a gain of HUF 0.1 billion, improving by HUF 1.4 billion versus the loss for 2023. The change was due to the expiry of a part of the transactions, as well as the development of foreign exchange yields.

Hedge FX swaps include short-term transactions concluded with foreign partners, with the Government Debt Management Agency and with domestic credit institutions. FX futures and forward transactions comprise short-term transactions concluded with foreign partners. Net interest income on these transactions amounted to HUF 67.3 billion, increasing the result by HUF 22.3 billion. The increase in net interest income was mostly related to FX swaps: in the case of transactions concluded with foreign partners it was due to the change of foreign exchange yields, while in the case of transactions providing euro liquidity to domestic credit institutions it was primarily due to the lower amount of transactions concluded. However net interest income on FX futures decreased as a result of the lower amount of transactions concluded.

The net interest result of hedging futures transactions rose by HUF 5.6 billion to a gain of HUF 5.4 billion, stemming from the increase in the net interest income of bond futures.

Net interest-related income on hedging transactions includes the exchange rate gains or losses on swap transactions and the option fee of option transactions. In 2024, the net exchange rate gains on hedging swap transactions amounted to HUF 0.3 billion; the improvement in the net result in the amount of HUF 1.4 billion is attributable to the base effect.

Net interest and interest-related income on other transactions amounted to HUF 1.6 billion, an increase by HUF 2.1 billion; the change was related to TBA transactions and to interest rate swaps other than hedging.

Realised Gains/Losses from Financial Operations

HUF millions

P/L line	Description	2023	2024	Change
	Realised gains on corporate bonds	15	101	86
	Realised gains on coupon-bearing bonds denominated in foreign currency	3,892	11,291	7,399
IV.	Realised gains from financial operations	3,907	11,392	7,485
	Realised losses on bonds issued by the Hungarian government	0	320,093	320,093
	Realised losses on covered mortgage bonds	0	405	405
	Realised losses on bonds issued by enterprises	283	647	364
	Realised losses on coupon-bearing bonds denominated in foreign currency	46,351	19,950	-26,401
XIV.	Realised losses from financial operations	46,634	341,095	294,461
IV.-XIV.	Net financial gains/losses	-42,727	-329,703	-286,976

In 2024, net realised losses from financial operations amounted to HUF 329.7 billion, reflecting an increase of loss of HUF 287 billion compared to 2023. Realised losses arose mainly from the repurchase of government securities at the end of the year, initiated by the Government Debt Management Agency. Because of the increase in yields over time since the acquisition of the repurchased securities, the book value of those securities became significantly lower than the market value. A net loss of HUF 8.7 billion was realised on sales of coupon-bearing bonds denominated in foreign currency, which was HUF 33.8 billion less than the loss registered in 2023. The change can be explained by the fact that foreign exchange market returns, which are relevant for the reserve portfolio, were shrinking already in the second half of 2024, after a rise in 2023.

4.19 COMPONENTS OF INCOME FROM THE REVALUATION OF FOREIGN EXCHANGE HOLDINGS

HUF millions

Description	2023	2024
Net income from exchange rate changes (realised and conversion spread)*	90,558	393,417
Change in revaluation reserves in the balance sheet** (due to unrealised revaluation net income)	-516,935	975,159
Total effect of exchange rate changes	-426,377	1,368,576

* P/L line: III.-XII.
 ** Revaluation reserves due to exchange rate changes (balance sheet line XI.4.).

In 2024, the total net exchange rate change effect was a gain of HUF 1,368.6 billion. The MNB realised a gain of HUF 393.4 billion on sales involving a decrease in the daily net FX position, while the revaluation reserve amount was increased by unrealised exchange rate gains of HUF 975.2 billion during the year. In 2024, foreign currency sales occurred mainly in relation to the debt management transactions of the Government Debt Management Agency and to the management of gold and foreign currency reserves.

For more details on revaluation reserves, see Section 4.16.

4.20 COST OF ISSUING BANKNOTES AND COINS

HUF millions

P/L line	Description	2023	2024	Change
	Cost of banknote production	9,153	11,281	2,128
	Cost of coin production	5,088	4,367	-721
	Cost of production of commemorative and collector coins	1,525	1,744	219
XIII.	Cost of issuing banknotes and coins	15,766	17,392	1,626

The total cost of issuing banknotes and coins amounted to HUF 17.4 billion in 2024, an increase of HUF 1.6 billion (10.3 per cent) compared to the previous year.

