1. Overview

Economic activity remained strong in the first quarter of 2022. In the first quarter, Gross Domestic Product (GDP) increased by 7.3% year-on-year and 1.2% quarter-on-quarter. In terms of production, services and the industrial sector were the main drivers of annual growth in the first quarter. The construction sector continued to restrain growth. On the expenditures side, the main driver of annual growth was final domestic demand, led by private consumption. Meanwhile, final domestic demand made a negative contribution to quarterly growth. On the production side, all components except for agriculture and net tax revenues made a positive contribution to quarterly growth.

The higher share of sustainable components in the composition of growth supports the rise in employment. The annual increase in machinery-equipment investments, one of the drivers of potential growth, has continued for ten quarters since the last quarter of 2019. Moreover, the contribution of other components that support the current account balance positively, such as net exports, also increased. In the first quarter of 2022, machinery-equipment investments and net exports contributed to annual growth by 1.4 and 3.5 percentage points, respectively. Thus, the share of these components in GDP reached the highest level of the last decade. Stable growth with production, investment and export-oriented sustainable components also has positive implications for employment. The April-May average of the seasonally-adjusted total unemployment rate declined by 0.3 points quarter-on-quarter to 11.1%. While employment grew by 2.3% (approximately 696,000 people) quarter-on-quarter in the said period, the increase in the participation rate limited the decrease in the unemployment rate. Additionally, employment gains became widespread across sectors.

The levels of capacity utilization, investment trends and other leading indicators indicate that the strong growth in the first quarter of 2022 continued in the second quarter with the support of external demand. The industrial production of sectors with higher export shares posted a strong growth. Adjusted for seasonal and calendar effects, the April-May average of the Industrial Production Index (IPI) was up by 0.5 points compared to the previous quarter. Industrial turnover indices also show that external demand continued to support industrial production. Increasing by 18.5% year-on-year, the retail sales volume index grew significantly compared to the previous quarter.

Despite the sustained strength in exports and the recovery in services revenues, the current account deficit increased amid rising energy and commodity prices. The escalating geopolitical risks were adversely realized in the first half of the year and caused a weakening in the global economic activity. Leading indicators signal a higher risk of recession for the global economy. The exports of Türkiye, on the other hand, remained resilient to the weakening global economic activity, and maintained a strong course in the second quarter of 2022 thanks to the increases in both price and quantity. Dynamic capacities and market diversification flexibility of exporting companies played a significant role in compensating for regional losses in exports stemming from the Russia-Ukraine conflict. Hence, regional exports exceeded their pre-conflict level. Meanwhile, as economic activity remained buoyant and international energy prices increased, particularly in natural gas, imports also maintained their uptrend in the second quarter of 2022. The 12-month cumulative current account balance excluding gold and energy has continued to run a surplus, which is particularly important for the impact of the soaring energy prices on the current account balance. On the other hand, the positive contribution of the services balance to the current account balance continued to rise. Backed by travel and transportation revenues, services revenues have gained further momentum in the second quarter of the year.

The rise in global inflation and increased concerns of a recession in advanced economies caused the global risk appetite to decline in the current reporting period. Lingering geopolitical risks and fluctuating commodity prices have weakened the expectations of a recovery in the global risk appetite. The volatility in long-term bond rates in advanced economies and the course of global financial conditions keep the risks to portfolio flows to emerging market economies (EMEs) alive, and cause outflows from bond markets in particular.

Targeted use of credits to enhance investments and production capacity will contribute positively to both sustainable growth and the current account balance. Despite losing momentum, credit growth, and allocation of funds for real economic activity purposes are closely monitored. In the second quarter of the year, credit demand for TL-denominated loans in particular surged due to soaring input costs and the firms' perceptions of uncertainty led by geopolitical conditions. During this period, reinforced macroprudential measures led normalization to start in credit growth as of the end of the quarter.

Consumer inflation was 78.62% annually in the second quarter of 2022, and annual inflation increased across all sub-categories, with energy and food groups in the lead. Despite some weakening, adverse supply shocks led by the prospects for global energy, food and agricultural commodity prices amid geopolitical developments, pushed inflation further upwards in this period. The Russian-Ukrainian conflict imposed additional pressure on food prices chiefly through the cereal production-supply channel. The effect of aggregate demand conditions on inflation remained limited compared to other main determinants such as the exchange rate, global energy and commodity prices. Regarding core inflation indicators, monthly rates of increases lost pace, whereas annual increases continued.

In the May- July period, the CBRT reinforced the macroprudential policy set by putting into practice the credit, collateral and liquidity policy actions, the review process of which was finalized. In the Monetary Policy Committee (MPC) meetings held between May and July, the CBRT stated that the rise in inflation was driven by: the rise in energy costs caused by geopolitical developments, price formations detached from economic fundamentals, and supply-side factors such as increments in global energy, food and agricultural commodity prices. To support sustainable price and financial stability, the CBRT continues to take monetary policy measures decisively in line with the liraization strategy. In this framework, the policy rate was kept unchanged at 14% in the May-July period, the macro-prudential policy set was strengthened, and credit, collateral and liquidity policy steps, whose evaluation processes were completed, were put into practice.

1.1 Monetary Policy Decisions

In May meeting, the CBRT drew attention to the temporary effects of price formations that are not supported by economic fundamentals and decided to keep the policy rate unchanged. The summary of the MPC decision in May stated that the increase in inflation was driven by rising energy costs resulting from geopolitical developments, temporary effects of price formations that are not supported by economic fundamentals and strong negative supply shocks caused by the rise in global energy, food and agricultural commodity prices. The Committee stated that the disinflation process was expected to start once the ongoing regional conflict was resolved and base effects on inflation were eased. Moreover, it was announced that collateral and liquidity policy steps would be taken to encourage permanent liraization.

In May, in the scope of the liraization strategy, the CBRT introduced an arrangement to increase the weight of TRY-denominated assets in the collateral system. In this context, the CBRT decided that at least 30% of the collateral blockage applied in currency swap transactions would consist of GDDS assets, moreover, the scope of the GDDS basket to be accepted as collateral was limited. In addition, the discount rates for indexed securities, FX-denominated and gold-backed assets were increased from 5% to 15% (Table 1.1).

In its June meeting, the CBRT decided to keep the policy rate unchanged, preserving its prediction that the disinflationary process would start once the ongoing regional conflict was resolved and base effects on inflation were eased. The CBRT also stated that the collateral and liquidity policy actions, the review processes of which had been finalized, would continue to be implemented to strengthen the effectiveness of the monetary policy transmission mechanism. It was stated in the MPC decision that the CBRT closely monitored credit growth and allocation of funds for real economic activity purposes. The CBRT will continue to implement the strengthened macroprudential policy set decisively and take additional measures when needed. (Table 1.1).

