

FINANCIAL STABILITY REPORT

2024-I

May 31, 2024



CENTRAL BANK OF THE REPUBLIC OF TÜRKİYE

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This report, aimed at informing the public, is based mainly on May 2024 data. Nevertheless, the Report includes developments and evaluations up to its date of publication in Turkish. The full text is available on the CBRT website. The CBRT cannot be held accountable for any decisions taken based on the information and data provided therein.

Foreword

Closely monitoring all developments concerning financial stability, we, as the Central Bank of the Republic of Türkiye, share a summary of recent developments with the public in this latest volume of the Financial Stability Report.

In addition to the tight monetary policy in place in our fight against inflation, macroprudential measures we took to support the monetary transmission mechanism have also been contributing to the tightening of financial conditions. As part of the simplification of the macroprudential framework, we abolished the securities maintenance practice and continue our policy of gradually phasing out the FX-protected deposits. In the coming period, we will continue to take further steps to enhance the effectiveness of the market mechanism and to maintain macro financial stability.

Our tight monetary policy stance and macroprudential policy steps have impacted financial markets in a fast and effective way. While the current level of Turkish lira loan rates contributes to the rebalancing in domestic demand, foreign currency loans have recently registered a noticeable growth. To reduce the potential risks that foreign currency loans may pose to the financial system, we decided to include these loans within the loan growth limit regulation as well.

The level of Turkish lira deposit rates encourages savings, thereby increasing the appetite for the Turkish lira. As a consequence, while the decline in FX-protected accounts continues, foreign currency deposit accounts have decreased considerably since April. Against this backdrop, the share of the Turkish lira in the deposit composition has increased significantly.

During this process, enhanced confidence in policies and positive expectations have led to a marked improvement in the country risk premium. Consequently, the corporate and banking sectors have rolled-over their external debt at higher ratios. The tightening in financial conditions has had a limited impact on the asset quality of the banking system. The strong liquidity and capital structure of the banking system will continue to contribute to financial stability.

I hope that the 38th volume of our Financial Stability Report, which includes analyses and evaluations of the current outlook for and risks to financial stability, will be of benefit to all readers.

Fatih KARAHAN, Ph.D.

Governor

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I. Overview

Global financial conditions and the tight monetary policies implemented by advanced country central banks continue to weigh on global growth. Key economic indicators suggest that the US economic growth outlook diverges favorably from that of the euro area, one of Türkiye's main trading partners. Uncertainty surrounding rate cuts by central banks of advanced economies, particularly the US, and the developments regarding global risk appetite cause portfolio inflows into emerging economies to be volatile.

Domestic demand's contribution to annual growth has declined, but domestic demand remains resilient. While the contribution of consumption to growth declined, that of net exports increased. The current account deficit narrowed thanks to the rebalancing trend in domestic demand and improved expectations. Recently, the share of long-term borrowing instruments and portfolio flows in financing the current account deficit has been on the rise. On the public finances front, the impact of earthquake-related expenses persists and the budget deficit's share in GDP has increased. In the last reporting period, the annual inflation recorded an increase, mainly in the services group. The Turkish lira's relatively stable outlook, the tightening of financial conditions, and the rebalancing of domestic demand will result in a slowdown in price increases in the upcoming period.

Turkish lira commercial loan growth, which gained momentum in February and March, slowed down amid the policy rate hike and macroprudential measures, while FX loan growth picked up. Turkish lira commercial loan growth slowed as of April on the back of the increase to the policy rate, as well as the reduction of the credit growth limit and implementation of reserve requirement. Weaker exchange rate depreciation expectations, lower exchange rate volatility, and the widening of the expected cost differential between Turkish lira commercial loan and FX loan costs led to increased demand for FX borrowing. The increase in Turkish lira liquidity in the system led to a decline in banks' currency swap transactions against the Turkish lira. This, in turn, resulted in an increase in FX liquidity that banks could use for FX loans and supported FX loans through the supply channel. In light of this, FX loans, which have been declining since 2018, are on an upward trend in 2024 on the back of supply and demand conditions. An amendment to the regulation in May introduced a monthly growth limit for FX loans, and the implementation of reserve requirements in the event that the limit is exceeded. The status of FX borrowing is closely monitored with regard to the FX income of borrowers and the impact of credit growth on domestic demand and foreign trade.

Macroprudential measures introduced for retail loans and the policy rate hike weakened consumer loan growth. In the first quarter of 2024, accelerated loan demand amid heightened uncertainty perceptions led to a rise in consumer loan growth driven by credit cards and general-purpose consumer loans. Following the macroprudential measures for these loans and the rises in maximum credit card interest rates, growth in personal credit cards and general-purpose consumer loans decelerated in April, falling below the growth rates of the last two quarters. The utilization of credit card cash advances is also declining. Slower retail loan growth will contribute positively to the rebalancing of consumption spending and the current account balance. Housing and vehicle loans remain weak owing to the measures in place related to these loans.

The retail NPL ratio deteriorated slightly following the tightening in financial conditions. Despite the increase in the retail NPL ratio, the banking sector's NPL ratio remained flat due to the decline in the commercial NPL ratio. Nevertheless, NPL ratios maintained their low level below the historical average across all loan segments. While Stage 2 loan ratios for commercial loans continued to decline, the same ratio for retail loans was up due to overdue debt. The developments on retail loan quality are closely monitored.

The absence of a notable deterioration in economic activity and employment outlook in this period of tighter financial conditions stabilizes the credit quality outlook for households. Meanwhile, rolling over short-term debts such as credit cards, cash advances, and overdraft accounts at high interest rates may increase the debt service burden. Therefore, the rebalancing of household debt, income and consumption patterns will be important in the upcoming period. The high provisions that banks had prudently kept in the previous period serve as an effective buffer against asset quality-driven deterioration and support banks' balance sheets.

Firms' indebtedness is on the decline, profitability indicators hover above the historical average, and liquidity outlook remains strong. While rising Turkish lira loan costs have increased firms' propensity to borrow in FX, the corporate sector's financial leverage ratio and FX open position remain at low levels. Despite the increase in FX loan debt, firms' export revenues and their capacity to cover their FX debt keep improving. With the introduction of regulatory limits on FX loan growth, no significant deterioration is envisaged in the FX risk outlook of firms.

While the low level of household indebtedness as a ratio of GDP continues, the share of personal credit card debt has been increasing. Indicators for per capita debt and debt-to-income ratio continued to decline in other retail loans excluding personal credit cards. In addition to the tightening in financial conditions, average maturities of retail loans that have become shorter may lead to an increase in the credit risk of households, particularly the ones with debt/income mismatch. In households' financial asset composition, the weights of TL-denominated assets have been increasing, while the share of FX-protected deposits has been decreasing. Households continue to diversify their savings by increasing their investments in alternative TL-denominated financial assets such as equities, mutual funds and pension plans.

Tight monetary policy stance and the accommodative macroprudential framework have been accelerating the transition of deposits to the Turkish lira, while banks' FX and TL liquidity has increased. Following the policy rate hike and macroprudential measures introduced, TL deposit rates have risen rapidly since the second half of March. As of the first week of April, in addition to shifts from FX deposits and FX-protected deposits to TL deposits, portfolio inflows from abroad and swap transactions with non-residents have increased rapidly. These developments have led to excess TL liquidity in the financial system, while banks' deposit auctions with the CBRT have increased and currency swap transactions have decreased. The excess TL liquidity in the system has been sterilized by additional reserve requirement steps.

The current policy mix has improved the risk perception towards Türkiye and lowered the risk premium. On the back of the improvement in the country risk premium, banks' external borrowing costs have decreased, while external debt rollover ratios have increased owing to additional new funding, particularly medium- and long-term instruments. While the cost of syndicated loan renewals decreased by 100 bp compared to the previous period, the renewal rate stood above 120%. Banks' long-term Eurobond and subordinated debt issuances have been robust. In the period until May 2024, banks secured new funding through subordinated debt instruments at the amount of USD 4.1 billion.

Effective management of balance sheets to address interest rate risk helped the impact of the policy rate hikes on banks' balance sheets to remain limited. The increase in floating rate and short-term loans as well as the extended maturities of deposits contributed to the management of the interest rate risk stemming from the re-pricing channel. Possible losses due to revaluation in the price of securities were offset owing to the classification of these securities mostly with regard to their amortized values. Accordingly, it is assessed that banks have a risk outlook and balance sheet structure aligned with regulatory thresholds against an upside interest rate shock.

Despite the fall in the net interest margin in the last two quarters, banks' profitability has stabilized to some extent thanks to loan growth as well as the contributions of fees and commissions income. Due to the effects of policy rate increases on the pricing of credits and deposits accompanied by the high cost of RR until February led to a decline in returns on equity. The sector's profitability outlook is expected to improve as of the second quarter on the back of the factors such as reduced re-pricing effect of policy rate increases on balance sheets, the sustained performance of fees and commissions income and the limited rise in the cost of risk.

The banking sector's capital adequacy hovers notably above the legal limits. The subordinated debt issuances of banks strengthened capital buffers. In addition to excess capital, prudent provisioning underpins the coverage capacity of capital for possible losses. It is expected that the contained rise in risk-weighted assets in the upcoming period by the decelerating loan growth coupled with the improved profitability performance, the positive outlook for banks' capital adequacy ratios will remain intact.

II. Macroeconomic Outlook

II.1 International Developments

Global financial conditions and ongoing tight monetary policies implemented by central banks of advanced economies continue to weigh on global growth. Key indicators of economic growth imply that the growth outlook for the US economy diverges favorably from that of the euro area.

The ongoing flat course in the global growth outlook was maintained in the final quarter of 2023 (Chart II.1.1). This mainly stemmed from the tightening in financial conditions and the adverse impact on economic growth due to sustained tight monetary policies in advanced economies. Leading indicators for growth suggest that the global manufacturing PMI value surpassed the reference value of 50 across countries and recovery in economic activity started in countries other than the euro area (Chart II.1.2). Indicators for the euro area, one of Turkey's major trading partners, suggest that the slowdown in economic activity will continue and that the recovery will be delayed compared to the US (Chart II.1.2 and Chart II.1.3).

Chart II.1.1: Countries' Growth Rates (%)

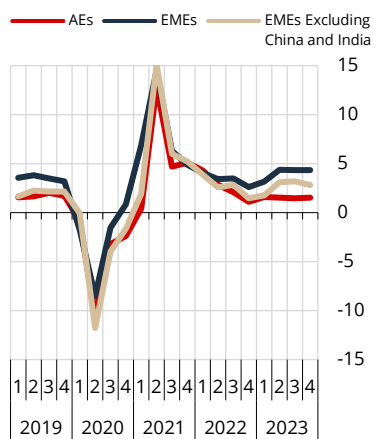


Chart II.1.2: Manufacturing PMI (Index)

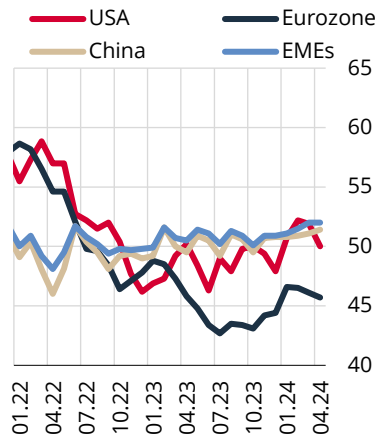
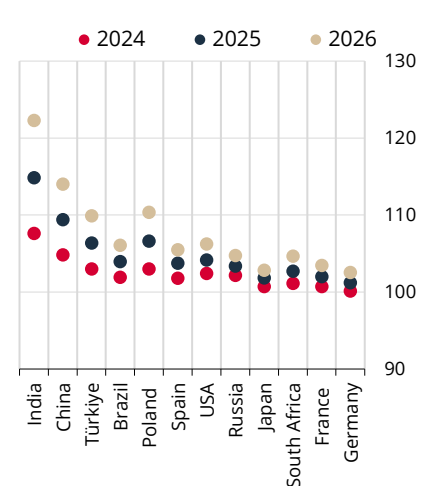


Chart II.1.3: Real GDP and Projections (Annual, 2023=100)



Source: Bloomberg Last Observation: 2023Q4

Source: Bloomberg Last Observation: 04.24

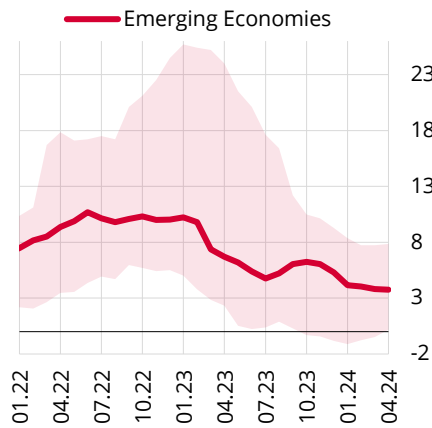
Source: Bloomberg Last Observation: 2023Q4

Note: AEs include the USA, the euro area, Japan, the United Kingdom, Canada, Korea, Switzerland, Sweden, Norway, Denmark, and Israel, while EMEs include China, Brazil, India, Mexico, Russia, Türkiye, Poland, Indonesia, South Africa, Argentina, Thailand, Malaysia, Czechia, Colombia, Hungary, Romania, the Philippines, Ukraine, Chile, Peru, and Morocco. In Chart II.1.3, the Bloomberg data is based on the World Bank method since the Indian fiscal year has a different period than the fiscal years of other countries.

The downtrend in headline inflation in advanced economies was replaced by a flat course.

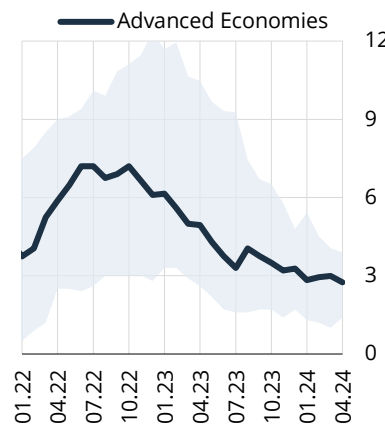
Inflation rates remained above inflation targets in many countries (generally 2% in advanced economies and 3.5% on average in emerging economies) (Chart II.1.4 and Chart II.1.5). Recently, heightened geopolitical risks, supply conditions and high energy prices stand out as risk factors that adversely affect global inflation (Chart II.1.6).

Chart II.1.4: Global Inflation- Emerging Economies (%)



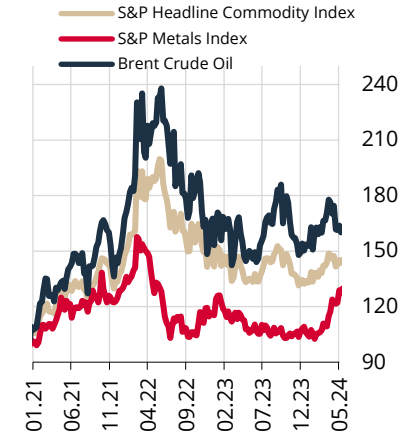
Source: Bloomberg Last Observation: 04.24

Chart II.1.5: Global Inflation- Advanced Economies (%)



Source: Bloomberg Last Observation: 04.24

Chart II.1.6: Commodity Indices (Index, 25.12.2020=100)



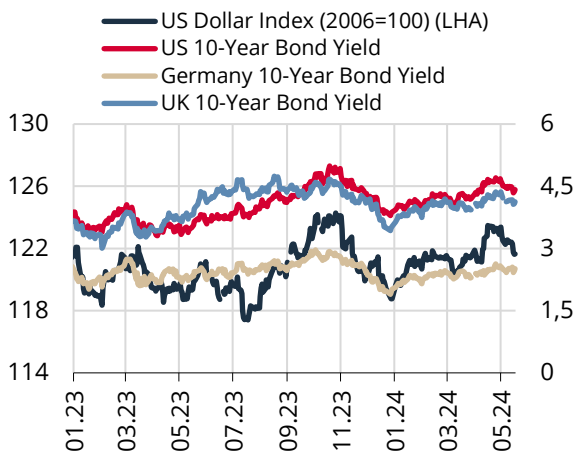
Source: Bloomberg Last Observation: 17.05.24

Note: Inflation rates refer to the annual change in CPI in respective countries. The straight line in Chart II.1.4 and Chart II.1.5 shows the median value across country groups. EMEs include Brazil, Mexico, Russia, Poland, Indonesia, S. Africa, Thailand, Czechia, Colombia, Hungary, Romania, Romania and the Philippines. AEs include the USA, the euro area, Japan, the UK, Canada, S.Korea, Switzerland, Sweden, Norway, and Israel. Shaded areas indicate the highest and lowest values observed in the respective country groups.

The US dollar index declined slightly, while long-term bond yields of advanced economies decreased slightly following the signal that the tight monetary policy of advanced economies had come to an end.

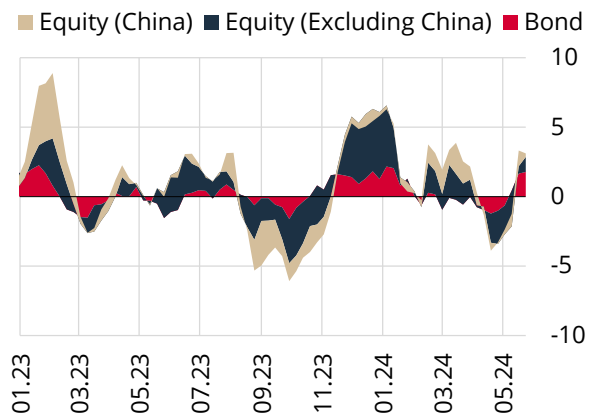
The US dollar index, which had risen in the previous reporting period, declined slightly in the final quarter of 2023, but picked up again in the first quarter of 2024. Strengthening expectations that central banks of advanced economies will cut interest rates later and more slowly compared to the previous reporting period limit the decline in 10-year bond yields (Chart II.1.7). Since the beginning of the year, uncertainties over the rate-cut processes of central banks of advanced economies, particularly of the USA, and developments in the global risk appetite have led to a volatile course in portfolio flows to EMEs (Chart II.1.8). Although there were outflows from debt and equity markets, and equity markets -excluding China- due to increased risk perception following the weakening of rate cut expectations, recent data point to some portfolio inflows.

