GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

ÁKK

GOVERNMENT DEBT MANAGEMENT REPORT

2023

Foreword

In 2023, Hungary also saw significant stabilisation. Inflation, which has a major impact on government debt management, declined rapidly, and the account balance also improved. At the same time, the key events affecting the economy—the war in Ukraine and the lingering effects of the pandemic—remained, and therefore, the budget responded to the economic challenges with a high deficit. Thus, although declining yields created a favourable environment for government debt management, the high deficit also posed significant challenges.

The ÁKK prepared the 2023 financing plan in line with the prevailing government debt management strategy. The key objectives of government debt management were to reduce the public debt ratio, keep the foreign-currency share of public debt low, and increase the stock of government securities held directly by households. Another important objective, extending maturities, was temporarily not pursued in the high-yield market environment, as embedding yields reflecting high inflation into the cost of public debt was to be avoided. Another government debt objective is sustainability and the development of green finance. In 2023, government debt management also met these objectives: Based on preliminary data, the central subsector's gross debt, managed by ÁKK, declined by 1.2 % to 67.8%, while the general government's consolidated "Maastricht" debt decreased by 0.6 % to 73.5%. All performance indicators for government debt management were met in 2023, and it is also important to note that the share of retail government securities held by households increased within total public debt.

In 2023, significant changes occurred in the retail government securities programme. Under the new retail government securities strategy approved in 2022, expanding the outstanding stock is no longer the primary objective; instead, reducing the risks of the retail programme—including ownership concentration—and introducing products suitable for all life situations, as well as strengthening the portfolio approach, have also become objectives. It has, of course, remained important to ensure that public debt continues to benefit from a reliable source of financing by channelling part of households' savings. These objectives were met in 2023.

Due to the increased net financing requirement, government debt management also undertook substantial fundraising in both domestic and foreign currency markets. In 2023, the development of the secondary market was a key focus in the forint market: its key elements, aimed at increasing secondary market liquidity, were the reduction in the number of ISINs, the reopening of outstanding series, and—most notably in this area—a reduction in the number of series for discount Treasury bills. Another important development was that, following the 2022 reform of the primary dealer system, the first government securities market maker, Morgan Stanley Europe SE, entered the market that year.

In 2023, the ÁKK carried out substantial foreign-currency issuances, taking advantage of the relative cost advantage of foreign-currency bonds and favourable conditions in the foreign exchange markets. In total, international foreign-currency bonds were issued for USD 5.2 billion and EUR 1.75 billion. At the same time, the substantial long-maturity foreign currency issuance is favourable in terms of debt refinancing risk, which was also supported by the buyback of a short-dated bond carried out at the time of the January USD bond issuance.

In addition to all this, the ÁKK also achieved further sustainability results. The Green Bond Framework was updated, and in December the Integrated Report was published, thereby completing the allocation of proceeds from the green bonds issued under the 2020 Green Bond Framework. These documents are available on the ÁKK's website, and debt management is prepared for the future issuance of green bonds.

Zoltán Kurali
Chief Executive Officer

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General information

In this publication, the data on the deficit of the central subsector of general government and on public debt are considered *preliminary* until the adoption of the Act on the Implementation of the Annual Budget, which, pursuant to the provisions of the Public Finance Act[1] , takes place in the second half of the year following the year under review.

In this publication, some data are presented on a cash basis, while others are presented on an accrual basis. On a cash basis, expenditures and revenues are recorded in the period in which they are actually paid or received, regardless of the period to which they relate in terms of their economic substance. On an accrual basis, the amount of an expenditure or revenue that affects more than one period is allocated proportionally over the periods it affects.

From the perspective of government debt management, the most significant such item is interest expenditure. Thus, for example, in the case of a bond with annual interest payments, when considering calendar-year reporting periods under the cash-basis method, the full amount of the annual interest expense is recorded in the year it is actually paid. Under the accrual basis, however, for annual interest payments, the interest amount is split into two parts and charged to the respective calendar years based on the proportion of the interest-rate period that falls in each year. A special example of interest expenditure is the price loss at issuance of government bonds, i.e., when, at the time of primary issuance, investors pay less than the face value of the bond (the net price, excluding accrued interest, is below 100%). Under the cash-basis method, a discount below 100% is recorded as interest expense on the settlement date of the auction, which can significantly increase interest expense on an annual basis. Under the accrual basis, this interest expenditure is recognised over the entire maturity of the issued bond; thus, for a 10-year bond, it is spread over 10 years, i.e. it burdens the budget much more evenly.

The ÁKK records public debt in accordance with domestic accounting regulations, the basic principles of which can be summarised as follows:

- The debt calculated by the ÁKK, in accordance with the provisions of Act CXCIV of 2011 on the Economic Stability of Hungary (hereinafter referred to as the Stability Act), comprises the unconsolidated[2] gross debt of the central subsector of general government (managed by the ÁKK), and does not include the debt items specified in Paragraphs (c), (d), and (f) of Subsection (1) of Section 3 of the Stability Act (bills of exchange, and liabilities arising from financial leasing and deferred payment).[3]
- Government bonds and retail government securities are carried at face value.
- Discount treasury bills are recorded at the so-called average selling price—i.e. their discounted value—which is adjusted after each sale-type transaction in the given security.
- Delivery-based repo transactions—depending on their direction—actually reduce or increase public debt.
- The foreign currency debt components are presented adjusted for foreign exchange swap transactions and converted into forints at the official MNB mid exchange rate at month-end.

The debt figures published by the ÁKK in accordance with Hungarian and international accounting standards differ from the debt figures used by the Statistical Office of the European Union (EUROSTAT), which are compiled on the basis of different principles and for a different scope of the general government, and are essentially statistical calculations. The production and provision of debt data calculated in accordance with the ESA 2010 principles are carried out by the Magyar Nemzeti Bank.

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[1] Act CXCV of 2011 on Public Finances (hereinafter referred to as the Public Finance Act). For the relevant provisions of the Public Finance Act and the Stability Act in force in 2023, see Section 4 of the Appendix to this publication.

[2] That is, debts between the different subsectors of the state are not netted out from the debt

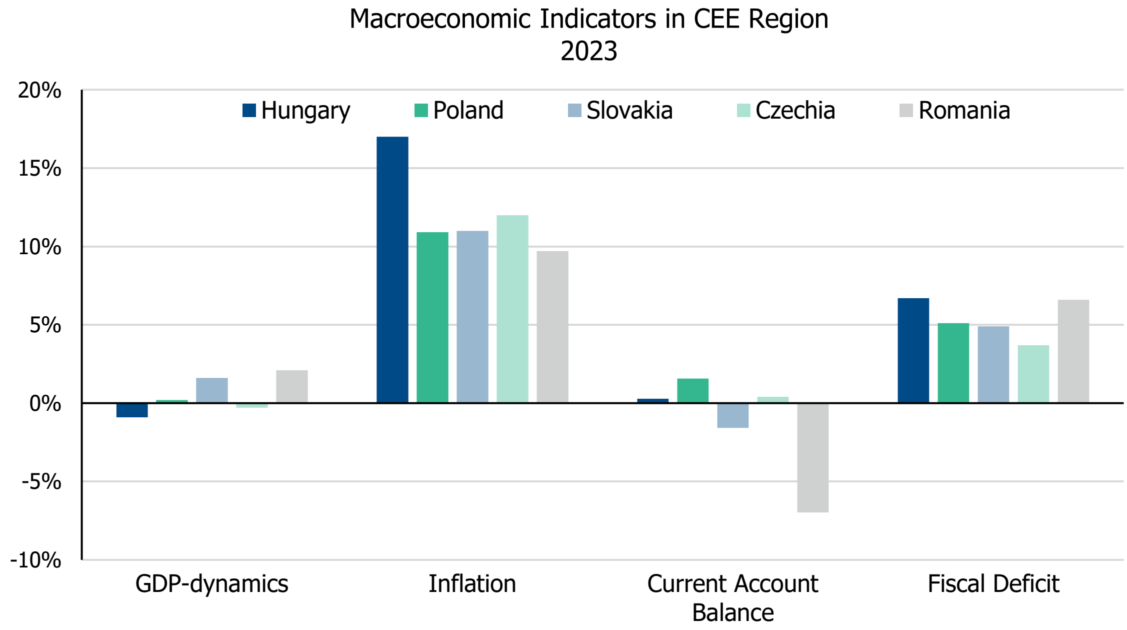
[3] Debt calculated excluding the loan liabilities of local governments and companies and non-profit organizations classified within central government

I. Macroeconomic developments in 2023

During 2023, the slowdown in inflation and the monetary policy response to it became the defining developments. Following the pandemic and then the Russian–Ukrainian war, the elevated inflation rate slowed rapidly worldwide; however, in 2023 it still remained well above central banks' target levels. Due to above-target inflation and the risk of second-round effects (price–wage spiral), central banks in developed markets continued to raise interest rates in the first half of the year. The assessment of the real economy was mixed: alongside signs of an economic slowdown, the labour market remained relatively tight both in Europe and overseas. In Hungary, the rapid deceleration of inflation and the emergence of expectations of interest rate cuts in developed markets in the second half of the year created an opportunity for the Magyar Nemzeti Bank to ease monetary conditions that had been significantly tightened in October 2022, starting in mid-year.

Domestic macroeconomic balance indicators developed unevenly. Inflation declined rapidly, while the unemployment rate remained particularly low. At the same time, the budget deficit increased compared to the previous year and remained well above the Maastricht reference value. By contrast, the current account balance improved rapidly.

Regional comparison



* For the current account balance and the budget deficit, a negative figure indicates a surplus
Source: Eurostat

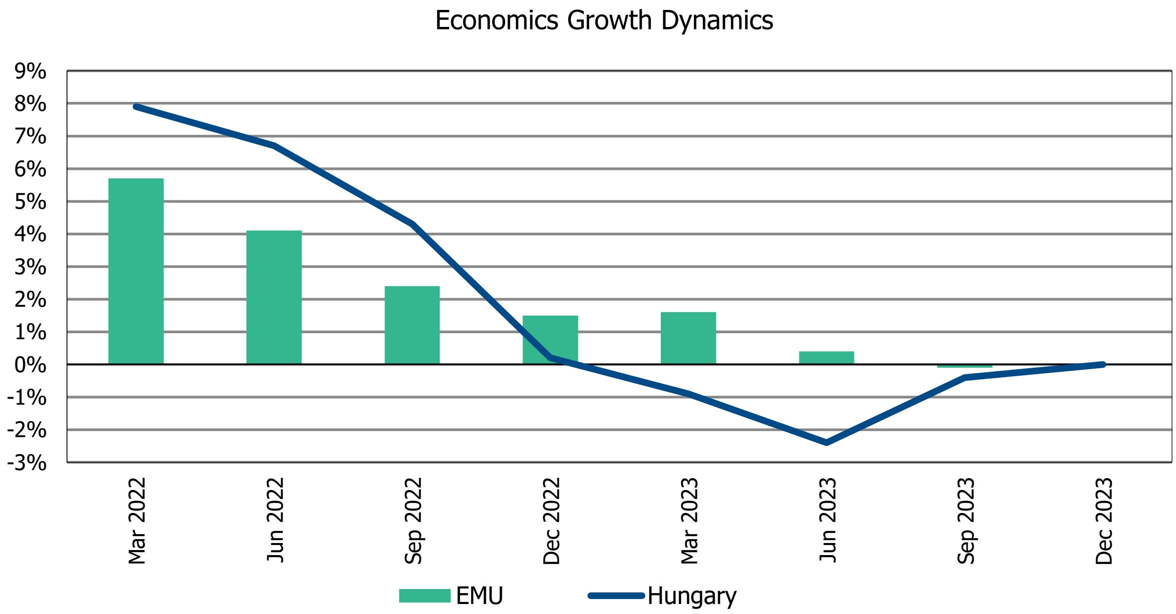
In 2023, in a regional comparison, Hungary's macroeconomic indicators developed unevenly. In 2023, the economies of the Central and Eastern European region slowed. Among the V4 countries and Romania, Hungary's 0.9% contraction exceeded the rate of decline[4] in the Czech Republic (0.3%) and was less favourable than the growth rates recorded in Poland (0.2%), Slovakia (1.6%), and Romania (2.1%). The latter two countries also exceeded the European Union's average growth rate (0.4%), whereas the other countries in the region fell short. The significant contraction is partly due to the relatively strong growth in previous years.

In terms of the annual average, inflation slowed across the entire region except in Hungary, but in every country it still remained significantly above the central bank's inflation target: In Hungary, the price

[4] Unadjusted, raw data

level increased by 17.0%[5], while price dynamics in the Czech Republic (12.0%), Slovakia (11.0%), and Poland (10.9%) were lower than this. Only Romania's inflation fell below 10% (9.7%). High inflation was primarily due to the rapid increases in energy and food prices.
With the exception of Romania, the current account balance moved close to equilibrium, primarily thanks to the normalisation of energy prices. Hungary's GDP-proportionate surplus (0.3%) was lower than the Czech (0.4%) and Polish (1.6%) figures, but was more favourable than the Slovak (1.6%) and Romanian (7.0%) deficits. The improving external balance improved investor perceptions of the entire region.
In Hungary, the budget deficit stood at 6.7% of GDP, which was the highest in the region. In Romania's case, the twin deficit (high current account and budget deficits) is an important risk factor, and the Romanian budget deficit was only marginally lower (6.6%) than Hungary's. Poland's and Slovakia's deficit ratios were more favourable (5.1% and 4.9%) than Hungary's, while the Czech ratio (3.7%) was the lowest in the region. Compared to the previous year, the deficit ratio increased across the entire region. The increase was smaller in Hungary, the Czech Republic (0.5 % in both countries), and Romania (0.3%), and larger in Poland (1.7%) and Slovakia (3.2%). The economic slowdown adversely affected the region's budget deficits. Across the European Union as a whole, the deficit ratio changed only marginally (rising from 3.4% to 3.5%), while in several member states with high public debt (Greece, Italy, Portugal and Spain) significant fiscal consolidation took place.

Economic growth



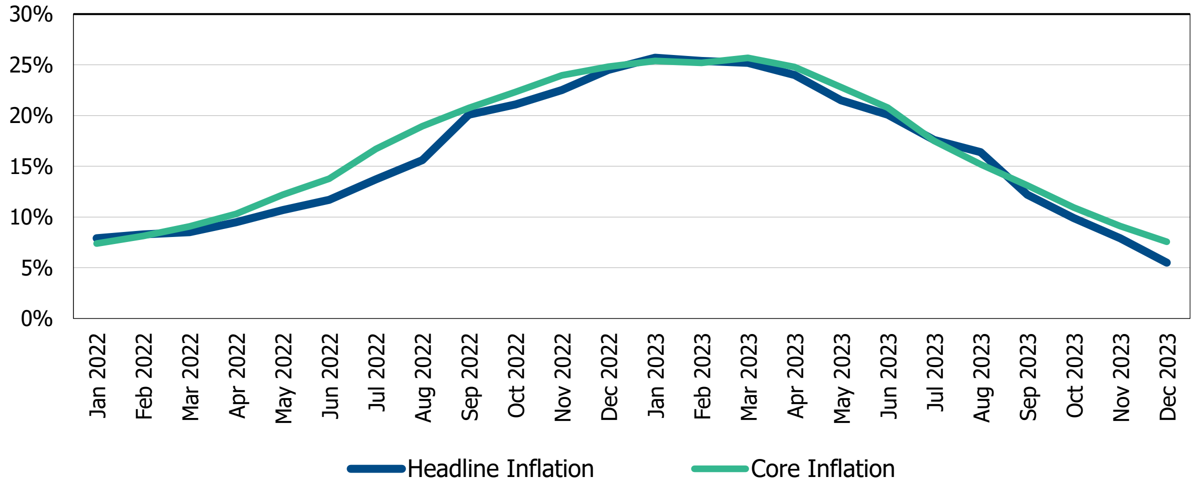
Source: HCSO, Eurostat

In 2023, Hungary recorded a contraction of 0.9%, while across the European Union as a whole, recorded growth of 0.4%. With the exception of agriculture, output declined in all sectors. The increase in agricultural output (68.7%) was also influenced by the very low base resulting from the extremely unfavourable weather in the previous year. Industry (5.1%), construction (5.6%) and services (1.5%) all declined significantly, largely due to weak domestic demand. In construction, in addition to the downturn in residential building, the shortfall in infrastructure investment also contributed to weak performance. Among the branches of the services sector, only a few sectors saw an increase in output: information and communication (2.4%), financial and insurance activities (0.4%), and real estate activities (1.1%), as well as public administration, education and health (2.0%), and arts, entertainment and other services (0.8%). From the expenditure side, a decline can be observed in almost all major components. Consumption declined by 1.1%, while investment volume fell by 14.9% (of which gross fixed capital formation decreased by 7.4%). Exports increased to a small extent (by 0.9%), while imports declined significantly (by 4.3%); as a result, the growth contribution of the external sector was positive, and GDP fell by a smaller extent (0.9%) than the decline in domestic use (5.6%).

[5] HICP inflation

Inflation

Headline Inflation and Core Inflation in 2022 and 2023
(yearly average)



Source: HCSO

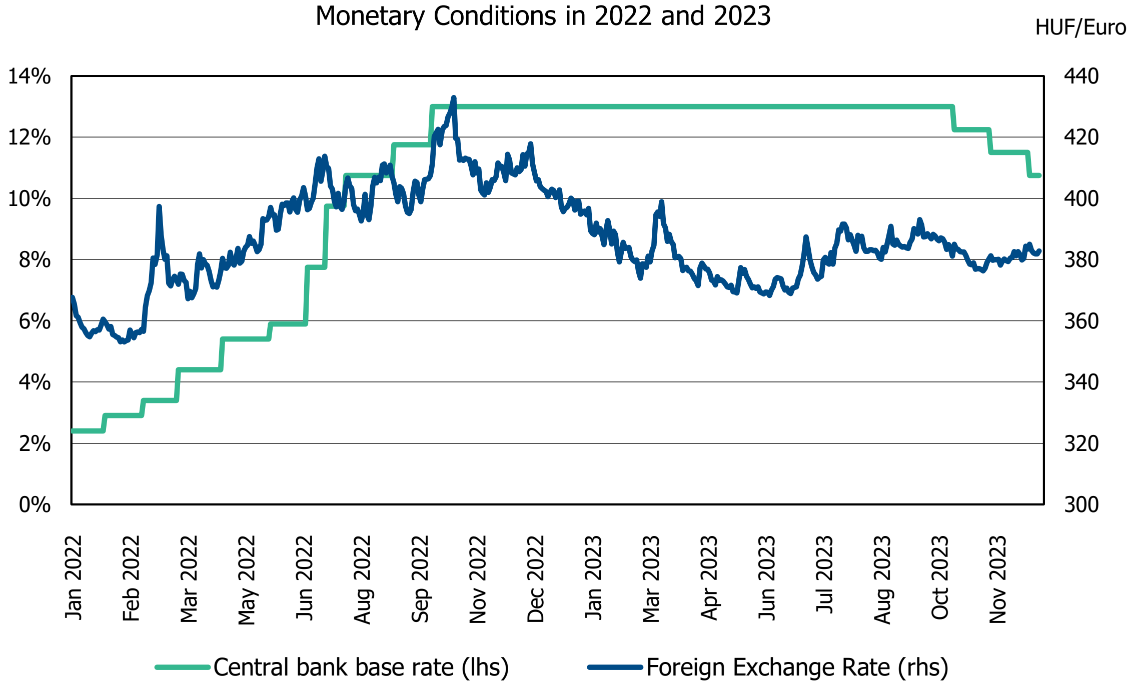
Inflation slowed from 24.5% in December 2022 to 5.5% by December 2023, while core inflation declined to a lesser extent, from 24.8% to 7.6%. Both the headline and the core inflation indicators still significantly exceeded the central bank's inflation target band of 2% to 4%. The price levels of durable consumer goods (1.0%) and household energy and heating (13.9%) declined. In the former, weak demand played an important role, while in the latter, the development of regulated prices was a key factor. Price increases in the other goods and fuel category were low (3.2%), with fuel price regulation also playing a role. Price dynamics for food (4.8%) and clothing (6.9%) were moderate; in addition to weak domestic demand, favourable harvests also played a role in the case of food. Price dynamics for alcoholic beverages and tobacco (10.3%) and for services (12.4%) were in double digits. In the former, increases in excise duty played a role, while in the latter, strong wage dynamics also contributed.

Monetary conditions

The MNB kept the central bank policy rate at 13% from the beginning of the year until October 2023. By contrast, at the beginning of the year, the de facto policy rate was the overnight instrument; the MNB gradually reduced its yield from 18% at the start of the year to the 13% level of the central bank base rate between May and September. The reduction of the overnight rate level was made possible by the slowdown in inflation, the stability of the forint, and the country's improving risk assessment. From October, the MNB significantly simplified its monetary policy toolkit. With the phase-out of the overnight instrument, the central bank base rate once again assumed the role of the policy rate. From October, the MNB pays interest on balances held above the minimum reserve on the reserve account (excess reserves) at a rate equal to the central bank base rate, and with this, the instrument assumed the role of the main policy instrument. During the remainder of the year, the Monetary Council reduced the base rate by 75 basis points each month, bringing it down to 10.75% by year-end.

During 2023, the forint exchange rate appreciated by 4.4%, from 400.25 HUF/EUR at the end of 2022 to 382.78 HUF/EUR.

Monetary Conditions in 2022 and 2023



Source: MNB

In the first half of the year, the forint strengthened. From around 400 HUF/EUR at the beginning of the year, the forint strengthened to below 370 HUF/EUR by the end of June. Domestic macroeconomic indicators, in particular economic growth, developed unfavourably during this period. In developed markets, both the ECB's and the Fed's interest rate hikes and signs of an economic slowdown adversely affected regional and domestic currencies. By contrast, improving macroeconomic balance indicators—including rapidly slowing inflation and a strengthening trade balance—strengthened the forint. The forint exchange rate was also supported by the exceptionally high effective central bank policy rate of 18%. The U.S. bank failures in March 2023 only briefly and temporarily weakened the forint exchange rate.
In the second half of the year, the forint exchange rate typically fluctuated between 380 and 390 forints per euro. Among the domestic macroeconomic indicators, several (including inflation and foreign trade) continued to improve; however, growth prospects remained fragile, and the budget deficit developed unfavourably. In developed markets, central banks had concluded their interest rate hike cycles, and market participants expected that the sharply increased level of interest rates would soon be reduced by central banks both in Europe and overseas. The domestic currency was weakened by the Magyar Nemzeti Bank's gradual reduction of the central bank base rate; however, the still double-digit policy rate supported the forint exchange rate.

Fiscal policy

According to the financial accounts, the general government deficit amounted to 6.7% of GDP, while the cash-based deficit of the central subsector reached HUF 4,593 billion, corresponding to 6.1% of GDP. In 2023, the accrual-based (ESA methodology) deficit of the general government—including local governments—amounted to HUF 5,018 billion, representing 6.7% of GDP according to actual data. The government's financing requirement increased in 2023 compared to the previous year.[6]

[6] The components of the net financing requirement are presented in detail in Chapter III.