In June, in the scope of the liraization strategy, the share of TRY-denominated securities in the collateral pool was increased, and it was stipulated that banks would maintain securities for FX liabilities and required reserves for TRY commercial loans. The minimum GDDS collateral blockage applied to all currency swap transactions with the CBRT and transactions at the Interbank Money Market was increased to 45%, while the discount rate applied to CPI-indexed securities accepted as collateral was increased to 30%. Moreover, to increase the effectiveness of the monetary policy, it was stipulated that banks will maintain additional Turkish lira long-term fixed-rate securities for FX deposits/participation funds. Meanwhile, the reserve requirement ratio for Turkish lira-denominated commercial cash loans except for some selected areas, which was announced as 10%, was increased to 20% (Table 1).

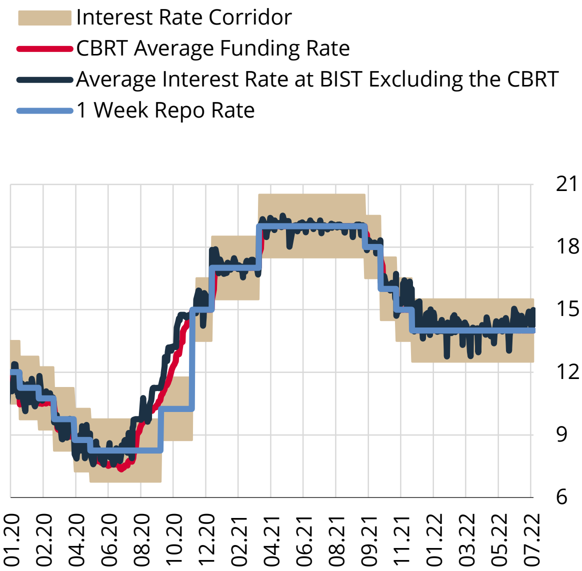
The CBRT rearranged the rediscount credit conditions and increased the commission rates applied to FX reserve requirements and FX accounts with notice. The CBRT also rearranged maturities of rediscount credits. Accordingly, 40% of export proceeds, which were sold by exporters to the CBRT pursuant to the relevant legislation, started to be counted as Turkish lira rediscount credit commitment; moreover, it was stipulated that companies seeking to use TRY rediscount credits would be extended credits upon submission of a commitment to sell 30% of their export proceeds to commercial banks. Moreover, the commission rates applied to FX reserve requirements and FX notice deposit accounts were increased, and since the sector's weighted average legal person conversion rate significantly exceeded the target value of 20% set for 2 September 2022, the deadline for the target value of 20% for legal person conversion rate was scheduled earlier for 8 July 2022 instead of 2 September 2022 (Table 1.1).

In July, the CBRT drew attention to the weakening global economic activity and likely recession risks. The MPC decision for July pointed to the divergence in monetary policy communication and decisions of central banks in advanced economies and increasing uncertainty in global financial markets. Moreover, the MPC decision stated that the slowing credit growth and allocation of funds for real economic activity purposes were closely monitored; the credit, collateral and liquidity policy actions, of which the review processes were finalized, would continue to be implemented to strengthen the effectiveness of the monetary policy transmission mechanism, and the policy rate was kept unchanged.

In July, additional steps were taken regarding the collateral system, and the scope of the KKM was extended. The GDDS collateral requirement in swap transactions with the CBRT and Interbank Money Market operations was raised, while the discount rates for CPI-indexed securities were increased to 50% from 30%. Additionally, resident legal entities were also allowed to convert their FX deposit accounts held at banks between 31 December 2021 and 30 June 2022 into the KKM.

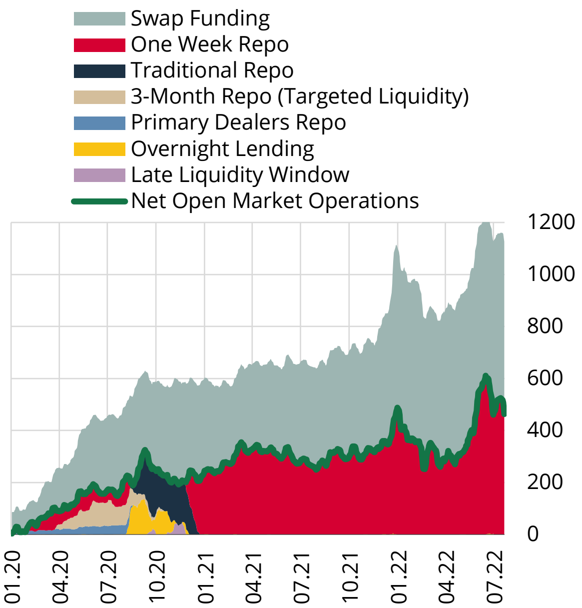
In the current reporting period, the CBRT continued to provide funding within a simple operational framework through Open Market Operations (OMO) and swap transactions, and the overnight interest rates hovered around the CBRT policy rate. Owing to the CBRT's predictable liquidity management framework, Borsa Istanbul (BIST) overnight repo rates continued to hover around the CBRT policy rate (Chart 1.1.1). The amount of swap transactions, which was TRY 607 billion as of 29 April 2022, increased to TRY 661 billion as of 22 July 2022. In the same period, the net OMO funding also rose to TRY 455 billion (Chart 1.1.2).

Chart 1.1.1: CBRT Rates and Short-Term Interest Rates (%)



Sources: BIST, CBRT.

Chart 1.1.2: CBRT OMO and Swap Transactions (One-Week Moving Average, TRY Billion)



Source: CBRT.

Table 1.1: Monetary Policy Implementations

Date	Policy Decision
11 May 2022	▪ The reserve requirement ratio for Turkish lira liabilities of financing companies was set at 0% until the calculation date of 13.05.2022 (included), while the reserve requirement ratio for their FX liabilities was set at 0% until the calculation date of 13.05.2022 (included) and at 3% until the calculation date of 23.12.2022 (included).
16 May 2022	▪ As part of the steps to increase the weight of Turkish lira assets in the collateral system in the scope of the Monetary and Exchange Rate Policy for 2022 document and the Liraization Strategy, it was stipulated that effective from 27 May 2022, • a minimum of 30% of the collateral blockage for all swap transactions with the CBRT should be composed of the GDDS basket, • the GDDS basket should be composed of only TRY-denominated, zero-coupon, fixed-coupon, floating-rate and TLREF-indexed GDDS or lease certificates issued domestically by the Ministry of Treasury and Finance Asset Leasing Company. ▪ With an amendment to the Implementation Instructions for Turkish Lira Operations and the Implementation Instructions for FX Markets, the collateral discount rates were increased from 5% to 15% for indexed securities as well as FX-denominated and gold-backed assets subject to collateral.
6 June 2022	▪ To increase the weight of Turkish lira assets in the collateral system in the scope of the Monetary and Exchange Rate Policy for 2022 document and the Liraization Strategy, effective from 24 June 2022, • the minimum GDDS collateral blockage for all swap transactions with the CBRT and the GDDS collateral requirement for Interbank Money Market Operations were increased from 30% to 45%, • With an amendment to the Implementation Instructions for Turkish Lira Operations and the Implementation Instructions for FX Markets, the collateral discount rates were increased from 15% to 30% for indexed securities as well as FX-denominated and gold-backed assets subject to collateral.
10 June 2022	▪ It was decided that banks should maintain additional Turkish lira long-term fixed-rate securities for foreign currency deposits/participation funds. ▪ The reserve requirement ratio for Turkish lira-denominated commercial cash loans was increased from 10% to 20%. ▪ Of the domestic loans of financing companies that were subjected to reserve requirement for the first time, those available as of 23 April 2022 were excluded from reserve requirement liabilities until their maturities.