Chart II.1.7: US Dollar Index and 10-Year Bond Yields in Advanced Economies (Index, %)



Source: FRED, Bloomberg Last Observation: 17.05.2024

Chart II.1.8: Weekly Portfolio Flows to EMEs (4-Week Moving Average, Billion USD)

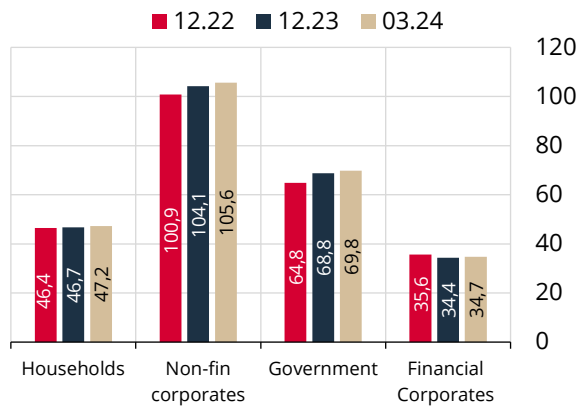


Source: IIF Last Observation: 17.05.2024

Since 2023, the financial indebtedness ratios of emerging economies have increased, while the financial indebtedness ratio of the public sector in advanced economies has remained high.

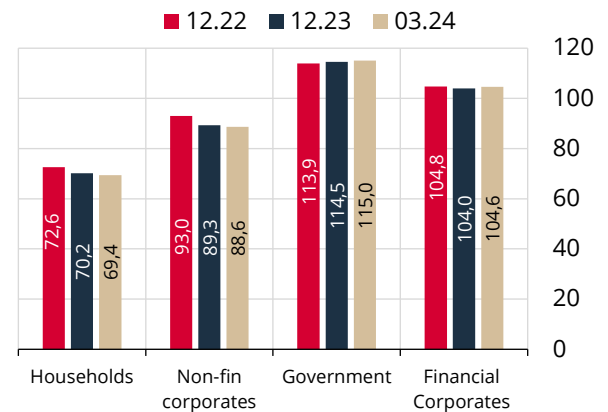
In EMEs, financial indebtedness increased across all sectors. In advanced economies, the financial indebtedness of the public and financial sectors stood out, while indebtedness in other sectors declined slightly (Chart II.1.9 and Chart II.1.10). Ongoing monetary tightening on a global scale continues to pose upside risks to sectors with high financial indebtedness.

Chart II.1.9: Financial Indebtedness in EMEs
(Debt/GDP, %)



Source: IIF Last Observation: 2024Q1

Chart II.1.10: Financial Indebtedness in AEs
(Debt/GDP, %)

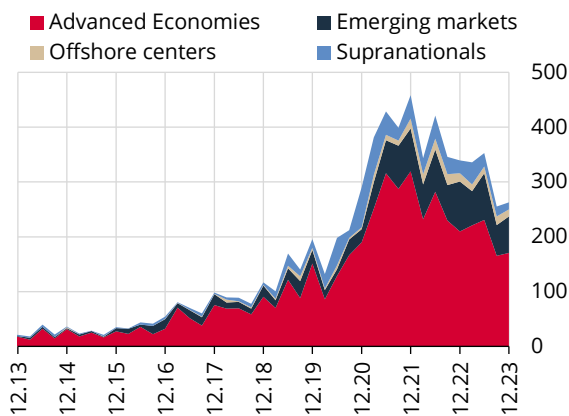


Source: IIF Last Observation: 2024Q1

While advanced economies continued to be a major actor in sustainability-themed borrowing, sustainability-themed borrowing declined slightly on a global scale.

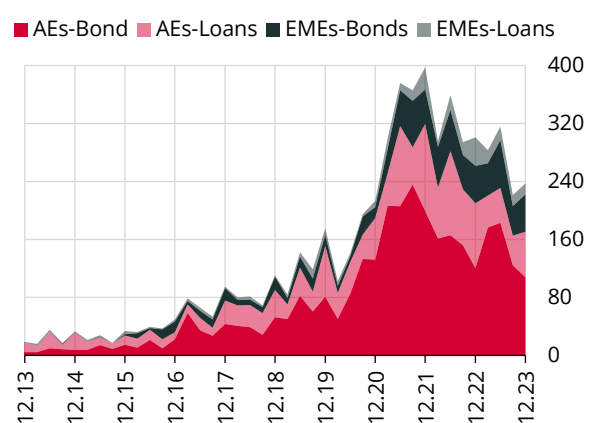
Since the second quarter of 2023, environmental, social and governance-themed borrowing has been decreasing moderately (Chart II.1.11). This was mainly driven by rising financial costs due to tight monetary policies and heightened geopolitical risks. Advanced and emerging economies increased the weight of bank loans in sustainability-themed borrowing and slightly reduced their bond issues (Chart II.1.12).

Chart II.1.11: Environmental, Social, and Governance-Themed Borrowing (Billion USD)



Source: IIF Last Observation: 2023Q4

Chart II.1.12: Breakdown of Bond Issues and Bank Loans for Environmental, Social, and Governance Purposes (Billion USD)



Source: IIF Last Observation: 2023Q4

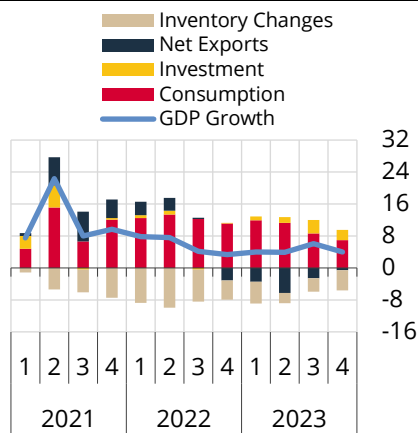
Notes: Emerging Economies (EMEs), Advanced Economies (AEs), and Offshore banking centers are the sum of 141, 35, and 24 different countries, respectively. Detailed information on country lists can be found in the sustainable debt screen on the IIF corporate website. Environmental, Social and Governance- themed borrowing can be provided in the form of both bonds and bank loans, and Chart II.1.12 analyzes this breakdown in detail for AEs and EMEs.

II.2 Main Domestic Macroeconomic Developments

Economic activity remained robust in the second half of 2023, while domestic demand rebalanced.

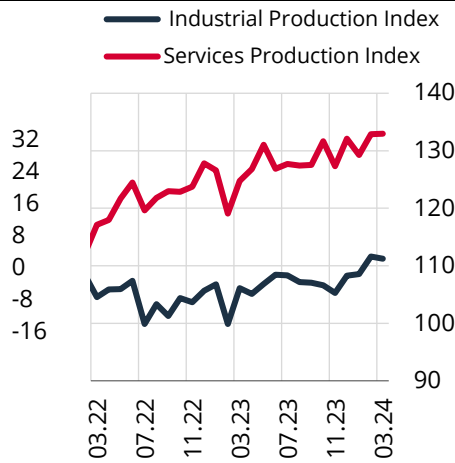
The brisk course of economic activity continued in the final quarter of 2023, while year-on-year growth stood at 4% and quarter-on-quarter growth at 1%. In the final quarter of 2023, the contribution of consumption expenditures to growth decreased, while that of net exports increased. The contribution of investment expenditures to growth is positive compared to the first half of 2023 (Chart II.2.1). In the first quarter of 2024, industrial and services production increased (Chart II.2.2). Leading indicators suggest that economic activity remained buoyant in the first quarter of 2024 as well (Chart II.2.3).

Chart II.2.1: Annual GDP Growth and Contribution of Expenditures (% Points)



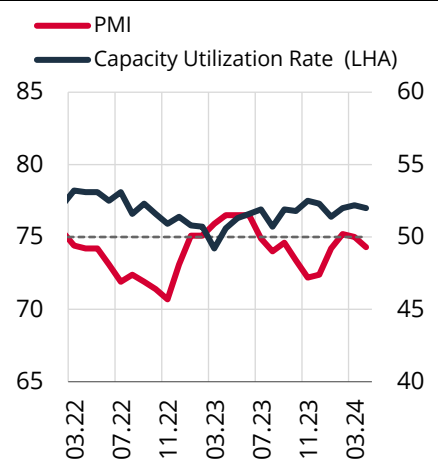
Source: TURKSTAT Last Obsv: 2023Q4

Chart II.2.2: Production Indices (Index, 2021=100)



Source: TURKSTAT Last Obsv: 03.24
Note: Industrial and services production index is adjusted for seasonal and calendar effects.

Chart II.2.3: Selected Leading Indicators of Economic Activity (Ratio, Index)

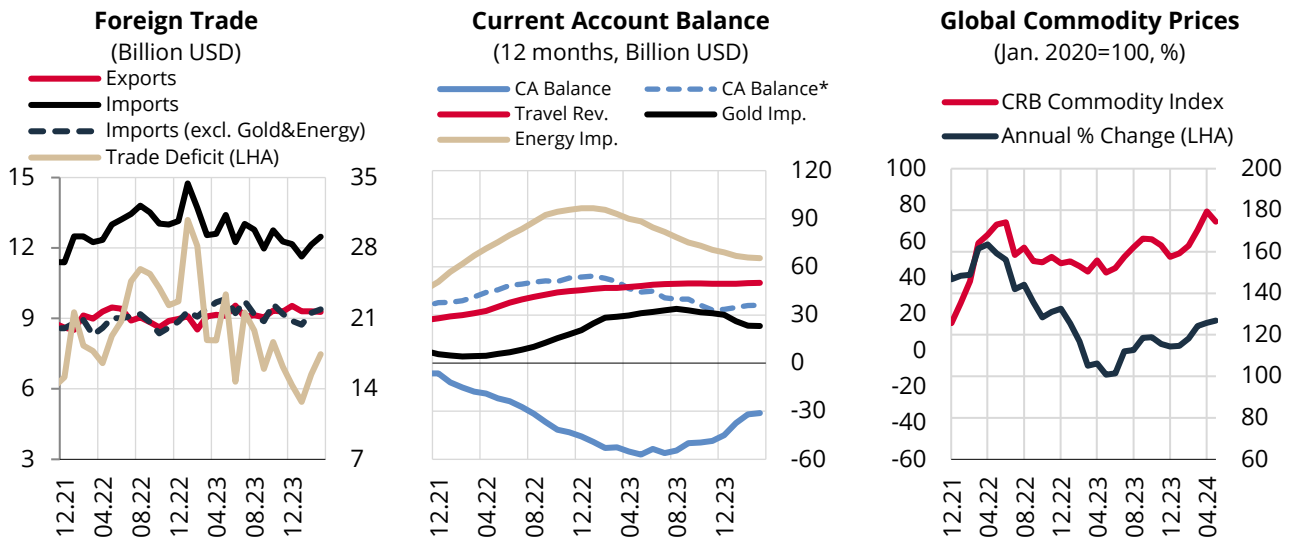


Source: CBRT, ICI Last Obsv: 04.24
Note: Manufacturing industry capacity utilization rate is adjusted for seasonal and calendar effects. The dashed line shows the stable state of Manufacturing Industry Purchasing Managers' Index (PMI).

The decline in the foreign trade deficit and the favorable outlook in the services balance helped the current account balance to improve further.

The foreign trade deficit narrowed on the back of the rise in exports excluding gold and the decline in imports. While the decrease in energy imports supported the narrowing in the current account deficit, the foreign trade deficit widened slightly due to the increase in imports excluding gold and energy in recent months. In the upcoming period, geopolitical developments, global commodity prices and the course of domestic and external demand may have an impact on the current account deficit (Chart II.2.4).

Chart II.2.4: Current Account Developments



Source: CBRT, TURKSTAT, Ministry of Trade, Refinitiv

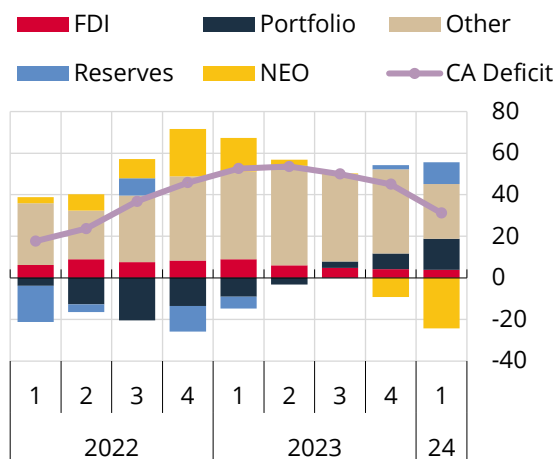
Last Observation: 03.24 (Commodity Prices 16.05.2024)

Note: For foreign trade, seasonally/calendar adjusted monthly exports (fob) and imports (cif) data according to the general trade system have been used. (*) refers to the current account balance excluding energy and gold. The Commodity Index (Refinitiv/CoreCommodity CRB Index) shows the arithmetic average of futures prices of 19 commodities, such as crude oil, gold, copper, livestock, and sugar.

In financing of the current account balance, the weight of long-term items and portfolio investments increases, while that of the net errors and omissions item decreases.

In the first quarter of 2024, contribution of portfolio investments and reserves to financing of the 12-month current account deficit increased (Chart II.2.5). While banks continued to roll over their external debt by more than 100%, banks' external debt rollover ratio stood at 113% in March. The external debt rollover ratio of the non-bank sector remained above 100% and maintained its positive outlook. External borrowing by the private sector had a positive impact on the financing of the annualized current account deficit (Chart II.2.6).

Chart II.2.5: Financing of Current Account Deficit (12-Month Cumulative, Billion USD)

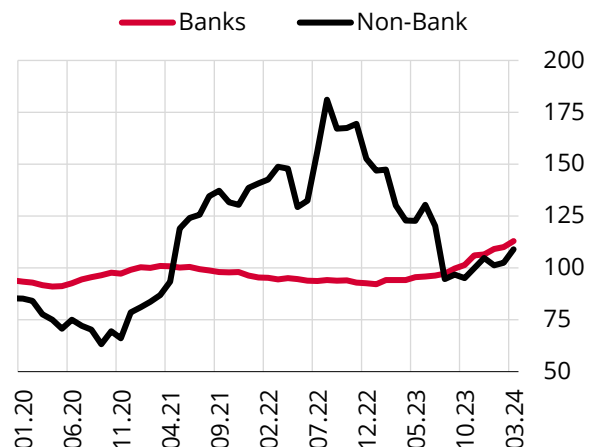


Source: CBRT

Last Observation: 03.24

Note: "Portfolio", "FDI", and "Other" investments items are in net terms. The (-) sign in "Reserves" implies an increase.

Chart II.2.6: External Debt Rollover Ratio (12- Month, %)



Source: CBRT

Last Observation: 03.24

Note: External debt rollover ratios are calculated on short and long-term total debt in a 12-month window.

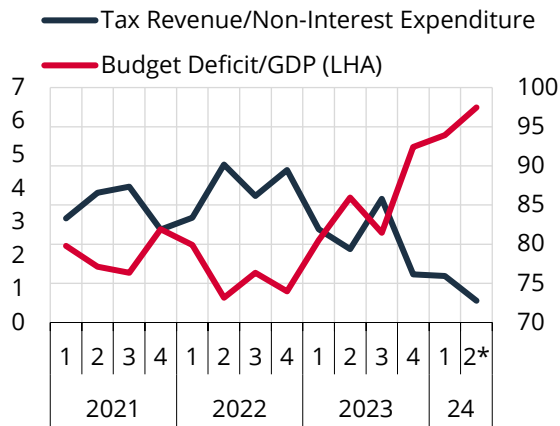
In public finance, the impact of earthquake-related expenditures continues and these expenditures will be the key determinant of the public finance outlook throughout 2024.

The effects of the earthquake disaster on public finance continued in the first quarter of 2024. The ratio of budget deficit to GDP, which was 5.2% at the end of 2023 due to earthquake expenditures, is projected to be 6.4% as of April. This increase was mainly driven by personnel expenditures and current transfers (Chart II.2.7).

Consumer inflation rose to 69.8% in April 2024, mainly due to the high course of services inflation.

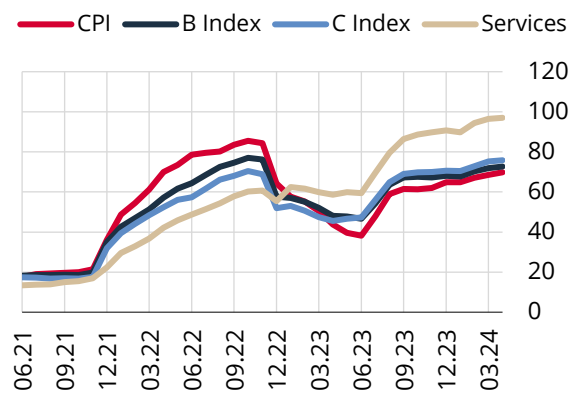
Annual inflation continued to rise on the back of time-dependent price adjustments and revision in administered prices by indexation to past inflation, as well as wage adjustments. While B and C indices continued to rise, the main driver of inflation was the services sector due to the strong inertia in the pricing behavior (Chart II.2.8). Geopolitical developments also played an important role in the elevated levels of inflation. In the first quarter of 2024, global commodity prices rose, led by the energy group, due to geopolitical developments and production disruptions. Geopolitical developments necessitated using alternative trade routes and led to longer delivery times pushing up freight rates.