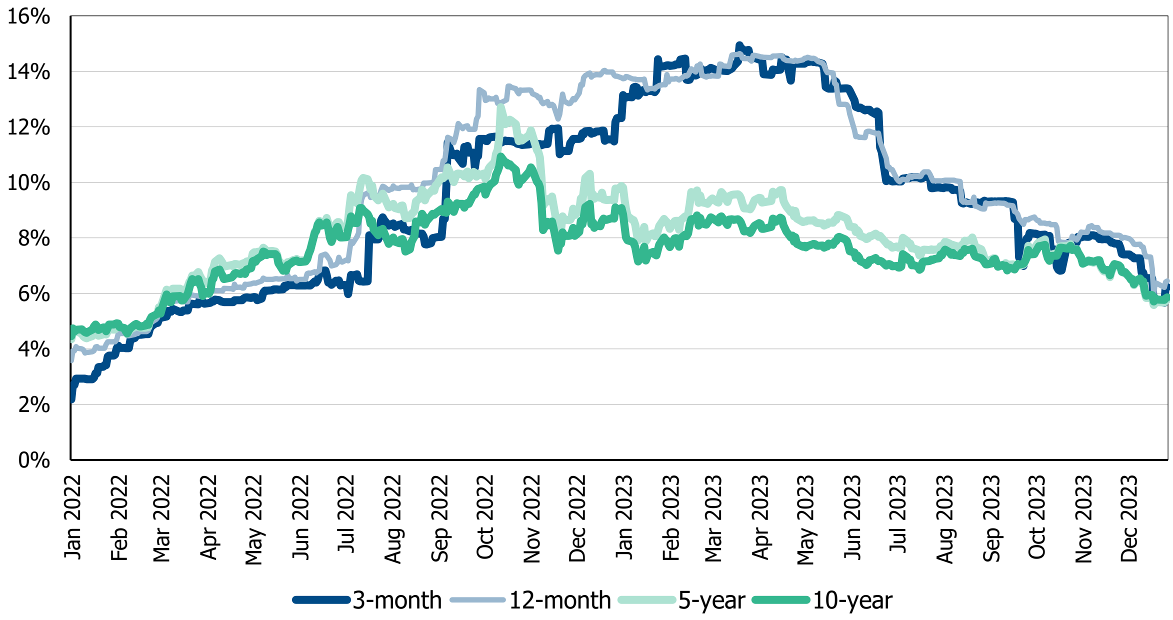
Developments in the financing position of the national economy

In 2023, households' net lending position amounted to 7.4% of GDP, while the corporate sector was a net borrower, amounting to 0.7% of GDP. Overall, the national economy appeared as a net borrower vis-à-vis the rest of the world, amounting to 0.7% of GDP. The current account balance closed 2023 with a significant surplus of EUR 0.4 billion.

Developments in the government securities market and yields

Over the course of the year, forint yields declined significantly across all maturities on an annual basis.

Benchmark Government Bond Yields
in 2022 and 2023



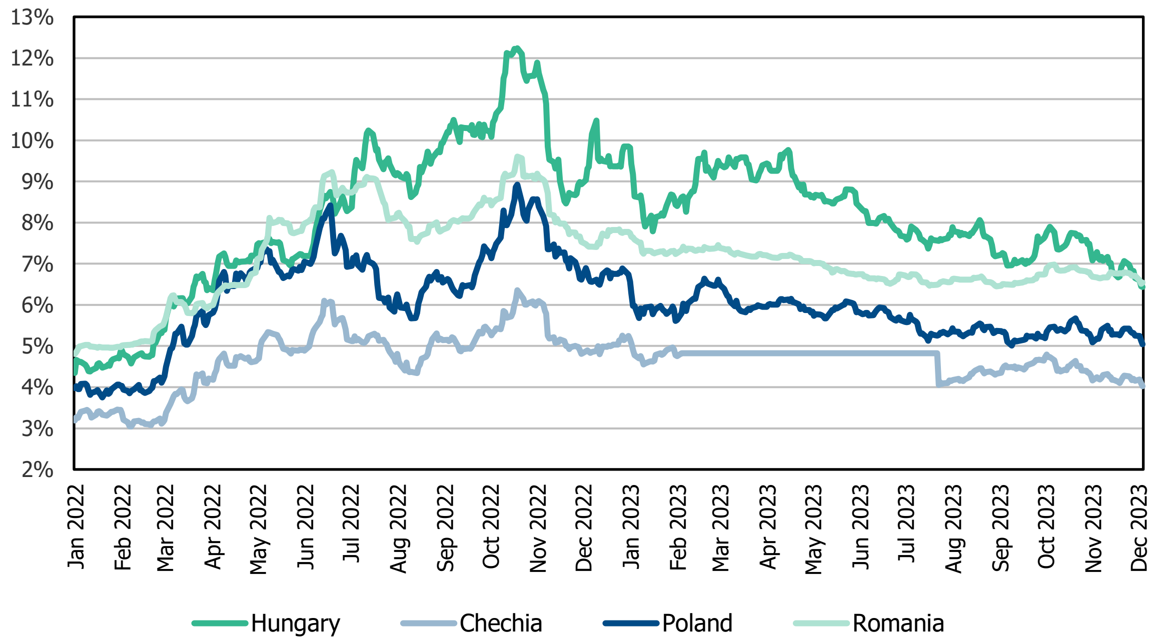
Source: ÁKK

Short-term government securities yields fluctuated around 14% in the first half of 2023. In the short-term segment, government securities yields exceeded the 13% central bank base rate, while remaining below the level of the effective central bank policy rate of 18%. Alongside rapidly declining inflation, market participants expected a reduction in the effective policy rate, which—given the longer maturities of short-term government securities relative to the overnight policy instrument—was consistent with yields below the policy rate. From May, the Magyar Nemzeti Bank began reducing the effective policy rate, and from September, it also gradually lowered the central bank base rate. In parallel with the central bank's rate cuts, short-end government securities yields also moved lower. At year-end, short-end yield levels fluctuated around 6.5%.

Bond yields moved sideways in the first four months of 2023. In the long-term segment, yields were lower at longer maturities, i.e. an inverted yield curve emerged, signalling strong expectations of rate cuts. From May, bond yields gradually declined further, driven by both external and domestic factors. On the one hand, from May, the Magyar Nemzeti Bank embarked on a rate-cutting cycle, which also pushed down the long end of the yield curve. On the other hand, central banks in developed markets concluded their interest rate hike cycles around mid-year, and market participants expected that both the ECB and the Fed would soon begin cutting interest rates. Both factors exerted downward pressure on bond yields. Improving external balance indicators—above all, the trade surplus—and rapidly declining domestic inflation also contributed to lower bond yields. At year-end, bond yields fluctuated around 6%, resulting in a flat yield curve by the end of the year.

By the end of 2023, the 3-month benchmark yield had declined to 6.23% and the 12-month benchmark yield to 6.26%; the 5-year government bond yield stood at 5.78%, while the 10-year yield was at 5.86%.

5-year Government Bond's Yields

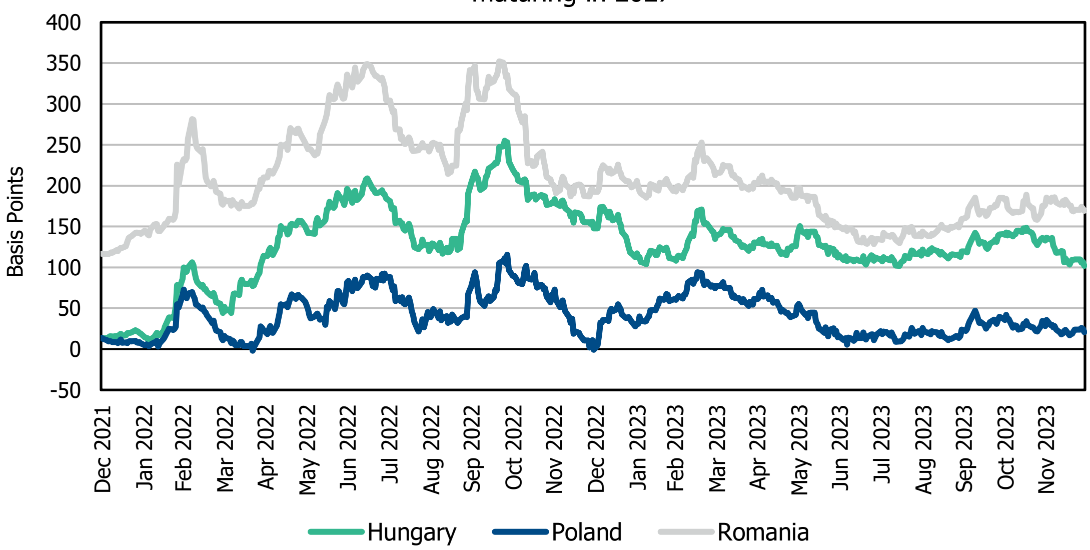


Source: Bloomberg

Regional 5-year local-currency benchmark yields, like the Hungarian yield, declined overall in 2023. In the first half of 2023, regional five-year government bond yields mostly moved sideways, followed by a decline in the second half of the year. Similarly to Hungary, the key factors shaping regional bond yields were the decline in inflation, the conclusion of interest rate hike cycles in developed markets around mid-2023, the strengthening of expectations for rate cuts, and fragile growth prospects. At year-end, the Hungarian five-year yield exceeded the Czech and Polish five-year yields and fell short of the Romanian five-year yield by a narrow margin.

Spreads on regional foreign currency bonds

Z-spreads of Government Bonds denominated in EUR maturing in 2027



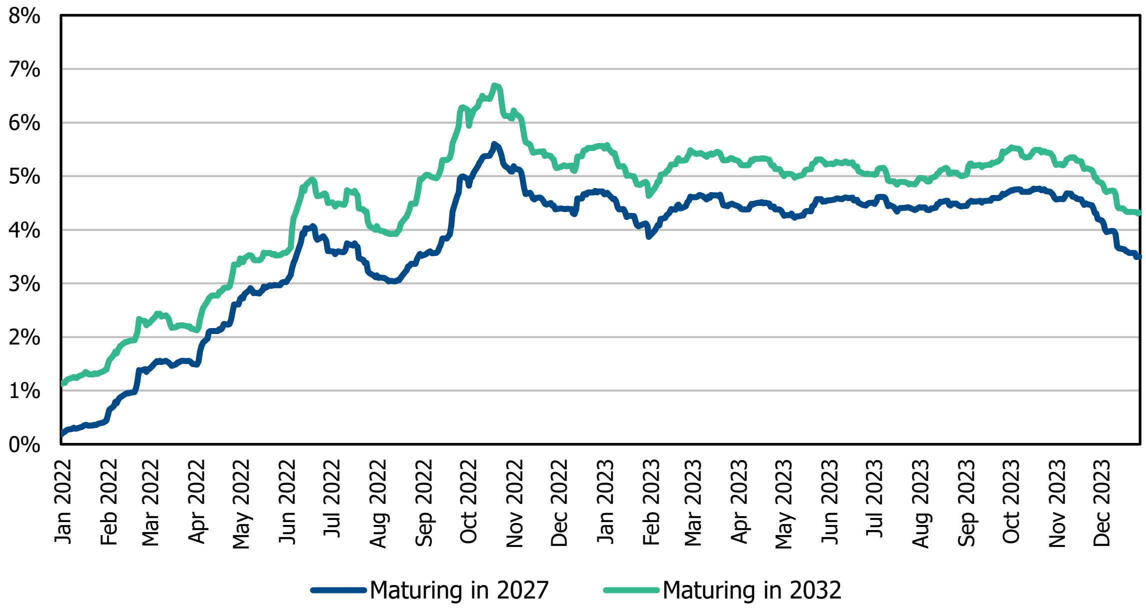
Source: Bloomberg

The Z-spreads of regional government bonds denominated in euros maturing in 2027 showed mixed developments throughout 2023. The Hungarian spread declined by 46 basis points to 102 basis points. Although the Romanian spread declined by 23 basis points over the year, it remained the highest in the region at year-end (169 basis points). The Polish government bond spread increased by 22 basis points, but at 21 basis points, it remained the lowest in the region.
The development of regional spreads over the course of the year was primarily driven by the improving investor perception of the region. In the first half of the year, spreads mostly moved sideways, while the U.S. bank failures in March temporarily pushed spreads higher. From June, regional spreads declined following the conclusion of the interest rate hike cycle in developed markets. In the final months of the year, spreads increased again. In this, alongside fragile growth prospects, weaker-than-previous expectations of rate cuts in developed markets also played a role.

Yields on foreign currency bonds

Yields on Hungary's euro-denominated government bonds declined overall in 2023 amid significant volatility.

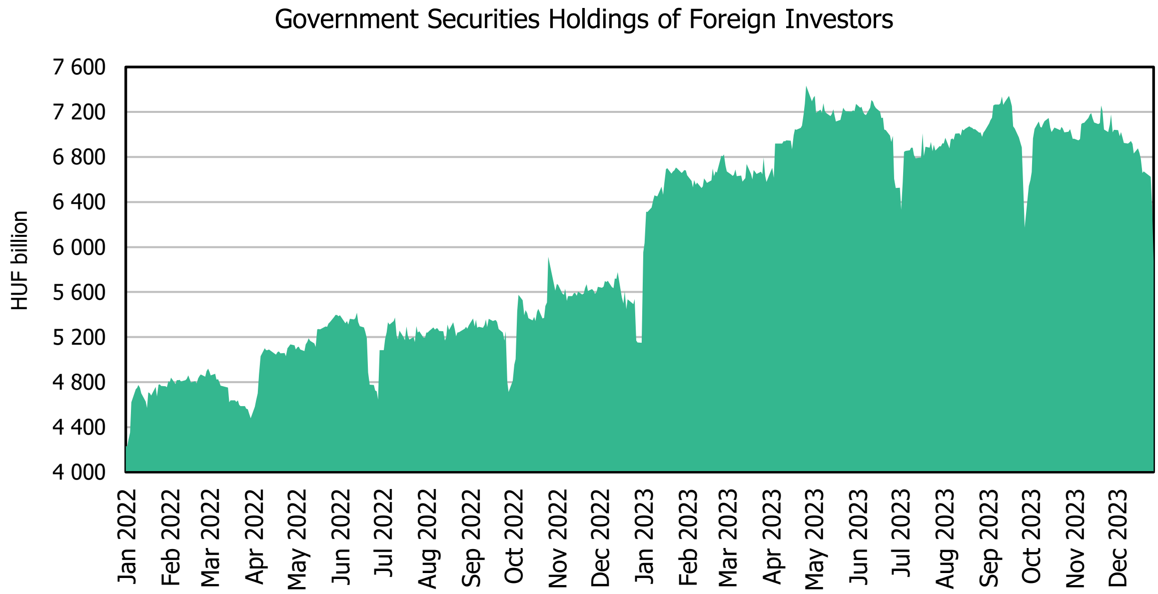
Yields of Hungarian Government Bonds issued in EUR



Source: Bloomberg

The yield on the Hungarian government bond maturing in October 2027 declined from 4.72% to 3.49% during 2023, while the yield on the Hungarian government bond maturing in April 2032 fell from 5.56% to 4.32%. Until early February, the yields on both bonds declined, primarily due to a significant narrowing of spreads. In contrast, during February, yield levels rose back close to their levels at the beginning of the year, as euro-denominated bond yields increased significantly. In mid-March, following the U.S. bank failures, Hungarian eurobond yields rose temporarily but then moved sideways until mid-November. During this period, the ECB concluded its interest rate hike cycle, which exerted downward pressure on both yields and spreads. By contrast, risks related to the economic slowdown intensified. In the final months of the year, bond yields in the euro area began to decline sharply, primarily due to rising investor fears about the economic slowdown, which also significantly reduced yields on Hungarian euro-denominated bonds.

Holdings of government securities by foreign investors



Source: ÁKK

The stock of forint-denominated government securities held by foreign investors fluctuated significantly during 2023. In the first week of January, foreign holdings increased from HUF 5,152 billion at the end of 2022 to HUF 6,311 billion, and then rose further to HUF 7,434 billion by the end of April. Thereafter, apart from significant declines at the end of individual quarters, the stock generally fluctuated around a level below this. Over the year, the stock increased by HUF 722 billion to HUF 5,874 billion.
The share of foreign ownership within forint-denominated debt stagnated at 18%. Together with foreign holdings of foreign currency debt, this implies a 38% foreign ownership share of total debt, exceeding the 37% ratio recorded a year earlier. It is favourable that the average remaining maturity of foreign investors' forint government securities portfolio remains high, although it declined from 6.47 to 6.16 years over the course of the year.

II. Debt management strategy in 2023

The ÁKK plans and carries out its financing operations in accordance with a debt management strategy approved by the Minister of Finance, which is updated annually.

The task of government debt management is to finance the budget's financing requirement over the long term at minimum cost while assuming acceptable risks.

With regard to government debt management—taking into account economic policy objectives—the following strategic objectives have been set:

1. In line with the requirement set out in the Fundamental Law that the public debt ratio must remain below 50% of GDP, **the primary objective of debt management is to support the process of reducing the debt ratio**.
2. The **second objective** of debt management is to **ensure** that **the debt portfolio is sufficiently diversified**, as broadening and diversifying the investor base can significantly improve the stability of the investor base and, thereby, the security of government debt financing. The instruments applied to achieve the strategic objective are:
    a. **The development of the institutional forint government bond market**, through a flexible issuance policy, the maintenance of a transparent primary dealer system, and the development of the domestic institutional investor base.
    b. **Expanding the domestic investor base of government debt, increasing the number of clients, and supporting the sales of retail government securities,** in line with the strategic objectives of the new retail government securities strategy.
    c. **Active management of the foreign currency share of government debt** within the defined limits, while also maintaining the **necessary market presence**.
3. The **third objective** of debt management is to **lengthen the remaining maturity** of government debt, **provided that market conditions allow it**. In view of the higher yield environment resulting from inflation, debt management considered this objective less of a priority in 2023, and market demand for such operations was correspondingly lower.
4. The **fourth objective** of debt management is to **maintain and develop its ESG market presence and to diversify funding sources**.

For the ÁKK, the level of government debt is essentially an external condition determined by economic policy, just as the budget's financing requirement is, which it must ensure. The ÁKK cannot materially influence their magnitude; only the appropriate choice of the debt's cost–risk ratio affects these indicators.
The objective of simultaneously optimising costs and risks is to establish a debt structure in which the cost–risk ratio is the most favourable over the long term. The long-term perspective implies that, in pursuit of the above objective, no operation may be undertaken that would accept higher future costs or greater risks in exchange for short-term (cost) advantages.

Among the risk factors, the following are the most important:

- Credit risk (counterparty risk) is also a significant risk factor in the case of hedging transactions concluded directly with foreign exchange market counterparties, as well as in liquidity management operations on the forint market.
- Exchange rate risk arises from changes in the exchange rates between the forint and the euro, as well as among different foreign currencies.
- Financing risk comprises of the risk of refinancing maturing debt and of meeting the net financing requirement. Behind financing risk, in extreme cases, lies liquidity risk; otherwise, it is interest rate risk.
- In the case of value risk, changes in the yield curve lead to changes in the market value of government debt. For the debt manager, this risk arises primarily in the case of buybacks and bond exchanges, since at maturity, redemption occurs at a fixed value, and government debt must be recorded at nominal value.
- Interest rate risk arises from changes in government securities yield levels.
- The budget's liquidity risk arises from fluctuations in the budget's cash flows, as well as from debt management's money market operations.

There are trade-offs between certain risks, meaning that they can be increased or reduced at each other's expense (for example, in the context of forint and foreign-currency financing, refinancing foreign-currency debt in forints reduces future foreign exchange risk but increases the refinancing and interest rate risks of government debt). Between certain elements, however, there is co-movement (for example, between financing and interest rate risk), i.e. if one risk increases, the other does as well. To jointly assess risks and costs, the ÁKK has developed so-called benchmarks (reference indicators) that reflect its strategic objectives, typically calculated using 90-day moving averages to filter out short-term effects. The benchmarks approved by the Minister of Finance also represent the quantification of the strategic objectives, i.e. the formulation of intermediate targets. In 2023, the central budget's debt met the objectives approved by the Minister of Finance.

1. Forint/foreign currency debt ratio

The debt management strategy aims to establish a forint/foreign-currency ratio within total debt that reduces the risks arising from interest rate and exchange rate fluctuations. According to the performance indicator in effect in 2023, the share of gross foreign-currency debt must remain below 30%, an increase from the previous upper band. At the same time, however, the previous lower band was abolished. The forint/foreign-currency composition of the debt portfolio complied with the applicable benchmark throughout the year; the foreign-currency ratio indicator (90-day moving average) calculated at year-end increased from 25.1% to 26.6% as a result of significant foreign-currency issuance, and thus remained below the designated upper limit.

2. Currency composition of foreign-currency debt

In order to reduce the cross-currency risk of foreign-currency debt, as in previous years, the ÁKK continued to set the currency composition of foreign-currency debt at 100% euro, with a maximum permitted deviation of 5%. If the state raises funds in currencies other than the euro, the ÁKK converts them into euro-based liabilities using foreign exchange swap transactions. At the end of 2023, the currency composition of foreign-currency debt met the benchmark, with the share of foreign-currency debt denominated in euros at 100%.

3. Fixed/variable interest rate composition of debt

The objective of the performance indicator for the target fixed/variable interest rate composition of the debt portfolio is to avoid excessively rapid repricing of government debt, i.e. to limit the extent to which an increase in interest rates is reflected very quickly in the budget's interest expenditures. The ÁKK can influence compliance with this benchmark primarily by adjusting the weights of fixed- and floating-rate instruments and through interest rate swap transactions, taking into account that government securities with maturities of less than one year are treated as floating-rate instruments. Previously, performance indicators were defined separately for forint and foreign currency debt; however, from 2023, a benchmark indicator has been set for total debt, under which the share of fixed-rate elements must be between 60% and 80%. By the end of 2023, the share of fixed-rate elements in total debt decreased from 73.3% to 68.5%, remaining within the target band.

4. Targets for the average time to refixing

The *average time to refixing (ATR) of government debt* is the time required to reprice the entire debt, i.e. the exposure to interest rate changes.
With shorter maturities and floating interest rates, larger yield movements are reflected in interest expenses sooner; thus, in an environment of higher interest rate volatility, interest expenditures also fluctuate significantly. With a longer time to refixing, interest rate changes are reflected in interest expenses only in a dampened manner over several years, which also plays a significant stabilising role in fiscal processes, making interest expenditures more predictable. Since 2019, the ÁKK has used the more widely applied international indicator for this purpose, the average time to refixing (ATR), to measure refinancing risk; however, unlike in previous years, from 2023 this has been applied not only to forint debt but to total debt.
At the end of 2023, the average time to refixing stood at 4.9 years (0.3 years lower than the moving-average value calculated for end-2022), which complied with the minimum benchmark of 4 years set for 2023.

