



GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

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# GOVERNMENT DEBT MANAGEMENT REPORT

## 2022



# Foreword

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The year 2022 was again an extraordinary year, mainly characterized by the aftermath of the COVID pandemic, the war in Ukraine and rising inflation which made necessary the revision of budget deficit and the annual financing plan during the year. Government securities' yields increased substantially in all maturities, long term yields went up due to increasing inflation rates and expectations in developed economies, while short term yields increased following the policy rate hikes of MNB.

The financing plan of 2022 was based on the medium term debt management strategy. Main objectives are reduction of the public debt ratio, maintaining the foreign currency debt ratio at a low level, supporting the participation of retail investors and lengthening the average life of public debt. Due to the pandemic ÁKK could only partially reach those objectives: the share of foreign currency debt increased slightly over the benchmark band of 10-25 pc due to deficit financing by international bond issuances in a relatively favourable market and the depreciation of the Hungarian currency. In spite of the high deficit and adverse macroeconomic conditions overall public debt declined. Maastricht debt declined by 2.3 pc to 73.9 pc and central government debt managed by ÁKK by 4.2 pc to 69.1 pc.

To finance the higher deficit ÁKK was very active in the international bond markets make use of the relative cost advantage of foreign financing and favourable market conditions. As a part of this international financing operations Hungary issued bonds in JPY, USD, EUR and CNY, developing the investors' base for Hungarian public debt. As a result of the substantial foreign currency debt issuance and the larger than forecast depreciation of HUF the share of foreign currency debt increased to 25.1 percent by the end of 2022. A favourable result however the somewhat increasing average life under such unfavourable circumstances. The ATM of the total public debt went up by 0.1 year to 6.2 years meaning lower annual maturities in the future.

The substantial rises of yields also resulted a challenging situation in the retail debt program: small investors switched from the Hungarian Government Securities Plus to the inflation linked retail product, and also to the wholesale products as well. That initiated the general re-thinking of the retail debt management strategy implemented late in 2022 and in the coming months.

In addition to these ÁKK has new achievements in the field of sustainability. Having issued green bonds in EUR and JPY back in 2020, ÁKK issued green bonds in JPY, EUR and RMB this year and added the 10-year tenor to the existing 30 year-tenor in the domestic market in 2022. ÁKK also published the Integrated Report on the Allocation and Environmental Impact of Hungary's Green Bond Proceeds 2021 in its homepage ([www.akk.hu](http://www.akk.hu)), and restructured and launched the new Primary Dealer system.

**Zoltán Kurali**  
Chief Executive Officer

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## General information

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Both deficit and debt data are preliminary until the Act on Final Accounts for the relevant year is approved by Parliament, which is usually during the second half of the following year. Therefore fiscal data used in this report were still preliminary when this report was compiled.

Some of the data in this report are cash-flow based and some are accrual-based. When using the cash-flow approach, expenditures and revenues are accounted for the very period in which they are actually paid or received, regardless of the periods to which their economic content relates. Under the accrual approach on the other hand, the amount of an expenditure or revenue item related to several periods is divided up on a pro rata basis and allocated to the relevant periods.

ÁKK publishes data about government debt in accordance with Hungarian accounting standards, the principles of which are summarised as follows:

- Government bonds and retail government securities are recorded at nominal value.
- Discount treasury bills are recorded at the average sale price (at discount value), which is recalculated after every transaction involving the security concerned.
- A Repo and reverse repo transactions actually increase or reduce outstanding government debt.
- Foreign currency debt is taken into account after swaps and is converted into HUF at the official exchange rate published by the National Bank of Hungary (MNB) at the end of the month or year in question.
- The debt published by ÁKK is the central government gross debt managed by ÁKK according to the Act No. CXCIV of 2011 on the Economic Stability of Hungary (i.e. it does not include either local government debt or the debt of state-owned enterprises and does not include debt under section 3 paragraph (1) c, d, and f, of the Stability Act and it is not a consolidated indicator (debt between various public sector subsystems is not netted)).

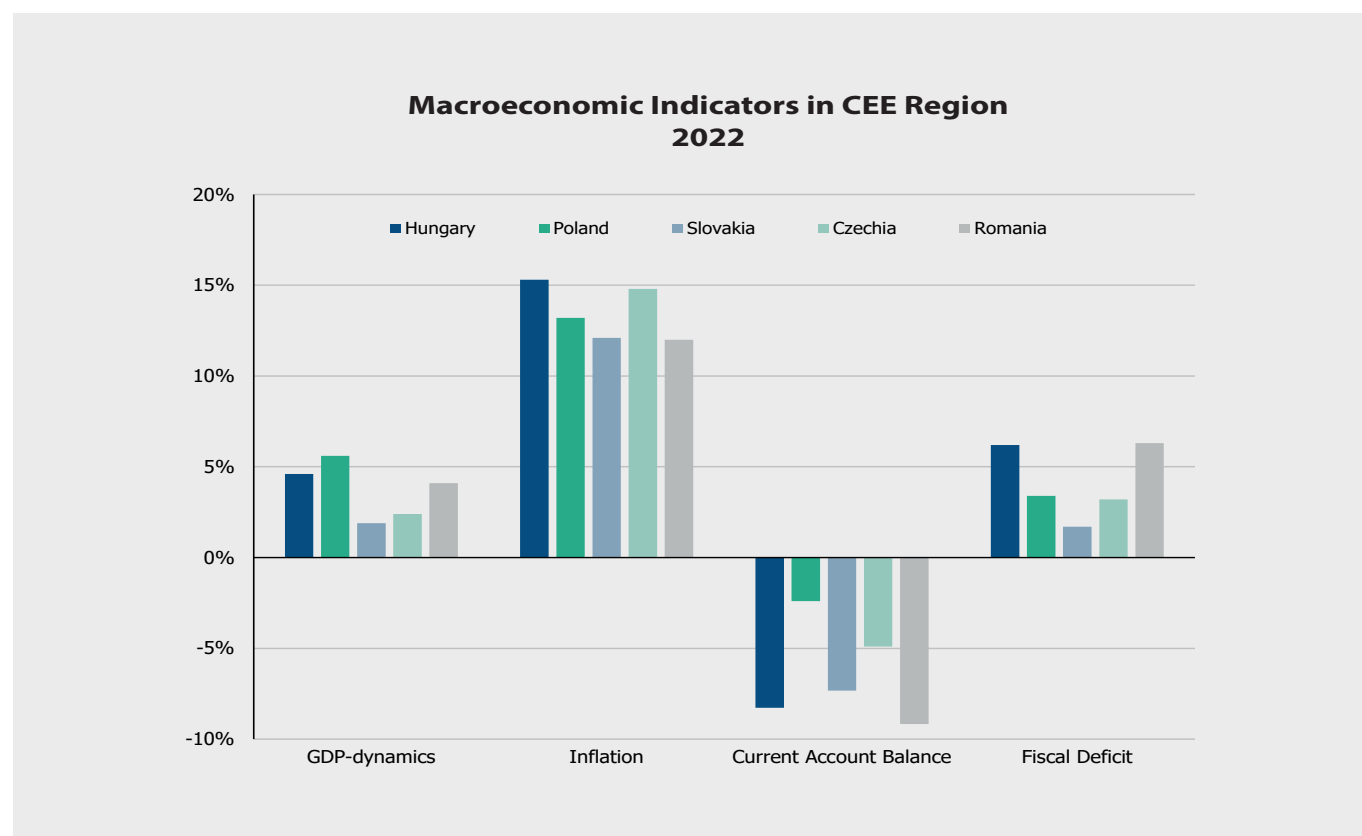
The debt data published by ÁKK in accordance with Hungarian and international accounting standards differs from the debt data used by Eurostat (the European Union's institute of statistics), which is calculated according to different principles and is essentially the result of statistical calculations. Public debt data is calculated and published in accordance with ESA '2010 principles by National Bank of Hungary (MNB), the Central Bank of Hungary.

# I. Macroeconomic developments in 2022

In 2022 global economic developments were determined by rising inflation and monetary reaction to that beside aftermath of the corona virus pandemic and war in Ukraine. The economic effects of the corona virus were managed by fiscal stimulus and strong economic growth resulted in rapidly increasing inflation in 2022. Monetary reaction to growing inflation was first gradual only, however the Magyar Nemzeti Bank also introduced stricter monetary conditions which affected public debt management as well.

Hungarian macroeconomic figures – especially inflation and current account deficit – worsened or remained unfavourable in 2022, budget deficit improved slightly but remained elevated, however GDP dynamics gradually slowed down in international comparisons.

## Regional Comparison



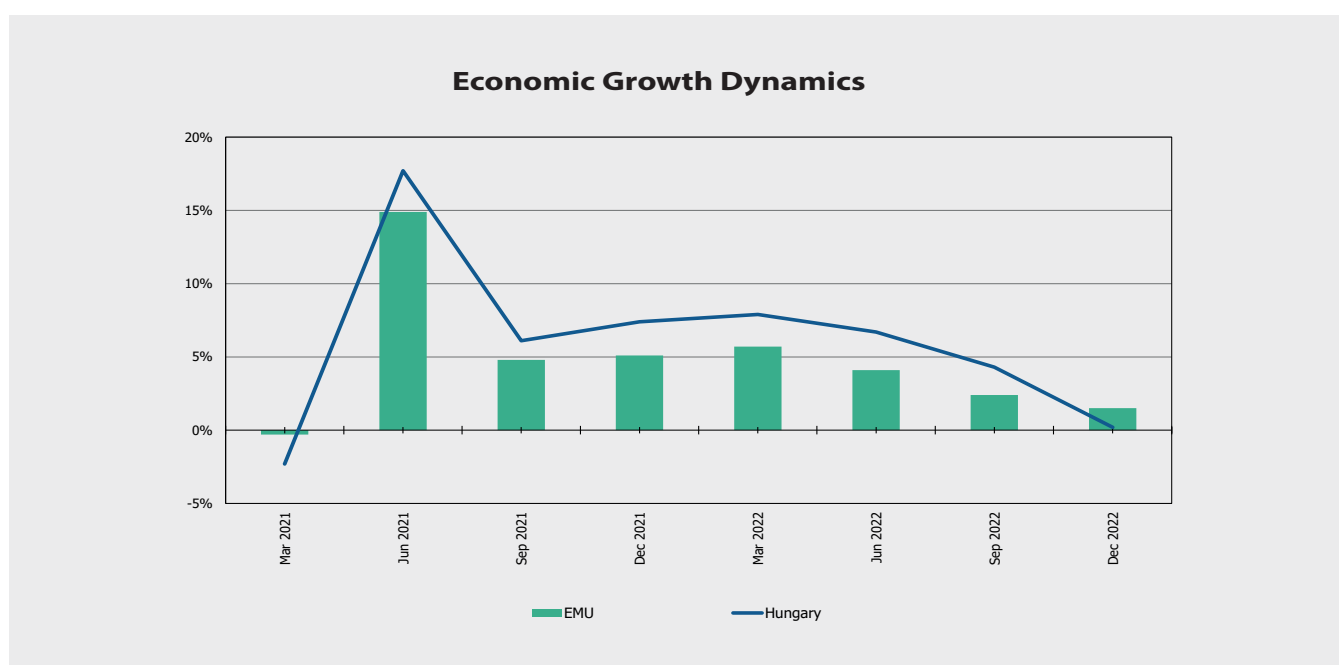
Source:: Eurostat

\* In case of current account, a negative figure means a surplus.

## I. Macroeconomic developments in 2022

During 2022 economies in the Central and Eastern European region showed a slowing economic activity and inflation increased over the inflationary targets of the Central Banks. Current account balance was in deficit every country in the region. Fiscal deficits remained high in Romania and Hungary, which resulted in a high net financing requirements for debt managers.

### Economic Growth

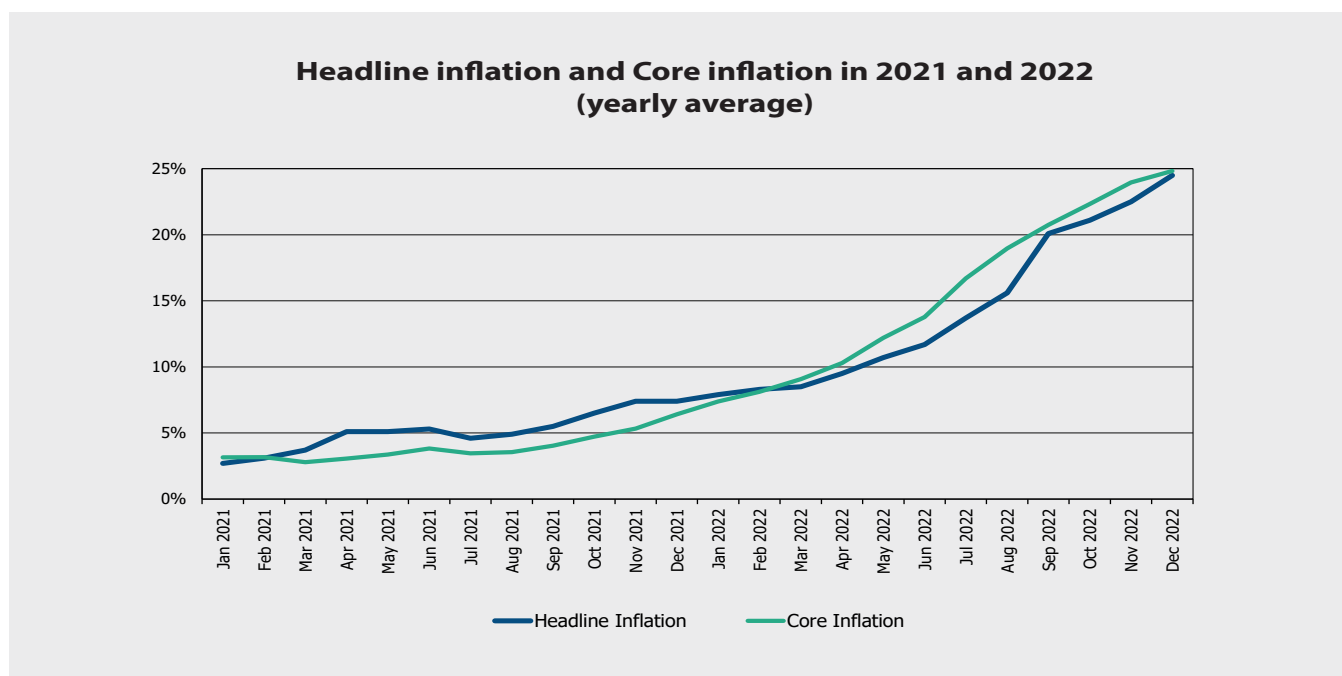


Source: Central Statistical Office (CSO), Eurostat

After a robust economic growth of 7.1% in 2021, economic activity started to slow down but on a yearly basis growth was still 4.6% in 2022. Economic activity increased in all economic sectors except agriculture in 2022. The most important sectors, the industry and services sectors both increased (by 2.1% and 7.9%). The construction sector posted 4% growth. Due to unfavourable weather conditions in 2022 activity in agriculture decreased by 27%. Regarding final use of GDP, consumption increased by 6.8% and investments by 1.4%. Exports and imports both increased (by 11.4% and 10.8%) relative to the previous year.

## I. Macroeconomic developments in 2022

### Inflation



Source: CSO

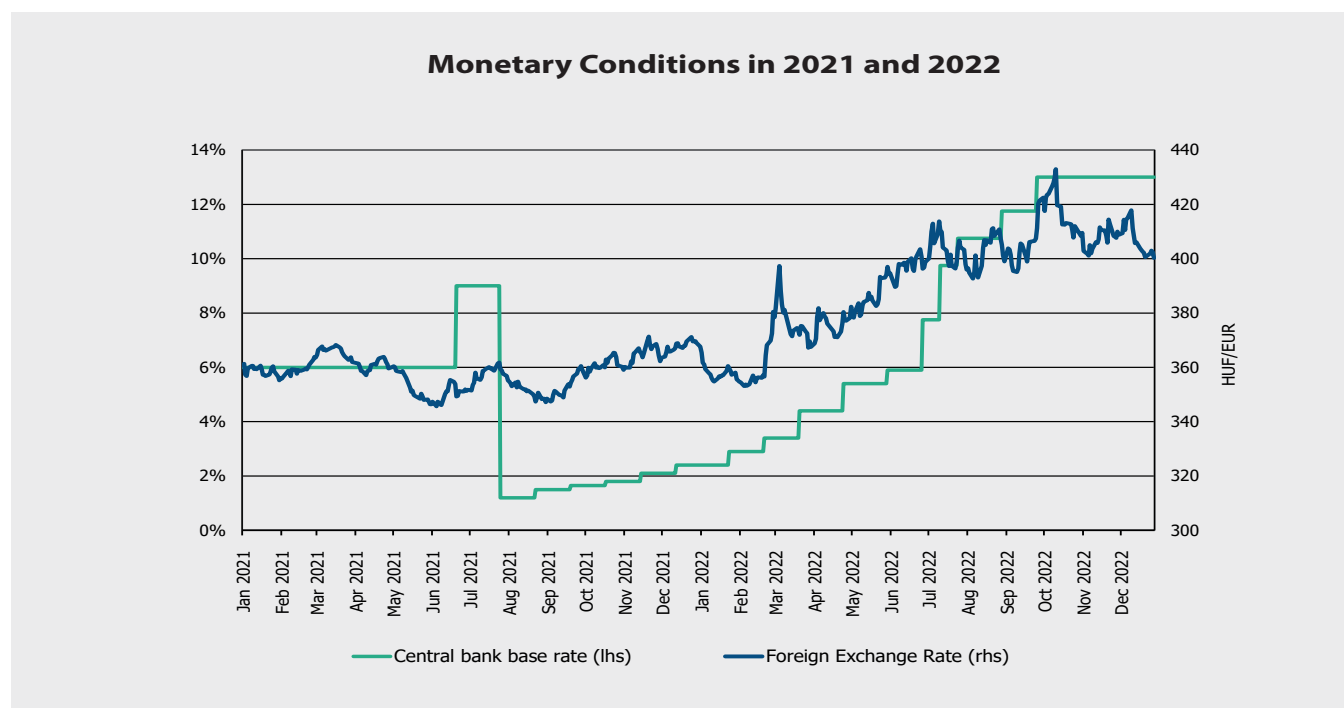
Inflation accelerated from 7.4% in December 2021 to 24.5% in December 2022 well over the inflation target (maximum 4%) of the central bank, one of the highest level in Europe. Core inflation also increased from 6.4% to 24.8%. The price level of food products increased by most by 28.5% and durable goods also increased by 13.1%.

### Monetary Conditions

As a reaction to rising inflation MNB, the Hungarian central bank tightened monetary conditions in 2022. The Monetary Policy Council of MNB increased the base interest rate in several steps from 2.4% to 13% in 2022. In addition to the base rate increases MNB increased the interest rate of the overnight deposit facility to 18% in October 2022.

The foreign exchange rate of the forint weakened during 2022 from 369.00 HUF/EUR to 400.25 HUF/EUR.