Chart II.2.7: Central Government Budget Indicators (12-Month Cumulative, %)



Source: CBRT, MTF
 Last Observation: 04.24
 Note: Estimated value for 2024 GDP.
 *Data for Q2 includes only April.

Chart II.2.8: Inflation Developments (Annual % Change)



Source: CBRT, TURKSTAT
 Last Observation: 04.24
 Note: The B index is obtained by excluding unprocessed food products, energy, alcoholic beverages, tobacco and gold items from the CPI, and the C index is obtained by excluding food and non-alcoholic beverages from the B index.

Box II.2.I: Policy Framework Supporting Monetary Transmission and Macro Financial Stability

The monetary policy transmission mechanism is defined as the effect of changes in policy interest rates, the main instrument of monetary policy, on economic activity, inflation and other macroeconomic variables through market interest rates led by loan and deposit rates, exchange rates, expectations, credit, and asset prices. The effectiveness of monetary policy on macro variables through the transmission mechanism depends on dollarization, liquidity conditions, confidence in central bank policies, the exchange rate regime in place and the depth of financial markets. Recent studies suggest that monetary transmission is stronger when economic uncertainty is low, financial conditions are tight and monetary policy is coordinated with fiscal and macroprudential policies (Vollmer, 2022 and Deb et al., 2023).

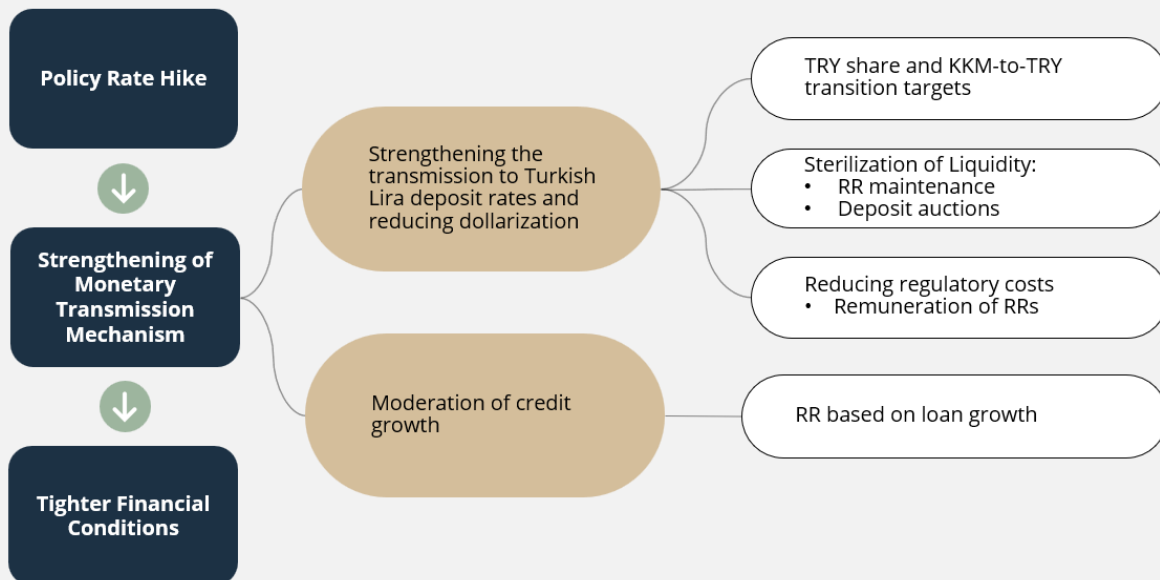
The CBRT has embarked on a strong monetary tightening since June 2023 by raising the policy rate from 8.5% to 50%. In this period, the CBRT continued to implement macroprudential policies with the aim of enhancing the functionality of the market mechanism and establishing macro financial stability. Although these developments supported the monetary transmission mechanism, dollarization and liquidity conditions limited effectiveness of transmission. Although the policy interest rate is formed in tightening territory consistent with inflation target, financial conditions should be supported by complementary and effective macroprudential tools in order for them to remain tight to ensure stronger transmission. This box elaborates on the objectives of the macroprudential policy framework that aims to enhance the effectiveness of the monetary policy stance, the channels through which the monetary policy stance supports the transmission mechanism, and the effects of policies on financial conditions.

The transmission of the changes in the policy rate to financial conditions are strengthened mainly if the following two conditions are met: (Diagram II.2.I.1).

- Strong transmission from policy rate to Turkish lira deposit rates and reduced dollarization.
- Balancing of loan growth and loan composition.

The following section summarizes the steps to ensure these conditions.

Diagram II.2.I.1: Enhancing Effectiveness of the Monetary Transmission Mechanism



Objective 1: Strengthening the Transmission to Turkish Lira Deposit Rates and Reducing Dollarization

The bulk of deposits in the banking system is composed of FX deposits or FX-protected accounts, which is one of the main factors that undermine the monetary policy transmission channel. The CBRT, aiming to affect TL interest rates and money supply/demand in the market through the short-term policy rate, is unable to use the policy rate effectively when the share of FX in the system increases. At the same time, high dollarization

weakens the monetary transmission mechanism by increasing the dependence of pricing decisions on exchange rates (and expectations).

The rise in exchange rates and gold prices expands the TL equivalent of FX deposits and KKM accounts, which are important components of the broadly-defined money supply, and this leads to nominal growth in the money supply. The increase in the money supply creates demand inflation, drives asset prices higher and makes it more difficult to achieve price stability. Exchange rate difference payments on KKM deposits also cause excess liquidity in the system and reduce the tightening effect of monetary policy.

After June 2023, when the monetary policy tightening process started, the rise in exchange rates along with the exchange rate difference payments to FX-protected deposits led to excess Turkish lira liquidity in the system. In this period, Turkish lira interest rates in the interbank market were formed at a level lower than the policy rate due to excess liquidity, which resulted in weaker transmission from monetary policy to deposit rates. To counter these challenges to the monetary transmission, the CBRT aims to strengthen the transmission from the policy rate to Turkish lira deposit rates, reduce FX deposits and KKM accounts, and accelerate transition to Turkish lira deposits.

Instrument 1.1: TL Deposit Share Growth and KKM-to-TL Transition Targets

Foreign currency deposits and FX-protected deposit accounts lead to an expansion in the money supply in times of appreciation in exchange rates, thereby having an inflationary effect. As the share of the Turkish lira in the system increases and dollarization is reduced, the monetary policy's potential to affect money supply and savings/consumption preferences increases.

The growth target for the Turkish lira share refers to an increase in the share of Turkish lira deposits in total deposits at a rate set as a monthly minimum. In the calculation of the Turkish lira share, Turkish lira deposits are included in the numerator and total deposits including KKM are included in the denominator. Transitions from FX deposits and KKM accounts to Turkish lira deposits increase the share and help achieve the target. Besides, new deposits arising from loan growth are also kept in Turkish lira, which contributes to increase in this ratio. The target value for the growth of the Turkish lira share is actively managed based on data and impact analyses in line with market conditions.

$$\text{TL Share} = \frac{\text{TL Deposits}}{\text{TL Deposits} + \text{FX Protected Deposits} + \text{FX Deposits}}$$

To increase the weight of the Turkish lira in the deposit composition, the CBRT also sets targets for banks to switch from the KKM to Turkish lira deposits. Additionally, the CBRT specified targets for renewal of the portion of the conversion KKM¹ accounts that was not switched to Turkish lira deposits, thus aimed to gradually reduce KKM deposits before they are converted into FX deposits. At the end of 2023, the TL-driven KKM² account openings and renewals ended. As the improvement in expectations and the decrease in exchange rate volatility have recently downplayed FX deposits, reserves strengthened and Turkish lira deposits became more preferable, the target of switching from KKM to Turkish lira was maintained, but the total target for renewal and switching to Turkish lira was reduced to 75% on 23 May 2024 to ensure a faster decline in KKM. As is the case with the Turkish lira share target, the targets for switching to Turkish lira and renewal are managed dynamically taking into account market developments.

Banks that fail to achieve the conversion-to-TL, renewal and TL share targets pay commission on required reserves maintained for FX deposits. On the other hand, banks that fulfill the targets of transition to TL and renewal are remunerated on their required reserves maintained for TL deposits and/or KKM deposits. The targets are set taking into account banks' business models, size and balance sheet structures, and decisions are taken based on impact analyses.

Instrument 1.2: Increasing Reserve Requirement Ratios

The increase in Turkish lira reserve requirement ratios sterilizes excess liquidity in the system, reduces banks' excess Turkish lira liquidity and supports the transmission of the CBRT funding rate to loan and deposit rates.

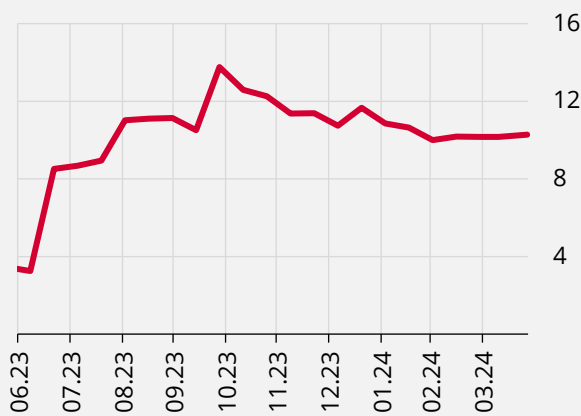
¹ Conversion KKM are accounts opened by converting foreign currency and gold deposits into Turkish lira.

² TL-based KKM are accounts opened using Turkish lira deposit accounts.

The CBRT made use of reserve requirements to sterilize the permanent excess liquidity in the financial system caused by the exchange rate difference payments to KKM deposits, and held Turkish lira deposit auctions to manage the temporary excess liquidity. In this context, the CBRT first ordered banks to maintain RRs for KKM, and significantly raised the ratios of Turkish lira-denominated RRs maintained for KKM. As another step taken in liquidity management, the Bank introduced the maintenance of additional Turkish lira-denominated RRs for FX deposits.

Although the withdrawal of excess liquidity from the system through the increase in RR ratios is expected to have a tightening effect on deposit rates via the liquidity channel, the increase in RR ratios also pulls deposit rates down as it creates costs for bank balance sheets. At the end of 2023, the share of the total RR amount in interest-bearing assets rose to 12% (Chart II.2.1.1). As the RR amounts to be maintained and borrowing costs increase, the RR cost also increases, driving banks to raise loan rates or reduce deposit rates to bear this cost. In fact, although the funding cost of RRs increased, banks did not yield interest income on these RRs. This pushed the regulation-driven costs on banks' balance sheets up and exerted downward pressure on deposit rates in early 2024 (Chart II.2.1.2). Finally, the revision of the KKM facility and the increase in RR ratios for KKM and TL deposits on May 23 are expected to increase the share of RR volume in interest-bearing assets in the recent period. Meanwhile, on the back of the decline in the KKM balance in line with the target renewal rates, the volume of RRs maintained for KKM accounts is expected to decline in the coming period.

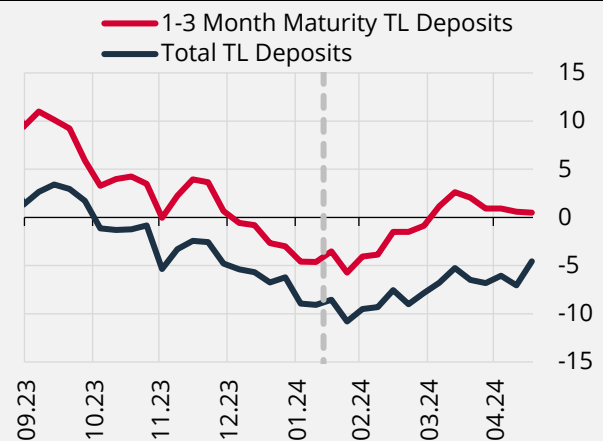
Chart II.2.1.1: Share of TL Required Reserves in Interest-Bearing Assets (%)



Source: CBRT Last Observation: April 2024

Note: Amounts that need to be maintained are taken into account.

Chart II.2.1.2: Spread Between TL Deposit Rate and Weighted Average Funding Cost (WAFC) (%)



Source: CBRT Last Observation: 17.05.2024

Note: Interest rate spreads are calculated with the annual compounded level of the WAFC. Participation banks are excluded. The dashed line indicates the effective date of the RR remuneration for banks that achieve the targets.

Instrument 1.3: Remuneration of Required Reserves

The remuneration of required reserves by the CBRT aims to offset the cost of the regulations and has an upward effect on deposit rates by supporting bank interest margins.

Banks generally need deposits along with other funding sources to finance their lending operations steadily and at affordable costs, to secure an equilibrium on their balance sheets and to cover the requirements arising from regulatory ratios. On the other hand, the maturity of deposits is generally short, while that of loans is longer. As a result, banks may tend to act slowly while reflecting policy rate increases on deposit rates.

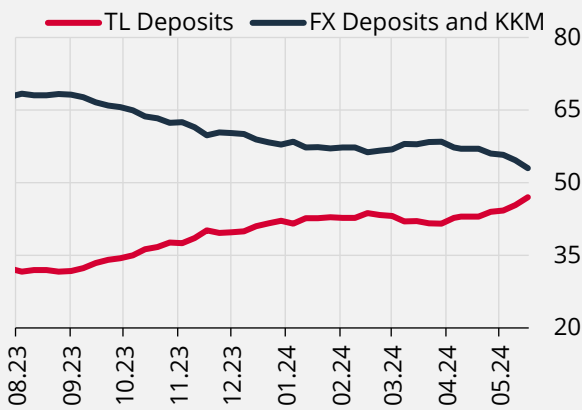
The pass-through of the increase in the policy rate to deposit rates may be slower in an environment where credit growth is capped and RR ratios are high. To achieve its policy objective of prioritizing Turkish lira deposits more effectively and to ensure that the tighter monetary policy is reflected in the macroeconomy through deposit rates, the CBRT decided to remunerate banks' RRs depending on their transition-to-Turkish lira and renewal rates.

This practice helped support the balance sheets of banks that achieved the targets and mitigate the RR cost, thereby preventing an easing in deposit rates. Moreover, the banks that failed to reach the desired level of

transition were motivated to meet the targets so as to benefit from this advantage, and Turkish lira deposit rates increased to the extent that allowed attaining targets. The RR remunerations are paid quarterly, based on the achievement of the target to limit the impact of the remuneration on liquidity.

As a result of the steps taken, the share of FX deposits and KKM in total deposits decreased, while the share of Turkish lira deposits increased. Since August 2023, the share of Turkish lira deposits has increased by 15 percentage points (Chart II.2.1.3). The transition in the related period was mainly driven by KKM accounts. In that period, KKM accounts declined by approximately TL 1.2 trillion (Chart II.2.1.4). There has recently been a shift from FX deposits to TL deposits thanks to the improvement in expectations. This trend is expected to continue as real TL deposit rates move into positive territory and as inflation declines steadily and permanently.

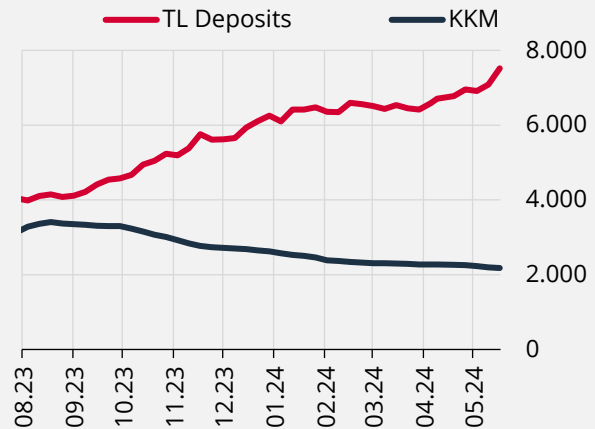
Chart II.2.1.3: Composition of Deposits (%)



Sources: CBRT, BRSA

Last Observation: 17.05.2024

Chart II.2.1.4: Deposit Volume (TL Billion)



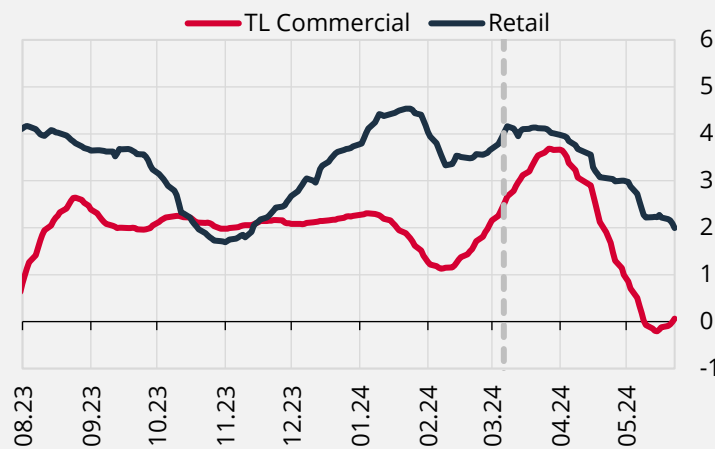
Sources: CBRT, BRSA

Last Observation: 17.05.2024

Objective 2: A Balanced Course Between Loan Growth and Loan Composition

With the monetary policy rate hikes and the simplification of the regulatory framework, bond yields rose across all maturities and the yield curve became negatively sloped, reflecting the improvement in inflation expectations. With this normalization, holding long-term securities became less of a deterrent for banks and the tendency of banks to extend loans above the loan growth limits defined in the securities maintenance practice increased, and Turkish lira commercial loans recorded an above-the-limit loan growth across the sector except for January.