5. Average maturity targets

In 2021, ÁKK Zrt. introduced a new performance indicator for the *average time to maturity (ATM) of forint debt*. The average remaining maturity of government debt quantifies the financing (refinancing) risk of maturing debt. From 2023, the ÁKK calculates this indicator also for total debt. In 2023, the ATM value was required to be higher than 5.5 years. Despite the unfavourable yield environment, the average remaining maturity did not decline; it stood at 6.1 years and complied with the benchmark.

6. Retail share

In 2023, a benchmark band was introduced for the share of retail government securities held by households in total debt, with a target range of 20–25% set for that year. The performance indicator increased from its opening value of 19.6% at end-2022 to 20.4% by the end of 2023, and remained within the target band.

7. Minimum Balance of the Treasury Single Account (TSA)

The strategy sets the objective of maintaining a safe level of cash balances in the Treasury Single Account (TSA) and of smoothing the daily balance, which is achieved through liquidity management activities carried out by ÁKK. The characteristics of liquidity management are detailed in Chapter VI.

Principles and methods applied in debt management

Similar to most foreign government debt management institutions, ÁKK determines the financing instruments to be applied and their sales techniques on the basis of the threefold objective of *simplicity*, *transparency,* and *liquidity*, which, in recent years, has been complemented by *flexibility*.

Within the framework of *simplicity* and *transparency*, ÁKK issues a relatively limited number of instruments that are well known to investors and easy to manage, in a market-conforming and transparent manner, i.e. it sells market forint bonds and discount Treasury bills at auctions, on the basis of an issuance calendar published one year in advance.

In the area of *liquidity*, it strives to ensure that government securities have a sufficiently liquid secondary market, as this also affects subsequent issuances. For investors, it is a key consideration that they can, if necessary, sell the government securities they hold before maturity. A liquid secondary market has two essential elements: continuous, two-way quoting that reflects actual market prices, and the existence of sufficiently large-volume (benchmark) government securities series. The technique for building large-volume series is to reopen the given series (via tap issuances), whereby the state issues government bonds into an existing series. For bonds, the targeted series size in 2023 was around HUF 1,000–1,800 billion, corresponding to approximately EUR 2.5–4.5 billion.

III. The financing requirements in 2023

Components of the financing requirement

ÁKK is responsible for financing the deficit of the central subsector of general government (the Treasury circle) and for maintaining its solvency, while the other major subsector of general government, local governments, are independently responsible for their budgets, financing and debt management. The balance of the *Treasury circle* (the difference between its revenues and expenditures) represents the consolidated balance of the central budget, the social security funds and the separate state funds.

From a financing perspective, the *cash-based* balance is the relevant indicator, as it shows the actual financial financing requirement and, fundamentally, determines the change in government debt in the given year. However, due to Hungary's EU membership, balance figures calculated on an accrual basis under the so-called ESA 2010 methodology are also presented. These data partly filter out the effects of cash-flow carryovers, allowing an economic assessment of developments over the given periods from a different perspective, and the accounting treatment of the financial transactions of programs financed by the European Union also differs significantly.

Financing had to cover cash-flow transactions. The financing of the Treasury circle essentially means continuously maintaining the cash balance held in the Treasury Single Account (TSA) at the Magyar Nemzeti Bank (MNB) at a given level or above that level which is sufficient to execute Treasury payments and to redeem maturing government debt, i.e. to maintain the solvency of the state, and, in addition, to provide a safety buffer against unforeseen financing shocks (e.g. disruptions in the government securities market, failures of government securities sales at auctions). According to the principle laid down in the Maastricht Treaty of the European Union (EU), the central bank may not extend credit to the budget, and the balance of general government accounts held with the central bank may not be negative.[7]

The Act XXV of 2022 on Hungary's 2023 Central Budget (hereinafter referred to as the 2023 Budget Act) projected a cash-flow-based deficit of HUF 3,400 billion for the central subsector in 2023. ÁKK revised its financing plan in September 2023 based on the net financing requirement increased to HUF 4,113 billion. The total *gross financing requirement* also includes, in addition, the redemption of short- and long-term debt.

Based on data from the Ministry of Finance, the *total cash-flow-based deficit* of the central subsector of general government in 2023 amounted to HUF 4,593 billion (6.1% of GDP), while net EU transfers and other items, taken together, further increased the total net financing requirement to HUF 5,437 billion (7.3% of GDP).

The cash-flow-based financing requirement realised in 2023 (HUF billion):

	2023 outturn
Balance of the Treasury circle	**-4,593**
Net pre-financing of EU transfers and changes in other cash-flow accounts	-844
Net financing requirement	**-5,437**
Redemption of short-term debt instruments (Treasury bills)	-2,851
Repayment of debt instruments with a maturity of more than one year	-5,753
Gross financing requirement	**-14,040**

Source: Hungarian State Treasury, Ministry of Finance, ÁKK

[7] See in detail: Section 15 of Act CCVIII of 2011 on the Magyar Nemzeti Bank.

Redemptions

The gross amount of redemptions in a given year is, on the one hand, the consequence of debt operations in previous periods, and is also influenced by bond buybacks and exchange auctions, as well as by the early repurchase or redemption of retail government securities and other government securities sold through the Treasury network. In the case of the latter two, ÁKK follows a passive, accommodating approach, i.e. both the amounts sold and the amounts repaid are determined by investors' intentions to sell or redeem.

Realisation of gross redemptions in 2023 (HUF billion): [8]

	2023 planned	2023 actual
Redemption of forint-denominated debt	**6,958**	**7,374**
Government bonds	1,783	1,816
Retail government securities	3,620	3,630
Discount treasury bills	1,496	1,772
Loans	59	156
Redemption of foreign currency debt	**798**	**804**
International bond	649	646
Domestic bond	27	39
FX and other loan	122	118
Total maturities	**7,756**	**8,178**
Exchange auction	408	173
Buyback of forint-denominated government bonds	0	45
Buyback of foreign currency bonds	296	208
Total pre-financing	**704**	**425**
Redemptions including pre-financing	**8,460**	**8,604**

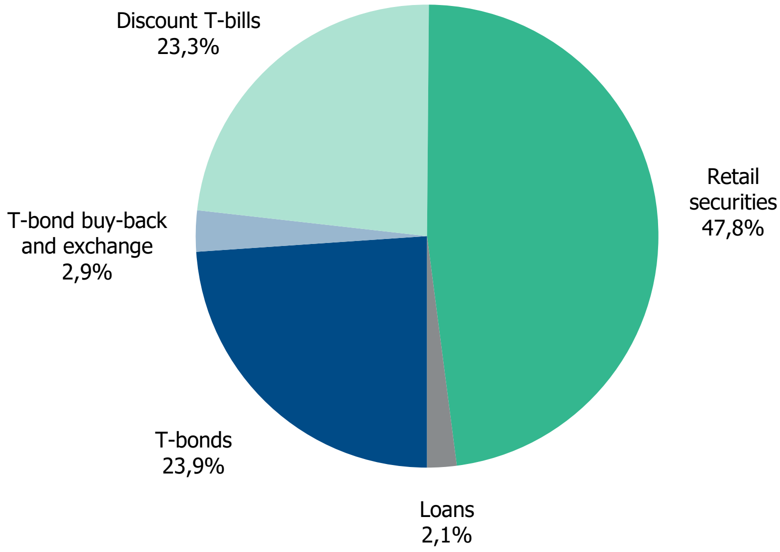
Source: ÁKK

Total gross redemptions in 2023, including pre-financing operations, exceeded the planned amount by 2%. While due foreign currency redemptions, forint bond redemptions and retail government securities redemptions evolved in line with the plan, forint loan maturities and discount Treasury bill redemptions exceeded the planned levels as a result of the conversion of certain forint loans into euro loans due to their relatively more favourable interest rates, as well as because of the higher stock of discount Treasury bills at the end of 2022.

Total redemptions in 2023 also included debt pre-financing of approximately HUF 425 billion, which was 40% below the planned level. The shortfall was mainly related to exchange auctions, as in 2023 ÁKK restarted its exchange auction program—temporarily suspended in 2022 due to high yields—only a few months later than originally planned, after yields had declined, and as a result, it was implemented at a level approximately 58% lower than planned. In addition, ÁKK conducted buybacks of forint and foreign-currency bonds, totalling HUF 45 billion for long-term forint bonds and HUF 208 billion for long-term foreign-currency bonds. These operations do not indicate high refinancing risk; on the contrary, by reducing bond maturities in the following year, they in fact reduce refinancing risk.

[8] In the publication, for government securities with a maturity of less than one year (discount Treasury bills), ÁKK presents maturities and gross issuance in accordance with the OECD methodology. On this basis, gross maturities are defined as the short-term debt outstanding at the beginning of the year, while gross issuance is defined as the sum of these maturities and the net issuance carried out during the year, which is equal to the stock outstanding at the end of the year.

Composition of domestic debt redemption in 2023



Source: ÁKK

Exchange auctions and forint bond buybacks

Large bond series maturing in a single lump sum pose refinancing risk. In order to reduce refinancing risk, ÁKK typically holds government bond buyback auctions in months when there are otherwise no bond maturities, at which it repurchases bonds with a remaining maturity of between half a year and two years prior to maturity. In 2023, ÁKK repurchased a total of HUF 294 billion of forint government bonds from the market, of which HUF 249 billion was the buyback of the series maturing in November 2023—thus affecting only liquidity management and not annual financing—while HUF 45 billion was the buyback of government bond series maturing in 2024.

Within the framework of bond exchange auctions, investors can swap bonds with short remaining maturities for longer-dated ones, thereby improving investment opportunities while also giving debt management the opportunity to lengthen maturities and pre-finance them. In 2022, amid the high-yield environment, ÁKK suspended its exchange auction program and restarted it only after yields had declined, in September 2023, under more flexible conditions than before. Exchange auctions were held bi-weekly, in the weeks when no buyback auction was held. Thus, a total of eight exchange auctions were held in 2023, during which investors primarily purchased the newly issued government bond series maturing in 2035, and in addition, in smaller amounts, bonds with maturities of 6–10 years. As consideration, as a result of the technical development in exchange auctions, investors could choose not only one but even several shorter-dated government bonds, typically with remaining maturities of 1–2 years. Thus, in total, ÁKK-issued government bonds with a nominal value of HUF 176 billion were issued through exchange auctions, while, as consideration, government bonds with a total nominal value of HUF 173 billion were accepted.

Foreign currency maturities

In 2023, in line with the plans, the maturities of two 10-year USD bonds originally issued in amounts of USD 2 billion each, as well as the maturity of a 3-year Japanese yen bond in the amount of JPY 22.7 billion, fell due. Thanks to foreign currency bond buybacks carried out in previous years to reduce refinancing risk, the amounts actually maturing in 2023 were significantly below the originally issued amounts: in the case of the USD bonds, only marginally more than half of the original amount, USD 2,111 million, had to be redeemed (and part of this was repurchased by ÁKK in early January 2023, which did not affect annual financing).

In addition, in 2023, a total of approximately EUR 60 million matured from the eleventh series of the Premium Euro Hungarian Government Bond. In order to reduce short-term remaining-maturity foreign currency debt, ÁKK additionally repurchased foreign-currency bonds in the amounts of USD 1,010 million and EUR 76 million, of which USD 380 million was repurchased from the USD bond maturing in the same year. In addition, in 2023, smaller amounts of contractual and early repayments on foreign-currency loans were recorded, totalling EUR 310 million (HUF 118 billion).

IV. Financing

In 2023, ÁKK carried out total issuances amounting to HUF 14,591 billion, of which it raised forint funds in gross of HUF 10,735 billion (74%) and issued foreign-currency debt in the amount of HUF 3,856 billion (26%).

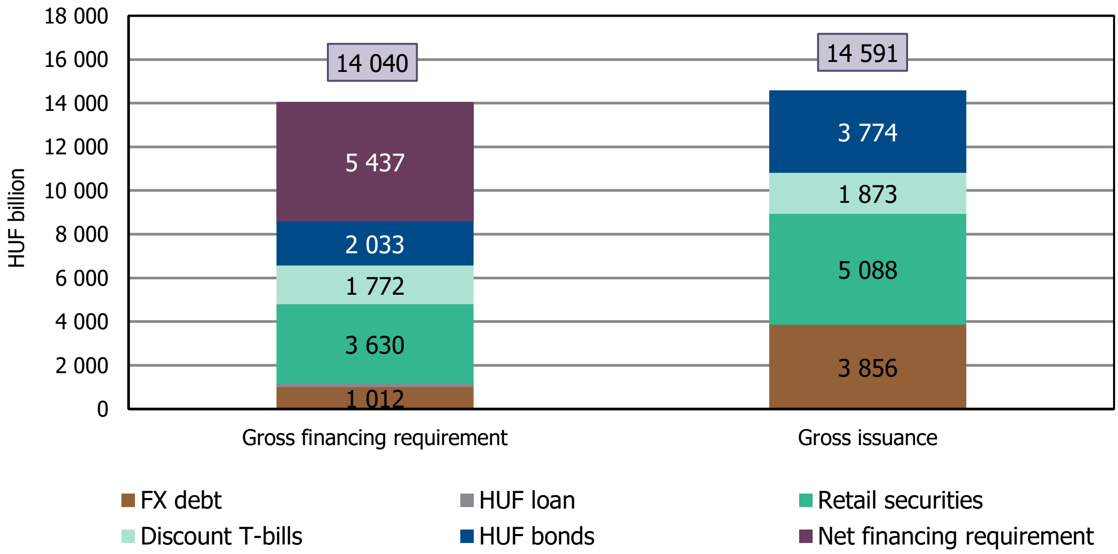
Realisation of gross issuance in 2023 (HUF billion):

	2023 actual
Issuance of forint debt	**10,735**
Government bonds	3,774
of which exchange auction issuance	176
Retail government securities	5,088
Discount treasury bills	1,873
Loans	0
Issuance of foreign currency debt	**3,856**
International bond	2,771
Domestic foreign currency bond	176
Loans	909
Total issuance	**14,591**

Source: ÁKK

Of gross issuance, the largest share was accounted for by the issuance of forint retail government securities, totalling HUF 5,088 billion. Gross foreign-currency borrowing and foreign-currency issuance amounted to HUF 3,856 billion, while issuance of forint bonds totalled HUF 3,774 billion. Of gross forint issuance, HUF 3,173 billion was auction issuance, HUF 176 billion was exchange auction issuance, while HUF 426 billion was the issuance of the Municipal Hungarian Government Bond and other Treasury and secondary market issuance. Gross issuance of discount Treasury bills amounted to HUF 1,873 billion, which, similarly to the other instruments, significantly exceeded the plans due to a higher-than-planned net financing requirement and strong retail and institutional demand.

Actual gross financing in 2023



Source: ÁKK, Ministry of Finance, Hungarian State Treasury

Net forint financing amounted to HUF 3,143 billion, while net foreign-currency issuance totalled HUF 2,844 billion, i.e. total net issuance in 2023 was HUF 5,988 billion.

Realisation of net issuance in 2023 (HUF billion):

	2023 actual
Issuance of forint debt	**3,143**
Government bonds	1,741
Retail government securities	1,458
Discount treasury bills	101
Loans	-156
Issuance of foreign currency debt	**2,844**
International bonds	1,917
Domestic foreign currency bond	137
Loans	791
Total issuance	**5,988**

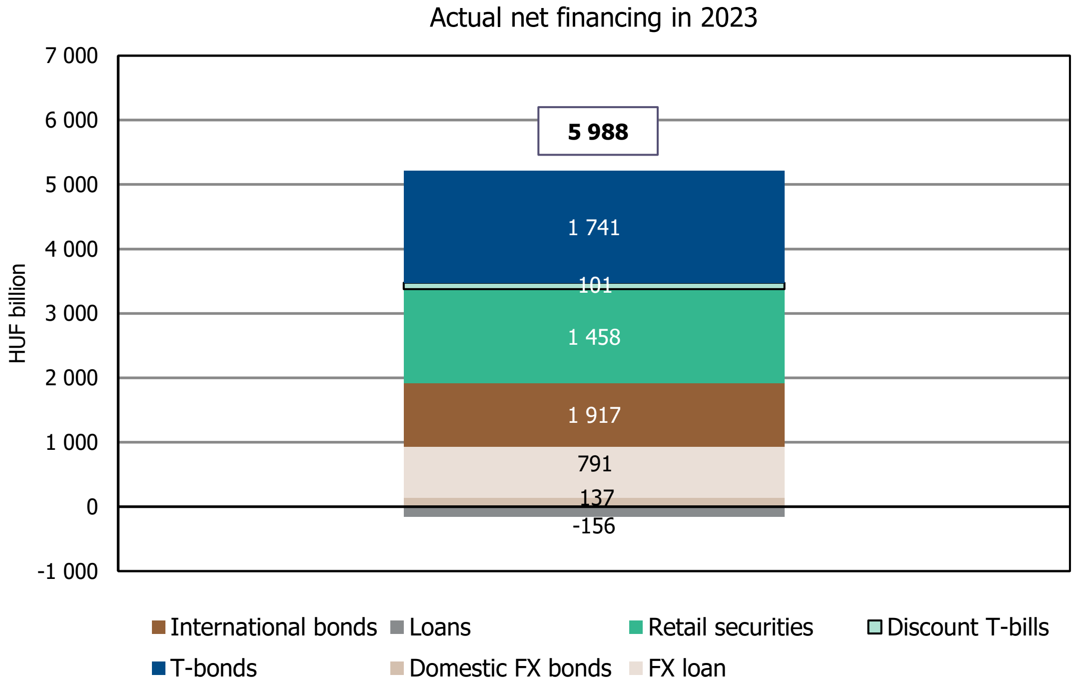
Source: ÁKK

Within net forint issuance, the largest share was accounted for by institutional forint bond issuance. The significantly increased net forint bond issuance compared to the original plans financed the high net financing requirement. ÁKK originally planned a net forint bond issuance of HUF 1,271 billion for 2023, which ultimately amounted to HUF 1,741 billion in 2023.

In addition to forint bonds, significant financing – also exceeding the original plan – was provided by households' net purchases of forint retail government securities, totalling HUF 1,806 billion. The stock of forint retail government securities held by other institutional sectors decreased by HUF 349 billion, as a result of the fact that a significant amount maturing in 2023 could no longer be rolled over into retail government securities by non-household investors due to the narrowing of the investor base. In 2023 as well, ÁKK ensured through continuous buybacks that retail government securities redeemed by household investors did not remain in the possession of dealers but were effectively removed from the government debt. As a result of the HUF 1,806 billion increase in the stock of forint retail government securities held by households and the significant decrease in the stock of retail government securities held by other, institutional sectors, net forint retail government securities issuance amounted to HUF 1,458 billion in 2023. In addition to all this, in 2023 the stock of institutional government securities held by households (primarily discount Treasury bills and forint government bonds) decreased modestly, after increasing significantly in 2022.

In the case of discount Treasury bills, net issuance amounted to HUF 101 billion, representing significantly more funding than the planned substantial decrease. The significant stock of discount Treasury bills held by households decreased by less than planned, while the stock of discount Treasury bills held by institutions increased above plan.

In view of the expected relative cost advantage of foreign-currency financing, ÁKK planned to draw down project-financing loans in foreign currency and, ultimately, did so, in light of the specific terms, in a net amount of HUF 791 billion. The gross and net foreign currency loan drawdown exceeding the plans to a small extent was the result of the fact that, during the year, ÁKK converted several forint loans into foreign currency loans in view of the more favourable relative cost, which increased both forint loan repayments and foreign currency loan drawdowns, but did not represent actual net financing.



Source: ÁKK

ÁKK planned for 2023 the issuance of international foreign-currency bonds in the amount of USD 4 billion and euro bonds in the amount of EUR 1 billion (alongside the buyback of USD 1 billion of short-term USD bonds), while leaving open the possibility of other forms of foreign currency financing serving debt management objectives (e.g. private conventional or green issuance). Overall, in 2023, ÁKK issued USD bonds totalling USD 5.2 billion and EUR 1.75 billion in euro bonds. As a result of international foreign-currency bond issuance amounting to the equivalent of HUF 2,771 billion, net foreign currency issuance ultimately significantly exceeded the plan, reaching HUF 2,844 billion. Of this, net issuance of international foreign-currency bonds amounted to HUF 1,917 billion, net issuance of domestic foreign-currency bonds to HUF 137 billion, and net foreign-currency loan borrowing totalled HUF 791 billion.

In 2023, the average cost of gross issuance (the yield to maturity, weighted by the amount issued and maturity, of government securities issued and loans drawn in the given year, including commissions related to sales) decreased by 0.6 % compared to the previous year and amounted to 6.5%. The decrease was driven by the decline in market yields observed from the summer of 2023 and by the increasing weight of lower-interest-rate debt instruments.

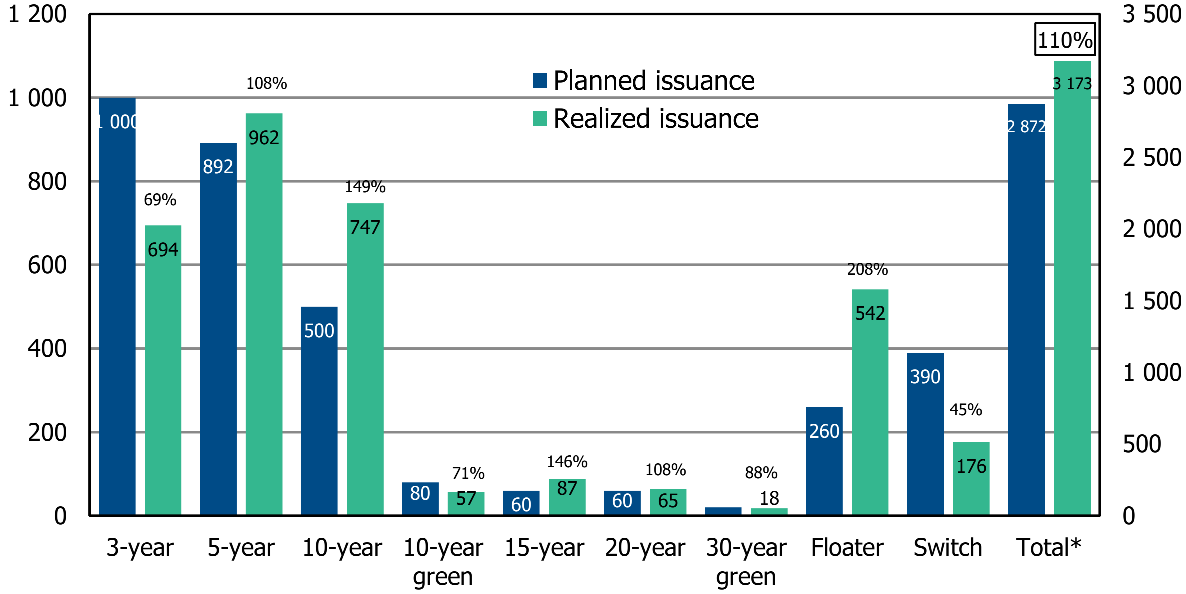
Government bonds

In 2023, forint financing was provided primarily by market forint-denominated government bonds and retail government securities, and to a smaller extent by the increase in the stock of discount Treasury bills.

