REPUBLIC OF TÜRKİYE
MINISTRY OF TREASURY
AND FINANCE

PUBLIC DEBT MANAGEMENT REPORT

2023

REPUBLIC OF TÜRKİYE
MINISTRY OF TREASURY
AND FINANCE

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INTRODUCTION

FOREWORD BY THE MINISTER

The global economy slowed down in 2022 due to factors such as war, geopolitical tensions, the ongoing pandemic in China, increasing protectionist tendencies in trade and tight monetary policies implemented to combat inflation. The tight monetary policies implemented by global central banks, especially the US and the European Central Bank, put economies at risk of recession.

Despite challenging conditions, the Turkish economy grew by 5.5 percent in 2022. In this period, the ongoing increase in machinery-equipment investments was one of the most important gains, while nearly 2 million additional jobs were created. Despite the strong outlook in exports and tourism, the rise in energy and gold imports had a negative impact on the current account balance. Consumer inflation stood at 64.3 percent at the end of the year due to rising commodity prices, exchange rate fluctuations, worsening expectations and deterioration in pricing behavior. In this period, public financial assets and liabilities were managed in line with market conditions. Thanks to the policies implemented to improve risk indicators and ensure effective debt management, the maturity of domestic debt stock was extended and the ratio of public debt stock to GDP remained below pre-pandemic levels.

In the Medium Term Program (2024-2026), we set the main priorities of our policy framework as establishing price stability, strengthening fiscal discipline and ensuring structural transformation. We will implement monetary, fiscal and revenues policies in coordination to permanently reduce inflation and achieve price stability. We aim to keep the ratio of the central government budget deficit to GDP, which increased due to earthquake and other expenditures, below 3 percent by the end of the Program period. Despite the volatility in global markets, we will continue our borrowing policy based on strategic criteria, reasonable risk level and affordable cost.

The Public Debt Management Report transparently presents to the public the developments and practices in financial asset and liability management in line with the fundamental principles of good governance. I would like to thank all my colleagues who contributed to the preparation of this report.

Mehmet ŞİMŞEK
Minister

FOREWORD BY THE DEPUTY MINISTER

Increasing geopolitical tensions, rising inflation and commodity prices have affected our country as well as the rest of the world. In spite of these drawbacks, the Turkish economy maintained its strong growth performance.

Since 2002, public debt management has been carried out with the perspective of financial asset and liability management approach by taking into account Treasury cash reserve, Treasury receivables, debt and contingent liabilities management as well as the risk and cost balance. Thus, the sensitivity of the debt stock to exchange rate, interest and liquidity risks and the level of public debt burden have been significantly reduced. Besides, thanks to effective debt management, the ratio of EU-defined debt stock to gross domestic product (GDP) declined by 10 percentage points year-on-year to 31.7 percent at 2022. This ratio is 83.5 percent on average for EU member countries. In this context, Türkiye is among the least indebted countries in terms of general government debt stock compared to these countries.

As of end-2022, 224 public administrations were included in the Single Treasury Account (TSA) implementation, which was launched on October 17, 2018 to manage public resources in a holistic manner and ensure efficiency in public cash management. With the implementation, a total resource size exceeding 55 billion TL was reached without any cost. The resources collected in the TSA were accrued interest by the Treasury at higher rates of return compared to public administrations, contributing to the central government budget with deposit interest income exceeding approximately TL 13 billion.

Sharing the developments and practices in financial asset and liability management with the public is carried out in line with the principles of accountability and transparency, and the Public Debt Management Report is one of the best examples of this practice. In this context, I would like to thank all my colleagues who have worked hard to realize our objectives and contributed to the preparation of this report.

Osman ÇELİK
Deputy Minister

DEBT AND RISK MANAGEMENT COMMITTEE

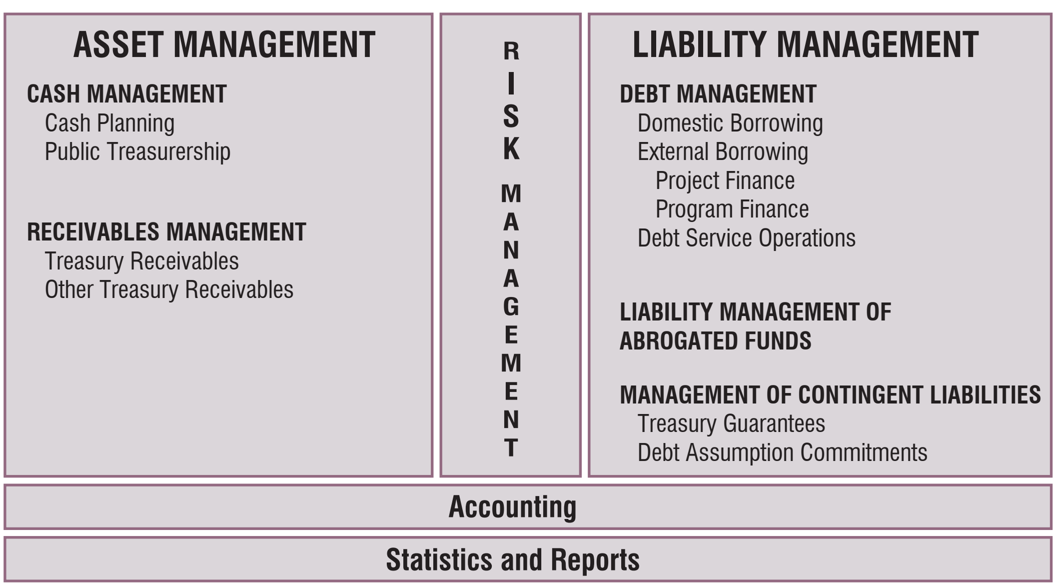
Debt and Risk Management Committee (DRC) is the decision making authority of the Ministry of Treasury and Finance which determines the main framework of debt and risk management activities. The duties of the DRC are set by the Article 12 of the Law No. 4749 on Regulating Public Finance and Debt Management. In this context DRC are responsible for

- Determination of strategic benchmarks and indicators within the scope of management of the government debt and Treasury Guarantees, recommendation of on-lent and Treasury Guaranteed Credit limits, determination of basic policies related to Treasury receivables management and Treasury cash assets,
- Monitoring the implementation of the Treasury's financial assets and liabilities management, increasing its efficiency and improving its infrastructure.

FINANCIAL ASSET AND LIABILITY MANAGEMENT

Legal framework regarding the management of financial assets and liabilities within the mandate of the Ministry of Treasury and Finance is set by the Law No. 4749 "Regulating Public Finance and Debt Management" and "Regulation on the Principles and Procedures of Coordination and Execution of Debt and Risk Management". As stated in the Law No. 4749; "The strategic benchmarks and implementation framework for the management of the Treasury's financial assets and liabilities shall be specified by the Debt and Risk Management Committee composed of the Minister, Deputy Minister and members appointed among General Directors and approved by the Minister". In this context, operations related to the management of financial assets and liabilities are carried out by relevant departments of the General Directorate of Public Finance, the General Directorate of Foreign Economic Relations and the General Directorate of Debt Office within the Ministry of Treasury and Finance. Cash management, management of Treasury receivables, risk management, accounting operations, statistics compilation, management of obligations arising from abrogated funds and activities regarding contingent liabilities are carried out by the General Directorate of Public Finance. Domestic borrowing and bond issuances in the international capital markets are carried out by the General Directorate of Debt Office. Financing of public projects via external loans, budget financing with program loans from international institutions, and activities related to the public private partnership projects are conducted by the General Directorate of Foreign Economic Relations.

Financial assets and liabilities managed by the Ministry of Treasury and Finance are presented in the following diagram.



DEVELOPMENTS AND PROSPECTS

In 2022, many economies, especially the US and Euro Area, implemented monetary tightening, leading to more rigid financing conditions, higher policy rates and slower economic activity. Invasion of Ukraine and the sanctions imposed on Russia, led to deterioration in global supply chains and energy and food prices to hike. Persistent inflation and low growth rates delayed the global economic recovery more than expected.

The war broke out in a neighbouring region of Türkiye, caused sharp increases in commodity prices, especially in energy and agricultural products, and made inflation more aggressive for many countries. As a consequence of monetary tightening policies implemented by the advanced economies' central banks, global liquidity conditions have become more strict, global economic activity were suppressed and growth rates realizations stayed below the prospects in many economies.

Despite the challenging global conditions, the Turkish economy grew by 5.5 percent in 2022, and decoupled positively from many countries. Private consumption was the main driver of the growth in 2022. In addition, productive investments driven by machinery and equipment investments accelerated. Despite strong outlook in exports and tourism revenues, the ratio of current account balance to GDP gave a deficit of 5.4 percent, mainly due to high course of commodity prices, especially energy, and increasing gold imports. However, excluding energy and gold, the current account balance gave a surplus of 5.6 percent of GDP.

MACROECONOMIC AND FINANCIAL FRAMEWORK

In 2020, Covid-19 pandemic have led to a sharp contraction in global economy. Thanks to vaccination, easing of measures and economic support, global economy recovered strongly in 2021. On the other hand, the continuation of Covid-related restrictions and supply-demand mismatches brought about price increases and made high inflation to be the most important problem of all economies.

While many economies, especially the US and the Euro Area, implemented tight monetary policy in 2022, financing has become difficult due to increasing interest rates and economic growth has slowed down. The invasion of Ukraine by Russia has been a further step to worsen all these global challenges. Increasing geo-politic risks and sanctions imposed on Russia caused both energy and food prices to increase.

The global economy grew by 6.3 percent in 2021 due to strong demand and base effect and by 3.5 percent in 2022[1]. In 2022, GDP growth of the USA, the Euro Area and China was 2.1 percent, 3.3 percent and 3 percent, respectively. Global trade volume, following the deep contraction in 2020, grew by 10.9 percent in 2021 and 5.2 percent in 2022.

Global inflation, which was 3.5 percent on average[2] in the 2018-2020 period, increased to 6.3 percent by the end of 2021 and 8.9 percent in 2022. Inflation rates in advanced economies in 2021 and 2022 were 5.3 percent and 7.3 percent, respectively.

Strengthening demand, insufficient supply and disruptions in supply chains were the main drivers of record increases in commodity and raw material prices in 2021 and 2022. Among these; the energy supply deficit in Europe, the increase in demand for natural gas due to the green energy targets of China and some EU countries, production losses in many commodities due to the pandemic and finally Russia-Ukraine tension took a part. While oil price per barrel was 55 dollars at the beginning of 2021, it was 77.8 dollars at the end of the year. Prices climbed to 120 dollars per barrel following the invasion in March 2022 and completed the year at 85.9 dollars.

Looking at global indebtedness[3], it is observed that the total public debt as a percentage of GDP was 92.1 percent in 2022, and it was 112.5 percent and 64.6 percent for advanced and developing economies, respectively. In 2021, the mentioned rates were 95.5 percent, 117.4 percent and 64.3 percent for the global economy, advanced and developing economies, respectively. Global budget deficit to GDP ratio decreased from 6.6 percent in 2021 to 4.7 percent in 2022[4].

Despite the negative effects of the Russia-Ukraine war, Turkish economy achieved strong growth in 2022…

By growing 5.5 percent in 2022, the Turkish economy recorded one of the highest growth rates among OECD countries, thanks to strong domestic demand and robust exports and tourism revenues.

In 2022, the highest contribution to GDP growth posted by private consumption. While construction investments contracted in this period, gross fixed capital formation was supported by strong course in machinery and equipment investments. While public consumption contributed to growth at the long-term average levels, the contribution of change in inventories was negative. Thus, domestic demand and net external demand contributed 4.8 and 0.7 percentage points to growth, respectively. On the production side, the highest contributions to growth in this period came from the services and industry. The contribution of agriculture sector remained limited while the construction sector's contribution was negative. The taxes and subsidies item had a neutral effect on GDP growth.

The strong momentum in economic activity continued to have a positive impact on employment and total employment increased by around 2 million people in 2022. In 2022, the labor force participation rate increased by 1.7 points and realized as 53.1 percent, the employment rate increased by 2.3 points and realized as 47.5 percent, the unemployment rate decreased by 1.6 points and realized as 10.4 percent.

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1 *IMF World Economic Outlook Report (WEO), April 2023.*
2 *IMF World Economic Outlook Report (WEO), April 2023.*
3 *IMF Fiscal Monitor Report, April 2023.*
4 *IMF Fiscal Monitor Report, April 2023.*

Despite strong outlook in exports and tourism revenues, current account balance deteriorated mainly due to the high energy and gold imports. However, current account balance excluding energy and gold improved.

Thanks to the strong external demand and the ability of Turkish exporters to turn the global supply chain disruptions into advantage, exports broke records in every month of 2022 and reached historical high level of the Republic with USD 254.2 billion. In 2022, export prices increased by 9.4 percent. In addition to the rise in export prices, export volume increased by 3.1 percent due to the strong demand. The high level of gold imports and the increase in energy imports due to global prices led imports to be realized as USD 363.7 billion in 2022. In addition to the 24.2 percent rise in import prices, real imports increased by 7.9 percent. In line with these developments, the trade deficit, which was USD 46.2 billion in 2021, realised as USD 109.5 billion in 2022.

The tourism sector, which showed a strong recovery in the post-pandemic period, reached its historical peak in 2022. While the number of tourists increased by 75 percent and reached 51.4 million people in 2022, tourism revenues increased by 54 percent and reached USD 46.5 billion. Despite the positive outlook in exports and tourism, the current account deficit, which was at USD 7.2 billion (0.9 percent of GDP) in 2021, increased to USD 48.9 billion (5.4 percent of GDP) in 2022, especially due to the increase in energy and gold imports. Current account surplus, excluding gold and energy, increased from USD 37 billion (4.6 percent of GDP) to USD 50.6 billion (5.6 percent of GDP) in 2022.

In 2022, the central government budget deficit to GDP ratio was realized as 1 percent thanks to the strong increase in tax revenues.

While the central government budget balance recorded a deficit of 142.7 billion TL, the primary balance gave a surplus of 168.2 billion TL in 2022. Thanks to higher tax revenues on the back of the revival in economic activity and developments in exchange rates and foreign trade, the budget balance improved by 1.8 percentage points and posted a deficit of 1 percent of GDP in 2022. The primary surplus to GDP ratio was realized as 1.1 percent. The highest contribution to the tax revenues, which increased by 102 percent in 2022, came from corporate income taxes. With the 88.4 percent increase in non-tax revenues, total budget revenues rose by 99.7 percent.

In this period, budget expenditures were increased by 83.5 percent, with the highest contributions to this increase coming from current transfers, personnel expenditures and capital expenditures, respectively. Interest expenditures increased by 71.9 percent in 2022.

The ratio of the EU-defined general government debt stock to GDP decreased by 10 percentage points and realized as 31.7 percent in 2022 and continued to stay well below the averages of advanced and emerging economies.

Inflation remained high in 2022...

In 2022, while supply constraints related to the Covid-19 pandemic were not yet fully eliminated, acceleration in international commodity prices, cumulative exchange rate developments, worsened inflation expectation, and disrupted pricing behaviors led annual inflation rate to reach 85.5 percent in October. However, in the subsequent period, with the supportive outlook in external factors, the stable performance of the Turkish Lira, and the support of the base effect, the year-end inflation rate decreased to 64.3 percent.

It is aimed to permanently reduce inflation and achieve price stability in the medium term through the structural policies that will increase competition and efficiency in goods and services markets in additon to strong coordination in the implementation of monetary and fiscal policies.

The banking sector continues to grow on solid foundations...

The sector has maintained its healthy outlook with its strong capital structure, high asset quality and profitability ratios. As of 2022, return on equity and return on assets realized as 49.9 percent and 4.9 percent, respectively.

Moreover, the sector maintained its strong capital structure and asset quality. In 2022, the sector's capital adequacy ratio was 19.5 percent, well above the target ratio of 12 percent and the regulatory requirement of 8 percent. The sector's non-performing loan ratio was recorded at 2.1 percent by the end of the year, which is a remarkably low level.

In 2022, loan growth was above the long-term average. The selective credit policy approach led to an acceleration in total loans driven by commercial loans. Thus, the annual growth in FX-adjusted total loans stood at 39.8 percent in 2022.

ASSET MANAGEMENT

Having a holistic view of all the financial assets and liabilities of the government is crucial in order to determine the risks and incurred costs of the borrowing policies of the Ministry of Treasury and Finance effectively. Accordingly, Treasury cash reserves, Treasury receivables and risk account items, which are among the main assets of the Treasury, are closely monitored, thus medium and long term strategies are shaped with the perspective of financial asset and liability management approach.

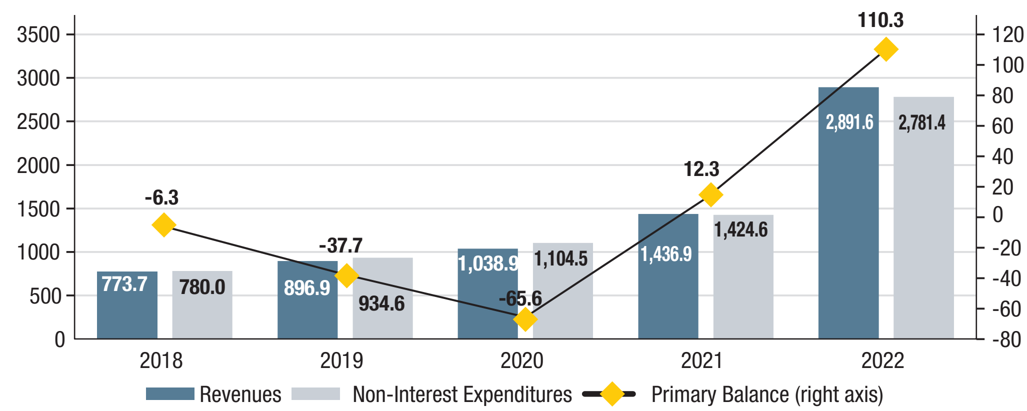
1. CASH MANAGEMENT

CASH PLANNING

Treasury cash reserve is held in TL and foreign exchange denominated accounts at Central Bank of the Republic of Türkiye (CBRT) and state-owned banks. Tax and non-tax revenues of general budget and financing resources received via borrowing and other financing resources are collected in these accounts. Likewise, general budget expenditures are also made from these accounts. Cash inflows and outflows relating to these accounts are monitored and reported on a daily basis.

Cash flows related to the Treasury accounts are classified and monitored under three categories as revenues, expenditures and financing. Revenues consist of tax and non-tax cash flows; expenditures consist of interest payments and non-interest expenditures and financing items are borrowings from the market, transfers made by Saving Deposits Insurance Fund, returns from on-lending / guaranteed loans and change in bank account. Having a primary surplus -the excess of government revenues over noninterest spending- is considered as an essential factor in reducing borrowing requirement and the debt stock of the government and maintaining the strong reserve policy.

Figure 1 – Revenues, Non-Interest Expenditures, Primary Balance (Billion TL)



In 2022, cash-based revenue collection increased by 101.2 percent to TL 2,891.6 billion, cash based non-interest expenditures from deferred and current year's appropriations increased by 95.2 percent to TL 2,781.4 billion compared to 2021. As a result, cash-based primary surplus reached to TL 110.3 billion in 2022.

Treasury cash reserve is managed in line with strong cash reserve policy which is determined through the strategic benchmarks and indicators defined by Debt and Risk Management Committee. Moreover, within the framework of international good practices, the Ministry receives interest revenue through remuneration of the Treasury's resources at the CBRT and state-owned banks and makes payment for Treasury operations. Interest revenues from remuneration and general expense payments over years are shown in Table 1.

Table 1 – Interest Revenues from Remuneration and General Expense Payments for Treasury Operations (Million TL)

Year	Interest Revenues (Net)	General Expense Payments
2018	3.532	419
2019	3.954	535
2020	7.446	859
2021	10.351	1.204
2022	31.381	8.264

In addition to these practices, the "Extended Treasury Single Account" (Extended TSA) system has been introduced through Law No. 7103 dated 21.03.2018. This system helps Treasury to manage the cash reserves of the public in an integrated manner including the idle cash amount of the public institutions and as a result increase the efficiency of the cash management overall. With the Presidential Decree published pursuant to the authority granted in the aforementioned Law, the public administrations and financial resources to be included under the extended TSA were determined and with the Regulation of the Extended Treasury Single Account published in the Official Gazette dated 08.09.2018, the general framework and operation of the system was regulated. Following the establishment of the legal infrastructure for the extended TSA system, the system was put into practice on 10.17.2018.

By the end of 2022, 224 public administrations were included in the extended TSA system and approximately exceeding TL 55 billion amount of public resources has been collected. In the upcoming period, expanding the scope of TSA will continue as foreseen in the 2019-2023 Strategic Plan of the Ministry of Treasury and Finance.

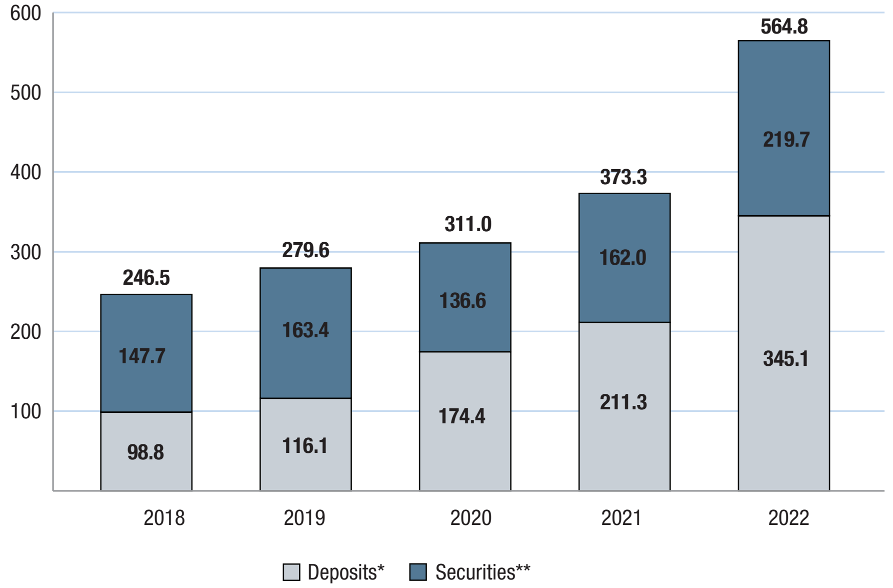
Box 1 - Gains Obtained With the "Extended Treasury Single Account System"

- The Treasury, remunerates public resource with higher returns compared to the public administrations, and the interest revenue gained by the Treasury is transferred to the general budget as income. Therefore, a positive contribution has been made to the state budget.
- The resources collected in Extended TSA enabled the Treasury to reduce its borrowing costs by providing cost-free short-term financing. The Treasury cash and debt management has been carried out with a stronger cash reserve.
- The implementation of the Unity of Treasury principle has been strengthened.

PUBLIC TREASURERSHIP

Within the framework of Public Treasurership Bylaw which was issued according to article no. 12 of the Law on Regulating Public Finance and Debt Management (Law No.4749), the financial resources of the public institutions and organizations other than the accounts of General Directorate of Public Finance of the Ministry of Treasury and Finance are closely monitored by the Ministry. According to the terms of the Bylaw, the public instuitions can hold their financial resources in a wide variety of the instruments such as time deposits, demand deposits, special current account, participation account, debt securities issued by the Ministry, debt securities of the public banks. The Bylaw also regulates the terms of the interest rates for some of the instruments used by the institutions.

Figure 2 - Financial Resources of Public Institutions at the End of Each Year (Billion TL)

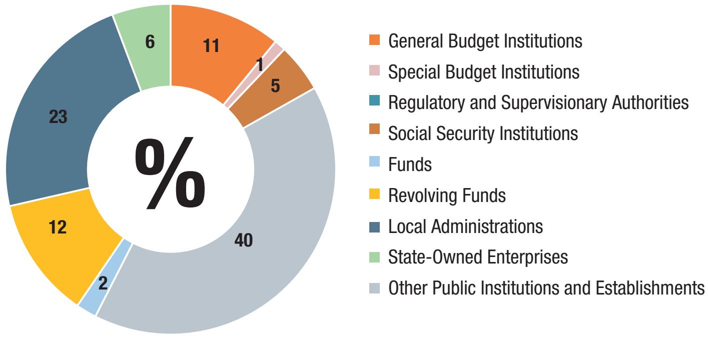


* *The amounts related to the 'Deposit' represent the TL denominated and foreign currency denominated time and demand deposit accounts. special current accounts and participation accounts.*

** *The data under 'Securities' represent the financial resources that are held as Government Domestic Debt Securities. Eurobonds and Lease Certificates. and the reverse repo transaction amounts.*

Financial resources of public institutions increased by 4.1 percent in 2018, 13.4 percent in 2019, 11.2 percent in 2020, 20 percent in 2021, and 51.3 percent in 2022 respectively.

Figure 3 - Distribution of Public Financial Resources by Institutions (%)*



* *As of 12.31.2022*

By the end of 2022, the financial resources of the public institutions have reached to TL 564.8 billion. 'Funds' with the percentage of 40.7 (Unemployment Insurance Fund, Saving Deposits Insurance Fund and other funds) have the largest share among different classifications within the scope of the Bylaw.

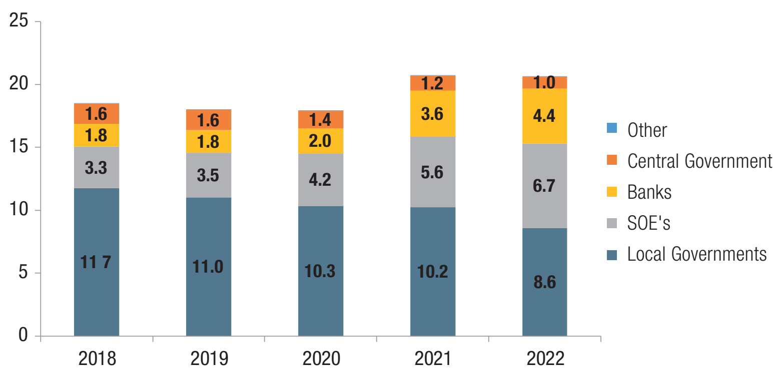
2. RECEIVABLE MANAGEMENT

The sources of Treasury receivables are; undertaking of Treasury guarantees, on-lending of foreign loans and on-lending of domestic debt securities. By the end of 2022, Treasury Receivables stock was TL 20.7 billion.

In addition to the "Treasury Receivables" defined in the Law No. 4749, there are also "Other Treasury Receivables"[5] arising from transactions in which the Treasury takes place as the legal entity of the State. By the end of 2022, the stock of other Treasury receivables stood at TL 8.8 billion.