The cost of banknote production amounted to HUF 11.3 billion, showing an increase of HUF 2.1 billion versus 2023, due to the rise in production volume. The cost of coin production fell by HUF 0.7 billion to HUF 4.4 billion compared to the previous year, owing to lower production volume.

The cost of producing commemorative and collector coins amounted to HUF 1.7 billion in 2024, exceeding the figure for 2023 by HUF 0.2 billion. Costs increased due to higher raw material prices, but this was partially offset by the smaller volume of coins issued during the year.

4.21 OTHER INCOME/EXPENSES

HUF millions

P/L line	Description	2023	2024	Change
V.1.	Income from fees and commissions	2,638	2,818	180
XV.1.	Expenses of fees and commissions	2,781	3,045	264
	Net income from fees and commissions	-143	-227	-84
V.2.	Income other than fees and commissions	4,140	8,281	4,141
XV.2.	Expenses other than fees and commissions	4,997	8,386	3,389
	Net income other than fees and commissions	-857	-105	752
V.3.	Income from supervisory activities	31,093	33,229	2,136
V.-XV.	Other net results	30,093	32,897	2,804

Net income from fees and commissions includes the balance of income from and expenses on fees and commissions linked to payment services, income from fees related to account management and the cost of securities trading, as well as expenses on fees related to holding foreign currency reserves. The increase in income from fees and commissions was related to the fees arising from the operation of payments systems, while the increase in expenses of fees and commissions was connected to custodian and trustee fees.

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	2023	2024	Change
	Dividends from investments	2,213	5,964	3,751
	Income related to coins and commemorative coins	1,717	1,952	235
	Recommitment of financial money transfer, remuneration	117	158	41
	Income from assets assigned free of charge	3	5	2
	Other income	90	202	112
V.2.	Income other than fees and commissions	4,140	8,281	4,141
	Expenses related to coins and commemorative coins	1,611	1,689	78
	Financial money transfer, remunerations	3,246	6,500	3,254
	Expenses related to public proceedings	24	116	92
	Expenses from assets assigned free of charge	73	44	-29
	Other expenditures	43	37	-6
XV.2.	Expenses other than fees and commissions	4,997	8,386	3,389
V.2.-XV.2.	Net income/expenses other than fees and commissions	-857	-105	752

Dividends from investments amounted to HUF 6 billion in 2024. KELER and KELER KSZF paid a dividend of HUF 3.7 billion in total, while BÉT paid HUF 0.5 billion and Pénzverő paid HUF 0.2 billion; additionally, BIS paid HUF 1.5 billion (EUR 3.88 million) to the MNB.

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 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 Magyar Pénzverő Zrt. at face value, except when the production cost exceeds the face value (the latter is typical for gold coins). In 2024, net income arose from the issue of the gold commemorative coins 'Saint Kinga of the house of Árpád' and 'The Golden Florin of Ladislaus V' and from the sale of gold commemorative coins issued in previous years.

In 2024, the MNB gave HUF 6.5 billion as donations or reimbursement to professional organisations and foundations, as well as to organisations for charitable and other purposes. The highest amount was the reimbursement of HUF 2.5 billion paid to MNB-EduLab for financing the Money Museum and Visitor Centre (financing of this company changed in 2024; costs related to museum activity, except of depreciation, are reimbursed by the MNB). A financial transfer of HUF 1.4 billion was made for the annual operation of PSFN Kft., in line with its financial plan. Moreover, the MNB provided HUF 0.4 billion to Pénziránytű – Alapítvány a Tudatos Pénzügyekért (a foundation for financial education) and HUF 0.3 billion to MNB Sportkör as donation. According to the MNB Act, 6 per cent of the penalties received in the previous year can be used for promoting and supporting environmental goals, in order to mitigate the effects of the MNB's activities on the environment. Based on the law, in 2024 HUF 39.5 million was paid to WWF Hungary as donation. During the year, HUF 0.2 billion was returned, mainly by PSFN Kft., to the MNB as an unused donation affecting previous years.

The item 'Other income' included in 2024 penalties, default interest and compensation.

4.23 INCOME FROM SUPERVISORY ACTIVITIES

HUF millions

P/L line	Description	2023	2024	Change
	Supervisory fee and default interest	26,877	29,971	3,094
	Received penalties and reimbursement from public proceedings	3,917	2,867	-1,050
	Administrative service fee from public proceedings	284	337	53
	Late payment surcharge for supervisory claims	9	47	38
	Other income arising from administrative procedures	6	6	0
V.3.	Income from supervisory activities	31,093	33,228	2,135

The main component in income from supervisory activities is supervisory fees received from the supervised institutions obliged to pay such fees. In 2024, the income arising from the assessment of the minimum charges for the entire year and of the variable-rate fees due quarterly amounted to HUF 30 billion. The increase in the supervisory fee was related primarily to investment funds and to investment companies. Income from penalties imposed by the MNB and from reimbursements totalled HUF 2.9 billion.