In response to the increased yields, from 2023, ÁKK again regularly held auctions of 3-year fixed-rate bonds as well. Fixed-rate bond auctions were held on a bi-weekly basis, when the 3-, 5- and 10-year bond series were issued, while in the weeks when there were no 3-, 5- and 10-year fixed-rate bond auctions, floating-rate bonds and the 15- and 20-year bonds, as well as green bonds, were sold. Floating-rate bonds generally had one auction per month, while longer-maturity bonds and green bonds had one auction per quarter.
As a result, in 2023, there were a total of 25 auctions of 3-, 5- and 10-year fixed-rate bonds for the benchmark series, and in addition, ÁKK auctioned non-benchmark bonds with maturities between 3 and

10 years on a further six occasions based on market demand. At the 15- and 20-year maturities, auctions were held four times each, whereas for green bonds, auctions were held five times. Floating-rate bond auctions were held a total of 20 times in 2023, with each auction day potentially issuing several floating-rate bonds of different maturities. With the regular issuance of the three-year bond, the average maturity of issued bonds decreased relative to the average maturity of the 2022 auctions, standing at 6.7 years. Average demand at the auctions was 3.7 times the announced amount. A total of HUF 2,561 billion worth of government bonds were sold at the auctions, and a further HUF 611 billion worth of bonds were sold in the non-competitive tenders following the auctions. Total auction bond sales thus reached HUF 3,173 billion in 2023, exceeding the planned level by 10%. The higher-than-planned bond issuance was required due to the higher-than-planned net financing requirement.

Domestic bond issuance (HUF bln) and
the fulfilment of the annual plan (%)



*without switch auctions
Source: ÁKK

Bond sales in 2023 were further increased by the HUF 176 billion issued within the framework of bond exchange auctions (in bond exchange auctions, the nominal value of the government securities withdrawn and issued generally differs, but their gross value is the same), which was HUF 214 billion below the planned amount. ÁKK planned to restart the exchange auction program in 2023, which had been temporarily suspended in 2022, following the expected decline in yields. The decline in yields ultimately materialised in the second half of 2023, so ÁKK restarted the exchange auctions only a few months later than originally planned, in September, and therefore fewer exchange auctions were held than planned. In addition, market and municipal government bonds sold through the Hungarian State Treasury's network in the amount of HUF 426 billion (excluding retail bonds) also increased gross issuance, which, in 2023, totalled HUF 3,774 billion, excluding repo operations. As a result of total government bond redemptions amounting to HUF 2,033 billion—including exchange auctions and buybacks—net forint market government bond issuance was HUF 1,741 billion, which significantly exceeded the plan by HUF 470 billion.

In the case of the 3-year fixed-rate bond, a new series was issued, while at the 5-year maturity, an earlier series originally issued in 2011 was re-offered for sale. For longer maturities, as well as green and floating-rate bonds, ÁKK also auctioned in 2023 the series that had already been issued in 2022. In addition, on an occasional basis, taking market demand into account, ÁKK also offered other fixed-rate and floating-rate bond series at auctions to enhance the liquidity of these series.

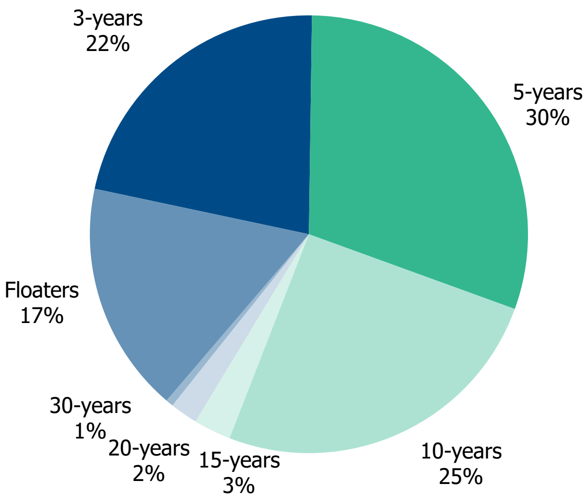
Bond series issued in 2023 (HUF billion):

	Maturity	No. of auctions	Auction issuance during the year	Non-competitive sales	End-of-year series size
2025/C	3	1	14	0	1,458
2026/F	3	1	7	0	824
2026/H	3	25	556	117	683
2027/B*	3	6	164	52	1301
2028/A	5	25	766	196	1,682
2029/A	7	1	34	12	983
2029/B*	7	3	40	8	1,343
2030/A	7	2	34	3	1,237
2032/A	10	25	512	118	1,344
2032/B*	10	11	211	66	435
2032/G	10	3	47	10	262
2033/A	10	1	30	3	1,369
2038/A	15	4	69	18	989
2041/A	20	4	59	6	585
2051/G	30	2	16	2	151

*floating-rate bond
Source: ÁKK

Within the maturity structure of gross bond issuance, the share of the 3-year bond was 22%, while the share of the 5-year bond increased from 23% to 30%. At the same time, the share of longer-maturity bonds and the floating-rate bond declined within gross issuance: the share of the 10-year fixed-rate bond decreased from 31% to 25%, while the shares of the 15- and 20-year bonds fell from 4% and 3%, respectively, to 3% and 2%. The share of the floating-rate bond declined from 29% to 17%, while the 30-year green bond accounted for 1% of total auction issuance.

Hungarian Government Bond issuance composition by tenor in 2023



Source: ÁKK

Discount Treasury Bills

The 3-, 6-, and 12-month Discount Treasury Bills (DKJ) are primarily short-term instruments for liquidity management; by adjusting their issuance volumes, ÁKK can smooth liquidity fluctuations caused by intra-year variations in financing needs. In addition, discount Treasury bills may contribute to longer-term financing through their permanently maintained outstanding stock and may also provide an alternative source of financing.

In 2023, ÁKK sold discount Treasury bills for a total of HUF 1,873 billion, which was HUF 101 billion higher than in 2022 and significantly exceeded the originally planned volume. The outstanding amount of discount Treasury bills increased significantly in 2022, primarily due to rising retail demand driven by higher yields. In 2023, the stock of discount Treasury bills held by households declined less than expected, while institutional demand increased as a result of legislative changes during the year; thus, at the end of 2023—including repos—the stock of discount Treasury bills stood at HUF 1,884 billion.

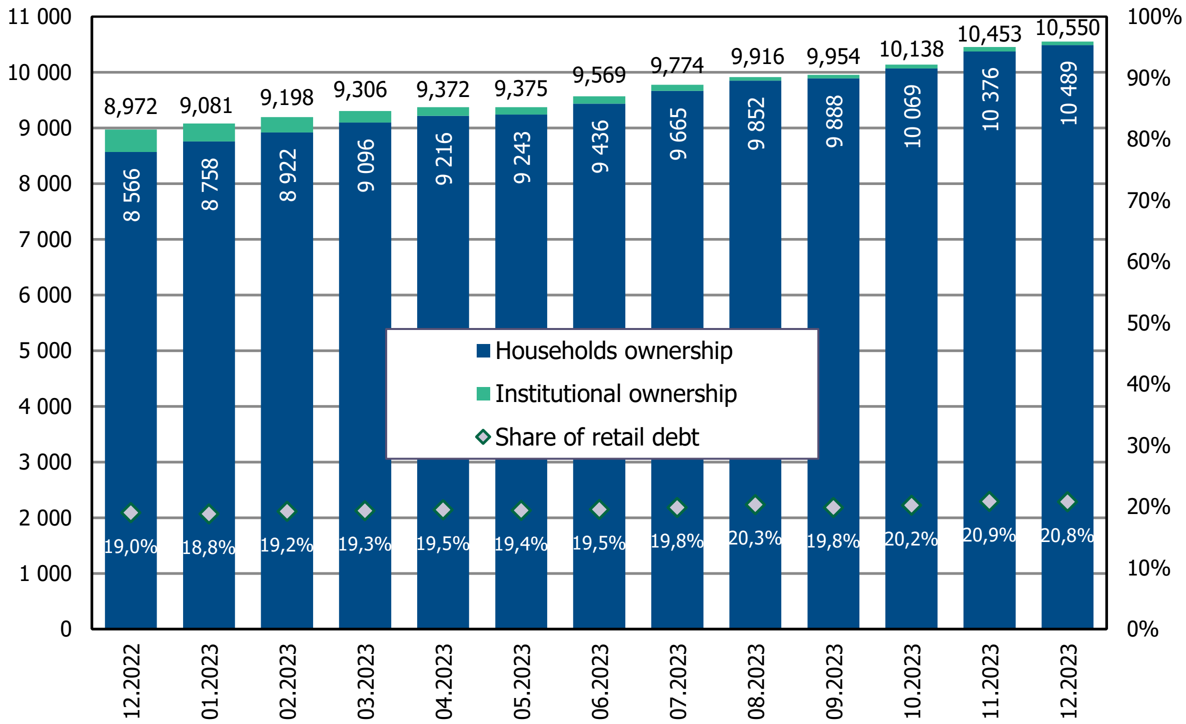
Retail government securities

The sale of government securities specifically designed for retail investors is one of ÁKK's key strategic objectives. Within sales, an important objective in 2023 was to reduce wealth concentration, further simplify the retail product range, and increase the number of clients. In addition, ÁKK introduced a new benchmark indicator for retail holdings of government securities. In 2023, as well, as a result of substantial retail sales, more than one-fifth of government debt was held in retail government securities. Retail government securities, through which household savings can be directly mobilised for financing, are easily accessible nationwide via their extensive distribution network.

Through these special instruments, ÁKK accesses a reliable alternative market whose behaviour effectively complements the sales performance of other markets. From a strategic perspective, the role of retail government securities is significant because, based on ÁKK's many years of experience, demand for them tends to move in the opposite direction to demand for capital market government securities. Another characteristic is that, over the longer term, retail interest rates fluctuate to a lesser extent than the yields of wholesale market government securities. The combined use of the two different types of government securities, therefore, makes financing more balanced and reduces financing risk.

Net sales of retail government securities declined sharply in the previous year, 2022, as a result of the Russia–Ukraine war and higher yields, with the stock of retail government securities decreasing by HUF 1,288 billion. At the same time, households increased their holdings of government securities overall in 2022, albeit to a small extent, as, alongside the decline in their holdings of retail government securities, they purchased a significant amount of institutional government securities. In 2023, however, while modestly reducing their holdings of institutional government securities, households purchased retail government securities in significant volumes. The combined stock of forint and foreign currency retail government securities increased by HUF 1,578 billion in 2023, of which households' holdings rose by HUF 1,923 billion, while institutions' holdings (which can no longer be rolled over) declined by HUF 345 billion.

Outstanding retail debt evolution and composition by ownership (HUF billion)



Source: ÁKK, MNB

Similarly to 2022, in 2023 the largest share of gross issuance, 64%, was accounted for by sales of the inflation-linked Premium Hungarian Government Bond (PMÁP), amounting to HUF 3,362 billion. The second-highest gross sales were achieved by ÁKK with the One-Year Hungarian Government Bond, amounting to HUF 593 billion (11% of total issuance), while gross sales of the floating-rate Bonus Hungarian Government Bond (BMÁP) amounted to HUF 555 billion (11% of total issuance). In terms of net issuance, PMÁP was also dominant with sales of HUF 2,671 billion, while the second-highest net issuance was recorded for BMÁP at HUF 359 billion. The stock of the One-Year Hungarian Government Bond declined by HUF 234 billion, while the combined stock of the dematerialised and printed Hungarian Government Bond Plus decreased by HUF 1,527 billion. As a result of gross issuance of HUF 80 billion, the stock of the Babybond increased by 39% compared to the end of 2022 and reached HUF 276 billion at the end of 2023, while gross sales of the physical one- and two-year Treasury Savings Bills available through the postal network amounted to HUF 424 billion, and their net increase in stock amounted to HUF 112 billion in 2023. In March 2023, ÁKK discontinued the sale of the inflation-linked Premium Euro Hungarian Government Bond (P€MÁP) and introduced a new, also euro-denominated, floating-rate retail government security under the name Euro Hungarian Government Bond (EMÁP). The combined gross sales of euro-denominated retail government securities amounted to HUF 176 billion, while their outstanding amount increased by HUF 120 billion during 2023.

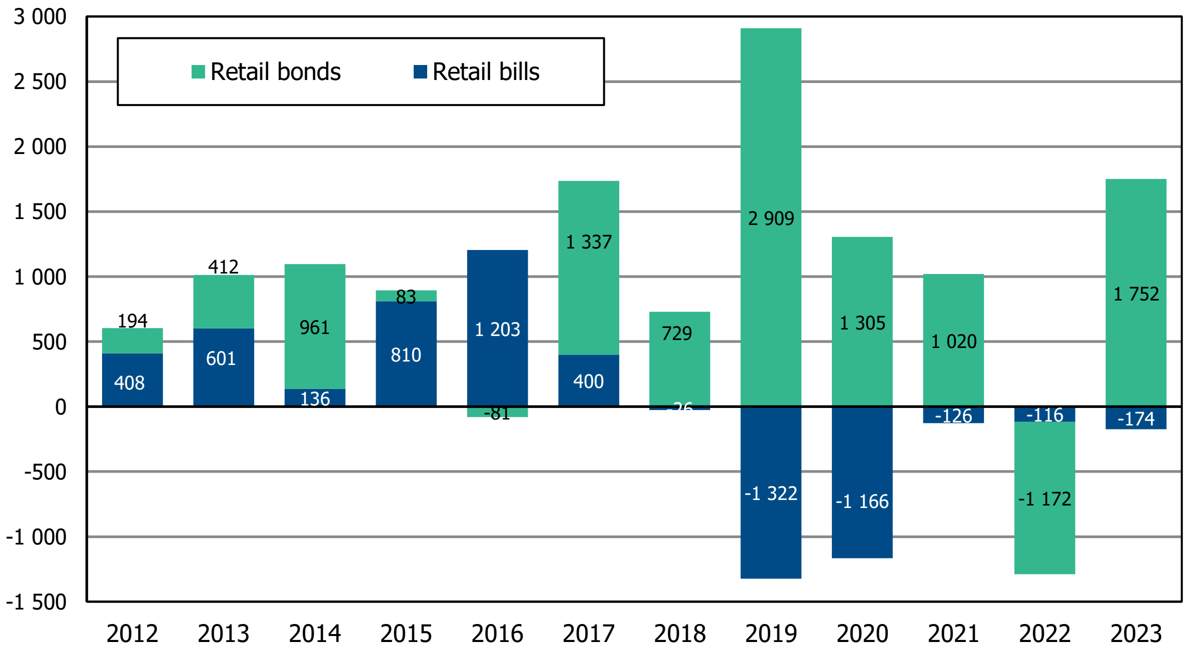
Development of gross issuance of retail government securities (HUF billion):

	2020	2021	2022	2023
Hungarian Government Bond Plus (dematerialised)	2,272	1,572	472	73
Hungarian Government Bond Plus (printed)	212	195	62	1
Premium Hungarian Government Security	556	660	3,784	3,362
Premium Euro Hungarian Government Security	50	125	181	84
Euro Hungarian Government Security				92
Bonus Hungarian Government Security	0	0	501	555
Babybond	31	39	53	80
Treasury Savings Bill (2-year)	36	169	100	112
Treasury Savings Bill (1-year)	207	27	301	312
One-Year Hungarian Government Security	1,275	1,200	829	593
Retail government securities, total	**4,639**	**3,987**	**6,283**	**5,264**

Source: ÁKK

In total, gross issuance of direct forint and foreign currency retail government securities amounted to HUF 5,264 billion, which, as a result of maturities and redemptions, resulted in net issuance of HUF 1,594 billion (the change in the outstanding amount was HUF 1,578 billion, which differs from net issuance due to the impact of exchange rate changes affecting government securities issued in foreign currency). Of net issuance, HUF 1,458 billion was attributable to net issuance of forint-denominated retail government securities, while HUF 137 billion was the net sales of the euro-denominated P€MÁP and EMÁP. The structure of retail financing continued to improve during 2023, as the share held by other, institutional investors within the total outstanding amount of forint-denominated and foreign currency retail government securities declined further; thus, at the end of 2023, 99.4% of the total outstanding amount of retail government securities was owned by households. The outstanding amount of short-term retail Treasury bills decreased by HUF 174 billion, while the outstanding amount of retail government securities with maturities longer than one year increased by HUF 1,752 billion during 2023.

Change of outstanding sotck of retail securities (HUF billion)



Source: ÁKK

Municipal Hungarian Government Bond

In 2023, ÁKK continued to sell the fixed-rate government bond available for purchase by municipalities. For most of the year, it sold the series issued at the end of 2022 and maturing in 2026, while in December, it issued a new series maturing in 2027. Owing to its favourable early redemption terms and flexibility, the Municipal Hungarian Government Bond (ÖMÁK) offers an attractive investment alternative for this investor segment. In 2023, investors purchased a total of HUF 47 billion of the fifth and sixth series of ÖMÁK. In addition, investors redeemed ÖMÁK in the amount of HUF 69 billion and HUF 2 billion matured, thus the total outstanding amount of the three ÖMÁK series decreased by HUF 24 billion to HUF 36 billion by the end of 2023.

Planned and actual gross and net foreign currency financing

For 2023, ÁKK planned USD bond issuance of USD 4 billion (alongside the buyback of USD 1 billion of short-term bonds) and EUR bond issuance of EUR 1 billion, while for other foreign-currency funding sources (e.g. domestic P€MÁP), the plan included issuance of EUR 0.4 billion. In January, USD bond issuance exceeded the planned amount, during which ÁKK issued 5-, 10-, and 30-year bonds totalling USD 4.25 billion; in addition, in line with the plans, it bought back USD 1 billion of short-term USD bonds from the market. In September, ÁKK issued EUR bonds totalling EUR 1.75 billion; in addition, based on investor demand, private tap issuances of the 5- and 10-year USD bonds issued in January took place in March and November, totalling USD 950 million.

Key characteristics of foreign currency bonds issued by the Hungarian State in 2023:

Currency	Original issue amount	Issue date	Maturity date	Maturity (year)	Coupon rate
USD	1,500,000,000	11.01.2023	22.05.2028	5	6.13%
USD	1,500,000,000	11.01.2023	22.09.2032	10	6.25%
USD	1,250,000,000	11.01.2023	25.09.2052	30	6.75%
USD*	150,000,000	14.03.2023	22.05.2028	5	6.13%
USD*	300,000,000	14.03.2023	22.09.2032	10	6.25%
EUR	1,750,000,000	12.09.2023	12.09.2033	10	5.38%
USD*	500,000,000	22.11.2023	22.05.2028	5	6.13%
USD	1,500,000,000	11.01.2023	22.05.2028	5	6.13%

* Increase in the amount of a previously issued bond
Source: ÁKK

In July 2023, ÁKK launched a dual-currency (euro and U.S. dollar) Commercial Paper (ECP) Program, which provides for the issuance of short-term securities up to a total amount of EUR 1 billion, thereby further expanding ÁKK's liquidity management toolkit. Under the program, a total amount of USD 500 million was issued during 2023.

Domestic foreign currency bond issuance amounted to EUR 457 million. At the beginning of the year, ÁKK sold the 5-year P€MÁP series issued in 2022, from which a total of EUR 215 million was issued during this period. From 17 March, instead of the P€MÁP paying interest based on euro area inflation, ÁKK has been selling a new euro-denominated retail government security under the name Euro Hungarian Government Bond (EMÁP), which pays interest quarterly based on the euro interbank interest rate (EURIBOR). During 2023, investors purchased a total of EUR 242 million of the 3-year EMÁP series.

Key characteristics of domestic foreign currency bonds issued by the Hungarian State in 2023:

Name	Currency	Issue date	Maturity date	Maturity (year)	Coupon rate
2028/Y	EUR	10.06.2022	23.08.2028	5	Floating (inflation-linked)
2026/U	EUR	20.03.2023	23.09.2026	10	Floating (EURIBOR)

Source: ÁKK

Taking into account the relative cost advantage of foreign currency issuance and the foreign currency share benchmark, ÁKK drew down the project financing loans planned to be taken from financial institutions in foreign currency as envisaged, and, in addition, several previously drawn loans were converted from HUF loans into foreign currency loans, where this was permitted under the contracts. In addition, ÁKK also drew the loan disbursed under the European Union's Recovery and Resilience Facility loan agreement, the loans taken for defence development, the loans taken under the Paks 2 project, as well as, in smaller amounts, other project financing loans, likewise in foreign currency. The total amount of foreign currency loan drawdowns and conversions in 2023 was HUF 909 billion (EUR 1.9 billion and USD 0.5 billion), which exceeded the planned amount by HUF 84 billion.

Total gross foreign currency issuance amounted to HUF 3,856 billion in 2023, while foreign currency debt repayments, including bond buybacks, amounted to HUF 1,012 billion; thus, net foreign currency issuance was HUF 2,844 billion, which exceeded the planned amount by HUF 965 billion, primarily as a result of the higher foreign currency bond issuance. As a result of significant net issuance and exchange rate appreciation, the share of foreign-currency debt increased to 26.6% by the end of 2023 (3-month moving average), which remains below the upper band defined in the strategy.

V. The government debt in 2023

ÁKK manages government debt, i.e. the debt of the central subsector of general government, and ensures the solvency of the central budget. In 2023, government debt—including repo operations—increased by HUF 5,303 billion (11.6%) to HUF 50,865 billion. The increase in government debt resulted from the combined, partly offsetting effects of three factors. The most significant driver of the increase in government debt remained the finacing of the high net financing requirement, which was composed of the HUF 4,593 billion deficit of the central subsector of general government and the net financing requirement, increasing balance of HUF 844 billion from EU transfers not recorded in the deficit, the MNB dividend payment, and other cash-flow accounts. Debt was reduced by the HUF 567 billion exchange gain arising from the year-end revaluation of foreign-currency debt, as well as by the HUF 91 billion decrease in the outstanding amount of mark-to-market deposits placed with ÁKK.