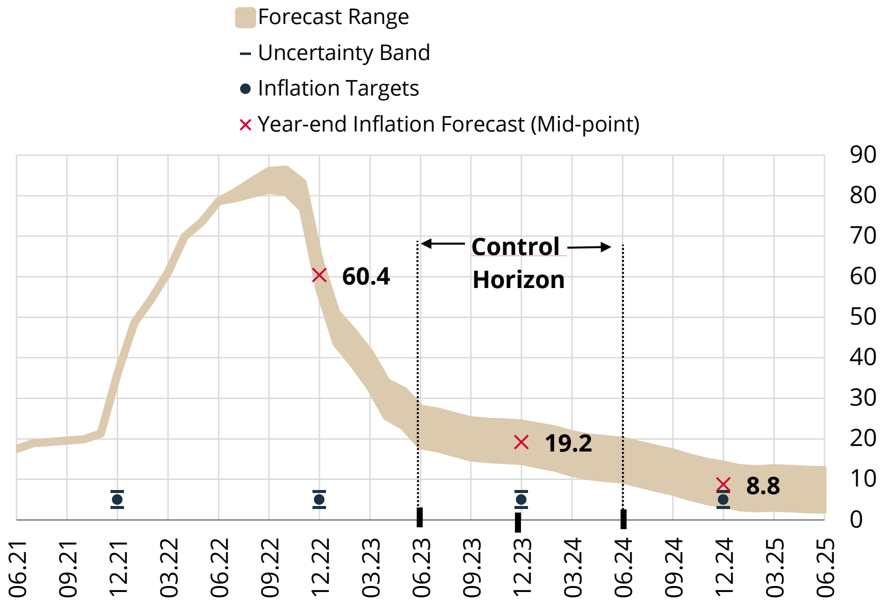
13 June 2022	▪ The Implementation Instructions for Rediscount Credits for Export and Foreign Exchange Earning Services were revised. ▪ Accordingly: • The maximum maturity was set at 360 days for Turkish lira rediscount credits and 720 days for the defense industry, • Interest rates for Turkish lira rediscount credits were set to be 300 basis points, 200 basis points, and 100 basis points below the policy rate for maturities of 0-90 days, 91-180 days, and 181-720 days, respectively, • In addition to the existing condition for access to TRY rediscount credits (stipulating that 40% of export proceeds should be sold to the CBRT), firms should also make a commitment to sell at least 30% of their export proceeds to a bank, • Firms using TRY rediscount credits should pledge not to buy the sold amount of foreign currency again for a month from the date of the first sale of export proceeds.
30 June 2022	▪ The commission rate applied to reserve requirements that banks maintain at required reserve and FX notice deposit accounts for their FX deposit/participation fund liabilities was increased from 1.5% to 5%. ▪ The conditions for commission exemption were changed, whereby the deadline for the target value of 20% for the conversion by legal persons was revised from 2 September 2022 to 8 July 2022. Moreover, the practice of charging double the commission rate to the banks that could not achieve a 10% conversion rate for real and legal persons (separately for each) was abolished.
4 July 2022	▪ Steps were taken to increase the weight of Turkish lira assets in the collateral system in the scope of the Monetary and Exchange Rate Policy for 2022 document and the Liraization Strategy. ▪ Accordingly, effective from 22 July 2022, • the minimum GDDS collateral blockage for all swap transactions with the CBRT and the GDDS collateral requirement for Interbank Money Market Operations were increased from 45% to 50%. • With an amendment to the Implementation Instructions for Turkish Lira Operations and the Implementation Instructions for FX Markets, the collateral discount rates were increased from 30% to 50% for indexed securities as well as FX-denominated and gold-backed assets subject to collateral.
6 July 2022	▪ With an amendment to the CBRT's communiqué on supporting the conversion to TRY deposits, resident legal persons were allowed to convert their FX deposit accounts, which were held at banks at any date between 31 December 2021 and 30 June 2022, into TRY deposits.

1.2 Medium-Term Projections

In the second quarter of 2022, consumer inflation and the B index reached 78.62% and 64.42%, respectively, exceeding the forecast range of the April Inflation Report. The deviation in the B index inflation remained more limited. The deviation in forecasts was driven by strong negative supply shocks such as hikes in commodity prices led by geopolitical developments, persisting supply chain disruptions driven by the effects of pricing behaviors detached from economic fundamentals, and soaring domestic energy costs.

The monetary policy stance will be determined with the focus on evaluating the sources of the risks to inflation, their permanence and to what extent they can be controlled by monetary policy, targeting sustainable price stability with a prudent approach. The disinflationary process is expected to start with the steps taken and resolutely implemented to achieve sustainable price stability and stronger financial stability as well as the re-establishment of the global peace environment. Accordingly, inflation is projected to be 60.4% at the end of 2022; fall to 19.2% at the end of 2023; and sustain the downward trend by receding to 8.8% by the end of 2024. With a 70% probability, inflation is expected to be between 56.9% and 63.9% (with a mid-point of 60.4%) at end-2022, and between 14.5% and 23.9% (with a mid-point of 19.2%) at end-2023, and between 3.9% and 13.7% (with a mid-point of 8.8%) at end-2024 (Chart 1.2.1).

Chart 1.2.1: Inflation Forecasts* (%)



Sources: CBRT, TURKSTAT.
* Shaded area denotes the 70% confidence interval for the forecast.

Forecasts are based on an outlook entailing weaker global economic activity, a sustained rise in global inflation, and tighter global financial conditions compared to the previous reporting period. Mounting uncertainties regarding global food security amid trade bans, the elevated course of commodity prices accompanied by persisting supply constraints in specific sectors, with staple food and energy in the lead, push producer and consumer prices upwards at the international level. Inflation may remain on an upward track longer than expected due to higher energy prices and the supply-demand mismatch. The persisting acceleration in global inflation coupled with the escalated concerns over recession caused global risk appetite to decline in the current reporting period.

