An important part of the Hungarian debt, yet we barely know anything about it: what good is the Discount Treasury Bill?

Károly Beke

In recent years, the share of Discount Treasury Bills (T-Bills) in Hungarian debt financing has risen again, following a significant decline in their stock between 2015 and 2021. T-Bills are important liquidity management instruments, enabling the Debt Management Agency (ÁKK) to smooth out short-term fluctuations in funding needs. In 2024, major change took place on this market, the number of series in circulation may decrease significantly and the switch auction system may start soon.

What is Discount Treasury Bill and what is it useful for?

In the government securities market, government securities with a maturity of up to one year, issued at a discounted rate and paying 100% of notional at maturity are called Discount Treasury Bills, which are mainly used to provide liquidity. Discount Treasury Bills are sold at auction by countries; in addition, there is a secondary market, where they are traded on a price in line with actual market quoting.

The lack of a classic coupon is the distinguishing feature of T-Bills; instead, they are traded at a discount to their face value, the yield can be obtained based on this. For example: an investor buying a one-year Discount Treasury Bill at the auction on 11 April 2024 at a price of 93.55% will receive the full face value at maturity, granting him an annualised yield of 6.8%.

The primary role of T-Bills in debt management is providing adequate short-term liquidity. By issuing these securities, the government can smooth out eventual fluctuations in financing needs. From an investor's point of view, they are the safest choice amongst government securities already representing low risk in general. Of course, this is usually reflected in their yields. **Short-term government securities represent a competitive alternative to bank deposits and money market funds for investors, as a short, safe and liquid instrument. Furthermore, their yields exceed the interest rates available on deposits in most cases.**

ÁKK sells T-Bills primarily through auctions, investors can bid through Primary Dealers. ÁKK determines the accepted amount based on the bids received and the amount offered. 3-month T-Bills are auctioned every Tuesday, whereas currently 6-month and 12-month T-Bills are issued every second Wednesday and Thursday, respectively. Additionally, retail investors can buy these short-term securities directly (on the secondary market) or through the Hungarian State Treasury.

The role of T-Bills in Hungary and Europe

Currently, secondary market price is quoted for all outstanding series, consequently, investors can trade them continuously. It is possible to hold auctions issuing T-Bills with maturity shorter than 3 months called liquidity T-Bills, based on case-by-case decision. ÁKK has not used this instrument for a long time, because the development of the liquidity management and planning toolbox systematically expanded by ÁKK in recent years made them unnecessary. ÁKK uses the repo market to cover liquidity needs lasting only a few weeks.

Since 2015, the role of T-Bills on the institutional HUF market declined gradually at first, due to the decreasing deficit and the expansion of the retail market, and then later due to the low yield environment. In 2022, following the rise in yields, the outstanding volume started to increase again. By end-March 2024, the outstanding amount was HUF 1,944 billion, representing 3.58% of the central government debt. Previously, the role of T-Bills was more pronounced, reaching 10% of central government debt in 2014.