Developments in the gross debt of the central budget in 2023:

HUF billion

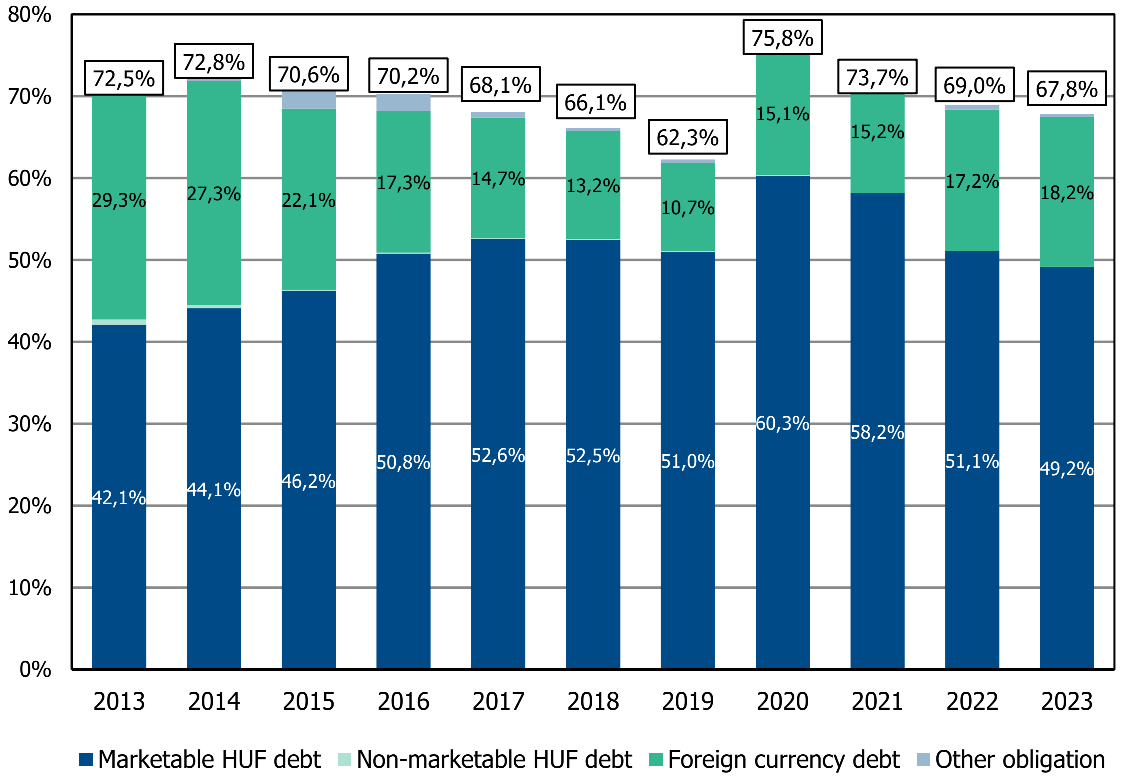
	2022		2023		Change
Forint debt	33,776	74%	36,888	73%	3,112
Loans	1,024	2%	868	2%	-156
Government bonds	22,346	49%	24,059	47%	1,713
Retail government securities	8,619	19%	10,077	20%	1,458
Discount treasury bills	1,786	4%	1,884	4%	98
Foreign currency debt	11,397	25%	13,678	27%	2,281
Loans	1,959	4%	2,670	5%	711
Government bonds	9,438	21%	11,008	22%	1,570
Total	45,173	99%	50,566	99%	5,393
Other liabilities	389	1%	299	1%	-91
Total	45,562	100%	50,865	100%	5,303

Source: ÁKK

According to preliminary data, the debt-to-GDP ratio of the central subsector of general government managed by ÁKK declined from 69% at the end of 2022 to 67.8% by the end of 2023; at the same time, the general government (Maastricht) debt ratio decreased by 0.6 % to 73.5% in 2023.

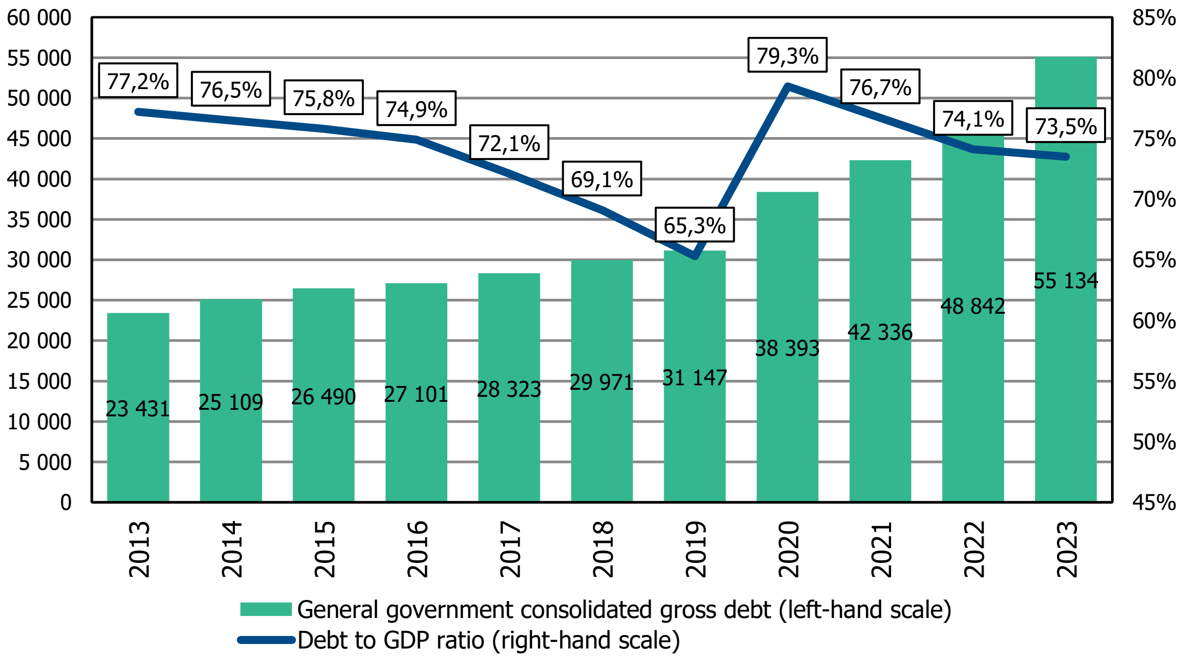
The ESA 2010 debt ratio, which includes the total debt of general government, shows the debt reduction that has taken place in recent years more clearly; this trend was interrupted in 2020 as a result of the coronavirus crisis, and then resumed from 2021 onward.

Central government debt/GDP ratio and its breakdown



Source: ÁKK

Maastricht level of gross government debt
(HUF billion) to GDP ratio (%)



Source: EUROSTAT

Characteristics of forint debt

Forint debt, which accounted for 73% of government debt, increased by HUF 3,112 billion (9%) to HUF 36,888 billion in 2023, reflecting financing of the net financing requirement.

At the end of 2023, long-term HUF government bonds (excluding retail bonds) accounted for 47% of total debt. The total outstanding amount, excluding repos, of HUF 24,023 billion comprised 28 bond series, with an average outstanding amount of HUF 858 billion per series; of these, 12 series had outstanding amounts exceeding HUF 1,000 billion, and the largest series had an outstanding amount of HUF 1,682 billion. By comparison, one year earlier, the bond stock totalling HUF 22,282 billion consisted of 29 series; the largest series amounted to HUF 1,530 billion, and the average stock per series was HUF 768 billion; in other words, the size of individual series increased significantly in 2023.

The outstanding amount of discount Treasury bills stood at HUF 1,884 billion in 2023 (HUF 1,873 billion excluding repos), i.e. it increased by HUF 98 billion compared to the end of 2022. At the end of 2023, there were 19 series on the market with an average outstanding amount of HUF 99 billion, representing an increase of HUF 14 billion in the average outstanding amount of discount Treasury bills compared to 2022.

As a result of dynamic retail sales, the outstanding amount of HUF retail government securities increased significantly in 2023, following a decline in 2022, and reached the level recorded at the end of 2021. Due to the changes in the yield environment, the composition of HUF retail government securities changed significantly.

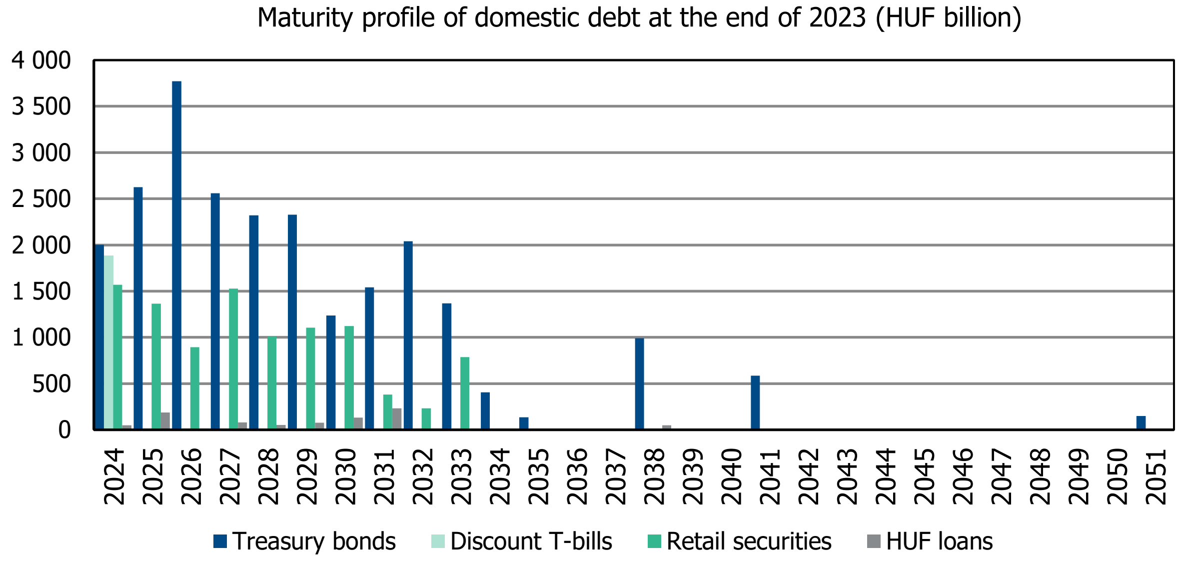
Structure of retail government securities (per cent, HUF billion):

	2020	2021	2022	2023
Hungarian Government Bond Plus (dematerialised)	54.1	59.4	25.3	7.9
Hungarian Government Bond Plus (printed)	2.8	4.1	2.9	1.1
Premium Hungarian Government Security	25.2	22.0	50.1	69.4
Bonus Hungarian Government Security	1.3	0.6	6.0	8.7
Babybond	1.2	1.5	2.3	2.7
Treasury Savings Bill (2-year)	1.2	0.6	1.1	1.4
Treasury Savings Bill (1-year)	2.3	1.7	2.9	3.1
One-Year Hungarian Government Security	11.9	10.0	9.4	5.7
Retail government securities, total (HUF billion)	**9,172**	**10,010**	**8,619**	**10,077**

Source: ÁKK

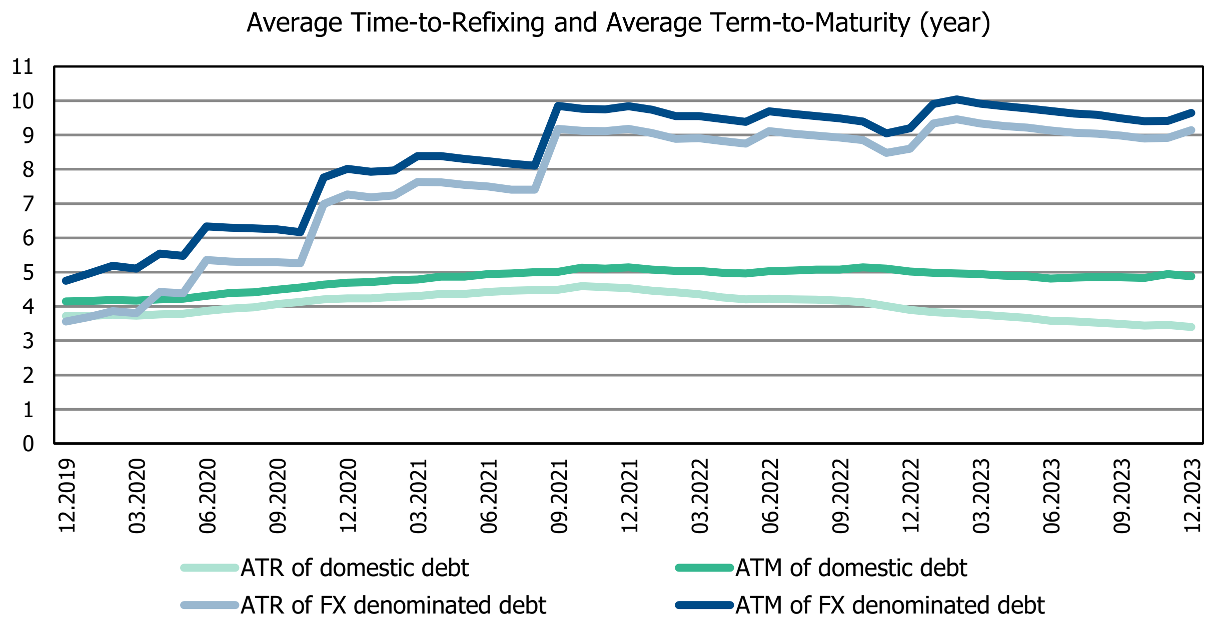
Overall, at the end of December, the outstanding amount of HUF-denominated retail government securities stood at HUF 10,077 billion, which corresponded to 27% of total HUF debt.

During the period under review, the outstanding amount of HUF loans declined to HUF 868 billion as a result of repayments amounting to HUF 156 billion and conversions into euro loans in view of the relative cost advantage.



Source: ÁKK

As a result of developments in the retail government securities market—particularly the exchange of MÁP Plus securities with short remaining maturities for longer-term PMÁP—the maturity structure of retail government securities shifted towards longer maturities, and the more risky, concentrated maturities were smoothed out. In the HUF institutional market, however, in response to rising yields, ÁKK in 2023 resumed the sale of the 3-year bond and also conducted exchange auctions of smaller amounts than the already reduced plan, thereby avoiding the long-term incorporation of higher yields into the cost of debt. As a result, the average repricing period of the total HUF-denominated debt portfolio decreased from 3.9 years to 3.4 years, while the average remaining maturity declined by 0.1 year to 4.9 years.



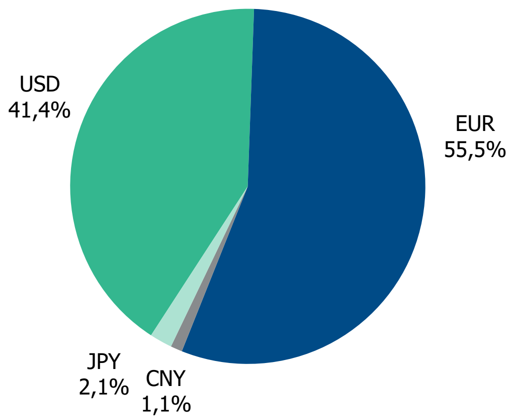
Source: ÁKK

Characteristics of foreign-currency debt

The gross foreign-currency debt of the central budget increased by HUF 2,281 billion in total in 2023, reaching HUF 13,678 billion (EUR 36 billion) at year-end. Within total gross government debt, the share of foreign-currency debt thus increased to 27,1%, temporarily excluding mark-to-market deposits (year-end value, not a moving average).

The stock of foreign-currency bonds reached HUF 11,008 billion at year-end, up from HUF 9,438 billion one year earlier. Bond debt accounted for 80% of total foreign currency debt at year-end. As of 31 December 2023, the foreign currency bond debt issued since 1999 comprised 38 bond series, of which 19 (including domestic foreign currency bonds) were denominated in euro, 10 in USD (including short-maturity foreign currency bonds issued under the ECP program), 7 in Japanese yen, and 2 in yuan. Of the 38 series, 9 are green bonds. Through swap transactions, in line with the strategy and the benchmark, all foreign-currency bonds issued in currencies other than the euro were converted into euro-denominated payment obligations.

Breakdown of foreign currency debt before swaps by currencies at the end of 2023



After swaps, 100% of foreign currency debt was denominated in euros at the end of 2023.

Source: ÁKK

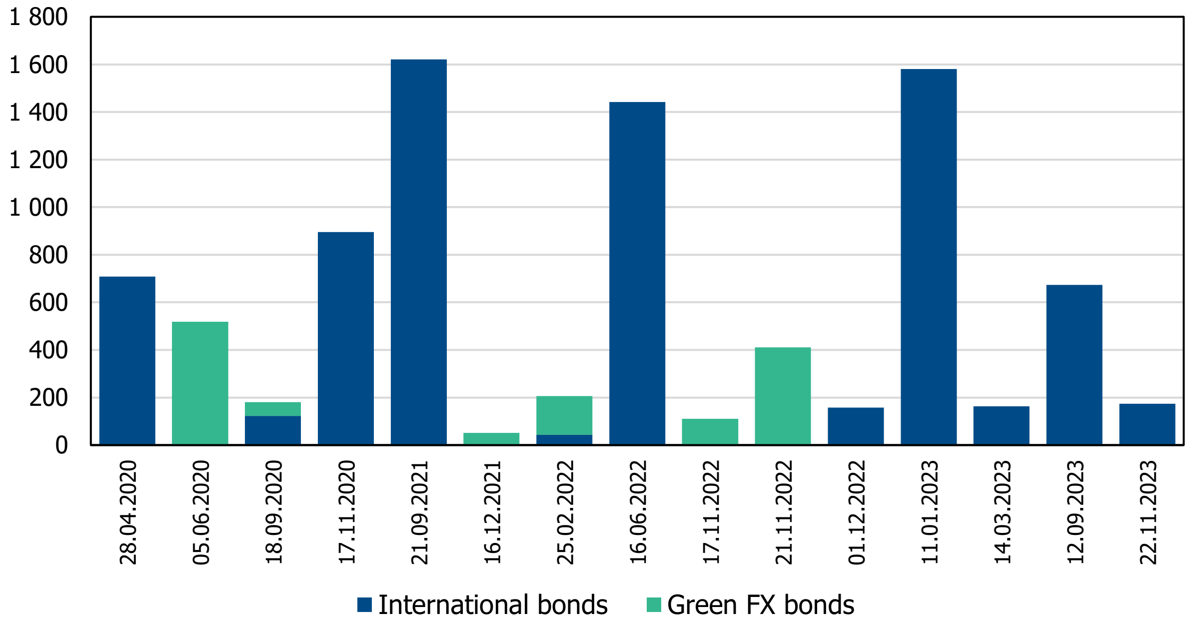
The stock of foreign-currency loans increased as a result of foreign-currency drawdowns on project financing and other loans maturing, as well as the conversion of certain loans drawn in forints into euro loans, and accounted for 20 per cent of foreign-currency debt. At end-2023, the foreign currency loan portfolio consisted mainly of long-term project-financing and COVID-19 crisis-related loans drawn from International Financial Institutions (such as EIB, CEB and EU loans), and to a lesser extent of loans assumed from local governments, loans taken for defence development, for the financing of the Hungarian section of the Budapest–Belgrade railway line, as well as loans drawn under the Paks II project and under the European Union’s Recovery and Resilience Facility loan agreement.

Indicators characterising the maturity of the foreign currency portfolio increased in 2023 as well, as a result of new long-term issuances and loan drawdowns. The average repricing time of foreign currency debt increased from 8.6 years to 9.1 years, while the average maturity of foreign currency debt likewise rose from 9.2 years to 9.7 years.

Green bond issuance

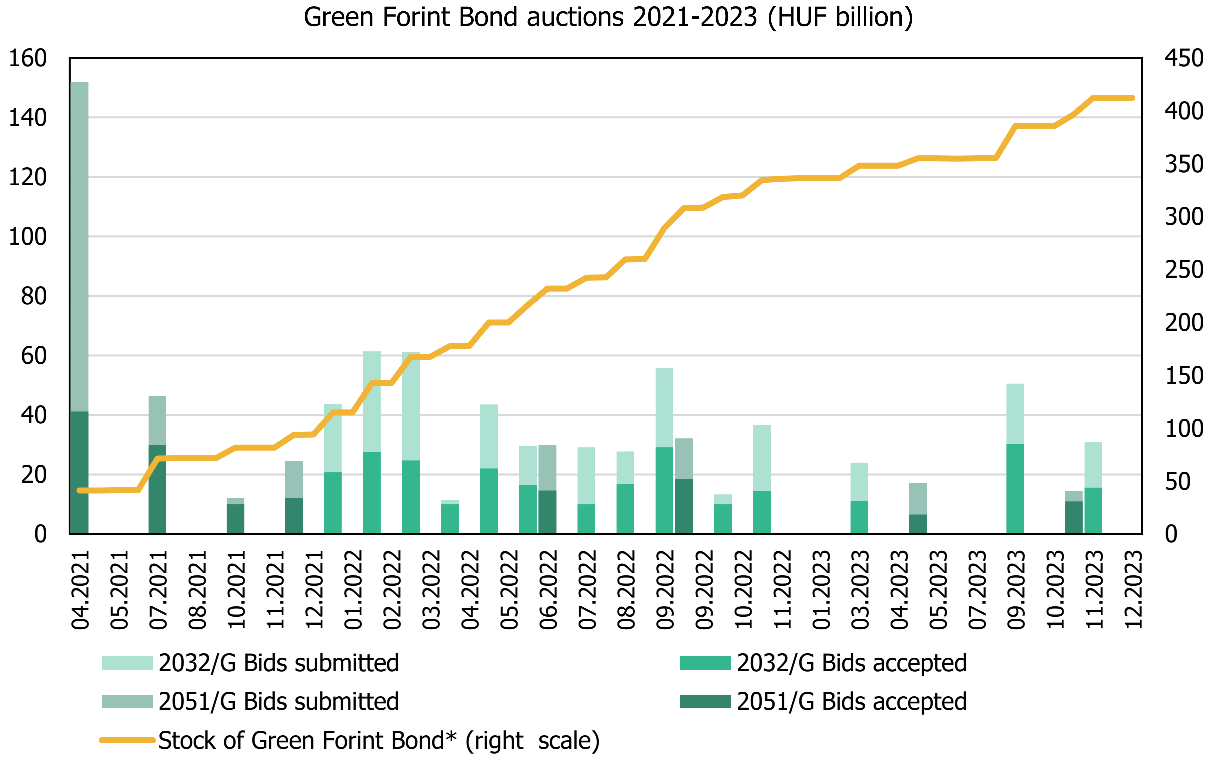
In line with international efforts, Hungary, and through it ÁKK Zrt., intends to actively contribute to sustainable financing at the international level and in the Hungarian domestic capital market by issuing green bonds. Within the ESG (Environmental, Social and Governance) framework encompassing sustainable investments, the green bond is an innovative financial instrument that channels funds specifically earmarked for the support of green investments to their intended purposes. Green bonds are issued to finance or refinance environmentally friendly projects that also take sustainability considerations into account.

Foreign currency bond issuance 2020-2023 (HUF billion)



Source: ÁKK

Hungary's first international Green Bond issuances took place in 2020, while its first forint-denominated Green Bond issuance was in April 2021. In recent years, Hungary has issued international Green Bonds in euro, Japanese yen and Chinese yuan, while in the forint market, green bonds with maturities of 30 and 10 years have been issued. In 2023, no international Green Bond issuance took place; however, ÁKK sold a total of HUF 75 billion of green forint bonds across five auctions, bringing the stock of green forint bonds to HUF 412 billion by end-2023.