Chart II.2.1.5: Monthly Loan Growth Trends (%)



Sources: CBRT, BRSA

Last Observation: 23.05.2024

Note: Calculated by taking the average of 20 business days of the growth rates pertaining to 20 business days. The dashed line denotes the announcement date of the loan growth-based RR maintenance.

Instrument 2.1: Loan Growth-Based RR Maintenance and Loan Growth Limits

Since the loan growth-based RR practice imposes a significant RR cost on banks' balance sheets when loan growth limits caps are exceeded, banks tend not to exceed the caps. This practice stabilizes loan growth by tightening financial conditions and supports the transmission of monetary policy.

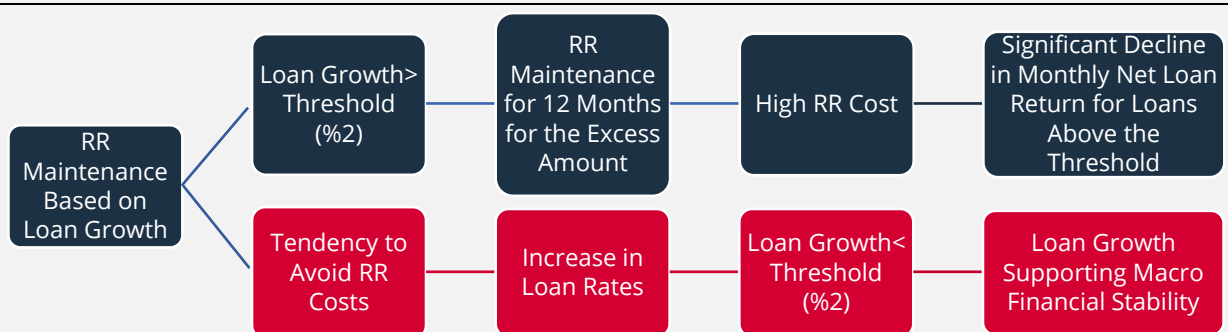
In March 2024, credit growth strengthened in a short period of time due to a higher-than-expected demand for loans driven by the volatility in expectations. Accordingly, in addition to the monetary policy rate hike in March 2024, financial conditions were tightened through regulations to support the transmission of the monetary policy. The monthly growth limits for Turkish lira commercial and general-purpose loans were reduced to 2%, making financial conditions tighter, and an obligation to maintain RRs was introduced if growth limits were exceeded, to increase the effectiveness of the practice.

The loan growth-based RR requires banks to maintain reserve requirements equal to the amount exceeding the monthly growth of 2% for general-purpose loans, vehicle loans and Turkish lira commercial loans³ for 12 months. Since this amount maintained is not remunerated, exceeding the loan limits significantly increases banks' RR costs. Thus, the RR cost arising from exceeding this limit has supported the steps taken to tighten financial conditions. The aim of the RR maintenance practice is to induce banks that do not want to bear this cost to keep their loan growth rates within specified limits by increasing the interest rates on loans, and to moderate loan growth through higher loan rates (Diagram II.2.1.2).

Following the implementation of the loan growth-based RR maintenance, Turkish lira commercial loan rates and general-purpose loan rates increased by approximately 10 percentage points and 18 percentage points, respectively, compared to their levels in the first week of March. After the implementation, commercial and retail loan growth rates slowed down significantly (Chart II.2.1.5). Thus, the loan growth-based RR maintenance loan growth is judged to support monetary policy transmission by tightening financial conditions.

On the other hand, Turkish lira loans declined in response to the measures taken regarding TL loans, while foreign currency loans have increased recently. Accordingly, in May 2024, a 2% monthly loan growth limit was imposed on FX loans⁴ as well as TL loans. This practice requires that banks should maintain Turkish lira denominated RRs equal to an amount exceeding the 2% loan growth limit in blocked accounts for one year. This step that tightens the FX loan growth incurs high RR costs for banks exceeding the threshold, and inhibits FX loan supply, and thereby contributes to maintaining macro financial stability and supporting the monetary transmission. Therefore, with this latest measure, the CBRT continued to strengthen macro financial stability and at the same time showed its sensitivity to this issue and commitment to monitoring the related developments.

Diagram II.2.1.2: Reserve Requirements Maintenance Based on Loan Growth

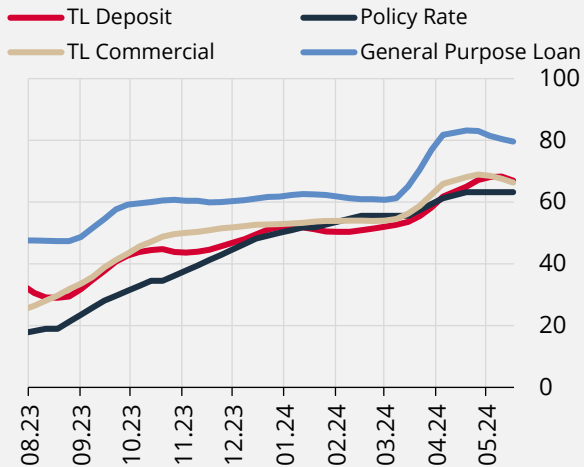


³ Export, investment, agriculture, tradesmen and earthquake loans, and loans to public institutions and agencies are excluded.

⁴ Investment loans, and loans extended to the earthquake region, public institutions-agencies and domestic banks are excluded.

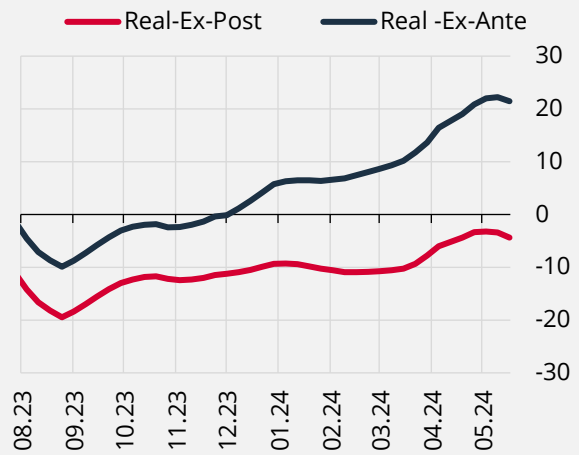
Conclusion:

The CBRT aimed to increase the effectiveness of the policy rate, the main instrument, by implementing measures to manage Turkish lira liquidity and strengthen monetary transmission. As a result of these measures supporting the tight monetary policy, the transmission from the policy rate to loan and deposit rates strengthened and the degree of tightness in financial conditions increased (Chart II.2.I.6). Moreover, the elevated level of deposit rates compared to ex-ante and ex-post inflation increased the attractiveness of Turkish lira financial assets (Chart II.2.I.7). The tightening in financial conditions is expected to contribute to the decline in dollarization and has a positive impact on inflation and inflation expectations by promoting savings instead of consumption.

Chart II.2.I.6: Interest Rates (% , 4 WMA)

Source: CBRT Last Observation:17.05.2024

Note: TL deposit interest rate represents the interest rate on TL deposits with 1 to 3-month maturity and is calculated excluding participation banks. TL commercial loan rate is calculated excluding credit cards, overdraft accounts and zero interest loans. General-purpose loan interest rate is calculated excluding overdraft accounts. Policy rate is converted to compound interest rate.

Chart II.2.I.7: Real TL Deposit Rates (% , 4 WMA)

Source: CBRT Last Observation: 17.05.2024

Note: TL deposit interest rate represents the interest rate on TL deposits with 1 to 3-month maturity and is calculated excluding participation banks. Real deposit rate is calculated by Fisher method, and deflated by expected and actual CPI inflation. The expected inflation is the 12-month-ahead CPI inflation expectation (modified mean) of the Survey of Market Participants. The chart shows the net return with withholding tax deduction applied.

References

- Vollmer, U. (2022). "Monetary policy or macroprudential policies: What can tame the cycles?" *Journal of Economic Surveys*, 36(5), 1510-1538.
- Deb, P., Estefania Flores, J., Firat, M., & Furceri, D. (2023). "Monetary Policy Transmission Heterogeneity: Cross-Country Evidence."

Box II.2.II: Steps for Effective Functioning of Financial Markets

This box presents, under main headings, a summary of measures and policy steps implemented in the current reporting period to strengthen macro financial stability and contribute to the functioning of market mechanisms.

Table II.2.II.1: Major Measures and Regulations for Financial Markets

1. Policy Rate and the CBRT's Liquidity Management

Announcement / Issue Date	Measure / Regulation
24.11.2023	The one-week repo auction rate was raised from 35% to 40%.
22.12.2023	The one-week repo auction rate was raised from 40% to 42.5%.
26.01.2024	The one-week repo auction rate was raised from 42.5% to 45%.
26.02.2023	The one-week repo auction rate was kept unchanged at 45%.
22.03.2024	The one-week repo auction rate was raised from 45% to 50%. The CBRT decided to set the Central Bank overnight borrowing and lending rates 300 basis points below and above the one-week repo auction rate, respectively.
25.04.2024	The one-week repo auction rate was kept unchanged at 50%.
23.05.2024	The one-week repo auction rate was kept unchanged at 50%.

2. Reserve Requirements and Securities Maintenance

Announcement / Issue Date	Measure / Regulation
21.12.2023	The CBRT decided that the securities maintenance ratio applied to liabilities would be reduced from 5% to 4% to be effective from the calculation date of 24 November 2023, and temporary implementation regarding securities maintenance based on loan growth, which was to be terminated on 29 December 2023, would be extended for six months until the calculation date of 28 June 2024.
27.12.2023	Regarding the commission implementation on reserve requirements, the CBRT decided to <ul style="list-style-type: none"> - adjust the monthly Turkish lira share growth target for real persons based on their Turkish lira share levels, - increase the target for the Rate of Transition to Turkish Lira Deposits from KKM Accounts from 10% to 15% and introduce changes in the calculation of this rate, - finalize the 75% KKM renewal rate target, - extend the calculation period of the Rate of Renewal and Transition to Turkish Lira to four weeks, as in the implementation regarding the Turkish lira share, effective after 22 December 2023; and - reduce the target for the Rate of Renewal and Transition to Turkish Lira from 100% to 95%, effective from 19 January 2024.
30.01.2024	Effective from the calculation date of 19 January 2024, the CBRT decided that the reserve requirement ratios for KKM accounts with maturities up to six months would be reduced from 30% to 25%, and the additional reserve requirement ratio for FX-denominated deposits/participation funds (excluding deposits/participation funds in foreign banks and precious metal deposit accounts) maintained in Turkish lira would be increased from 4% to 8% across all maturities.
04.02.2024	Based on the Rate of Renewal and Transition to Turkish Lira and the Rate of Transition to Turkish Lira for KKM accounts, the CBRT decided that <ul style="list-style-type: none"> - a set amount of Turkish lira reserve requirements of deposit banks would be subject to remuneration, and - participation banks would be provided with a discount on the set amount of their Turkish lira reserve requirements.
05.03.2024	Effective from the calculation date of 26 January 2024, the monthly growth limit for Turkish lira commercial loans excluding exempt loans, previously set at 2.5%, was reduced to 2%; the monthly growth limit for general-purpose loans, previously set at 3%, was revised down to 2%; and the 2% limit for vehicle loans remained unchanged within the scope of the loan growth-based securities maintenance practice.
08.03.2024	Effective from the calculation period of 29 March 2024, banks were required to keep the required reserves up to the loan amount exceeding the 2% growth limit for Turkish lira commercial loans (excluding exempt loans), general-purpose loans (excluding overdraft

	accounts), and vehicle loans separately, as blocked, within the scope of the loan growth-based reserve requirement implementation.
13.03.2024	Within the scope of the reserve requirement implementation, institutions with an asset size of more than TL 500 billion and institutions with an asset size of more than TL 100 billion were required to keep 25% and 15% of the required reserves to be maintained as average for Turkish lira liabilities, respectively, as blocked.
16.03.2024	Regarding the commission implementation, the CBRT decided to <ul style="list-style-type: none"> - introduce a monthly Turkish lira share growth target for legal persons, as for real persons, and - revise the monthly Turkish lira share growth target for real persons and increase the commission rate applied upon failure to achieve the target from 2% to 3%.
06.04.2024	The CBRT decided that the securities maintenance ratio applied to liabilities would be reduced from 4% to 1% to be effective from the calculation date of 29 March 2024, and that temporary implementation regarding securities maintenance based on loan growth, which was to expire on 28 June 2024 (including), would be terminated as of the calculation date of 23 February 2024 (including).
29.04.2024	Within the scope of the reserve requirement implementation, <ul style="list-style-type: none"> - effective from 26 April 2024, the upper limit of the remuneration rate applied to the amount of required reserves that should be maintained for KKM accounts based on the renewal and transition to Turkish lira was set at 60% of the policy rate, the upper limit of the remuneration rate applied to the amount of required reserves that should be maintained for Turkish lira deposits based on the Turkish lira conversion rate was set at 80% of the policy rate, and - the cumulative discount application for participation banks on the set amount of their Turkish lira reserve requirements was terminated and replaced with remuneration.
09.05.2024	The securities maintenance regulation was repealed.
23.05.2024	To be effective as of 24 May 2024, <ul style="list-style-type: none"> - the required reserve ratio for Turkish lira deposits/participation funds (excluding deposits/participation funds obtained from banks abroad) – demand, notice, with maturities up to one month and up to (and including) three months- was raised from 8% to 12%, - the required reserve ratio for Turkish lira deposits/participation funds (excluding deposits/participation funds obtained from banks abroad) with maturities up to (and including) six months, up to one year, of one year, and longer than one year was set at 8%, - the required reserve ratio for KKM accounts with maturities up to (and including) six months was raised from 25% to 33%, and - the required reserve ratio for KKM accounts with maturities up to one year, of one year, and longer than one year was raised from 10% to 22%.
23.05.2024	Regarding reserve requirement and commission implementations, <ul style="list-style-type: none"> - the total target rate including renewal and transition to Turkish lira was reduced to 75%, effective from the calculation period of 7 June 2024, - Legal persons' KKM accounts, as well as legal and real persons' YUVAM accounts were excluded from calculation of the total target, effective from the calculation period of 5 July 2024 (including), - the remuneration rate applied to reserve requirements maintained for KKM accounts when the total target is achieved was decreased to 40% of the policy rate, effective as of 24 May 2024 (including).
23.05.2024	Effective from the calculation period of 21 June 2024 (including), a monthly growth limit of 2% was introduced for foreign currency loans (excluding those extended to the earthquake zone), and Turkish lira required reserves amounting to loans exceeding the limit were decided to be blocked for one year.

3. Rediscount Credits and Advance Loans

Announcement / Issue Date	Measure / Regulation
23.11.2023	The maximum discount rate for rediscount credits for export and foreign exchange earning services was kept constant at 25.93%, and a cap was set for the total interest cost of these credits.
23.11.2023	According to the new implementation framework for ALAIC, it was decided that eligible firms would be allocated ALAIC via intermediary banks for their investment projects with a

minimum total investment amount of TL 1 billion by taking into account their Technology/Strategy score, and the interest rate for loans, which would be extended with a maximum maturity of ten years, would be set between 15% and 30%, depending on the Technology/Strategy score, the ratio of external financing for the investment, and the financial soundness assessment.

4. Deposits/ Participation Funds and Payment Systems

Announcement / Issue Date	Measure / Regulation
25.11.2023	An amendment was introduced to enable participation accounts to be opened with maturities up to (and including) one month.
31.01.2024	The CBRT decided that the minimum interest rate on KKM accounts cannot be lower than 80% of the one-week repo auction rate set by the CBRT.
05.02.2024	The cut-off date for real residents' KKM accounts was extended from 30 November 2023 to 31 January 2024.
06.04.2024	The cut-off date for real residents' KKM accounts was extended from 31 January 2024 to 31 March 2024.

5. Regulations Regarding Credit Extension, Installments, and Debt Repayments

Announcement / Issue Date	Measure / Regulation
14.12.2023	As per the decision taken by the SDIF, the amount of deposits and participation funds covered by insurance, which is currently TL 400 thousand, was set at TL 650 thousand, effective from the beginning of the calendar year 2024.
21.12.2023	An upper limit was introduced for the reference rate not to exceed current levels of maximum interest rates for credit cards and maximum commission rates for merchants. The upper limit was set at 3.11%, which was the current level of the reference rate, and the calculation method was kept unchanged for rates below this level. No increase was thus introduced to the most recently announced rates for maximum interest rates for credit cards and maximum commission rates for merchants.
16.03.2024	It was decided that the monthly maximum contractual interest rate to be applied in cash withdrawal or usage transactions made through credit cards was determined by adding 189 basis points to the monthly reference rate in place of 131 basis points, and that the revised rates would be announced and implemented from 16 March 2024.
21.03.2024	As per the decision taken by the BRSA, the maturity limits for loans only for electric vehicles manufactured by taxpayers falling within the scope of Provisional Article 12 of Corporate Tax Law No. 5520 dated 13 June 2006, were set as <ul style="list-style-type: none"> - forty-eight months for loans extended for the purchase of vehicles with a final invoice value of TL 1.6 million or less, - thirty-six months for loans extended for the purchase of vehicles with a final invoice value above TL 1.6 million and below TL 3 million, - twenty-four months for loans extended for the purchase of vehicles with a final invoice value above TL 3 million and below TL 4 million, and - twelve months for loans extended for the purchase of vehicles with a final invoice value above TL 4 million and below TL 5 million. The loan-to-value ratios were set <ul style="list-style-type: none"> - to not exceed 70% for vehicles with a final invoice value of TL 1.6 million or less, - to not exceed 50% for vehicles with a final invoice value above TL 1.6 million and below TL 3 million, - to not exceed 30% for vehicles with a final invoice value above TL 3 million and below TL 4 million - to not exceed 20% for vehicles with a final invoice value above TL 4 million and below TL 5 million, and - as 0% for vehicles with a final invoice value above TL 5 million.
06.04.2024	It was decided that the monthly maximum contractual interest rate on credit card transactions in TL (excluding cash withdrawal or usage transactions) was determined by adding 114 basis points to the monthly reference rate in place of 55 basis points, and that the revised rates would be announced and implemented from 6 April 2024.