4.24 OPERATING INCOME AND EXPENSES

HUF millions

P/L line	Description	2023	2024	Change
	Income from assets and inventories	23	159	136
	Income from subcontracted services	349	459	110
	Income from invoiced services	154	183	29
	Other income	25	28	3
VIII.	Total operating income	551	829	278
	Expenses of materials	35,876	36,710	834
	Cost of materials	2,751	1,881	-870
	Services contracted	33,026	34,728	1,702
	- Maintenance, operation and rent of properties	10,086	10,373	287
	- Maintenance and rent of equipment	2,878	3,077	199
	- Consultancy services	2,243	2,194	-49
	- IT systems services	5,439	6,586	1,147
	- Guarding services, transport of banknotes and coins	5,310	5,141	-169
	- Advertisements, market research	2,618	2,570	-48
	- Other, non-significant services*	4,452	4,787	335
	Other services	99	101	2
	Personnel-related costs	39,274	43,493	4,219
	Depreciation	7,163	7,739	576
	Transfer of costs of other activities	-945	-951	-6
	Total operating costs	81,368	86,991	5,623
	Expenses incurred on assets and inventories	23	39	16
	Expenses incurred on subcontracted services	345	453	108
	Expenses incurred on invoiced services	150	183	33
	Other expenses	642	936	294
	Total operating expenses	1,160	1,611	451
XVIII.	Total operating costs and expenses	82,528	88,602	6,074
VIII.-XVIII.	Net operating expenses	-81,977	-87,773	-5,796

* In particular, 'Other, non-significant services' contains postal and telecommunication services, preparation of publications, travel and hotel services, services for education, translation and audit, membership fees, as well as the distribution of commemorative coins.

In 2024, net operating expenses amounted to HUF 87.8 billion, an increase of HUF 5.8 billion (7.1 per cent) compared to 2023.

Operating costs rose by HUF 5.6 billion (6.9 per cent) in 2024 compared to the previous year. 2024 expenditures were increased mainly by personnel-related costs, but expenses of materials and depreciation also rose versus 2023.

In 2024, expenses of materials exceeded the expenses incurred in 2023 by more than HUF 0.8 billion (2.3 per cent).

As part of expenses of materials, the increase in the costs of the services contracted was decisive, especially the 'IT system services'. In addition, the costs of 'Maintenance, operation and rent of properties' as well as 'Maintenance and rent of equipment' also rose. At the same time, 'Cost of materials' decreased significantly.

- The increase in the costs of 'IT systems services' (from HUF 5.4 billion to HUF 6.6 billion) basically stemmed from additional costs due to IT investments previously implemented (functional expansions, higher availability levels), and the maintenance and support contracts concluded in previous years. In addition, the MNB continued to pay special attention to maintaining and increasing IT security, which was also accompanied by rising expenditures.
- Compared to the previous year, the cost of 'Maintenance, operation and rent of properties' increased (from HUF 10.1 billion to HUF 10.4 billion) in 2024. Within this, the rise in property maintenance and cleaning costs of properties was notable, especially the increase in operating fees at the following properties: Bölcs Vár, MNB Budai Központ (MNB's Buda Centre) and MNB Logisztikai Központ (MNB Logistics Centre). At the same time, rental fees fell significantly, because in the case of two properties – Bölcs Vár, MNB Budai Központ (MNB's Buda Centre) – the reduction of the fees (which were based on the cost of the properties and determined in HUF, instead of the previous pricing in EUR) occurred starting from 1 November 2023 based on a contract modification. Because of this, in 2023 between January and October market prices determined in EUR were charged, but in 2024 the MNB paid a cost- and HUF-based rental fee, which was lower, for the entire year.
- The cost of 'Maintenance and rent of equipment' in 2024 rose from HUF 2.9 billion to HUF 3.1 billion compared to 2023, mainly due to the increase in the repair and maintenance costs of property security systems.
- The financial statements and audit costs (due diligence based on accounting documents, occasional financial/accounting analyses, consulting) amounted to HUF 66 million, of which the MNB's annual audit fee was HUF 61 million in 2024.
- Compared to the previous year, the item 'Cost of materials' fell from HUF 2.8 billion to HUF 1.9 billion, mainly due to the significant reduction in electricity service fees in 2024 compared to 2023.