Source: ÁKK

In July 2023, Hungary's updated Green Bond Framework was published, under which the majority of eligible green categories are now aligned with the EU Taxonomy. In addition, with the publication of the Integrated Report in December 2023, the allocation of proceeds raised through green bonds issued under the 2020 Green Bond Framework was completed.

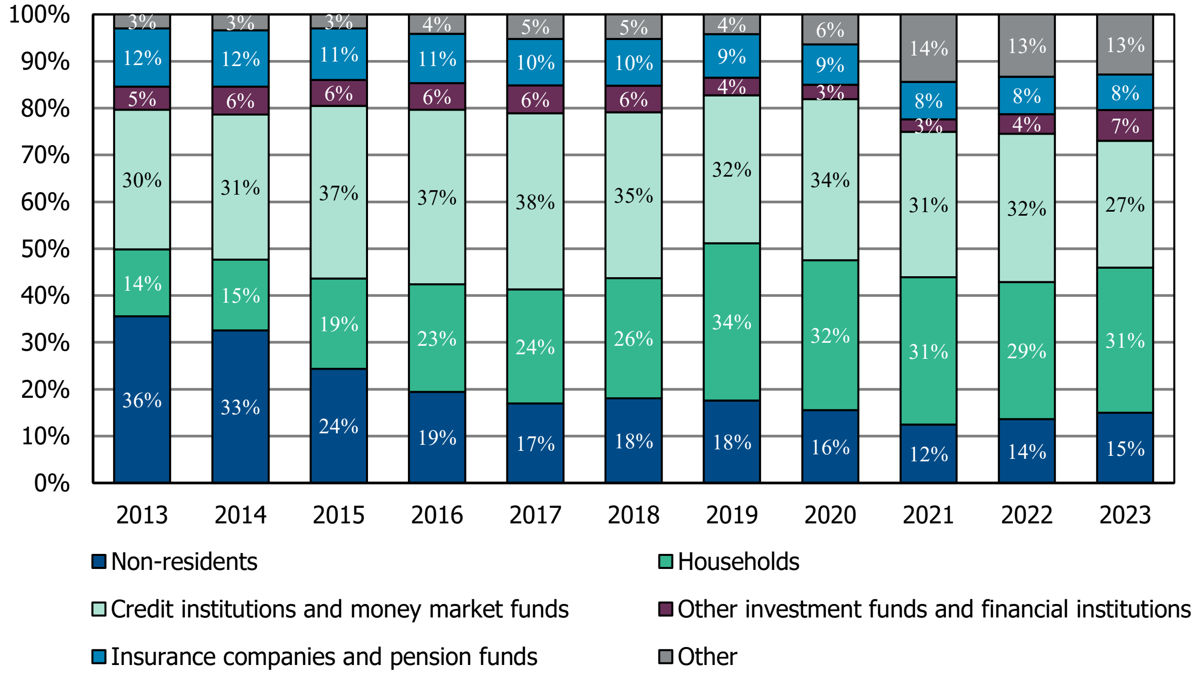
Other liabilities

In line with international market practice, to reduce counterparty risks arising from swap transactions, the parties post collateral (deposits) corresponding to the net value of the swaps between them. As a result, the collateral amounts placed with ÁKK Zrt. in connection with these transactions (the so-called mark-to-market deposits) are included in the debt stock under other liabilities. The deposit posted under this title indicates by how much the value of foreign-currency bonds issued in currencies other than the euro would have increased within government debt compared to euro bonds, had they not been converted into euros. In recent years, other currencies (primarily the USD and the CHF) have appreciated significantly against the euro; however, the additional debt arising from this was successfully eliminated through the use of swap transactions. During 2023, the stock of mark-to-market deposits placed with ÁKK decreased by HUF 91 billion, amounting to HUF 299 billion at year-end.

Ownership structure of government debt

Based on the comprehensive (market and non-market) government securities ownership statistics published by the Magyar Nemzeti Bank, in 2023, as a result of the significant retail issuance, the shares of households (+1.7 %), investment funds (+2.4%), and non-residents (+1.3%) increased within forint-denominated debt. By contrast, the share of banks decreased significantly (also in nominal terms) by 4.5%, while the shares of insurers and pension funds (-0.4%) and other sectors (-0.5%) also declined in relative terms and to a lesser extent.

Ownership structure of domestic public debts by investors

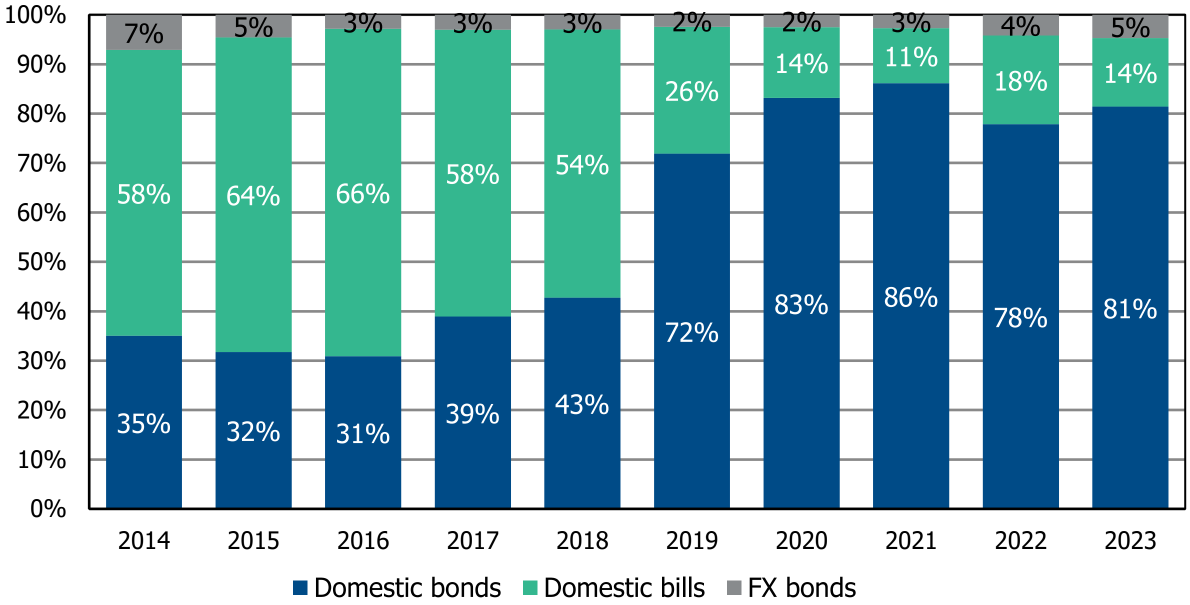


Source: MNB

In 2023, non-residents increased their forint exposure overall, with the stock of forint government securities held by non-residents rising by approximately HUF 722 billion to HUF 5,874 billion. The duration of forint-denominated government securities owned by non-residents remained unchanged at 5.1 years at end-2023, while the average remaining maturity declined to 6.2 years in 2023. In 2023, it was again observed that foreign investors primarily hold longer-maturity bonds, and the average maturity of the foreign portfolio continues to exceed the corresponding indicator for the total stock of forint government securities.

Households' direct holdings of government securities increased by HUF 1,691 billion in 2023 (at nominal value), representing a significant increase. It is favourable that within this, the share of long-maturity forint bonds continued to increase, rising by 3 % and accounting for 81% of the total household portfolio by end-2023, while the share of short-maturity government securities declined within households' government securities portfolios.

Breakdown of households' government securities investment



Source: MNB

VI. Liquidity management

The necessity and objective of liquidity management

Pursuant to the authorisation of the Stability Act, the management and utilisation of the State's temporarily free cash balances are the responsibility of ÁKK[9]. Due to the specific cyclicality in the evolution of budget revenues and expenditures, as well as the impact of capital transactions (debt repayments and borrowings), the daily change in the cash balance held on the KESZ shows continuously significant fluctuations (which may even exceed HUF 100 billion).[10]

Through the budgetary disbursements and receipts executed on the KESZ, significant amounts of funds enter and leave the economy on a daily basis. Reducing this volatility can support the efficient functioning of money markets and enhance the security of financing. In practice, the relationship between money market liquidity and the KESZ balance is strongest around end-of-month tax payments and at the beginning of the month during Treasury disbursements. During tax payment periods, the free liquidity in the banking system declines, while the KESZ balance increases. Liquidity placements carried out against the increasing KESZ balance thus replenish the missing liquidity in the money market. In the case of liquidity absorption during periods of a declining KESZ balance (e.g. early-month wage payments and VAT refunds), this process takes place in reverse.

In the course of KESZ smoothing operations and the management of free cash balances, ÁKK has set the objective that the end-of-day KESZ balance should reach the minimum level defined by the benchmark, and that the actual KESZ level should, where possible, fluctuate around the specified optimal KESZ balance.[11] The way to keep the KESZ within the target band is to place the balance above the upper limit in the money market—subject to adequate demand—and, if additional funds are needed to reach the lower target level, ÁKK raises them from the money market.

As in the preceding two years, ÁKK's liquidity management activities in 2023 were also significantly influenced by fiscal, monetary policy and other economic policy measures responding to the economic and market environment. The central bank began a rate-cutting cycle, and market developments were supportive from a financing perspective; however, due to the higher-than-planned budget deficit, ÁKK had to raise additional financing again. Traditional short-term liquidity management instruments—primarily liquidity repos—played only a limited role in managing these risks.

Instruments applied

In order to align the end-of-day KESZ balance with the target band, ÁKK may use the following instruments:

- active and passive government securities repo transactions,
- the active adjustment of the auction volumes of 3-, 6-, and 12-month discount Treasury bills,
- government bond buybacks,
- the temporary use of the free foreign currency deposit balance available to ÁKK for liquidity management through FX conversion and FX swap transactions,

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[9]Stability Act, Section 13 (1).

[10] The coordination of primary budgetary expenditures and revenues, as well as the forecasting of their aggregated daily balance, is the responsibility of the Hungarian State Treasury.

[11] When defining the band, it must be taken into account that there are certain debt operations which, although they may increase the KESZ balance even on a lasting basis, do not affect the liquidity of the banking system. Examples include cash flows arising from foreign currency funding raised abroad or from transactions with the MNB, which ÁKK introduces to the market only gradually in the course of its operations, implementing this through an adjustment of the target band (a temporary increase of the upper limit).

- drawdowns under the increased revolving credit facilities.
- From 2023, ÁKK expanded its liquidity management toolkit by launching the dual currency (euro and US dollar) Commercial Paper Program (ECP).

The use of these instruments depends on the time horizon of the fluctuations that ÁKK seeks to manage. For smoothing medium-term fluctuations, discount Treasury bills, bond buybacks, and the ECP program launched in 2023 are suitable. To achieve shorter-term (even daily) objectives and to keep the end-of-day KESZ within the band, ÁKK primarily uses repo transactions. In the case of a balance above the upper target level, ÁKK uses active repos (liquidity placement, absorption of government securities), while in the case of an expected balance below the lower limit, it uses passive repo transactions (liquidity absorption, placement of government securities). The maturities of the repos used are 1 day (overnight, tom-next, spot-next) and 7 days (spot-week).

The financing safety buffer is primarily provided by the high balance held on the Treasury Single Account (KESZ). The reserves are further increased by various foreign-currency deposits. The use of foreign-currency deposits can cover temporary significant liquidity needs (for example, in the case of large bond redemptions or transfers related to the European Union).

Experience with the use of the various instruments in 2023

In 2023, the total volume of liquidity repo transactions amounted to HUF 27,736 billion, representing a significant increase compared to the transaction volume of HUF 9,553 billion in 2022. Of this, HUF 25,585 billion was active repos for lending purposes, while only HUF 2,151 billion was passive repos. In other words, the increase was realised in active repos, while passive repo transactions declined to a small extent compared to 2022.

In 2023, for technical reasons, the end-of-day KESZ closing balance exceeded the prescribed minimum on every day except one.

ÁKK held 144 overnight repo tenders in 2023 (accounting for 23% of all repo tenders). Of these, on 5 occasions the objective was targeted liquidity absorption, while on all other occasions it was liquidity placement. Among the overnight requests for quotes, unsuccessful tenders occurred at a lower-than-average rate.

Availability repo

ÁKK does not conduct repo transactions solely for liquidity management purposes. The purpose of the "repo availability" facility is to support primary dealers' market-making, ensure the smooth settlement of government securities transactions, and promote increased trading volume. If a Primary Dealer temporarily needs a government security that is under market making but cannot obtain it on the market, or only at disproportionately high cost, it may turn to ÁKK under the repo framework agreement, under which ÁKK, against appropriate collateral, makes the given security available through a one-week repo transaction.

VII. The secondary market of Hungarian government securities

In 2022, to support secondary-market liquidity and to reduce the market-making burden on Primary Dealers, ÁKK carried out a comprehensive modernisation of the Primary Dealer system, which also introduced Market Maker status alongside Primary Dealer status. Morgan Stanley joined the expanded system as the first Market Maker in April 2023. The Primary Dealers and Market Makers (collectively, market leaders) have the joint task of providing secondary market quotations, thereby ensuring that investors can at any time purchase the government bonds and discount Treasury bills issued domestically through public auctions, or sell the government securities they hold at any time prior to maturity.

On the MTS Hungary electronic trading system introduced in 2012,[12] which serves government securities markets in almost all countries of the euro area and the Central and Eastern European region,[13] the market leaders fulfil their secondary market market-making obligations. Settlement of the concluded transactions takes place within KELER Zrt.'s multilateral clearing system.

On the system, trading hours run daily from 9:00 to 16:45, within which Primary Dealers must fulfil their market-making obligations for at least four hours. Based on the yields/prices quoted here, ÁKK publishes the daily best bid and ask yields/prices for each institutional government security and calculates on a daily basis the benchmark yields, the government bond market indices (the MAX index family), and the zero-coupon yield curve.

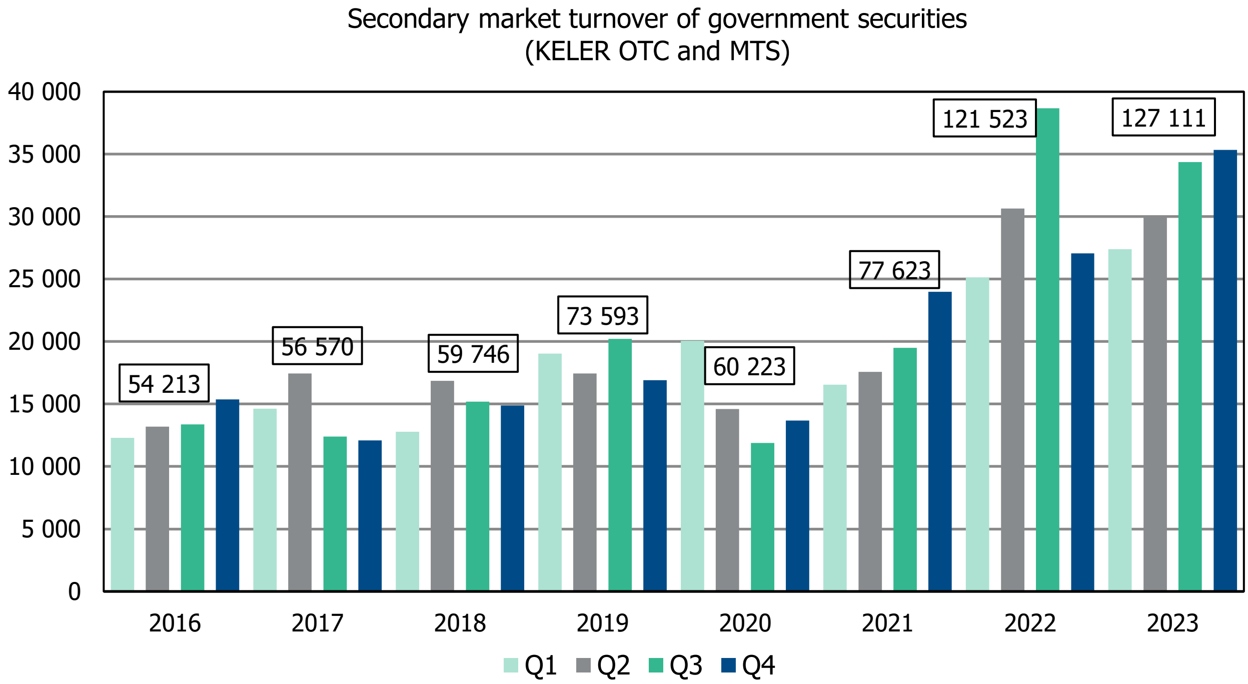
To ensure that the Market Leaders can continuously and smoothly fulfil their market-making obligations, ÁKK, under the so-called repo availability facility and within specified limits, lends them the government securities subject to the market-making obligation (subject to the existence of the appropriate contractual framework).

Turnover data

As in previous years, the vast majority of secondary-market government securities trading in 2023 also took place in the OTC market. Based on data from KELER Központi Értéktár Zrt. (KELER Zrt.). In 2023, market participants conducted OTC government securities trading amounting to a total of HUF 125,007 billion, which was 4% higher than in the previous year, of which government bonds accounted for 96% and discount Treasury bills for 4%. By way of comparison, turnover of HUF 125 thousand billion – including repos – means that the HUF 25,896 billion stock of forint government securities outstanding at end-2023 and tradable on the secondary market changed hands on average nearly five times during the year. For the most liquid government securities, turnover was even several times this amount.

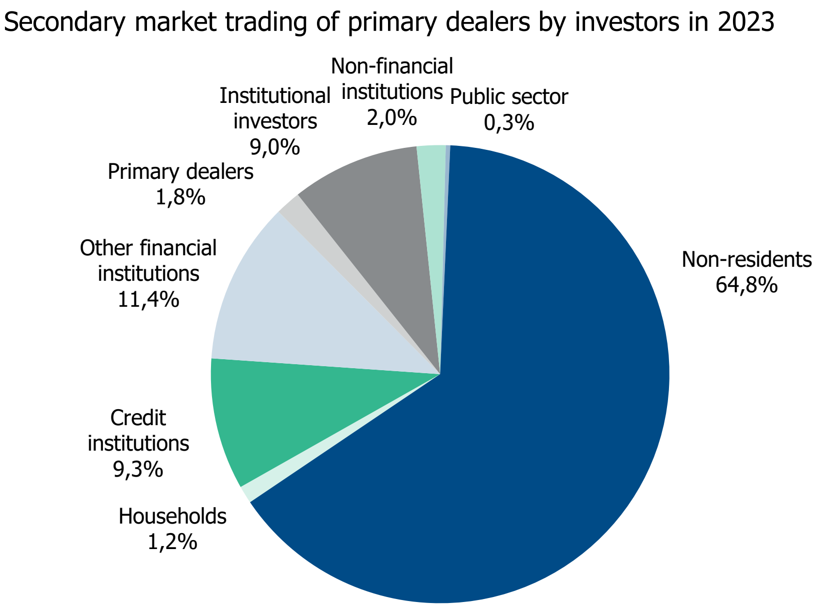
[12] The MTS Hungary system is a trading platform operated by MTS S.p.A. (formerly EuroMTS Ltd.) and supervised by ÁKK.

[13] Among the markets operated by MTS S.p.A., MTS Hungary was the 17th.



Source: KELER Zrt., MTS

Primary Dealers conducted government securities trading amounting to HUF 39,718 billion (this figure also includes transactions not settled at KELER). The activity of the foreign sector did not change compared to 2022, and it remained the most active sector in the secondary market, with Primary Dealers conducting approximately 65% of their government securities trading with foreign investors. At the same time, the share of credit institutions declined further, from 11.8% to 9.3%.



Source: ÁKK

The average size of Primary Dealers’ secondary-market government securities transactions—excluding trades with households—was HUF 597 million in 2023. The average transaction size increased by approximately HUF 6 million compared to 2022. During the year, the government bond with the highest turnover was the 2028/A, with a remaining maturity of five years (HUF 4,624 billion), followed by the 2032/A, with a nine-year maturity, and the 2026/H, with a remaining maturity of three years.

ÁKK has been assessing the market activities of Dealers and Market Leaders for years. Based on 2023 data, ÁKK prepared its assessment in the following five categories:

Primary Dealer of the Year

1. K&H Bank Zrt.
2. ING Bank N.V.
3. OTP Bank Nyrt.

Retail Dealer of the Year

1. Hungarian State Treasury.
2. Gránit Bank Zrt.
3. CIB Bank Zrt.

Special Award: Dealer with the Largest Auction Share

K&H Bank Zrt.

Special Award: Market Leader with the Largest Secondary Market Share

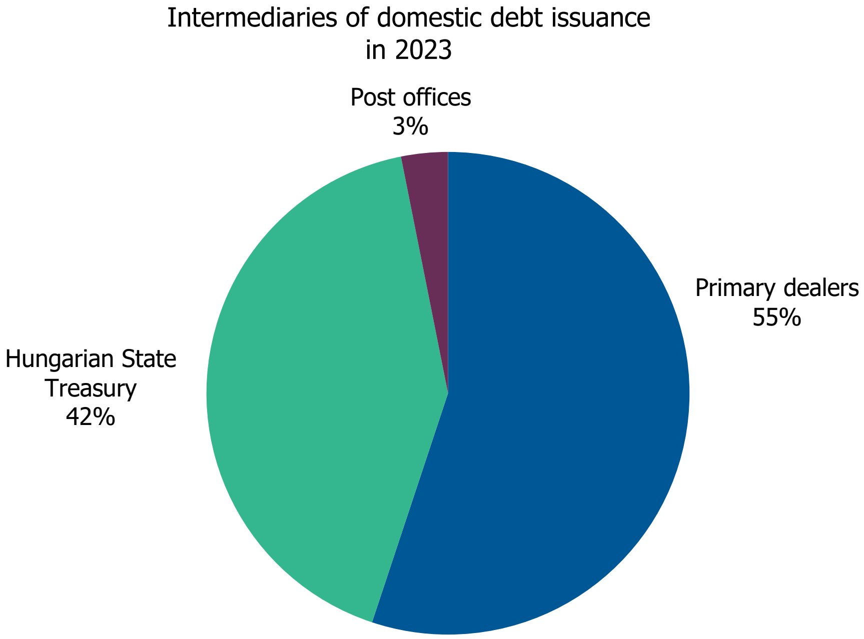
BNP Paribas

Special Award: Best Market Maker under the Mandatory Market-Making Framework

Citibank Europe Plc.

VIII. The institutional framework for the issuance of government securities

The sale of government securities is carried out by ÁKK through intermediaries. The Hungarian State sells 55% of forint government securities through the so-called Primary Dealers and Retail Government Securities Dealers. Investors may purchase government securities from these intermediaries, as well as from the Hungarian State Treasury or its sub-distributor, Magyar Posta Zrt.



Source: ÁKK

The primary dealer and market-making system

The primary dealer system for government securities was established in 1996 with the aim of placing the financing of the budget deficit on a more secure footing, reducing its costs through market mechanisms, and improving the transparency and liquidity of the secondary government securities market.

