Box 2.4

Effects of the Regulations Made in 2022 on Public Borrowing Structure

The central government budget recorded a deficit of TL 139.1 billion in 2022. The annualized budget deficit to GDP ratio is estimated to remain well below the forecast set out in the MTP (2023-2025). The strength of revenues and the discipline in expenditures were effective in this strong budget performance.

In 2022, net domestic borrowing was TL 362.1 billion and net foreign borrowing was TL 75.2 billion. Domestic borrowing exceeded the 2022 financing program projections[1] and the total domestic debt rollover ratio for the whole year was 132.3 percent. Although the 2022 budget deficit was well below the MTP estimate, borrowing was higher than anticipated due to favorable market conditions, so 2023 started with a strong level of cash reserves.

The future burden of borrowings on the budget and debt stock can be evaluated by calculating debt service. In addition to the amount of domestic borrowing, the distribution of instruments, i.e., the composition of the borrowing, is also important. As a result of the borrowing policy carried out according to strategic benchmarks since 2003, the sensitivity of the public debt stock to exchange rate, interest rate and liquidity risks has been significantly reduced. Within the framework of this strategy, in 2022 the share of foreign currency and foreign currency-indexed securities in domestic borrowing decreased significantly, and domestic borrowing mainly constituted of fixed coupon bonds in addition to CPI-indexed, floating rate and zero-coupon bonds. Borrowing mainly through fixed coupon bonds rather than inflation-indexed bonds will ensure that future interest payments will be less affected by changes in the price level. In a relatively low interest-rate environment, long-term borrowing through fixed coupon bonds will increase the predictability of debt service payments in the future and will also make a positive contribution to rolling over the existing debt at low financing costs.

On the other hand, it is noteworthy that there was a change in the amount of fixed coupon and CPI-indexed borrowing throughout the year. While equal amounts were borrowed with these two instruments in the first four months of the year, there was a significant increase in favor of fixed coupon bonds in the May-December period (Table 1). The CBRT's recent collateral and liquidity policy arrangements aiming liraization and monetary transmission played a role in this. In 2022, within the context of the Liraization Strategy, several measures were taken to increase the weight of TL-denominated assets in securities accepted as collateral against the CBRT's TL funding. The minimum GDDS holding requirement in the collateral system was increased gradually to 50 percent by adjustments made in May, June and July. Moreover, the collateral discount rates were changed to increase the share of TL-denominated assets in the collateral system. Accordingly, the collateral discount rates for indexed securities as well as FX and gold assets pledged as collateral were raised from 5% to 15% in May, 30% in June, 50% in July, 60% in September 2022 and 70% in January 2023. One positive impact of these measures that firstly aim to strengthen monetary transmission was the shift of the demand for CPI-indexed securities to fixed-rate securities. Hence, while the amount of issuance made via fixed coupon bonds was TL 57 billion in the first four months of 2022, this amount increased to TL 322.4 billion in the rest of the year (May-December 2022). In the same period, inflation-indexed securities decreased from TL 56.5 billion to TL 22.9 billion (Table 1).

[1] In the 2022 Treasury Financing Program, the domestic debt rollover ratio for 2022 is projected to be 103.0 percent.

Table 1: Amount of Domestic Borrowing Made by Ministry of Treasury and Finance with Fixed Coupon and CPI-Indexed Bonds in 2022

	January-April 2022	May-December 2022	January-December 2022
Fixed Coupon Bonds (Billion TRY)	57.0	322.4	379.4
CPI Indexed Bonds (Billion TRY)	56.5	22.9	79.4
Fixed Coupon / CPI Indexed	1.0	14.1	4.8

Source: Ministry of Treasury and Finance.

In fixed coupon bonds, a standard amount of interest[2] is paid on the coupon payment dates. In CPI-indexed bonds, while the standard amount of interest is paid on the coupon payment dates, the portion of the principal amount that increases as the inflation rate at the end of maturity is added to the standard amount of interest payment on the redemption date. Thus, the interest payments made on the redemption date can reach very high amounts. It should be noted that the coupon rate of CPI-indexed bills issued on and after February 23, 2022 is 0 percent, and the interest payment will consist only of the amount to be paid on the principal on the redemption date.

This analysis examines the effect of the shift in the amounts of fixed coupon and CPI-indexed securities in favor of fixed coupon securities on interest payments in the May-December 2022 period. In other words, it asks what would have happened to interest payments if the CPI-indexed borrowing in the May-December period of 2022 had continued to equal fixed coupon borrowing, as did in the first four months of the year, instead of falling to one 14th. For this, calculations were made under the assumption that the borrowing amounts made with these two types of securities were the same in the given period (by decreasing the nominal total sales of the fixed coupon bonds issued, while increasing the nominal total sales of the CPI-indexed bonds). Another essential factor here is the determination of the inflation path. While creating the CPI path, the MTP (2023-2025) projections were used for the first three years, after which the CBRT's inflation target of 5 percent was applied.

As mentioned above, the coupon rate of CPI-indexed bonds issued in the aforementioned period is 0. The fact that no interest is paid for these securities during coupon payment periods creates a perception at first glance that borrowing in this way is more advantageous. However, when the portion of the principal increased by the inflation rate at the maturity date is recorded as interest expense, the true extent of the cost becomes clear. For this reason, since it would be misleading to take a period of several years when calculating the interest cost, the period between January 2023 and the redemption date of the bills is taken for both fixed coupon and CPI-indexed bills. As of December 2022, the most advanced redemption dates for fixed coupon and CPI-indexed securities are 13 October 2032 and 4 August 2032, respectively. Therefore, the cost calculation was made for the period January 2023 – October 2032.

The shift from CPI-indexed borrowing to fixed borrowing, which occurred in the period under consideration, provided significant savings by reducing the total amount of interest to be paid until the end of October 2032 by approximately 136 billion TL compared to the burden if there was no such shift and an equal amount of borrowing was made as in the first four months of the year. This calculation relates to an eight-month period only. It should also be noted that in the years following 2022, if high borrowings of CPI-indexed securities continue, the costs will accumulate and reach much higher levels depending on the course of inflation.

In summary, the change in borrowing composition led by the CBRT's recent arrangements for collateral and liquidity policies that aim to strengthen monetary transmission has reduced the interest cost in the upcoming period. This, in turn, will reduce the interest expenditures of the budget in the coming years and positively affect the debt service and borrowing requirement of the Treasury. Thus, the arrangements made within the scope of the Liraization Strategy with a focus on monetary transmission will make a significant contribution to the public fiscal stance.

[2] Standard interest payment=principal*coupon rate