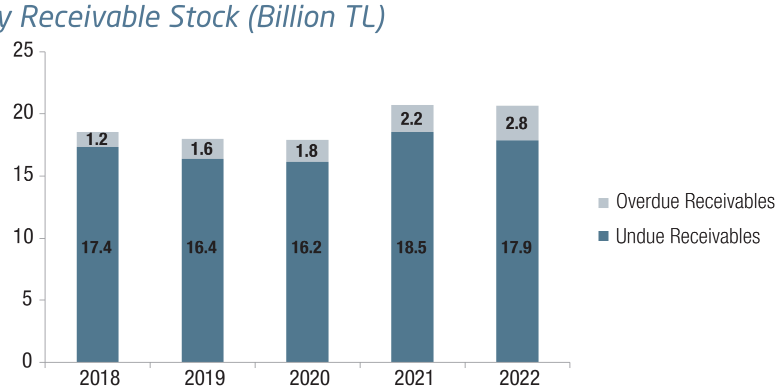
The borrower profile of the Treasury receivables indicates that the local administrations are the most indebted group with an amount of TL 8.6 billion as of the end of 2022. It is followed by the SOE's with TL 6.7 billion and Public Banks with TL 4.2 billion, respectively.

Figure 4 - Treasury Receivables Stock by Borrower (Billion TL)



The amount of TL 20.7 billion Treasury receivables stock is comprised of TL 2.8 billion overdue receivables[6] and TL 17.9 billion undue receivables[7].

Figure 5 - Treasury Receivable Stock (Billion TL)



5 *Mentioned receivables are regulated by "Regulation on Management, Proceeding and Collecting of Other Treasury Receivables" which was published in the Official Gazette dated 12.23.2014*

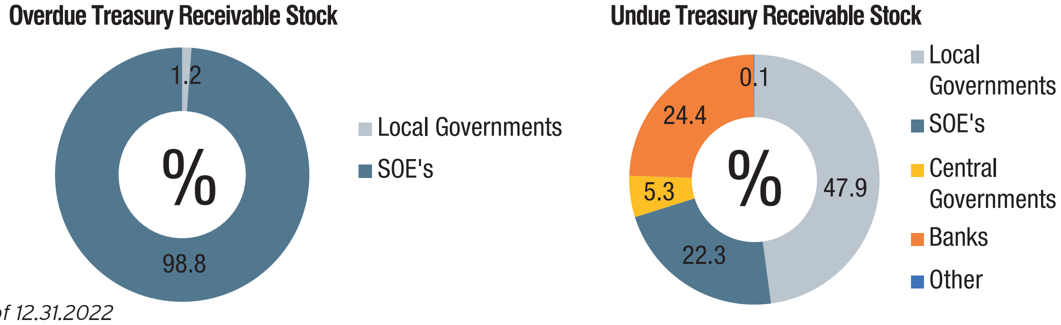
6 *It reflects the overdue portion of receivables which is followed under a redemption plan. It consists of the sum of overdue capital, interest, expenses and interest accrued to those amounts.*

7 *It reflects the capital amount of undue portion of receivables which is followed under a redemption plan*

The largest share of Treasury overdue receivables belongs to SOE's (98.8 percent), which are followed by local administrations (1.2 percent). Overdue receivables have increased by TL 0.6 billion in 2022 as compared to 2021.

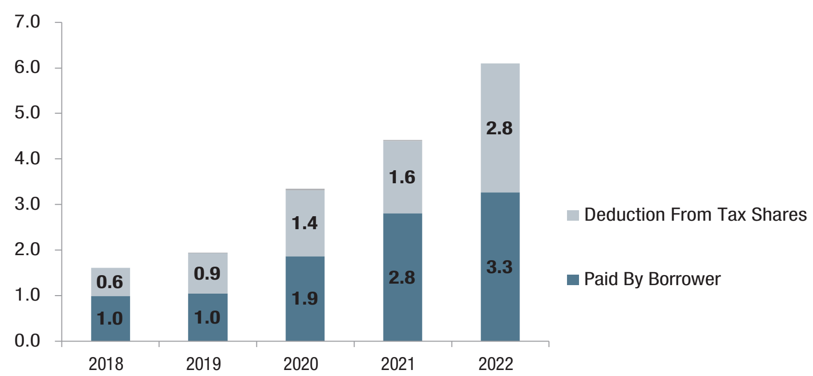
47.9 percent of undue Treasury receivables arise from local administrations, 24.4 percent from banks, 22.3 percent from SOE's and 5.3 percent from central administrations. In 2022 undue Treasury receivables have decreased by TL 0.6 billion as compared to 2021.

Figure 6 - Treasury Receivable Stock By Debtor(%)*



* As of 12.31.2022

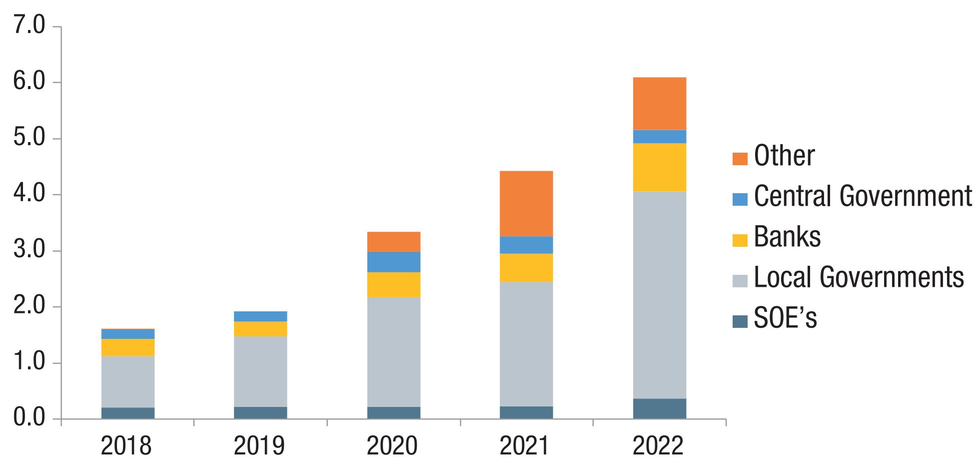
Figure 7 - Collection Types of Treasury Receivables (Billion TL)



In 2022 total collections for Treasury Receivables were realized as TL 6.1 billion. With respect to borrowers, the collections realized from Local Administrations have the majority with TL 3.7 billion which is followed by the Türkiye Wealth Fund with TL 918 million, Public Banks with TL 839 million, SOE's with 366 milion and Central Administrations with 238 million, respectively.

The amount of TL 3.3 billion of total collections were paid directly by beneficiaries and TL 2.8 billion were collected via deductions from tax shares.

Figure 8 - Collections from Treasury Receivables (Billion TL)



LIABILITY MANAGEMENT

Liability management operations are conducted within the scope of ALM approach adopted by Law No. 4749 and relevant secondary legislation. In this regard, liabilities arising from domestic and external borrowing, Treasury guarantees, abrogated funds as well as the contingent liabilities arising from debt assumption commitments constitute the main components of liability management.

1. DEBT MANAGEMENT

Public debt management is mainly based on the principle of lowering costs to appropriate levels by considering risk exposure of debt stock. In this context, borrowing policies are carried out by strategic benchmarks built on a medium-term perspective every year. These benchmarks, which have been implemented since 2003, not only improved the structure of debt stock but also made a significant contribution to reducing the sensitivity of debt stock to risks.

In 2022, the policies such as borrowing in local currency (TL) in domestic market, keeping the share of debt maturing within 12 months and the share of debt stock with interest rate refixing period of less than 12 months at a certain level, by taking into account appropriate instrument and maturity composition to optimize interest payments, keeping a certain level of cash reserve in order to reduce the liquidity risk associated with cash and debt management were continued to be implemented.

Macroeconomic balances and cyclical movements are also taken into account through the entire debt management process starting from creating strategic benchmarks to implementation of debt program. In this context, debt management is carried out in accordance with the institutions responsible for monetary and fiscal policy.

In accordance with the aforementioned strategic benchmarks, the announcement of 2022 Treasury Financing Program was released to public attention on 28th October 2021, based on Medium Term Programme (MTP) for 2022-2024 period.

Table 2- Treasury Financing Program(1)[8] (Billion TL)

	2022 (Program)	2022 (Realization)
I- TOTAL DEBT SERVICE	505.9	684.9
Domestic Debt Service	385.5	482.8
Principal	222.6	276.9
Interest	162.9	205.9
External Debt Service	120.4	202.2
Principal	70.8	120.5
Interest	49.6	81.7
II- FINANCING	505.9	684.9
Non-Borrowing Resources[9] (2)	7.9	-149.6
Total Borrowing	498.1	834.5
External Borrowing	101.0	195.6
Domestic Borrowing	397.1	638.9
Memo	-	-
NET BORROWING (Borrowing - Principal Payments)	204.6	437.2
Net Domestic Borrowing	174.4	362.0
Net External Borrowing	30.2	75.2

In 2022, total amount of TL 482.8 billion domestic debt service was redeemed and TL 638.9 billion worth of borrowing was raised in domestic market. In the same period, TL 202.2 billion external debt service was redeemed and TL 195.6 billion worth of external borrowing was realized.

Keeping strong cash reserves is critical for an effective Treasury cash and debt management system, in terms of mitigating the refinancing, liquidity, exchange rate and interest rate risks. In addition, this policy

8 *Cash based.*

9 *The cash primary balance, privitization revenues, the revenues from 2B land sales, receipts from SDIF, receipts from on-lending and guaranteed debt, use of cash account and FX changes are included.*

has an important role in providing the flexibility needed to carry out the borrowing program, especially when the market volatility surges. In this context, the policy of keeping cash reserves in a certain level continued in 2022.

Gold bonds and gold lease certificates, which started to be issued to individual investors in 2017 also started to be issued to institutional investors in 2019 in order to expand the investor base and diversify investment instruments. In this context, in 2022, approximately 49.2 tons of gold equivalent of 42.3 billion TL, and until the end of 2022, a total of 393.5 tons of gold equivalent of 171.2 billion TL gold bond and gold lease certificates were issued.

On the other hand, in order to broaden the investor base and diversify the borrowing instruments, foreign currency bonds and lease certificates were issued for institutional investors within the framework of cyclical developments. In this context, in 2022, the total amount of the issuances conducted in terms of foreign exchange was approximately USD 1.6 billion. By the end of 2022, total of EUR 11.6 billion and USD 18.2 billion were issued.

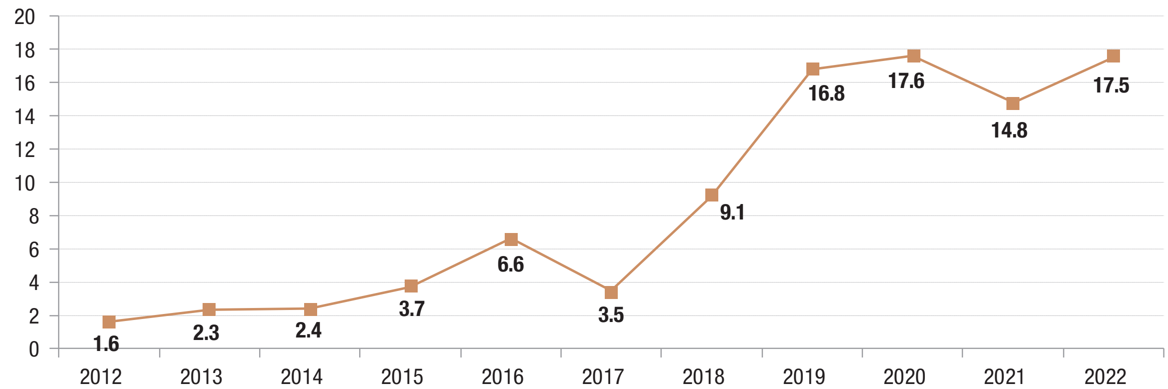
DOMESTIC BORROWING

In 2022, as a result of the expansionary policies and supply chain disruptions during the pandemic, as well as the inflationary pressures caused by regional and global geopolitical developments, the adverse effects of uncertainties continued. The upward trend in energy and commodity prices due to the Russia-Ukraine developments has led to an increase in inflation rates worldwide. As a result, central banks, including the Federal Reserve and the European Central Bank, implemented a gradual interest rate increase process, which have affected fund flows to emerging economies.

In 2022, thanks to effective borrowing policies based on strategic benchmarks and fiscal discipline, improvements have been obtained in public debt management, the structure of the public debt stock. In addition, as a result of macro-prudential measures, investor demand for TL-denominated, long-term and fixed-rate government bonds has increased, especially as of June. In order to meet market demand, issuance of TL-denominated fixed-rate long term securities has been increased. In this context, the share of fixed-rate TL-denominated securities in domestic borrowing has increased to 60% in 2022, while it was 38% in 2019-2021 period. Furthermore, the policy of borrowing mainly in TL and gradually reducing the FX-denominated debt stock has continued in 2022. Thus, the FX-denominated domestic debt stock, which was $36.2 billion in 2020, has decreased to $27.4 billion as of the end of 2022. As a result of these developments, sensibility of debt stock has reduced against macroeconomic variables. Within the framework of these developments, the domestic debt roll-over ratio was approximately 132% in 2022.

In order to broaden the investor base and diversify the borrowing instruments, the issuances of foreign exchange denominated government bonds/lease certificates and gold bonds/gold lease certificates in addition to TL denominated government debt bonds and lease certificates continued in 2022 as well. On the other hand, in order to reduce the sensitivity of the debt stock to fluctuations in the exchange rate, the policy of gradually reducing the foreign currency denominated debt in the domestic debt stock continued in 2022, and FX-denominated domestic borrowing of USD 1.6 billion was realized in the domestic market in return for the redemption of USD 4.1 billion in FX-denominated domestic debt in the same period.

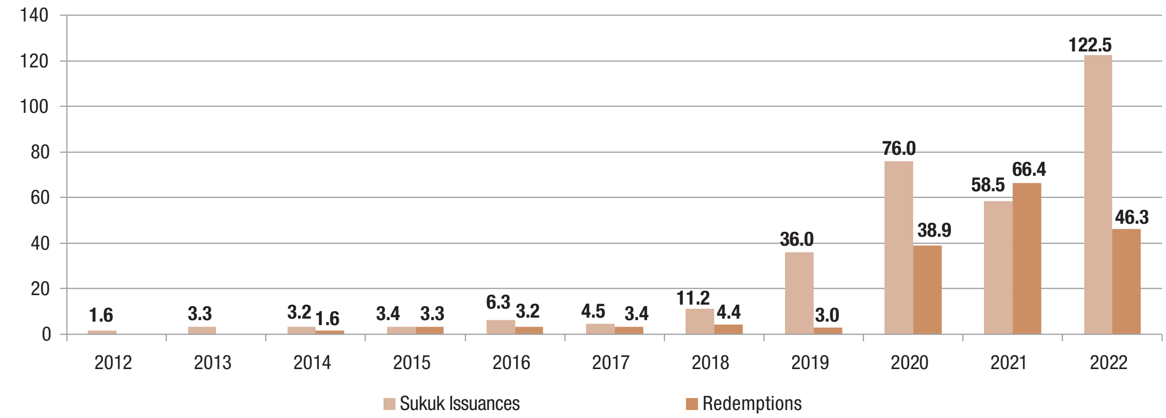
Figure 9 - Share of Domestic Sukuk Instruments in Overall Domestic Borrowing (%)[10]



The share of domestic lease certificates in total domestic borrowing was 1.6 percent in 2012, and the ratio increased each year and it realized as 17.5 percent in 2022.

10 *Gold based lease certificate and foreign currency lease certificates issued domestically are included.*

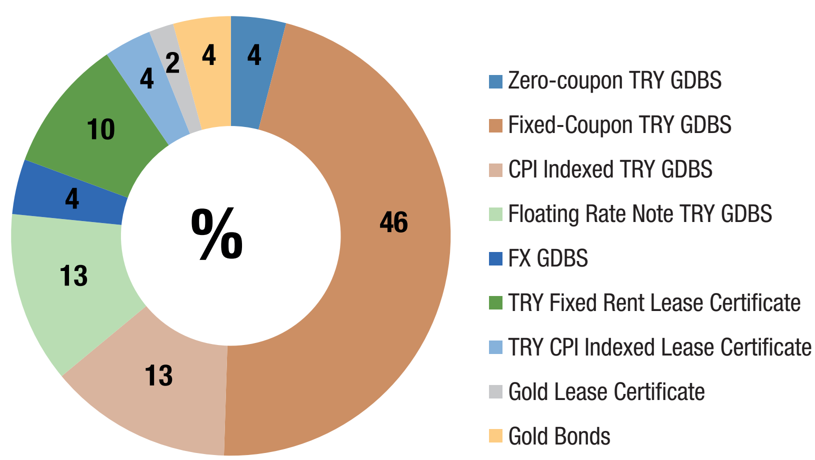
Figure 10 - Domestic Sukuk Issuances and Redemptions, 2012-2022 (Billion TL)



In order to support the development of the domestic lease certificate market, the issuance amounts have been generally realized above the redemption since 2014, the year in which the lease certificate redemptions started, until the end of 2022. In 2022, approximately 46.4 billion TL worth of Sukuk were redeemed, and 122.5 billion TL worth of Sukuk were issued in return, reaching the highest issuance amount on an annual basis. In reaching the highest issuance amount, the macroprudential measures taken by the CBRT, and in this regard, the increased demand for TL-denominated lease certificates by banks also played a significant role.

In June 2022, aiming to broaden the investor base and diversify the borrowing instruments, TL 6.6 billion worth of revenue-indexed bond was issued to individual investors.

Figure 11- Domestic Borrowing by Instruments in 2022 (%)*



* *The calculation is based on net borrowing amounts.*

In 2022, 4 percent of total domestic cash borrowing was realized through TL denominated zero-coupon bonds; 13 percent through TL denominated floating rate notes; 46 percent through TL denominated fixed rate coupon bonds; 13 percent through TL denominated CPI indexed bonds; 14 percent through TL denominated lease certificates; 4 percent through foreign exchange denominated bonds; and 6 percent through gold bonds and gold lease certificates.

In 2022, 76 percent of domestic borrowing was realized through auctions, 23 percent with direct sales and 1 percent by public offering.

EXTERNAL BORROWING

Program Finance

Program financing refers to the financing provided by the Ministry of Treasury and Finance from any external financing source in order to meet the financing needs of the public, within the framework of our country's macroeconomic programs.

In this context, the second tranche of EUR 100 million of the EUR 200 million financing provided by the Council of Europe Development Bank in 2020 for partial financing of the expenditures made from the budget in order to support the efforts to combat Covid-19 carried out by the Ministry of Health, was realized in 2021 and the disbursement process of the loan has been completed.

Eurobond and Lease Certificate Issuances in the International Capital Markets

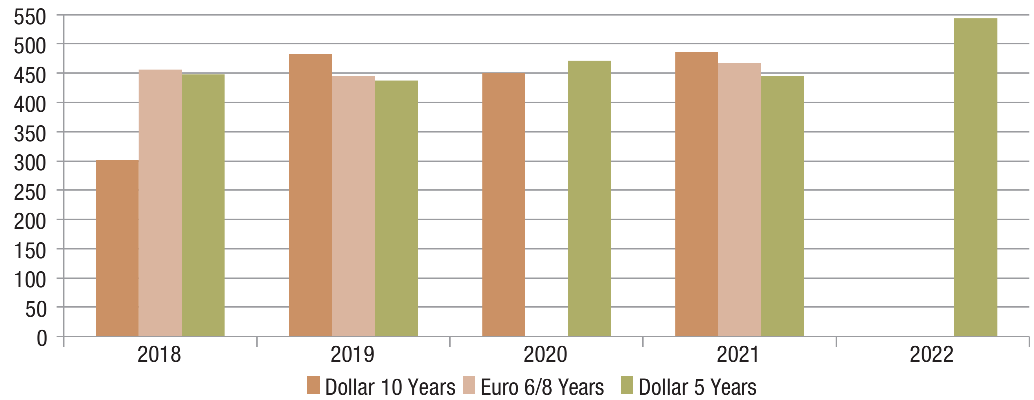
In 2022, a total of USD 11 billion worth of external funding was raised via three bond issuances and two lease certificate issuances in international capital markets. The first transaction of the year in February was a lease certificate issuance with a maturity of 5 years and a size of USD 3 billion. The lease certificate issuance had a lease rate of 7.250 percent. After the lease certificate issuance, in March, a bond issuance with a maturity of 5.5 years and a size of USD 2 billion was realized with the coupon rate of 8.600 percent. The second lease certificate issuance of the year was executed in October. The lease certificate issuance, with a maturity of 3 years and a size of USD 2.5 billion dollars, had a lease rate of 9.758 percent. In November, another bond issuance with a maturity of 5 years and a size of USD 1.5 billion was executed. The bond issuance had a coupon rate of 9.875 percent. In December, as the last transaction of the year, the bond that was issued in November with a coupon rate of 9.875 percent, was reopened with the amount of USD 2 billion.

Table 3- Eurobond and Lease Certificate Issuances in 2018-2022

Issue Date	Maturtiy Date	Currency	Amount	Coupon/Lease Rate (%)	Yield-To-Investor	
					(%)	Spread (bp)
01.17.2018	02.17.2028	USD	2,000,000,000	5.125	5.200	UST + 266.7
04.24.2018	10.24.2028	USD	2,000,000,000	6.125	6.200	UST + 336.8
10.23.2018	12.23.2023	USD	2,000,000,000	7.250	7.500	UST + 447.5
11.14.2018	02.16.2026	EUR	1,500,000,000	5.200	5.250	MS + 456.4
01.16.2019	04.26.2029	USD	2,000,000,000	7.625	7.680	UST + 497.0
01.31.2019	03.31.2025	EUR	1,250,000,000	4.625	4.750	MS + 446.0
02.21.2019	02.21.2022	USD*	2,000,000,000	5.800	5.800	MS + 318.0
03.26.2019	04.26.2029	USD	1,000,000,000	7.625	7.150	UST + 455.0
07.10.2019	08.10.2024	USD	2,250,000,000	6.350	6.450	UST + 469.7
11.14.2019	11.14.2024	USD	2,500,000,000	5.600	5.700	UST + 407.4
02.13.2020	03.13.2025	USD	2,000,000,000	4.250	4.450	UST + 298.5
02.13.2020	03.13.2030	USD	2,000,000,000	5.250	5.450	UST + 380.6
10.14.2020	10.14.2025	USD	2,500,000,000	6.375	6.400	UST + 608.7
12.02.2020	01.15.2031	USD	2,250,000,000	5.950	6.000	UST + 511.7
01.26.2021	01.26.2026	USD	1,750,000,000	4.750	4.900	UST + 445.3
01.26.2021	06.26.2031	USD	1,750,000,000	5.875	5.950	UST + 486.0
06.22.2021	06.22.2026	USD*	2,500,000,000	5.125	5.125	MS + 426.7
07.08.2021	07.08.2027	EUR	1,500,000,000	4.375	4.500	MS + 468.3
09.20.2021	10.24.2028	USD	750,000,000	6.125	5.700	UST + 459.6
09.20.2021	09.20.2033	USD	1,500,000,000	6.500	6.500	UST + 517.9
02.24.2022	02.24.2027	USD*	3,000,000,000	7.250	7.250	MS + 524.7
03.24.2022	09.24.2027	USD	2,000,000,000	8.600	8.625	UST + 645.1
10.13.2022	11.13.2025	USD*	2,500,000,000	9.758	9.750	MS + 545.5
11.15.2022	01.15.2028	USD	1,500,000,000	9.875	10.000	UST + 561.4
12.08.2022	01.15.2028	USD	2,000,000,000	9.875	9.000	UST + 529.6

* *Lease Certificate*

Figure 12 - Risk Premiums for International Bond Issuances (basis points)*



* *The values are the weighted averages of the spreads and the nominal amounts of the bonds issued during the year corresponding to the given maturity.*

Box 2- Developments in International Capital Markets

At the beginning of 2022, the effects of the COVID-19 pandemic began to diminish as access to the vaccine became relatively easier and the effects of the new variants remained limited. On the other hand, the continuation of restrictions in China, which maintained its "Zero Covid" policy as a result of an increasing number of cases, caused the global economy to remain under pressure from time to time. In late February 2022, geopolitical developments became the main agenda of the world after Russia declared war on Ukraine. Additionally, the recovery in global demand due to the easing of pandemic conditions, supply constraints and disruption in the supply chain, the negative impact of war conditions and the sharp rise in commodity prices caused significant increase in inflation in advanced and emerging economies.

In this context, central banks, especially in developed countries, started to raise interest rates on a global scale in order to bring inflation to targeted levels. Starting March 2022, the Fed hiked the interest rates in seven consecutive meetings, and raised the upper bound of benchmark interest rate to 4.50 percent at the end of 2022. Likewise, the European Central Bank (ECB) started to raise interest rates to tame rising inflation in the Eurozone. The ECB delivered its first rate hike at July 2022 meeting by raising its key interest rates by 50 basis points. At the end of 2022, the interest rate on the main refinancing operations in the Eurozone was 2.50 percent. The Bank of England (BoE) raised the interest rate, which was 0.10 percent for a long time, to 0.25 percent at December 2021 meeting. At the end of 2022, the BoE raised the interest rate to 3.50 percent by hiking the interest rates in all consecutive meetings.

Risk premiums rising due to the effects of the war and US Treasury bond yields that started to rise as of March 2022, when the Fed started to raise interest rates, increased the borrowing costs of developing countries in international markets. The deterioration in risk perception, caused by the rise in bond yields in the US and other advanced economies, increased the demand for safe havens and led to capital outflows from emerging economies. Accordingly, the low global risk appetite and the rise in borrowing costs of developing countries led to a significant fall in the amount of bond issuances of developing countries in international capital markets. Moreover, stock markets of developing countries diverged negatively from the global stock markets as of the second half of 2022.

While CDS premiums of developing countries increased due to the Russian-Ukrainian war that started in February 2022, a downward trend was observed in the CDS premiums of developing countries in the last quarter of the year. The J.P. Morgan EMBI+ index, an indicator of the risk premium for emerging countries, decreased by 11 basis points compared to the end of 2021 and realized as 375 basis points at the end of 2022. The Türkiye sub-segment of the index decreased by 165 basis points and realized as 413 basis points in the same period. In 2022, the lowest level of Türkiye 5-year CDS premium was 495 basis points, and the highest level was 895 basis points. As of year-end 2022, our CDS premium stood at 512 basis points.

Project Finance

Between 2018 and 2022, annual average of USD 4.85 billion in external financing was provided under agreements in which the Ministry included as borrower or guarantor. In 2022, the amount of financing provided reached to about USD 3.50 billion. The financing provided in 2022 was mainly for projects in the energy sector, health, urban infrastructure, SMEs and agriculture/rural development sectors.

The sector that received the most financing between 2018 and 2022 is the transportation sector with approximately USD 6.51 billion. The transportation sector is followed by energy, real sector, municipal infrastructure, health and agriculture sectors.