## I. Macroeconomic developments in 2022



Source: National Bank of Hungary (NBH)

### Fiscal Policy

The deficit of the public sector was 6.2% of GDP based on the financial accounts methodology, the cash-flow based (GFS) central government deficit amounted to HUF 4,725 billion (equalling 7.2% of GDP for the year 2022). In 2022, the accrual based (ESA) general government deficit (including local governments) amounted to HUF 4,108 billion (equalling 6.2% of GDP for the year 2022). The financing need of the state for the year 2022 decreased in comparison to the previous year as a result of stabilisation from the pandemic.<sup>1</sup>

### Financing Position of the Economy

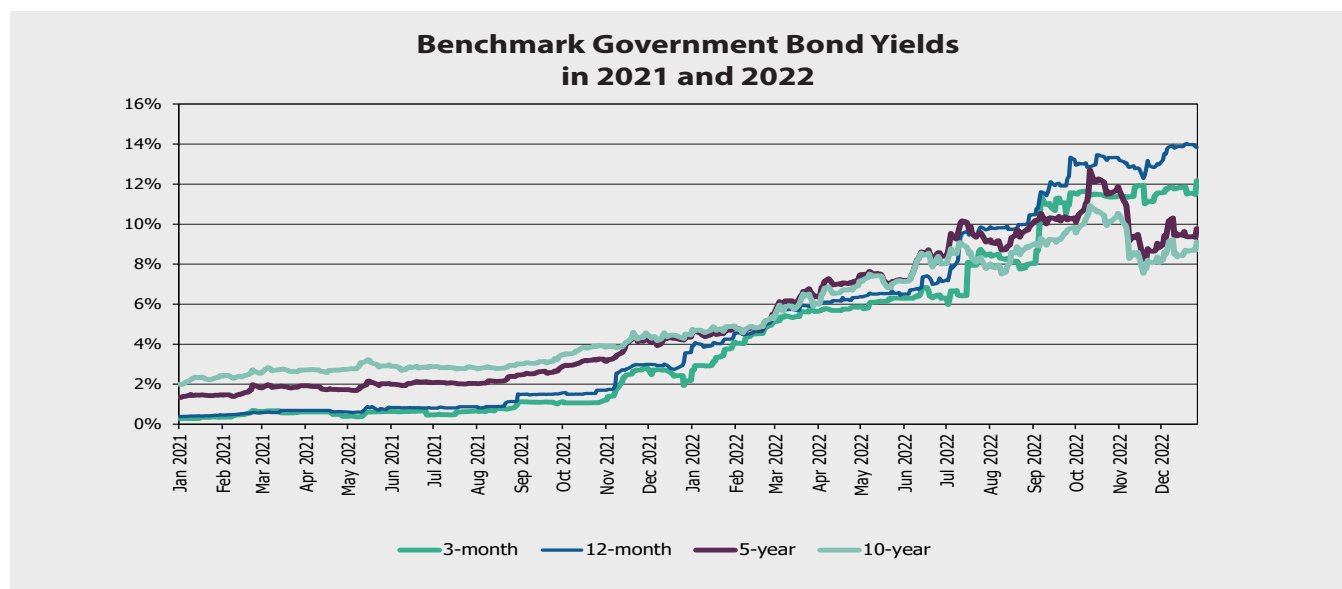
The households' savings to GDP ratio decreased slightly and amounted to 4.0%. The net financing need of the corporate sector increased to 6.0%. The balance of the economy of Hungary as a whole towards the rest of the world deteriorated due to the rapidly rising energy bill, and the current account posted a deficit of EUR 13.7 billion or -8.5% of GDP.

<sup>1</sup> The components of the net financing need are described in detail in Chapter III.

## I. Macroeconomic developments in 2022

### Developments of Government Securities Markets and Yields

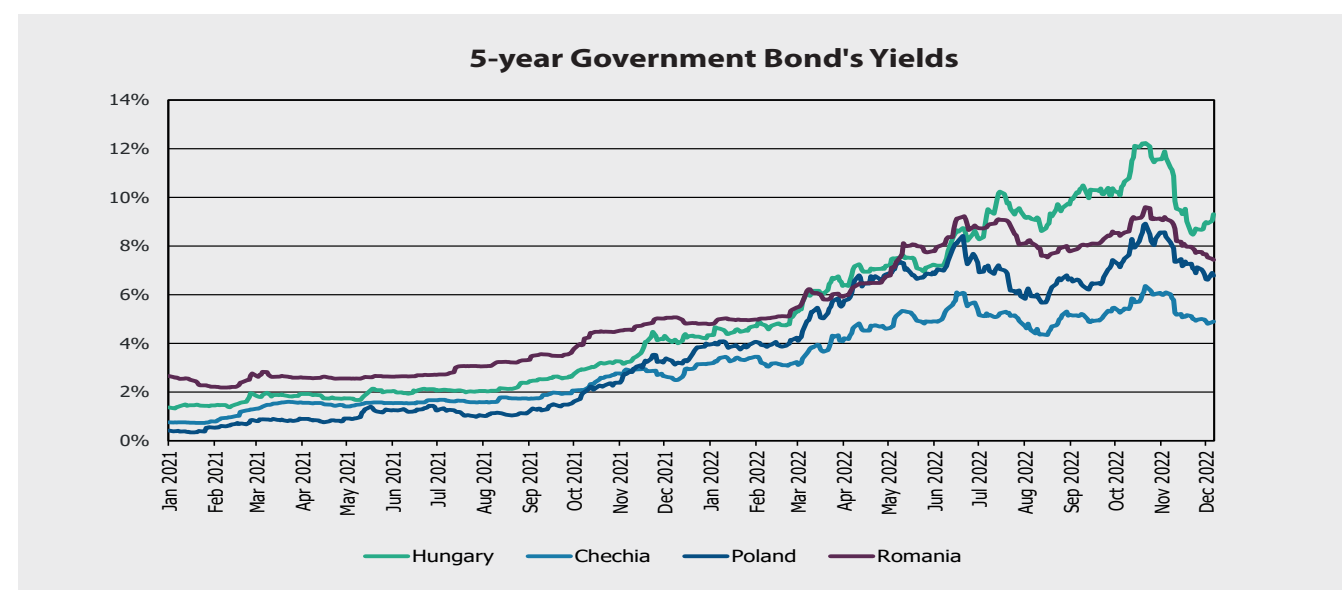
During the course of the year forint yields for all tenors increased significantly.



Source: ÁKK

Short-term government securities yields followed the development of the central bank rate in 2022. The MNB kept raising interest rates as a reaction to higher and higher inflationary development. Long-term bond yields increased steadily in the first half of 2022. After a short-term correction in the summer, they reached their peak in November with economic expectations stabilized and long-term yields came down until the end of the year.

At the end of 2022 the 3-month yield reached 12.18%, the 12-month yield increased to 13.83%, the 5-year yield amounted to 9.78% and the 10-year yield stood at 9.10%.

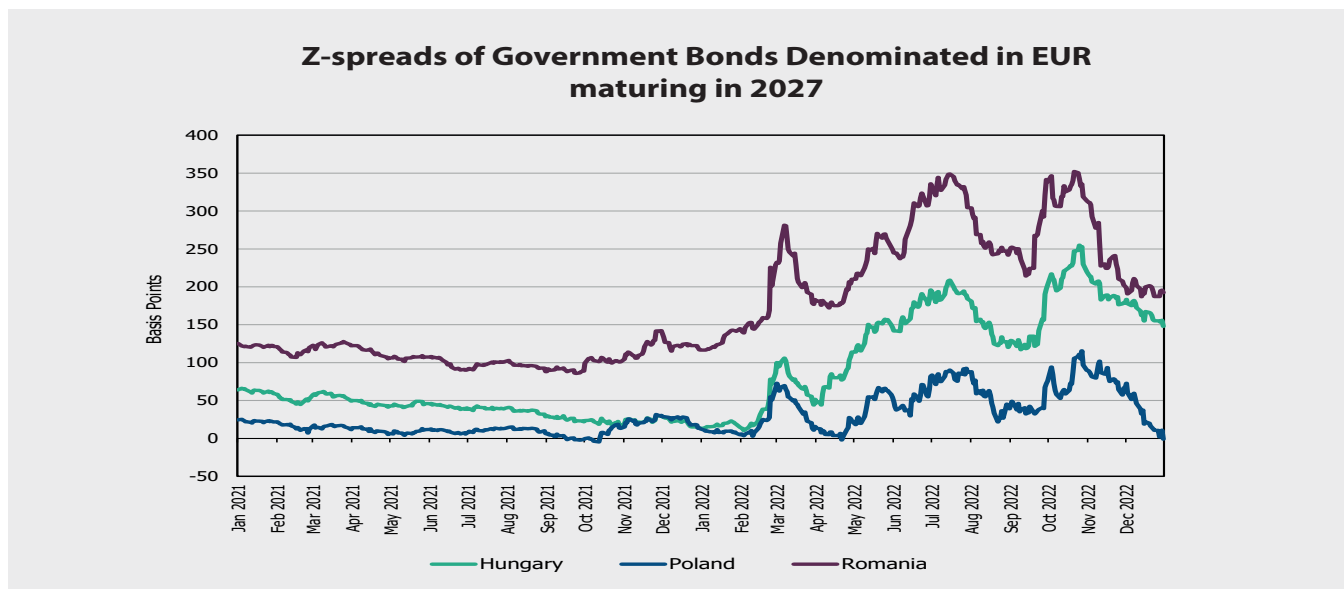


Source: Bloomberg

5-year yields increased rapidly in CEE countries in 2022, following rising inflation and central bank rate rises. The Hungarian 5-year yield level was higher than in other countries in the region.

## I. Macroeconomic developments in 2022

### Spreads of the Foreign Currency Denominated Bonds in the CEE Region

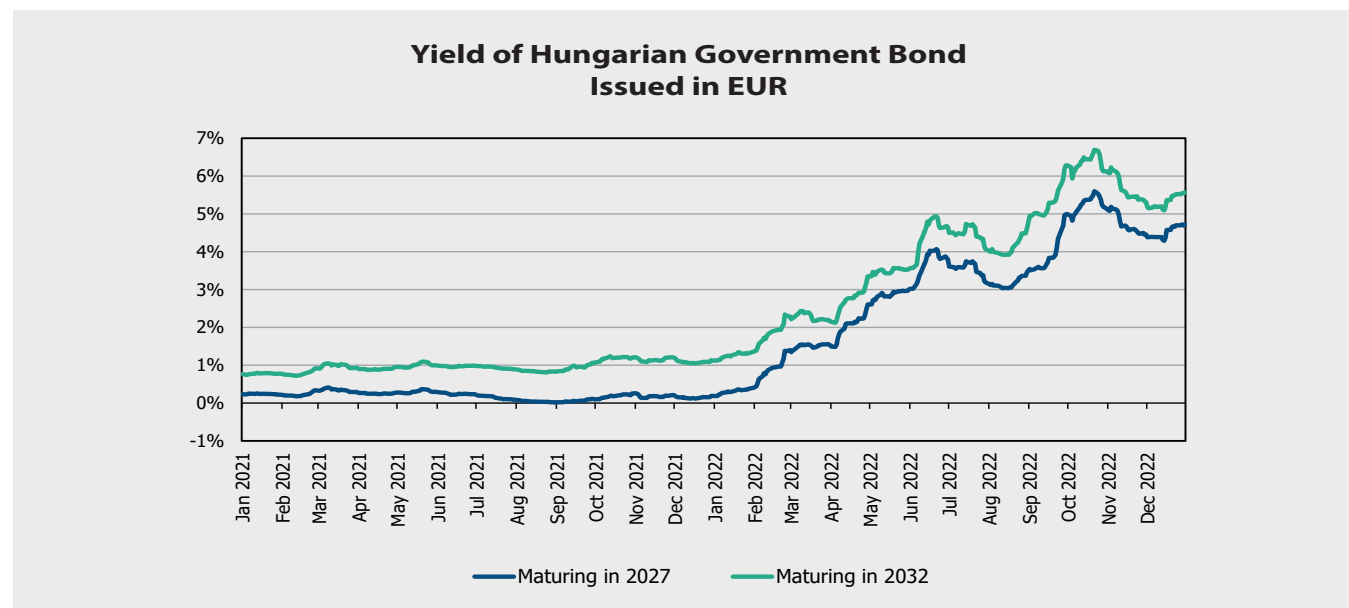


Source: Bloomberg

The Z-spread of EUR bond of CEE countries maturing in 2027 increased substantially, the largest rise was in Hungary by 134 basis points to 148 basis points during 2022 and as a result Hungarian Z-spread came close but still below to that of Romania. The development of spreads was explained mostly by worsening investors' sentiment, however, by the end of the year Z-spreads started to decrease due to improving investors' sentiment.

### Yields of Foreign Currency Denominated Bonds

Government bond yields denominated in euro issued by Hungary increased substantially in 2022.



Source: Bloomberg

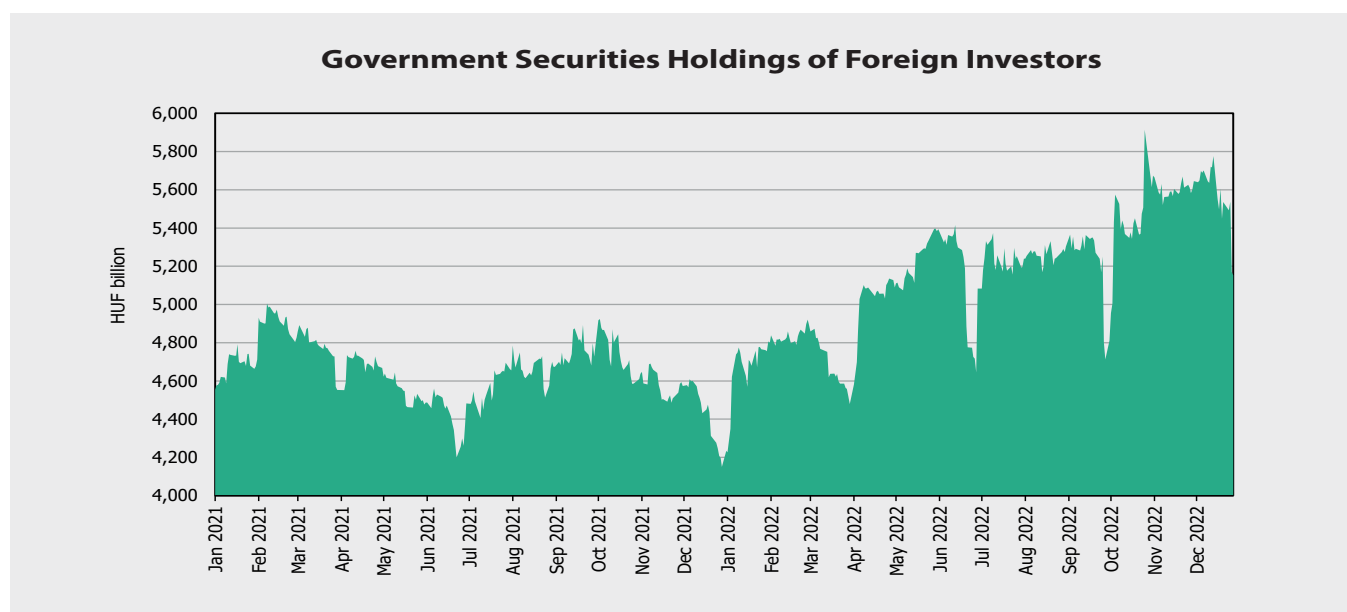
## I. Macroeconomic developments in 2022

The yield of the Hungarian government bond issued in October 2017 with a maturity in October 2027 increased from 0.19% to 4.7% during the course of the year, while the yield of the bond maturing in 2032 increased from 1.13% to 5.6%. Bond yields increased in line with market trends in the first half of the year and also during autumn, and by the end of October reached the maximum yields of 5.6% and 6.7% respectively. Both periods were followed by corrections, which resulted lower yields by the end of the year.

### Government Securities Holdings of Foreign Investors

The value of forint-denominated government securities held by non-residents increased from HUF 4,150 billion to HUF 5,152 billion in 2022. The increase in non-resident portfolio was rather even during the year with substantial but short-term declines at quarter-ends.

The share of foreign holdings in forint denominated debt increased from 17% to 18%. The ATM of non-resident owned domestic debt increased from 6.3 year to 6.47 years. Including foreign holdings in foreign exchange denominated debt, the share of foreign holdings in total debt amounted to 37%.



Source: KELER

### Credit Ratings of Hungary

The credit rating of the long-term foreign currency denominated debt of Hungary was: BBB (Standard & Poor's); BBB (Fitch); Baa2 (Moody's) as at 31 December 2022. On 12 August, 2022 Standard & Poor's changed the outlook to negative from stable. Moody's and Fitch had stable outlook at the end of 2022.

## II. Debt management strategy in 2022

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ÁKK plans and performs its financing transactions in accordance with the Debt Management Strategy approved each year by the Minister of Finance.

**ÁKK's main objective is to finance the central government at the lowest costs in the long run, taking account of risks. Taking the economic policy as a framework, the strategy must focus on the best possible achievement of this objective.**

In accordance with the economic policy of the government ÁKK had set four secondary objectives:

1. According to the fundamental law of Hungary if the debt to GDP ratio is higher than 50 percent, only such budget can be approved, which leads to the reduction of the debt ratio year by year. **The primary objective of debt management is to support the debt reduction** accordingly. During 2022 the public debt ratio decreased from 76.7pc by 2.6 pc points to 74.1pc.
2. One of the main factors that led to the vulnerability of Hungary during the GFC was that the higher part of the government debt had been financed by non-resident investors. Increasing domestic savings and the domestic financing of the debt reduce the risks of public debt and support macroeconomic stability in the long term. Thus the second objective of ÁKK is to increase investors' diversification, develop further the domestic investor base, and especially to **increase the retail debt program**. An important source of domestic funding is the retail program having a medium term objective of the retail portfolio reaching HUF 11 trillion by 2023. In 2022 however the portfolio of retail securities of households decreased by HUF 1,493 billion to HUF 8,972 billion. The decline of retail securities' stock was the result of rapid government yield rises and households partly switched to wholesale securities about the same volume.  
  
Decreasing debt ratio and increasing domestic financing enable to **maintain the share of foreign currency debt at a low level** within the total debt.
3. The 3<sup>th</sup> objective is to **increase the average maturity** of the public debt portfolio. The average life of the Hungarian public debt is relatively short and the annual refinancing requirement is high in international comparison, therefore this objective intends to reduce risks associated with the short maturity of Hungarian public debt, which could be fulfilled in 2022 since investors' demand was in favor of long term debt.
4. A new, 4<sup>th</sup> objective is to implement **sustainability aspect (ESG)** into the debt management framework.

In the trade-off between costs and risks, the aim is to develop a debt structure with the most favourable long-term cost-risk characteristics. The emphasis is on the long term: no transaction should be done to achieve lower costs in the short term at the expense of higher costs or greater risks in the future.

## II. Debt management strategy in 2022

### The most important risk factors are as follows:

- Refinancing risk consists of the risk of renewing maturing debt and the risk associated with meeting net financing requirements. In extreme cases, refinancing risk may become liquidity risk, but in general it is interest rate risk.
- Interest rate risk relates to fluctuations in the yields and interest rates of government debt.
- Liquidity risk is the result of fluctuations in the cash-flows of the central government and the capital market operations of debt management.
- Foreign exchange rate risk arises out of fluctuations of the exchange rates of the forint versus the euro, as well as other foreign currencies.
- Credit risk (counterparty risk) is an important risk factor in the case of hedging transactions concluded directly with partners in the international capital markets and in the case of repo operations in the domestic money market.

ÁKK has developed various benchmarks reflecting its strategic objectives which consider risks and costs simultaneously. In order to filter out short-term effects, these benchmarks are monitored as 90-day moving averages. The benchmarks approved by the Minister of Finance are also used to quantify strategic objectives and to set intermediate targets. During the course of 2022 the composition of the central government debt was in line with the benchmarks (with a slight deviation in case of the foreign currency debt ratio and the fix-floating mix of the domestic debt).

### Public debt management benchmarks in 2022

| Benchmarks                                    | Tolerance band    | End 2021 | End 2022 |
|-----------------------------------------------|-------------------|----------|----------|
| 1. Foreign currency debt ratio                | 10-25%            | 20.9%    | 25.1%    |
| 2. Foreign currency debt composition          | 95-105% EUR       | 100.0%   | 100.0%   |
| 3. Fixed coupon part of foreign currency debt | 70-90%            | 87.0%    | 86.9%    |
| 4. Fixed coupon part of domestic debt         | 70-90%            | 80.2%    | 68.7%    |
| 5. Average time to refixing of domestic debt  | minimum 4 years   | 4.5      | 4.04     |
| 6. Average term to maturity of domestic debt  | minimum 4.5 years | 5.1      | 5.1      |

Benchmark No. 7. is to maintain a secure level of funds on the Single Treasury Account (STA). For a detailed description of liquidity management see Chapter VI.

## II. Debt management strategy in 2022

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### Strategic principles

ÁKK executes its financing policy governed by the three main principles of simplicity, transparency and liquidity. In ensuring simplicity and transparency, ÁKK only issues a limited number of plain vanilla instruments in a transparent manner, i.e. it sells fixed coupon and floating rate forint bonds and zero-coupon discount treasury bills according to a fixed annual issuance calendar published in advance.