Forecasts focus on an outlook where credits move in tandem with economic activity on the back of the reinforced macroprudential policy set, whose evaluation processes have been completed and have recently proved quite effective, and liquidity and collateral policy actions are based on liraization. The measures taken against accelerating commercial and consumer loans in the second quarter of the year were gradually increased, and a normalization trend appeared in loans. As loans remain aligned with economic activity and the output gap gradually closes as its narrowing trend continues, growth will be in line with the potential throughout the year. Moreover, the efficient use of loans in real economic activity is expected to prevent loans from putting pressure on asset prices and exchange rates.

1.3 Key Risks to Forecasts

The outlook underlying the medium-term projections presented in the Inflation Report is based on the Monetary Policy Committee's judgments and assumptions. The major downside and upside macroeconomic risks that may lead to a change in baseline projections and the associated monetary policy stance are as follows. [1]

In this current reporting period, the key risk factors on economic activity and inflation have been the supply shocks that started with the pandemic and grew amid the Russian-Ukrainian conflict. Causing a pickup in commodity prices as well as transportation costs, a slowdown in global trade, and a tightening in global financial conditions, supply shocks keep risks brisk, which are both upside and downside to inflation and downside to economic activity.

Downside risks to foreign demand have increased compared to the previous reporting period, and suggest that regional divergences may become more evident. Uncertainties regarding global financial conditions weigh on the risk of stagflation. The Russian-Ukrainian conflict poses risks to travel and transportation revenues. Geopolitical risks, developments regarding the new variants, and new waves related to the pandemic, and the consequences of these developments on domestic and foreign demand are monitored closely.

Upside risks to the current account balance are in place due to soaring energy prices amid the Russian-Ukrainian conflict. Despite the ongoing robust performance of exports and the recovery in services revenues, risks persist from soaring energy prices. Accordingly, pricing differentiations are observed according to the types of energy.

Global inflation continues to rise sharply, while monetary policy steps and communications of major central banks exhibit a wider divergence due to the varying economic prospects among countries. Major central banks underline that inflation may remain on the rise for a longer-than-expected period due to higher energy prices and supply-demand mismatch. Central banks increased their efforts to develop new supportive measures and tools to cope with the increasing uncertainties in financial markets. The divergence and mounting uncertainties in financial markets lead to volatilities in exchange rates. The increased possibility of divergence in economic conditions and problems among advanced economies in the upcoming period pose additional risks to the global economic activity and uncertainties regarding financial conditions. This outlook results in downside risks to international prices and foreign demand.

Credit growth and the allocation of financial funds for real economic activity purposes are essential for the CBRT. The effects of the credit, collateral, and liquidity policy actions on the liraization of financial sector balance sheets and the reinforcement of the monetary transmission mechanism are monitored closely. The strengthened macroprudential policy toolkit is further expanded through additional measures when needed.

Pressures on producer prices keep mounting. The supply shock posed by the Russian-Ukrainian conflict weighs on existing supply constraints and causes international commodity prices to follow a high course that varies among different products.

Deterioration in pricing behaviors persists. Depending on the frequency of incoming shocks, the frequency of price updates is getting higher, and the average period for prices to remain unchanged is getting shorter. This outlook will be shaped depending on the effectiveness of the holistic policy mix to fight inflation, the frequency and the magnitude of the supply shocks, and their degree of diffusion to the economy. Despite the disinflationary content of implemented policies coupled with the increased coordination, ongoing effects of supply shocks on the economy increase upside risks.

1 Evaluations of how and through which channel these risks may affect the inflation forecasts cited in the previous section are summarized in Table 3.3.1.

Box 1.1

Recent Credit, Collateral and Liquidity Policy Steps

As stated in the Monetary Policy Committee decisions, a comprehensive policy framework review process that encourages permanent and strengthened liraization in all CBRT policy instruments continues in order to institutionalize price stability in a sustainable manner. Credit, collateral and liquidity policy actions, whose evaluation processes have been completed, continue to be used to strengthen the effectiveness of the monetary policy transmission mechanism. This box introduces the recent credit, collateral and liquidity steps taken by the CBRT and other relevant institutions. In the Turkish economy, there is ample room for the development of the financial architecture that facilitates the liraization of the system and its optimization around price stability. As a matter of fact, the recent measures caused significant changes in liquidity conditions. It is evaluated that the positive effects of these measures on price stability and financial stability will be observed cumulatively in the coming months.

With the RR regulations made by the CBRT in the second quarter of 2022, TRY commercial loans were subjected to RR in order to allign commercial loan disbursements with business activities. Also, to support the liraization strategy, the FX RR rates applied to FX deposit/participation funds were differentiated according to conversion rates to TL deposit/participation accounts and the commission rates applied for the FX RRs were raised for the banks that did not reach the conversion targets.

In May, within the scope of the "Liraization Strategy", steps were taken to increase the share of TRY-denominated assets in the collateral pool for TRY funding from the CBRT. In this context, the collateral blockage and discount rates in the collateral types imposed on TRY funding were significantly changed, and additional collateral measures were taken by updating the discount rates in June and July. The weight of the TRY-denominated assets in the collateral pool will continue to be evaluated under the "Liraization Strategy".

In June, it was announced that in order to increase the effectiveness of the monetary policy, banks will maintain long-term fixed-interest securities in TRY in addition to RRs for FX deposits/participation funds as of 29 July. The aforementioned implementation will be further strengthened to support the liraization targets.

On the other hand, a series of macroprudential regulations regarding loans have been implemented by the Banking Regulation and Supervision Agency (BRSA) in the recent period.

The risk weight in TRY commercial loans, which was in the 20% to 150% range according to credit quality, was increased to 200%, excluding some selected credit types such as SME, export, investment and agriculture loans. In addition, for the CAR calculation, the BRSA decided to use the CBRT's foreign exchange buying rate at 31 December 2021 instead of the simple arithmetic average of the CBRT's foreign exchange buying rates for the last 252 business days as of 31 December 2021.

On 9 June 2022, while the maturity limit of consumer loans was reduced from 24 months to 12 months for loans over TRY 100,000, the minimum payment rate was increased from 20% to 40% for personal credit cards with a limit of more than TRY 25,000.

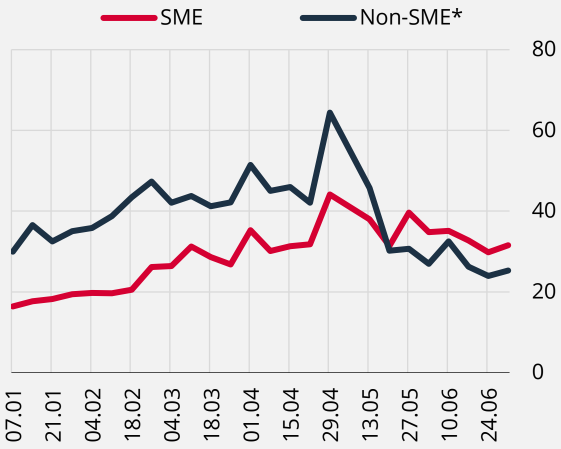
On 23 June 2022, the loan-to-value (LTV) ratio for housing loans was reduced by differentiating it according to the value of the house and whether the house is new-build or old-build, while loans were no longer offered for houses with a value over TRY 10 million. On the other hand, the risk weight to be applied by banks in CAR calculations for TRY and FX commercial loans borrowed by residents for derivative transactions with non-residents was set at 500%.