Figure 13 - Distribution of Project Loans Secured Between 2018-2022 by Sources (Million USD)

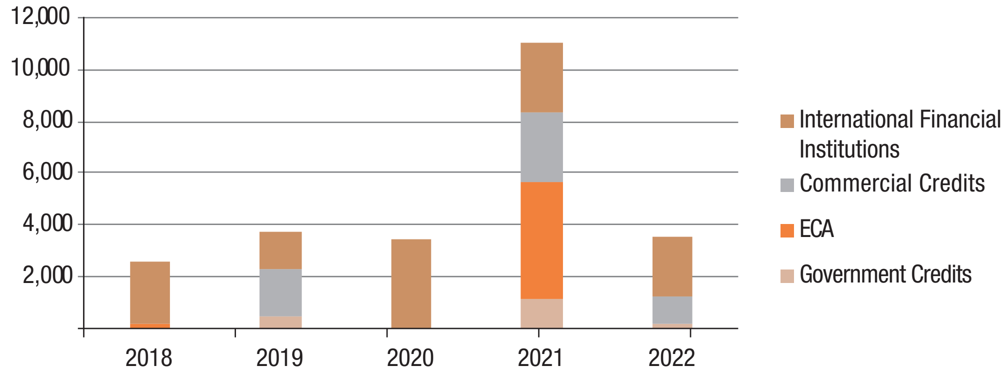


Figure 14 - Allocated Facilities (Million USD)

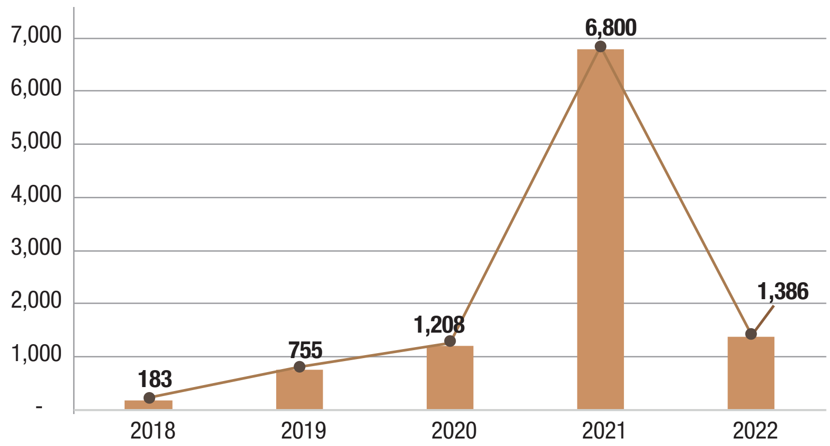
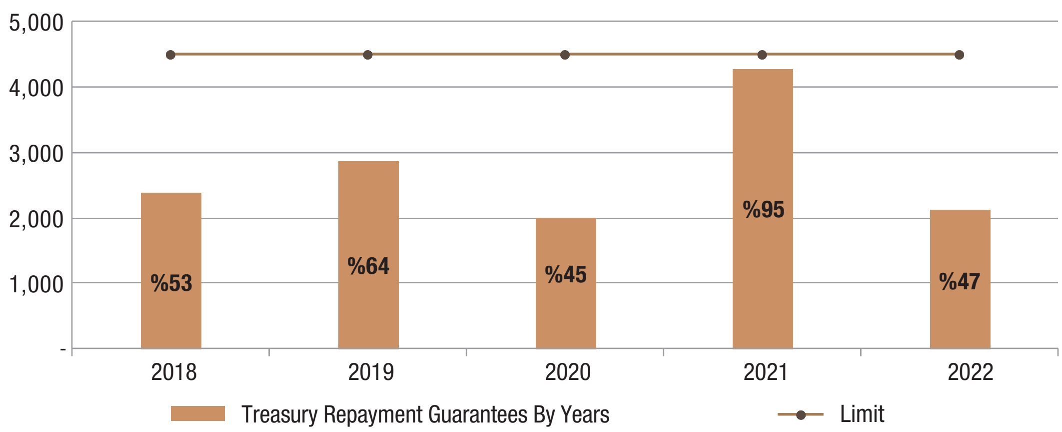


Figure 15 - Treasury Guarantee and On-lending Limit. Guarantee and On-lending Amount Secured (Million USD)

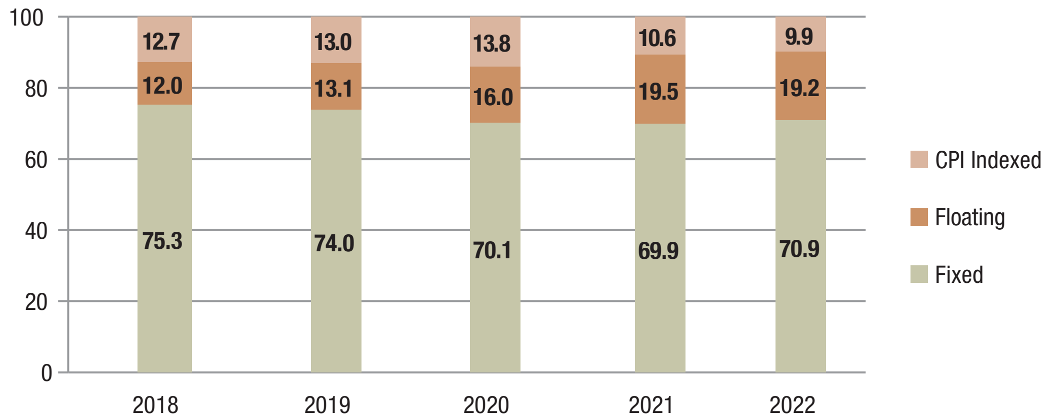


DEBT STOCK

Liquidity, interest and exchange rate risks are mitigated and significant improvements are achieved by implementing the borrowing strategies consistent with the strategic benchmarks framework that are determined by the Debt and Risk Management Committee since 2003.

Within this framework, the share of the domestic debt in total stock actualized as 47.2 percent and the share of the external debt in total stock actualized as 52.8 percent at the end of 2022. On the other hand, share of TL-denominated debt in total stock realized as 34.5 percent. Besides, the share of fixed rate debt in total stock realized as 70.9 percent, the share of CPI-indexed debt as 9.9 percent and the share of floating-rate debt excluding CPI-indexed debt realized as 19.2 percent.

Figure 16 - Central Government Debt – Interest Composition (%)



The average time to maturity of central government debt realized as 5.4 years as of the end of 2022, 3.6 years for domestic debt stock and 7.1 years for external debt stock.

In 2022, central government domestic debt stock was TL 1,905.3 billion. TL 1,742.0 billion of it was the cash bonds and TL 163.3 billion of it was the non-cash bonds. Foreign share in the domestic debt stock had realized as 0.8 percent.

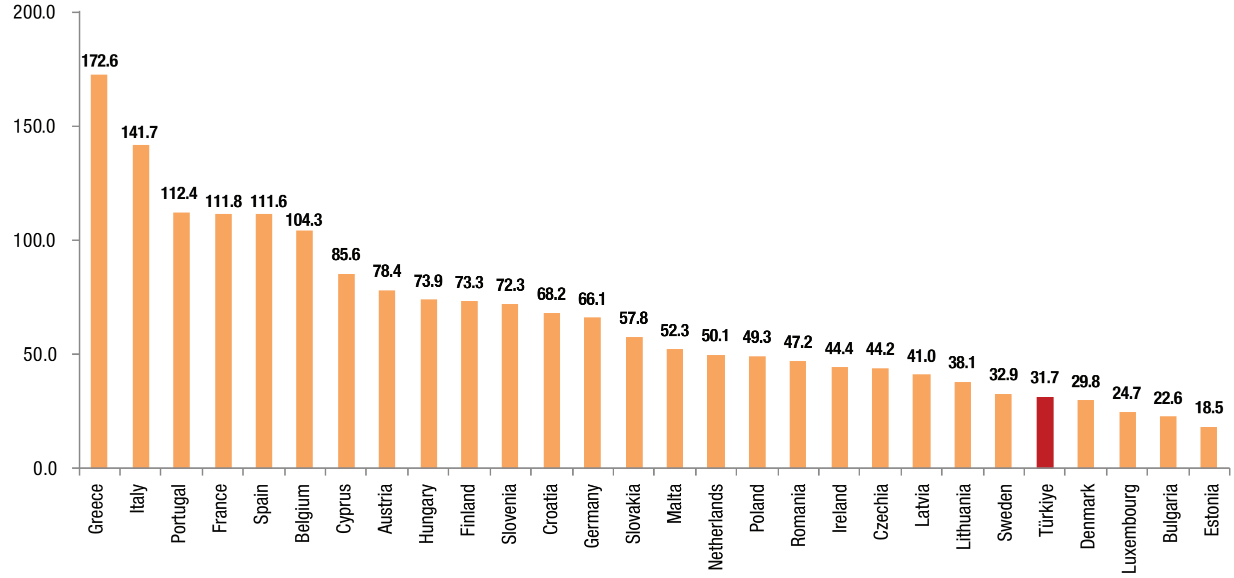
Table 4 - Composition of Central Government Debt Stock by Currency, Interest and Cash Type (Billion TL)

	2018	2019	2020	2021	2022
Interest					
Fixed	375.2	464.2	591.7	696.0	1,044.3
Floating	210.9	290.8	468.7	625.2	861.0
Indexed to CPI	*135.4*	*172.3*	*250.9*	*291.6*	*397.7*
Currency					
TL	580.3	668.5	794.4	933.2	1,392.1
FX	5.9	86.5	265.9	388.0	513.2
Cash / Non-cash					
Cash	586.1	716.5	983.9	1,226.4	1,742.0
Non-cash	0.0	38.6	76.5	94.7	163.3
Central Government Domestic Debt Stock	**586.1**	**755.1**	**1,060.4**	**1,321.2**	**1,905.3**

On the other hand, the general government debt stock, which the European Union member states are obliged to compile and report to Eurostat within the scope of the Excessive Deficit Procedure (EDP), has been calculated by the Ministry of Treasury and Finance since 2003. The general government debt stock, "EU-defined general government debt stock", is shared with the public on website. Within the scope of the EDP, a 60 percent cap has been determined for the general government debt stock to GDP ratio as an indicator of debt sustainability for European Union members.

Taken into account the ratio, Türkiye has been positively differentiated from the average of EU - 27 countries in the last 10 years. While the EU average was 85 percent as of the end of 2012, it decreased to 83.5 percent in 2022. In the same period, the ratio of Türkiye declined from 32.4 percent to 31.7 percent.

Figure 17 – General Government Debt Stock Defined by the EU Standards to GDP by the end of 2022 (%)



Source: Eurostat (October, 2023). Ministry of Treasury and Finance (September, 2023)

Table 5- Debt Stock Indicators

	2018	2019	2020	2021	2022
Central Government Gross Debt Stock (Million TL)	1,067,115	1,329,054	1,812,849	2,747,819	4,034,229
Central Government Gross Debt Stock / GDP (%)	28.4	30.8	35.9	37.9	26.9
General Government Debt Stock Defined by EU Standards (Million TL)	1,130,088	1,406,415	2,001,628	3,028,860	4,759,452
General Government Debt Stock Defined by EU Standards / GDP (%)	30.0	32.6	39.6	41.7	31.7
Public Sector Net Debt Stock (Million TL)	507,135	702,236	970,709	1,489,151	2,522,941
Public Sector Net Debt Stock / GDP (%)	13.5	16.3	19.2	20.5	16.8

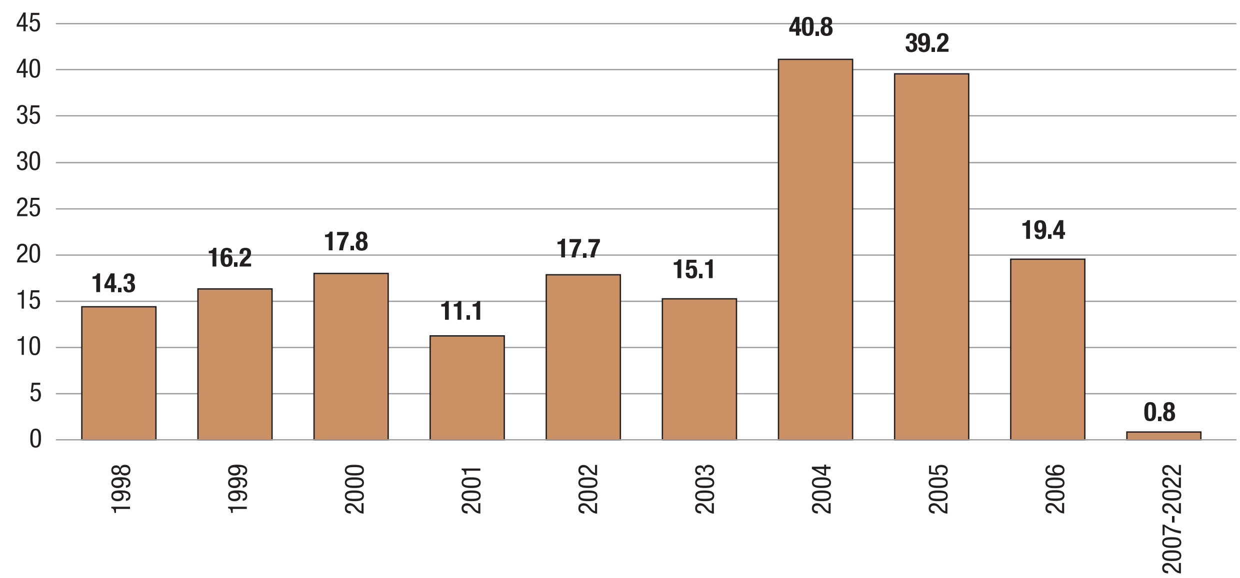
Note: Figures may vary due to possible revisions on external debt data of previous years.

2. MANAGEMENT OF THE ABROGATED FUNDS OBLIGATIONS

Funds are special accounts of public, which may or may not reside in the budget for the allocation specified resources for particular purposes. As a result of the increase in the usage of funds from the beginning of 1980's, collective funds account was established in 1992 to oversee all the revenues and expenditures of the funds and the majority of the funds were incorporated into the budget in 1993. Abrogation of the funds had been decided in 1999 and related legislation was enacted in 2000.

Compulsory savings account was established by Law No. 3417 enacted on March 9, 1988. The purpose of the account was to encourage employees to save by funneling part of their wages and salaries and contributions from employers or the government to the account where the proceeds earn high yields. Between April 1988 and May 2000, 2 percent of wages and salaries with 3 percent contributions from employers or the government were deposited to the savings accounts held by Ziraat Bank. After the establishment of Unemployment Fund in 2000, the deduction from salaries and wages and the contributions from employers or the government were halted. By the Law No. 4853 enacted on April 24, 2003, the account has been set to dissolve. Accumulated savings and yields were paid to the employees in ten installments between 2003- 2006. As of December 31, 2007 all the assets and liabilities of the account had been transferred to Ministry of Treasury and Finance.

Figure 18 - Payments from Compulsory Savings Account (*)(Billion ₺)



** Payments have been updated as of 31.12.2022, taking into account inflation realizations.*

3. MANAGEMENT OF CONTINGENT LIABILITIES

Contingent liabilities refer to obligations of which timing and magnitude depend on the occurrence of some uncertain future event outside the control of the government. If contingent liabilities are obligations based on contracts, laws, or clear policy commitments they are called "explicit contingent liabilities". On the other hand, if they are based on social, political and economic concerns for the government instead of a clear commitment, they are called "implicit contingent liablities".

Treasury repayment guarantees and Treasury debt assumption commitments provided in the context of Public-Private-Partnership (PPP) projects are among the explicit contingent liabilities of the Ministry of Treasury and Finance (MoTF). In the debt assumption commitments provided by the MoTF, in case the senior debt of a PPP project is assumed by the MoTF as a result of the early termination[11] of a project contract, all assets related to the project are also transferred to the government. Similarly, once an assumption occurs as a result of Treasury repayment guarantees, the related beneficiary becomes indebted to the MoTF with an equal amount and Treasury receivable collection mechanisms are triggered. Thereby, the change that occurs in the public assets and liabilities should be evaluated with a wholistic approach when calculating the contingent liabilities' effects on the public fiscal balance.

In order to strengthen the management of the contingent liabilities faced by the MoTF, the Internal

11 More detailed information can be found in the article "Termination Payment Provisions in Public Private Partnership Contracts" in the 2017 Public Debt Management Report. p. 48-58.

Credit Rating Model, which takes into account the performance and financial data of the institutions that have guaranteed debt and receivables stock against the MoTF, has been used since 2007. In this context, the model outputs are used to determine and implement tools such as Treasury repayment guarantee and on-lent limit, guarantee and on-lent fee and Risk Account allowance that used to reduce risks arising from contingent liabilities.

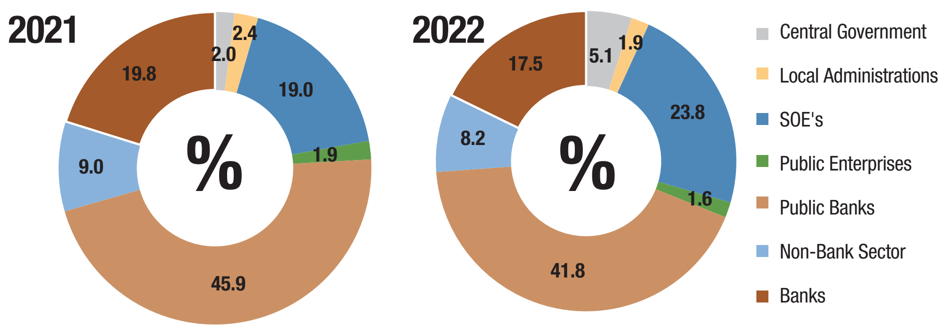
Within this framework, the limit for the Treasury repayment guarantee and on-lent and the limit for the Treasury debt assumption commitment to be provided within the relevant fiscal year under the Law no 4749, are included in the Central Government Budget Law. Both limits have been determined as USD 4.5 billion for 2022.

Possible effects of risks that the MoTF exposed to within the scope of contingent liabilities on debt stock, debt sustainability and fiscal discipline are measured, monitored and reported regularly by various risk management tools and scenario analyzes as part of the risk management.

TREASURY GUARANTEES

According to Law no 4749, there are four types of guarantees that the Ministry of Treasury and Finance can provide. These are Treasury repayment guarantee, Treasury counter–guarantee, Treasury country guarantee and Treasury investment guarantee. Treasury investment guarantee is mainly used for energy power plant projects within the scope of Public Private Partnership. Treasury country guarantee are yet to be realized. Implementation of treasury counter–guarantee started in 2020. Treasury repayment guarantee is one of the most commonly used guarantee type for supporting the external financing of the public investment projects realized by public banks, SOE's, municipalities and their affiliates. Treasury guaranteed foreign debt stock has increased by USD 534 million from its level in 2021 and reached to USD 16.2 billion by the end of 2022.

Figure 19 - Treasury Guaranteed External Debt Stock by Borrower (%)



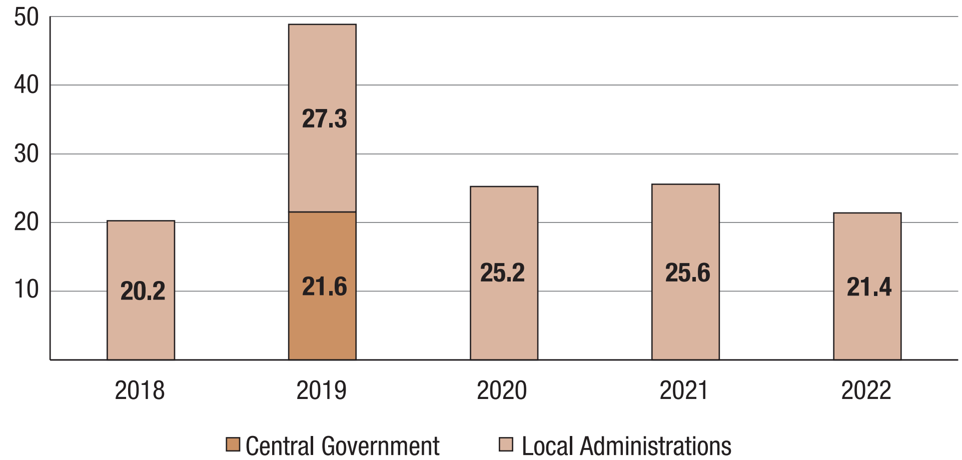
Source: Ministry of Treasury and Finance

The undertaken ratio[12] of Treasury guaranteed credits has increased to 1.1 percent in 2022 from its level of 0.8 percent in 2021. Undertakings were realized from municipality guaranteed debt.

In 2022, Treasury has undertaken USD 21.4 million due to the repayment guarantees in total and there is no undertakings related to investment guarantees. In 2022, institutions have paid USD 1.9 billion from their guaranteed debt stock without any undertakings by the Treasury.

12 *The undertaken ratio is provided by the ratio of undertakings for Treasury repayment guaranteed credits divided by the sum of undertakings by the Treasury and payments made by institutions to creditors. "Treasury undertakings/ (Treasury undertakings + repayments by the borrower)"*

Figure 20 - Treasury Guarantees Undertaken (Million USD)



The undertaken amounts of Treasury guaranteed credits have been paid from the Risk Account. As the balance of the account carried forward in the previous years and the collections of the account throughout the year are high enough to cover the payments of the undertaking, no budget allocation has been used in 2022. Since 2009 there hasn't been any need for transfer from the budget allocations because of the sufficient balances of the account.

DEBT ASSUMPTION COMMITMENTS

Within the framework of PPPs, debt assumption mechanism will be put into use by the public sector in the case of early termination of the contract between the administration and the appointed company (i.e. the company carrying out the project). If a debt assumption occurs, the assets of the project are transferred to the public sector and the outstanding liabilities of the external financing provided for the project as of the date of termination of the contract will be covered by the MoTF. In this context, in case of the early termination of the implementation contracts and the transfer of the project assets, the MoTF is authorized to assume the external financing including those resulting from the hedging products.

The projects subjected to debt assumption commitment are given in Table 6 below. As of the date of the report, no debt assumption has been realized.

*Table 6 - Loans Subject to Debt Assumption Agreement**

Project Name	PPP Model	Debt Asssumption Agreement Date	Total Project Cost	Loan Amount	Loan Amount (USD Equivalent)
Eurasia Tunnel	Build-Operate-Transfer	12.11.2012	$1,239,863,000	$960,000,000	$960,000,000
Gebze-Orhangazi-İzmir Motorway (including the Izmit Gulf Crossing)	Build-Operate-Transfer	06.05.2015	$6,312,392,047	$4,956,312,328	$4,956,312,328
Çanakkale-Malkara Motorway (including 1915 Çanakkale Bridge)	Build-Operate-Transfer	03.16.2018	€3,159,721,036	€2,265,000,000	$2,799,993,000
Ankara-Nigde Motorway	Build-Operate-Transfer	06.07.2018	€1,462,628,902	€1,114,962,012	$1,310,749,341
Northern Marmara Motorway - Kurtköy-Akyazı Section	Build-Operate-Transfer	09.16.2019	$3,661,656,404	$2,840,000,000	$2,840,000,000
Northern Marmara Motorway- Kınalı-Odayeri Section	Build-Operate-Transfer	09.16.2019	$2,072,257,009	$1,595,000,000	$1,595,000,000
Northern Marmara Motorway -Odayeri-Paşaköy Section (including Third Bosphorus Bridge)	Build-Operate-Transfer	12.02.2021	$3,456,244,239	$1,198,302,550	$1,198,302,551
Aydın-Denizli Motorway	Build-Operate-Transfer	12.30.2021	$1,118,643,935	$769,939,998	$869,416,246
				TOTAL	**16,529,773,465**

** As of 12.31.2022. Treasury's debt assumption commitment stock including hedging cost caps is USD 13,603,893,806.*

RISK MANAGEMENT

According to the Law No. 4749 on Regulating Public Finance and Debt Management and its secondary legislation, "Debt and Risk Management Committee" (DRC) is responsible for determining general strategies concerning the management of public assets and liabilities. Major risks regarding the public debt, receivables and cash management; namely market risk, credit risk and operational risk, are managed in line with the principles and policies set by the DRC and regularly reported to DRC.

1. BUDGET AND FISCAL RISKS

Monitoring, estimating and identifying risks in the public fiscal balance are the most important inputs in determining of measures and policies for efficient debt and cash management. In this context, while the Central Government Budget (CGB) realizations are monitored closely, the deviations in budget revenues and expenditures are analyzed and solid data is provided for debt and cash management.

In 2021, economic recovery was achieved due to the impact of post-pandemic normalization. In 2022, the buoyant economic activity, especially increase in domestic demand, contributed to the strong performance of budget revenues. In 2022, CGB revenues increased by 15.9 percent in real terms compared to the previous year, while CGB expenditures increased by 6.5 percent in real terms, with a limited performance compared to budget revenues. Despite revenue and expenditure measures (such as VAT reductions on basic food and necessity products, FX-protected deposit mechanism, transfers to energy SOEs, etc.) implemented at the end of 2021 and in 2022, the Central Government Budget significantly outperformed the Budget Law's projection, ended the year with 1 percent deficit, thanks to the strong performance of tax revenues. Furthermore, the primary balance of CGB realized a surplus for the first time since 2018, ended the year at 1.1 percent.

The budget deficit, which was determined as TL 278.4 billion in the Central government Budget Law for 2022, was revised to TL 461.2 billion in the Medium-Term Program (MTP). At the end of 2022, the CGB deficit was realized as TL 142.7 billion, well below the projection. The CGB primary balance, which was expected to have a TL 38 billion deficit according to the Budget Law, ended the year with a surplus of TL 168.2 billion.

When the CGB figures for the year 2022 are examined, both budget revenues and expenditures exceeded the Budget Law projections by TL 1,327.5 billion and TL 1,191.8 billion, respectively. In 2022, tax revenues performed TL 1,095.2 billion above the Budget Law projections. When tax revenues are examined in detail, all essential tax items outperformed the Budget Law projections. Personal income tax, corporate income tax, domestically VAT, import VAT, and motor vehicles SCT tax were noteworthy for their performance above the projections. The realization of non-tax revenues above the budget target was mainly driven by enterprise and property revenues and interest revenues.

When CGB expenditures are examined, non-interest expenditures and interest expenditure realized as TL 1,121.3 billion and TL 70.5 billion above the Budget Law respectively in 2022. All expenditure items of non-interest expenditure, except the reserve allocations, exceeded the Budget Law projections. The highest increase compared to the Budget Law in non-interest expenditure items was seen current transfers, personnel expenditures and lending items. The TL 464.6 billion increase in current transfers item mainly resulted from health, retirement, and social aid expenditure, as well as transfers to households under the FX-Protected deposits scheme and shares from revenues item due to high performance in revenues. The TL 218.5 billion increase in personnel expenditures (including SSI expenditures) was driven by wage increases and the increase in public employment since the beginning of the year. The TL 148.3 billion increase in lending item was mainly attributed to capital transfers to energy SOEs.