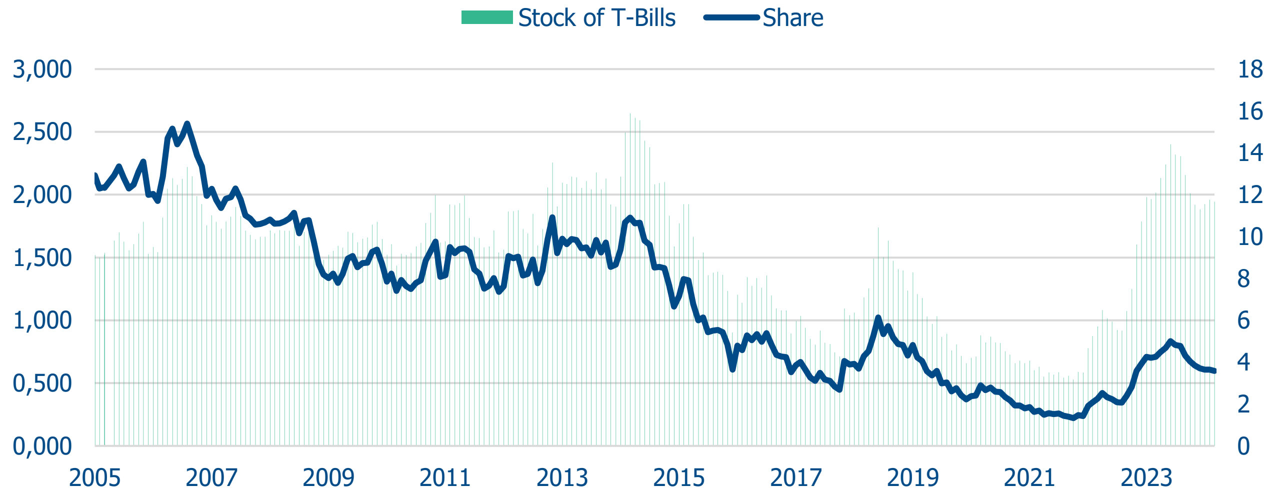

Figure 1: Stock of T-Bills in Hungary (HUF billion, left axis) and their share in the central government debt (%, right axis). Source: MNB

The change was justified by not only the evolution of yield levels but also ÁKK's objective to increase the average maturity of the debt. In addition, liquidity shocks in the governmental financing need necessitating significant issuance were absent. Even facing enhanced investor appetite for T-Bills, ÁKK accepted limited amounts on the auctions.

T-Bills financing short-term debt and providing liquidity are of course not limited to the Hungarian market, similar instruments exist in most European countries. Moreover, since September 2021, the European Commission (EC) has been issuing joint European Union T-Bills with a maturity of less than one year. The EC strives to establish stable market presence and to enhance market liquidity. The EC also targets a new investor base with the short-term papers. Two auctions are held each month, selling 3- and 6-month T-Bills.

In the region, the Polish Ministry of Finance only issues T-Bills when the liquidity situation justifies it. That has not been the case for several years now, the last series of T-Bills expired in 2021. Consequently, there is no such instrument on the Polish market currently. Based on end-February data, 3- and 6-month T-Bills with a total amount of CZK 65 billion are in circulation in the Czech Republic, representing 2.1% of the total stock of government securities.

Among European sovereigns, Germany had EUR 149 billion of T-Bills (Bubill) in its total debt portfolio at the end of 2023, accounting for 6.6% of total government securities. Last year, the German government issued a total of more than EUR 200 billion of short-term maximum one-year papers. The 2024 plan contains a smaller amount of EUR 165 billion, of which EUR 55 billion has already been issued. In Germany, all Bubill series have a maturity of 12 months and are reopened from time to time, eventually selling papers with maturity between 3 and 12 months. The situation is similar in Italy, where EUR 125.5 billion of T-Bills accounted for 5.15% of the total securities portfolio at the end of March 2024. The French T-Bills market is even larger, the outstanding amount exceeds EUR 180 billion currently.

H-1013 Budapest, Krisztina tér 2. | Postal address: H-1253 Budapest, PO BOX. 85.
E-mail: strategia@akk.hu | Registered at the Budapest Capital City Court (Hungary), Registration No.: 01-10-044549