On 24 June 2022, the BRSA announced that no TRY commercial loans would be extended to firms that simultaneously meet the conditions of (i) being subject to independent audit, (ii) having FX (including gold) cash assets of more than TRY 15 million, and (iii) having FX cash assets exceeding 10% of total assets or net sales revenue of the past one year- whichever is greater.

Reserve Requirement Regulations

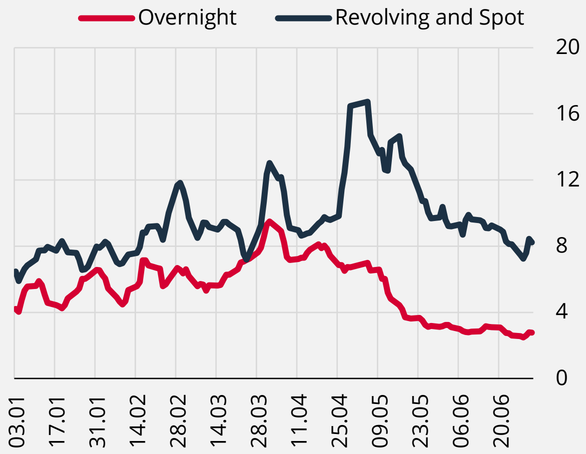
With the upward trend in TRY commercial loans, a new reserve requirement policy was introduced to ensure these loans align with business operations. The regulation limits the use of the loans other than SME loans, tradesman loans, export loans, investment loans and agricultural loans to encourage the lending in activities that support production, investment and employment in line with intended purposes. The regulation has two dimensions: Newly issued loans and stock loan growth. It also imposes a reserve requirement of 10% during the maintenance period of four weeks on commercial loans extended in four-week periods since 1 April 2022. For banks with a loan growth rate above 20% by 31 May 2022 compared to 31 December 2021, the differences between their outstanding loan balances on 31 March 2022 and 31 December 2021 will be subject to reserve requirements of 20% of this difference, for a period of six months. As of 10 June 2022, the reserve requirement ratio for newly issued TRY commercial loans has been increased to 20% from 10%.

Chart 1: Weekly TRY Commercial Loan Disbursement (TRY Billion)



Source: CBRT.
* Non-SME loans except for exports and investment.
Holidays are excluded.

Chart 2: Daily TRY Commercial Loan Disbursement (TRY Billion, 5-Day Average)



Source: BRSA.

The total y-o-y TRY loan growth increased to 46.1% before the regulation, up 23.7% from the end of 2021. Non-SME loans also contributed greatly to the increase since the end of 2021. Since its introduction, the regulation has affected both loan costs and loan amounts. There has been a decrease in the use of loans other than SME loans, investment loans and export loans by companies. The level of loan disburement decreased to half of the previous period in this group. (Chart 1). The use of overnight and short-term spot loans also demonstrated a noticeable downward trend (Chart 2).

With the regulation made in April, the RR ratios of financing companies, which were zero percent, were brought to the same level as those of banks, and it was decided to apply the RR ratios for foreign currency liabilities at the level of 3 percent until the end of the year.

In addition, in order to support the liraization strategy, FX RR ratios were differentiated according to the conversion rate of real persons from FX deposit/participation funds to Turkish lira deposit/participation accounts, and it was decided to apply additional 500 bps RR for banks with a conversion rate below 5 percent, and 300 bp for banks with 5-10 percent conversion rates.

With the regulation made in June, the rate of commission taken from RRs for FX deposits/participation funds of banks whose conversion rates of real and legal persons did not reach the determined target values was increased from 1.5 percent to 5 percent.

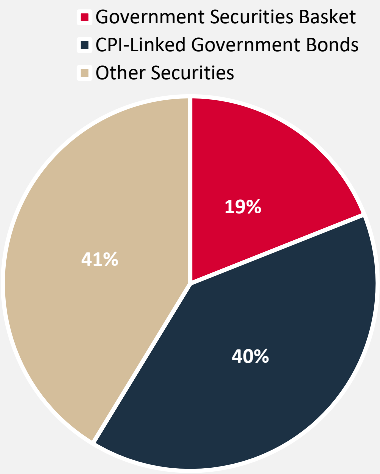
Changes to Collateral Management

Table 1: Changes to Collateral Management

16 May 2022	Effective from 27 May 2022, the government securities basket were decided to consist of TRY-denominated zero coupon, fixed coupon, floating rate and TLREF indexed Government Domestic Debt Securities and Lease Certificates (GDDS). For Interbank Money Market and swap transactions, banks are obliged to hold at least 30% of their collateral as government securities basket.
	The discount rate of CPI-indexed, gold-backed and FX-denominated GDDS, and FX-denominated and gold-backed assets was increased from 5% to 15%.
6 June 2022	Effective from 24 June 2022, the minimum government securities basket requirement ratio for Interbank Money Market and Swap transactions was increased from 30% to 45%.
	The discount rate of CPI-indexed, gold-backed and FX-denominated GDDS, and FX-denominated and gold-backed assets was increased from 15% to 30%.
4 July 2022	Effective from 22 July 2022, the minimum government securities basket requirement ratio for Interbank Money Market and Swap transactions was increased from 45% to 50%.
	The discount rate of CPI-indexed, gold-backed and FX-denominated GDDS, and FX-denominated and gold-backed assets was increased from 30% to 50%.

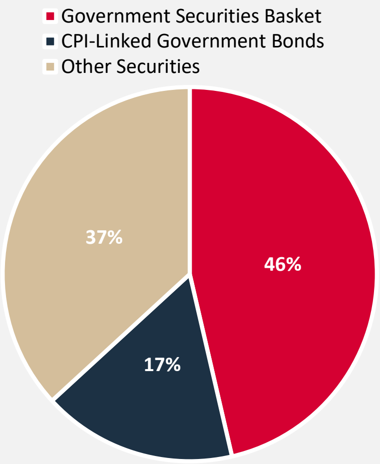
The collateral pool of banks held at the CBRT is presented in Charts 3 and 4. Analyzing the changes in the collateral pool, the share of the government securities basket comprised of TRY-denominated zero coupon, fixed coupon, floating and TLREF indexed GDDS appears to have significantly increased, whereas CPI-indexed government bonds decreased remarkably.