6. Classification of Loans and Receivables, and Legal Ratio Limitations

Announcement / Issue Date	Measure / Regulation
27.01.2024	Pursuant to the Communiqué, the amount that the drawee banks should be legally obliged to pay to the bearer (holder) of the bad checks on or after 31 January 2024 was increased from TL 6,000 to TL 9,270.

7. Other Regulations

Announcement / Issue Date	Measure / Regulation
21.12.2023	The CBRT decided to hold Turkish lira deposit buying auctions to enhance the monetary transmission mechanism and contribute to the diversification of the sterilization instruments.
01.05.2024	As per Presidential Decree No. 8434, the withholding tax rate for deposits was set at <ul style="list-style-type: none"> - 7.5% for demand and notice accounts and accounts with maturities up to (and including) six months, - 5% for time deposits up to (and including) one year, - 2.5% for accounts with maturities longer than one year, - 0% for accounts with maturities longer than one year and an inflation-based variable interest rate, - 0% for KKM accounts.
01.05.2024	As per Presidential Decree No. 8434, the withholding tax rate for income and earnings from bonds and bills issued by banks and from lease certificates issued by asset leasing companies with these banks as the fund users was set as <ul style="list-style-type: none"> - 7.5% of the income provided to those with maturities up to (and including) six months, - 5% of the income provided to those with maturities up to (and including) one year, - 2.5% of the income provided to those with maturities longer than one year, - 7.5% of earnings derived from the disposal of those held for less than (and including) six months, - 5% of earnings derived from the disposal of those held for less than (and including) one year, and - 2.5% of earnings derived from the disposal of those held for more than one year.
01.05.2024	As per Presidential Decree No. 8434, the withholding tax rate applied to income and earnings from asset-based securities, mortgage-based securities, mortgage-backed securities, and asset-backed securities issued by mortgage finance institutions (including asset finance funds and housing finance funds founded by these companies) established under Law No. 6362 was raised from 5% to 7.5%.
21.05.2024	With the Presidential Decree, the monthly late fee determined in Article 51 of Law No. 6183 on the Procedure for Collection of Public Claims was increased from 4% to 4.5%.
21.05.2024	With the Presidential Decree, the legal interest rate was increased from 12% to 24% per annum, effective from 1 June 2024 (With the Decree of the Council of Ministers No. 2005/9831 dated 19 December 2005, the legal interest rate had been reduced from 12% to 9% per annum, effective from 1 October 2006).

III. Non-Financial Sector

III.1 Household Developments

Household indebtedness in Türkiye remains significantly below the average of advanced and emerging economies.

Standing at 11.4% in the first quarter of 2024, the household financial debt/GDP ratio in Türkiye is well below those of peer countries (Chart III.1.1 and Chart III.1.2). The decline in indebtedness in recent years is attributed to buoyant economic activity, the rapid growth in nominal GDP amid high inflation, and the macroprudential measures on retail loans. The limited increase observed in this ratio in 2023 was mainly driven by the use of personal credit cards (PCCs). In 2024, macroprudential measures for retail loans are expected to continue, while tighter financial conditions are expected to restrain debt growth. Amid tightening financial conditions, the relatively low level of the household total indebtedness ratio contributes to the management of risks stemming from household debts.

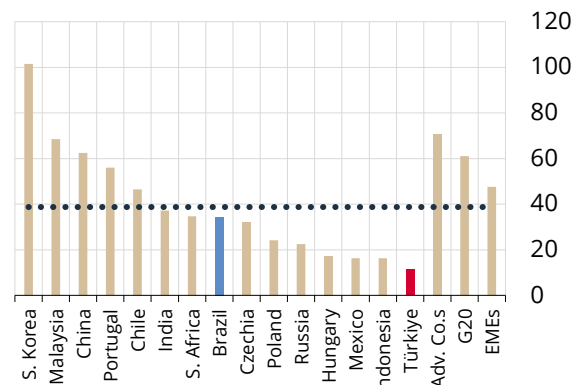
Chart III.1.1: Household Indebtedness in Türkiye (Debt/ GDP, %)



Source: BIS

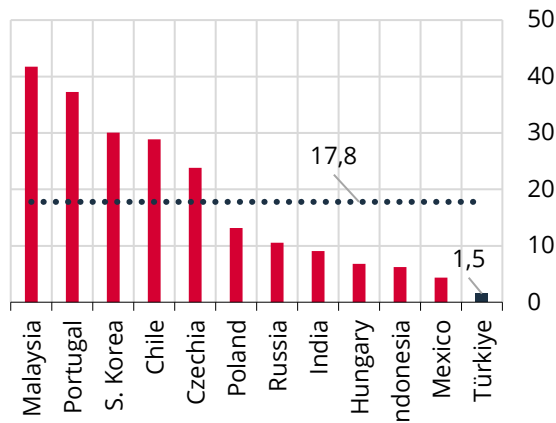
Note: Household indebtedness is calculated as the ratio of (the total of debt securities and loans of households and nonprofit institutions serving households) to GDP. The country marked in blue has median indebtedness in the sample. The horizontal line shows the average values of selected countries. Türkiye's data for 2024Q1 has been estimated in Table III.1.1.

Chart III.1.2: Household Indebtedness in Peer Countries (Debt/ GDP, %)



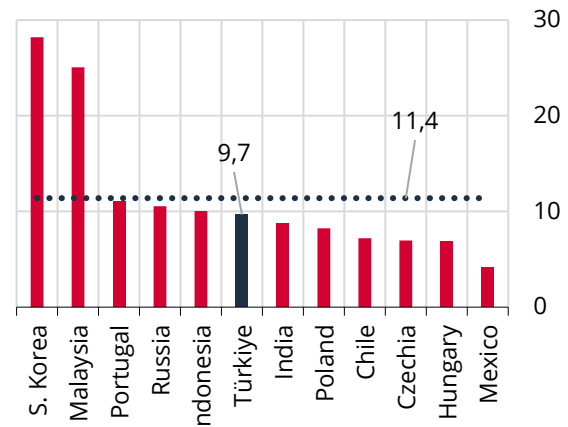
Last Observation: 2023 Q3

Chart III.1.3: Ratio of Housing Loans to GDP (%)



Sources: IMF, Global Economy

Chart III.1.4: Ratio of Retail Loans Excluding Housing Loans to GDP (%)



Last Observation: 12.23

Note: The ratio is calculated as the current total housing loan and retail loans excluding housing loans balance divided by end-2023 GDP. Horizontal lines are average values for selected countries. Retail loan balance excluding housing loans includes all other types of loans extended to households (such as PCC, vehicle loans, and student loans) except housing loans.

A breakdown of indebtedness reveals that the ratio of housing loans to GDP is also well below the average of other countries, while the ratio of retail loans excluding housing loans to GDP is slightly below the average of peer countries. In recent years, the contraction in house purchasing power due to the increase in house prices, macroprudential regulations imposed on housing loans and high interest rates have led to a decline in the utilization and share of housing loans in Türkiye. Moreover, the fact that housing loans in Türkiye are extended with shorter maturities compared to advanced economies and that principal debt gradually reduces due to the fixed interest rate structure of the debt has led the housing loan/GDP ratio to remain below the averages of other countries (Chart III.1.3). The relatively high ratio of retail loans excluding housing loans to GDP in Türkiye is driven by the fact that credit cards, which provide ease of payment amid increased digitalization, offer an easily accessible financing opportunity with installment facilities, especially during inflationary periods, and by the preference for general purpose loans for the purchase of durable/semi-durable goods and services (Chart III.1.4).

Table III.1.1: Household Financial Liabilities

	03.23		09.23		03.24		3-Month Growth (Annualized)
	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	
Total Liabilities	1,988	11.6	2,580	11.4	3,224	11.5	59.0
Housing Loans	447	2.6	507	2.2	512	1.8	7.5
Vehicle Loans	74	0.4	96	0.4	102	0.4	-9.5
General Purpose Loans	844	4.9	949	4.2	1,130	4.0	51.0
Personal Credit Cards	585	3.4	988	4.4	1,433	5.1	102.9
AMC Receivables	37	0.2	41	0.2	47	0.2	33.5

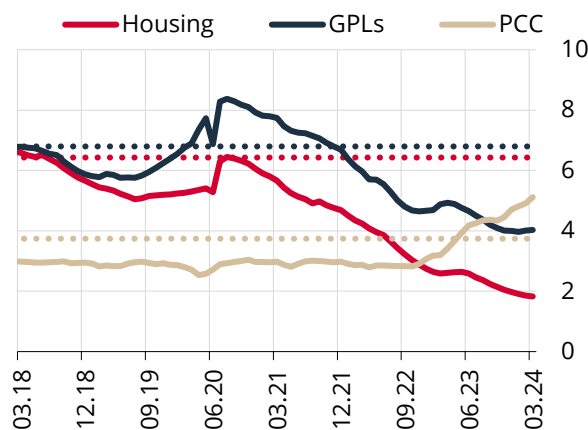
Sources: CBRT, BRSA, TOKI

Note: Liabilities also include NPL. Estimated values for 2024Q1 GDP. AMC: Asset Management Companies.

The rise in household financial liabilities is driven by credit card debts.

Factors such as consumer inflation in core goods and services, ease of use by increased digitalization, the decline in the use of banknotes in payments and the widespread use of cards, banks' high limit increases, and installment facilities in credit card spending have been influential in credit card balance growth. Moreover, maximum contractual interest rates on credit cards that were significantly lower than the interest rates on general purpose loans until the last quarter of 2023, and the trend of not paying off the total balance of credit card debts in an inflationary environment also contributed to the increase in personal credit card (PCC) balances (Table III.1.1). In March and April 2024, following the increase in the maximum contractual interest rates applicable to credit card cash withdrawals (including ODA) and credit card shopping transactions, the growth in PCC balances slowed down.

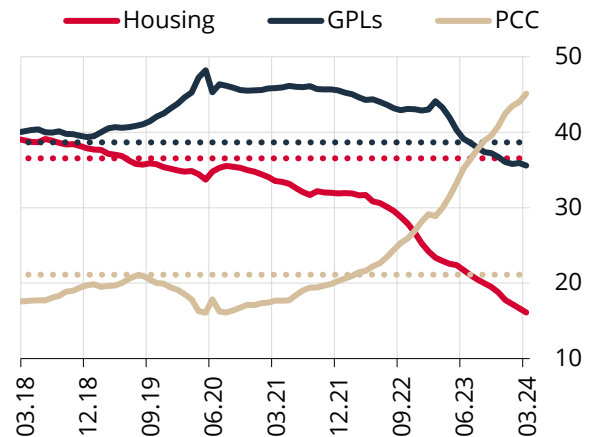
Chart III.1.5: Households' Financial Liabilities to GDP Ratio (%)



Sources: CBRT, BRSA, TURKSTAT

Note: Liabilities include NPLs. GDP forecasts for 2024Q1 are estimated values. Dashed lines are the average values of the related series for 2012-2019.

Chart III.1.6: Breakdown of Households' Financial Liabilities (%)



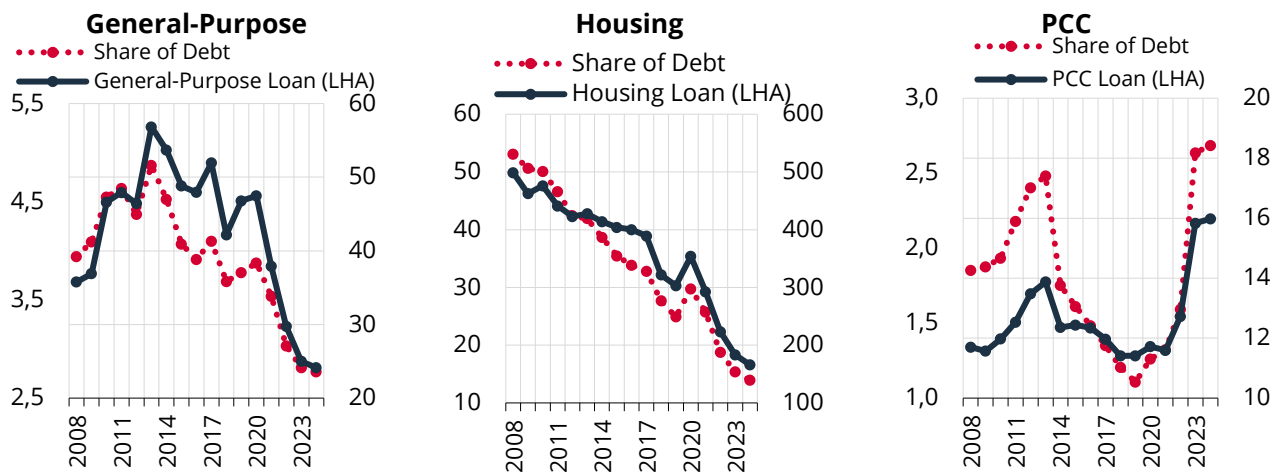
Last Observation: 03.24

The ratios of housing and general-purpose loans to GDP are still below their historical averages (Chart III.1.5). The share of housing loans in retail loans, which was approximately 37% in the 2012-2019 period, declined to 16%. While the share of general-purpose loans remained close to the period average, the share of PCC increased rapidly and reached 44% (Chart III.1.6).

While the per capita debt and ratio of per capita debt to income in PCC increase, the same items have been decreasing in other consumer loans.

The downward trend observed in real per capita debt amount of general-purpose and housing loans since 2013, which constitute a significant portion of household indebtedness, continued in the first quarter of 2024 (Chart III.1.7). Debt stemming from housing and general-purpose loans, which are utilized at fixed and low interest rates, decreased in real terms amid the high inflation environment. The structure of individuals' debts in proportion to their incomes is considered to limit risks to household repayment ability. However, it should be noted that this assessment is based on average income and thus, may vary according to borrowers' income profile and income distribution. On the other hand, the per capita debt balance and its share in per capita income have been on an uptrend since 2020. The PCC debt has a short-term nature and deferring the credit card debts at high interest rates may strain households' debt service capacity.

Chart III.1.7: Per Capita Debt Balance in Retail Loans and Share of Per Capita Debt in Disposable Income (% , Inflation-Adjusted TRY Thousand)



Sources: BRSA, TURKSTAT

Last Observation: 03.24

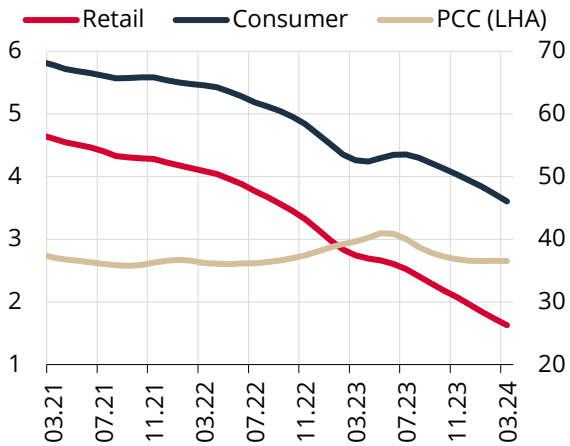
Note: Dashed lines indicate the share of debt in per capita disposable income. Loan per capita is calculated by dividing the total credit balance in the related item by the number of borrowers, singularized by banks. Per capita loan amount is deflated by CPI. Real income is assumed to have remained unchanged in 2024. Per capita disposable income from the Household Consumer Tendency Survey is calculated by subtracting inter-household transfers (including alimony) and tax payments from income from salaries, wages, rents, etc.

Average maturities of retail loans have been shortening led by general-purpose loans and PCC.

Shortening in maturities of total retail loans continues due to ongoing maturity constraints in general-purpose loans and the rise in the share of PCC, which is a short-term loan (Chart III.1.8). The average maturity of retail loans, which were abundantly extended with long maturities and grace periods, had approached 60 months during the pandemic, but decreased to 26 months in the following period. Meanwhile, macroprudential measures taken in vehicle and general-purpose loans are also considered to have been effective in the shortening in maturities (Chart III.1.9).

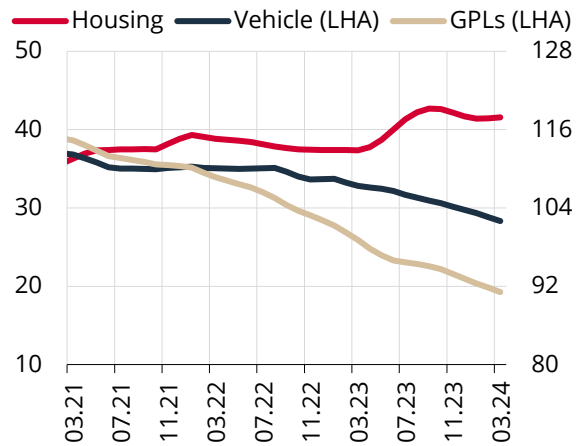
In addition to high interest rates, the shortening in the average maturity of retail loans implies an additional tightening in households' financial conditions, which may lead to an increase in the credit risk of individuals with debt/income mismatch.