As regards liquidity, ÁKK aims to ensure that wholesale government securities have a sufficiently liquid secondary market. A liquid secondary market can be supported by debt management by two ways. The first measure is the continuous two-way price quotation by Primary dealers that reflects real market prices; the second is to consolidate domestic bonds into sufficiently large government securities series (benchmarks). In order to achieve this latter goal, ÁKK reopens individual series – i.e. it issues additional bonds that are fully fungible with previously issued series. The targeted volume of bond series was increased to HUF 800-1500 billion (approximately EUR 2-4 billion) in 2022. Smaller size is targeted in the longest tenor, the green bonds maturing in 2032 and 2051, reflecting lower investors' demand. Secondary market operations were also enhanced by bond buy-backs and a much more intensive bond exchange program than before. In 2022 ÁKK also made several changes to its Primary dealer system, mostly to develop the secondary market by supporting PDs' activities. Among others, ÁKK changed their ranking methodology, introduced new incentives for them, started measuring their market making quality, and established the Non-PD Market Maker status, which allows other dealers to enter the secondary market of Hungarian government securities with several privileges (alongside obligations) to enhance the secondary market liquidity by these new entrants.

ÁKK also maintains the flexibility of its financing operations. This way it can react to changes in market demand to a greater extent as regards the announcement of auctions, and the accepted amounts at auctions. The purpose of the non-competitive top-up phase of bond auctions is similar, to be able to react to a stronger than expected demand.

### III. The financing requirements in 2022

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#### The components of the financing requirements

The most important part of the net financing requirements is the deficit of the central government. ÁKK is responsible for financing the central government and maintaining liquidity, while local authorities (the other subsystem of the public sector) and SOEs manage their own budgets, financing and debt.

The total annual net financing requirement financed by ÁKK is the sum of the central government deficit and other, extra-budgetary transfers (net transfers from the EU, special transfers to the NBH etc.). The gross financing requirement, in addition, also includes debt redemptions, the majority of which is contributed by short-term debt, which may be renewed several times a year.

#### The net financing requirement

In 2022 the original cash flow based deficit was – in line with the Budget Law – HUF 3153 billion. The total cash-flow based deficit of the central government was HUF 4,753 billion (or 7.2 percent of GDP according to preliminary data), while the total net financing requirement amounted to HUF 4,499 billion (or 6.8 percent of GDP) including net EU transfers and other funding sources.

#### Borrowing requirements in 2022:

|                                                     | Outturn 2022<br>(HUF billion) |
|-----------------------------------------------------|-------------------------------|
| <b>Net financing need of the central government</b> | <b>-4,753.4</b>               |
| Net EU transfers and other                          | 254.1                         |
| <b>Total net financing requirements</b>             | <b>-4,499.3</b>               |
| Short term debt redemptions                         | -1,826.9                      |
| Long term debt redemptions                          | -9,107.9                      |
| <b>Gross financing requirements</b>                 | <b>-15,434.0</b>              |

Source: Hungarian State Treasury, Ministry of Finance, ÁKK

### III. The financing requirements in 2022

#### Redemptions

Redemptions in any given year are largely the function of debt financing operations in previous periods and of the sales of short-term instruments renewed within the year. Prepayments of loans, buy-backs of bonds and the early repurchasing/redemption of retail securities and other securities in the Treasury network may also influence the final sum.

#### Government debt redemptions: <sup>2</sup>

HUF billion

|                                                 | 2022 plan    | 2022 outcome  |
|-------------------------------------------------|--------------|---------------|
| <b>Domestic debt redemptions</b>                | <b>4,388</b> | <b>9,845</b>  |
| T-bonds                                         | 1,275        | 1,488         |
| Retail securities                               | 2,432        | 7,493         |
| Discount T-bills                                | 563          | 580           |
| Loans                                           | 118          | 284           |
| <b>Foreign currency debt redemptions</b>        | <b>491</b>   | <b>392</b>    |
| International bonds                             | 0            | 25            |
| Domestic FX bonds                               | 289          | 326           |
| FX loan                                         | 202          | 41            |
| <b>Total</b>                                    | <b>4,880</b> | <b>10,237</b> |
| T-bond switch auctions                          | 921          | 240           |
| T-bond buy-back auctions                        | 0            | 70            |
| FX bond buy-backs                               | 536          | 388           |
| <b>Prefinancing in total</b>                    | <b>1,457</b> | <b>698</b>    |
| <b>Redemptions in total, incl. prefinancing</b> | <b>6,336</b> | <b>10,935</b> |

Source: ÁKK

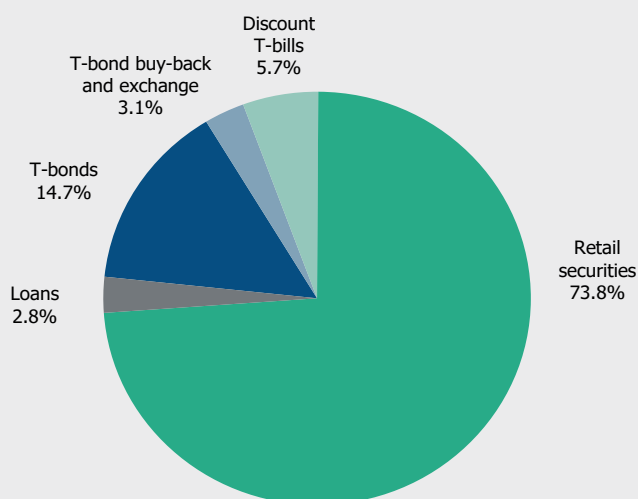
The total debt redemption –including prefinancing - was HUF 10,935 billion in 2022, 73 percent higher than planned. The significantly higher redemptions are due to the retail program, retail investors switched their portfolio into the inflation linked Premium Hungarian Bonds from other retail securities.

On the other hand ÁKK executed less liability management operations in 2022 due to the elevated yield levels, which decreased maturities: The total redemption includes HUF 240 billion domestic prefinancing via switch auctions (by 74 percent lower than planned) and USD 1.2 billion (HUF 388 billion) FX bond switches (less than planned), while ÁKK had HUF 70 domestic bond buyback auction in 2022 (contrary to plans). The total prefinancing totalled HUF 698 billion, 52 percent less than the plan.

<sup>2</sup> In this publication the redemption and gross issuance of short-term debt is reported according to the OECD methodology. The amount of redemption of T-bills equals the outstanding volume of the short-term debt at the beginning of the year and gross issuance equals the sum of the redemption figure and the net issuance in the given year.

### III. The financing requirements in 2022

**Composition of domestic debt redemption in 2022**



Source: ÁKK

#### Bond buy-backs and exchanges

Large bond series maturing at a given time creates refinancing risk. This risk can be reduced by repurchasing a part of the bonds before maturity. ÁKK's financing plan includes a regular bond buy-back program, and the actual repurchase amount depends on the quantity and quality of bids. In 2022 ÁKK preferred switches to buyback.

In order to decrease refinancing risk ÁKK has been holding bond switch auctions on a regular basis. In these switch auctions the investors can exchange their bonds with short remaining term-to-maturity for longer term bonds. This improves the investment possibilities of investors and at the same time lengthens the average term-to-maturity (ATM) of the government debt. Until August ÁKK held regular switch auctions. In 2022 49 exchange auctions were held at which ÁKK exchanged a total of HUF 240 billion (less than planned) short-term bonds for long-term ones. The switch auctions contributed to the increase of the average term to maturity of the debt portfolio and to the reduction of the refinancing risk.

#### Foreign currency debt redemptions

In 2022 there was no international bond maturities, ÁKK executed a liability management operation resulting the switching of USD 1.2 billion short tenor bond into long term bond.

The 10th serie of Premium Euro Hungarian Government Bond totalling EUR 239 million and the remaining 3 series of Residency Bonds totalling EUR 555 million matured, meaning that Hungary completed the Residency Bond program in 2022. Smaller redemptions and smaller early repayments totalling EUR 120 million (HUF 41 billion) took place in the case of IFI project financing and other loans in 2022.

## IV. Financing

In 2022 the HUF denominated issuance (including switch auctions) amounted to HUF 11,795 billion (79%), while foreign currency issuance was HUF 3,050 billion (21%).

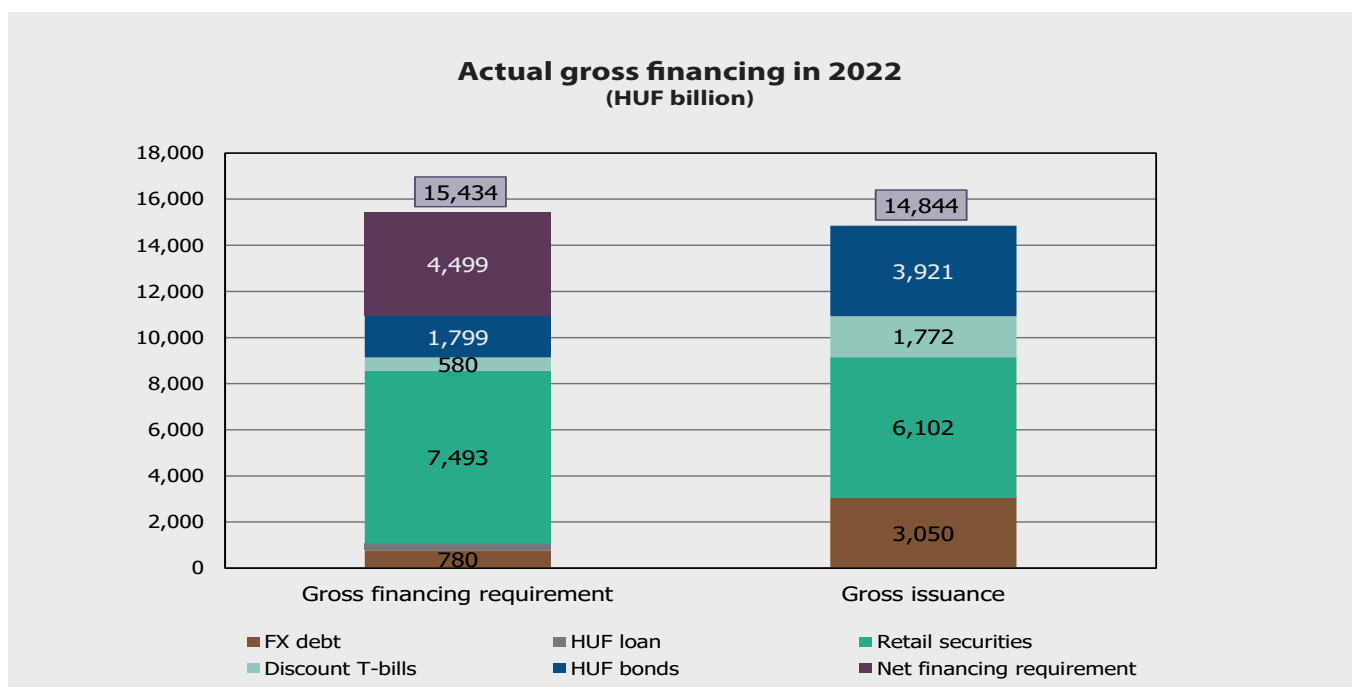
### Gross debt issuance:

HUF billion

|                                       | 2022 plan    | 2022 outcome  |
|---------------------------------------|--------------|---------------|
| <b>Domestic debt issuance</b>         | <b>7,449</b> | <b>11,795</b> |
| T-bonds                               | 3,325        | 3,921         |
| <i>of which exchange auctions</i>     | <i>1,000</i> | <i>308</i>    |
| Retail securities                     | 3,302        | 6,102         |
| Discount T-bills                      | 822          | 1,772         |
| Loans                                 | 0            | 0             |
| <b>Foreign currency debt issuance</b> | <b>1,551</b> | <b>3,050</b>  |
| International bonds                   | 760          | 2,326         |
| Domestic FX bonds                     | 87           | 181           |
| FX loans                              | 703          | 543           |
| <b>Issuance in total</b>              | <b>9,000</b> | <b>14,844</b> |

Source: ÁKK

The largest part of the total gross issuance was the domestic retail securities issuance totalling HUF 6,102 billion, mostly because of the portfolio adjustment of households. Domestic wholesale bonds and Discount T-bill issuance also exceeded plans due to higher deficit and changing investors (partly retail) demand during the year. ÁKK was more active also in the international markets with a large liability management operation and higher deficit financing.



Source: ÁKK

## IV. Financing

Net HUF denominated financing totalled HUF 1,639 billion, while net foreign currency financing amounted to HUF 2,270 billion, so the total net issuance was HUF 3,909 billion in 2022 that covered the increased net financing need caused by post COVID macroeconomic situation.

### Net issuance:

HUF billion

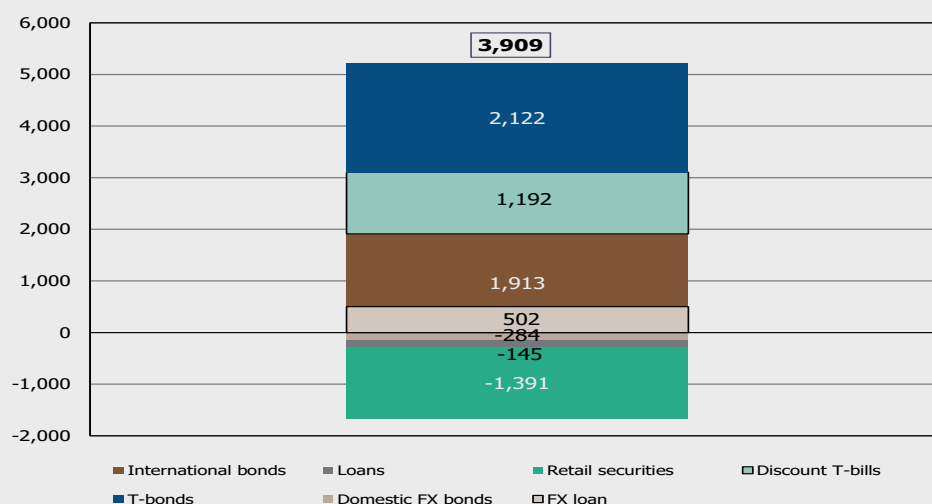
|                                       | 2022 plan    | 2022 outcome |
|---------------------------------------|--------------|--------------|
| <b>Domestic debt issuance</b>         | <b>2,140</b> | <b>1,639</b> |
| T-bonds                               | 1,130        | 2,122        |
| Retail securities                     | 870          | -1,391       |
| Discount T-bills                      | 258          | 1,192        |
| Loans                                 | -118         | -284         |
| <b>Foreign currency debt issuance</b> | <b>523</b>   | <b>2,270</b> |
| International bonds                   | 224          | 1,913        |
| Domestic FX bonds                     | -202         | -145         |
| FX loans                              | 501          | 502          |
| <b>Issuance in total</b>              | <b>2,663</b> | <b>3,909</b> |

Source: ÁKK

Within the net HUF issuance the domestic bond issuance had the highest share. The significant issuance of long term bonds contributed to the increase of the average term-to-maturity of the debt portfolio and financed the increased deficit of the central budget. ÁKK originally intended to issue net HUF 1,130 billion domestic bond in 2022, but as the deficit target had been increasing during the year, ÁKK revised its financing plan accordingly, thus ÁKK increased the net issuance plan of domestic bonds to HUF 2,122 billion.

The negative net issuance of HUF denominated retail securities totalled HUF 1,391 billion in 2022 as a result of households' net sales of retail securities, while switching a part of their savings into wholesale domestic securities, mostly Discount Treasury bills. The net issuance of discount T-bill was HUF 1,192 billion (the plan was 258), while the net HUF loan drawdown was HUF -284 billion.

**Actual net financing in 2022  
(HUF billion)**



Source: ÁKK

## IV. Financing

ÁKK originally planned modest net issuance in the foreign currency markets, mainly in the form of loans. However as a reaction to higher budget deficit and a pro-active liability management to improve the maturity of foreign currency debt, ÁKK issued net HUF 1,913 billion international bonds. Net draw-down was according to plans, and total net foreign currency issuance amounted to HUF 2,270 billion in comparison to the planned HUF 523 billion (EUR 1.4 billion).

The average cost of financing (the weighted average yield to maturity – including sales commissions – of new debt instruments issued in 2022) increased to 7.1 percent. The increase was the result of the higher yields of wholesale domestic bonds and bills, retail securities and international bonds as well.

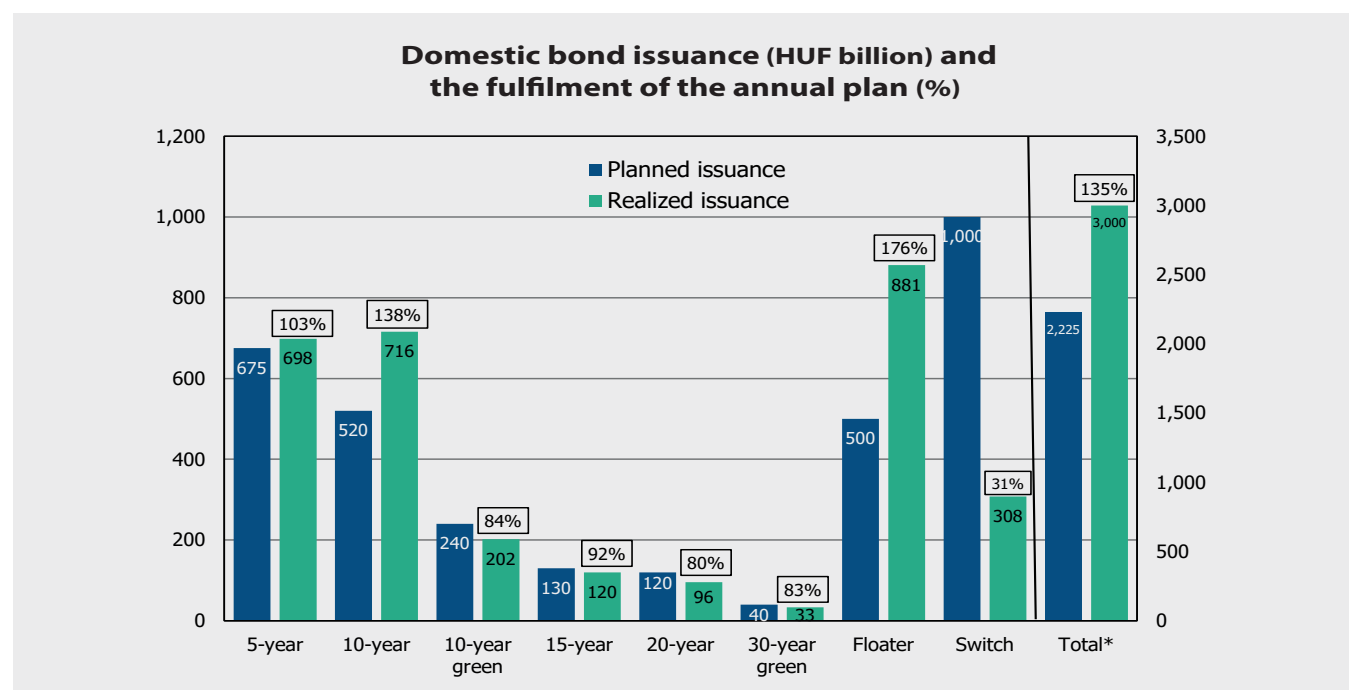
### Domestic Government bonds

Domestic financing was mostly provided by wholesale domestic bonds and retail instruments.

Getting back to normal after the pandemia ÁKK returned to the bi-week fixed bond auctions including the 3-year tenor from September. Due to the rising net financing need, the actual realized auction bond issuance exceeded the plan by HUF 775 billion and amounted to HUF 3,000 billion in 2022. As a reaction of high yield level and changing investors' behaviour ÁKK increased the issuance of shorter and floating rate bonds and decreased the issuance of the 15 and 20 year bonds and also green bonds.

There were a total of 5 3-year, 26 5-year and 32 10-year fixed bond auctions in 2022. Auctions were held 11 times for the 15-year term, 10 for the 20-year term, and 11 times for the new 10-year green bond and twice for the 30-year green bond. A total of 28 floating rate bond auctions took place in 2022, at which auctions the series maturing in 2027 was issued 3 times, the series maturing in 2029 was issued 19 times and the new series maturing in 2032 was issued 6 times. ÁKK actively used its right to modify the accepted amount as a reaction to bids. Another way to react to changes in market demand was the use of the non-competitive top-up phase in the afternoon of the auctions when successful bidders at the auction could buy additionally up to 40 percent of their winning bids at the average price of the auction.