Chart 3: Distribution of Banks' Collateral Held at the CBRT (%, 13 May 2022)



Source: CBRT.

Chart 4: Distribution of Banks' Collateral Held at the CBRT (%, 14 July 2022)

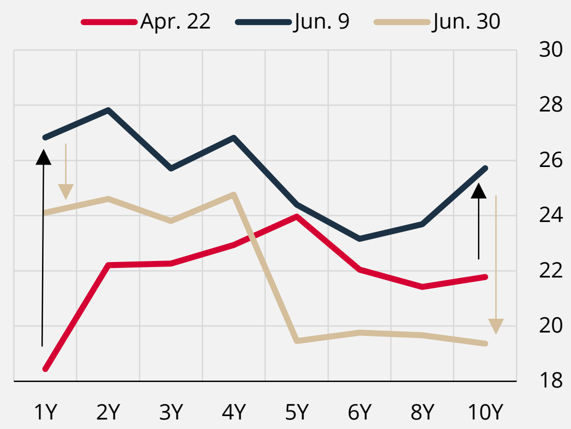


Source: CBRT.

Note: The government securities basket is comprised of TRY-denominated zero coupon, fixed coupon, floating and TLREF indexed GDDS. Moreover, other securities include Eurobonds, FX deposits, FX banknotes, gold deposits, foreign bonds/notes, MBS/ABS, and gold-backed and FX-denominated GDDS.

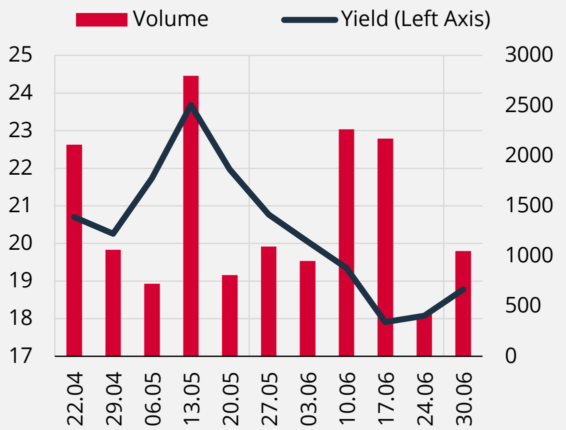
On the other hand, with the announcement made on 10 June 2022, banks were obliged to maintain additional Turkish lira long-term fixed-rate securities for foreign currency deposits/participation funds and maintenance rates are differentiated according to the conversion rates of banks. The aim of this regulation is to increase the effectiveness of the monetary policy within the scope of the liraization strategy. There has been a tendency towards long-term fixed-interest bonds in the GDDS market since mandatory long-term TRY denominated fixed-interest securities were enforced and collateral management was changed. As a result, interest rates at the short-term and long-term ends of the yield curve shifted downwards. While there was an increase in both the short and long-term ends of the yield curve before the regulation, there was a decrease of around 300 bps in the short-term and more than 400 bps in the long-term after the regulation (Chart 5). Short-term interest rates, which serve as a benchmark for the market, remained above the April level. In addition, transaction volumes in long-term fixed-rate securities generally increased. While the transaction volume for bonds maturing in 2030 increased by approximately TRY 1 billion in the second and third weeks of June compared to the week before the regulation, their yield decreased by approximately 200 bps in the same period (Chart 6).

Chart 5: GDDS Yield Curve (%)



Source: Bloomberg.

Chart 6: 2030 Fixed-Rate Security (%, TRY Billion, Days to Maturity: 3057)



Source: Bloomberg.

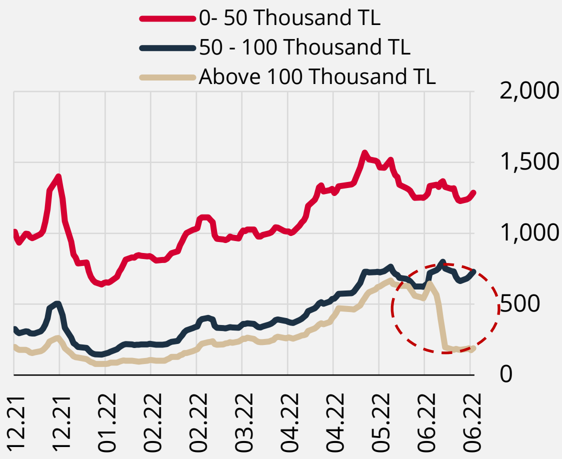
In addition, while the interest in long-term fixed-rate bonds has increased significantly in the borrowing auctions held by the Ministry of Treasury and Finance in the recent period, the bids for CPI-indexed bonds have lost momentum. After the announcement of the regulation, the first issue of 5-year fixed-rate government bonds on 14 June 2022 received a total of TRY 54.3 billion in bids, while the actual borrowing amounted to TRY 29.7 billion. As a result of the auction, the average annual compound interest rate formed at 19.45%.

For comparison purposes, an auction held prior to the regulation was examined. Accordingly, at the re-issue of fixed-rate government bonds on 23 May 2022 with a maturity of 4 years, a total of TRY 7.4 billion borrowing was made against a a total of TRY 10.1 billion in bids, and the average annual compound interest rate formed at 27.31% as a result of the auction. The comparison of the two issue results despite the slight difference in maturities, reveals that the demand for fixed-rate government bonds increased rapidly on the back of the regulation, resulting in a decrease in the interest rate by approximately 700 bps. On the other hand, a total of TRY 18.9 billion was received in bids for the re-issue of the 10-year CPI-indexed government bonds on 24 May 2022, while the actual borrowing amounted to TRY 7.9 billion. The same bond was re-issued on 14 June, resulting in borrowing of a total of TRY 1.8 billion against bids totaling TRY 6.8 billion, which clearly demonstrates the loss of momentum in CPI-indexed bonds.

Macroprudential Policies for Consumer Loans

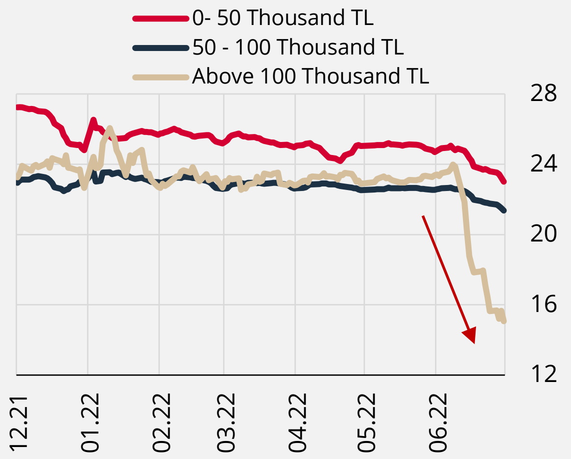
General purpose loans (GPLs) saw an uptrend after April, which was more evident in GPLs of high amounts. Daily GPL extensions, which averaged TRY 2.2 billion in the first three months of the year, rose to TRY 3.6 billion TL after April, marking a significant acceleration. Individuals tended to reduce their debt service payments by spreading their borrowings of high amounts over the long term within maturity limits. As of 16 September 2021, the BRSA reduced the general maturity of GPLs from 36 months to 24 months for loans over TRY 50,000. On 9 June 2022, the BRSA revized its decision and reduced the general maturity limit for loans over TRY 100,000 to 12 months. In June, loan utilizations of over TRY 100,000 receded to January levels (Chart 7). The average maturity of loans over TRY 100,000 declined (Chart 8).