Since 1 May 2004, any investment firm or credit institution registered in the EU or an OECD member state may become a Primary Dealer, provided that it meets the contractual requirements and concludes a primary dealer agreement with the Government Debt Management Agency (ÁKK). In addition to numerous obligations, primary dealer status also grants the signatories exclusive rights to agreement. In 2023, of the 13 Primary Dealers, 4 were foreign-headquartered financial institutions.

Primary dealers at the end of 2023:

BNP Paribas

CIB Bank Zrt.

Citibank Europe plc Hungarian Branch

Deutsche Bank AG

Erste Befektetési Zrt.

Goldman Sachs Bank Europe SE

ING Bank N.V. Hungarian Branch

J.P. Morgan Securities SE

K&H Bank Zrt.

MBH Bank Nyrt.

OTP Bank Nyrt.

Raiffeisen Bank Zrt.

UniCredit Bank AG

One of the key tasks and at the same time an exclusive right of the Primary Dealers is to participate actively, through regular auction bidding, in the issuance of government bonds and discount treasury bills offered publicly (at auctions and exchange auctions); in this respect, the ÁKK prescribes a minimum participation requirement for them with regard to the government securities sold at auction. Furthermore, they have the exclusive right to participate in buyback auctions.

From July 2022, in addition to primary dealer status, market maker status was also introduced to support the secondary market for institutional government securities. The first institution to join the expanded system as a market maker was Morgan Stanley Europe SE in April 2023. Within this framework, from the above date, in addition to the Primary Dealers, Morgan Stanley Europe SE may also contribute, through its market-making activity on the MTS Hungary system, to increasing secondary market liquidity in the market for forint government securities.

Another important task of the Primary Dealers, together with the Market Makers, is to continuously quote bid and ask prices for a specified range of government securities (for a minimum of 4 hours per day), thereby ensuring market liquidity and transparency, enabling the valuation of government securities portfolios, and providing continuous investor access to government securities.[14]

The Primary Dealers and Market Makers regularly submit reports to the ÁKK on the government securities transactions they conduct and, at the prescribed frequency, provide information on their financial position.

[14] The market-making obligation applies to publicly issued government bonds and discount treasury bills with a remaining maturity of more than 92 days. The venue for the fulfilment of the market-making obligation is the MTS Hungary multilateral trading platform.

Only the Primary Dealers are entitled

- to submit bids directly at bond and discount treasury bill auctions, exchange auctions, and bond buyback auctions organised by the ÁKK[15];
- to submit non-competitive bids directly at auctions and, in the case of conventional bond auctions, to participate in the post-auction non-competitive tender;
- the ÁKK provides repo availability[16] facilities supporting secondary market trading and market-making exclusively to the Primary Dealers and the Market Makers;
- to participate in information meetings organised by the ÁKK;
- to use the distinguishing designation "Primary Dealer."

Only the Market Makers are entitled

- to use the distinguishing designation "Market Maker";
- to access, in addition to the Primary Dealers, the quoting of the government securities included in secondary market making in the MTS Hungary system;
- to participate, in addition to the Primary Dealers, in repo transactions provided by ÁKK Zrt. under the availability facility, in accordance with the relevant detailed rules, provided that the appropriate framework agreement is in place.

In addition, in the case of the issuance of foreign-currency-denominated bonds in EUR and USD, as well as any potential buybacks initiated by ÁKK Zrt., the ÁKK selects the lead managers from the bank groups of the Primary Dealers, and, beyond them, considers only the Market Makers as potential partners, provided that the respective Market Maker is a market-leading/active participant in the relevant capital market. In addition to the exclusive rights, the Primary Dealers and the Market Makers are typically key partners of the ÁKK, also in liquidity management, repo transactions, and swap transactions concluded for risk management purposes.

Primary Dealers, as well as other banks and brokerage firms – provided that they have a broad distribution network – may also conclude separate agreements with the ÁKK for the distribution of retail government securities, including the Bonus Hungarian Government Security, the One-Year Hungarian Government Security, the Premium Hungarian Government Security and the Hungarian Government Security Plus. The branches of the Hungarian State Treasury, as well as the service points of its sub-distributors, Magyar Posta Zrt. and Fundamenta-Lakáskassza Zrt., play an active role in the distribution of retail government securities.

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[15] Any investor may submit a purchase bid at an auction for orders reaching a nominal value of HUF 10 million; however, this may only be done indirectly, through a Primary Dealer.

[16] Within the framework of availability repo transactions, the ÁKK provides its repo counterparties—upon their request—with government securities for a one-week maturity (or, in order to reduce settlement risk, for a one-day maturity).

Retail government securities dealers at the end of 2023:

- CIB Bank Zrt.
- Concorde Értékpapír Zrt.
- EQUILOR Befektetési Zrt.
- ERSTE Befektetési Zrt.
- Gránit Bank Zrt.
- K&H Bank Zrt.
- MBH Bank Nyrt.
- MBH Befektetési Bank Zrt.
- OTP Bank Nyrt.
- Raiffeisen Bank Zrt.
- UniCredit Bank Hungary Zrt.
- Hungarian State Treasury

The branch network of the Hungarian State Treasury

In connection with the distribution of government securities, the most important task of the Treasury's branch network is to carry out direct sales to retail and small investors; its objective is to ensure that those who so wish can purchase government securities directly from the state, without the risks of the intermediary system. In addition, the Treasury's branch network performs other functions, including custody services, and also carries out the redemption of physical government securities that matured earlier - years ago - (except for KTJ I., KTJ II., and printed MÁP Plusz).

The Treasury's State Cash Offices (the current list is available on the ÁKK website at www.allampapir.hu), as well as the Sales Points, under the organisation of the ÁKK, continuously quote ask and bid prices for publicly issued government securities (including retail government securities) for retail investors. In the case of wholesale government securities (Discount Treasury Bills and Hungarian Government Bonds), the ask price is available up to the 14th business day prior to maturity, while the bid price is available up to the 3rd business day prior to maturity.
In the case of retail government securities (Bonus Hungarian Government Security, One-Year Hungarian Government Security, Premium Hungarian Government Security, Hungarian Government Security Plus), the currently purchasable series is sold through subscription or phased issuance, and the bid price, similarly to wholesale government securities, is available up to the 3rd business day prior to maturity.
In addition, in 2023, the Babybond introduced in 2013, the Municipal Hungarian Government Bond introduced in 2018, as well as, until March 2023, the Premium Euro Hungarian Government Securities, and from March 2023, the Euro Hungarian Government Securities, were distributed exclusively through the network of the Hungarian State Treasury. In recent years, WebKincstár and MobilKincstár, the two online securities services of the Hungarian State Treasury, have developed significantly and increased their share in sales; in December 2023, these platforms underwent visual and functional renewal, thereby continuing to catch up with the digital products of financial service providers and enhancing the user experience.

The branch network of Magyar Posta

Magyar Posta participates in the distribution of government securities as a sub-distributor of the Hungarian State Treasury by distributing the 1-year and 2-year government securities produced in printed form and designed specifically for retail investors, named Treasury Savings Bill I and Treasury Savings Bill II, respectively, as well as the 5-year Hungarian Government Security Plus in both dematerialized and printed form, and all other dematerialized government securities (Bonus Hungarian Government Security, One-Year Hungarian Government Security, Euro Hungarian Government Security, Premium Hungarian Government Security).

At nearly 2,000 service points designated by Magyar Posta for the distribution of government securities, in addition to the 1-year and 2-year Treasury Savings Bills and the printed Hungarian Government Security Plus, dematerialised government securities are also available.

Dealers of international issuances and foreign currency bonds

In the case of Hungary's international foreign-currency bonds, on the primary market for EUR and USD issues, the ÁKK selects the lead manager banks executing the foreign-currency bond issuances from the bank groups of the Primary Dealers. On the secondary market, there is no designated group of dealers. In the case of issuances in other currencies, such as Asian currencies, the lead managers are selected from among market leaders.

In 2023, the lead managers were as follows:

EUR and USD bonds: BNP Paribas, Citigroup, Goldman Sachs Bank SE, Erste Group Bank AG, ING Bank, KCB Bank NV, RBI Group, Deutsche Bank, JP Morgan

Domestic foreign currency bonds

The euro-denominated, inflation-linked government bond (P€MÁP), intended for domestic and foreign retail investors and issued from 20 November 2012, was sold by the ÁKK until 16 March 2023. At the beginning of 2023, one series of the P€MÁP was available to investors, which could be purchased exclusively through the branch network of the Hungarian State Treasury, with a remaining maturity of 5 years. From 17 March 2023, the ÁKK has been selling a new euro-denominated retail government security under the name Euro Hungarian Government Security (EMÁP). The series sold in 2023 has a maturity of 3 years, pays interest quarterly, is interest rate-linked to the 3-month Euribor, and is likewise available for purchase exclusively from the Hungarian State Treasury.

IX. The institutional framework and the objectives of government debt management

The principal legal framework for government debt management is set out in the Act on the Economic Stability of Hungary. This legislation, together with Act CXCV of 2011 on Public Finances, authorizes the minister responsible for public finances (the Minister of Finance), inter alia, to ensure the execution of the central budget, the financing of the deficit, the continuous maintenance of the government budget's solvency, the servicing of debt, and the management of the state's temporarily free cash balances. The annual budget acts specify this authorisation by quantifying the financing requirement for the given year. The Minister of Finance performs the tasks falling within this scope through the ÁKK. [17]

The ÁKK, as a company wholly owned by the state, was established on 1 March 2001 on the basis of the provisions of the then-effective Act on Public Finances[18], as the legal successor to the budgetary institution previously performing the same functions. The organisation operating in the form of an independent business entity is a single-member company limited by shares registered with the Company Registration Court; its shares are non-transferable, and its sole and permanent owner is the Hungarian State, in whose name the ownership rights are exercised by the minister responsible for public finances (the Minister of Finance). The framework of its operation is defined in part by the former Act on Public Finances establishing it, and from 2012 by the Stability Act, and in part by the general legislation governing the operation of business entities. Accordingly, the company is managed by the Board of Directors of the ÁKK, while operational oversight—arising from its corporate status—is exercised by the Supervisory Board and the auditor. In addition to these internal governance and control mechanisms, the process of debt management is also regularly audited by the State Audit Office. The activities of the ÁKK are aligned with the operations of the Ministry of Finance and the Hungarian State Treasury. The coordinated professional management of these organisations is implemented through the person of the Minister of Finance.

According to the decision-making procedure, the public debt management strategy prepared by the ÁKK, the annual financing plan, and the performance indicators (benchmarks) to be applied in the course of debt management are adopted by the Minister of Finance following approval by the Board of Directors.

Responsibilities of the ÁKK

On the basis of Sections 13 (1) and (4) of the Stability Act, the activities of the ÁKK in 2023 included, inter alia, the following main areas of responsibility:

- The development of a long-term financing strategy consistent with economic policy, which defines the objectives of debt management and the instruments for its implementation.
- On the basis of the annual budget act, and in line with the strategy, the preparation of the annual and medium-term financing plan of the budget, and the planning of annual interest expenditures.
- The execution of domestic and international funding operations forming part of the debt of the central subsector of general government, i.e. the organisation and conduct of government securities auctions and subscriptions, foreign bond issuances, borrowings, and debt assumptions.
- Payment of the debt service obligations (interest and principal repayments) of the central subsector of general government.
- The management and utilisation of the state's temporarily free cash balances (liquidity management activities).

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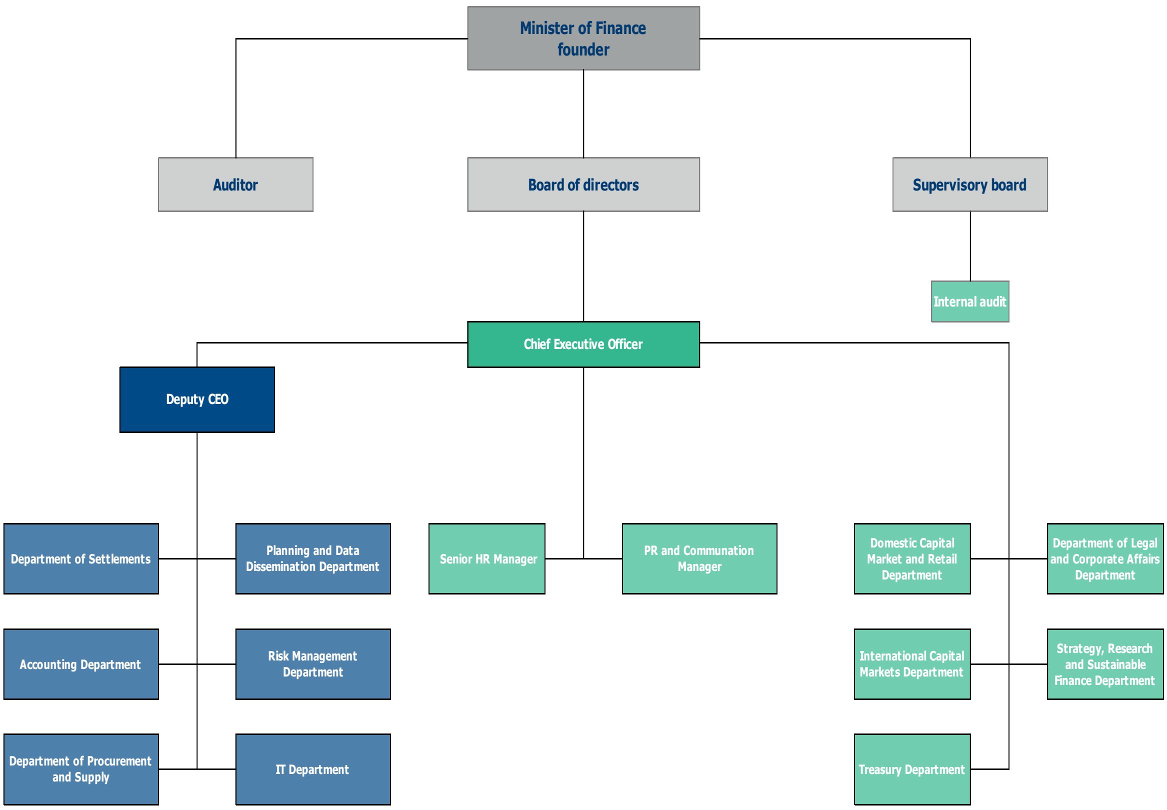
[17] The most important legal framework in force as at 31 December 2023 relating to deficit financing, government debt management, and the ÁKK is set out in Section 4 of the Appendix.

[18] Act XXXVIII of 1992 on Public Finances (hereinafter referred to as the former Act on Public Finances)

- The organisation and continuous development of the institutional framework of the government securities market (the primary dealer system, distribution channels, secondary market, etc.).
- Participation in the commenting and execution of borrowings undertaken with a state guarantee; in the case of individual suretyship, in addition to commenting, the execution of the transactions concerned upon request.
- Participation in the financing of the development of the MVM Paks II nuclear power plant.
- Participation in tasks related to the disbursement of loans provided by the state to other entities classified within the government sector.

The organisational structure of the ÁKK, in force as of 31 December 2023



X. The information services of ÁKK

It is a statutory obligation of the ÁKK to inform the broader public about developments in general debt and the processes of the government securities market, which it fulfils through numerous channels.

The ÁKK publishes current daily data on its websites and through other electronic information systems.

The website of the ÁKK

The website of the Government Debt Management Agency www.akk.hu provides users interested in the government securities market and government debt with a wide range of content and information services. The objective of the ÁKK is to ensure that the most important current information is available already on the homepage; accordingly, it includes, inter alia, current news, the level and structure of government debt, the main data from the most recent auctions, daily market-making data (benchmark yields), as well as the current interest rates and outstanding volumes of retail government securities.

In the "ÁKK" menu of the website, information can be found on the objectives, activities, legal basis, organisational structure, and career opportunities of the ÁKK, and the ÁKK also fulfils its other statutory disclosure obligations in this section under public interest data. In addition, the awards and recognitions received by the ÁKK are also available in this menu section.

In the "Statistics" menu, results for various types of government securities issuances and buybacks, as well as the most important secondary market data, can be viewed. The data are contained in historical databases, i.e. past data and time series can also be queried. Here, various government securities indices, yield and turnover data, and statistical data and time series related to government debt and financing can be found.

In the "Government Securities Issuance and Trading" menu, detailed descriptions of the various types of government securities are available, along with the latest public offers, prospectuses, and procedures. Information related to the Primary Dealer group is also included here, and a brief description of retail distribution can likewise be found in this section.

In the "Publications and Press Releases" menu item, the ÁKK's publications and investor information materials are available in electronic (PDF) format. Here, the public analyses prepared by the ÁKK, the monthly monitoring reports, and the weekly government securities market reports updated on a weekly basis are also available. In addition, the press releases of the ÁKK are also available here.

In the "Green Bond" menu item, Hungary's Green Bond Frameworks and the related external, independent expert opinions are available in Hungarian and English, and some documents in other languages as well. In addition, the Allocation Report (in English), the investor presentations related to the Green Bond issuances (in English), and the press releases related to the Green Bond issuances are also available here.

One of the website's services for registered users is the distribution of current information via a newsletter. As a result, when the content is posted on the website, the user also receives it in an email or a notification about its publication. Registration on the website and subscription to the newsletters are free of charge.

The ÁKK operates the website www.allampapir.hu, specifically for retail investors, which provides the information retail investors need about government securities in a clear, easy-to-understand format (government securities, points of sale, information, introduction). The website www.babakotveny.hu is also available, where retail investors can find useful information specifically related to the Babybond.

Other electronic platforms

In addition to its website, the ÁKK primarily publishes its auction and market-making data on the Bloomberg and Thomson Reuters information platforms as well.

Press conferences, media appearances

The ÁKK regularly holds press conferences on annual financing, any changes thereto, the primary dealer ranking, and other key topics. It supports the promotion of retail sales of government securities through marketing activities and also publishes PR articles targeted at foreign investors.

Publications

The ÁKK also informs interested parties through regular, free publications, which can be downloaded free of charge from its website:

- Financing Plan publications
- Investor presentations (English only)
- Annual reports
- Quarterly publications
- Monthly publications
- Issuance calendar

Further information regarding the purchase of government securities is available 24 hours a day, seven days a week, via the information numbers +36-1-452-2900, +36-20-881-9530, +36-30-344-0040, and +36-70-460-9000, as well as on the website of the Hungarian State Treasury and the WebKincstár (at www.allamkincstar.gov.hu).

Appendix

1. The central government gross debt as of 31.12.2023 (HUF million)

HUF denominated debt			
Hungarian Government Bonds	**Maturity**	**Coupon**	**Outstanding amount**
2024/I	21.02.2024	Floating rate, Premium	105,591.91
2024/O	24.04.2024	Floating rate, Bonus	253.87
2024/P	24.04.2024	Floating rate, Bonus	813.35
2024/B	26.06.2024	3.00%	815,906.30
2024/N	26.08.2024	Floating rate, Bonus	4,387.69
2024/J	25.09.2024	Floating rate, Premium	53,841.41
2024/C	24.10.2024	2.50%	1,150,113.75
2024/K	20.12.2024	Floating rate, Premium	73,818.42
2025/I	20.02.2025	Floating rate, Premium	49,931.92
2025/K	27.03.2025	Floating rate, Premium	264,137.21
2025/Z	24.04.2025	2.50%	2,185.71
2025/J	21.05.2025	Floating rate, Premium	164,754.24
2025/B	24.06.2025	5.50%	1,165,388.13
2025/N	30.09.2025	Floating rate, Bonus	519,330.69
2025/C	26.11.2025	1.00%	1,457,835.75
2026/J	20.02.2026	Floating rate, Premium	233,159.91
2026/Z	25.03.2026	8.00%	33,436.32
2026/E	22.04.2026	1.50%	1,269,695.91
2026/I	20.07.2026	Floating rate, Premium	168,572.65
2026/F	26.08.2026	1.50%	823,592.59
2026/N	22.09.2026	Floating rate, Bonus	2,820.98
2026/H	21.10.2026	9.50%	682,664.67
2026/O	21.10.2026	Floating rate, Bonus	304,305.03
2026/D	22.12.2026	2.75%	962,730.17
2027/J	27.01.2027	Floating rate, Premium	663,502.45
2027/K	24.02.2027	Floating rate, Premium	594,388.70
2027/I	24.03.2027	Floating rate, Premium	186,116.04
2027/B	22.04.2027	Változó	1,301,331.23
2027/N	26.05.2027	Floating rate, Bonus	34,367.64
2027/Z	22.09.2027	6.50%	329.88
2027/A	27.10.2027	3.00%	1,256,358.94
2028/I	23.02.2028	Floating rate, Premium	279,341.58
2028/N	22.03.2028	Floating rate, Bonus	5,435.26
2028/O	22.03.2028	Floating rate, Bonus	1,508.26
2028/B	23.03.2028	4.50%	639,943.75
2028/J	20.04.2028	Floating rate, Premium	243,721.61
2028/K	20.06.2028	Floating rate, Premium	244,380.16
2028/L	26.07.2028	Floating rate, Premium	232,808.89
2028/A	22.10.2028	6.75%	1,682,035.73
2029/I	21.02.2029	Floating rate, Premium	510,381.03
2029/J	21.03.2029	Floating rate, Premium	593,500.77
2029/A	23.05.2029	2.00%	982,920.06
2029/B	22.08.2029	Változó	1,343,232.93
2030/I	20.02.2030	Floating rate, Premium	633,106.68
2030/J	20.03.2030	Floating rate, Premium	488,130.63
2030/A	21.08.2030	3.00%	1,236,697.24

2031/I	21.05.2031	Floating rate, Premium	380,021.58
2031/A	22.10.2031	3.25%	1,540,166.51
2032/I	22.04.2032	Floating rate, Premium	58,783.04
2032/G	27.05.2032	4.50%	261,747.73
2032/B	25.08.2032	Változó	434,645.69
2032/A	24.11.2032	4.75%	1,343,708.60
2032/S	02.12.2032	Floating rate, Babybond	173,655.25
2033/I	20.01.2033	Floating rate, Premium	770,731.63
2033/S	01.02.2033	Floating rate, Babybond	16,357.35
2033/A	20.04.2033	2.25%	1,368,530.37
2034/S	01.02.2034	Floating rate, Babybond	13,633.81
2034/A	22.06.2034	2.25%	407,100.81
2035/S	01.02.2035	Floating rate, Babybond	13,393.00
2035/A	24.10.2035	7.00%	136,505.04
2036/S	01.02.2036	Floating rate, Babybond	12,450.92
2037/S	01.02.2037	Floating rate, Babybond	12,467.46
2038/S	01.02.2038	Floating rate, Babybond	10,964.19
2038/A	27.10.2038	3.00%	989,159.60
2039/S	01.02.2039	Floating rate, Babybond	9,459.79
2040/S	01.02.2040	Floating rate, Babybond	7,393.59
2041/S	01.02.2041	Floating rate, Babybond	4,621.53
2041/A	25.04.2041	3.00%	584,751.65
2042/S	01.02.2042	Floating rate, Babybond	1,740.47
2051/G	28.04.2051	4.00%	150,503.92
Matured, but unclaimed government bonds			83.27
Total			**32,165,384.85**
Repos with government bonds (repos actually increase or decrease the total amount)			35,574
Discount Treasury Bills			**1,872,911.61**
Repos with discount Treasury bills (repos actually increase or decrease the total amount)			**10,858.06**
Hungarian Government Security Plus (dematerialized)			**793,799.05**
Hungarian Government Security Plus (printed)			**113,531.68**
1-year Hungarian Government Security			**573,997.14**
Out of which matured, but unclaimed			36.08
Treasury Savings Bills (1-year)			**310,886.40**
Treasury Savings Bills (2-year)			**142,818.64**
HUF loans			**868,220.29**
Matured, but unclaimed other retail government securities			51.83
Total HUF debt			**36,888,033.54**