In 2022, the demand for domestic bonds was significant in general, the average bid-to-cover ratio was 3.1.



Source: ÁKK

\* without switch auctions

## IV. Financing

Total bond issuance – together with switch auctions, the retail sales of the Hungarian State Treasury, the bonds issued for local authorities and secondary market operations – was HUF 3,921 billion, versus total bond maturities of HUF 1,799 billion, which resulted in a net issuance of HUF 2,122 billion.

In the case of the 5-year, 10-year fixed bond and the floating rate bond, new series were issued in 2022, and in addition, a new 10-year green bond maturing in 2032 was also introduced in 2022, while in the 15-year, 20-year and 30-year green segments, series that were also auctioned in the previous year were issued throughout 2022.

### On-the-run bond series in 2022:

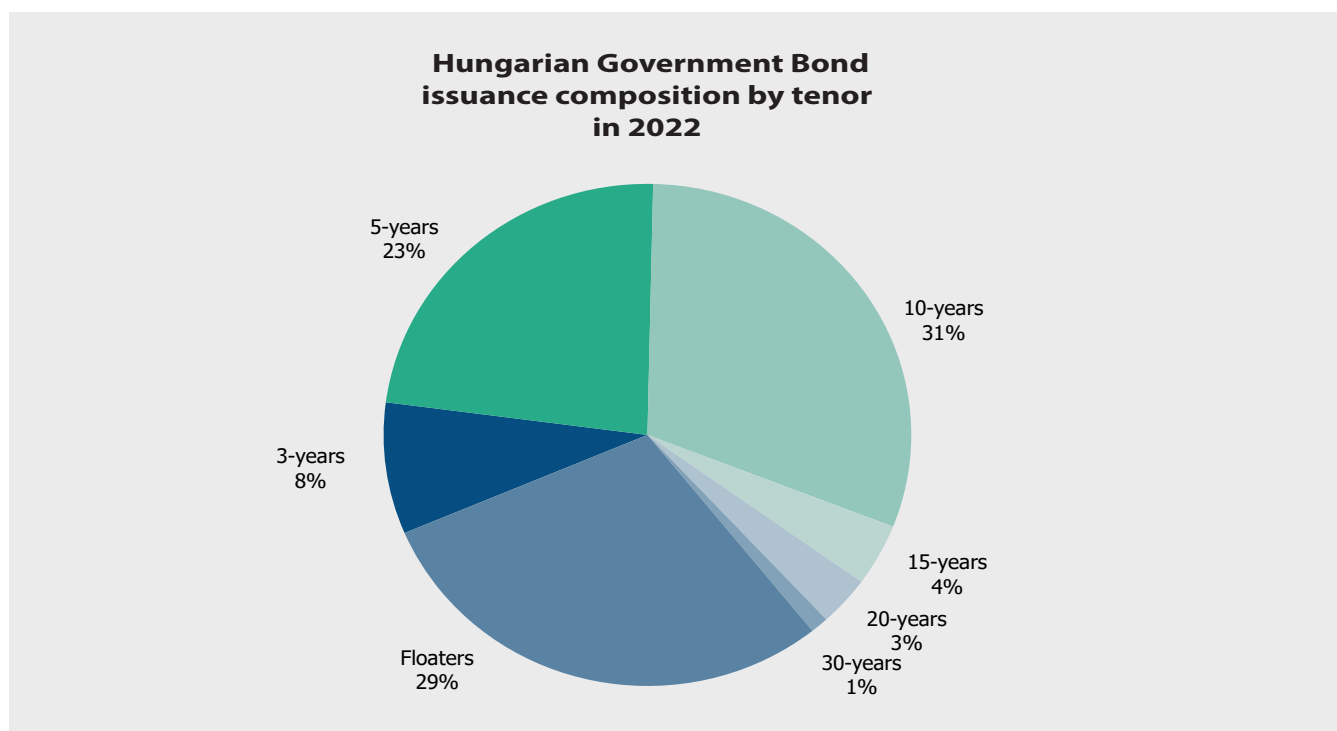
HUF billion

|                | Tenor    | No. of auctions | Auction sales in 2022 | Non-competitive sales in 2022 | Size (end of 2022) |
|----------------|----------|-----------------|-----------------------|-------------------------------|--------------------|
| <b>2024/C</b>  | 3-years  | 1               | 65                    | 9                             | 1,173              |
| <b>2025/B</b>  | 3-years  | 1               | 20                    | 0                             | 1,231              |
| <b>2025/C</b>  | 3-years  | 2               | 112                   | 10                            | 1,467              |
| <b>2026/F</b>  | 3-years  | 1               | 38                    | 1                             | 816                |
| <b>2027/B*</b> | 5-years  | 3               | 45                    | 4                             | 1,019              |
| <b>2028/A</b>  | 5-years  | 1               | 42                    | 14                            | 720                |
| <b>2028/B</b>  | 5-years  | 22              | 531                   | 111                           | 640                |
| <b>2029/B*</b> | 7-years  | 19              | 525                   | 164                           | 1,280              |
| <b>2032/A</b>  | 10-years | 25              | 576                   | 124                           | 708                |
| <b>2032/B*</b> | 10-years | 6               | 118                   | 25                            | 145                |
| <b>2032/G</b>  | 10-years | 11              | 181                   | 21                            | 205                |
| <b>2033/A</b>  | 10-years | 1               | 15                    | 0                             | 1,315              |
| <b>2038/A</b>  | 15-years | 11              | 105                   | 15                            | 902                |
| <b>2041/A</b>  | 20-years | 10              | 84                    | 12                            | 519                |
| <b>2051/G</b>  | 30-years | 2               | 29                    | 4                             | 132                |

Source: ÁKK

\* Floating rate bond

ÁKK adjusted the accepted amounts at the auctions according to demand, and the results show that investors' demand changed towards medium term and floating rate bonds. The share of the 3-year bond was 8% and the share of the 5-year fix bond reduced from 34% to 23%. At the same time, the share of the 10-year fixed-rate bond remained at 31% (together with the green bond), while the share of 15- and 20-year bonds decreased from 7% and 6% to 4% and 3% respectively. The share of the floating rate bond increased from 18% to 29%, while the 30-year green bond represented only 1% of the total auction issuance.



Source: ÁKK

### Discount treasury bills

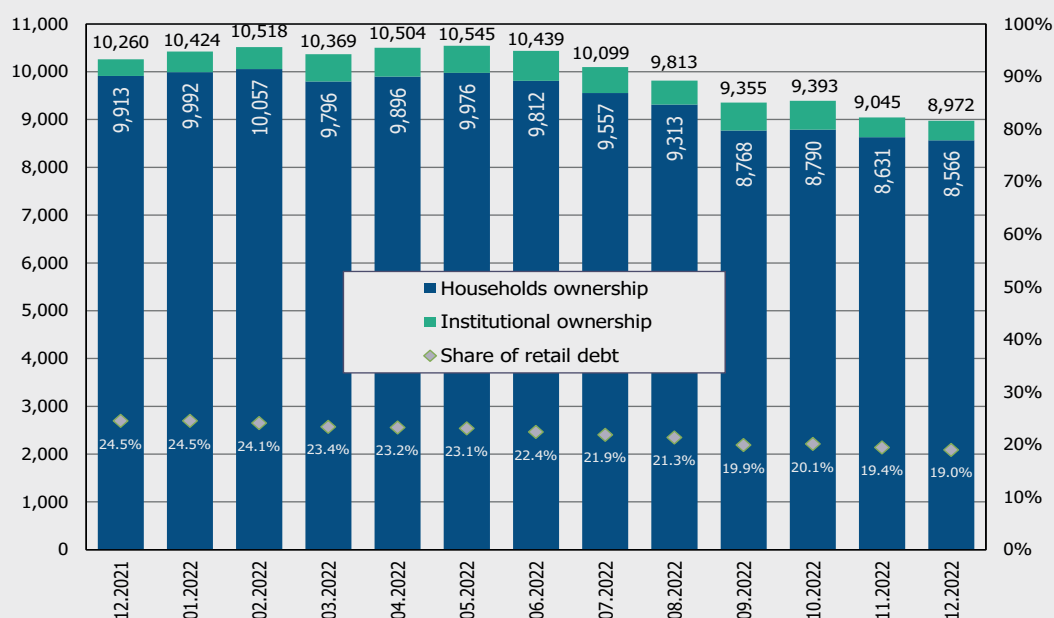
The 3, 6 and 12-month discount treasury bills are short-term instruments mainly used for liquidity management, i.e. for smoothening the fluctuations in liquidity caused by the varying financing requirements over the year. They may also play a role in financing, if needed, by maintaining a higher stock for a particular term. In September 2022 ÁKK re-introduced the 6-month bill as a reaction to the increased demand for short term securities, particularly from retail investors. In 2022 ÁKK sold discount treasury bills in a total of HUF 1786 billion, HUF 1200 billion more than in 2021.

### Retail securities

One of the strategic objectives of ÁKK is to develop further its retail debt programme, which constitutes an important source of domestic financing. The retail program amounted 19% of the public debt in 2022. With continuously growing domestic savings it is natural for the Government to tap this secure source of funds directly. The medium term objective of public debt management is to reach HUF 11 trillion of retail debt owned by households by 2023.

The issuance of retail government securities gained new momentum in 2019 with the introduction of the Hungarian Government Security Plus. Due to the appearance of the COVID pandemic in the spring of 2020 and economic difficulties thereafter, retail demand temporarily decreased. The outstanding amount of retail government securities held by households (denominated in HUF and EUR) decreased by HUF 1347 billion to HUF 8,566 billion in 2022.

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



Source: NBH, ÁKK

The decline of the retail portfolio was determined by the significant change of retail investors' behaviour as a reaction to rising inflation and interest rates. The previous preferred instrument lost its appeal, and small investors switched to the inflation linked PMÁP and interestingly wholesale securities. Major component of the gross issuance was the Premium Government Security (PMÁP) issuance with 60%, while the sale of the Hungarian Government Security Plus fell to 8% only. The second most popular paper became the 1-year Hungarian Security with a 13% market share

#### Gross retail issuance:

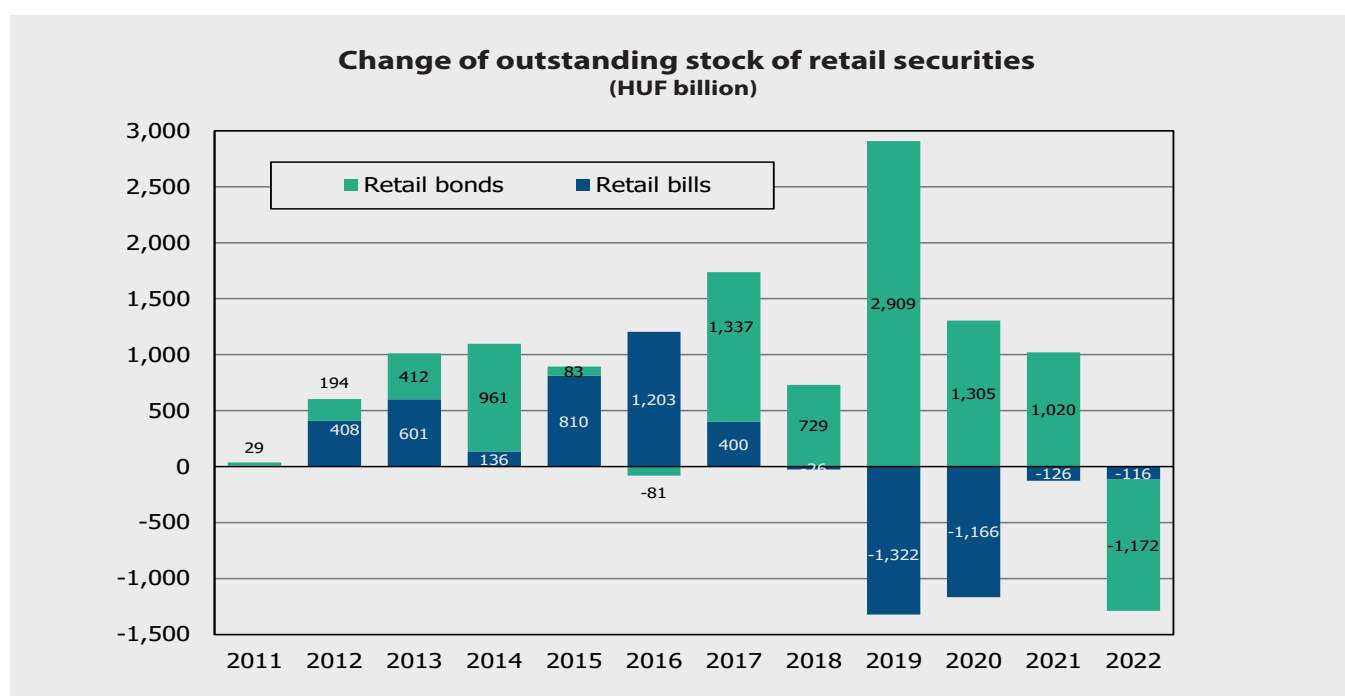
HUF billion

|                                                     | 2019         | 2020         | 2021         | 2022         |
|-----------------------------------------------------|--------------|--------------|--------------|--------------|
| Hungarian Government Security Plus (dematerialised) | 3,179        | 2,272        | 1,572        | 472          |
| Hungarian Government Security Plus (printed)        | 60           | 212          | 195          | 62           |
| Premium Hungarian Government Security               | 759          | 556          | 660          | 3,784        |
| Premium Euro Hungarian Government Security          | 90           | 50           | 125          | 181          |
| Bonus Hungarian Government Security                 | 1            | 0            | 0            | 501          |
| Babybonds                                           | 25           | 31           | 39           | 53           |
| Treasury Savings Bills (2-year)                     | 106          | 36           | 169          | 100          |
| Treasury Savings Bills (1-year)                     | 329          | 207          | 27           | 301          |
| 1-year Hungarian Government security                | 2,246        | 1,275        | 1,200        | 829          |
| Retail securities whose sale ceased in 2019         | 116          | 0            | 0            | 0            |
| <b>Retail securities total</b>                      | <b>6,911</b> | <b>4,639</b> | <b>3,987</b> | <b>6,283</b> |

Source: ÁKK

The total gross issuance of HUF and foreign currency retail government securities was HUF 6,283 billion, a 58% increase from 2021, however that was the result of retail investors switching from Hungarian Government Security Plus to other government securities. Out of the net issuance of HUF -1,347, HUF -1,421 billion was the net issuance of retail government securities denominated in HUF, while HUF +74 billion was the net issuance of PÉMÁP (denominated in EUR).

The structure of retail financing continued to improve during 2022, the average term to maturity (ATM) of the retail debt increased by 0.34 years to 3.23 years in 2022.



Source: ÁKK

### Hungarian government bond for local authorities

ÁKK continued the issuance of fixed government bonds that can be purchased by local governments in 2022. For most of the year, the series maturing in 2025 was available for the investors, while in December 2022, following the rise in market yields, ÁKK issued a new series maturing in 2026. The Hungarian Government Bond for Local Authorities (ÖMÁK) offers an attractive investment alternative for this group of investors due to its favourable redemption before maturity and its flexibility. The total stock of ÖMÁK series decreased by HUF 48 billion to HUF 60 billion by the end of 2022.

### Foreign currency financing

ÁKK issued several foreign currency bonds in the international market, and the other foreign currency denominated borrowing (e.g. loans) also provided funding in 2022.

In February 2022 ÁKK issued 4 series of JPY bonds of JPY 75.3 billion, the longest 3 tenors are green bonds having a total volume of JPY 59.3 billion. In June 2022, ÁKK issued 7- and 12-year dollar bonds in the amount of USD 1.75 and 1.25 billion, respectively, and a 9-year euro bond in the amount of EUR 750 million. In November, Hungary executed 2 green bond issuance in Euro and CNY, and on 1st December also added a USD 400 million tranche to the already existing March 2041 serie.

| Currency | Amount                             | Date of issuance | Maturity        | Tenor (years) | Coupon     |
|----------|------------------------------------|------------------|-----------------|---------------|------------|
| JPY      | 75,300,000,000<br>(59,300,000,000) | 25.02.2022       | 25.02.2025-2032 | 3-5-7-10      | 0.45-1.15% |
| USD      | 3,000,000,000                      | 16.06.2022       | 16.06.2029-2034 | 7-12          | 5.25-5.50% |
| EUR      | 750,000,000                        | 16.06.2022       | 16.06.2031      | 9             | 4.250%     |
| EUR      | 1,000,000,000                      | 21.11.2021       | 21.11.2027      | 5             | 5.00%      |
| CNY      | 2,000,000,000                      | 17.11.2022       | 17.11.2025      | 3             | 3.750%     |

Source: ÁKK

The domestic FX bond issuance (P€MAP) was EUR 466 million. During the year, the ÁKK sold the 4- and 6-year series already sold in 2021, and then from February only new 6-year series were issued in order to further increase its term-to-maturity.

| Series | Currency | Date of issuance | Maturity   | Tenor (years) | Coupon            |
|--------|----------|------------------|------------|---------------|-------------------|
| 2025/Y | EUR      | 14.12.2021       | 15.12.2025 | 4             | Floater (Premium) |
| 2027/X | EUR      | 14.12.2021       | 17.09.2027 | 6             | Floater (Premium) |
| 2028/X | EUR      | 17.02.2022       | 23.02.2028 | 6             | Floater (Premium) |
| 2028/Y | EUR      | 10.06.2022       | 23.08.2028 | 6             | Floater (Premium) |

Source: ÁKK

In order to maintain the foreign exchange ratio at a low level and to reduce the refinancing risk of later years, ÁKK made liability management operations from the new USD bonds and bought back dollar bonds with short remaining maturity (maturities in 2023 and 2024) from the market in 2022 in the total amount of USD 1.2 billion.

ÁKK drew project financing loans of EUR 731 million and USD 234 million, the latter being the loan financing the Budapest-Belgrad railway construction. Redemptions were EUR 120 million (HUF 41 billion) and net disbursement was EUR 1.25 billion (HUF 501 billion), in line with plans.

The net FX issuance amounted to HUF 2,270 billion in 2022, meaning that the ratio of foreign currency debt increased, resulting that together with the effect of the depreciation of the Hungarian currency and despite the significant repurchase and redemptions of foreign currency bonds, the foreign exchange debt share calculated as a 90-day moving average rose to 25.1% in the end of 2022, and thus slightly exceeded the upper limit of the 10-25% benchmark range set as a target for debt management.

## V. The government debt in 2022

During 2022 the central government debt increased by HUF 4,865 billion (by 12 percent) to HUF 45,562 billion. The growth of the debt was determined by four factors.

Funding the net financing requirement of the budget that consisted of the budget balance totalling HUF -4,753 billion (deficit) which was partially offset by other net financing requirement (e.g. EU transfers at the end of the year) totalling HUF 254 billion (sufficit) was the most important factor, resulting a net borrowing requirement of HUF 4,499 billion. The increase of the HUF value of the foreign currency debt because of the depreciation of the Hungarian currency also increased the debt by HUF 732 billion in 2022. The stock of marked-to-market deposits placed at ÁKK (so-called 'other obligations') increased by HUF 209 billion in 2022.