Table 7- 2022 Central Government Budget (Million TL)

	MTP (2022 - 2024)	MTP (2023 - 2025)	Realization (*)
Budget Balance	-278,374	-461,200	-142,660
Primary Balance	-37,991	-131,400	168,243
Revenues	1,472,583	2,672,500	2,800,088
Tax Revenues	1,258,279	2,269,600	2,353,438
Other Revenues	214,304	402,900	446,650
Expenditures	1,750,957	3,133,700	2,942,748
Primary Expenditures	1,510,574	2,803,900	2,631,845
Interest Expenditures	240,384	329,800	310,903

** Source: Directorate General of Public Accounts*

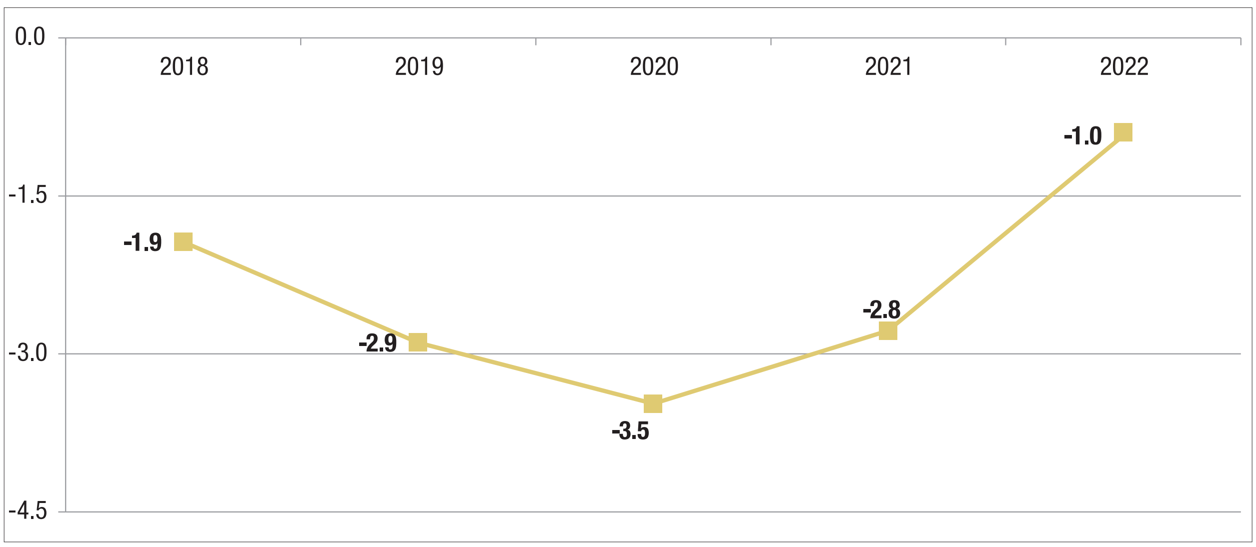
Table 8- 2022 Central Government Budget Balance/GDP (%)

	MTP (2022 - 2024)	MTP (2023 - 2025)	Realization (*)
Budget Balance	-3.5	-3.4	-1.0
Primary Balance	-0.5	-1.0	1.1
Revenues	18.7	19.9	18.7
Tax Revenues	16.0	16.9	15.7
Other Revenues	2.7	3.0	3.0
Expenditures	22.2	23.3	19.6
Primary Expenditures	19.2	20.9	17.5
Interest Expenditures	3.1	2.5	2.1

** Source: Directorate General of Public Accounts*

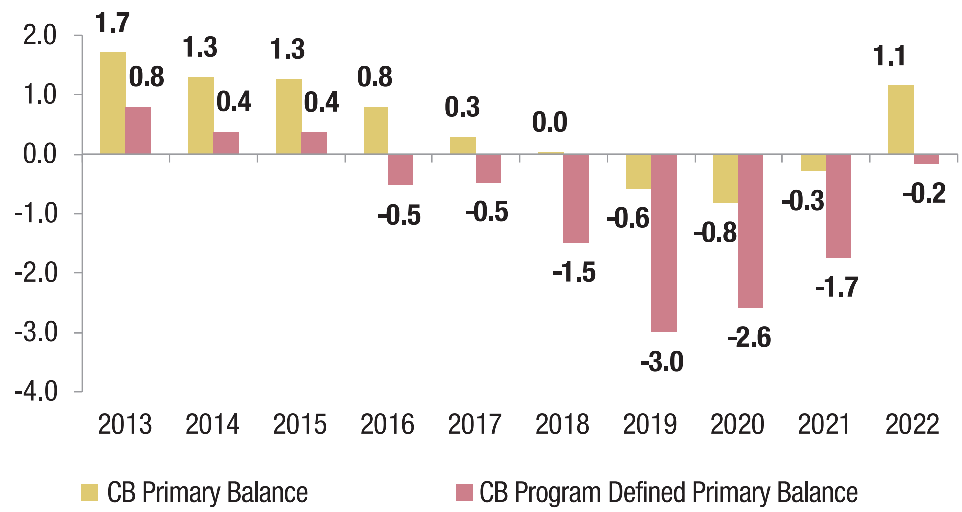
Looking at the ratio of the Central Government Budget balance to the GDP for the period of 2018 to 2022, measures taken to mitigate the negative effects of economic fluctuations in the last quarter of 2018 on commercial activities continued to affect public finances in 2019. In 2020, increase in budget deficit was observed in parallel with the expansionary policies implemented all over the world in order to eliminate the pandemic effect. In 2021, as a result of the recovery in economic activity and the improvement in the revenue performance of the budget, the ratio of the budget deficit to GDP decreased. In 2022, the ratio of the budget deficit to GDP realized 1 percent in line with the high increase in budget revenues and limited increase in expenditures.

Figure 21 – Central Government Budget Balance/GDP (%)



On the other hand, when the Central Government Primary Budget Balance (program defined) is examined, it was -1.5 percent in 2018 and increased to -3 percent in 2019. In 2020, it advanced to -2.6 percent demonstrating better performance than the preceding year. In 2021, this ratio further improved to -1.7 percent, and in 2022 it exceeded expectations well above the Budget Law projections and posted a limited deficit of 0.2 percent.

Figure 22- Central Government Primary Budget Balance (Program Defined)/GDP (%)



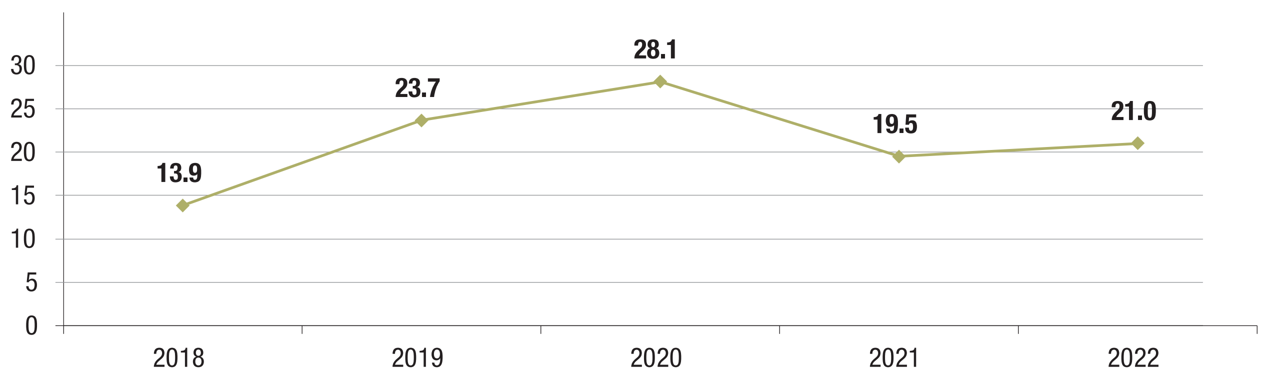
2. MARKET RISK MANAGEMENT

"Market risk" is defined as the exposure of public debt dynamics to market variables such as exchange rates, interest rates and inflation. "Liquidity risk" can be described as possibility of experiencing difficulties in accessing funds required for Treasury operations which also induces the refinancing (roll-over) risk for the Treasury. The main principle of the public debt management is reducing the costs to the most appropriate level in the medium-long term taking these risks into consideration. Facing with a trade-off between cost and risk, public debt managers try to balance the effects of changes in macroeconomic indicators on debt dynamics.

By considering risk factors that Treasury portfolio is exposed to, targets are set for the current and the following two years via strategic benchmarking practice since 2003 by the Ministry. Thus, a medium-term perspective is brought to borrowing policies. In this context, strategic benchmarks and indicators determined for the year 2022:

- Liquidity Risk:
  - To keep the share of debt maturing within 12 months at a certain level.
  - To keep a certain level of cash reserve in order to reduce the liquidity risk associated with cash and debt management.
- Interest Rate Risk:
  - To keep the share of debt stock with interest rate refixing period of less than 12 months at a certain level by taking into account appropriate instrument and maturity composition to optimize interest payments.
- Exchange Rate Risk:
  - To borrow mainly in TL and to decrease the share of domestic debt stock denominated in foreign currency.
  - To borrow in foreign currencies besides US dollar in international markets for market diversification.

Figure 23 - Share of Debt Maturing within 12 Months in Domestic Debt Stock (%)



In terms of liquidity risk, the share of domestic debt maturing within 12 months realized as 19.5 percent in 2021, while this ratio increased to 21.0 percent as of the end of 2022.

Table 9 - Change in EU Defined General Government Debt to GDP Ratio

	2002	2022
Change in real exchange rate app/dep by 5 percentage points	+ / - 2.0 Points	+ / - 0.9 Points
Change in TL interest rate by 500bp	+ / - 1.4 Points	+ / - 0.6 Points
Change in GDP growth rate by 2 percentage points	+ / - 1.3 Points	+ / - 0.5 Points

The sensitivity of general government debt burden to macroeconomic shocks has been in a general downward trend since 2002. This change was mainly driven by tight fiscal policies and borrowing policies based on strategic benchmarks. As a result of these policies, the sensitivity of the general government debt burden to macroeconomic indicators was significantly reduced considerably in 2022 compared to end-2002.

Figure 24 - Interest Composition of Central Government Domestic Debt Stock (%)

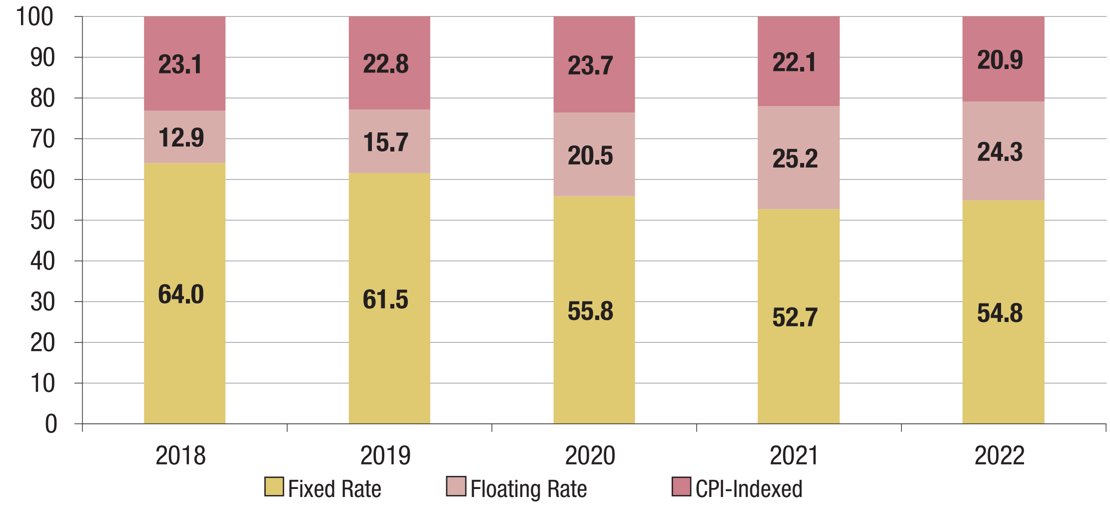
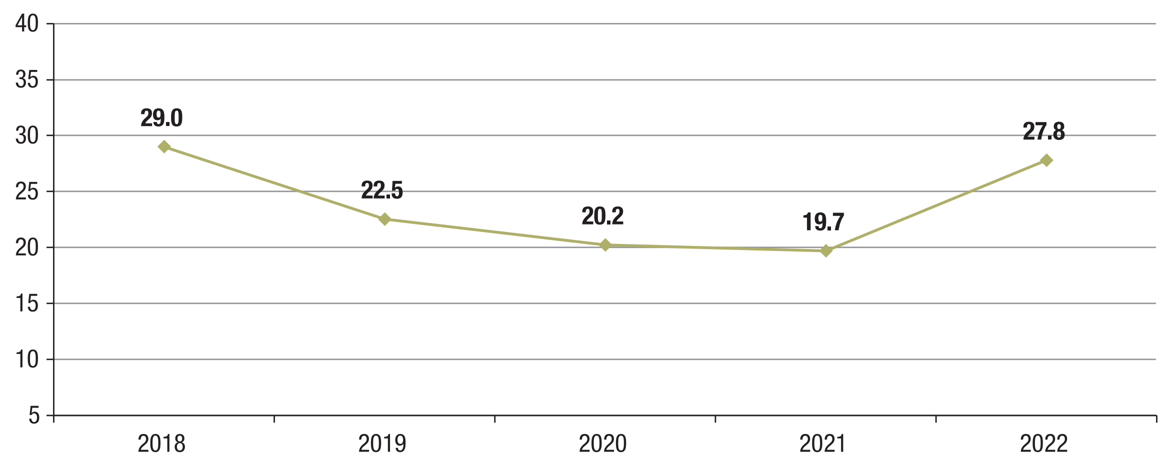
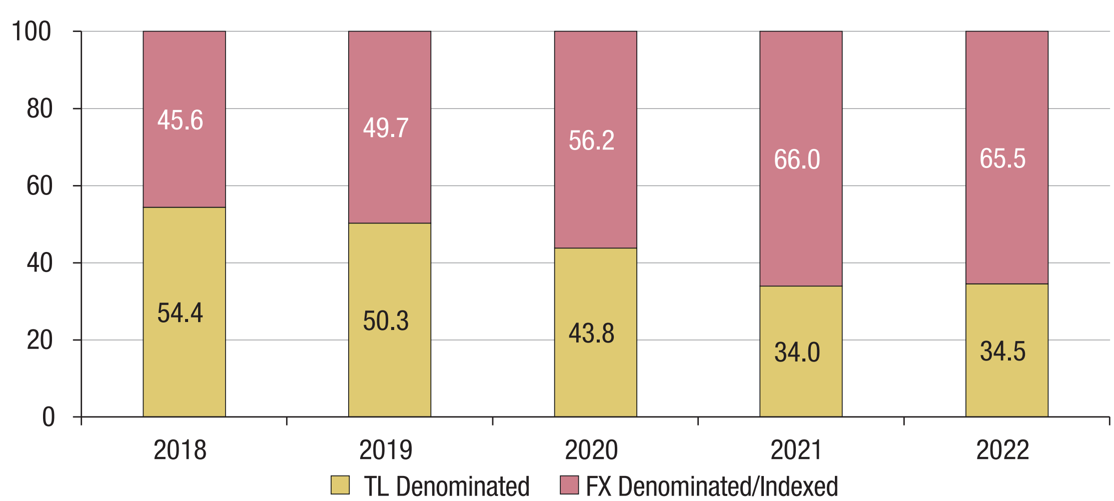


Figure 25 - Duration of TL Denominated Central Government Debt Stock (*) (in Months)



** Represents Macaulay duration. Not covered the non-cash bonds. the CPI-indexed bonds. the gold bonds and the gold denominated lease certificates.*

Figure 26 - TL/FX Composition of Central Government Debt Stock (%)



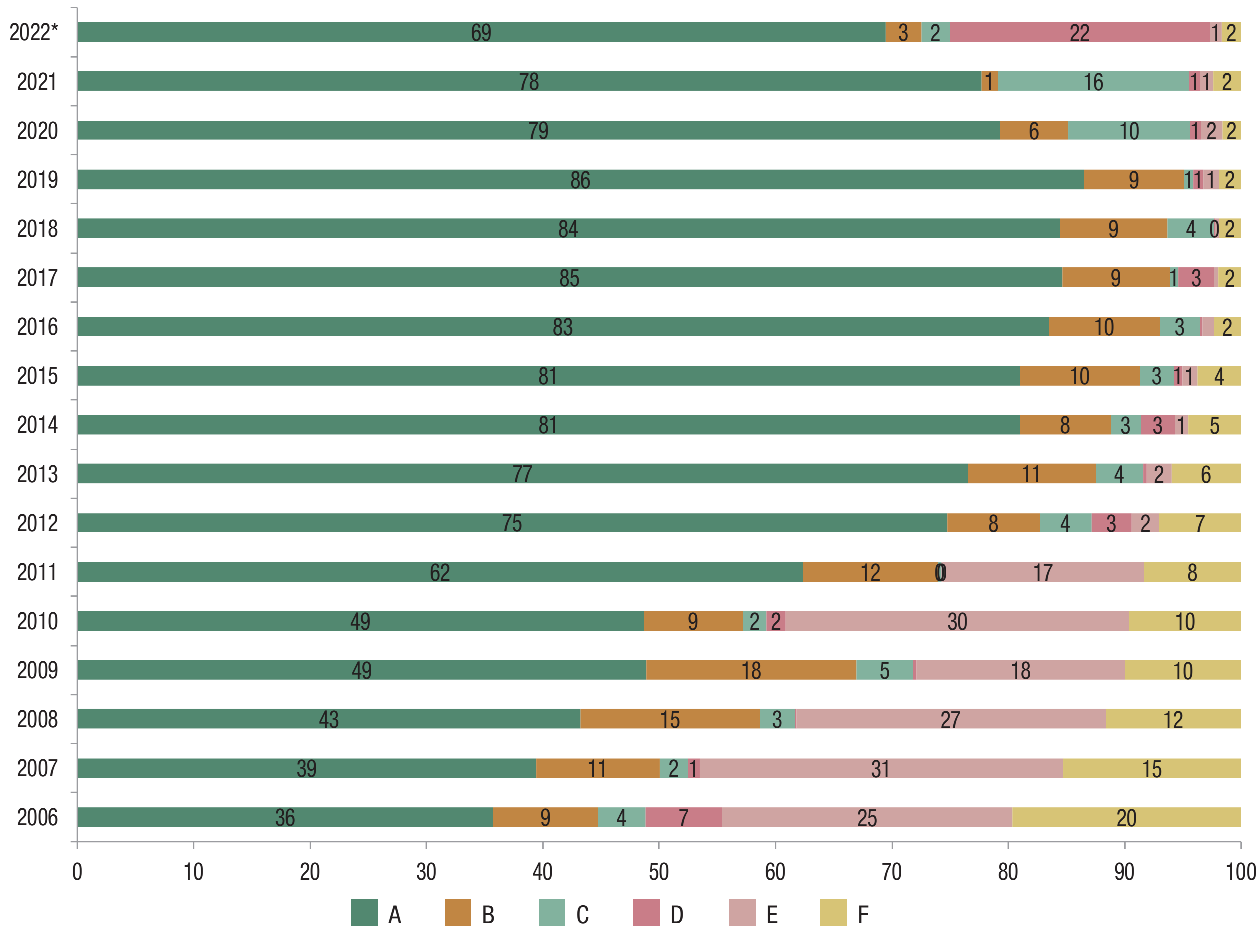
3. CREDIT RISK

Credit risk is defined as the probability that the beneficiary institutions will not be able to fulfill their obligations on time under the terms of agreements. Main sources of credit risk that the MoTF is exposed to are the guaranteed and on-lent loans as well as the debt assumption commitments provided by the MoTF. The realization of credit risk will result in an unanticipated cash need, which may have negative impacts on the borrowing programs. Credit risk management aims to assess such risks and to take necessary measures to mitigate them.

In order to effectively manage the credit risk exposure of MoTF, a credit rating model is used to assign ratings to the beneficiary institutions (Municipalities, municipal administrations, public banks-development banks and state owned enterprises). As a result of the measures introduced [13] in the area of credit risk management, the distribution of the credit ratings of Treasury repayment guaranteed and on-lent credits has been improving.

The share of institutions with "A" credit rating within the overall portfolio of Treasury guaranteed and on-lent credits stock increased to 69 percent in 2022 compared to 36 percent in 2006.

*Figure 27 - The Distribution of Treasury Repayment Guaranteed and On-lent Credit Stock by Credit Rating (%)***



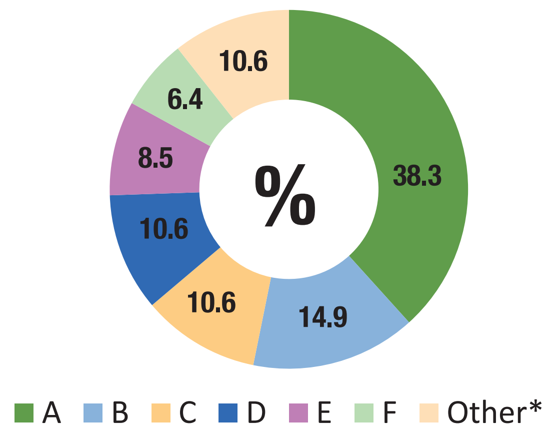
(*) Temporary.

(**) Stock amounts do not include institutions that are not included in the internal credit rating model. The share of these institutions in the total foreign debt stock with guaranteed and on-lent is 13 percent.

Evaluating the composition of the credit ratings of the institutions, the share of A rated institutions in Treasury guaranteed credit and on-lent credits portfolio is 38.3 percent and the share of B rated institutions is 14.9 percent as of the end of 2022.

13 *For the measures taken under credit risk management, Credit Rating Model and detailed information about the calculation of credit ratings see Public Debt Management Report 2011 pg. 39- 42.*

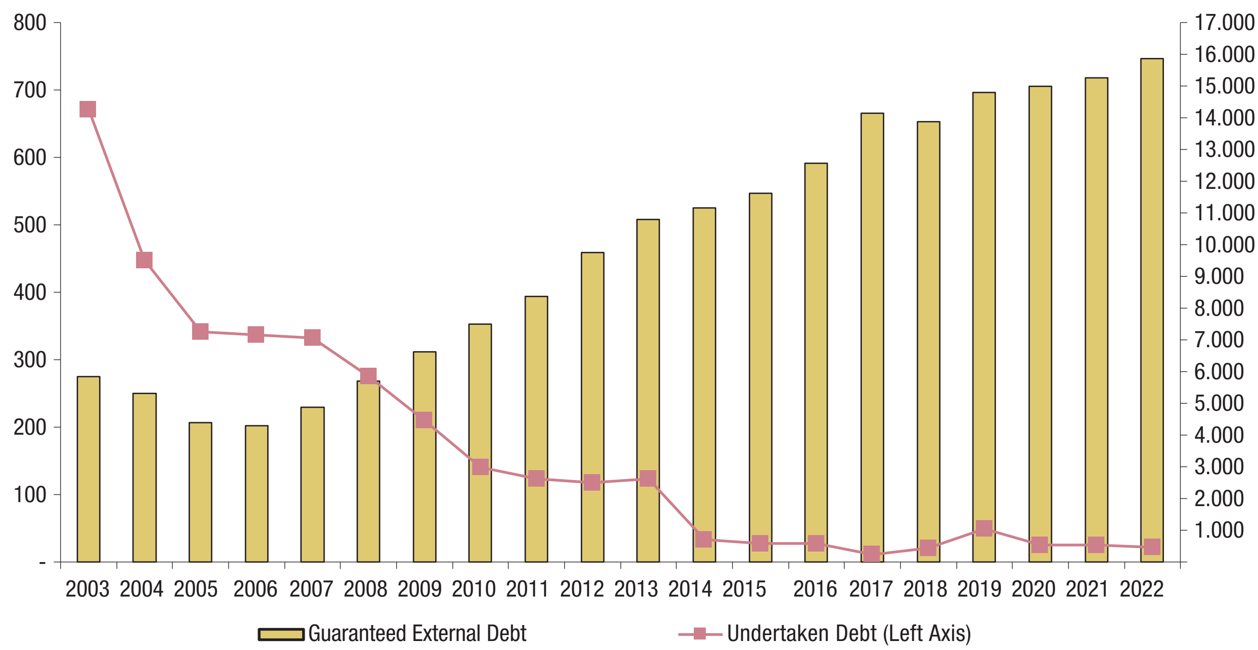
Figure 28 - Credit Rating Distribution of Institutions in Treasury Repayment Guaranteed and On-lent Stock (%)



(*) Institutions that are not included in the internal credit rating model.

Despite the increase observed in Treasury Guaranteed external debt stock, there is a decreasing trend in the undertakings from Treasury repayment guaranteed loans as a result of the implementation of effective credit risk management principles. In this context, while USD 672 million was undertaken in 2003, this amount decreased to USD 21 million in 2022.

Figure 29 - Treasury Guaranteed External Debt Stock and Undertakings from Treasury Guarantees (Million USD)



In 2009, the revenues of the Risk Account, which was established to ensure fiscal discipline, has reached a level sufficient to cover the undertaken amounts. As a result, no budgetary appropriations were used for the Risk Account since 2009.

Treasury-Backed Guarantee System

Treasury-backed guarantee system has been introduced in 2009 to increase accessing of finance for small- and medium-sized enterprises (SMEs). Pursuant to the Provisional Article 20 laid down in the Law no. 4749 on Regulating Public Finance and Debt Management, Turkish Treasury is entitled to provide with support up to TL 1 billion and/or special category state domestic borrowing notes. After establishment of the regulatory framework Turkish Credit Guarantee Fund is designated as an institution to be backed by Treasury.

The changes made within the scope of Treasury-backed credit guarantee system over the years are as follows;

- The amount of cash that can be provided to credit guarantee institutions increased from TL 1 billion to TL 2 billion in accordance with the change of the Provisional Article 20 laid down in the Law no. 4749 Decree in 2015.
- In order to make the system more effective and efficient, a new implementation period has started in Treasury-backed credit guarantee system with the Council of Ministers' Decision of 31st of October 2016 and numbered 9538 (Decision). In this context, the Portfolio Guarantee System (PGS) was put into practice and with the PGS, the evaluation of the applications was left to the creditors and the approval process of the collateral was accelerated. In addition, the definition of beneficiary was extended to all SMEs and non-SME firms to benefit from the system.
- In January 2017, the amount of cash that can be provided to credit guarantee institutions was increased from TL 2 billion to TL 25 billion with the amendment made to the Law numbered 4749. Thus, the guarantee volume was increased from TL 20 billion to TL 250 billion. The upper limits of guarantee are determined as maximum TL 12 million for beneficiaries with SME definition and maximum TL 200 million for beneficiaries other than SME definition.
- The amendment to the Decision in January 2018 allowed the re-use of the guarantee gap resulting from credit returns. The beneficiaries classified in the third and fourth groups in terms of credit risk were excluded from the system within the framework of banking legislation. With the amendment put into force in October, the beneficiary is required to be given the opportunity to restructure within the scope of the Decision or Regulation on Restructuring of Debts to the Financial Sector before the lenders can demand compensation.
- In March 2020, the amount of cash that can be provided to credit guarantee institutions was increased from TL 25 billion to TL 50 billion with the amendment made to the Law numbered 4749.
- In 2022, the amount of cash that can be provided to credit guarantee institutions was increased from TL 50 billion to TL 100 billion with the amendment made to the Law numbered 4749.