Chart III.1.8: Average Maturity in Retail Loans (Months)



Source: CBRT

Chart III.1.9: Average Maturity in Sub-Categories of Retail Loans (Months)

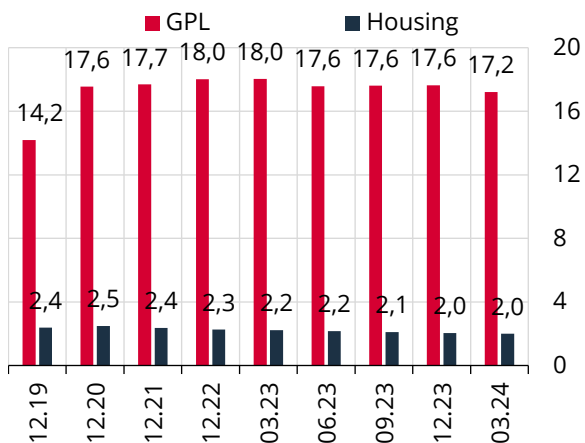


Last Observation: 03.24

The number of housing and general-purpose loan borrowers has been declining moderately.

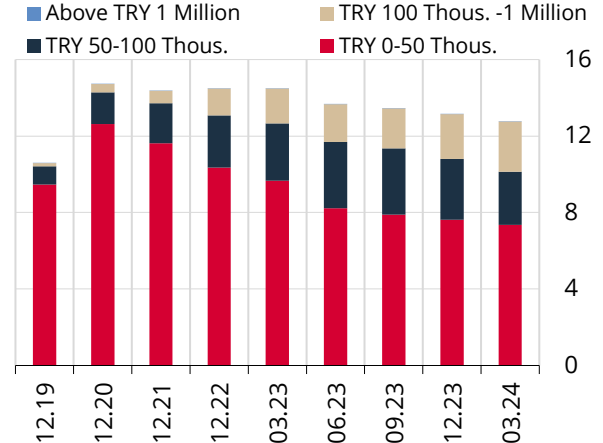
Due to the rise in general-purpose loan interest rates and macroprudential measures, the number of borrowers has decreased (Chart III.1.10). This decrease mainly took place among those with debts below TRY 100 thousand. In the current Report period, the number of people with debts up to TRY 100,000 decreased from 11.4 million to 10.1 million, while the number of people with debts above TRY 100,000 increased from 2.1 million to 2.6 million (Chart III.1.11). In the housing loan market, the relatively high course of interest rates as well as the 75% reduction in the loan-to-value ratio for those who will buy a home that is not their first, and the increase in the risk weight for these loans from 35% to 150% are considered to have been effective in the decline in the number of people with housing loan debts.

Chart III.1.10: Number of People with Consumer Loan Balance (Million People)



Sources: Risk Center, CBRT Last Observation: 03.24
 Note: Reports the number of individual general-purpose and housing loan borrowers in the banking sector. General-purpose loans include overdraft accounts (ODA).

Chart III.1.11: Per Capita Debt by Amount in General Purpose Loans (Million People)

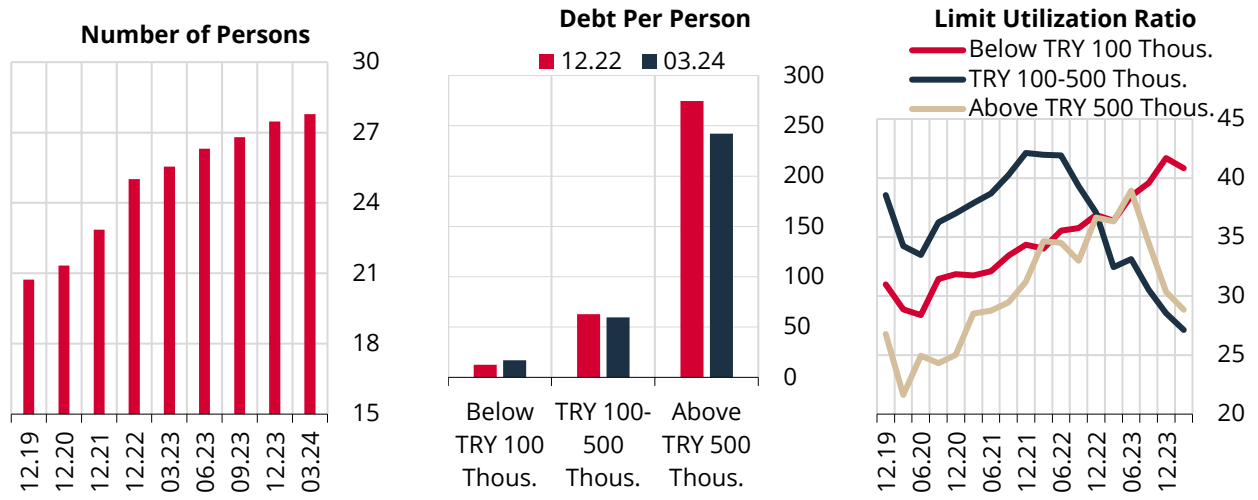


Sources: Risk Center, CBRT Last Observation: 03.24
 Note: Amount brackets show the outstanding general-purpose loan debt amounts per person at all banks. The number of people is the total number of people in the relevant bracket. ODA and general-purpose loans classified as NPLs are excluded.

While the number of PCC users is growing, the limit utilization ratio of cards with high limits is decreasing.

The number of active credit card users approached 28 million. In this period, individuals have significantly increased their credit card balances and limits, whereas in high credit card limit groups with more significant limit increases, the rise in balances has been slower than the limit increases (Chart III.1.12).

Chart III.1.12: Number of People Actively Using PCC, Card Balance and Limit Per Customer, Card Limit Utilization Rate (Million People, TRY Thousand, %)



Sources: Risk Center, CBRT

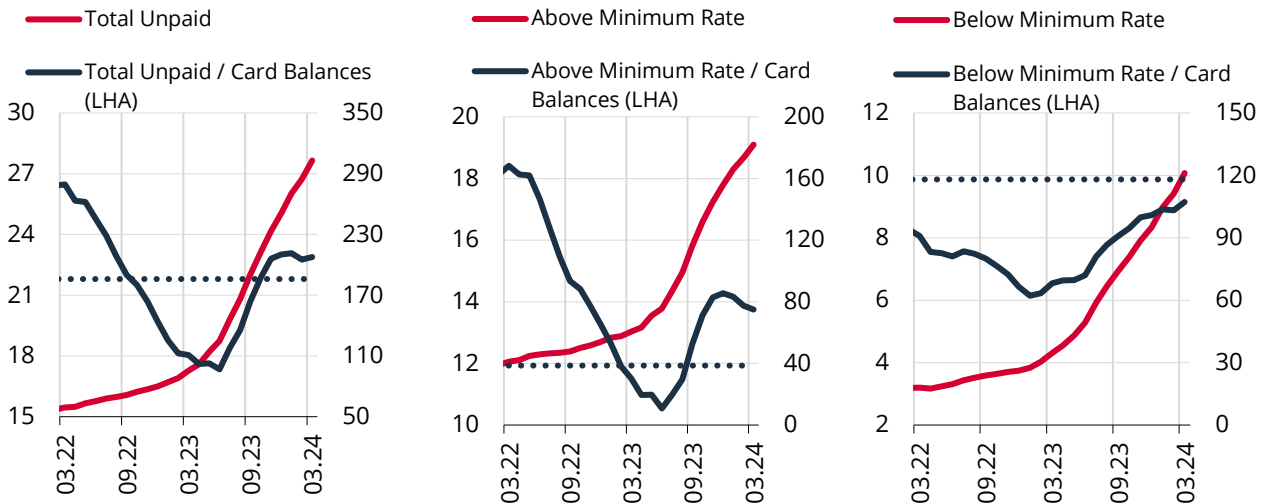
Note: People with credit card balances of zero have been excluded.

Last Observation: 03.24

While the amount of unpaid debt on credit cards has increased, the ratio of this amount to the total credit card balance has slightly exceeded its historical average.

The ratio of unpaid debt to total card balance is 13.7% on credit cards for which a payment of the minimum payment amount or more has been made, and the ratio of unpaid debt to total card balance is 9.1% on credit cards for which less than the minimum payment amount is paid (Charts III.1.15 and III.1.16). With the rise in the recent months, the ratio of unpaid debts to total PCC balance rose to 22.9%, exceeding the historical average. With increasing credit card interest rates, carrying a credit card balance and not paying the debt fully may increase the debt service burden, especially for individuals with income/borrowing mismatch.

Chart III.1.13: Personal Credit Cards with Unpaid Balances (TRY Billion, %, 3-Month MA)



Sources: Risk Center, CBRT

Last Observation: 03.24

Note: "Above Minimum Rate" refers to the total outstanding debt for PCCs paid at or above the minimum payment rate; "Below Minimum Rate" refers to the total outstanding debt for PCCs for which a payment is made below the minimum payment rate. Dashed lines show the 2012-2019 seasonal averages of the relevant ratios.

In last Report period, the share of households' balances in ODA and the share of ODA in general-purpose loans increased, while the share of cash advances with installments (CAWI) in PCC decreased (Chart III.1.14 and Chart III.1.15). The uptrend in ODA is attributed to the growth restrictions imposed on general-purpose loans excluding ODA.

Chart III.1.14: Quarterly Change in ODAs (TRY Billion, %)

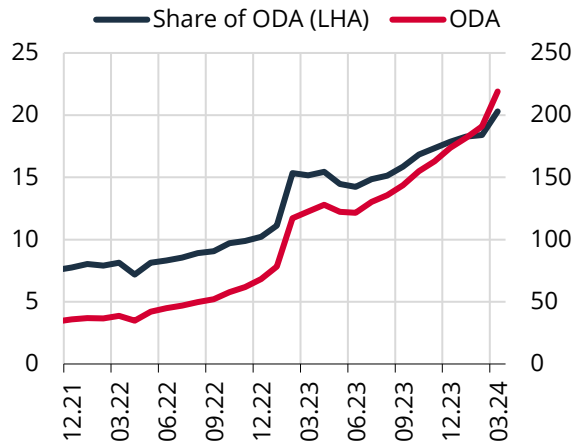
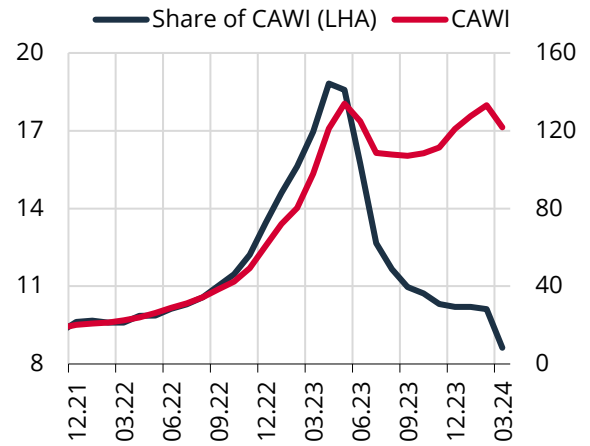


Chart III.1.15: Quarterly Change in CAWI (TRY Billion, %)



Source: BRSA

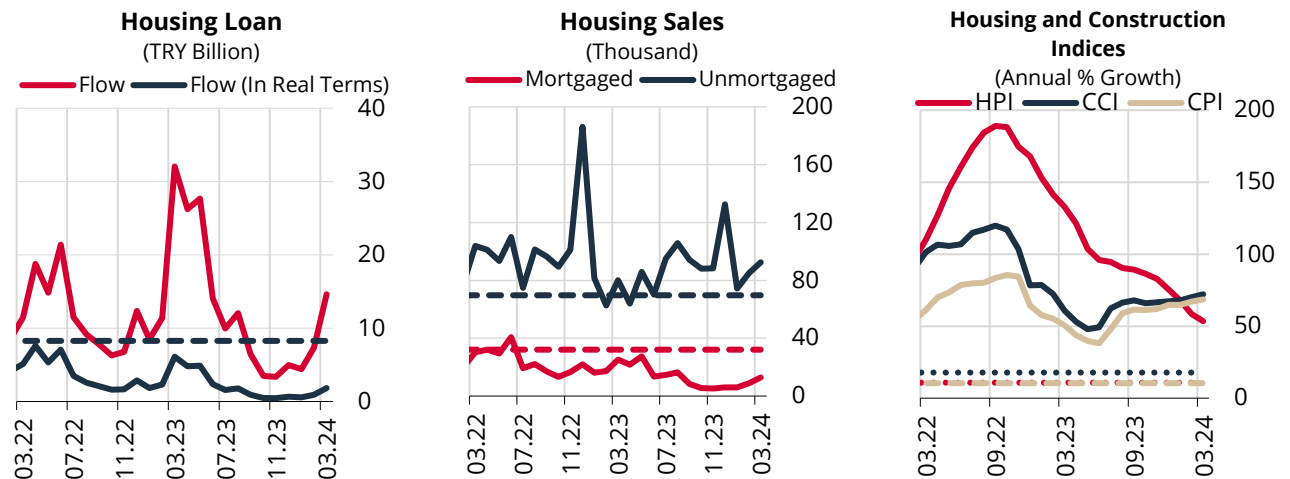
Last Observation: 03.24

Note: "ODA Ratio" is the ratio of real persons' ODA in general purpose loans, while "CAWI Ratio" is the ratio of CAWI to PCC balance.

Housing loan utilization remains below its historical average, while houses are sold mostly without mortgages.

The current level of house prices, the tightening in financial conditions and macroprudential policies for multiple home ownership have limited housing loan utilization. Therefore, the outlook for housing loan utilization and mortgaged house sales has been weak since the second half of 2022 (Chart III.1.16). Against this backdrop, the annual rate of increase in house prices continued to decelerate, falling below the increases in the construction cost index (CCI) and the CPI. In the upcoming period, individuals' disposable income is expected to improve as rent increases follow house price developments.

Chart III.1.16: Housing Loans, House Sales and House Prices



Source: CBRT

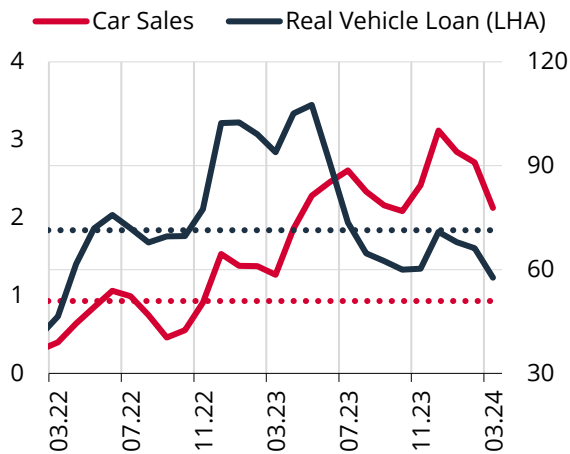
Last Observation: 03.24

Note: Housing loans are shown in terms of monthly flow disbursements. Dashed lines show the average annual index changes in the 2012-2019 period (2016-2019 period for the CCI), real housing loans extended and related housing sales. Data have been deflated by the HPI.

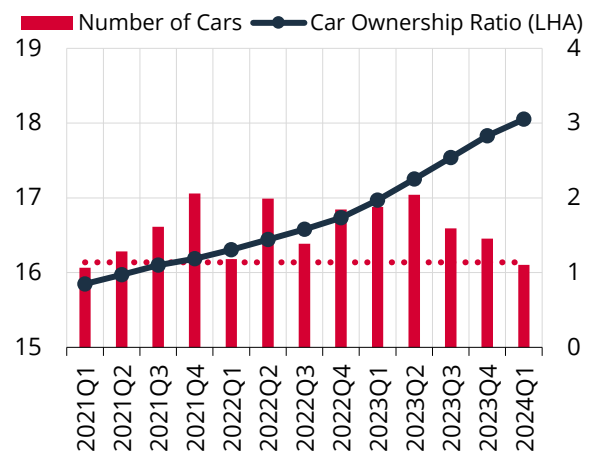
While vehicle loan utilization has been weak since the second half of 2023, increased supply of vehicles and campaigns may boost new car sales.

Sales of new cars are well above their historical averages; however, loan utilization has slowed down (Chart III.1.17). At the end of 2023 and in the first quarter of 2024, vehicle sales campaigns by firms as well as the normalization in vehicle supply have played a decisive role in buoyant demand for new vehicles. On the other hand, the lack of a price update in the loan-to-value ratio regulation, which is applied gradually according to vehicle prices, significantly slowed down the use of vehicle loans. While the number of transferred vehicles has been decreasing since the third quarter of 2023, the vehicle ownership rate continued to increase and reached 18% (Chart III.1.18). The slowdown in second-hand vehicle transfers is also associated with the favorable conditions in new vehicle sales.

Chart III.1.17: Vehicle Loans and New Car Sales (Thousand Units, TRY Billion, 3-Month MA) **Chart III.1.18: Number of Used Car Sales and Car Ownership Ratio** (Million Units, %)



Sources: ODD, BRSA Last Observation: 03.24
 Note: Data for monthly flow vehicle loans of banks and financing companies, and new car sales have been used. Deflated by the vehicle prices sub-index of the CPI. Dashed lines show the average real vehicle loan disbursements and car sales between 2012 and 2019.