### Central government debt

HUF billion

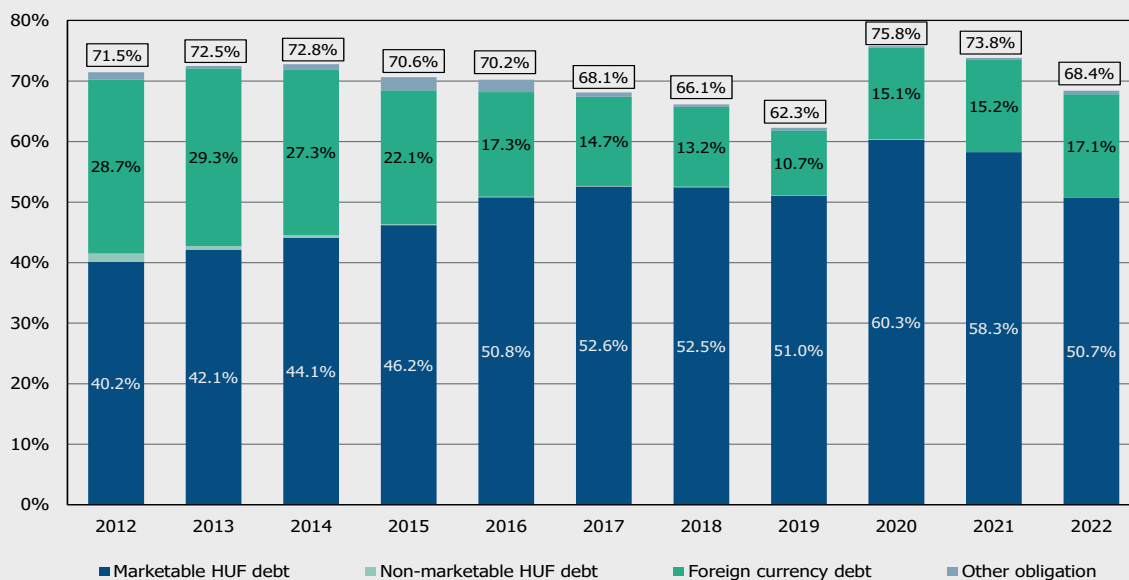
|                                          | 2021          |             | 2022          |             | Change       |
|------------------------------------------|---------------|-------------|---------------|-------------|--------------|
|                                          | debt stock    | breakdown   | debt stock    | breakdown   |              |
| <b>Domestic debt</b>                     | <b>32,121</b> | <b>79%</b>  | <b>33,776</b> | <b>74%</b>  | <b>1,654</b> |
| Loans                                    | 1,308         | 3%          | 1,024         | 2%          | -284         |
| Government bonds                         | 20,220        | 50%         | 22,346        | 49%         | 2,126        |
| Retail securities                        | 10,010        | 25%         | 8,619         | 19%         | -1,391       |
| Discount T-bills                         | 583           | 1%          | 1,786         | 4%          | 1,203        |
| <b>Foreign currency denominated debt</b> | <b>8,395</b>  | <b>21%</b>  | <b>11,397</b> | <b>25%</b>  | <b>3,002</b> |
| FX Loans                                 | 1,345         | 3%          | 1,959         | 4%          | 614          |
| FX Bonds                                 | 7,050         | 17%         | 9,438         | 21%         | 2,388        |
| <b>Total debt</b>                        | <b>40,516</b> | <b>100%</b> | <b>45,173</b> | <b>99%</b>  | <b>4,657</b> |
| Other obligations                        | 181           | 0%          | 389           | 1%          | 209          |
| <b>Grand total debt</b>                  | <b>40,697</b> | <b>100%</b> | <b>45,562</b> | <b>100%</b> | <b>4,865</b> |

Source: ÁKK

According to preliminary data, the central government debt managed by ÁKK decreased from 73.7 to 69.0 percent of GDP, while the ESA2010 general government gross debt to GDP ratio decreased by 2.6 percent to 74.1 percent in 2022.

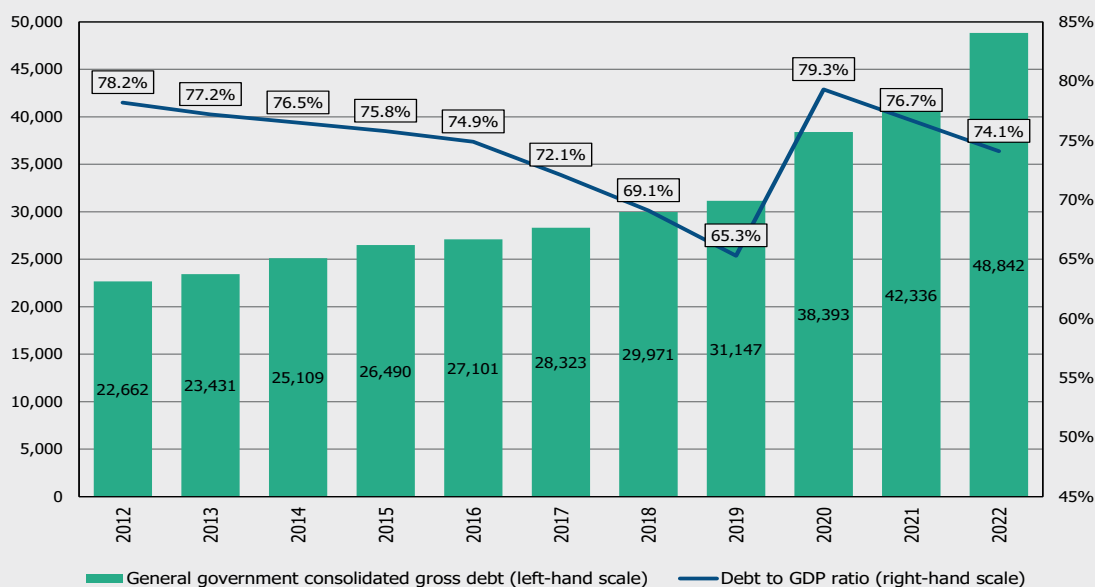
## V. The government debt in 2022

**Central government debt/GDP ratio and its breakdown**



Source: ÁKK

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



Source: Eurostat

## V. The government debt in 2022

### Characteristics of the HUF debt portfolio

In 2022 the HUF denominated debt – which accounts for 75 percent of the total debt – increased by HUF 1,654 billion (5 percent) to HUF 33,776 billion.

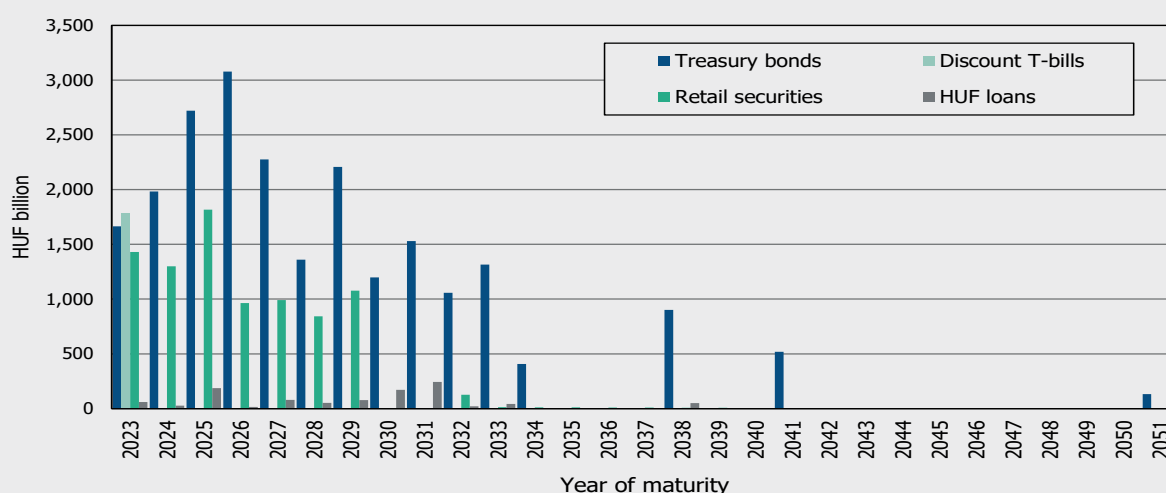
49 percent of the total public debt was in the form of long-term HUF government bonds (excluding retail bonds). The total domestic wholesale bond portfolio of HUF 22,346 billion consisted of 26 bond series (vs 28 a year before, reflecting the objective of less ISINs), the average size of a series was HUF 859 billion (ca. EUR 2.15 billion). 10 series had a volume in excess of HUF 1,000 billion (ca. EUR 2.5 billion), and the largest bond series reached a volume of HUF 1,530 billion (ca. EUR 4 billion). The average size of bond series increased substantially in 2022.

The outstanding stock of discount T-bills amounted to HUF 1,786 billion. The discount T-bill stock consisted of 17 series with an average outstanding amount of HUF 105 billion (a significant increase in comparison with 2021). The stock of Discount Treasury bills increased not only because of more active liquidity management but also the higher demand from retail investors replacing a part of their investments in the retail debt program. At the end of 2022 more than half of Discount T-bills were owned by households.

In 2022 the portfolio of domestic retail government securities decreased rapidly to HUF 8,619 billion. The portfolio of retail investors changed substantially in 2022, instead of the previous favourite MAP Plus they bought mostly inflation linked Premium Hungarian Government Security and wholesale Discount T-bills. Premium Hungarian Government Security had the highest share by increasing by HUF 2,119 billion to HUF 4,322 billion. The stock of Hungarian Government Security Plus (dematerialised and printed) declined by HUF 3,927 billion to HUF 2,435 billion. The stock of the short term 1-year Hungarian Government Security decreased modestly to HUF 808 billion, while the stock of the very long-term Babybond increased by HUF 50 billion and totalled HUF 199 billion at the end of 2022. The share of domestic retail securities decreased to 26 per cent within the total domestic debt.

The volume of loans denominated in Hungarian forint decreased by HUF 284 billion to HUF 1,024 billion in 2022 as a result of maturities.

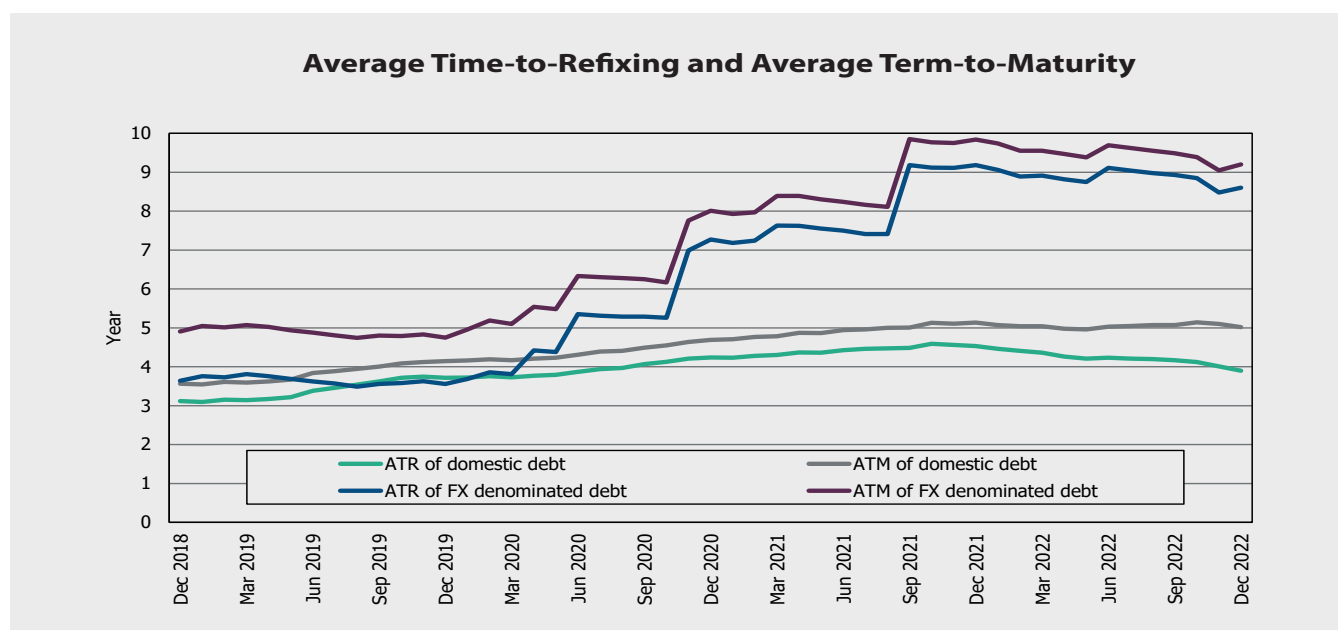
**Maturity profile of domestic debt at the end of 2022**



Source: ÁKK

## V. The government debt in 2022

As a result of the lengthening the average term-to-maturity of the retail portfolio (increasing role of the inflation linked – floating rate – retail securities with long tenor), moving towards longer terms at auctions and switch operations and while an increasing stock of Discount T-bills the refinancing risk of the debt remained about the same. The average time-to-refixing (ATR) of the domestic debt decreased from 4.5 years to 4.0 years, while the average term-to-maturity (ATM) remained at 5.1 years during 2022.



Source: ÁKK

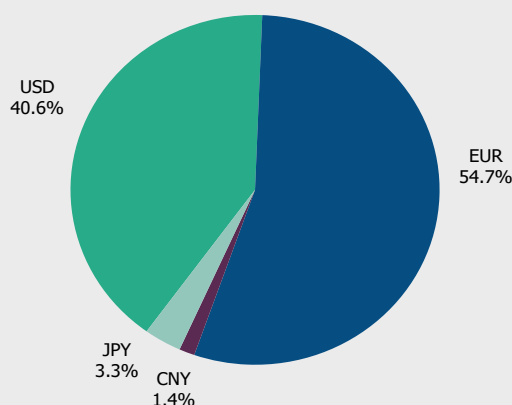
### Characteristics of the foreign currency debt portfolio

The gross foreign currency government debt increased by HUF 3,002 billion in 2022, reaching HUF 11,397 billion (EUR 28,5 billion) by the end of the year. The share of foreign currency debt within the total gross government debt increased to 25 percent in 2022 (end-of-year data, not moving average).

The volume of outstanding foreign currency bonds (after swaps) reached HUF 9,438 billion by the end of the year, increasing from HUF 7,050 billion at the end of 2021. Bonds accounted for 83% of the total foreign currency debt portfolio. On 31 December 2022 there were 36 series of foreign currency bonds outstanding, 18 of which had been issued in euro (including the domestic euro bonds as well), 8 in US dollars, 8 in Japanese Yen and 2 in Chinese Yuan. In accordance with the strategy and benchmarks, all non-euro bonds had been converted into euro liabilities through swap transactions.

## V. The government debt in 2022

**Breakdown of foreign currency debt before swaps  
by currencies at the end of 2022**

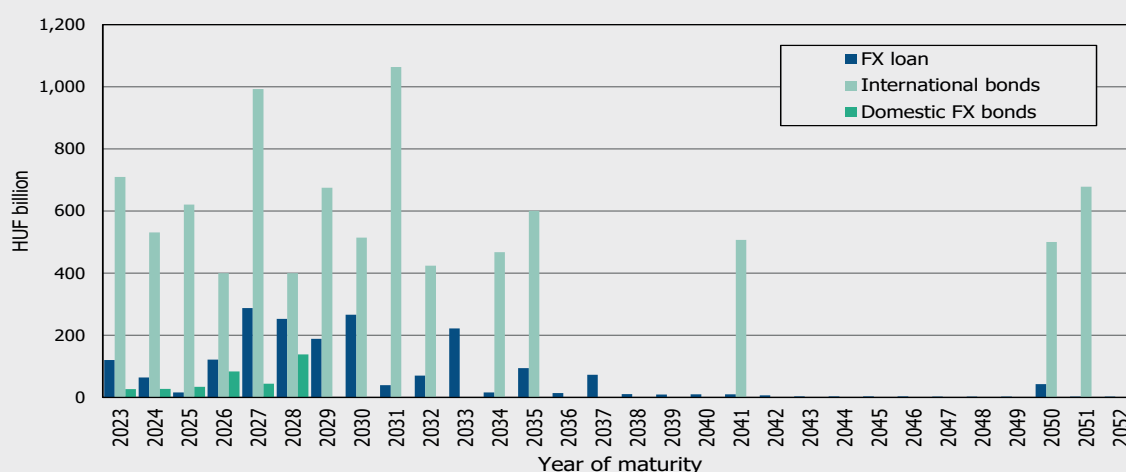


Source: ÁKK

At the end of 2022 100% of the foreign currency debt was denominated in euro (after swaps).

The foreign currency loan portfolio consisted of long-term project financing loans from international financing institutions (e.g. EIB, CEB, AIIB and loans from the European Union) and loans from the Paks 2 nuclear power plant and the Budapest-Belgrad railway project. The share of loans within total foreign currency debt was 17% at the end of 2022.

**Maturity profile of foreign debt at the end of 2022**



Source: ÁKK

As a result of increasing share of the loan portfolio the average term-to-maturity of the foreign currency portfolio decreased from 9.8 years to 9.2 years and the average time-to-refixing also decreased from 9.2 years to 8.6 years during 2022.

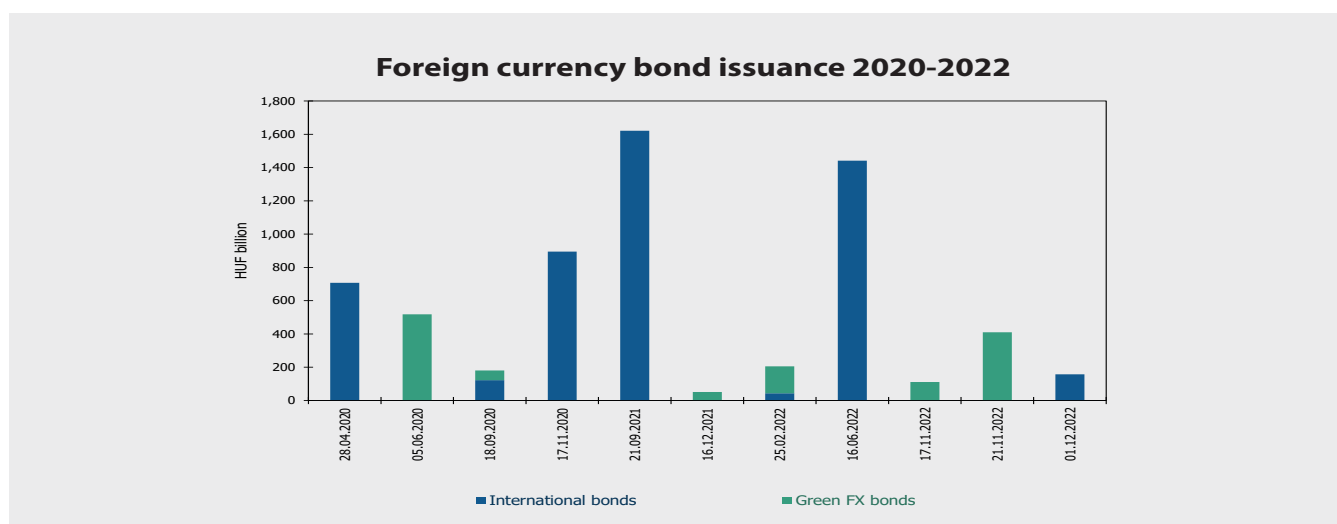
## V. The government debt in 2022

### Green bonds

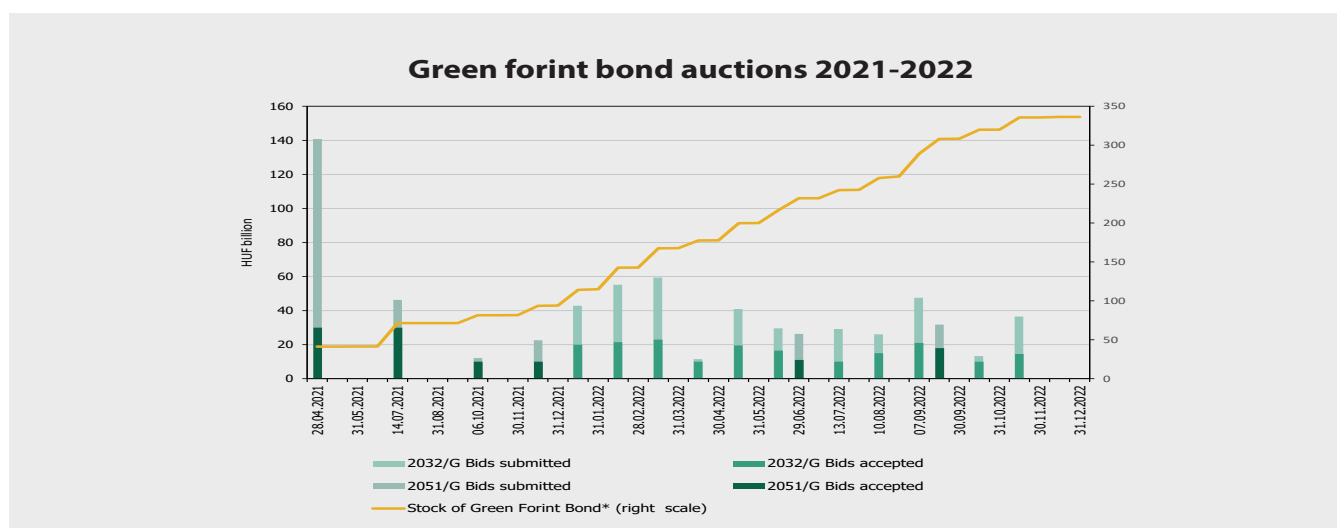
In line with international efforts, Hungary, through ÁKK Zrt., intends to actively contribute to sustainable financing internationally as well as on the Hungarian domestic capital market by issuing green bonds. Within the ESG (Environmental, Social, and Governance) system, a green bond is an innovative financial product that specifically targets resources to support green investment. Green bond is issued to finance and refinance environmentally friendly projects that also take sustainability into account.