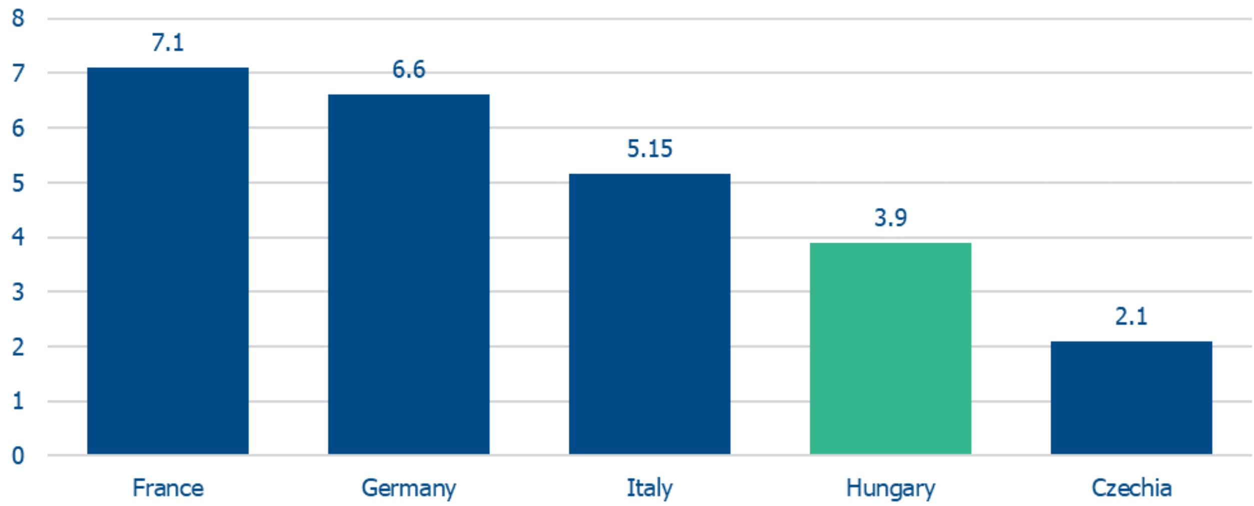

Figure 2: Share of T-Bills in the full amount of government securities (%). Source: DMOs

Who owns the Hungarian Discount Treasury Bills?

In Hungary, two thirds of T-Bills are held by either mutual funds or households, the former buys mainly because of legal requirements and the latter because of their preference for short-term investments. The stock held by households has built up over the last few years, its background will be discussed in detail in a forthcoming analysis.

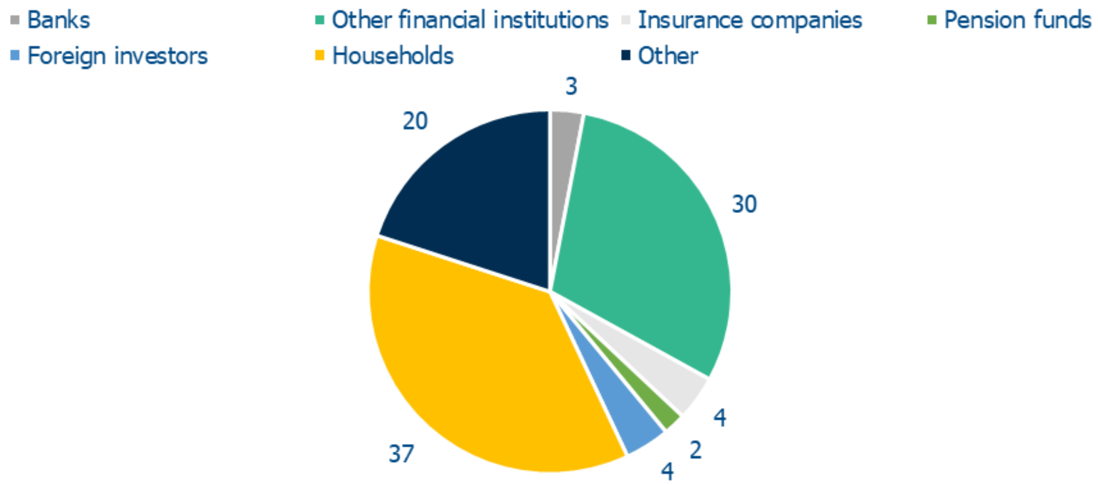

Figure 3: Breakdown of the Hungarian T-Bills owners at the end of February 2024 (%). Source: MNB

Because of the positive but declining difference between the central bank base rate and T-Bills yields, banks do not buy T-Bills on their own accounts. Holding T-Bills on banks' own account is still too costly in the current environment. This may change reverting back to normal with the convergence of the base rate and T-Bills yields.