Foreign currency debt	Outstanding amount (HUF million)	Outstanding amount (EUR million)
Syndicated loan and loans drawn down from revolving credit facilities*	**0.00**	**0.00**
Loans granted by International Financial Institutions*	**2,564,449.23**	**6,699.54**
Foreign currency loans taken over*	**105,559.89**	**275.77**

Government bonds issued since 1999

Maturity date	Currency	Outstanding amount (original currency)	Maturity (years)	Coupon	Outstanding amount (HUF million)	Outstanding amount (EUR million)
25.03.2024	USD	1,013,272,000	10	5.375%	351,037.95	917.07
12.09.2024	USD	500,000,000	1	6.250%	173,220.00	452.53
16.12.2024	CNY	1,000,000,000	3	3.280%	48,590.00	126.94
25.02.2025	JPY	16,000,000,000	3	0.450%	39,062.40	102.05
18.09.2025	JPY	20,000,000,000	5	0.740%	48,828.00	127.56
22.10.2025	EUR	924,000,000	7	1.250%	353,688.72	924.00
17.11.2025	CNY	2,000,000,000	3	3.750%	97,180.00	253.88
28.04.2026	EUR	1,000,000,000	6	1.125%	382,780.00	1,000.00
22.02.2027	EUR	1,000,000,000	5	5.000%	382,780.00	1,000.00
25.02.2027	JPY	46,800,000,000	5	0.730%	114,257.52	298.49
17.09.2027	JPY	15,500,000,000	7	1.030%	37,841.70	98.86
10.10.2027	EUR	1,000,000,000	10	1.750%	382,780.00	1,000.00
22.05.2028	USD	2,150,000,000	5	6.13%	744,846.00	1,945.89
21.09.2028	EUR	1,000,000,000	7	0.125%	382,780.00	1,000.00
22.02.2029	JPY	4,700,000,000	7	0.91%	11,474.58	29.98
16.06.2029	USD	1,750,000,000	7	5.25%	606,270.00	1,583.86
18.09.2030	JPY	4,500,000,000	10	1.29%	10,986.30	28.70
18.11.2030	EUR	1,250,000,000	10	0.50%	478,475.00	1,250.00
16.06.2031	EUR	750,000,000	9	4.250%	287,085.00	750.00
22.09.2031	USD	2,250,000,000	10	2.125%	779,490.00	2,036.39
25.02.2032	JPY	7,800,000,000	10	1.15%	19,042.92	49.75
28.04.2032	EUR	1,000,000,000	12	1.63%	382,780.00	1,000.00
22.09.2032	USD	1,800,000,000	10	6.25%	623,592.00	1,629.11
12.09.2033	EUR	1,750,000,000	10	5.38%	669,865.00	1,750.00
16.06.2034	USD	1,250,000,000	12	5.50%	433,050.00	1,131.33
05.06.2035	EUR	1,500,000,000	15	1.75%	574,170.00	1,500.00
29.03.2041	USD	1,650,000,000	30	7.63%	571,626.00	1,493.35
17.11.2050	EUR	1,250,000,000	30	1.50%	478,475.00	1,250.00
21.09.2051	USD	2,000,000,000	30	3.13%	692,880.00	1,810.13
25.09.2052	USD	1,250,000,000	30	6.75%	433,050.00	1,131.33
Total					**10,591,984.09**	**27,671.21**
Cross-currency swaps					**-56,535.42**	

Premium Euro Hungarian Government Bond

Code	Currency	Maturity date	Maturity (years)	Coupon	Outstanding amount (HUF million)	Outstanding amount (EUR million)
2024/X	EUR	20.11.2024	3	Floating rate, Premium	25,543.93	66.73
2025/X	EUR	21.08.2025	5	Floating rate, Premium	19,012.93	49.67
2025/Y	EUR	17.12.2025	4	Floating rate, Premium	10,797.25	28.21
2026/X	EUR	27.11.2026	5	Floating rate, Premium	79,114.67	206.68
2027/X	EUR	17.09.2027	6	Floating rate, Premium	39,972.30	104.43
2028/X	EUR	23.02.2028	6	Floating rate, Premium	33,709.52	88.07
2028/Y	EUR	23.08.2028	6	Floating rate, Premium	174,120.17	454.88
Total					**382,270.77**	**998.67**

Euro Hungarian Government Bond

Code	Currency	Maturity date	Maturity (years)	Coupon	Outstanding amount (HUF million)	Outstanding amount (EUR million)
2026/U	EUR	23.09.2026	3	Változó, Euribor	90,585.17	236.65
Total					**90,585.17**	**236.65**

Total foreign currency debt	**13,678,313.73**	
Total central government debt	**50,566,347.27**	
Other obligations of ÁKK (marked-to-market deposits placed at ÁKK)	298,836.35	
Grand total	**50,865,183.62**	

** Including swaps*

2. The credit rating history of the long-term debt of Hungary

Foreign currency denominated debt			
Date of change	**Moody's**	**Standard and Poor's**	**Fitch Ratings**
20.04.1992	-	BB+	-
27.12.1993	Ba1	BB+	-
25.04.1996	Ba1	BB+	BBB-
28.10.1996	Ba1	BBB-	BBB-
19.12.1996	Baa3	BBB-	BBB-
24.06.1997	Baa3	BBB-	BBB
08.05.1998	Baa2	BBB-	BBB
11.12.1998	Baa2	BBB	BBB
25.06.1999	Baa1	BBB	BBB
29.10.1999	Baa1	BBB	BBB+
02.02.2000	Baa1	BBB+	BBB+
14.11.2000	A3	BBB+	BBB+
29.11.2000	A3	BBB+	A-
19.12.2000	A3	A-	A-
12.11.2002	A1	A-	A-
06.12.2005	A1	A-	BBB+
22.01.2006	A1	A-	BBB+
26.01.2006	A1	A-	BBB+
15.06.2006	A1	BBB+	BBB+
22.12.2006	A2	BBB+	BBB+
05.11.2007	A2	BBB+	BBB+
17.03.2008	A2	BBB+	BBB+
17.10.2008	A2	BBB+	BBB+
07.11.2008	A3	BBB+	BBB+
10.11.2008	A3	BBB+	BBB
17.11.2008	A3	BBB	BBB
02.03.2009	A3	BBB	BBB
30.03.2009	A3	BBB-	BBB
31.03.2009	Baa1	BBB-	BBB
02.10.2009	Baa1	BBB-	BBB
23.07.2010	Baa1	BBB-	BBB
06.12.2010	Baa3	BBB-	BBB
23.12.2010	Baa3	BBB-	BBB-
06.06.2011	Baa3	BBB-	BBB-
11.11.2011	Baa3	BBB-	BBB-
24.11.2011	Ba1	BBB-	BBB-
21.12.2011	Ba1	BB+	BBB-
06.01.2012	Ba1	BB+	BB+
23.11.2012	Ba1	BB	BB+
20.12.2012	Ba1	BB	BB+
20.03.2015	Ba1	BB+	BB+
20.05.2016	Ba1	BB+	BBB-
16.09.2016	Ba1	BBB-	BBB-
04.11.2016	Baa3	BBB-	BBB-
15.02.2019	Baa3	BBB	BBB-
22.02.2019	Baa3	BBB	BBB
24.09.2021	Baa2	BBB	BBB
27.01.2023	Baa2	BBB-	BBB

Moody's and S&P assigned a 'stable' while Fitch Ratings a 'negative' rating outlook at the end of 2023.

HUF denominated debt			
Date of change	Moody's	Standard and Poor's	Fitch Ratings
25.04.1996	-	-	BBB+
28.10.1996	-	A-	BBB+
24.06.1997	-	A-	A-
22.06.1998	A1	A-	A-
02.07.1998	A1	A-	A
11.12.1998	A1	A	A
29.11.2000	A1	A	A+
19.12.2000	A1	A+	A+
19.11.2002	A1	A	A+
12.01.2005	A1	A	A
27.05.2005	A1	A-	A
06.12.2005	A1	A-	A-
22.01.2006	A1	A-	A-
26.01.2006	A1	A-	A-
15.06.2006	A1	BBB+	A-
22.12.2006	A2	BBB+	A-
05.11.2007	A2	BBB+	A-
17.03.2008	A2	BBB+	A-
17.10.2008	A2	BBB+	A-
07.11.2008	A3	BBB+	A-
10.11.2008	A3	BBB+	BBB+
17.11.2008	A3	BBB	BBB+
02.03.2009	A3	BBB	BBB+
30.03.2009	A3	BBB-	BBB+
31.03.2009	Baa1	BBB-	BBB+
02.10.2009	Baa1	BBB-	BBB+
23.07.2010	Baa1	BBB-	BBB+
06.12.2010	Baa3	BBB-	BBB+
23.12.2010	Baa3	BBB-	BBB
06.06.2011	Baa3	BBB-	BBB
11.11.2011	Baa3	BBB-	BBB
24.11.2011	Ba1	BBB-	BBB
21.12.2011	Ba1	BB+	BBB
06.01.2012	Ba1	BB+	BBB-
23.11.2012	Ba1	BB	BBB-
20.12.2012	Ba1	BB	BBB-
20.03.2015	Ba1	BB+	BBB-
16.09.2016	Ba1	BBB-	BBB-
04.11.2016	Baa3	BBB-	BBB-
15.02.2019	Baa3	BBB	BBB-
22.02.2019	Baa3	BBB	BBB
24.09.2021	Baa2	BBB	BBB
27.01.2023	Baa2	BBB-	BBB

Moody's and S&P assigned a 'stable' while Fitch Ratings a 'negative' rating outlook at the end of 2023.

3. The addresses of primary dealers

Primary Dealer	**Address**
BNP Paribas	16 Boulevard des Italiens, 75009 Paris, France
CIB Bank Zrt.	H-1024 Budapest, Petrezselyem utca 2-8.
Citibank Europe plc Hungarian Branch	H-1133 Budapest, Váci út 80.
Deutsche Bank AG	Taunusanlage 12, D-60325 Frankfurt am Main, Germany
ERSTE Befektetési Zrt.	H-1138 Budapest, Népfürdő utca 24-26.
Goldman Sachs Bank Europe SE	Marienturm, Taunusanlage 9-10, D-60329 Frankfurt am Main, Germany
ING Bank N.V. Hungarian Branch	H-1068 Budapest, Dózsa György út 84/b.
J.P. Morgan	TaunusTurm, Taunustor 1, D-60310 Frankfurt am Main, Germany
K&H Bank Zrt.	H-1095 Budapest, Lechner Ödön fasor 9.
MBH Bank Nyrt.	H-1056 Budapest, Váci utca 38.
OTP Bank Nyrt.	H-1051 Budapest, Nádor utca 16.
Raiffeisen Bank Zrt.	H-1133 Budapest, Váci út 116-118.
UniCredit Bank AG	Arabellastraße 12, D-81925, Munich, Germany

4. Key provisions of the legislation governing the legal status of the ÁKK and relating to government debt management in force as of 31 December 2023

<u>Act CXCIV of 2011 on the Economic Stability of Hungary (hereinafter referred to as "Stability Act")</u>

Provisions on the calculation of the government debt ratio, Section 2

"**Section 2(1)** The government debt ratio to be taken into account in the implementation of the provisions set out in Subsections (4) and (5) of Section 36 and Subsections (2) and (3) of Section 37 of the Fundamental Law (hereinafter referred to as the government debt ratio) is a ratio expressed as a percentage and rounded to one decimal place, in which

a) the numerator is the value, as defined in this Act, of the government debt

b) the denominator is the value, as defined in this Act, of the gross domestic product calculated in accordance with the Council Regulation on the European system of national and regional accounts in the Community."[19]

Rules limiting the incurrence and increase of government debt, Section 8

"Section 8 (1) Any transaction entered into in the name of the State that gives rise to debt as listed in Subsection (2) may be validly concluded only on the basis of authorization by an act of law.

(2) Transactions giving rise to debt and their amounts:

a) the raising or assumption of a loan or borrowing, from the date of disbursement or assumption until the date of final repayment, and its outstanding principal amount,

b) the issuance of a debt security within the meaning of the Act on Accounting (hereinafter referred to as Accounting Act), from the date of issuance until the date of redemption; in the case of an interest-bearing security, its nominal value, and in the case of any other security, its purchase price,

c) the issuance of a bill of exchange from the date of issue until the date of redemption, and its value, equal to the obligation replaced by the bill of exchange and excluding interest,

d) the conclusion of a financial leasing contract, as defined by law, as the lessee for the duration of the lease, and the remaining amount of the principal stipulated in the lease agreement,

e) the conclusion, as the seller, of a sale and purchase agreement with a repurchase obligation—including genuine repurchase and collateral repo transactions within the meaning of the Act on Accounting—until repurchase, and the stipulated repurchase price,

f) deferred payment or instalment payment of at least three hundred and sixty-five days received under a contract, and the unpaid consideration,

g) collateral deposits placed with the Government Debt Management Agency Pte. Ltd. (hereinafter referred to as ÁKK Zrt.) by credit institutions as differences arising from derivative transactions, and their amounts."

[19] Pursuant to point f) of Section 1 of the Stability Act, government debt means the debt calculated in the manner defined in Council Regulation (EC) No 479/2009 of 25 May 2009 on the application of the Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community.

The legal status of the ÁKK, Subsections (1)–(3) of Section 11

"(1) For the purpose of meeting the financing requirement of the central subsector of general government and managing the debt referred to in points *a), b), e)* and *g) of Subsection (2) of* Section 8, the minister responsible for public finances shall ensure the conduct of financial operations through ÁKK Zrt.

(2) ÁKK Zrt. is a single-member private company limited by shares; its shares are registered and non-transferable.

(3) The owner of ÁKK Zrt. is the State, in whose name the rights related to its establishment and the exercise of ownership rights are exercised by the minister responsible for public finances, provided that he may not withdraw the powers of the Board of Directors."

The tasks of the ÁKK for the purpose of financing the budget deficit, Subsection (a) of Section 13

"(1) For the purpose of financing the budget deficit of the central budget, the minister responsible for public finances, through ÁKK Zrt.,

a) on the basis of the authorization provided by the Act on the Central Budget, organizes the issuance of government securities, the raising of loans and the assumption of debt to be accounted for against the portion of the debt of the central subsector of general government arising from the debt-creating transaction pursuant to paragraphs *a)* and *b)* of Subsection (1) of Section 3,

b) prepares the annual and medium-term financing plan of the central budget and elaborates the financing strategy for the debt referred to in point *a),*

c) ensures the payment of the servicing costs of the portion of the debt of the central subsector of general government arising from the debt-creating transaction pursuant to paragraphs *a)* and *b)* of Subsection (1) of Section 3*,*

d) on the basis of the authorization provided by the Act on the Central Budget, and taking into account the forecast pursuant to paragraph *b)* of Subsection (1) of Section 76 of the Public Finance Act, ensures the maintenance of the solvency of the central budget, as well as the management of the temporarily free cash funds of the State,

e) organises the secondary government securities market,

f) conducts proprietary trading, securities lending, repo and reverse repo transactions on the secondary government securities market, and enters into spot, forward, hedging, swap and derivative transactions, and furthermore performs custody and safekeeping services,

g) analyses the developments in the debt service referred to in point *a)* and in the government securities market,

h) participates in the calculation of government debt, provides information on the developments in the portion of the debt of the central subsector of general government arising from the debt-creating transactions pursuant to paragraphs *a)*, *b)*, *e)* and *g)* of Subsection (1) of Section 3, and on the developments in the government securities market,

i) gives an opinion on the terms and conditions of loans granted and bonds issued with individual State suretyship or guarantee,

j) performs lending and deposit operations,

k) participates in the performance of tasks related to borrowing and loan-taking with State suretyship or guarantee, and to the issuance of debt securities."

Other responsibilities of ÁKK, Subsection (4) of Section 13

"(4) In addition to the tasks defined in Subsection (1), ÁKK Zrt.

a) on the basis of statutory authorization, may organise the issuance of debt securities secured by State suretyship or State guarantee, and may perform related advisory tasks,

b) for a fee in the amount specified in Subsection (2), may participate in the performance of tasks related to the borrowing and loan-taking of the State, local governments, and economic operators majority-owned by them, and to the issuance of their debt securities, including advisory services related to business strategy,

c) may participate in the management of the free funds of the National Deposit Insurance Fund and the Resolution Fund, as well as in the performance of tasks related to their borrowing and loan-taking and the issuance of their debt securities, including advisory services related to business strategy,

d) on the basis of statutory authorization, it may, on behalf of the State, fulfil the payment obligations related to the implementation of the capital increase financing the investment defined in Subsection (1) of Section 1 of Act VII of 2015 on the Investment Related to the Maintenance of the Capacity of the Paks Nuclear Power Plant and on the Amendment of Certain Related Acts, granted to MVM Paks II Nuclear Power Plant Development Private Company Limited by Shares, including the payments referred to in Article 1(2) of the Agreement promulgated by Act XXIV of 2014 on the Promulgation of the Agreement between the Government of the Russian Federation and the Government of Hungary on the Provision to the Government of Hungary of a State Loan for Financing the Construction of a Nuclear Power Plant in Hungary, in the manner, amount and schedule determined by the body exercising the aggregate of the State's ownership rights and obligations.

e) may participate in the management of the funds of the Investor Protection Fund,

f) on the basis of the decision of the minister responsible for public finances, performs the tasks related to the disbursement of the loan granted by the State to other organizations classified in the government sector pursuant to Section 9/A."

Authorisations of ÁKK, Subsections (5)–(6) of Section 13 and Section 14

"(5) Within the scope of its activities pursuant to subsection (1), in respect of debt securities issued by the State or secured by State suretyship or State guarantee, as well as the financial instruments defined in paragraphs *a)–d), h), i), j)* and *k)* of Section 6 of Act CXXXVIII of 2007 on Investment Firms and Commodity Dealers, and on the Regulations Governing their Activities (hereinafter: the Investment Firms Act), ÁKK Zrt. may perform the investment services activities defined in Subsection (1) of Section 5 of the Investment Firms Act, as well as the ancillary services to investment services defined in paragraphs *a), b), d), g)* and *h)* of Subsection (2) of Section 5 of the Investment Firms Act.

(6) The activity of ÁKK Zrt. pursuant to Subsection (1) and its activity under Subsection (5) performed in respect of debt securities issued by the State shall qualify as government debt management. The provisions of the Investment Firms Act shall apply to the investment services activities of ÁKK Zrt. outside the scope of government debt management, and to its ancillary services to investment services.

Section 14 (1) The minister responsible for public finances shall ensure the management of the State's temporarily free cash funds through ÁKK Zrt. In the performance of this task, ÁKK Zrt. shall be entitled to carry out the operations referred to in Subsection (1) of Section 13. The interest arising from this activity shall be credited to the central budget.

(2) In civil law relationships related to government debt management, the State shall be represented by the minister responsible for public finances, provided that

a) […]

b) the minister responsible for public finances may exercise his right of representation through ÁKK Zrt. or may transfer it in writing to ÁKK Zrt. or to another member of the Government.

(2a) […]

(3) Any transaction concluded by ÁKK Zrt. in the course of government debt management shall be deemed to be a transaction concluded for the benefit of, or to the detriment of, the State."

Act CXCV of 2011 on Public Finances

Authorisation of the minister responsible for public finances, Subsection (2) of Section 5

"(2) Within the central subsector of general government, the minister responsible for public finances shall ensure the use of the budget surplus, the financing of the budget deficit and the management of public debt, without the determination of financing revenues and financing expenditures in the Act on the Central Budget. […]"

5. Balance sheet and profit/loss statement of the ÁKK

I. Balance sheet

data in HUF thousand

	Assets	2022	2023
	A) Fixed assets	455,287	441,599
I	Intangible assets	248,959	282,544
II	Tangible assets	142,792	100,058
III	Invested financial assets	63,536	58,997
	B) Current assets	206,154	302,874
I	Inventories	36	41
II	Receivables	7,485	7,629
III	Securities	-	-
IV	Cash and cash equivalents	198,633	295,204
	C) Accrued and deferred assets	56,070	92,195
	Assets in total	717,511	836,668

data in HUF thousand

	Liabilities	2022	2023
	D) Capital and reserves	567,877	645,281
I	Subscribed capital	300,000	300,000
IV	Profit reserve	194,303	231,091
VII	Balance-sheet profit or loss	73,574	114,190
	E) Provisions	-	-
	F) Liabilities	117,163	177,660
I	Subordinated liabilities	-	-
II	Long-term liabilities	-	-
III	Short-term liabilities	117,163	177,660
	G) Accrued and deferred liabilities	32,471	13,727
	Liabilities in total	717,511	836,668

Budapest, 12 March 2024

Zoltán Kurali
Chief Executive Officer

II. Profit and loss account

data in HUF thousand

	Liabilities	2022	2023
I	Net sales revenue	1,780,168	2,049,600
III	Other revenue	10,411	9,282
IV	Material expenses	500,300	516,283
V	Personnel expenses	1,109,422	1,335,451
VI	Depreciation and amortisation	114,607	107,696
VII	Other expenses	6,758	6,797
A	Operating profit or loss	59,492	92,655
B	Profit or loss from financial transactions	21,359	35,249
C	Profit or loss on ordinary activities	80,851	127,904
XII	Tax payable	7,277	13,714
F	Profit or loss after taxation	73,574	114,190

Budapest, 12 March 2024

Zoltán Kurali
Chief Executive Officer

6. The executive officers of the Company in December 2023:

Members of the Executive Board:

Chair:	László Balogh
Members:	Balázs Greinstetter
	István Molnár
	Dr. Attila Simon Tóth
	Tibor Tóth

Members of the Supervisory Board:

Chair:	Judit Gondos
Members:	Dr. Viktor Várpalotai
	Dr. Ábel Berczik

The auditor of the Company:

Club-Audit Számviteli és Pénzügyi Szolgáltató Kft.
H-1136 Budapest, Hegedűs Gyula u. 49/51.4. em.1.

Person with personal responsibility for the audit:

Éva Vikárius Fehérné, auditor