Hungary's first international euro Green Bond was issued on 2 June 2020 in the amount of EUR 1.5 billion (HUF 518.4 billion). In the coming years Hungary also issued Green bonds in Japanese yen and Chinese yuan. In 2022 Hungary again was very active in green issuance, since tapped all three markets: in February with 3 series of JPY 59.3 billion, and in November with bonds of EUR 1 billion and CNY 2 billion.

The Green Bond Framework Program was expanded also in the HUF government bond market. After the 30-year green bond issued in 2021, ÁKK introduced a 10-year green bond (2032/G) in 2022 in the local market as well. That bond is sold in parallel with a same tenor 10-year standard security. By the end of December 2022, via the auctions, the green HUF bond portfolio reached HUF 336 billion (EUR 0.84 billion). Non-resident interest is high in case of green bonds, foreign ownership is more than twice that of normal bonds at 44 pc share.



Source: ÁKK



Source: ÁKK

## V. The government debt in 2022

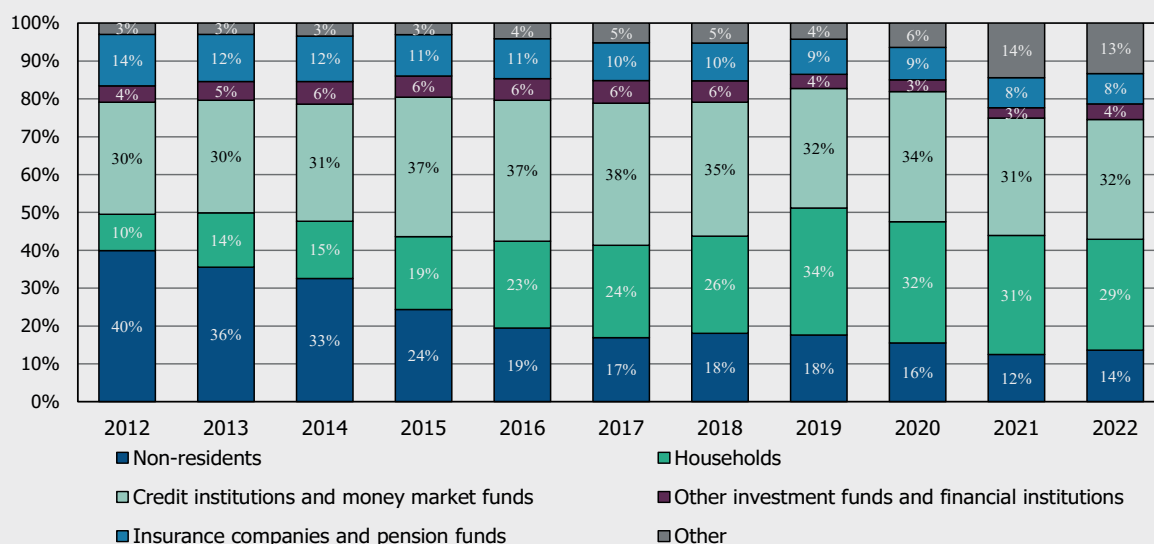
### Other obligations

In order to reduce counterparty risk associated with the swap transactions concluded by ÁKK, so-called marked-to-market deposits are being placed as collateral covering the net value of their swap positions. Such deposits placed with ÁKK are shown as part of the government debt among 'other obligations'. Due to the appreciation of the euro against other currencies, the maturity of FX debt denominated in USD and other operations ÁKK received a significant amount of deposits from its swap partners. As of 31 December 2022 marked-to-market deposits placed with ÁKK totalled HUF 389 billion (EUR 0.97 billion), by HUF 208 billion higher than at the end of 2021.

### The ownership structure of government debt

According to statistics published by the Magyar Nemzeti Bank, the most important investor of Hungarian government securities is the banking sector with a 32% market share. Households are still an important investors with a somewhat lower, 29% share. After the finishing the QE, the share of other investors declined and non-resident investors became the 3rd most important investors with a 14% market share.

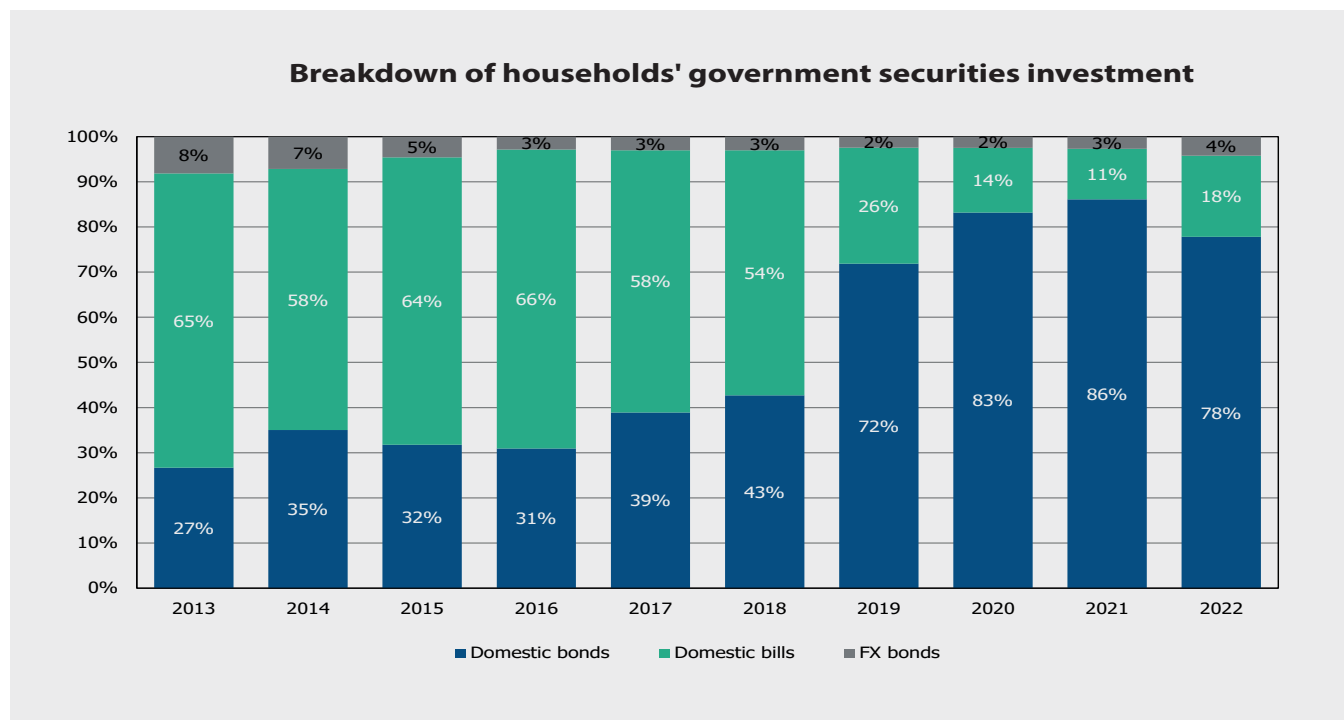
**Ownership structure of domestic public debt by investors**



Source NBH

In 2022 non-residents increased their share in the domestic market in nominal terms. Non-resident holdings of HUF denominated government securities increased by HUF 1002 billion to HUF 5,152 billion. At the same time the duration of their holdings remained at 5.15 years, while the ATM of their holdings increased to 6.47 years in 2022. Foreign investors keep holding primarily longer dated bonds, and both the duration and the ATM of the non-resident holdings are longer than that of the total outstanding stock of HUF government securities.

## V. The government debt in 2022



Source NBH

The maturity of the retail program continued to increase in 2022. After the introduction of the 5-year Hungarian Government Security Plus in May 2019, the previously T-bill dominated retail portfolio changed for longer term. This process continued in 2022 as well when retail investors switched from Hungarian Government Security Plus to the even longer tenor inflation linked Premium Hungarian Security. By the end of 2022 78 percent of the portfolio was in domestic bonds, most of it in long-term securities.

## VI. Liquidity management

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According to the Act on the Economic Stability of Hungary, liquidity management of the central government is also the responsibility of ÁKK. The goal of ÁKK is to maintain the balance of the Treasury Single Account (TSA) which serves as a financing reserve at a targeted level and the excessive volatility of the cash balance is managed with liquidity management operations. These operations may be active (placement of funds) or passive (fund-raising) transactions, however, ÁKK only invests temporary excess liquid funds from the TSA if repo partners show adequate demand, otherwise it keeps the extra cash on the TSA.

In 2022 ÁKK used the following instruments to manage the end-of-day balance of the TSA:

- repo and reverse repo transactions with government securities;
- active adjustment of the volume of 3 and 12 months discount treasury bills at auctions;
- bond buy-backs;
- temporary use of FX deposits;
- Stand-by credit lines (re-introduced in 2022).

The adequate instruments are chosen mainly as a function of the duration of the required liquidity adjustment; repos are very short term instruments, while discount T-bills and buy-backs have longer term liquidity effects.

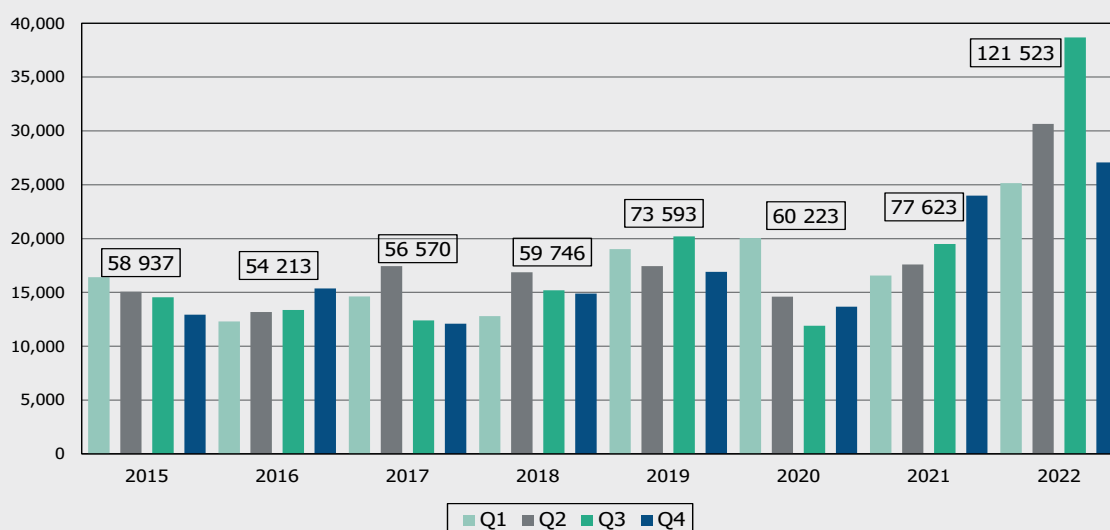
Liquidity repo transactions are ÁKK's main tool for fine-tuning the end-of-day balance of the Treasury Single Account. In 2022 the use of repo transactions decreased significantly to HUF 9,553 billion as the banking sector demand for short term liquidity decreased. As a result of effective liquidity management the end-of-day TSA balance was always higher than the minimum target level in 2022.

ÁKK concludes repo transactions not only for liquidity management purposes. The objective of the so-called stand-by repo facility is to support the price quotation of Primary dealers and to promote trading in government securities. If a Primary dealer needs temporary access to a quoted government security, and is unable to obtain it in the market, that dealer may turn to ÁKK to provide the required security in a one-week repo transaction.

## VII. The secondary market of Hungarian government securities

MTS Hungary is the main electronic platform of trading government securities and Primary dealers fulfil their price quotation obligations on this platform, however, more than 99% of all secondary trade is executed in the over-the-counter (OTC) market. According to data from the KELER Central Depository Ltd., the total volume of OTC trading in government securities was HUF 121,523 billion in 2022 (up 57% from 2021, about 4 times the size of the total outstanding marketable debt), out of which 91 percent was in government bonds and 9 percent in discount treasury bills.

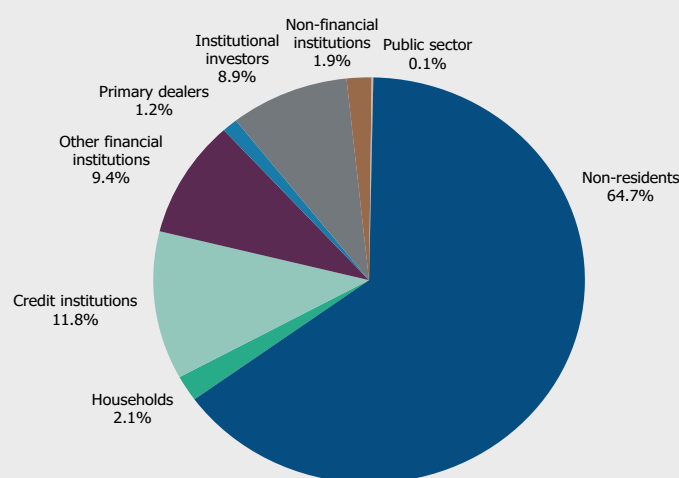
**Secondary market turnover of government securities (KELER OTC and MTS)**



Source: KELER, MTS

The average size of deals with Primary dealers (excluding retail transactions) was HUF 807 million, which is HUF 59 million higher than in the previous year. Over the year, the 2032/A government bond with a 10-year term-to-maturity had the largest turnover (HUF 4,023 billion), followed by the 11-year 2033/A and the 6-year (remaining term-to-maturity) 2028/B bonds.

**Secondary market trading of primary dealers by investors in 2022**

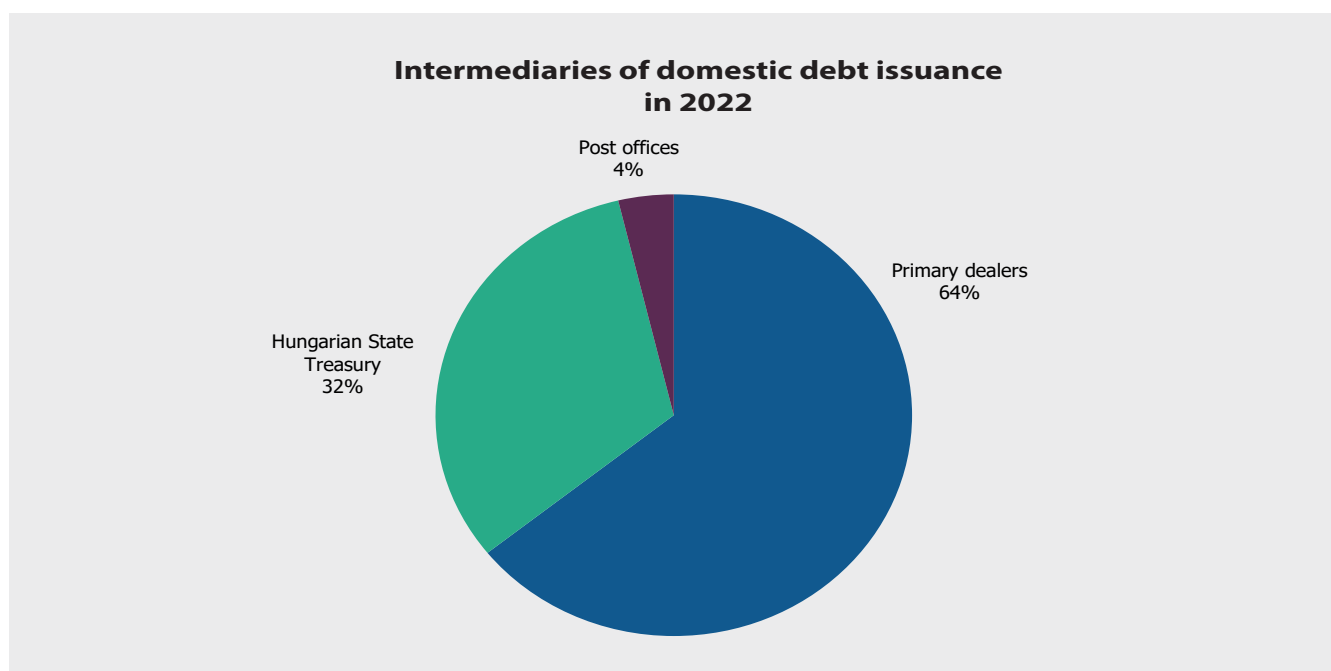


Source: Primary dealers, ÁKK

The most active Primary dealer and the winner of the title 'Primary dealer of the Year' for 2022 was Goldman Sachs Bank Europe SE, while in the retail program the winner was the Hungarian State Treasury.

## VIII. The institutional framework for the issuance of government securities

ÁKK sells government securities through intermediaries to investors. In the domestic market, 64 percent of HUF-denominated government securities were sold through the Primary dealers in 2022, the rest through dedicated retail channels, the increasing share reflects a fast development of the retail debt program by the Hungarian State Treasury in Hungary in 2022.



Forrás: ÁKK

### The primary dealer system

The Primary dealer system for government securities was set up in 1996 in order to establish a more secure institutional base for the financing of government debt, to reduce the costs of debt management and to improve the transparency and liquidity of the secondary market in government securities.

Since May 2004, any investment firm or bank registered in the European Economic Area may become a Primary dealer in Hungarian government securities if it meets the contractual requirements and signs a Primary dealer contract with ÁKK. Along with a number of obligations in the primary and secondary market, the Primary dealer status also guarantees exclusive rights. In 2022 5 out of the 13 Primary dealers were non-resident institutions.

## VIII. The institutional framework for the issuance of government securities

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### **Primary dealers at the end of 2022:**

BNP Paribas SA  
CIB Bank Zrt.  
Citibank Europe Plc. Hungary Branch  
Deutsche Bank AG  
Erste Befektetési Zrt.  
Goldman Sachs Bank Europe SE  
ING Bank N.V. Hungary Branch  
J. P. Morgan SE  
K&H Bank Zrt.  
MKB Bank Nyrt.  
OTP Bank Nyrt.  
Raiffeisen Bank Zrt.  
UniCredit Bank AG

### **Only Primary dealers may:**

1. directly submit bids at government bond and discount treasury bill auctions and submit offers at bond buy-back and exchange auctions;<sup>3</sup>
2. directly submit non-competitive bids at auctions and submit bids at the non-competitive phase after bond auctions;
3. use the stand-by repo facility provided to Primary dealers by ÁKK to support their secondary market trading and price quotation;
4. participate at the consultations organised by ÁKK;
5. use the title 'Primary dealer'.

In addition to their exclusive rights, primary dealers are also ÁKK's main partners for international capital market transactions and liquidity management (repo) and other transactions.

As of July 2022 ÁKK made several changes to its Primary dealer system, mostly to support PDs' activities.

Among others,

- ÁKK changed the PD ranking methodology, also by introducing a new category measuring their market making quality;
- connected incentives to their performance;
- rationalised the penalty system (e.g. abolished financial penalties);
- mainly eased certain price quotation rules;
- established the Non-PD Market Maker status, which allows other dealers to enter the secondary market of Hungarian government securities (but not the primary market) with several privileges (alongside obligations) to enhance the secondary market liquidity by these new entrants.

In 2022 negotiations were still ongoing with several candidates to enter as a Non-PD Market Makers.

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<sup>3</sup> Other investors may submit bids at an auction indirectly, through a Primary dealer.