Chart 7: Daily GPL Use (5-Day MA, TRY Million)



Source: Risk Center.
Holidays and weekends are excluded.

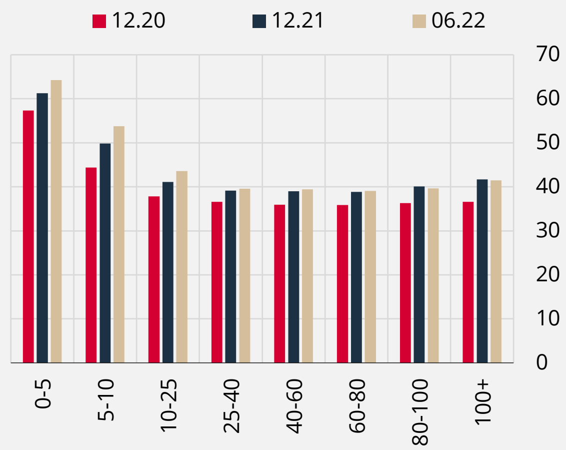
Chart 8: Daily GPL Weighted-Average Maturity (Month)



Source: CBRT.

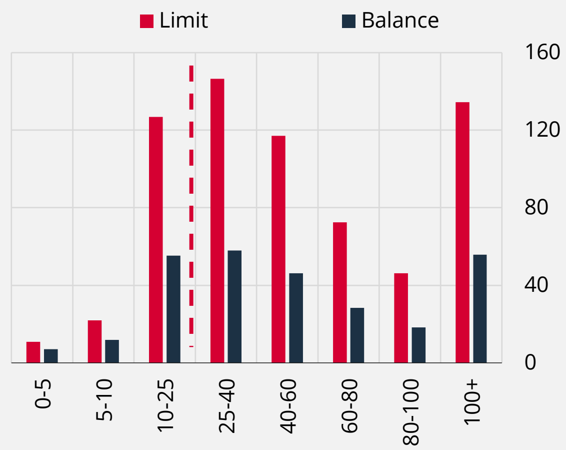
In order to support the payment capacity of individuals, the minimum payment rate for credit cards was reduced from 20-40% to 20% for all cards in the beginning of the pandemic. On 9 June 2022, the minimum payment rate for credit cards with a limit of more than TRY 25,000 was set at 40%. In the recent period, the increase in the outstanding balance of personal credit cards has continued at a higher pace. Limit utilization rates showed an increase across all limit groups. An analysis in terms of personal credit card balances indicates that the increase in cards with a limit above TRY 25,000 was more pronounced compared to the end of the year (Charts 9 and 10). The balance pertaining to individuals with a credit card limit above TRY 25,000 constitutes 73% of the total personal credit card balance. The regulation is expected to be effective on those individuals who do not pay their debts in full and incur interest.

Chart 9: Limit Utilization Rates by Card Limits (%)



Source: CBRT.

Chart 10: Limits and Balances by Card Limits as of June 2022 (TRY Billion)



Source: Risk Center.

Note: Card limits and balances are consolidated at the individual level. Limits for individuals who do not have a balance are excluded.

While the LTV limitation for housing loans determines individuals' access to loans in residential purchases, it contributes to financial stability by supporting debt service capacity. The LTV ratio, which had been set at 75% for the first time for all residences as of 2011, was changed several times in the following years, and finally started to be applied at different ratios according to the energy class and value of the houses upon the implementation of the latest regulation (Table 2).

Table 2: LTV Ratio Regulation for Housing Loans

	House Value	Maximum LTV by Energy Class		
		A-Class	B-Class	Other
New-Build Houses	Value ≤ TRY 2 Million	90%	85%	80%
	TRY 2 Million < Value ≤ TRY 5 Million	70%	65%	60%
	TRY 5 Million < Value ≤ TRY 10 Million	A maximum of TRY 3.5 Million	A maximum of TRY 3.25 Million	A maximum of TRY 3 Million
	TRY 10 Million < Value	0%	0%	0%
Old-Build Houses	Value ≤ TRY 500,000	90%	90%	90%
	TRY 500,000 < Value ≤ TRY 2 Million	70%	65%	60%
	TRY 2 Million < Value ≤ TRY 5 Million	50%	45%	40%
	TRY 5 Million < Value ≤ TRY 10 Million	A maximum of TRY 2.5 Million	A maximum of TRY 2.25 Million	A maximum of TRY 2 Million
	TRY 10 Million < Value	0%	0%	0%

Source: BRSA.
Note: The last regulation date is 23.06.2022, and the maximum LTV represents the ratio of the loan amount to the value of the house received as collateral. The maximum LTV prior to the regulation: 90% for all residences with a value up to TRY 500,000; 90% for A-class residences, 85% for B-class residences, and 80% for other residences of TRY 500,000 and above.

Mortgaged house sales prior to the regulation (the January-May period) in 2022 suggest that approximately 80% of the sales were older homes, and 95% were valued below TRY 2 million (Table 3). On the other hand, the fact that the average LTV ratios of the loans extended were mostly below the threshold values indicates that banks acted prudently in lending for housing. Of loans utilized in the aforementioned period, approximately one quarter in terms of number, and 32% in terms of amount, were extended with an LTV ratio of above 70%. In case the loans extended in that period are restricted to the maximum LTV ratio laid down in the current regulation, the total loan utilization decreases by 5.3%.[1] The implied effect of the regulation appears to be greater for higher value residences for which the maximum LTV ratios are lower.