H-1013 Budapest, Krisztina tér 2. | Postal address: H-1253 Budapest, PO BOX. 85.
E-mail: strategia@akk.hu | Registered at the Budapest Capital City Court (Hungary), Registration No.: 01-10-044549

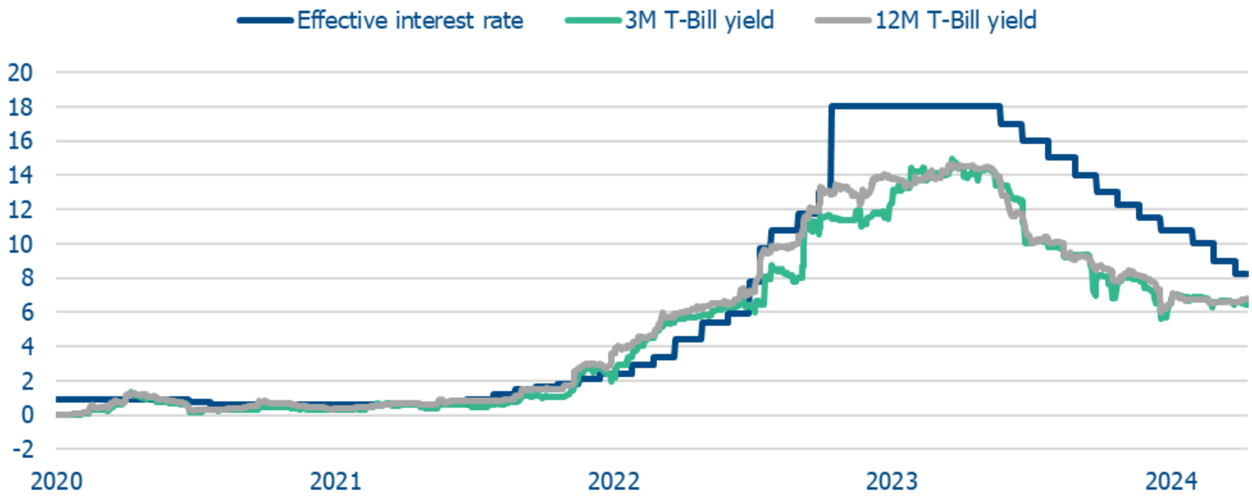

Figure 4: The MNB effective interest rate and the T-Bill yields (percent). Source: MNB, ÁKK

Figure 4 shows that the convergence between the central bank policy rate and T-Bills yields has already started, and closing the gap can be expected in the coming months. This can stimulate demand from institutional players (mainly banks and investment funds) on this market.

In 2024, ÁKK will introduce two market-developing innovations on the T-Bills market: first, ÁKK has significantly reduced the number of series outstanding since January 2024 onwards, and second

ÁKK will also hold switch auctions for T-Bills starting mid-May 2024.

The reduction in the number of T-Bill series outstanding has been achieved by changing the selection criteria for the offered series in the 3-month T-Bills auctions. Prior to the change in January 2024, a series with a 91-day maturity was issued each week. If such a paper was not already available amongst the previously issued ones, a new series was created, resulting in approximately 20 series being available simultaneously, the majority of them had very low outstanding amounts. Since the introduction of the new issuance regime, a given series of T-Bills – with maturity exceeding 91 days - will be auctioned 4-6 times on 3-month auctions, reducing the number of series simultaneously available to 8. Repeated reopening of the series significantly increases the outstanding stocks, supporting their liquidity on the secondary market.

ÁKK will also launch weekly switch auctions for T-Bills starting mid-May 2024 in order to reach higher outstanding amounts, concentration and thus better liquidity in each T-Bills series and to further smooth the maturity profile of the central government debt. This will allow investors to sell T-Bills with a remaining maturity of close to one and a half months or less in exchange for longer, previously auctioned T-Bills through Primary Dealers.

What drives the T-Bills' yields?

As in any (well-functioning) freely tradable market, the supply and demand of T-Bills should be the main drivers of yields. That means their evolution depends on the amount of short-term government bonds issued by ÁKK and the market demand for them. Besides, two important indicators should be taken into account: the interbank rate (BUBOR) and the implied yield, since the market usually converges to them.