## VIII. The institutional framework for the issuance of government securities

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### Retail debt programmes

The State Treasury's branch network provides direct access to government securities for retail investors. Supervised by ÁKK, the State Treasury branch offices in Budapest and the county seats and other major cities quote two-way prices for retail investors for publicly issued bonds, Hungarian Government Securities Plus, Premium Hungarian Government Securities, Premium Euro Hungarian Government Securities, Babybonds, discount treasury bills and the 1-year Hungarian Government Securities. Government securities may also be purchased and sold through the Hungarian State Treasury's online banking service, mobile application or by phone.

The Hungarian Post Office participates in the sale of three retail government securities. The Hungarian Government Securities Plus are sold in printed and dematerialised forms, and the 1 and 2-year Treasury Savings Bills are government securities available only in printed form, designed specifically for retail investors.

Retail government securities are also sold through the network of retail primary dealers, banks and brokerage firms who signed a contract with ÁKK to sell retail government securities directly to households.

### The dealers of foreign currency bond issues

Lead managers of international EUR and USD bond issuances are selected from among the primary dealers (or its bank groups) individually for each transaction.

#### Lead managers in 2022:

|                              |                                                                       |
|------------------------------|-----------------------------------------------------------------------|
| <b>Bonds in USD and EUR:</b> | BNP Paribas, Deutsche Bank, Goldman Sachs Europe SE, ING, J.P. Morgan |
| <b>Bonds in JPY:</b>         | Daiwa Securities, Mizuho Securities, Nomura Securities Co Ltd         |
| <b>Green CNY Bond:</b>       | Bank of China, China Construction Bank, Export-Import Bank of China   |

ÁKK sells 3-year inflation linked domestic bond denominated in EUR ('Premium Euro Government Bond', P€MÁK) from 2012. From 2020 ÁKK started to lengthen the tenor of the bond and from 2022 sells one serie with a 6-year tenor. The bonds are available only in the Hungarian State Treasury branch network.

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

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The government debt management is regulated by Act no. CXCV. of 2011 on the Economic Stability of Hungary (the Stability Act). Among other provisions, this law and the Act no. CXCV of 2011 on the Public Finances authorises the minister responsible for the public finances (the Minister of Finance) to provide for the implementation of the central budget, financing of the deficit, continuous solvency of the budget, the repayment of debt and the management of temporarily free state funds. Annual budget acts make this authorisation more specific by stipulating the annual financing requirement. According to the provisions of the Stability Act, the minister responsible for public finances performs these tasks through the Government Debt Management Agency Pte. Ltd. (ÁKK).<sup>4</sup>

Pursuant to an amendment of the Public Finances Act, the Government Debt Management Agency Pte. Ltd. was established on 1 March 2001 as the legal successor of a government agency that had performed the same tasks. The organisation, which operates as an independent corporate entity, is a single-member corporation limited by shares registered at the Court of Registration. Its shares may not be traded, the Hungarian State is their sole and permanent owner, and these ownership rights are exercised by the minister responsible for the public finances (the Minister of Finance). The rules governing the operations of ÁKK as a company are stipulated by general legislation on the operation of companies. Accordingly, the management's activities are controlled by the Board of Directors, while ÁKK's operation is under the supervision of a Supervisory Board and an auditor pursuant to the corporate status. In addition to these internal management and audit mechanisms, the debt management activity is regularly audited by the State Audit Office. The operation of ÁKK is closely linked to the Ministry of Finance and the Hungarian State Treasury. The co-ordination of the professional activity of these organisations is carried out by the Minister of Finance.

According to the decision-making mechanism in place, the government debt management strategy, the annual financing plan and the benchmarks are approved by the Board of Directors, followed by approval from the Minister of Finance. All responsibilities of ÁKK, which are not the responsibilities of the Board are carried out by the Management of ÁKK.

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<sup>4</sup> The most important provisions concerning the financing of the deficit and government debt management, effective as of December 2020, are provided in Section 4 of the Appendix.

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

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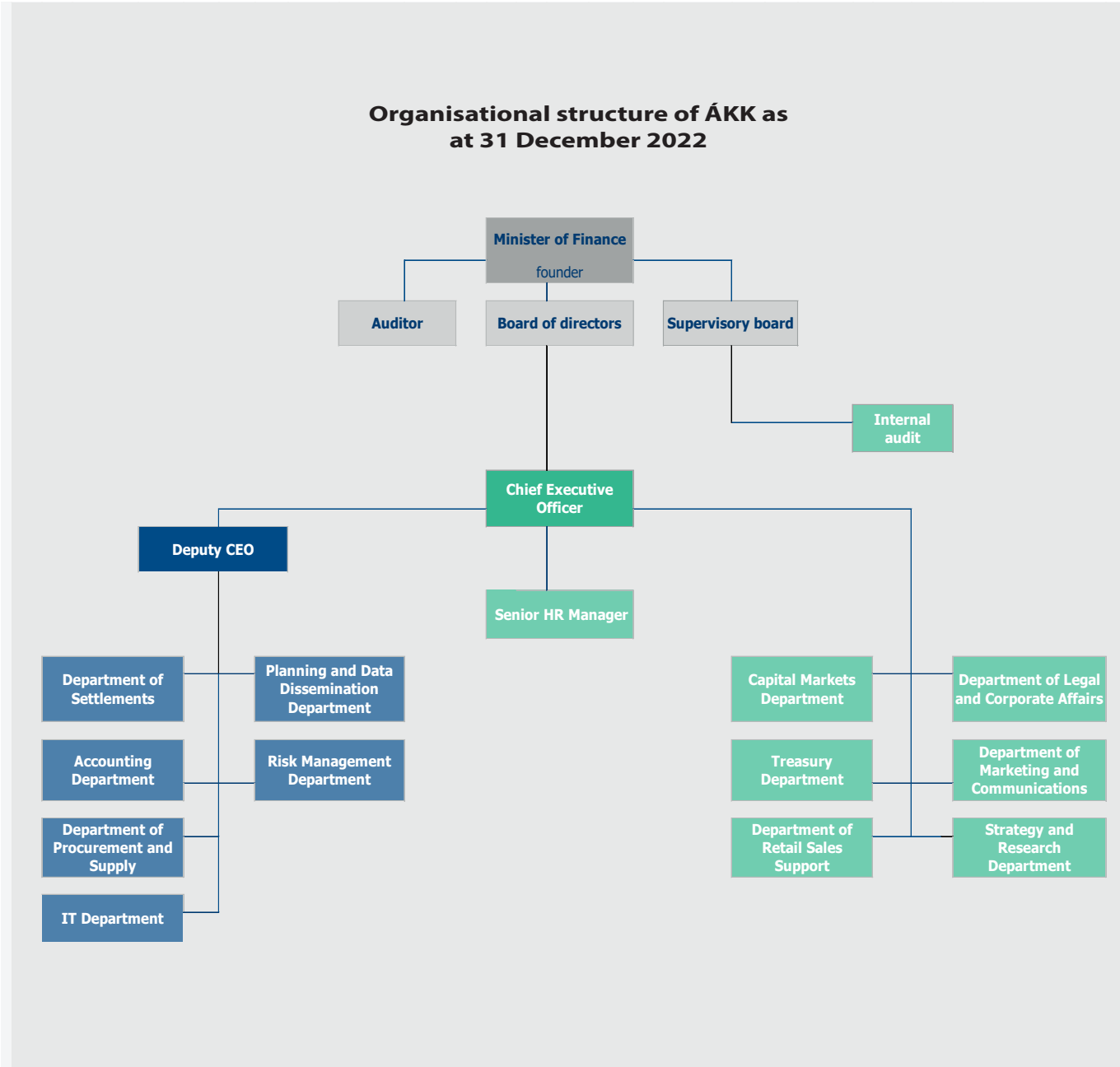
### The responsibilities of ÁKK

According to the provisions of Article 13 of the Act on the Economic Stability of Hungary, the responsibilities of ÁKK include the following major tasks:

- developing a long-term financing strategy in line with economic policy, which determines the objectives of debt management and the means of their implementation;
- preparing the annual and medium-term financing plans and planning the annual interest expenditure based on the annual Budget Act and in line with the strategy;
- performing the required financing operations, i.e. organising and implementing both domestic and international government securities issuance and raising of loans;
- ensuring the payment obligations burdening the central government debt;
- managing the temporarily free cash funds of the state (liquidity management);
- effecting debt redemptions and interest payments;
- organising and continuously developing the government securities market (the primary dealer system, sales channels, secondary market etc.);
- expressing its opinion on the financial terms and conditions of borrowings with a state guarantee; on request, organising transactions with individual guarantees (with a lesser role for guarantees prescribed by legislation).
- may participate in the management of the free cash funds of the National Deposit Insurance Fund and the Reorganization Fund;
- may participate in management of cash funds of the Investor Protection Fund;
- may participate in financing related to MVM Paks II. Nuclear Power Plant Development.

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

Organisational structure of ÁKK as at 31 December 2022



## X. The information services of ÁKK

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ÁKK provides information to the general public about the central government debt and the developments in the government securities market. It fulfils these tasks using several media: its website, other electronic communications systems and its publications.

The website at [www.akk.hu](http://www.akk.hu)<sup>5</sup> provides a wide range of information about the government securities market and the government debt. Already the homepage shows the most important data, such as the latest news, the current volume of government debt, upcoming auctions, the latest auction results and daily market yields (benchmark fixings).

The 'Introduction' menu provides information on ÁKK as a company, the goals, activities, legal framework and the organisational structure of ÁKK.

The 'Statistics' menu provides access to main features of the government securities, the results of the auctions and subscriptions, yields, government security indices and statistics related to the secondary market, government debt and financing. Historical figures are also available here.

The 'Government securities issuance and trading' menu includes the description of types of government securities, rules of procedure and information about the sales system of government securities (Primary dealers, retail sale).

The 'Publication and Press releases' menu provides access to the publications of ÁKK in electronic (pdf) format. The menu also contains the public analyses prepared by ÁKK and press releases of the ÁKK.

As a new feature, the "Green bond" menu provides information about Hungary's Green Bond Framework and its Green bond issuances.

A newsletter service is offered to registered users of the website free of charge. Subscribers receive newly uploaded data by e-mail or an e-mail notification about newly added contents.

For retail investors ÁKK has another website, [www.allampapir.hu](http://www.allampapir.hu), where they can find all relevant information about retail instruments (types, list of retail security dealers, descriptions etc.), available only in Hungarian.

In addition to its website, ÁKK publishes auction and secondary market price quotation data on the information pages of Bloomberg and Refinitiv.

ÁKK holds regular press conferences on annual financing, the ranking of primary dealers and on other special topics. The press conference materials can also be found on ÁKK's website.

ÁKK also regularly informs interested readers in free publications. The following publications are available on the website:

- Debt Management Outlook publications (at the beginning of the actual year);
- Annual reports (released in the year following the actual year);
- Investor Presentation (in English only);
- Quarterly reports (the second month after the actual quarter);
- Monthly reports (at the end of the next month);
- Issuance calendar (in December of the year preceding the actual year).

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<sup>5</sup> The site is also available at [www.gdma.hu](http://www.gdma.hu)

# Appendix

## 1. The central government gross debt as at 31.12.2022 (HUF million)

| HUF denominated debt       |            |                        |                    |
|----------------------------|------------|------------------------|--------------------|
| Hungarian Government Bonds | Maturity   | Coupon                 | Outstanding amount |
| 2023/K                     | 15.02.2023 | Floating rate, Premium | 48,584.57          |
| 2023/I                     | 22.03.2023 | Floating rate, Premium | 52,992.29          |
| 2023/Z                     | 24.05.2023 | 1.00%                  | 4,897.07           |
| 2023/L                     | 31.05.2023 | Floating rate, Premium | 177,521.34         |
| 2023/B                     | 26.07.2023 | Floating rate          | 330,520.99         |
| 2023/C                     | 23.08.2023 | 1.50%                  | 354,524.58         |
| 2023/J                     | 28.09.2023 | Floating rate, Premium | 73,706.20          |
| 2023/A                     | 24.11.2023 | 6.00%                  | 910,632.74         |
| 2024/I                     | 21.02.2024 | Floating rate, Premium | 114,427.51         |
| 2024/O                     | 24.04.2024 | Floating rate, Bonus   | 341.20             |
| 2024/P                     | 24.04.2024 | Floating rate, Bonus   | 989.07             |
| 2024/B                     | 26.06.2024 | 3.00%                  | 810,202.66         |
| 2024/N                     | 26.08.2024 | Floating rate, Bonus   | 4,765.71           |
| 2024/J                     | 25.09.2024 | Floating rate, Premium | 73,523.59          |
| 2024/C                     | 24.10.2024 | 2.50%                  | 1,172,573.60       |
| 2024/K                     | 20.12.2024 | Floating rate, Premium | 100,196.31         |
| 2025/I                     | 20.02.2025 | Floating rate, Premium | 51,415.78          |
| 2025/K                     | 27.03.2025 | Floating rate, Premium | 273,651.87         |
| 2025/Z                     | 24.04.2025 | 2.50%                  | 21,899.05          |
| 2025/J                     | 21.05.2025 | Floating rate, Premium | 175,733.81         |
| 2025/B                     | 24.06.2025 | 5.50%                  | 1,231,282.44       |
| 2025/N                     | 30.09.2025 | Floating rate, Bonus   | 498,266.60         |
| 2025/C                     | 26.11.2025 | 1.00%                  | 1,466,831.95       |
| 2026/J                     | 20.02.2026 | Floating rate, Premium | 240,327.99         |
| 2026/Z                     | 25.03.2026 | 8.00%                  | 32,896.63          |
| 2026/E                     | 22.04.2026 | 1.50%                  | 1,265,097.23       |
| 2026/I                     | 20.07.2026 | Floating rate, Premium | 196,909.55         |
| 2026/F                     | 26.08.2026 | 1.50%                  | 816,355.03         |
| 2026/N                     | 22.09.2026 | Floating rate, Bonus   | 3,216.47           |
| 2026/D                     | 22.12.2026 | 2.75%                  | 962,495.15         |
| 2027/J                     | 27.01.2027 | Floating rate, Premium | 632,619.39         |
| 2027/I                     | 24.03.2027 | Floating rate, Premium | 196,385.68         |
| 2027/B                     | 22.04.2027 | Floating rate          | 1,018,659.23       |
| 2027/A                     | 27.10.2027 | 3.00%                  | 1,256,119.17       |
| 2028/I                     | 23.02.2028 | Floating rate, Premium | 290,698.22         |
| 2028/N                     | 22.03.2028 | Floating rate, Bonus   | 5,498.31           |
| 2028/O                     | 22.03.2028 | Floating rate, Bonus   | 1,625.78           |
| 2028/B                     | 23.03.2028 | 4.50%                  | 640,018.48         |
| 2028/J                     | 20.04.2028 | Floating rate, Premium | 263,738.80         |
| 2028/K                     | 20.06.2028 | Floating rate, Premium | 281,861.99         |
| 2028/A                     | 22.10.2028 | 6.75%                  | 719,769.50         |

|                                                                                           |            |                         |                      |
|-------------------------------------------------------------------------------------------|------------|-------------------------|----------------------|
| 2029/I                                                                                    | 21.02.2029 | Floating rate, Premium  | 528,411.33           |
| 2029/J                                                                                    | 21.03.2029 | Floating rate, Premium  | 548,913.11           |
| 2029/A                                                                                    | 23.05.2029 | 2.00%                   | 927,147.86           |
| 2029/B                                                                                    | 22.08.2029 | Floating rate           | 1,279,666.30         |
| 2030/A                                                                                    | 21.08.2030 | 3.00%                   | 1,198,976.29         |
| 2031/A                                                                                    | 22.10.2031 | 3.25%                   | 1,529,618.72         |
| 2032/G                                                                                    | 27.05.2032 | 4.50%                   | 204,535.47           |
| 2032/B                                                                                    | 25.08.2032 | Floating rate           | 145,175.88           |
| 2032/A                                                                                    | 24.11.2032 | 4.75%                   | 707,929.50           |
| 2032/S                                                                                    | 02.12.2032 | Floating rate, Babybond | 126,017.29           |
| 2033/S                                                                                    | 01.02.2033 | Floating rate, Babybond | 12,870.58            |
| 2033/A                                                                                    | 20.04.2033 | 2.25%                   | 1,314,723.20         |
| 2034/S                                                                                    | 01.02.2034 | Floating rate, Babybond | 10,455.06            |
| 2034/A                                                                                    | 22.06.2034 | 2.25%                   | 407,071.78           |
| 2035/S                                                                                    | 01.02.2035 | Floating rate, Babybond | 10,345.27            |
| 2036/S                                                                                    | 01.02.2036 | Floating rate, Babybond | 9,559.96             |
| 2037/S                                                                                    | 01.02.2037 | Floating rate, Babybond | 9,354.31             |
| 2038/S                                                                                    | 01.02.2038 | Floating rate, Babybond | 7,945.35             |
| 2038/A                                                                                    | 27.10.2038 | 3.00%                   | 901,667.95           |
| 2039/S                                                                                    | 01.02.2039 | Floating rate, Babybond | 6,478.41             |
| 2040/S                                                                                    | 01.02.2040 | Floating rate, Babybond | 4,407.96             |
| 2041/S                                                                                    | 01.02.2041 | Floating rate, Babybond | 1,412.52             |
| 2041/A                                                                                    | 25.04.2041 | 3.00%                   | 519,397.84           |
| 2051/G                                                                                    | 28.04.2051 | 4.00%                   | 131,748.06           |
| Matured, but unclaimed government bonds                                                   |            |                         | 83.37                |
| <b>Total</b>                                                                              |            |                         | <b>27,317,686.90</b> |
| Repos with government bonds (repos actually increase or decrease the total amount)        |            |                         | 63,759               |
| <b>Discount Treasury Bills</b>                                                            |            |                         | <b>1,772,058.83</b>  |
| Repos with discount Treasury bills (repos actually increase or decrease the total amount) |            |                         | 13,724.01            |
| <b>Hungarian Government Security Plus (dematerialized)</b>                                |            |                         | <b>2,183,953.48</b>  |
| <b>Hungarian Government Security Plus (printed)</b>                                       |            |                         | <b>250,537.22</b>    |
| <b>1-year Hungarian Government Security</b>                                               |            |                         | <b>807,802.04</b>    |
| Out of which matured, but unclaimed                                                       |            |                         | 36.09                |
| <b>Treasury Savings Bills (1-year)</b>                                                    |            |                         | <b>250,746.09</b>    |
| <b>Treasury Savings Bills (2-year)</b>                                                    |            |                         | <b>91,103.49</b>     |
| <b>HUF loans</b>                                                                          |            |                         | <b>1,024,205.27</b>  |
| Matured, but unclaimed other retail government securities                                 |            |                         | 51.83                |
| <b>Total HUF debt</b>                                                                     |            |                         | <b>33,775,628.15</b> |