Table 3: Impact Analysis of LTV Ratio Regulation

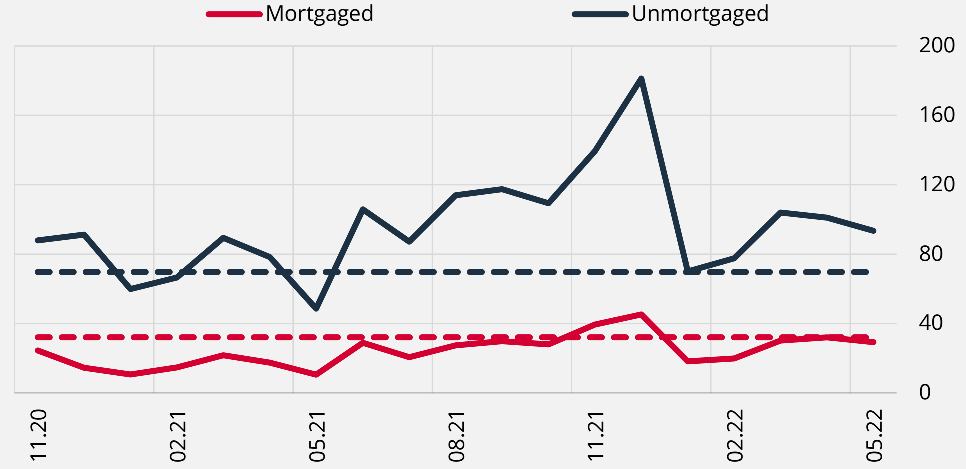
January-May 2022 Period		Number of Credits Used	Average LTV (%)	LTV over 70 %		Credit Tightening Implied by Regulation (%)**
				Number of Credits	Share of Flow Loan Balance (%)*	
All Houses		127.585	52,5	32.155	31,7	5,3
New-Build Houses	Value ≤ TRY 2 Million	25.928	46,2	3.796	21,0	0,1
	TRY 2 Million < Value ≤ TRY 5 Million	1.084	30,6	43	10,7	1,1
	TRY 5 Million < Value ≤ TRY 10 Million	83	31,2	8	21,2	8,7
	TRY 10 Million < Value	11	40,3	1	35,4	100,0
	Total	27.106	45,5	3.848	20,0	1,1
Old-Build Houses	Value ≤ TRY 500,000	36.713	62,1	14.692	51,7	0,1
	TRY 500,000 < Value ≤ TRY 2 Million	58.498	50,8	13.075	31,8	3,1
	TRY 2 Million < Value ≤ TRY 5 Million	4.697	39,6	436	19,6	10,8
	TRY 5 Million < Value ≤ TRY 10 Million	450	42,8	85	35,9	33,5
	TRY 10 Million < Value	121	40,9	19	35,0	100,0
	Total	100.479	54,4	28.307	34,4	6,2

Source: CBRT, Authors' Calculations.
Note: The statistics in the table are from total sales in the January-May reporting periods of 2022. "*" is the ratio of loan extentions in each sub-item to the total loan extensions in the relevant sub-item, and "**" is the ratio of the portion of the extensions that remain above the current LTV ratio limits to the total loan extension in the relevant items. Since the energy classification data was not entered in full, the threshold values in A-class were taken as basis in the calculation of the "**" column. Houses completed in 2021 and 2022, are considered new-build houses.

[1] When the threshold values in the "Other" class instead of the "A" energy class are considered, the credit utilization decreases by 9.2%.

Since mortgaged sales constitute a relatively low share in house sales, the LTV ratio arrangement is not expected to have a negative impact on housing supply/demand dynamics (Chart 11). It is envisaged that the regulation will limit mortgages for high amounts of housing investments and thus contribute to financial stability by strengthening the allocation of funds for real economic activity purposes.

Chart 11: Mortgage and Unmortgaged Housing Sales (Thousand)



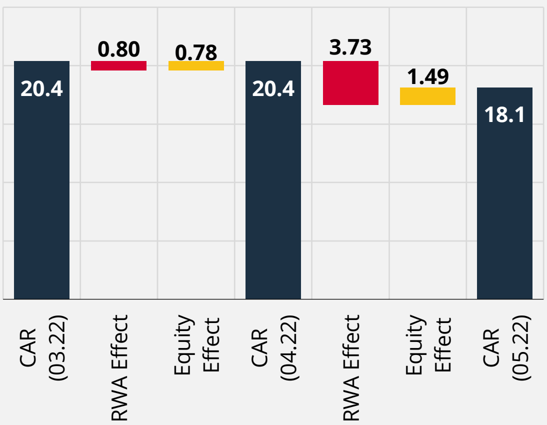
Source: CBRT.
Note: Dashed lines show the 2012-2019 average of mortgaged and unmortgaged house sales.

Policy Measures Regarding Capital Adequacy

On 28 April 2022, the BRSA strengthened its macro prudential policy set and announced new decisions regarding the capital adequacy ratio (CAR) in order to ensure a healthy loan growth and composition. The first decision was to tighten the exchange rate flexibility provided in risk-weighted asset calculations for credit risk. As of 1 May 2022, the value at risk in the CAR calculation began to be calculated based on the 2021 year-end exchange rate value, instead of the 2021 average exchange rate. Accordingly, the USD/TRY exchange rate level used in obtaining the TRY equivalent of FX risk-weighted assets increased from 8.8910 to 13.3290. Risk-weighted assets increased due to the valuation effect and a downward effect emerged in the CAR. Additionally, the risk weight to be applied to TRY commercial loans excluding agricultural, SME, investment and export, public, financial sector loans and corporate credit cards extended as of 1 May 2022 was increased to 200%. This regulation also had a downward effect on the CAR by increasing risk-weighted assets. CAR is one of the fundamental indicators that affect banks' risk appetite and credit policies. In this respect, the decisions taken by the BRSA are considered to have an impact on the loan growth rate and use of loans for intended purposes.

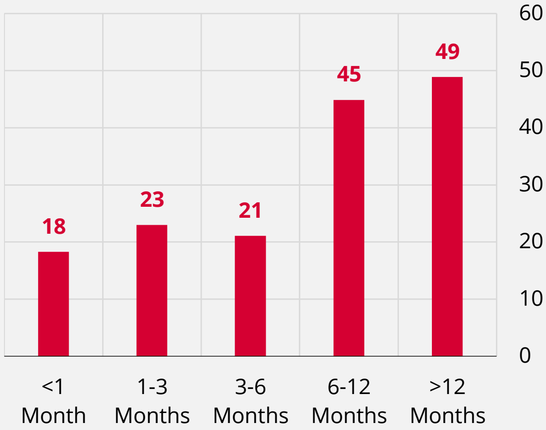
In May, the CAR of the banking sector decreased by 223 basis points compared to the previous month and stood at 18.1%. The increase in risk-weighted assets, driven mainly by the change in the exchange rate flexibility, was effective in this decline. In May, risk-weighted assets had an effect of approximately -373 basis points on the the banking sector CAR (Chart 12). The effect of the higher risk weight on the CAR is observed gradually since the arrangement is applied to newly-extended loans (Chart 13). Meanwhile, when all the loans covered by the regulation are rolled-over in the upcoming period, other factors that affect capital adequacy being constant, an effect of up to 145 basis points may occur on the CAR.

Chart 12: Components of CAR Change (%)



Sources: BRSA, CBRT.

Chart 13: Gradual Impact of the Higher Risk Weight on the Sector's CAR (bp)



Sources: BRSA, CBRT.