The limits allocated within the scope of the decision are as follows;

- **Protocol with a Guarantee Limit of TL 200 Billion - 03.15.2017**

  The guarantee limit of TL 200 billion signed on 03.15.2017 between our Ministry and Credit Guarantee Fund, allocated to all firms (SME's and non- SME's). The indemnity upper limit of the guarantees provided under the system is determined as 7 percent. As of 12.31.2019, the amount of guarantee granted from the limit is TL 199.8 billion.

- **Protocol with a Guarantee Limit of TL 52.5 Billion - 02.28.2018**

  Guarantee provided by the Protocol; exporters and foreign exchange earning activities, investors, investors within the scope of center of attraction, agricultural firms, women and young entrepreneurs, companies within the scope of "TOBB Nefes Project" are allocated to certain beneficiary groups. As of 12.31.2019, the total amount of guarantee granted from the limit is TL 37.7 billion.

- **Protocol with a Guarantee Limit of TL 32.5 Billion - 05.11.2018**

The limit of guarantee returns is reserved for the use of exporters, foreign exchange earning activities and all other firms. The guarantee limit for exporters and foreign currency earners and manufacturers and investors is determined as TL 25 million. As of 12.31.2019, the total amount of guarantee granted from the limit is TL 31.05 billion.

In 2019, total of TL 60 billion guarantee limit allocated with the SME Value I, SME Value II and Economy Value packages, each of has TL 20 billion guarantee limit, put into effect in January, March and May in 2019 respectively. Thus, within these guarantee packages TL 51.7 billion guarantee utilized.

In 2020, twelve new guarantee packages put into force in order to facilitate the access of legal and real persons to credit which affected negatively by the Covid-19 pandemic. Ten of the support packages offered to commercial enterprises and two of them made available to individual beneficiaries. The purpose of the guarantee limits allocated to the packages is covering all fixed expenses, meeting the operating expenses and facilitating the payment of checks drawn until a certain date.

With these twelve packages, a total guarantee limit of TL 261.28 billion allocated, and TL 44.30 billion of this amount belongs to individual beneficiaries who adversely affected by the pandemic. In this context, approximately TL 195.33 billion guarantee amount utilized and TL 33.49 billion of this amount belongs to individual beneficiaries.

In 2021, in order to lessen impacts of the pandemic, three support packages implemented within the scope of The Economic Reform Program. The purpose of the guarantee limits allocated to the packages is providing financial support to long-term investments, providing guarantee to micro and small-scale companies which have liquidity problems for additional employment, supporting investments of SMEs that invest in cold storage units.

With these packages, TL 23 billion guarantee limit allocated. As of December 2022, approximately TL 16,4 billion guarantee utilized

In 2022, within the scope of The Economic Reform Program

- Export Package which has 25 billion worth of the guarantee limit and which is aiming to support SMEs operating in exporting and foreign exchange earning sectors, and SMEs that are not currently exporters but have export potential has been announced with the aim of increasing the export volume of existing exporters and increasing the number of exporting companies,
- Working Capital Package which has 10 billion worth of the guarantee limit and which is aiming to support certain areas for operational expenses and to provide regular financing to corporate card holders has been announced..
- Investment Support Package, which have 25 billion worth of the guarantee, limit and which is aimingto support the investments of enterprises to meet their investment expenditures and working capital needs has been announced.
- In addition, 2 billion worth of the guarantee limit has been announced. The focus of the program is to support SMEs and non-SME companies that purchase unprocessesed fresh tea crop.
- Furthermore, 20 billion worth of the guarantee limit has been announced. The focus of the program is to support SMEs and non-SME construction companies that projects have not been completed entirely however, at least 30% of their projects have been completed during the application of loan.
- Additionally, 8 billion worth of the guarantee limit has been announced The focus of the program is to support natural and legal entity farmers and irrigation unions so that financing of agricultural electricity bills.
- Lastly, 500 million worth of the guarantee limit has been announced. The focus of the program is to support groceries who has signed supplier agreement with the Turkish Agricultural Credit Cooperatives to consumers through grocery stores/markets.

As of 31 December 2022, the pivot table of the guarantee amounts given under the Treasury-backed guarantee system for the 2009-2022 period is as follows:

Table 10 - Developments in the Treasury-backed Guarantee System for the Period of 2009 - 2022 (Million TL)*

REALIZATION*			OUTSTANDING RISK(*)				INDEMNIFICATION	
Number	Credit (Million ₺)	Credit Guarantee (Million ₺)	Number	Credit (Million ₺)	Credit Guarantee (Million ₺)	Credit Guarantee (Million ₺)	Number	Credit (Million ₺)
1.275.844	659.919	559.191	726.195	177.013	146.790	169.023	47.365	17.153

** Loan and guarantee amounts are calculated from the exchange rate on the date of approval. Restructuring are excluded.*

4. OPERATIONAL RISK MANAGEMENT

The concept of operational risk management refers to prevention of potential losses in business processes, which may arise from coordination and communication problems, poor resource management, technical infrastructure/information system failures, external factors and extraordinary events such as natural disasters and terrorism. Operational risk management also aims to reduce the likelihood of these incidents by taking precautionary measures.

By taking operational risks under control, the main objective is to monitor the risks effectively, to ensure consistency between the purpose of the work and the implementation, to support the control objectives of organizational structure and to create an institutional culture that takes the importance of internal controls into account. Therefore, it is aimed to increase the quality of operational activities and to minimize the disruptions that may arise in business processes.

Maintaining business continuity during an emergency is crucial for the future and the prestige of institutions. In that regard, Business Continuity Plan (BCP) provides a guideline to avoid disruptions and ensures the continuity of the critical processes within the predetermined downtime period if a disruption happens. The BCP was prepared by the General Directorate of Public Finance (GDPF) consists of action plans towards maintaining the critical processes, which aim to protect the assets and liabilities of the Treasury under certain scenarios. BCP was reviewed in 2022 and necessary updates were made.

Additionally, "ISO 9001 Quality Management System Certificate" project, which was initiated at the end of 2018 in order to strengthen the organizational structure, increase stakeholders' satisfaction, improve processes and accommodate the latest technological advancements in the GDPF, was completed as a result of the external audit by Turkish Standards Institution (TSI) auditors and the GDPF was awarded the ISO 9001 Quality Management System Certificate in 11.17.2020. In accordance with the ISO 9001 Certificate, external audit activities were carried out by TSI auditors in 2022, and our General Directorate successfully completed this process.

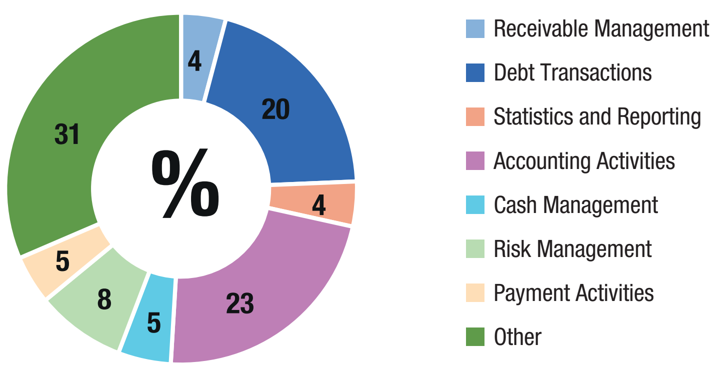
Operational Risk Management

Operational Risk Management process involves measuring risks (determination of "Likelihood" and "Impact" levels of risks), developing management strategies to keep the potential risks under control, regular reporting and continuous monitoring.

In order to monitor the operational risks concerning the cash, debt and receivables management within the GDPF, a Risk Profile Table was created. These risks are monitored via Operational Risk Management Information System and updated annually and as needed.

A total of 253 risks, covering all the business processes of GDPF were identified in Operational Risk Management Information System. Among these risks; 23 percent refers to the accounting, 20 percent refers to debt transactions and 8 percent refers to the risk management, 5 percent refers to the cash management, 5 percent refers to the payment activities, 4 percent refers to the statistics and reporting, 4 percent refers to receivables management and 31 percent related to other activities[14].

Figure 30 - Distribution of Risks by Activity (%)



14 *Other activities are Support Services (19%), Secretariat, Coordination and Legal Transactions (10%), Total Monitoring of Public Sector (1%), International Organizations and Foreign Relations (1%).*

Likelihood and impact levels of 253 operational risks in GDPF are assessed in a 5x5 scale. The risks with relatively high likelihood and impact are determined as high priority risks (red cells). As of 2022, there is no priority risk. The risk matrix showing the prioritization of existing risks is given below:

Table 11 - Operational Risk Matrix

		Risk Impact					Total
		Insignificant (1)	Minor (2)	Modarate (3)	Major (4)	Catastrophic (5)	
Risk Likelihood	Very Low (1)	1	18	14	25	18	**76**
	Low (2)	5	16	40	61	19	**141**
	Medium (3)	0	6	17	8	0	**31**
	High (4)	2	1	1	0	0	**4**
	Very High (5)	0	1	0	0	0	**1**
Total		**8**	**42**	**72**	**94**	**37**	**253**

INTERNATIONAL EXPERIENCE SHARING IN DEBT MANAGEMENT

Since 2002, the Ministry of Treasury and Finance has developed its legal and organizational infrastructure and technical capacity in the field of public debt, cash, receivables and risk management within the framework of international best practices. This experience and knowledge accumulated over the years is shared with the debt management of other countries as well as international institutions and organizations through training programs, consultancy, technical support and workshops within the scope of Experience Sharing Program.

Within this framework, the activities that our Ministry has taken part in the Experience Sharing Program for the last 5 years are shown in the table. In addition to this, the experience of Türkiye has been shared with the audience consisting of executives of foreign debt in events organized by various international organizations, including the OECD, the IMF and World Bank.

As in previous years, participation in the activities of the "Debt Management Working Group", the "Steering Committee" operating within the OECD and "Macroeconomic Forecasting Working Group", which is organized by the European Commission twice a year for the experts, was continued in 2022.

Table 12 - International Experience Sharing in Debt Management

Year	Country	Subject	Location
2019	Kosova	Cash Management Applications in Turkey	Ankara
2019	Uganda	Debt and Risk Management Applications in Turkey	Ankara
2019	Thailand	Cash and Risk Management Applications in Turkey	Ankara
2017	India	Gold Bonds and Gold Denominated Lease Certificates	New Delhi
2017	Kenya	Cash Management and Treasury Single Account	Ankara
2017	Bahrain	Debt and Risk Management Applications in Turkey	Ankara
2017	Sudan	Public Finance and Debt Management Operations	Ankara
2016	Azerbajian	Risk Management Tools in Public Private Partnership Projects	Ankara
2016	Kyrgyzstan	Kyrgyzstan Public Finance Information System Development Project	Bishkek

RESEARCH AND ANALYSIS

With the Covid-19 pandemic which started at the end of 2019, one of the crises with profound impacts on the economies of countries on global scale has been experienced. The monetary and fiscal policies implemented by countries to overcome the economic effects of the pandemic had an increasing effect on the debt stock. While the ratio of the global total debt stock, which refers to the debts of households, general government, financial and non-financial corporations, to Gross Domestic Product (GDP) was 324 percent in 2019 before the pandemic, increased to 361 percent and 350 percent in 2020 and 2021, respectively, and decreased to 337 percent as of 2022 due to high inflation and growth.

Taking into account the general government debt stock share in public sector debt, its comparability with publication standards and course of the changes in the debt, it may presents important information on the results of the policies implemented on a country-by-country basis. In this context, when the pre and post-pandemic periods are analyzed, it is observed that the ratio of general government debt stock to GDP on a global scale was 89 percent in 2019, increased to 107 percent and 103 percent in 2020 and 2021, and then decreased to 97 percent in 2022, however it is still above the pre-pandemic debt ratio.

In Türkiye, the ratio of debt stock to GDP declined even below the pre-pandemic level and stood at 31.7 percent in 2022, thanks to the fiscal discipline and effective debt management.

CHANGES IN GLOBAL AND GENERAL GOVERNMENT DEBT STOCKS AFTER THE COVID-19 PANDEMIC[15]

1. INTRODUCTION

In times of crisis, various expenditure and revenue-oriented measures can be implemented by using monetary and fiscal policy instruments to ensure economic recovery. Although the mix of these policy instruments varies cyclically, the measures have had inevitable repercussions on public finances and may affect public debt levels.

Since 2020, countries have announced large fiscal packages against the economic and social impacts of the Covid-19 pandemic, have used a variety of fiscal and monetary instruments, such as loans and subsidies, to keep businesses afloat and stabilize financial institutions. All these policies had repercussions on public finance, with significant changes in public debt ratios (the ratio of debt stock to GDP).

In this study it is examined the changes in general government debt stock of Türkiye and selected countries along with the changes in the global debt stock during the pandemic. In order to compare the pre-pandemic period and the levels of the debt stock after the measures taken during the pandemic period, the end-2019 value, which is the pre-pandemic period, the end-2020 and end-2021 values which cover the pandemic period, and the end-2022 values for the post-pandemic period were used.

In addition, the study evaluates global debt (covering household, general government, financial and non-financial corporate debt) ratios and public sector debt ratios and makes comparisons for selected countries and country groups. Furthermore, the factors affecting the changes in debt stocks and debt ratios are evaluated. In this context, first the global debt outlook is presented and then the general government debt outlook, which refers to the indebtedness of sovereigns, is explained.

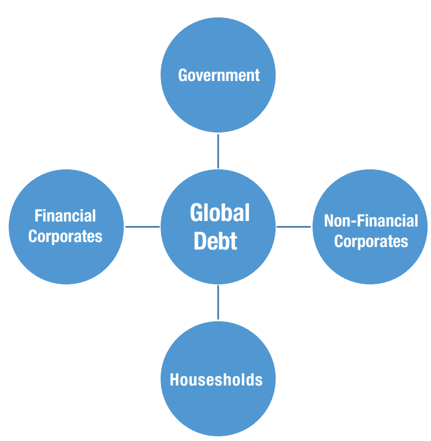
In this framework, the global debt outlook is presented first, followed by the general government debt outlook, which refers to the indebtedness of sovereigns.

2. GLOBAL TOTAL DEBT OUTLOOK

Due to the pandemic and global changes in economic policies, private and public debts have reached levels not seen for a long time in most economies since 2019. After 2.8 percent contraction globally in 2020, debt stock ratios improved in 2021 thanks to growth of 6.3 percent (the IMF forecasts a global growth rate of 3.5 percent for 2022 (IMF World Economic Outlook, July 2023). Moreover, the rise in the global inflation rate from 3.2 percent in 2020 to 4.7 percent and 8.7 percent in 2020 and 2021, respectively, had reducing effect on debt stock ratios.

According to the Institute of International Finance (IIF), total global debt refers to the debt of households, general government, financial and non-financial corporations (Figure 31). According to this definition, the global debt stock increased in 2020 and 2021, in the midst of a pandemic. The global debt stock increased from USD 259 trillion in the pre-pandemic period to USD 293 trillion and USD 303 trillion in 2020 and 2021, respectively (Figure 32).

Figure 31: - Sectors of Global Debt (IIF)



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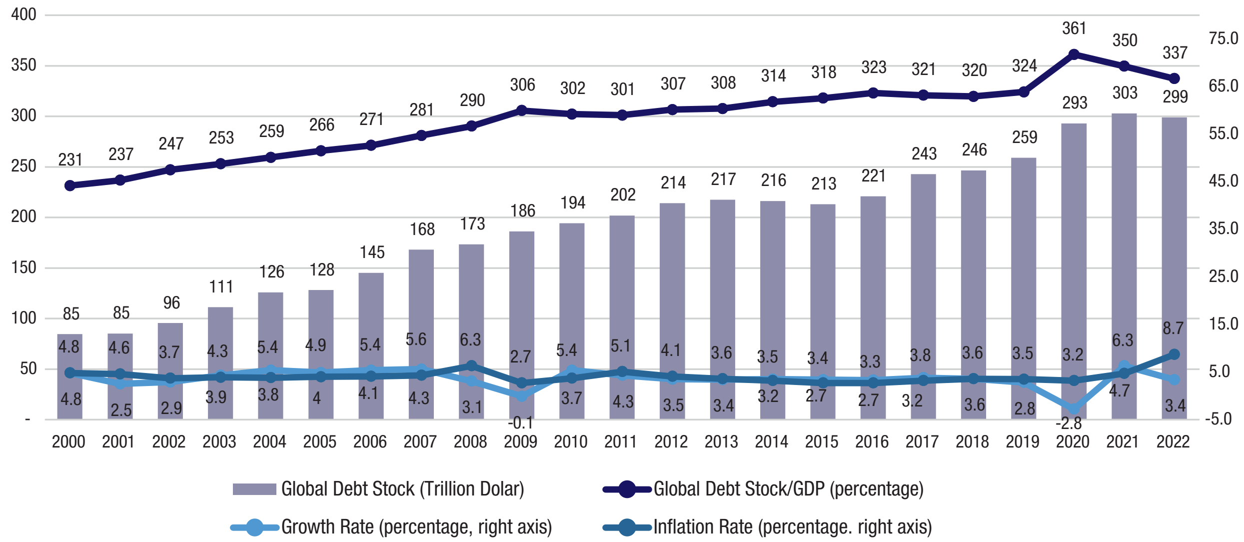
In 2022, when the effects of the pandemic faded and the economy recovered, the global debt stock declined for the first time in nominal terms since 2015 and stood at USD 299 trillion. However, it is still above the pre-pandemic level.

The debt stock to GDP ratio, which allows debt stock to be compared of international economic indicators, also increased during the pandemic compared to 2019. The global debt ratio, which was 324% in 2019, increased to 361% by the end of 2020, when the effects of the pandemic were intense, the highest debt ratio in the last 20 years. At the end of 2021, the debt ratio stood at 350%. In 2021, although the debt stock increased year-on-year, the debt ratio decreased due to the global contraction (Figure 32).

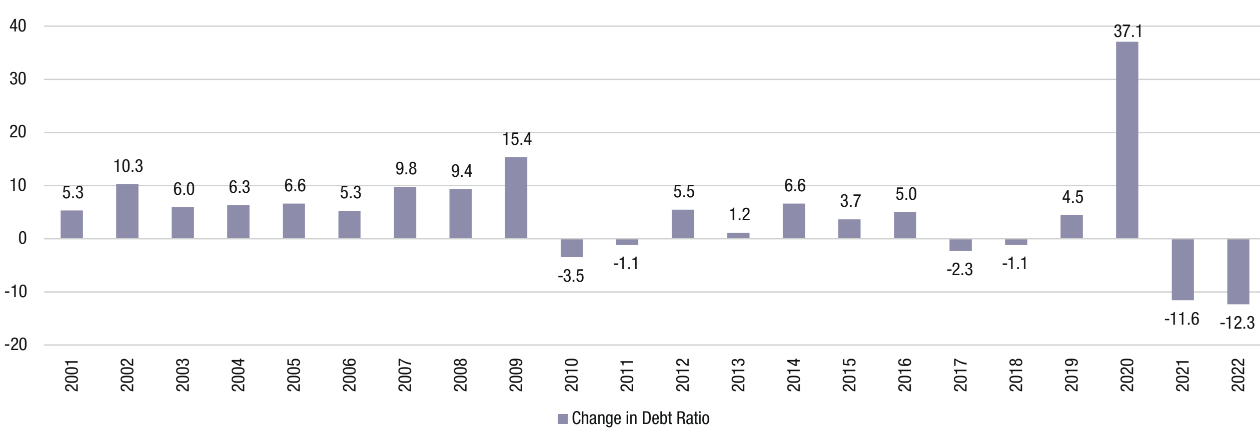
Figure 32: Global Total Debt



Source: IIF - February 2023 and IMF World Economic Outlook - April 2023 database.

The highest annual increase in the debt ratio since 2001 was realized in 2020 (Figure 33). In 2020, the debt ratio increased by 37.1 points compared to the previous year. The year 2009, when the effects of the global financial crisis continued, was another year with the highest change (15.4 points). It is understood that the rate of increase in global debt stock becomes higher due to the fiscal and monetary policies implemented during the crisis periods.

Figure 33 - Global Debt Ratio Annual Change (pp)



Source: IIF- February 2023 database.

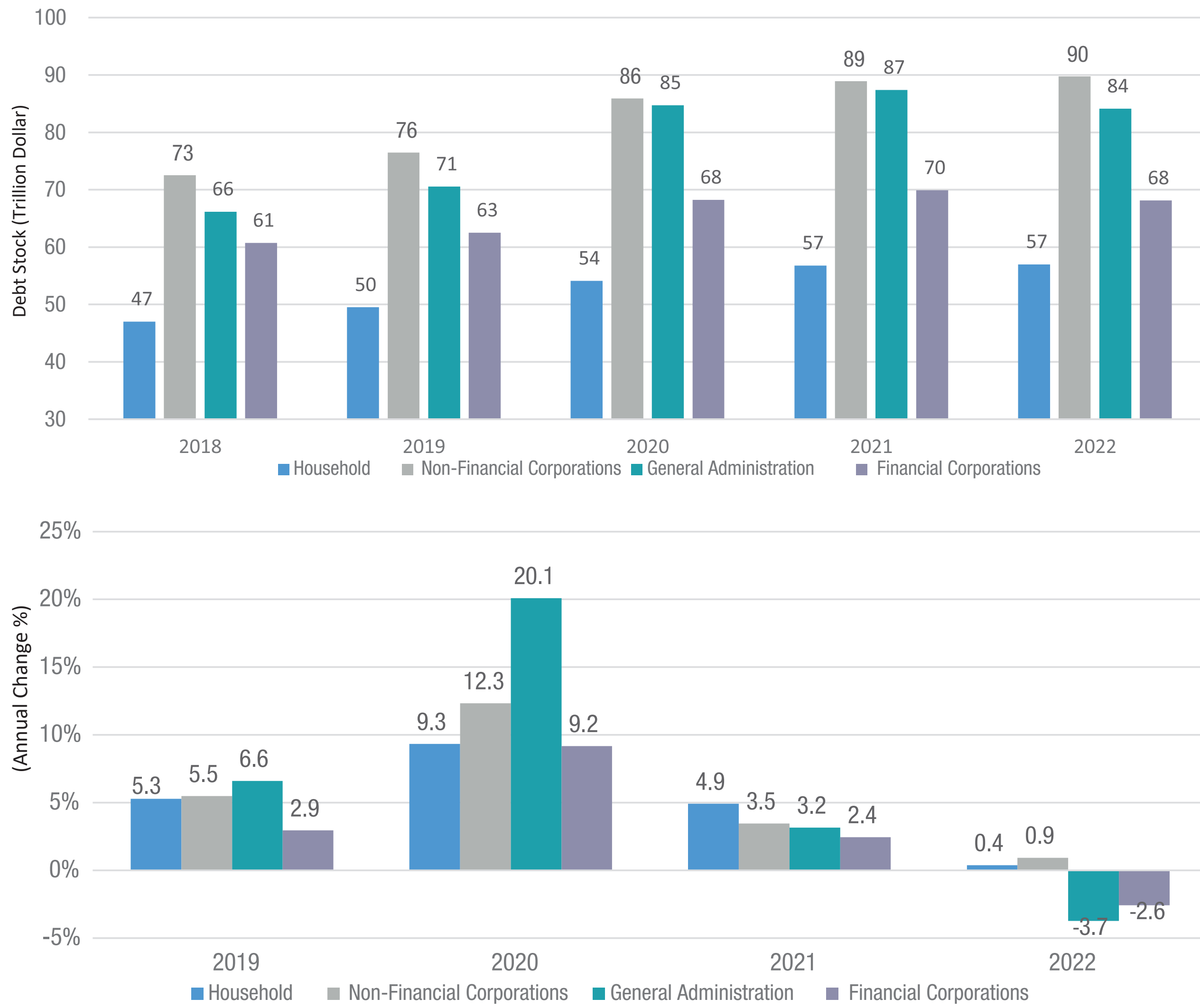
The general government debt increased the most in 2020 among the IIF defined sectors (Figure 34). In 2020, general government debt stock increased by 20.1%, while non-financial corporations, households and financial corporations increased by 12.3%, 9.3% and 9.2%, respectively. It is assessed that the reason for the highest increase in the general government sector is due to the increasing share of the fiscal measures taken by the states during the pandemic in budget expenditures and the increase in borrowing amounts. In order to prevent the contraction in the economies, especially in the first year of the pandemic, countries provided economic incentives to manintain sustainability in economic activity. These incentives, the main source of the increase in many countries' debt stocks during this period, lead to an increase in public expenditures and were financed by borrowing due to the decline in revenues.

In 2021, the highest increase in the rate realized in household sector. The 4.9% increase in household debt was followed by non-financial corporations and the general government sector with increases of 3.5% and 3.2% respectively, and financial corporations with an increase of 2.4%. The increase in nominal household debt mainly stemmed from the rising inflation rate and easier access to financing.

The year of 2022 became a returning period to normalization on a global basis. The measures taken and policies implemented in this period have started to compensate for the deterioration in the debt stock. In 2022, general government sector showed a rapid recovery in terms of nominal debt with the decline of 3.7 percent.

In the same period, the debt stock of financial corporations decreased by 2.6 percent, while the increase in the debt stock of non-financial corporations and households remained relatively limited with 0.9 percent and 0.4 percent, respectively.

Figure 34 - Sectoral Debt Stock (Trillion USD) and Annual Change (%)



Source: IIF - February 2023 database.

3. AN ASSESSMENT OF THE GENERAL GOVERNMENT DEBT OUTLOOK BY COUNTRY GROUPS

1. Based on the Economic Development Level of Countries:

An analysis of the general government debt ratios of countries by development level published by the International Monetary Fund (IMF) indicates that the general government debt ratios of developed and developing economies increased by 18.9% and 9.7%, respectively, in 2020 compared to the pre-pandemic period (Table 13). Developed economies recovered faster than developing economies in 2021 and 2022, and their general government debt ratios plummeted to 112.5 percent in 2022. On the other hand, the debt stock ratio of emerging economies remained stable in 2021 and 2022.

The data published by the IMF also includes forecasts for the trajectory of debt ratios between 2023 and 2028 according to the level of development of countries. It is considered that the debt ratios of developing economies will increase faster in the upcoming periods. Particularly, due to the surging inflation that started during the pandemic, developed economies have been raising interest rates since 2022 in order to control inflation and re-tighten monetary policies that were loosened after the global financial crisis. This puts pressure on interest rates in emerging economies. Moreover, country risk premiums of emerging economies have also increased on a global scale (IMF Fiscal Monitor, 2023). Higher interest rates and global risk premiums have led investors to seek safe harbors. This may have an adverse impact on emerging market risk premiums and thus on borrowing costs. At the meantime, especially the decline in investments will be one of the significant factors in the economic activity (Kamin et al., 2022). In this context, it is foreseen that the debt ratios of emerging economies may rise due to the sluggish in economic activity.