T-Bills yields being lower than interbank rates in the **long run** can be derived of a moderate amount of T-Bills issuance on the market, that was the result of ÁKK not facing unforeseen liquidity shortages thanks to the diversified and balanced financing model, in addition to the strategic aim to lengthen

H-1013 Budapest, Krisztina tér 2. | Postal address: H-1253 Budapest, PO BOX. 85.
E-mail: strategia@akk.hu | Registered at the Budapest Capital City Court (Hungary), Registration No.: 01-10-044549

the remaining time-to-maturity of the debt. At the same time, there has been continuous demand driven by buying of index-tracking funds and certain institutional investors complying with regulatory requirements, leading to a divergence between primary and secondary market yields. The increase in the outstanding amount T-Bills since 2022, following the increase in yields, can be explained by two factors: ÁKK strived to avoid fixing interest expenditures in a high yield environment, therefore ÁKK relied more heavily on T-Bills. Moreover, augmenting the additional demand from institutional investors, the retail sector also entered the market with significant demand driven by high yields.

In other words, it is basically a supply-driven market, as

in addition to the permanent demand, the yield is mostly influenced by the volume of supply provided by ÁKK.

In order to further enhance the T-Bills' market, ÁKK decided to introduce the market development measures described above in addition to respond more flexibly to market demand.

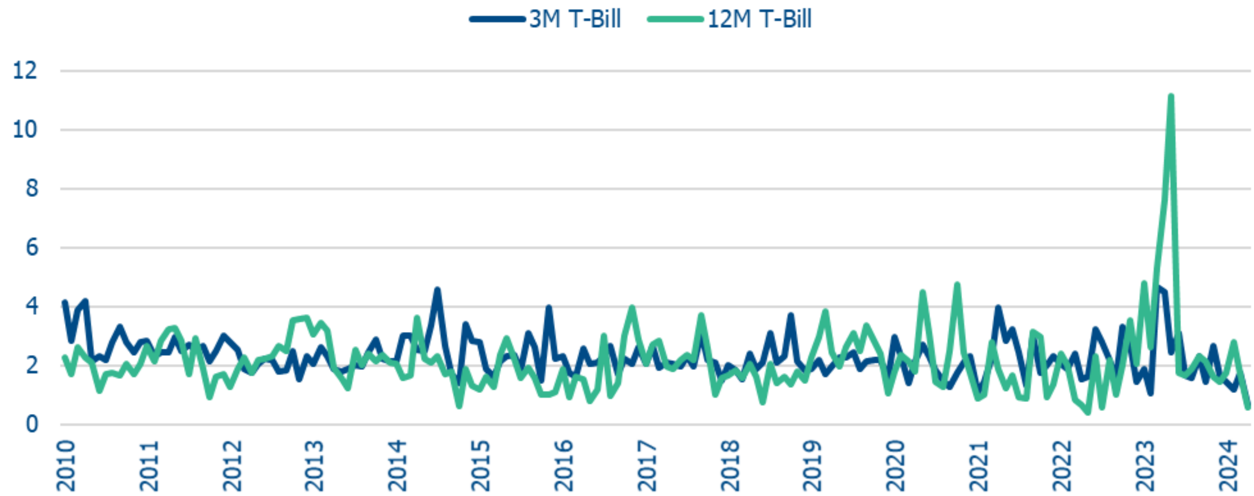

Figure 5: Bid-to-cover ratio on the T-Bill auctions (monthly average, percent). Source: ÁKK

Obviously, temporary anomalies or regulatory changes may arise, when the connection between supply and demand does not work perfectly in the **short term** and yields deviate from their (perceived) equilibrium. In the long run however, the market will return to its equilibrium, taking into account or bypassing the distorting factors which, if they persist, will be integrated in the market framework and will be priced in by market participants.

In the second part of our article, we will discuss the relationship between the T-bills market and retail government securities.

H-1013 Budapest, Krisztina tér 2. | Postal address: H-1253 Budapest, PO BOX. 85.
E-mail: strategia@akk.hu | Registered at the Budapest Capital City Court (Hungary), Registration No.: 01-10-044549