Personnel-related costs (HUF 43.5 billion) increased by HUF 4.2 billion (10.7 per cent) compared to 2023. The major factor in this regard was the decision by the MNB Board of Directors to increase the annual wage bill by 6 per cent from 1 January 2024, in order to secure and retain highly skilled employees over the long run. Over and above this, personnel-related costs contain the full year costs of Balatonakarattya Oktatási és Konferencia Központ (Balatonakarattya Education and Conference Centre) in 2024.

The depreciation and amortisation of tangible and intangible assets in 2024 was HUF 0.6 billion (8 per cent) higher than the previous year. This is mainly due to investments, predominantly in IT, made in the second half of 2023 and 2024, within which the acquisition of intangible assets (software) was significant.

Prime cost transfers are intended to ensure that the total amount of operating expenses reflects only actual expenses incurred by the MNB (e.g. rent paid by Magyar Pénzverő Zrt. for the partial use of MNB Logisztikai Központ (MNB Logistics Centre); reimbursed expenses related to payment system – VIBER, instant payment system).

In 2023 and 2024, other (operating) expenses included receivables – mainly supervisory receivables – were mainly written down because of uncollectibility, which did not have any impact on the result, due to the reversal of impairment loss.

4.25 INFORMATION ON WAGES AND NUMBER OF STAFF, REMUNERATION OF EXECUTIVE OFFICERS

Wage and Headcount Data

HUF millions

Description	2023	2024	Change (%)
Payroll costs incurred on staff	26,810	29,527	10
Other staff costs*	691	787	14
Payroll	27,501	30,314	10
Other payments to personnel	7,227	8,190	13
Social contribution tax	4,374	4,794	10
Contribution to rehabilitation	151	174	16
Sick-allowance	21	21	5
Taxes on personnel-related payments	4,546	4,989	10
Payments to personnel	39,274	43,493	11

* Other wage costs include absence payments for notice periods and amounts paid to staff off payroll and non-MNB workers.

Persons

Description	2023	2024	Change (%)
Average number of staff	1,561	1,606	2.9

Remuneration of Executive Officers

HUF millions

Bodies	2024
Monetary Council*	588
Supervisory Board	307

* Includes the salaries and other payments to 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.

Loans of Executive Officers

Bodies	Amount of loans	Outstanding at 31 Dec 2024	Maturity	Rate of interest
	HUF millions			
Monetary Council	268	188	1 Feb 2034	Fixed or floating*
Supervisory Board	-	-	-	-

** The preferential interest rate for housing loans is 2.5 per cent (fixed rate) or the central bank base rate.*

4.26 OTHER MAJOR EVENTS AFFECTING 2024 AND AFTER THE REPORTING PERIOD

In the framework of the Pallas Athena Public Thinking Programme, in 2013-2014 the MNB established six foundations and between 2013-2016 it allocated to the foundations monetary founders' assets and non-monetary assets amounting to a total of HUF 266.5 billion. The allocation of assets was recorded in the books of MNB as financial money transfer among expenses. Between 2016 and 2019, the Pallas Athena Foundations merged in several steps into one foundation, the Pallas Athena Domus Meriti Foundation (PADME).

In March 2025, the State Audit Office of Hungary (ÁSZ) published three audit reports on the following subjects: on the management of PADME foundation (25035), on the long-term debt security investment of the John von Neumann University Foundation (25036) and on the lawful operation of the MNB (25038). In connection with the statements of ÁSZ and with the news published in the press, it became necessary for the MNB to investigate and if justified to present their possible effects in its financial statements for 2024.

The internal investigation ordered by the Governor of the MNB was closed, and its findings were discussed by the Executive Board of the MNB.

As part of a comprehensive review of the valuation of assets on the balance sheet, the MNB revised the methodology of the corporate bond's valuation. In line with the revised methodology, an additional impairment of HUF 35.5 billion was accounted for corporate bonds (see B/S line I.3 and Section 4.10). Moreover, the MNB applied expert market valuations as well to the impairment of invested financial assets, and as a result of which the necessary impairments were accounted (see Section 4.12).

In relation to the foundations established by the MNB in 2013-2014, or their legal successor, the PADME foundation, the MNB examined whether a potential loss of property in the foundation creates any obligation or any conditional obligation to perform for the central bank. Based on the investigation, in which the expert opinion of an external legal office was also used, the MNB has no present or conditional obligations that should be presented as provisions or contingent liabilities in these financial statements.

28 May 2025, Budapest

Mihály Varga
Governor of the Magyar Nemzeti Bank

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