Table 13 - General Government Debt Ratios of Developed and Developing Economies

	Realization				Forecast					
General Government Debt Ratio (%)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Developed Economies	104	122.9	117.4	112.5	112.4	113.6	115	115.9	116.7	117.8
Developing Economies	55.1	64.8	64.3	64.6	67.5	69.8	72.2	74.3	76.3	78.1
Developed Economies (Change)		18.9	-5.5	-4.9	-0.1	1.2	1.4	0.9	0.8	1.1
Developing Economies (Change)		9.7	-0.5	0.3	2.9	2.3	2.4	2.1	2.0	1.8

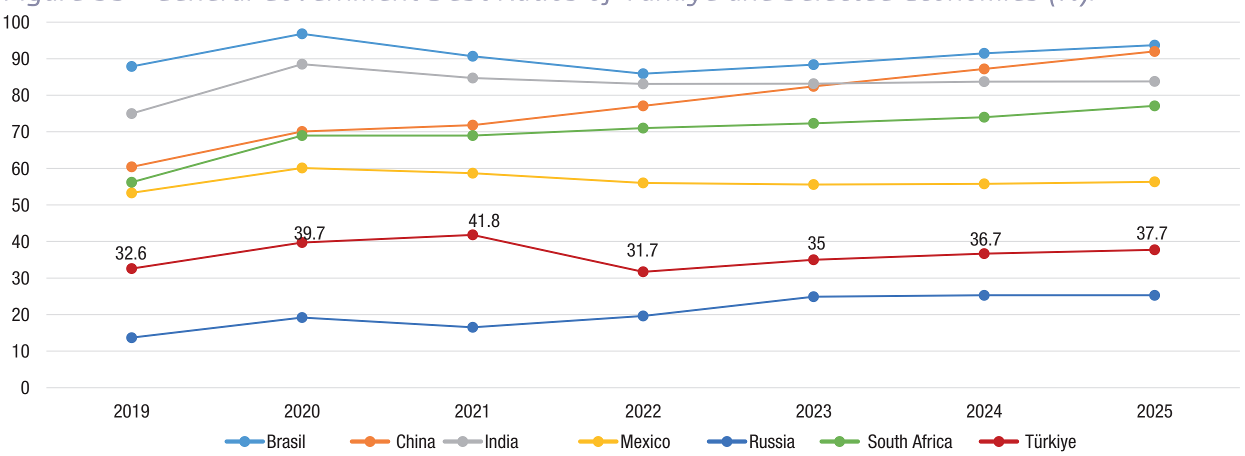
Source: IMF World Economic Outlook - April 2023 database.

2. Türkiye and Selected Economies

In the first year of the pandemic, general government debt ratios of Türkiye and the selected economies, such as Brazil, China, India, Mexico, Russia and South Africa, increased. In 2021, the debt ratios of Brazil, India, Mexico and Russia recovered (Figure 35).

Türkiye's debt ratio substantially recovered in 2022. In the same period, only Brazil and Türkiye were able to reduce their general government debt ratios below the pre-pandemic level (2019). Türkiye's general government debt ratio amounted to 31.7 percent in 2022 (Figure 35). In accordance with the Maastricht criteria, one of the accession criteria to the European Union, the candidate countries are obliged to have a general government debt ratio of below 60 percent. In this regard, Türkiye remained below this debt ratio criterion, also Russia and Mexico performed relatively well in terms of debt ratios.

Figure 35 - General Government Debt Ratios of Türkiye and Selected Economies (%).



Source: IMF World Economic Outlook - April 2023 database.

4. DETERMINANTS OF THE DEBT

The study of 2022 categorizes the factors behind the fluctuations in global debt into three categories (Gaspar et al.):

- **Fluctuations in economic growth;** the recession and supply-demand tremors experienced during the pandemic caused significant declines in GDP and debt ratios skyrocketed in 2020. However, the debt ratios decreased with the swift recovery in economies in 2021 with the announced fiscal support packages, monetary policy measures and the end of lockdown measures restricting economic activity. These developments also contributed to fluctuations in nominal GDP and hence to changes in the debt ratios. According to the growth data shown in Figure 32, following the 2.8% shrinkage on a global scale in 2020, when the negative effects of the pandemic on economic activity were felt, the growth was 6.3% in 2021.
- **High and volatile inflation;** after the drop in inflation rates in the first year of the pandemic, many countries experienced a spike in inflation in 2021. While inflation was 3.2% globally in 2020, it jumped to 4.7% in 2021 and 8.7% in 2022 (Figure 32). In this scope, economic activity moved in sync with inflation in 2020-21; economic activity came to a standstill in 2020, but recovered quickly in 2021.
- **The effects of economic shocks on general government, corporate and household budgets;** fluctuations in economic conditions had significant effects on debt dynamics and budgets. In 2020, following the stimulus to businesses and individuals due to the recession, the debts surged and the budget deficits expanded. In 2021, the budget deficits decreased; however, remained above the pre-pandemic level.

According to the IMF's World Economic Outlook (April, 2023), the determinants of the general government debt stock are categorized as follows:

1. **Non-interest balance:** The non-interest balance (primary balance) is a stabilizer that reduces the debt stock, Public borrowings, which have an increasing effect on the debt stock, are made to fund budget deficits. When the primary balance, which is the net balance between the budget revenues and expenditures (excluding interest), is favorable, there will be less need for borrowing, which has a dampening effect on the debt stocks.
2. **Nominal effective interest rates:** Nominal effective interest rates are the ratio of interest expenses in the relevant year to the debt stock in the previous year. An increase in interest rates leads to an increase in borrowing costs. This raises interest payments in the corresponding year and at the same time necessitates the need to finance interest expenditures, In this respect, an upward trend in interest rates has a downside effect on the debt stock.
3. **Inflation rate:** The inflation rate impacts the debt ratio via two mechanisms. Firstly, higher inflation pushes up nominal growth rates, therefore decreasing the debt ratio even if the debt stock remains unchanged. The second impact mechanism is the nominal interest rates that hike with rising inflation. Nominal interest rates drive up the debt stock. Nevertheless, the impact factor in these two mechanisms, which operate inversely to each other, is related to the timing of inflation expectations. If inflation accelerates faster than the expectations, the shift in interest rates may not catch up with this pace. In this scenario, the effect of inflation in lowering the debt stock will offset the effect of rising interest rates.
4. **Real growth rate:** Real growth in the economy leads to a reduction in the ratio of debt stock to gross domestic product.
5. **Residual value:** It can be composed of other parameters such as exchange rate fluctuations and changes in the prevailing market price of debt instruments. In the IMF's Fiscal Monitoring Report for 2023, the stock-flow adjustment variable is used among the determinants of debt instead of residual value.

In the same report, the contribution of debt components to the change in the indebtedness ratio is analyzed according to the following equation:

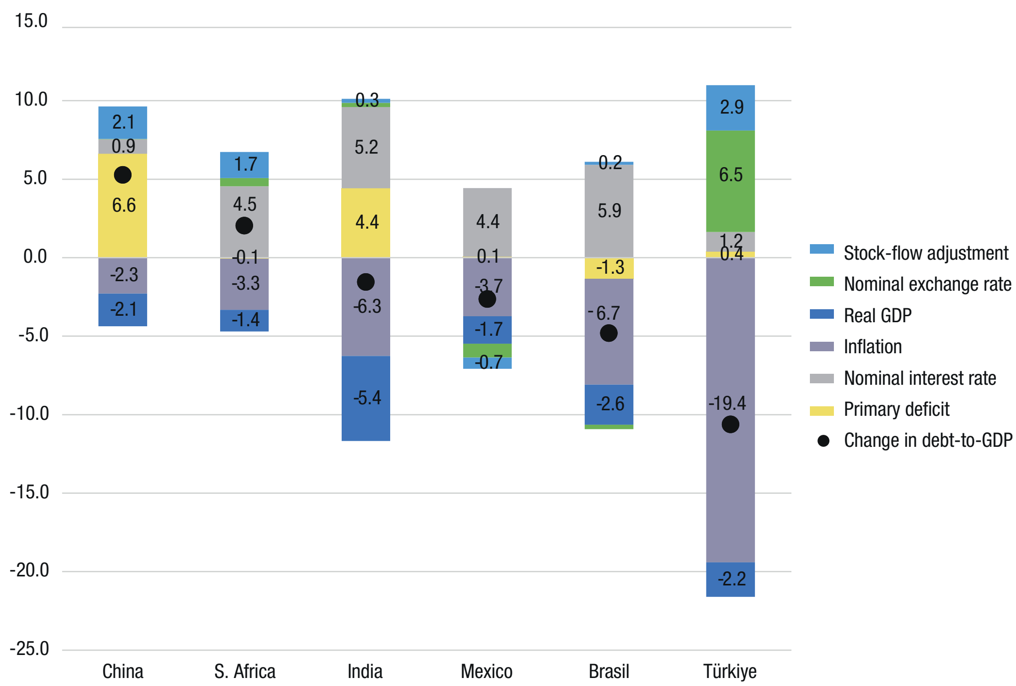
$$\frac{Debt\ Stock_t}{GDP_t} - \frac{Debt\ Stock_{t-1}}{GDP_{t-1}} = \left(\frac{Effective\ interest\ rate_t}{1+Nominal\ growth\ rate_t} - \frac{Inflation\ rate_t}{1+Nominal\ growth\ rate_t} - \frac{Real\ growth\ rate_t}{1+Real\ growth\ rate_t}\right) x\ (Debt\ ratio_{t-1}) - Primary\ balance_t + Residual\ value$$

The determinants of these factors may differ across country groups. The IMF's Fiscal Monitor Report for 2023 includes the determinants of countries' general government debt (Figure 36). For 2022, inflation and real growth have a downward impact on the debt ratio, while rise in the nominal interest rate, depreciation against the exchange rate, primary deficit and positive stock-flow adjustment have an upward impact on the debt stock for Türkiye and selected economies.

With regard to the effects of these determinants on the debt stock of selected countries, the primary balance has the largest negative impact on the debt ratio of China, followed by India. Figure 36 shows that the increase in public expenditures in China, which was one of the most affected countries during the pandemic, had an increasing effect on the debt stock (6.6 percent). However, nominal interest rates contributed the most to increase debt in Brazil (5.9 percent) and India (5.2 percent). On the other hand, real growth and inflation in this period had a dampening effect on debt ratios of countries.

With regard to the factors affecting Türkiye's debt ratio, the impact of the primary deficit (0.4 percent) remained limited. The policies implemented in this period ensured that the debt ratio remained stable. In the same period, nominal exchange rate and stock-flow adjustment were the main drivers of the increase in the debt ratio (6.5 percent and 2.9 percent, respectively). On the other hand, inflation and growth rates (19.4 percent and 2.2 percent, respectively) were the most effective parameters in reducing the debt ratio.

Figure 36 - Determinants of General Government Debt in Türkiye and Selected Economies



Source: IMF Fiscal Monitor Report - April 2023

5. CONCLUSION AND ASSESSMENT

Countries have implemented various fiscal policies to mitigate the negative effects of the pandemic. Recent inflationary pressures and increases in borrowing costs, on the other hand, have led to an increase in borrowing rates and significantly increased economic vulnerabilities for highly indebted countries. In this respect, determining the right policy combination emerges as an important challenge.

At the beginning of the pandemic, the global general government debt ratio exceeded 100 percent. In the post-pandemic normalization period, countries implemented various policies to effectively manage financial stability and debt vulnerabilities. Thanks to strong growth rates and an inflationary period, government debt ratios declined to 97 percent in 2022. However, this ratio is still 8 basis points above the pre-pandemic period (IIF - February 2023 database).

When the factors affecting the debt stock are evaluated, the budget deficits of the countries decreased during the normalization period in 2022 and approached the pre-pandemic period. On the other hand, interest rates increased due to tightening monetary policies. The main reason for the decline in debt ratios in this period was the strong global growth data and high inflation. The effects of these factors may have different dimensions depending on the level of development of countries and the country's own dynamics. Despite rising inflation, especially in emerging economies, the average debt ratio continued to be adversely affected by rising interest rates and borrowing costs as well as the rise in the exchange rate affecting the debt stock. Advanced economies, on the other hand, managed to reduce their debt ratios during the normalization period with their high growth performances and normalized budget balances (IMF Fiscal Monitor Report, April 2023).

Although Türkiye started the pandemic period with a relatively low debt ratio and showed a high growth performance, it was one of the countries whose debt ratio increased relatively more among the economically compared countries in 2021. However, with the increasing inflation rate and economic growth performance, by the end of 2022, it was among the countries with low debt ratios among these countries. These developments once again demonstrate the importance of effective risk management efforts.

In the near term, changing global and financial conditions as well as the monetary and fiscal policies implemented by countries for price stability and financial stability will be the most important determinants of sovereign debt ratios. The ratio of budget deficits to GDP is expected to rise to 5 percent on average, particularly in 2023. In particular, rising interest expenditures and rising wages, which are struggling to keep pace with inflation, will put pressure on public expenditures. For the next few years, budget deficits are projected to remain above the pre-pandemic level, but the determinants of budget deficits will be near-term growth rates and global interest rate conditions (IMF Fiscal Monitoring Report, April 2023). Therefore, the course of debt ratios will vary according to uncertain global conditions and the policies that states will implement in response to these conditions.

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LEASE CERTIFICATES AS A DOMESTIC BORROWING INSTRUMENT: THE CASE OF TÜRKİYE[16]

INTRODUCTION

Sukuk, an alternative financing instrument, attracts the attention of investors not only in Türkiye but also on a global basis and increases its share in financial markets in respect to volume.

Sukuk was designed under the principles of interest-free finance, and the first sukuk issuances were realized in countries such as Malaysia, Jordan and Pakistan as this instrument was found attractive in terms of investment. Sukuk has been used effectively not only in interest-free financial institutions but also in conventional banking systems and in financing large projects, so it has become a significant financing instrument globally. In this regard, issuances were carried out in many countries, such as Indonesia, the UK and Türkiye, while Malaysia is the market leader with a 24.7% share in global sukuk issuances as of June 2020.

In this study, the structure, types and mechanism of sukuk, one of the instruments that has rapidly become widespread in financial markets, will be explained. In addition, the implementation of lease certificates, one of the types of sukuk in Türkiye, will be discussed. In the first section, internationally accepted definitions and principles regarding sukuk types are explained; in the second section, the development of the sukuk market in the world is mentioned. The third section summarizes the general framework of lease certificates used as domestic financing instruments in Türkiye, while the conclusion provides a summary of the study.

1. Sukuk as an Interest-Free Financing Instrument

Interest in interest-free financing systems, particularly since the 2000s, has notably risen, with sukuk, developed in alignment with interest-free finance principles, playing a significant role in this surge. According to the Islamic Financial Services Board (IFSB), global interest-free financial assets saw an annual increase of 11.3 percent in 2021, estimated at a total value of USD 3.06 trillion. Among these assets, sukuk holds a 25.4 percent share, marking the second-largest portion following participation banking assets (at 68.7 percent). Sukuk dominates the interest-free financial markets, encompassing both sukuk and interest-free funds, claiming an 83.3 percent share (IFSB, 2022).

1.1 Definition of Sukuk

The term "sukuk", which describes certificates representing equally valued and undivided shares in a tangible asset, interest, service or a specific project, briefly refers to interest-free securities.

The first corporate sukuk was issued by Shell MDS Malaysia in 1990. The first sovereign sukuk was issued by the Government of Bahrain in 2001 in the form of ijarah sukuk (İSEDAK, 2019).

Sukuk gives the investor the right to own or benefit from an asset. This right to benefit is not only cash flow but also the right of ownership. In this respect, sukuk differs from traditional bonds. While traditional bonds are interest-based, sukuk is an asset-based security. At the same time, some types of sukuk can be traded in secondary markets, such as stock exchanges and over-the-counter markets (Haholu, 2012).

Sukuk, which are traded in our country under the name of lease certificates and are mostly traded in murabaha and ijarah types, have different types and applications in the world.

1.2. Types of Sukuk

The commonly used sukuk types approved by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) are as follows:

1.2.1. Murabaha Sukuk

Murabaha sukuk describes certificates of identical worth issued to fund the acquisition of an asset. Consequently, holders of the certificates gain ownership rights to the specified asset. In this arrangement, the issuer acts as the seller of the murabaha asset, while investors act as asset buyers, and the funds obtained through the issuance cover the purchasing cost (Ela, 2017).

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1.2.2. Salam Sukuk

Salam sukuk is a type of lease certificate similar to the forward application of capital market derivative products. In the salam sukuk contract, the seller undertakes to provide a specific commodity at a certain price in a future maturity. In order to eliminate uncertainty in salam sukuk, measures such as prepayment of the entire agreed sales amount and a fixed delivery date have been taken (Yılmaz, 2014). The issuer of the certificates is the seller of the goods. With the capital raised, financing is provided for the purchase of the good. Certificate holders acquire ownership of the good in question (IIFM, 2014).

1.2.3. Istisna Sukuk

These are certificates of equal value issued to provide the financing required to produce specific products. In istisna sukuk, the issuer is the party that will sell the good, in other words, the producer. Certificate holders, on the other hand, take ownership of the asset to be manufactured (Alparslan & Kudun, 2016). This type of sukuk is used for real estate development projects or pre-financing of large equipment such as power plants, ships and aircraft (IIFM, 2022).

1.2.4. Mudaraba Sukuk

Mudaraba sukuk can be defined as partnership certificates based on profit sharing in the partnership of labor and capital, which also represent investments. While the entrepreneur, characterized as the party that puts forth his labor, is the sukuk issuer, investors are the party that brings capital. Investors receive a share of the profit at the rate specified in the mudaraba contract and are also affected in cases where losses occur. The entrepreneur, on the other hand, is not affected if a loss occurs and only loses the profit share agreed in the mudaraba contract (Çelenk & Çebi, 2019).

1.2.5. Musharaka Sukuk

This type of certificates are equal-value lease certificates issued to provide project financing based on profit-loss partnership and operating according to the principles of the musharaka sukuk contract. Unlike mudaraba sukuk, both the investor and the entrepreneur are responsible for the profit and loss that will occur within the framework of the agreed ratio (Çelenk & Çebi, 2019).

1.2.6. Hybrid Sukuk

Hybrid sukuk is defined as the combination of two or more sukuk types such as istisna and ijarah, murabaha and ijarah (IIFM, 2022).

1.2.7. Wakala Sukuk

Wakala sukuk is similar to an agency contract. In Wakala sukuk, the agent is the party issuing the certificates. Sukuk holders, on the other hand, are the represented party. The agents participate in profit-loss partnerships on behalf of the certificate holders, and the certificate holders become the partners of the profit or loss that will arise (Yazıcıoğlu & Hasan Kazak, 2019).

1.2.8. Ijarah Sukuk (Lease Certificate)

The term ijarah, which means "to rent", refers to a contract whereby a usufruct right or the right to use a service is transferred for a certain period and a specific price. Ijarah-type lease certificates are certificates of equal value representing undivided shares in tangible assets or their income-generating uses. In the context of interest-free financial transactions, there are two basic ijarah structures: classical ijarah and ijarah financing (Şer'i Standartlar ve Operasyonel Gereklilikler, 2021).

In the classical ijarah structure, the leasee aims to benefit from the leased asset instead of owning the asset. Therefore, at the end of the lease term, asset ownership remains with the lessor. Ijarah financing, on the other hand, is structured in such a way that the ownership of the asset is transferred to the lessee at the end of the lease term (Şer'i Standartlar ve Operasyonel Gereklilikler, 2021).

Although Ijarah-type lease certificates are very similar to financial leasing practices, they differ in terms of defining the characteristics of the leased property. The asset and usufruct right to be used in the issuance of lease certificates must be an asset that complies with the principles of interest-free finance, is appraisable, available, identifiable, accessible, deliverable, non-debt-based and durable. The asset and usufruct must belong to the lessor (Şer'i Standartlar ve Operasyonel Gereklilikler, 2021).

There are basically three parties involved in sukuk issuances:

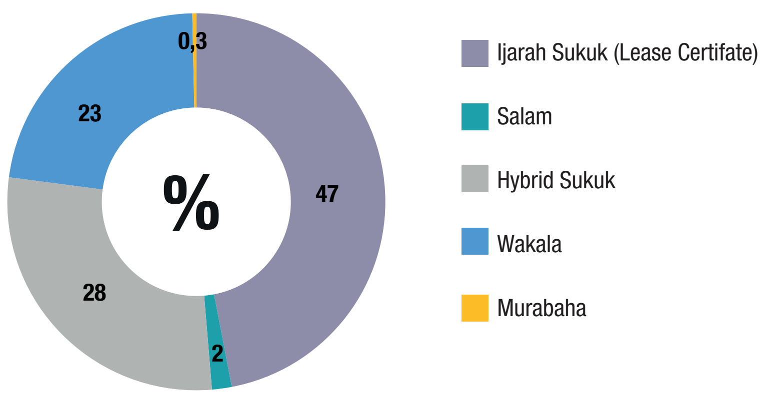
1. The originator
2. Special purpose vehicle (in Türkiye. these entities are known as asset leasing companies)
3. Investors

The operational structure of lease certificates is basically as follows:

- The originator issues sukuk based on the asset whose characteristics are specified above.
- The originator sells the underlying asset through an asset leasing company (ALCO).
- This sold asset is leased back to the originator by the asset leasing company. The rental income is paid to the certificate holders; in other words, investors, in specific periods as coupon payments (Sümer. 2020).

The share of lease certificates is quite high worldwide, especially in government sukuk issuances.

Figure 37 - Government Sukuk Issuances Between 2001-2021



Source: IIFM

As seen in the chart, lease certificates were the most preferred type of sukuk in government sukuk issuances between 2001 and 2021.

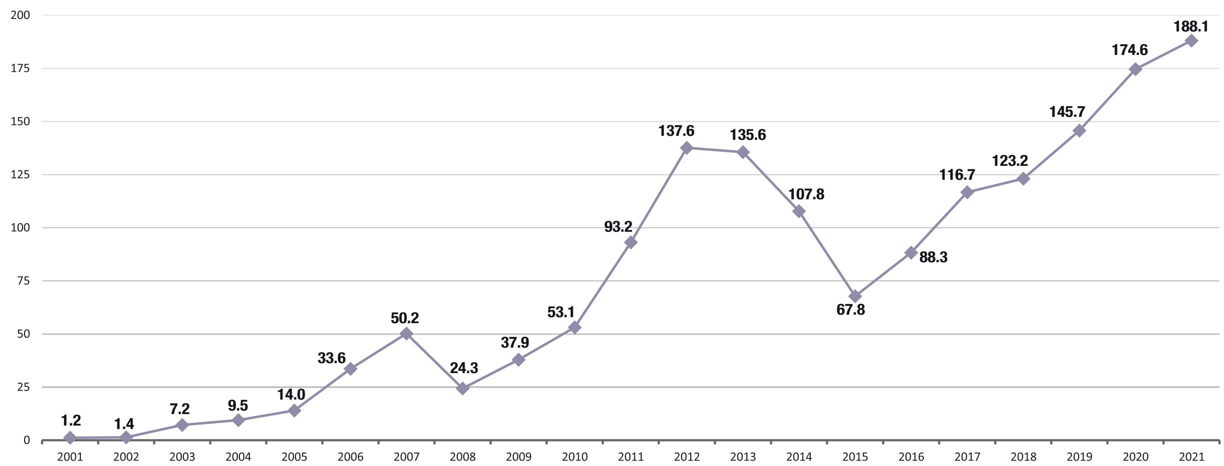
According to the Capital Markets Board's (CMB) "Communiqué on Lease Certificates" No. III-61.1, a lease certificate is a security issued by an asset leasing company to provide financing for all kinds of assets and rights. It entitles its holders to share revenues from such assets or rights. The necessary legal arrangement for the issuance of lease certificates by the Ministry of Treasury and Finance (MoTF) was realized with the amendment made in 2012 to Article 7/A of Law No. 4749 on the Regulation of Public Finance and Debt Management. Following this amendment, the Ministry started issuing lease certificates in domestic and international markets in 2012.

2. Global Outlook of the Sukuk Market

As a result of developments in interest-free finance, the demand for sukuk issuances has increased rapidly on a global basis over the years. The first corporate sukuk was issued in Malaysia in 1990, and the first government sukuk was issued in Bahrain in 2001. Although only USD 1.2 billion worth of sukuk was issued by all sukuk issuers worldwide in 2001, this amount reached USD 188.1 billion by 2021.

Global sukuk issuances peaked in 2012 and 2013, declined in 2014 and 2015, then have been on the rise again since 2015, reaching their highest level in 2021

Figure 38- Sukuk Issuances by Years (Billion USD)

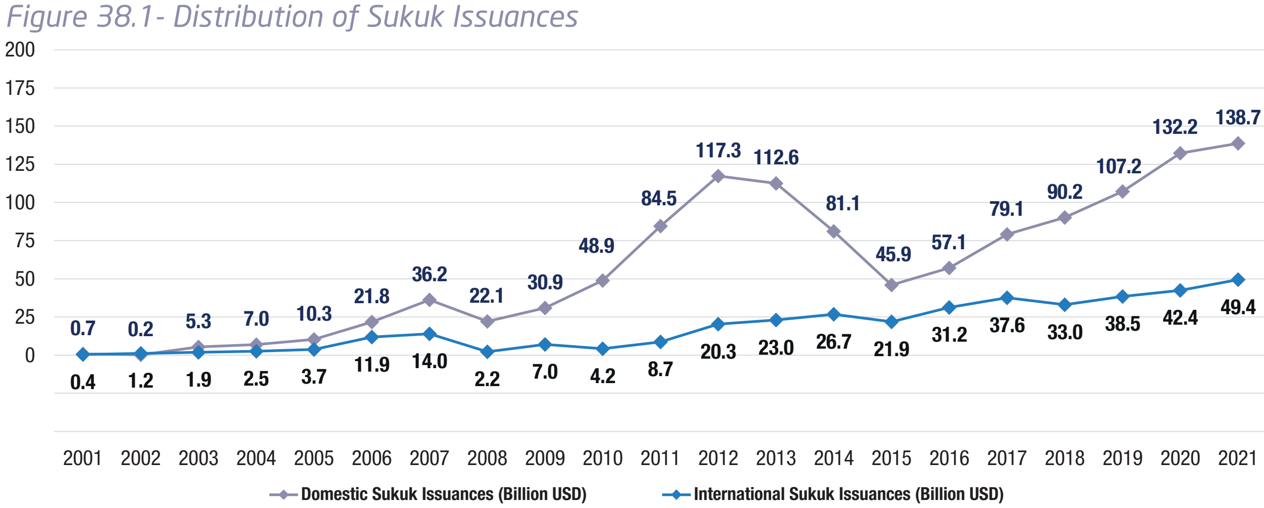


Source: IIFM

USD 1.2 billion in 2001, sukuk issuances increased steadily until 2007. By 2008, the transformation of the crisis in the US, which was mainly caused by the inability to repay housing loans, into a global crisis also had a negative impact on sukuk issuances. In 2008 and 2009, the continued high impact of the crisis led to a decline in sukuk issuances in these years. As of 2011, sukuk issuances started to increase again and reached quite high volumes in 2012 and 2013. Although issuances declined again in 2014 and 2015 due to the drop in oil prices, increasing uncertainties, interest rate hike expectations, and the policies of the Central Bank of Malaysia to stop short-term sukuk issuances, have continued to rise since 2016 until today (IIFM, 2016).

In 2021, total sukuk issuance, which was USD 174.6 billion in 2020, increased by 7.7% to USD 188.1 billion. In 2021, the source of the increase was the sukuk issuances in countries such as Bahrain, Kuwait, Saudi Arabia, Indonesia and Malaysia (IIFM, 2022).