| Foreign currency debt                                                  |          |                                           |                  |        | Outstanding amount<br>(HUF million) | Outstanding amount<br>(EUR million) |
|------------------------------------------------------------------------|----------|-------------------------------------------|------------------|--------|-------------------------------------|-------------------------------------|
| Syndicated loan and loans drawn down from revolving credit facilities* |          |                                           |                  |        | 0                                   | 0                                   |
| Loans granted by International Financial Institutions*                 |          |                                           |                  |        | 1,837,497.01                        | 4,590.87                            |
| Foreign currency loans taken over*                                     |          |                                           |                  |        | 121,581.82                          | 303.76                              |
| Government bonds issued since 1999                                     |          |                                           |                  |        |                                     |                                     |
| Maturity date                                                          | Currency | Outstanding amount<br>(original currency) | Maturity (years) | Coupon | Outstanding amount<br>(HUF million) | Outstanding amount<br>(EUR million) |
| 21.02.2023                                                             | USD      | 959,296,000                               | 10               | 5.375% | 360,388.32                          | 900.41                              |
| 15.09.2023                                                             | JPY      | 22,700,000,000                            | 3                | 0.520% | 64,551.99                           | 161.28                              |
| 22.11.2023                                                             | USD      | 1,151,760,000                             | 10               | 5.750% | 432,693.20                          | 1,081.06                            |
| 25.03.2024                                                             | USD      | 1,642,972,000                             | 10               | 5.375% | 617,231.72                          | 1,542.12                            |
| 16.12.2024                                                             | CNY      | 1,000,000,000                             | 3                | 3.280% | 54,100.00                           | 135.17                              |
| 25.02.2025                                                             | JPY      | 16,000,000,000                            | 3                | 0.450% | 45,499.20                           | 113.68                              |
| 18.09.2025                                                             | JPY      | 20,000,000,000                            | 5                | 0.740% | 56,874.00                           | 142.10                              |
| 22.10.2025                                                             | EUR      | 1,000,000,000                             | 7                | 1.250% | 400,250.00                          | 1,000.00                            |
| 17.11.2025                                                             | CNY      | 2,000,000,000                             | 3                | 3.750% | 108,200.00                          | 270.33                              |
| 28.04.2026                                                             | EUR      | 1,000,000,000                             | 6                | 1.125% | 400,250.00                          | 1,000.00                            |
| 22.02.2027                                                             | EUR      | 1,000,000,000                             | 5                | 5.000% | 400,250.00                          | 1,000.00                            |
| 25.02.2027                                                             | JPY      | 46,800,000,000                            | 5                | 0.730% | 133,085.16                          | 332.51                              |
| 17.09.2027                                                             | JPY      | 15,500,000,000                            | 7                | 1.03%  | 44,077.35                           | 110.12                              |
| 10.10.2027                                                             | EUR      | 1,000,000,000                             | 10               | 1.750% | 400,250.00                          | 1,000.00                            |
| 21.09.2028                                                             | EUR      | 1,000,000,000                             | 7                | 0.13%  | 400,250.00                          | 1,000.00                            |
| 22.02.2029                                                             | JPY      | 4,700,000,000                             | 7                | 0.91%  | 13,365.39                           | 33.39                               |
| 16.06.2029                                                             | USD      | 1,750,000,000                             | 7                | 5.25%  | 657,440.00                          | 1,642.57                            |
| 18.09.2030                                                             | JPY      | 4,500,000,000                             | 10               | 1.29%  | 12,796.65                           | 31.97                               |
| 18.11.2030                                                             | EUR      | 1,250,000,000                             | 10               | 0.500% | 500,312.50                          | 1,250.00                            |
| 16.06.2031                                                             | EUR      | 750,000,000                               | 9                | 4.250% | 300,187.50                          | 750.00                              |
| 22.09.2031                                                             | USD      | 2,250,000,000                             | 10               | 2.13%  | 845,280.00                          | 2,111.88                            |
| 25.02.2032                                                             | JPY      | 7,800,000,000                             | 10               | 1.15%  | 22,180.86                           | 55.42                               |
| 28.04.2032                                                             | EUR      | 1,000,000,000                             | 12               | 1.63%  | 400,250.00                          | 1,000.00                            |
| 16.06.2034                                                             | USD      | 1,250,000,000                             | 12               | 5.50%  | 469,600.00                          | 1,173.27                            |
| 05.06.2035                                                             | EUR      | 1,500,000,000                             | 15               | 1.75%  | 600,375.00                          | 1,500.00                            |
| 29.03.2041                                                             | USD      | 1,650,000,000                             | 30               | 7.63%  | 619,872.00                          | 1,548.71                            |
| 17.11.2050                                                             | EUR      | 1,250,000,000                             | 30               | 1.50%  | 500,312.50                          | 1,250.00                            |
| 21.09.2051                                                             | USD      | 2,000,000,000                             | 30               | 3.13%  | 751,360.00                          | 1,877.23                            |
| <b>Total</b>                                                           |          |                                           |                  |        | <b>9,611,283.34</b>                 | <b>24,013.20</b>                    |
| Cross-currency swaps                                                   |          |                                           |                  |        | <b>-525,816.93</b>                  |                                     |

\* Including swaps

| Premium Euro Hungarian Government Bond                             |          |               |                  |                        |                                     |                                     |
|--------------------------------------------------------------------|----------|---------------|------------------|------------------------|-------------------------------------|-------------------------------------|
| Code                                                               | Currency | Maturity date | Maturity (years) | Coupon                 | Outstanding amount<br>(HUF million) | Outstanding amount<br>(EUR million) |
| 2023/X                                                             | EUR      | 20.09.2023    | 3                | Floating rate, Premium | 26,259.08                           | 65.61                               |
| 2024/X                                                             | EUR      | 20.11.2024    | 3                | Floating rate, Premium | 27,310.87                           | 68.23                               |
| 2025/X                                                             | EUR      | 21.08.2025    | 5                | Floating rate, Premium | 22,100.42                           | 55.22                               |
| 2025/Y                                                             | EUR      | 17.12.2025    | 4                | Floating rate, Premium | 11,617.60                           | 29.03                               |
| 2026/X                                                             | EUR      | 27.11.2026    | 5                | Floating rate, Premium | 83,518.23                           | 208.67                              |
| 2027/X                                                             | EUR      | 17.09.2027    | 6                | Floating rate, Premium | 43,582.13                           | 108.89                              |
| 2028/X                                                             | EUR      | 23.02.2028    | 6                | Floating rate, Premium | 36,694.55                           | 91.68                               |
| 2028/Y                                                             | EUR      | 23.08.2028    | 6                | Floating rate, Premium | 101,700.28                          | 254.09                              |
| <b>Total</b>                                                       |          |               |                  |                        | <b>352,783.16</b>                   | <b>881.41</b>                       |
| <b>Total foreign currency debt</b>                                 |          |               |                  |                        | <b>11,397,328.40</b>                |                                     |
| <b>Total central government debt</b>                               |          |               |                  |                        | <b>45,172,956.56</b>                |                                     |
| Other obligations of ÁKK (marked-to-market deposits placed at ÁKK) |          |               |                  |                        | 389,419.24                          |                                     |
| <b>Grand total</b>                                                 |          |               |                  |                        | <b>45,562,375.79</b>                |                                     |

## 2. The addresses of primary dealers

| Primary dealer                           | Address                                                         |
|------------------------------------------|-----------------------------------------------------------------|
| BNP Paribas                              | 16 Boulevard des Italiens, 75 009 Paris, France                 |
| CIB Bank Zrt.                            | Budapest, H-1027 Medve utca 4-14.                               |
| Citibank Europe Plc.                     | Budapest, H-1133 Váci u. 80. Promenade Garden                   |
| Deutsche Bank AG                         | Taunusanlage 12, 60325 Frankfurt am Main, Germany               |
| ERSTE Befektetési Zrt.                   | Budapest, H-1138 Népfürdő u. 24-26.                             |
| Goldman Sachs Bank Eurpe SE              | Marienturm, Taunusanlage 9-10, 60329 Frankfurt am Main, Germany |
| ING Bank N.V.                            | Budapest, H-1068 Dózsa György út 84/B. (Hungarian Branch)       |
| J.P. Morgan AG                           | Taunustor 1, 60310 Frankfurt am Main, Germany                   |
| K&H Bank Zrt.                            | Budapest, H-1095 Lechner Ödön fasor 9.                          |
| MKB Bank Zrt.                            | Budapest, H-1056. Váci u. 38.                                   |
| MTB Magyar Takarékszövetkezeti Bank Zrt. | Budapest, H-1122 Pethényi köz 10.                               |
| OTP Bank Nyrt.                           | Budapest, H-1131 Nádor utca 16.                                 |
| Raiffeisen Bank Zrt.                     | Budapest, H-1054 Akadémia u. 6.                                 |
| UniCredit Bank Hungary Zrt.              | Budapest, H-1054 Szabadság tér 5-6.                             |

### 3. Selected parts of legislation governing the legal status of ÁKK and government debt management\*

#### Act no. CXCV of 2011 on the economic stability of Hungary

##### CHAPTER II

##### Reduction of government debt

##### 1. Definition and calculation of government debt

2.§ (1) The current government debt index that should be taken into consideration in the course of the execution of the provisions stipulated in paragraphs (4) and (5) of Article 36 and paragraphs (2) and (3) of Article 37 of the Fundamental Law (hereinafter: the government debt index) is a quotient rounded to one decimal digit where

a) the dividend includes the value of the consolidated debt (debts after setting off debts owed by the central subsystem of the public finances, the local government subsystem of the public finances, general government and other organisations classified in the governmental sector to each other) (hereinafter jointly: government debt);

b) the divisor includes the value of the gross domestic product - calculated in accordance with the Council Regulation on the European system of national and regional accounts in the Community - as specified in this Act.

(2) The debt of the central subsystem of the public finances shall be the consolidated value of all transactions resulting in debts undertaken by legal persons belonging to the central subsystem of the public finances, as at the date of recording.

(3) The debt of the local government subsystem of the public finances shall be the consolidated value of all transactions resulting in debts which were undertaken by local governments, self-governments of minorities, regional development councils as defined in the Act on regional development and regional planning, multi-purpose microregional associations and other associations with legal personality (hereinafter jointly: local government), as at the date of recording.

(4) The debt of other organisations classified in the governmental sector shall be the consolidated value of all transactions resulting in debts which were undertaken by them on their own behalf, as at the date of recording.

##### 3.§ (1) Transaction resulting government debt and its value:

a) borrowing, assumption of credit and loan facility as from the date of disbursement or the date of assumption to date of repayment, and the actual principal amount,

b) issuance of debt securities according to Act on Accounting (hereinafter: Accounting Act) from the date of issuance to the date of redemption, in case of interest-bearing security its nominal value, in case of other security its purchase price,

c) issuance of bill of exchange as from the date of issuance to the date of redemption, and the value of such obligation - excluding the interest - exchanged by such bill of exchange,

d) pursuant to the Accounting Act, finance lease concluded as lessee during the term of the lease, and outstanding principal amount stipulated in the lease contract,

e) concluding sale and repurchase agreement (stipulating repurchase obligation) as seller – real reverse transactions and repo transactions combined with security deposit as defined in Act on Accounting are also included – until the date of repurchase and the stipulated repurchase price,

f) three hundred and sixty-five days of grace - at least - for deferred payment and/or payment by instalments granted in contract, and the unpaid consideration,

g) marked-to-market deposits and their sum, deposited as the difference of derivative transactions with Government Debt Management Agency Pte. Ltd. (hereinafter: 'GDMA Pte. Ltd.') by credit institutions.

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\*This translation of the selected legal provisions serves only information purposes and is not an official translation.

(...)

### Chapter III

The government debt management agency

#### 4. Legal status of the Government Debt Management Agency

11.§ (1) Through GDMA Pte. Ltd. the minister responsible for public finances ensures the fulfilment of funding requirement of the central subsystem of public finances and ensures the financial operations executed in order to management of the debt falling under point a) b) e) and g) of paragraph (1) of Section 3.

(2) GDMA Pte. Ltd. is a single shareholder company (limited by shares), the company's shares are registered and non-negotiable securities.

(3) GDMA Pte. Ltd. is owned by the state, and the minister responsible for public finances exercises the rights related to the establishment and the ownership by and on behalf of the state, however, not entitled to absorb the rights of the Board of Directors.

(4) The operation of GDMA Pte. Ltd. – unless otherwise provided by the present Act – are governed by the provisions of the Civil Code related to the business associations.

(5) Executives of the state - as specified in the Act on central administrative agencies and the legal status of the Members of the Government and Secretaries of State - may hold positions on the Board of Directors and on the Supervisory Board of GDMA Pte. Ltd.

(6) The scope of authority of the Supervisory Board of GDMA Pte. Ltd. does not include the report on the debt management strategy of the central subsystem of public finances, the associated performance indicators and financing plans.

12.§ (1) GDMA Pte. Ltd. manages its assets autonomously within the framework of laws and regulations, the decisions of the shareholder and the decisions of the Board of Directors.

(2) The revenues of GDMA Pte. Ltd. are:

a) the appropriation assigned for this purpose in the Annual Central Budget Act, in relation to debt management of the central subsystem of public finances arising out of debt transactions falling under point a) b) e) and g) of paragraph (1) of Section 3, which is to be placed at the disposal of the company in equal monthly instalments,

b) other revenues.

(3) The interest, cost, fee and other expenses associated with revenues according to point a) of paragraph (2) shall be booked and paid by GDMA Pte. Ltd. to the charge of the chapter of the Act on the Annual Central Budget including budgetary revenues and expenditures of debt management of the central subsystem of public finances.

(4) GDMA Pte. Ltd. holds a bank account at the National Bank of Hungary [(hereinafter: 'NBH')] for its operations.

(5) GDMA Pte. Ltd. holds a securities custody account and a securities account at the Central Clearing House and Depository PTE Ltd. [(hereinafter: 'KELER')], may open a foreign currency account at the NBH or at credit institutions for its operations.

13.§ (1) In order to finance the deficit of the central budget, the minister responsible for public finances, through GDMA Pte. Ltd.

a) upon the authorization of the Central Budget Act, organizes the issuance of government securities, borrowing of loans and debt assumptions which shall be settled as debt of the central subsystem of public finances arising out of debt transactions falling under point a) and b) of paragraph (1) of Section 3,

- b) elaborates the annual and medium-term financing plan of the central budget, develops the financing strategy of debt falling under point a),
  - c) ensures the payment obligations burdening the debt of central subsystem of public finances arising out of debt transactions falling under point a) and b) of paragraph (1) of Section 3,
  - d) ensures the solvency of the central government budget upon the authorization of the Annual Central Budget Act and by taking into account the forecast rendered in point b) of paragraph (1) of Section 76 by Act on the Public Finance, and the management of the temporarily free cash-funds of the state,
  - e) organises the secondary market of government securities,
  - f) executes dealing on own account on the secondary market of government securities, concludes security lending, repo and reverse repo transactions, concludes prompt, forward, hedge, swap and derivative transactions, and executes custodial and deposit management tasks,
  - g) analyses the tendencies of the government debt service falling under point a) and the government securities market,
  - h) participates in the calculation of the government debt, provides information on developments of government debt of the central subsystem of public finances arising out of debt transactions falling under point a) b) e) and g) of paragraph (1) of Section 3, and on the tendencies in the government securities market,
  - i) opines the terms and conditions of loans and bonds secured by individual government suretyship or guarantee,
  - j) executes credit and deposit operations,
  - k) participates in performing duties related to borrowing loans and credits and issuance of debt securities guaranteed by government suretyship or guarantee,
- (2) For participation specified in point i) of paragraph (1), GDMA Pte. Ltd. receives remuneration – burdening the central government budget – equalling to - 0.025 percent of the principal amount of the underlying transaction as a maximum. The Government shall determine the detailed regulation of such duties and remuneration of GDMA Pte. Ltd. in a decree.
- (3) GDMA Pte. Ltd. may create debt securities on the separated sub-accounts of the securities account specified in paragraph (5) of Section 12 - without outright issuance and underlying financial claims - which may become objects of transactions specified in point f) of paragraph (1).
- (4) In addition to its duties specified in paragraph (1), GDMA Pte. Ltd:
- a) upon authorisation by a separate law may organize issuance of debt securities secured by government suretyship or government guarantee, or may fulfil advisory tasks related thereto,
  - b) may participate in performing duties – advice related to business strategy also implied – related to borrowing loans and credits, or issuance of debt securities by the state, municipality and business organizations owned thereby through majority ownership, for a remuneration to such extent as determined in paragraph (2),
  - c) may participate in the management of the free cash funds of the National Deposit Insurance Fund and the Reorganization Fund, and performing duties – advice related to business strategy also implied - related to borrowing loans and credits, or issuance of debt securities of such Funds,
  - d) upon authorization of law may fulfill payment obligations related to the realisation of the capital increase provided on behalf of the state to MVM Paks II. Nuclear Power Plant Development Private Company Limited by Shares financing the investment as defined in Paragraph 1 of the Section 1. of Act No. VII. of 2015 on the investment related to the maintenance of the capacity of the Paks Nuclear Power Plant and the amendment of related Acts (including the payments set forth in Section 2. of Article 1 of the Agreement promulgated by the Act No. XXIV. of 2014 on the promulgation of the Agreement between the Government of the Russian Federation and the Government of Hungary on the extension of a state credit to the Government of Hungary for financing of the construction of nuclear power plant in Hungary), in accordance with the method, amount and timing defined by the instrumentality exercising the entirety of the ownership rights and obligations of the state
  - e) may participate in the management of cash funds of the Investor Protection Fund.

14.§ (1) The minister responsible for public finances ensures the management of the temporarily free cash-funds of the state through GDMA Pte. Ltd.. Within such duty, GDMA Pte. Ltd. is entitled to execute operations falling under paragraph (1) of Section 13. Interests arising out of such operations shall be settled in favour of the central budget.

(2) In government debt management related civil law legal relationships, the state shall be represented by the minister responsible for public finances, who may exercise such incumbency right through GDMA Pte. Ltd., or may delegate such incumbency right in writing to GDMA Pte. Ltd..

(3) Transactions concluded by GDMA Pte. Ltd. within the framework of government debt management shall be deemed as concluded in favour of and charged to the state.

(...)

### **ACT No. CXCV. of 2011 on the public finances**

Authorisation of the Minister responsible for the public finances

5.§ (2) In the central subsystem of public finances the minister responsible for the public finances ensures the consumption of the central budget surplus, financing the deficit of the central budget and the government debt management – without the establishment of financing revenues and expenses in the Central Budget Act.

#### 4. The balance sheet and the profit and loss account of ÁKK

##### I. Balance sheet

data in HUF thousand

|     | Assets                         | 2021    | 2022    |
|-----|--------------------------------|---------|---------|
|     | A) Fixed assets                | 401,956 | 455,287 |
| I   | Intangible assets              | 173,698 | 248,959 |
| II  | Tangible assets                | 183,557 | 142,792 |
| III | Invested financial assets      | 44,701  | 63,536  |
|     | B) Current assets              | 249,337 | 206,154 |
| I   | Inventories                    | 15      | 36      |
| II  | Receivables                    | 8,419   | 7,485   |
| III | Securities                     | 0       | 0       |
| IV  | Cash and cash equivalents      | 240,903 | 198,633 |
|     | C) Accrued and deferred assets | 47,327  | 56,070  |
|     | Assets in total                | 698,620 | 717,511 |

data in HUF thousand

|     | Liabilities                         | 2021    | 2022    |
|-----|-------------------------------------|---------|---------|
|     | D) Capital and reserves             | 536,693 | 567,877 |
| I   | Subscribed capital                  | 300,000 | 300,000 |
| IV  | Profit reserve                      | 151,914 | 194,303 |
| VII | Balance-sheet profit or loss        | 84,779  | 73,574  |
|     | E) Provisions                       | 0       | 0       |
|     | F) Liabilities                      | 150,254 | 117,163 |
| I   | Subordinated liabilities            | 0       | 0       |
| II  | Long-term liabilities               | 0       | 0       |
| III | Short-term liabilities              | 150,254 | 117,163 |
|     | G) Accrued and deferred liabilities | 11,673  | 32,471  |
|     | Liabilities in total                | 698,620 | 717,511 |

Budapest, 14 March 2023

Zoltán Kurali  
CEO

## II. Profit and loss account

data in HUF thousand

|     | Liabilities                                | 2021      | 2022      |
|-----|--------------------------------------------|-----------|-----------|
| I   | Net sales revenue                          | 1,552,890 | 1,780,168 |
| III | Other revenue                              | 2,410     | 10,411    |
| IV  | Material expenses                          | 347,896   | 500,300   |
| V   | Personnel expenses                         | 1,017,802 | 1,109,422 |
| VI  | Depreciation and amortisation              | 83,722    | 114,607   |
| VII | Other expenses                             | 14,319    | 6,758     |
| A   | Operating profit or loss                   | 91,561    | 59,492    |
| B   | Profit or loss from financial transactions | 2,056     | 21,359    |
| C   | Profit or loss on ordinary activities      | 93,617    | 80,851    |
| XII | Tax payable                                | 8,838     | 7,277     |
| F   | Profit or loss after taxation              | 84,779    | 73,574    |

Budapest, 14 March 2023

Zoltán Kurali  
CEO

## 5. Senior officials of ÁKK in december of 2022

### Members of the Board of Directors:

László Balogh, chairman  
Balázs Greinstetter, member  
István Molnár, member  
Dr. Attila Simon Tóth, member  
Tibor Tóth, member

### Members of the Supervisory Board:

Judit Gondos, chairman  
Dr. Viktor Várpalotai, member  
Dr. Ábel Berczik, member

### The Company's auditor:

Club-Audit Számviteli és Pénzügyi Szolgáltató Kft.  
1136 Budapest, Hegedűs Gyula u. 49/51. 4. em.1.

### Responsible auditor:

Fehérné Vikárius Éva, auditor