Source: TURKSTAT Last Observation: 2024 Q1
 Note: Used car sales refer to vehicles whose ownership has changed hands once or more through public notaries. Shows the quarterly sums of the number of vehicles changing hands. Dashed line shows the average number of used car sales amounting to 1.1 million between 2012 and 2019 in quarterly periods. Car ownership ratio is the ratio of cars registered in the traffic to the total population.

The weight of TL-denominated assets and non-deposit financial instruments in households' financial asset composition continues to increase.

The ratio of household assets to GDP increased by 4 percentage points to 46% over the last 1-year period. The uptrend in the ratios of TRY savings deposits, equity and fund investments to GDP continued (Table III.1.2). In this period, when the shares of TRY deposits and non-deposit financial instruments increased, the share of FX-protected products in household assets has been decreasing. The rise in the weight of TRY in household asset composition is expected to continue on the back of high levels that deposit rates have reached in real terms after policy rate hikes as well as the improvement in exchange rate expectations.

The share of households' holdings in equities, IPS and mutual funds in their total financial assets has exceeded 30%.

In recent years, the tendency of households towards the equity market has been strong, while the number of investors holding portfolios has been flat since the last quarter of 2023. The number of equity investors, which was 7.6 million at the end of 2023, stood at 8.2 million in the current period. In the same period, the real index of household equity portfolio increased slightly.

Table III.1.2: Household Financial Assets

	03.23		09.23		03.24		3-Month Growth (Annualized)
	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	TRY Billion	Ratio to GDP	
Total Assets	7,157	41.8	10,613	46.9	12,901	46.0	66.6
TL Savings Deposits	1,759.4	10.3	1,833.6	8.1	3,197.7	11.4	42.5
KKM and DDM	1,250.6	7.3	2,495.5	11.0	1,617.2	5.8	-46.3
FX Savings Deposits	1,553.2	9.1	2,091.8	9.2	2,513.6	9.0	75.2
- (Billion USD)	81.1		76.7		78.1		21.4
Precious Metal Deposits	572.2	3.3	707.9	3.1	1,038.4	3.7	137.4
- (Billion USD)	29.9		25.9		32.3		64.5
Bonds and Bills	189.9	1.1	250.4	1.1	308.1	1.1	21.4
Mutual Funds	886.8	5.2	1,436.6	6.3	2,318.5	8.3	251.0
Pension Mutual Funds	401.7	2.3	593.3	2.6	802.8	2.9	99.5
Other Mutual Funds	485.0	2.8	843.3	3.7	1,515.7	5.4	390.8
Equity Securities	857.7	5.0	1,652.2	7.3	1,801.6	6.4	146.5
Repo	11.8	0.1	16.2	0.1	23.5	0.1	151.2
Currency in Circulation	75.1	0.4	129.3	0.6	82.6	0.3	42.8

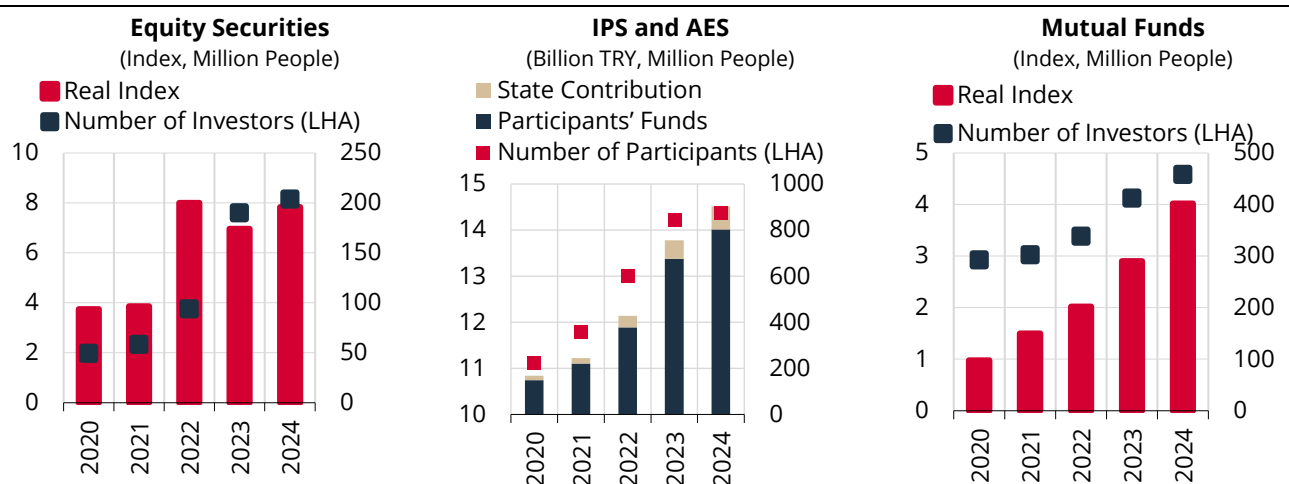
Sources: CBRT, MKK, EGM

Note: Month-end exchange rates have been used. Pension mutual funds show the total funds of participants in the Voluntary Participation System (IPS) and the Auto Enrollment System (AES), minus the state contribution. Deposits refer to resident real persons' deposits. Estimated value for 2024Q1 GDP data.

Funds in the Voluntary Participation System (IPS) and Automatic Enrollment System (AES), which are among the major asset items of households, have been on a moderate rise. Similarly, the number of participants in the pension system exceeded 14 million in this Report period. Households developing a habit of accumulating savings in long-term instruments is expected to contribute to financial stability.

The number of mutual funds and investors continues to increase steadily. The number of investors in mutual funds reached approximately 4.5 million as of April 2024, while the real index value of mutual funds increased significantly. Mutual funds, which amounted to TRY 850 billion in the last quarter of the year, exceeded TRY 1.6 trillion as of April 2024, while funds appreciated by 52% percent in real terms in this period (Chart III.1.19).

Chart III.1.19: Changes in Households' Assets other than Deposits



Sources: MKK, BIST, EGM

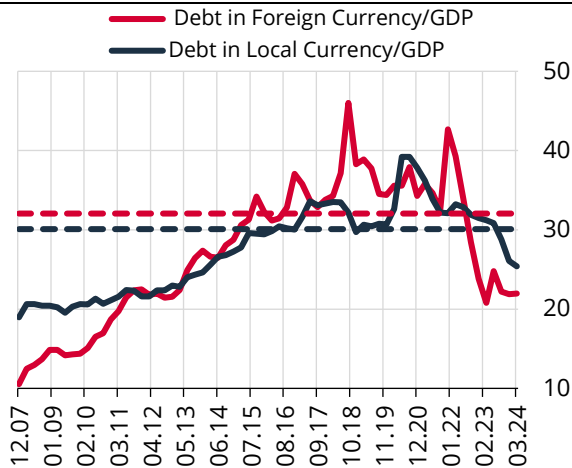
Note: The real index for equities and mutual funds is CPI-adjusted and indexed to 100 in January 2021. IPS and AES data are in aggregated terms, and the number of participants has been singled out. Stocks and mutual funds are 3-month MA. Last Observation: 04.24

III.2 Corporate Sector Developments

The ratio of corporate sector debt to GDP is on the decline.

The ratio of corporate sector firms' Turkish lira and FX debts to GDP declined considerably. As of the first quarter of 2024, the corporate sector's debt ratio was 47.4%, significantly below both its historical average and the average of peer countries (Charts III.2.1 and III.2.2).

Chart III.2.1: Debt/GDP Ratio of the Corporate Sector (%)

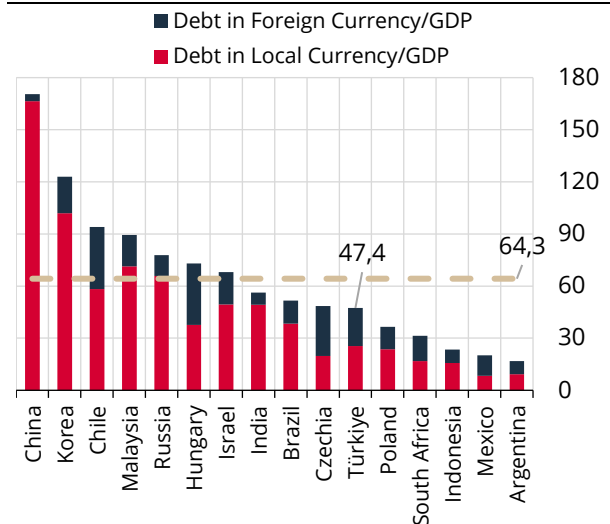


Sources: CBRT, IIF

Last Observation: 03.24

Note: Dashed lines denote the historical average of the relevant ratio between 2012Q4 and 2021Q4. Imputed value is used for the GDP value for 2024Q1. Assumptions are employed for the last two quarters to harmonize with other country data sources.

Chart III.2.2: Debt/GDP Ratio of Corporate Sector (%)



Source: IIF

Last Observation: 03.24

Note: The countries in the chart are ranked from larger to smaller according to Total Debt/GDP ratios for 2024Q1. The dashed line shows the average of peer countries' indebtedness in 2024Q1.

Monetary policy rate hikes and macroprudential measures led to a tightening in financial conditions, and the ratio of corporate sector debt to GDP continued to decline (Table III.2.1). The financing that firms obtained through bond issuances also increased slightly, despite having a very limited share in borrowing. While the share of firms' Turkish lira loans in GDP decreased, FX loan utilization increased somewhat due to relatively low FX financing costs. The decrease in Turkish lira indebtedness was driven by rising Turkish lira financing costs and regulations restricting loan growth. On the other hand, low FX borrowing costs relative to Turkish lira borrowing, and the improvement in exchange rate expectations played a decisive role in the rise in FX indebtedness. The increase in FX indebtedness is expected to be on a milder track due to the 2% growth limit introduced for FX loans on 23 May 2024.

The financial leverage ratio of the corporate sector continues to hover below its historical average.

The ratios of the corporate sector's debts and assets to GDP dropped slightly. The financial leverage ratio, which shows the ratio of corporate sector debts to assets, increased somewhat due to upward exchange rate movements and growing financing costs, after hitting its lowest historical level in September 2023 (Chart III.2.3). The relatively low level of the corporate sector's financial leverage ratio enhances firms' resilience against tighter financial conditions and increased financing costs.

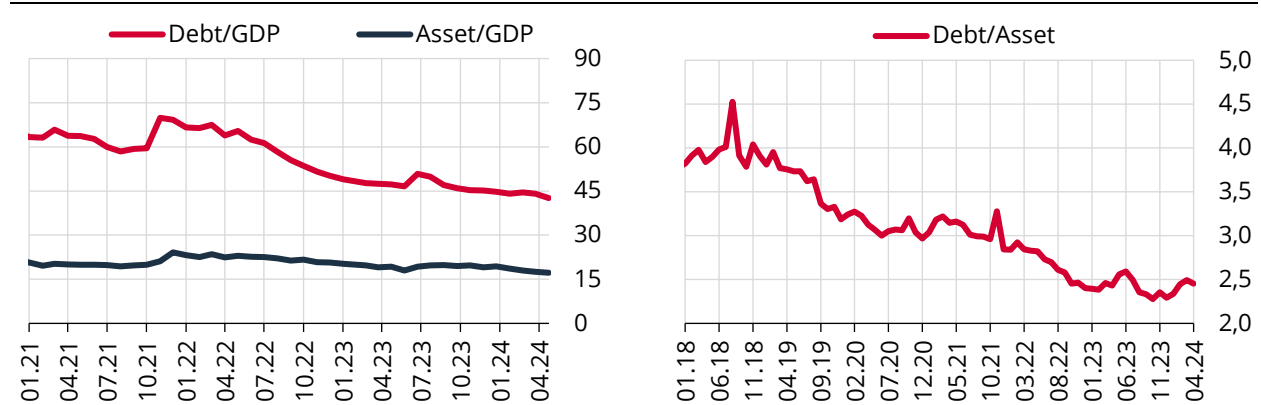
Table III.2.1: Financial Liabilities of the Corporate Sector

	02.23		09.23		02.24		Annual Growth (%)
	Billion TRY	Ratio to GDP (%)	Billion TRY	Ratio to GDP (%)	Billion TRY	Ratio to GDP (%)	
I. Domestic Loans (i+ii)	6,070.2	37.0	7,983.0	35.3	9,143.6	33.6	50.6
i. Turkish Lira	3,985.3	24.3	5,051.0	22.3	5,632.2	20.7	41.3
A.Bank	3,728.4	22.7	4,709.8	20.8	5,232.2	19.2	40.3
B.NBFI	190.8	1.2	263.0	1.2	307.7	1.1	61.3
C.Bonds Issued	66.1	0.4	78.2	0.3	92.3	0.3	39.7
ii. FX (FX-indexed loans included)	2,084.8	12.7	2,932.0	13.0	3,511.4	12.9	68.4
<i>USD Equivalent (A+B+C)</i>	110.3	0.7	107.1	0.5	112.8	0.4	2.3
A.Bank	104.9	0.6	102.0	0.5	107.8	0.4	2.8
B.NBFI	4.7	0.0	4.5	0.0	4.5	0.0	-4.6
C. Past-Due Loans Taken Over by SDIF	0.7	0.0	0.5	0.0	0.5	0.0	-26.2
II. External Loans	1,940.0	11.8	2,750.9	12.2	3,172.2	11.7	63.5
<i>USD Equivalent</i>	102.6		100.5		101.9		-0.7
III. Bonds Issued Abroad	174.5	1.1	226.3	1.0	282.5	1.0	61.9
<i>USD Equivalent</i>	9.2		8.3		9.1		-1.7
Total Financial Debt (I+II+III)	8,184.7	49.9	10,960.2	48.4	12,598.3	46.3	53.9
<i>Total FX Loans (Billion USD)</i>	222.2		213.9		223.8		0.7

Sources: CBRT, BRSA

Last Observation: 02.24

Note: The "ratio" columns show the ratio of the relevant items to GDP. The last column denotes the annual change between February 2023 and February 2024.

Chart III.2.3: Debts and Assets of the Corporate Sector (% , Ratio)

Source: CBRT

Last Observation: 04.24

Note: Debts include the corporate sector's domestic and external loans, leasing, factoring debts and bond issuances. Assets include Turkish lira and FX deposits and securities, but direct capital investments abroad and export receivables are not included. GDP values used in calculations are annual estimated values. The latest GDP data is the CBRT's estimate. End-month foreign exchange buying rate is used in calculations.

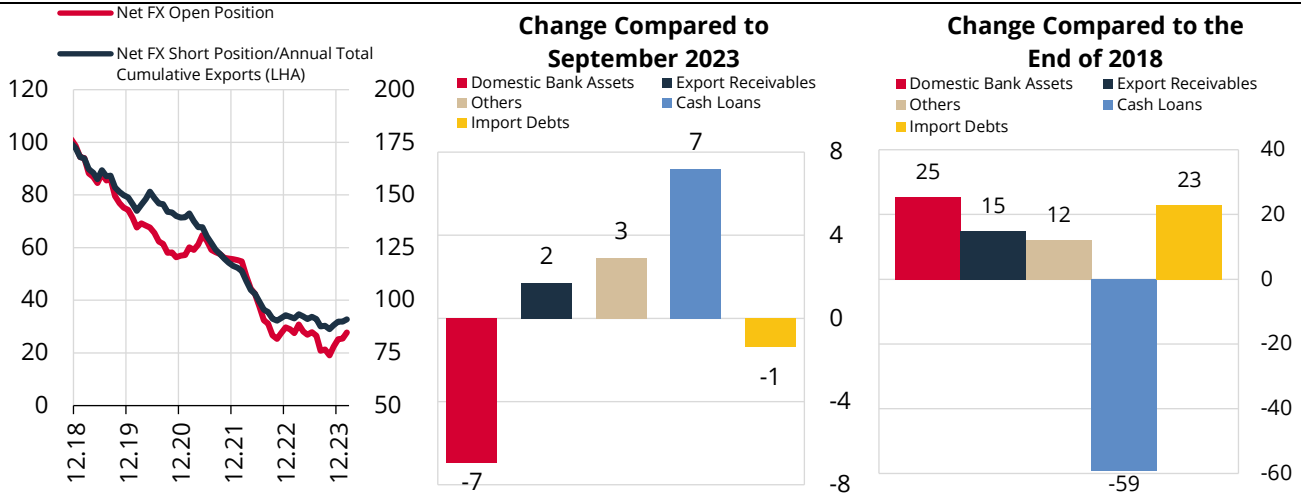
The improvement in the net FX short position of the corporate sector continues.

The decline in the corporate sector's net FX short position observed since 2018 has been replaced by an upward trend since September 2023. This upward trend observed in the current Report period was driven by the fall in FX deposits and the rise in FX loans.

As for the FX position trend of the corporate sector in the long term, the net short position dropped by USD 89 billion to USD 84.8 billion as of February 2024 from USD 173 billion at the end of 2018. Compared to end-2018, the net short position decreased by 51%. This decrease was mainly due to the strong increase in

FX deposits of domestic banks and export receivables as well as the decline in FX loans taken out from domestic banks. While the ratio of the net FX short position to 12-month exports remained flat at around 30%, the capacity of export revenues to cover the short position strengthened compared to the end of 2018 (Chart III.2.4).