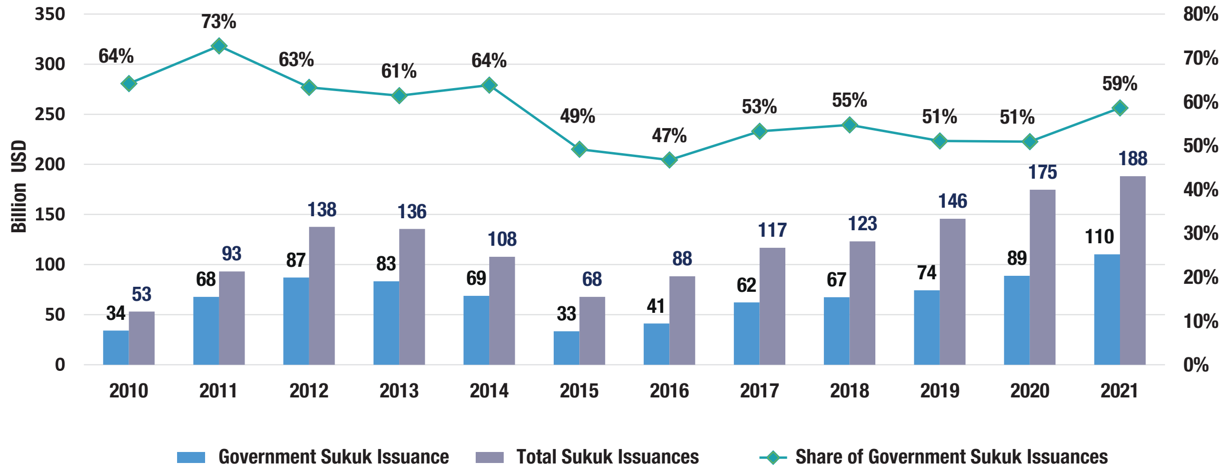
Figure 38.1- Distribution of Sukuk Issuances



Source: IIFM

In 2020, USD 132.2 billion of the USD 174.6 billion worth of issuance was realized in domestic markets and USD 42.4 billion in international markets. In 2021, USD 138.7 billion of the USD 188.1 billion worth of issuances was issued in domestic markets, while USD 49.4 billion was issued in international markets. In 2020 and 2021, the share of international issues to total issues was 24.3% and 26.3%, respectively.

Figure 38.2 - Share of Government Sukuk Issuances



The main driving force behind the increase in global sukuk issuances has been the issuances by central governments. Since 2010, the share of sukuk issuances by governments has not fallen below 47 percent. In total, 57 percent (USD 818.5 billion) of the USD 1.4 trillion worth of sukuk issued between 2010 and 2021 was issued by central governments.

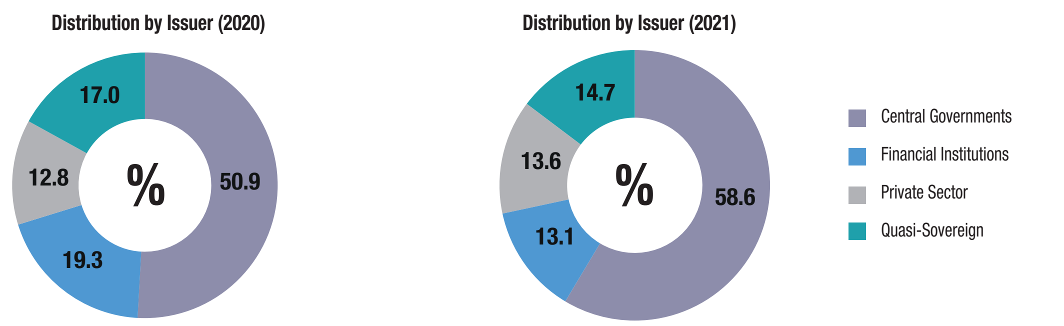
Table 14 - Distribution of Sukuk Issuances by Issuer Between 2010-2021 (Billion USD)

Years	Central Governments	Financial Institutions	Private Sector	Quasi Sovereign	Total
2010	34.1	2.0	13.9	3.2	**53.1**
2011	67.8	3.7	16.1	5.7	**93.2**
2012	87.1	6.1	22.7	21.6	**137.6**
2013	83.2	5.0	34.6	12.8	**135.6**
2014	68.8	4.7	12.7	21.6	**107.8**
2015	33.3	8.2	14.7	11.5	**67.8**
2016	41.3	5.9	19.8	21.3	**88.3**
2017	62.2	8.9	16.8	28.8	**116.7**
2018	67.4	10.1	22.0	23.6	**123.2**
2019	74.4	18.8	21.7	30.8	**145.7**
2020	88.9	33.8	22.3	29.7	**174.6**
2021	110.2	24.6	25.7	27.7	**188.1**

Source:IIFM

The table shows the distribution of issuances between 2010 and 2021 by issuer. Accordingly, central governments reached the highest issuance amount with USD 818.5 billion. The central governments were followed by private sector issuances with USD 243.1 billion, quasi-sovereign with USD 238.3 billion and financial institutions with USD 131.9 billion, respectively. In this period, the ratios of these institutions to total issues were 57.2 percent, 17 percent, 16.6 percent and 9.2 percent, respectively.

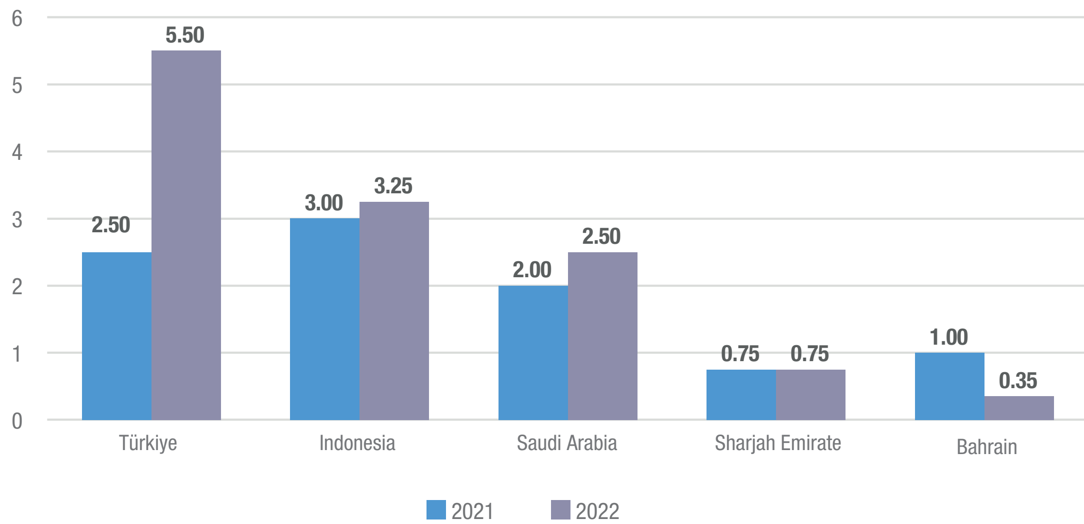
Figure 38.3 - Distribution of The Sukuk Issuances by Issuer



Source: IIFM

In 2021, while the total amount of issuances increased, the issuances of financial institutions and quasi-sovereigns decreased. The share of quasi-sovereigns in total issuances decreased by 2.3 points compared to the previous year from 17 percent to 14.7 percent, while the share of financial institutions decreased by 6.2 points from 19.3 percent to 13.1 percent. However, the share of issuances by central governments and the private sector increased. The share of central governments increased by 7.7 percentage points from 50.9 percent to 58.6 percent in 2021, while the share of issues by the private sector rose by 0.8 percentage points from 12.8 percent to 13.6 percent.

Figure 38.4 - 2022 International Government Sukuk Issuances in Selected Countries (Billion Dollars)



Source:Bloomberg

Countries such as Indonesia, Saudi Arabia, the United Arab Emirates, Bahrain and Türkiye, which have made significant contributions to the development of the sukuk market, continued to issue sukuk in 2022. In 2022, Türkiye issued USD 5.5 billion, Indonesia USD 3.25 billion, Saudi Arabia USD 2.5 billion, Sharjah Emirate of the United Arab Emirates USD 750 million and Bahrain USD 350 million of sukuk in international markets.

3. Sukuk as Domestic Debt Instruments in Türkiye

The CMB initiated the first legislative regulation regarding the lease certificate market in Türkiye with the Communiqué on Principles Regarding Lease Certificates and Asset Leasing Companies published in the Official Gazette dated 1/4/2010 and numbered 27539. This paved the way for the development of a new interest-free financial instrument in Türkiye's capital market. (İSEDAK, 2019).

In the communiqué published by the CMB on 1/4/2010, a lease certificate is defined as a security issued by an asset leasing company to finance the assets that it takes over through purchase or lease, and which enables the holders to be entitled to the income generated from these assets in proportion to their shares.

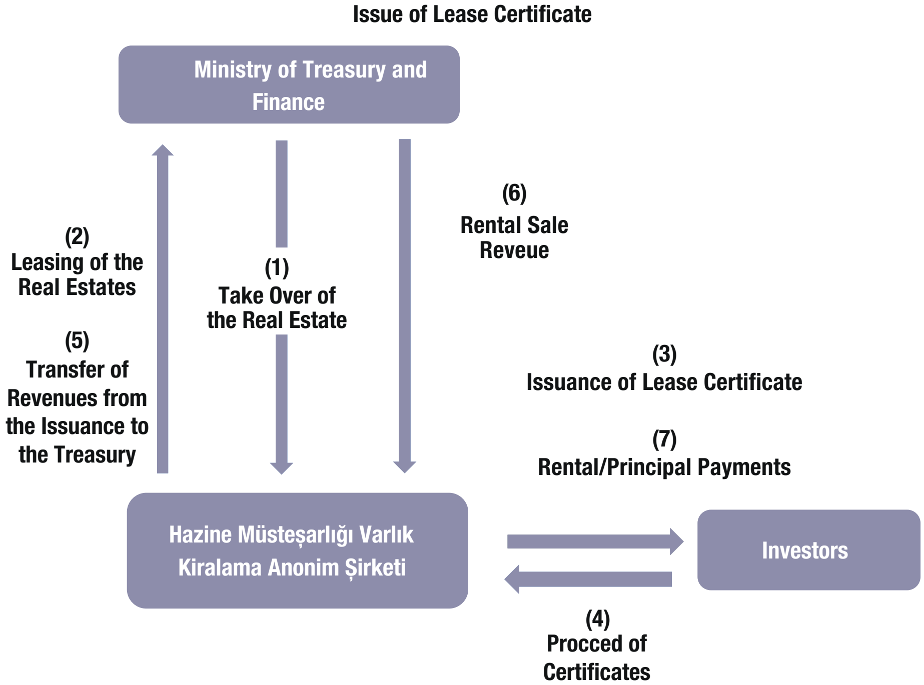
In our legislation, sukuk is regulated under the name of lease certificate. The Communiqué on Lease Certificates published in the Official Gazette dated 7/6/2013 and numbered 28670 lists the types of lease certificates based on ownership, management contract, purchase and sale, partnership and work contract, and stipulates that they can be issued by Asset Leasing Companies.

Hazine Müsteşarlığı Varlık Kiralama Anonim Şirketi (HMVKŞ), which is wholly owned by the MoTF, was established as a joint stock company with a private law legal entity with the approval of the Office of the Deputy Prime Minister dated 17.08.2012 and numbered 13863 to be the issuer of lease certificates.

Lease certificate issuances as a public finance instrument in Türkiye were initiated in 2012 in both the domestic and international markets to increase domestic savings, broaden the investor base and diversify financing instruments. Thus, in 2012, USD 1.5 billion was obtained in financing through international issuances and TL 1.6 billion through domestic issuances.

3.1 Structure of Lease Certificate

The lease certificates issued by HMVKŞ are realized as the ijarah sukuk structure, and the diagram below shows the issuance structure.



The stages in the above diagram regarding the issuance of lease certificates are explained below.

"1. Within the context of Article 7/A of Law Number 4749 on Regulating Public Finance and Debt Management, takeover of the public real estates through sale to HMVKŞ is realized. At the same time, the immovables are registered to deed in the name of HMVKŞ.

2. Provided that the beneficiary institutions continue to utilize the assets that are taken over by HMVKŞ, a lease agreement, apart from the deal of takeover through sale stated in Article 1, is signed between the Republic of Türkiye Ministry of Treasury and Finance (MoTF) and HMVKŞ. Moreover, a letter of a purchase undertaking of these immovable by MoTF at the end of lease period are committed. On the other hand, before the issue, HMVKŞ gives out a declaration to address the preservation of the aforementioned assets on its own name and on its own behalf and for the account of and the benefit of certificate holders.

3. In return for the leasing of the assets purchased by HMVKŞ to the MoTF, lease certificates are issued that provide investors to merit rental proceeds from the assets on a pro rata basis.

4. The amount of payment by the investors in return to the lease certificates is transferred to HMVKŞ.

5. Proceeds of lease certificates are transferred to the MoTF from HMVKŞ in return for the asset takeover.

6. In the context of the lease agreement and the purchase undertaking between the MoTF and HMVKŞ, rental payments are fulfilled by the MoTF to the HMVKŞ during the life of lease contract and a payment is made in return for the repurchase of immovable by MoTF at the end period of the lease agreement.

7. Rental proceeds on a pro rata basis and the principal payment of the lease certificates are allocated to the certificate holders by HMVKŞ." (Ministry of Treasury and Finance, 2012)

The lease certificate issuance process, as described in the lease certificate investor guide published by the MoTF, is summarized as follows: publicly-owned immovables are transferred to the HMVKŞ through the sale. In addition, a lease agreement is signed between the MoTF and HMVKŞ for rental payments. At the end of the lease agreement, a repurchase undertaking is signed for the repurchase of the immovables. Lease certificates are issued to provide rental payments to investors in exchange for the lease of HMVKŞ immovables to the MoTF. The amount paid by investors in exchange for the lease certificate is transferred to HMVKŞ. The amount obtained by HMVKŞ is transferred to the Treasury in exchange for the immovables. Within the framework of the lease agreement, the Treasury makes payments to HMVKŞ regarding the lease payments and the value of the immovables at the end of the term. On the other hand, HMVKŞ allocates to the certificate holders rental payments in proportion to their shares and the principal payment of the lease certificates at the end of the maturity.

3.2 The Role of Lease Certificates in Domestic Financing

As a domestic financing instrument, fixed rent rate, CPI ındexed TL-denominated, gold, US dollar and euro-denominated lease certificates issues are realized for institutional investors. Lease certificates are issued through direct sales to institutional investors. In addition, gold and euro-denominated lease certificates were issued through public offerings for individual investors.

Table 15 - Lease Certificates Issuances between 2012 and 2022 (Principal Currency)

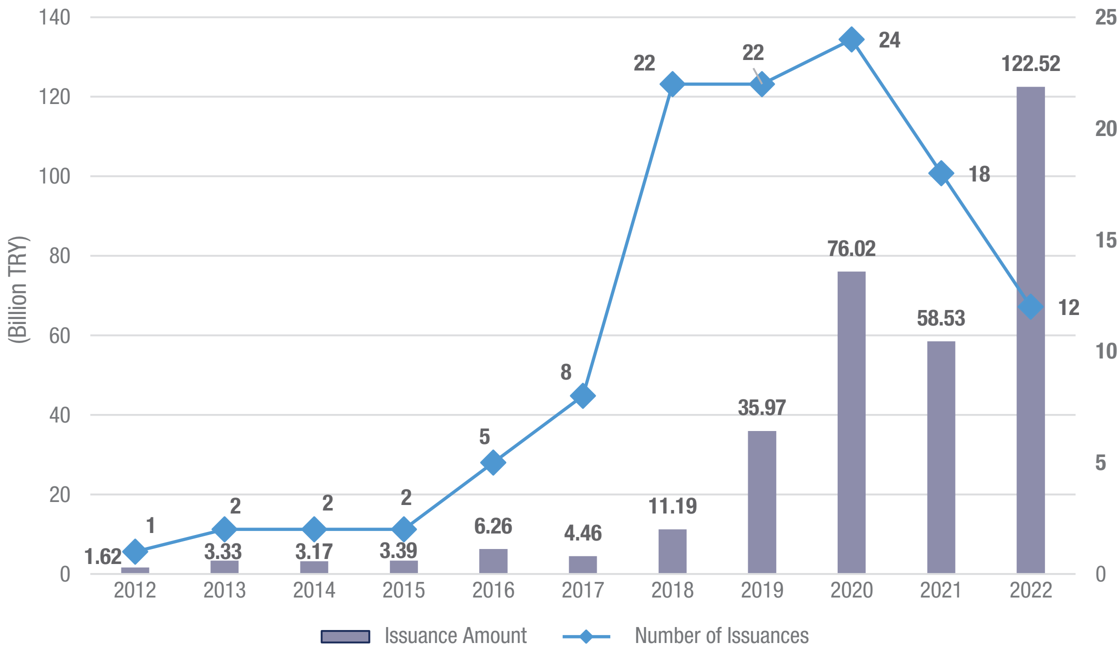
Years	Euro	USD	Gold (1000/1000 purity) (gm)	TRY
2012	-	-	-	1,624,482,560
2013	-	-	-	3,332,626,823
2014	-	-	-	3,172,784,070
2015	-	-	-	3,390,299,233
2016	-	-	-	6,262,256,540
2017	-	-	1,318,542	4,259,964,792
2018	565,565,000	-	2,485,747	7,253,675,000
2019	1,836,950,000	-	65,473,071	7,601,170,000
2020	488,464,000	2,427,292,000	51,105,190	37,155,160,000
2021	1,062,908,000	232,929,000	77,550,300	11,477,850,000
2022	-	-	34,833,955	92,954,790,000
Total	3,953,887,000	2,660,221,000	232,766,805	178,485,059,018

Source: MoTF

In 2017, lease certificates based on gold were issued to individual investors for the first time in order to bring the gold under the pillow into the economy, diversify the financing instruments and expand the investor base. In 2018, euro-denominated lease certificates were issued for the first time. The first issuance of USD-denominated lease certificates was realized in 2020 (Ministry of Treasury and Finance, 2020).

Table 15 shows the lease certificate issuances realized by the Treasury in the domestic market from 2012 to 2022. TL-denominated lease certificate issuances, which were first issued in 2012, provided a total of TL 178.48 billion in financing until 2022. Gold lease certificates, which started to be issued to individual investors in 2017, started to be issued to institutional investors in 2019; in this context, until the end of 2022, 232.77 tons of gold lease certificates were issued. In 2018, euro-denominated lease certificate issuances started to be issued for individual investors, and in 2019 also issued for institutional investors, thus providing a total of EUR 3.95 billion in financing until 2022. In 2020, USD 2.66 billion in domestic financing was provided through USD-denominated lease certificate issuances exclusively for institutional investors. However, in line with the strategy to reduce the share of foreign exchange-denominated domestic borrowing in total domestic borrowing, foreign exchange-denominated lease certificate issuances have been reduced since 2021.

Figure 39 - Amount and Number of Lease Certificates Issued between 2012 and 2022

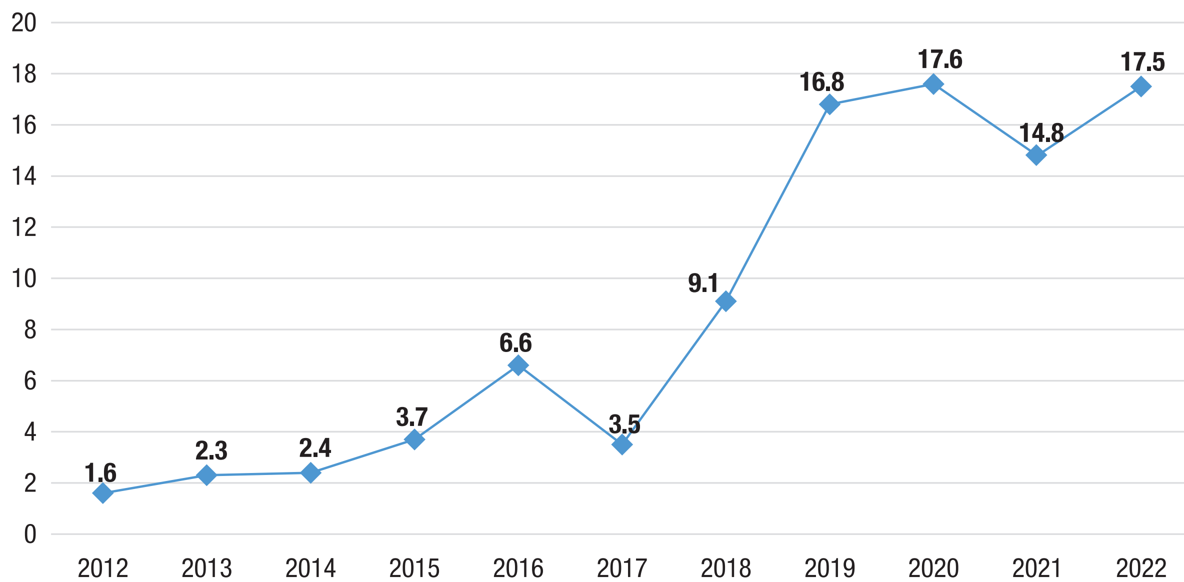


Source: MoTF

Lease certificate issuances, which started in 2012 with the intention of increasing domestic savings, broadening the investor base and diversifying borrowing instruments, increased significantly after 2016. However, to reduce the sensitivity of the debt stock to exchange rate fluctuations, the number of gold and foreign exchange-denominated issuances has been reduced since 2021, leading to a decrease in the number of issuances.

Figure 39 shows the number and amounts of lease certificate issuances in the domestic market between 2012 and 2022. In 2018 and 2019, although the issuance amounts were lower compared to the following years, the reason for the high number of issuances is the issuances made for individual investors.

Figure 39.1 - Share of Lease Certificates in Total Domestic Borrowing (%)



An analysis of the share of lease certificate issuances in total domestic borrowing reveals that while the share was 1.6 percent in 2012, it gradually increased over the years and realized at 14.8 percent in 2021 due to the policy of reducing foreign exchange-denominated domestic borrowing in 2021. As Figure 39.1 shows, with the increase in demand for TRY-denominated lease certificate issuances in 2022, the share of lease certificates in domestic borrowing increased again to 17.5 percent.

Figure 39.2 - Domestic Borrowing by Instruments in 2022

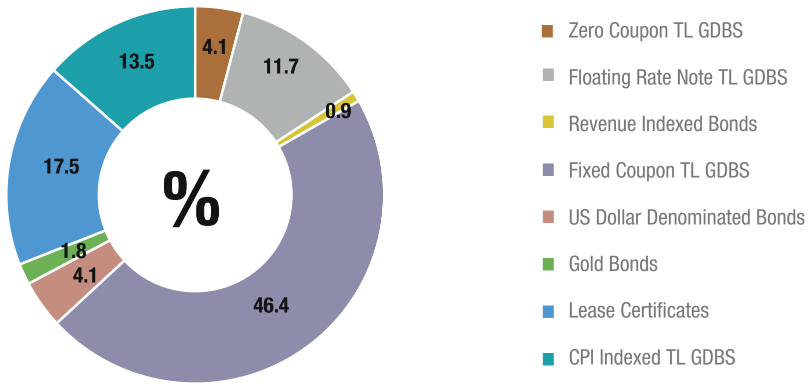


Figure 39.2 shows that 46.4 percent of total domestic borrowing was composed of fixed coupon government domestic debt securities (GDBS). Fixed coupon government securities are followed by lease certificates with 17.5 percent. Lease certificates have a significant role in domestic financing with their share in domestic borrowing.

4. CONCLUSION

Borrowing is an important method used by countries to finance budget deficits. In this sense, effective and efficient debt management is required to cover the resource deficit. One of the ways to realize effective and efficient debt management is to develop alternative financial instruments.

In this context, lease certificates were introduced as an alternative financial instrument in Türkiye in 2012, and since then, both individual and institutional investors have raised funds for public financing. In 2017, gold-denominated lease certificate issuances were launched for individual investors, expanding the investor base and bringing some of the savings of interest rate-sensitive investors kept under the pillow into the economy through lease certificates. Through lease certificates, Türkiye has not only provided resources for public financing but also gained flexibility in debt management. In 2008, the economic contraction caused by the global crisis led countries to issue sukuk, and Türkiye diversified its borrowing instruments in response to the crisis.

In conclusion, lease certificates maintain their importance as an interest-free financing instrument with their flexibility in times of crisis and their contribution to public debt management. Due to the increasing interest in interest-free finance on a global scale, it is significant for Türkiye to develop the lease certificate market and increase its share in issuances in order to have a say in the market.

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INFORMATION FOR INVESTORS

GOVERNMENT DEBT SECURITIES

1. Government Domestic Borrowing Security

Government Domestic Borrowing Securities (GDBS) are the common name of government bonds and treasury bills issued by Republic of Türkiye Ministry of Treasury and Finance. Information regarding types of securities, issuing process and frequently asked questions can be reached through Ministry's web page by following the link "www.hmb.gov.tr > Debt Office> Information for Investors".

2. Lease Certificates

Lease certificates are the securities designed by the asset leasing companies in their own name and own behalf and for the account of and the benefit of certificate holders to provide the financing of assets that are taken over by special purpose vehicles through sale or lease agreements and to give the holders of the security the entitlement to the revenues generated from these assets in proportion to the holders' share. Investor guide takes place on the following link: "www.hmb.gov.tr > Debt Office > Information for Investors".

3. International Bonds

These bonds have been issued by Ministry of Treasury and Finance in the international capital markets in the purpose of budget financing since 1988. Information about to issuances of such bonds are announced via press release on Ministry's web site.

PRINCIPLES OF PARTICIPATION IN THE AUCTIONS OF GDBS

The Principles of Participation in the Auctions of Government Domestic Borrowing Securities comprise regulations related to the operations of Government domestic borrowing securities issuance performed by Republic of Türkiye Ministry of Treasury and Finance, and also include participation offer form for auctions. These principles can be reached through Ministry's web page by following the link "www.hmb.gov.tr > Debt Office > Information for Investors.

PRINCIPLES OF BUYBACK AUCTIONS OF GDBS

In order to ensure smooth debt redemption, controlling the liquidity risk defined as not having enough cash or financing and to increase the price efficiency of secondary market, regular buyback auctions may be implemented in domestic markets. In these auctions, Treasury pays to the investors by early redemption. These principles can be reached through Ministry's web page by following the link "www.hmb.gov.tr > Debt Office > Information for Investors".

TAXATION OF DOMESTIC BORROWING NOTES

With the Decree of the Council of Ministers-2010/926 dated 09.27.2010, withholding rate on the interest incomes and purchase-sale profits of the domestic borrowing notes, issued after 01.01.2006, was determined as 10 percent (15 percent formerly) for individual investors. Aforementioned withholding rate is performed as 0 percent for capital stock companies, which are mentioned in the law and 10 percent for other taxpayers.

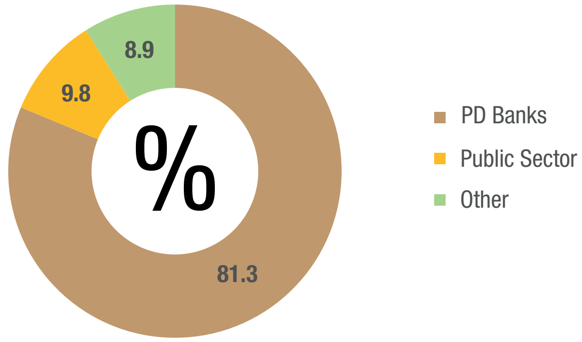
Provisional Article 67 is not applied for interest incomes and purchase-sale profit of Eurobonds regardless of their issuing date. Eurobond interest income is declared by resident taxpayers when the declaration limit of the preceding year is surpassed while purchase - sale profit is declared for the remaining amount over the cost value indexing and exemptions. For non-resident taxpayers, income of the Eurobonds is not declared. On the other hand, with the decision of the Council of Ministers dated 09.22.2017 and numbered 2017/10840, the tax rate for gold bond and gold based lease certificate was determined as 0 percent.

PRIMARY DEALERSHIP SYSTEM

Primary Dealership System can be described as a system which is designed with the purpose of reducing roll-over risk, broadening investor base, constituting transparent, competitive and more organized market and also increasing liquidity and reducing volatility in the secondary market by giving certain official rights and obligations related to primary and secondary market of government debt securities to a group of professional intermediaries. Primary Dealership Agreement which includes the selection criteria, the name of the banks selected as primary dealer and the rights and obligations for Primary Dealers can be reached under the "Debt Office > Information for Investors > Primary Dealership System" section at www.hmb.gov.tr.

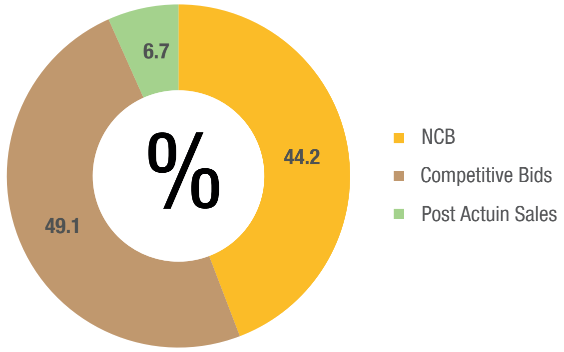
In 2022, 81.3 percent of total domestic borrowing including premium in the primary markets was met by primary dealers.

Figure 40 - Investor Composition of Primary Market Issuances (2022, %)



In 2022, 49.1 percent of the domestic borrowing to the PD banks were implemented through competitive bidding with auctions method, and the remaining 44.2 percent from non-competitive bidding and 6.7 percent from post-auction sales.

Figure 41 - Distribution of Borrowings Through Auction Method from the Primary Dealer Banks in 2022 (%)



The 11 Primary Dealers for the year 2022 are listed below:

1. Akbank T.A.Ş
2. Denizbank A.Ş.
3. HSBC Bank A.Ş.
4. QNB Finansbank A.Ş.
5. Türk Ekonomi Bankası A.Ş
6. T. Garanti Bankası A.Ş.
7. T. İş Bankası A.Ş.
8. T. Vakıflar Bankası T.A.O.
9. T. Halk Bankası A.Ş.
10. T.C. Ziraat Bankası A.Ş.
11. Yapı ve Kredi Bankası A.Ş.

INVESTOR RELATIONS OFFICE

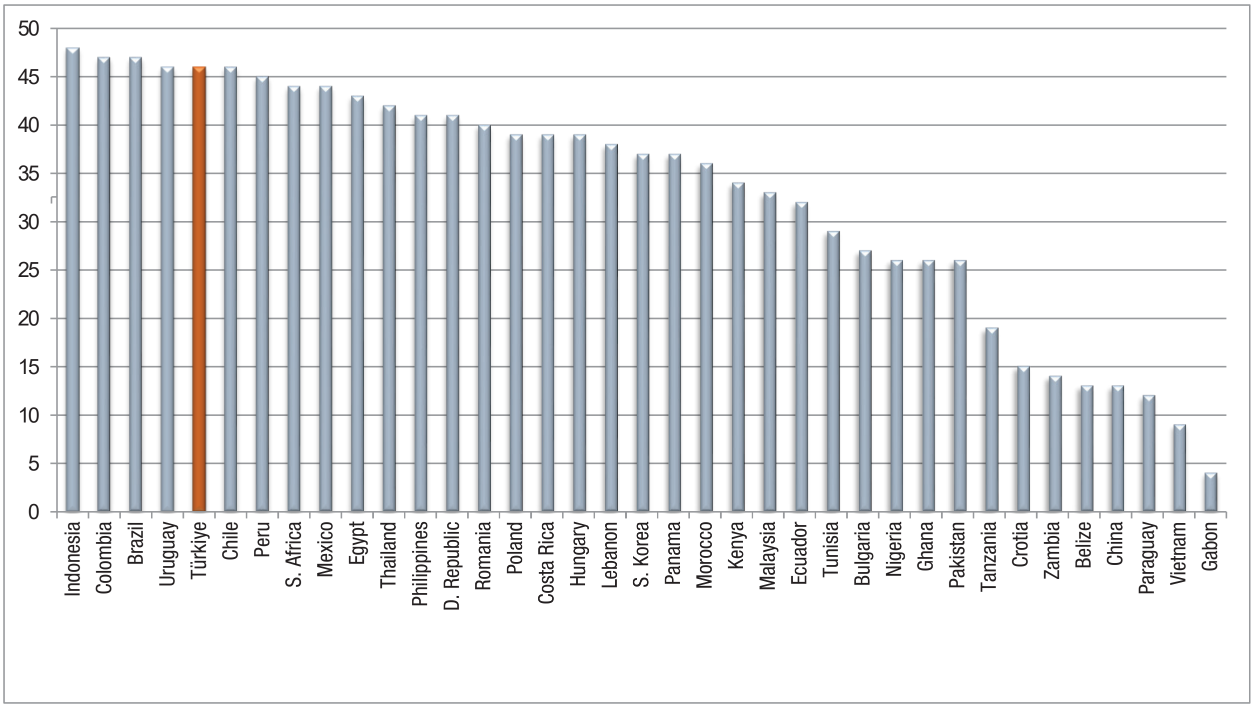
The Investor Relations Office (IRO) was established under the General Directorate of Debt Office in order to conduct relations with credit rating agencies (CRAs), as well as international banks, individual or corporate fund and portfolio managers, and to convey the current developments in our country's economy and financial markets at first-hand.

In line with the investor relations management function; the IRO organizes investor group meetings, gives opinions by reviewing the reports from foreign stakeholders including CRAs, monitors the data, trends and predictions regarding many areas of the Turkish economy and the global conjuncture, and carries out the processes of answering questions from foreign stakeholders.

The IRO's website can be reached at https://en.hmb.gov.tr/investor-relations-office.

The International Finance Institute (IIF) assesses investor relations practices of 37 emerging markets and developing countries that are active in capital markets with a periodic report. In the latest issue of this report, which was published in October 2022, Türkiye ranked fifth with 46 points in investor relations and data transparency practices.

Figure 42 - Investor Relations and Data Transparency Practices (IIF - October 2022)



SELECTED STATISTICS

All transactions carried out by the Ministry of Treasury and Finance within the asset and liability management framework are booked and the statistical results of these transactions are disclosed by the statistic department regularly. In this context, monthly debt management reports, monthly, quarterly, yearly statistics and various presentations are being published in the Ministry's official website https://en.hmb.gov.tr/ In this section of the report, some selected statistics are also presented to provide key aggregates.

CENTRAL GOVERNMENT DEBT STOCK - CURRENCY AND INTEREST COMPOSITION[1]

		2019			2020			2021			2022		
		Billion TL	Billion USD	%	Billion TL	Billion USD	%	Billion TL	Billion USD	%	Billion TL	Billion USD	%
CURRENCY DECOMPOSITION	**TOTAL DEBT STOCK**	**1,329.05**	**223.32**	**100.00**	**1,812.85**	**246.51**	**100.00**	**2,747.82**	**211.35**	**100.00**	**4,034.23**	**244.21**	**100.00**
	Fixed	982.98	165.17	73.96	1,271.43	172.88	70.13	1,919.63	147.65	69.86	2,862.15	166.87	70.95
	Floating	173.75	29.20	13.07	290.52	39.51	16.03	536.54	41.28	19.53	774.42	46.75	19.20
	Indexed to CPI	172.32	28.96	12.97	250.90	34.12	13.84	291.65	22.43	10.61	397.66	30.59	9.86
	TL	668.54	112.34	100.00	794.44	108.03	100.00	933.20	71.78	100.00	1,392.13	107.08	100.00
	Fixed	402.29	67.60	60.17	401.14	54.55	50.49	435.69	33.51	46.69	722.77	55.59	51.92
	Floating	93.92	15.78	14.05	142.40	19.36	17.92	205.86	15.83	22.06	271.70	20.90	19.52
	Indexed to CPI	172.32	28.96	25.78	250.90	34.12	31.58	291.65	22.43	31.25	397.66	30.59	28.57
	FX	660.52	110.98	100.00	1,018.41	138.48	100.00	1,814.62	139.58	100.00	2,642.10	137.13	100.00
	Fixed	580.69	97.57	87.91	870.29	118.33	85.46	1,483.95	114.13	81.78	2,139.38	111.28	80.97
	Floating	79.83	13.42	12.09	148.12	20.14	14.54	330.68	25.44	18.22	502.72	25.85	19.03
	DOMESTIC DEBT STOCK	**755.05**	**126.88**	**100.00**	**1,060.35**	**144.19**	**100.00**	**1,321.19**	**101.62**	**100.00**	**1,905.33**	**134.48**	**100.00**
	Fixed	464.24	78.01	61.49	591.67	80.46	55.80	695.98	53.53	52.68	1,044.33	72.76	54.81
	Floating	118.48	19.91	15.69	217.79	29.62	20.54	333.56	25.66	25.25	463.34	31.13	24.32
	Indexed to CPI	172.32	28.96	22.82	250.90	34.12	23.66	291.65	22.43	22.07	397.66	30.59	20.87
	TL	668.54	112.34	100.00	794.44	108.03	100.00	933.20	71.78	100.00	1,392.13	107.08	100.00
	Fixed	402.29	67.60	60.17	401.14	54.55	50.49	435.69	33.51	46.69	722.77	55.59	51.92
	Floating	93.92	15.78	14.05	142.40	19.36	17.92	205.86	15.83	22.06	271.70	20.90	19.52
	Indexed to CPI	172.32	28.96	25.78	250.90	34.12	31.58	291.65	22.43	31.25	397.66	30.59	28.57
	FX	86.51	14.54	100.00	265.92	36.16	100.00	387.99	29.84	100.00	513.20	27.40	100.00
	Fixed	61.95	10.41	71.61	190.53	25.91	71.65	260.30	20.02	67.09	321.56	17.17	62.66
	Floating	24.56	4.13	28.39	75.39	10.25	28.35	127.70	9.82	32.91	191.64	10.23	37.34
	EXTERNAL DEBT STOCK [2]	**574.00**	**96.44**	**100.00**	**752.49**	**102.32**	**100.00**	**1,426.63**	**109.73**	**100.00**	**2,128.90**	**109.73**	**100.00**
	Fixed	518.74	87.15	90.37	679.76	92.42	90.33	1,223.65	94.11	85.77	1,817.82	94.11	85.39
	Floating	55.26	9.29	9.63	72.73	9.89	9.67	202.98	15.62	14.23	311.08	15.62	14.61
DÖVİZ YAPISI	**TOTAL DEBT STOCK**	**1,329.05**	**223.32**	**100.00**	**1,812.85**	**246.51**	**100.00**	**2,747.82**	**211.35**	**100.00**	**4,034.23**	**211.45**	**100.00**
	TL	668.54	112.34	50.30	794.44	108.03	43.82	933.20	71.78	33.96	1,392.13	74.32	34.51
	USD	389.33	65.42	29.29	631.20	85.83	34.82	1,164.33	89.56	42.37	1,740.41	87.04	43.14
	EUR	200.42	33.68	15.08	257.41	35.00	14.20	376.15	28.93	13.69	528.86	28.60	13.11
	SDR	8.09	1.36	0.61	10.42	1.42	0.58	98.91	7.61	3.60	135.88	7.61	3.37
	JPY	36.45	6.11	2.74	42.02	5.70	2.32	44.38	3.41	1.61	41.12	3.41	1.02
	XAU	24.56	4.13	1.85	75.39	10.25	4.16	127.70	9.82	4.65	191.64	10.23	4.75
	Other	1.66	0.28	0.13	1.98	0.27	0.11	3.16	0.24	0.12	4.19	0.24	0.10
	DOMESTIC DEBT STOCK	**755.05**	**126.88**	**56.81**	**1,060.35**	**144.19**	**58.49**	**1,321.19**	**101.62**	**48.08**	**1,905.33**	**101.72**	**47.23**
	TL	668.54	112.34	50.30	794.44	108.03	43.82	933.20	71.78	33.96	1,392.13	74.32	34.51
	USD	0.00	0.00	0.00	102.73	13.97	5.67	163.81	12.60	5.96	188.78	10.08	4.68
	EUR	61.95	10.41	4.66	87.80	11.94	4.84	96.49	7.42	3.51	132.78	7.09	3.29
	XAU	24.56	4.13	1.85	75.39	10.25	4.16	127.70	9.82	4.65	191.64	10.23	4.75
	EXTERNAL DEBT STOCK [2]	**574.00**	**96.44**	**43.19**	**752.49**	**102.32**	**41.51**	**1,426.63**	**109.73**	**51.92**	**2,128.90**	**109.73**	**52.77**
	USD	389.33	65.42	29.29	528.47	71.86	29.15	1,000.52	76.96	36.41	1,551.63	76.96	38.46
	EUR	138.47	23.27	10.42	169.60	23.06	9.36	279.66	21.51	10.18	396.08	21.51	9.82
	JPY	36.45	6.11	2.74	42.02	5.70	2.32	44.38	3.41	1.61	41.12	3.41	1.02
	SDR	8.09	1.36	0.61	10.42	1.42	0.58	98.91	7.61	3.60	135.88	7.61	3.37
	Other	1.66	0.28	0.13	1.98	0.27	0.11	3.16	0.24	0.12	4.19	0.24	0.10
	USD Selling Rate		**5.9509**			**7.3537**			**13.0009**			**18.7320**	
	EUR/USD		1.1196			1.2272			1.1314			1.0573	
	SDR/USD		1.38283			1.44482			1.39881			1.33446	

(1) Provisional

(2) TL equivalents of external debt figures are calculated by end of relevant period USD selling rates.

Note: The stock by years can change due to possible updates.

GENERAL GOVERNMENT DEBT STOCK [1] DEFINED BY EUROPEAN UNION STANDARDS					
(Million TL)	**2018**	**2019**	**2020**	**2021**	**2022**
Total Debt	**1,130,088**	**1,406,415**	**2,001,628**	**3,028,860**	**4,759,452**
Central Government	1,180,122	1,457,171	1,996,565	3,004,720	4,736,804
Local Government	69,810	74,415	85,467	104,888	136,351
Social Security Funds	9	7	6	6	8
Between Sector Consolidation	-119,852	-125,178	-80,409	-80,755	-113,711
Total Debt	**1,130,088**	**1,406,415**	**2,001,628**	**3,028,860**	**4,759,452**
Currency and Deposits	2,731	3,145	3,632	4,184	4,738
Securities	944,174	1,207,408	1,745,705	2,579,321	4,139,851
Loans	183,183	195,863	252,292	445,355	614,864
Total Stock / GDP (%)	**30.05**	**32.57**	**39.65**	**41.74**	**31.70**

1- Consolidated nominal debt stock defined in European System of Accounts (ESA) deficit and debt manual.

PUBLIC NET DEBT					
(Million TL)	**2018**	**2019**	**2020**	**2021**	**2022**
Total Public Sector Net Debt (I-II-III-IV)	**507,135**	**702,236**	**970,709**	**1,489,151**	**2,522,941**
I- Total Public Sector Debt Stock (Gross)	**1,170,083**	**1,451,081**	**1,959,555**	**3,010,892**	**4,552,624**
A-Domestic Debt	**664,985**	**846,083**	**1,158,415**	**1,493,032**	**2,277,425**
Central Government	586,142	755,052	1,060,354	1,321,189	1,905,331
Rest of the Public Sector	78,843	91,031	98,061	171,843	372,094
B- External Debt	**505,098**	**604,999**	**801,141**	**1,517,860**	**2,275,199**
Central Government	480,973	574,002	752,495	1,426,629	2,130,116
Rest of the Public Sector	24,126	30,997	48,646	91,231	145,084
II- Central Bank Net Assets	**426,300**	**460,677**	**614,196**	**1,037,584**	**995,839**
Net Foreign Assets	478,895	613,427	657,726	1,303,879	2,127,612
Other Asset and Obligations (Net)	-52,595	-152,750	-43,530	-266,295	-1,131,773
III- Public Sector Deposits	**109,004**	**156,627**	**271,438**	**393,406**	**909,538**
Central Government	69,378	105,464	194,963	271,988	630,469
Rest of the Public Sector	39,625	51,163	76,474	121,418	279,069
IV-Unemployment Insurance Fund Net Assets	**127,644**	**131,542**	**103,213**	**90,752**	**124,307**
Memo:					
Net External Debt Stock	**26,204**	**-8,428**	**143,415**	**213,981**	**147,587**
Net Domestic Debt Stock	**480,932**	**710,664**	**827,294**	**1,275,170**	**2,375,353**
Public Net Debt Stock/GDP (%)	**13.5**	**16.3**	**19.2**	**20.5**	**16.8**
GDP	**3,761,166**	**4,317,810**	**5,048,568**	**7,256,142**	**15,011,776**

GROSS EXTERNAL DEBT STOCK of TÜRKİYE - by BORROWER

(Million USD)	2018	2019 (1)	2020 (2)	2021 (2)	2022 (2)
SHORT TERM	**93,099**	**95,990**	**111,732**	**118,740**	**149,101**
PUBLIC SECTOR	**20,828**	**23,444**	**24,892**	**22,219**	**28,895**
GENERAL GOVERNMENT	0	0	0	0	0
Central Government	0	0	0	0	0
Local Administrations	0	0	0	0	0
Funds	0	0	0	0	0
FINANCIAL INSTITUTIONS	20,828	23,444	24,892	22,219	28,895
Banks	20,828	23,444	24,892	22,219	28,895
Non-Banking Institutions	0	0	0	0	0
NON-FINANCIAL INSTITUTIONS	0	0	0	0	0
SOE's	0	0	0	0	0
Other	0	0	0	0	0
CBRT	**5,914**	**8,452**	**21,344**	**26,052**	**32,790**
PRIVATE SECTOR	**66,357**	**64,094**	**65,496**	**70,469**	**87,416**
FINANCIAL INSTITUTIONS	33,246	29,860	31,949	27,816	34,042
Banks	31,513	28,813	30,804	26,940	33,374
Non-Banking Institutions	1,733	1,047	1,145	876	668
NON-FINANCIAL INSTITUTIONS	33,111	34,234	33,547	42,653	53,374
LONG TERM	**332,723**	**317,878**	**316,936**	**318,228**	**309,431**
PUBLIC SECTOR	**122,391**	**137,444**	**152,974**	**157,739**	**157,550**
GENERAL GOVERNMENT	94,525	99,751	106,584	113,663	117,574
Central Government	91,245	96,443	102,317	109,732	113,715
Local Administrations	3,279	3,309	4,268	3,932	3,859
Funds	0	0	0	0	0
FINANCIAL INSTITUTIONS	26,398	35,460	33,863	31,461	26,868
Banks	26,398	34,340	32,635	30,046	25,535
Non-Banking Institutions	0	1,120	1,227	1,414	1,333
NON-FINANCIAL INSTITUTIONS	1,468	2,233	12,527	12,615	13,109
SOE's	1,468	2,044	2,348	3,086	3,886
Other	0	189	10,179	9,529	9,222
CBRT	**0**	**0**	**0**	**0**	**0**
PRIVATE SECTOR	**210,332**	**180,434**	**163,962**	**160,489**	**151,881**
FINANCIAL INSTITUTIONS	105,954	79,432	73,294	66,551	55,513
Banks	88,079	66,250	63,278	57,781	46,078
Non-Banking Institutions	17,875	13,182	10,016	8,770	9,435
NON-FINANCIAL INSTITUTIONS	104,378	101,001	90,667	93,938	96,367
GROSS EXTERNAL DEBT STOCK of TÜRKİYE	**425,822**	**413,868**	**428,668**	**436,968**	**458,532**
PUBLIC SECTOR	**143,219**	**160,888**	**177,866**	**179,958**	**186,445**
GENERAL GOVERNMENT	94,525	99,751	106,584	113,663	117,574
Central Government	91,245	96,443	102,317	109,732	113,715
Local Administrations	3,279	3,309	4,268	3,932	3,859
Funds	0	0	0	0	0
FINANCIAL INSTITUTIONS	47,226	58,904	58,755	53,680	55,763
Banks	47,226	57,784	57,527	52,265	54,430
Non-Banking Institutions	0	1,120	1,227	1,414	1,333
NON-FINANCIAL INSTITUTIONS	1,468	2,233	12,527	12,615	13,109
SOE's	1,468	2,044	2,348	3,086	3,886
Other	0	189	10,179	9,529	9,222
CBRT	**5,914**	**8,452**	**21,344**	**26,052**	**32,790**
PRIVATE SECTOR	**276,689**	**244,528**	**229,458**	**230,958**	**239,297**
FINANCIAL INSTITUTIONS	139,200	109,292	105,243	94,367	89,555
Banks	119,592	95,063	94,082	84,721	79,452
Non-Banking Institutions	19,608	14,229	11,161	9,646	10,103
NON-FINANCIAL INSTITUTIONS	137,489	135,235	124,214	136,591	149,741

(1) In accordance with the Presidency Decision dated December 4th, 2019 and numbered 1814, the foreign debt data of VakıfBank started to be classified under public sector classification as of 2019 Q4.

(2) Public Sector Classification has been updated as of the first quarter of 2020 within the scope of the "Statistical Classification Regulation" published in the Official Newspaper No. 31022 (repeated) dated 28 January 2020.

NET EXTERNAL DEBT STOCK OF TÜRKİYE

	GROSS EXTERNAL DEBT STOCK	CBRT EXTERNAL DEBT STOCK (-)	BANKS EXTERNAL DEBT STOCK (-)	EXTERNAL DEBT STOCK EXCLUDING MONETARY SECTOR(I)	CBRT NET FOREIGN ASSETS(1)	BANKS NET FOREIGN ASSETS	MONETARY SECTOR NET FOREIGN ASSETS (2) (II)	NET EXTERNAL DEBT STOCK (I-II)	NET EXTERNAL DEBT STOCK / GDP (3) (%)
2018	425,822	5,914	166,819	**253,089**	92,062	-91,340	**722**	**252,368**	**31.6**
2019	413,868	8,452	152,847	**252,569**	104,660	-71,722	**32,938**	**219,631**	**28.9**
2020	428,668	21,344	151,609	**255,714**	91,163	-78,229	**12,934**	**242,780**	**33.9**
2021	436,968	26,052	136,986	**273,930**	107,058	-54,133	**52,925**	**221,004**	**27.4**
2022	458,532	32,790	133,882	**291,860**	121,024	-59,349	**61,674**	**230,186**	**25.4**

(1) As the Treasury's obligations to the IMF are included in the "External Liabilities" side of the "Monetary Survey" and "Gross External Debt Stock of Türkiye", Treasury's obligations to the IMF are subtracted from CBRT's liabilities in order to avoid double counting.

(2) "Monetary Survey" data is used as a net foreign assets of monetary sector.

(3) For quarterly terms, ratios are calculated using GDP in USD amounts on a four quarter moving basis.

PROGRAM DEFINED BALANCE (% GDP)

GDP	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 MTP	2024 MTP	2025 MTP
CB Primary Balance	1.7	1.3	1.3	0.8	0.3	0.0	-0.6	-0.8	-0.3	1.1	-0.5	0.5	1.3
CB Program Defined Primary Balance	0.8	0.4	0.4	-0.5	-0.5	-1.5	-3.0	-2.6	-1.7	-0.2	-1.7	-0.7	0.2

Million USD	REPAYMENTS OF TREASURY GUARANTEED CREDITS (1)								
	2020			2021			2022		
	Paid by Treasury	Paid by Institution	Undertaken Ratio (%)	Paid by	Paid by	Undertaken	Paid by	Paid by	Undertaken
Central Government	0	39	0.0	0	35	0.0	0	38	0.0
Local Administrations	25	45	35.7	26	47	35.2	21	39	35.7
Funds	0	0	0.0	0	0	0.0	0	0	0.0
Financial Institutions	0	1,330	0.0	0	2.523	0.0	0	1.175	0.0
Non-Financial Institutions	0	119	0.0	0	159	0.0	0	235	0.0
Private Sector Financial Institutions	0	440	0.0	0	398	0.0	0	406	0.0
Private Sector Non-Financial Institutions	0	0	0.0	0	0	0.0	0	0	0.0
Total	**25**	**1,934**	**1.3**	**26**	**3,162**	**0.8**	**21**	**1,892**	**1.1**

(1) Provisional

Million TL	TREASURY RECEIVABLE STOCK								
	2020			2021			2022		
	Outstandig Overdue Receivables	Projected Receivables Stock	Total	Outstandig Overdue Receivables	Projected Receivables Stock	Total	Outstandig Overdue Receivables	Projected Receivables Stock	Total
Local Institutions	42	10,286	10,328	35	10,213	10,249	32	8,562	8,594
SOEs	1,727	2,482	4,209	2,146	3,450	5,595	2,738	3,983	6,722
Banks	0	100	100	0	149	149	0	181	181
Social Security Institution	0	6	6	0	6	6	0	8	8
Public Banks	0	1,884	1,884	0	3,499	3,499	0	4,184	4,184
Public Enterprises (2)	0	25	25	0	22	22	0	12	12
Central Administrations	0	1,367	1,367	0	1,189	1,189	0	954	954
Organizations (3)	0	0	0	0	0	0	0	0	0
Insurance Institutions	0	0	0	0	0	0	0	0	0
Private Institutions (4)	0	0	0	0	0	0	0	0	0
Foundations (5)	0	0	0	0	0	0	0	0	0
Total	**1,769**	**16,151**	**17,919**	**2,181**	**18,528**	**20,709**	**2,771**	**17,885**	**20,655**

(1) Provisional. Indicates total amount of outstanding overdue and projected receivables.

(2) Represents İstanbul Gas Distribution Company.

(3) Represents Industrial Zones, Trade Unions and Istanbul Olimpic Games Preparation & Organizing Board.

(4) Represents Corporations governed by foundations.

(5) Represents Foundation of Technological Improvements in Turkey.

REPUBLIC OF TÜRKİYE
MINISTRY OF TREASURY
AND FINANCE