Chart III.2.4: Net FX Position of the Corporate Sector (Billion USD)

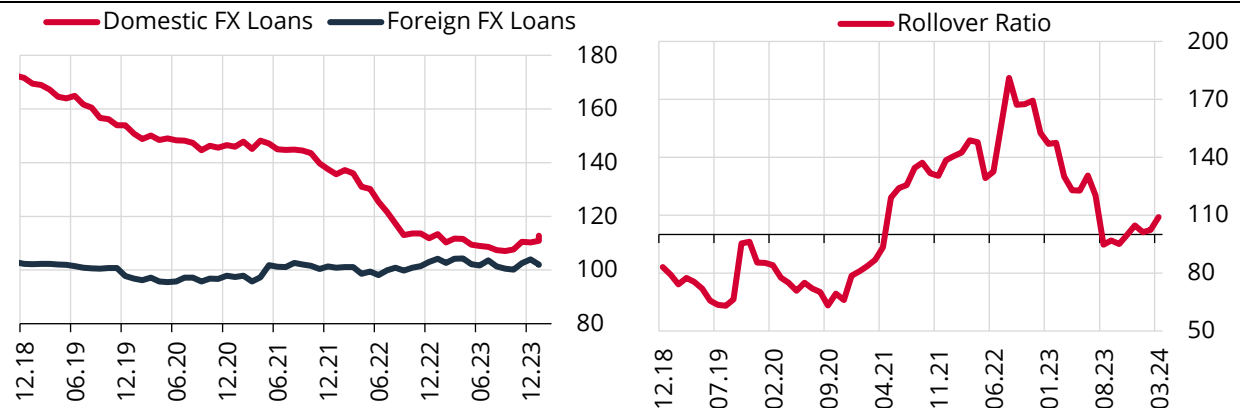


Source: CBRT Last Observation: 02.24 Source: CBRT Last Observation: 02.24 Source: CBRT Last Observation: 02.24
 Note: Export values are the sum of 12-month cumulative amounts. Values in the chart show the change in net FX short position and the breakdown of this change. The change in the "Other" item covers the change in the assets with banks abroad, securities and direct capital investments abroad.

While domestic FX loan demand of firms is reviving, they continue to access external funding.

In the current Report period, corporate sector firms' demand for domestic FX loans has increased amid high Turkish lira financing costs, the growth limit for Turkish lira commercial loans, and improved exchange rate expectations. Despite rising interest rates in global markets and tight monetary conditions, firms continue to have solid access to external financing and their external debt rollover ratios remain above 100% (Chart III.2.5).

Chart III.2.5: Indicators of Corporate Sector's FX Loans and External Debt Rollover (Billion USD, %)

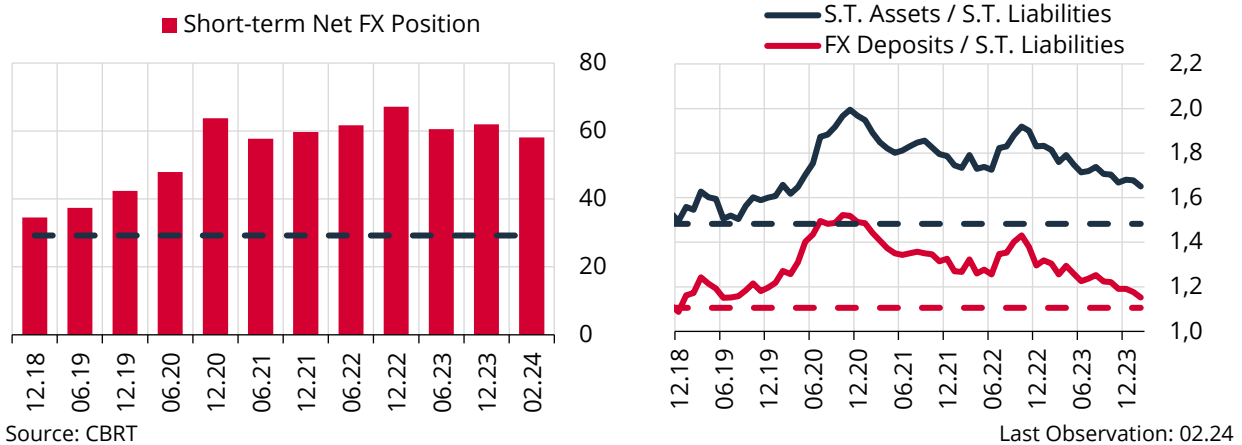


Source: CBRT Last Observation: 02.24 Source: CBRT Last Observation: 03.24
 Note: External debt rollover ratio shows the ratio of the cumulative external borrowing over a 12-month period to the debt repayment in the same period.

Firms have a high capacity to cover short-term FX liabilities.

The short-term net FX position of firms was USD 58.1 billion as of February 2024. Indicators of firms' capacity to cover shorter-than-one-year FX debt continue to hover above historical averages. These liquidity indicators show that corporate sector firms are resilient against possible exchange rate and external financing shocks (Chart III.2.6)

Chart III.2.6: Indicators of Corporate Sector's Exchange Rate Risk (Billion USD, Ratio)



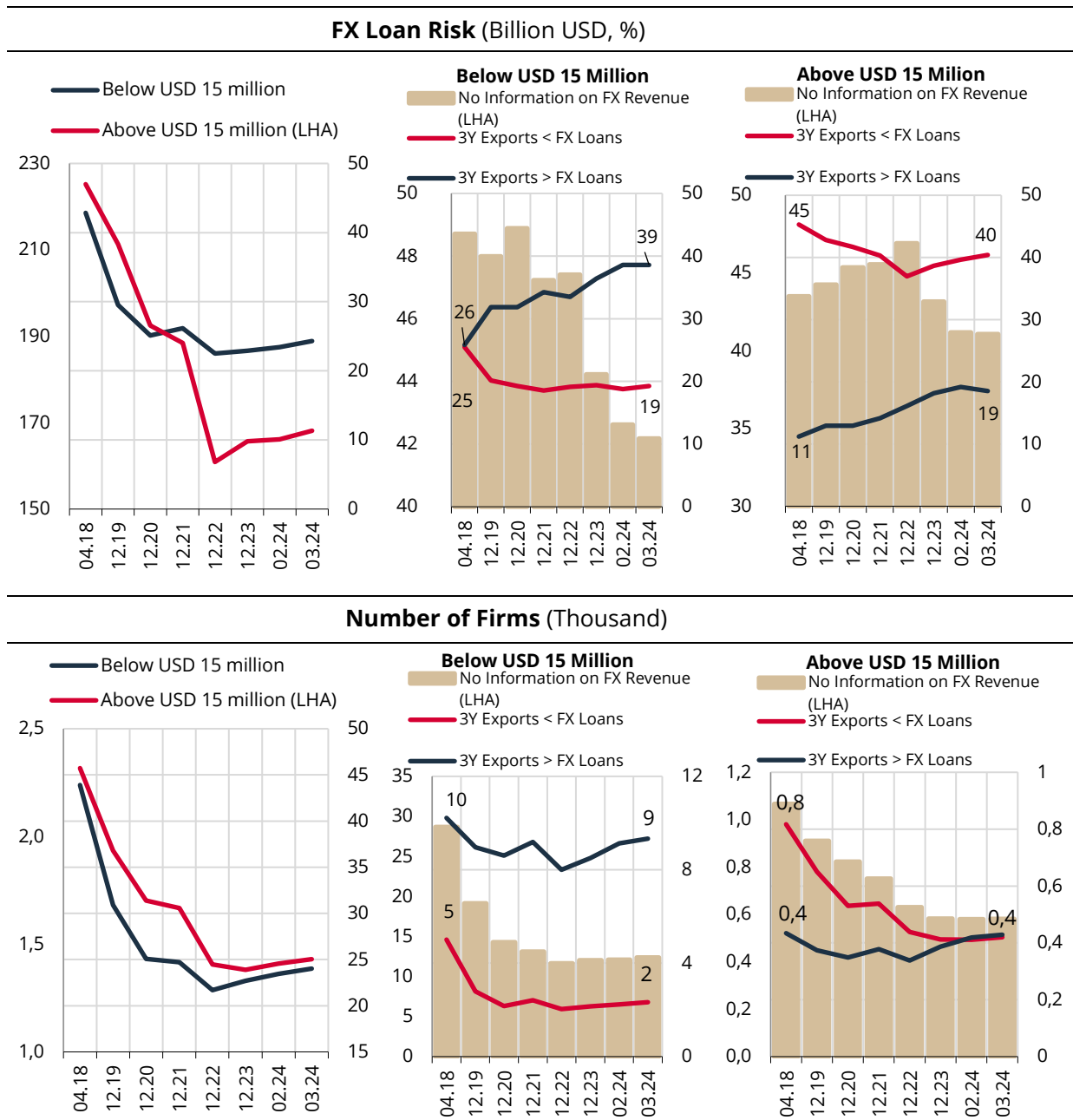
Note: FX deposits are the total amount of FX deposits held by resident corporate sector firms at domestic and foreign financial institutions. Net FX position calculations include FX-protected deposits. Dashed lines show the historical average of the relevant data between 01.12 and 12.21. The abbreviation S.T. stands for "short-term".

Firm-based indebtedness indicators show that the capacity to cover FX loan debt with export revenues continues to improve.

Following the 2018-dated regulation linking FX loan utilization of firms to their export revenues for the last three years, among the firms with an FX loan amount below USD 15 million, the share of firms with three-year export revenues above their FX loans rose to 39% from 26%. Among the firms with an FX risk of USD 15 million or above that are not subject to any restrictions from this regulation, the share of those with three-year export revenues above their FX loan debt also continues to increase as well. As of March 2024, among the firms with no accessible FX revenue data, the share of those with FX loan debt below and above USD 15 million dropped to 42% and 41%, respectively. Besides, the foreign trade data that the calculation of firms' FX revenues is based on covers exports of goods, and these firms are likely to generate FX revenues through exports of services.

The number of firms with FX loans declined until 2023 across both the firms with an FX loan amount below USD 15 billion and those with an FX loan amount above USD 15 million, while the number of firms utilizing FX loans has increased somewhat in the recent period. In both groups of firms, the number of firms whose last three years of export revenues are below their FX risk is decreasing, while the number of firms with an export revenue is increasing. These indicators suggest that the capacity of firms' export revenues to cover their FX loan debt continues to improve. Moreover, the FX loans-driven deterioration in the asset quality outlook after the exchange rate shock in 2018 has urged banks to act more prudently in the current period. Accordingly, among the firms with an FX loan amount above USD 15 million that are not affected by the abovementioned regulation, banks have provided loans predominantly to those firms earning FX revenue (Chart III.2.7). In addition to the regulation linking FX loan utilization to export revenues, the monthly growth limit for FX loans introduced in May 2024 is also expected to contribute to the management of risks arising from FX loan utilization.

Chart III.2.7: FX Loan Balances and Number of Firms (Billion USD, Thousand)



Sources: Risk Center, CBRT, Ministry of Trade

Last Observation: 03.24

Note: Export revenues are the sum of the firm's year-end revenues from exports of goods over the last three years as of the relevant date. FX loan debt includes loans extended from abroad via domestic banks. Direct loans used from abroad are not included. Firms that do not have export revenue records in the database for the last three-year period before loan utilization are classified as firms with no info on FX revenues. FX loan value calculations are based on the average USD buying rate in the relevant month.

While the share of Turkish lira deposits in the corporate sector's financial asset composition is growing, that of KKM accounts is decreasing.

The upward trend in Turkish lira deposits of firms continues, while KKM accounts decrease gradually, accompanied also by a decline in FX deposits since April. With the tightening in financial conditions becoming more pronounced, firms started to meet their requirements with their financial assets, especially as of the final quarter of 2023. Having been on an upward trend until 2023, the ratio of financial assets to GDP fell somewhat in the last two quarters. However, financial assets of firms are assessed to be still

significantly above the levels of the previous year and can serve as a buffer for some firms against tight financial conditions (Table III.2.2).

FX deposits of firms are on the decline following the rise in Turkish lira deposit rates after January 2024 (Chart III.2.8). While the share of KKM in total deposits continues to decline after August 2023, that of Turkish lira deposits has reached levels similar to those of FX deposits through mild increases. Firms' preferences for FX deposits have weakened following the policy rate hike, Turkish lira deposit rates exceeding inflation expectations, and the improvement in exchange rate expectations. However, foreign trade payments and FX loan developments will also play a decisive role in the FX commercial loan volume in the upcoming period.

Table III.2.2: Financial Assets of the Corporate Sector

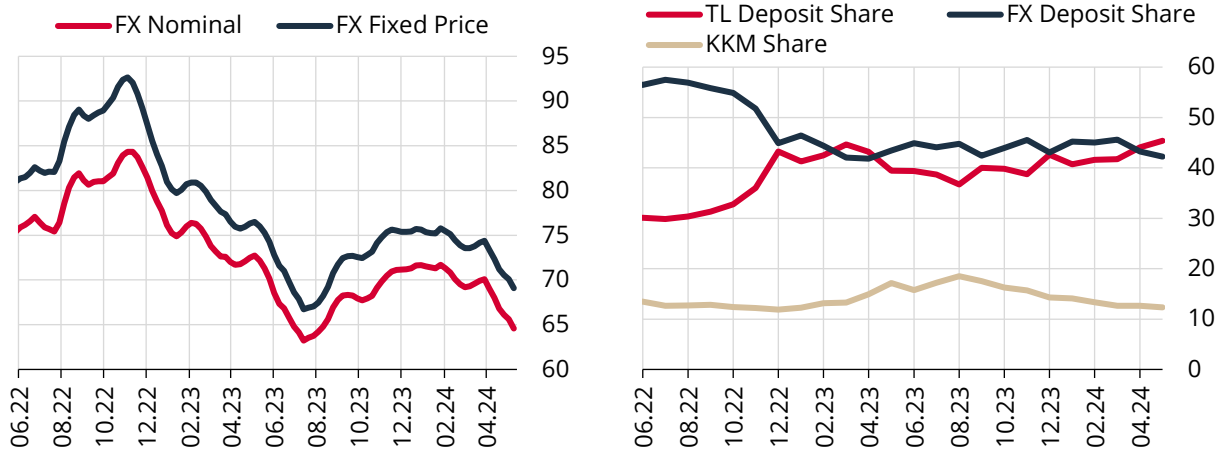
	03.23		09.23		03.24		Annual Growth
	Billion TRY	GDP Share (%)	Billion TRY	GDP Share (%)	Billion TRY	GDP Share (%)	
Total Assets	3,490	20.4	4,742	21.0	5,383	19.2	54.3
Turkish Lira Commercial Deposits	1,963	11.5	2,654	11.7	2,842	10.1	44.8
KKM Accounts	451	2.6	809	3.6	661	2.4	46.7
FX Commercial Deposits	1,424	8.3	1,958	8.7	2,384	8.5	67.4
(Billion USD)	74		72		74		-0.4
Public Debt Instruments	39.0	0.2	44.0	0.2	48.6	0.2	24.6
Private Sector Debt Instruments	63.2	0.4	85.7	0.4	108.5	0.4	71.7
Total Assets / GDP	20.4		21.0		19.2		-1.2

Source: CBRT

Last Observation: 03.24

Note: GDP share shows the ratio of the relevant item to GDP. The last column denotes the 12-month change between March 2023 and March 2024. The "Total Assets / GDP" value in this column is the difference between the two ratios in the current Report period.

Chart III.2.8: Commercial Deposits (Billion USD, %)



Source: CBRT

Last Observation: 10.05.2024

Source: CBRT

Last Observation: 10.05.2024

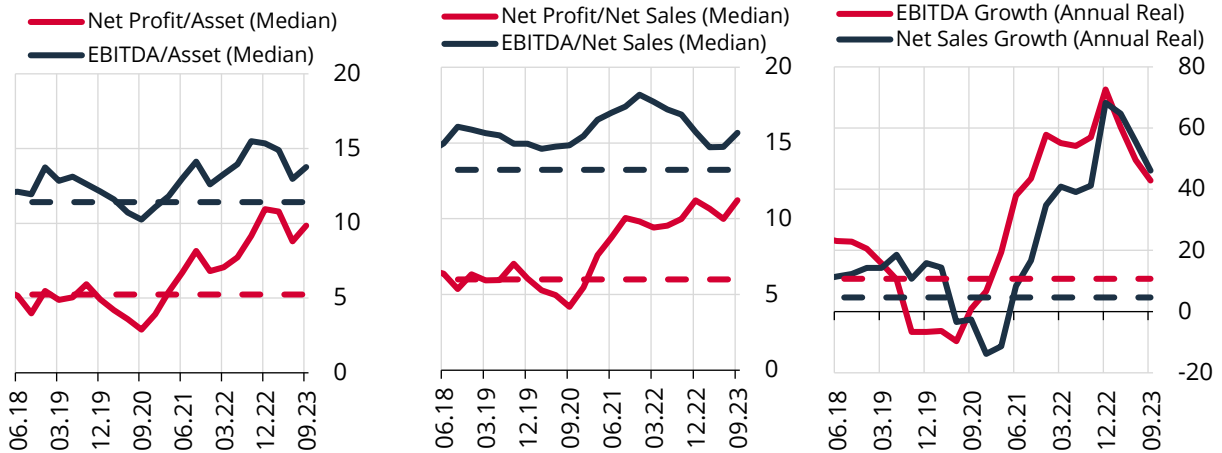
Note: In the FX deposit constant price assumption, the EUR/USD parity and ounce gold values are fixed to the exchange rate on 30.07.2020 and the values on the chart are the four-week moving averages. As of 10.05.2024, the shares of Turkish lira deposits, FX deposits, and KKM were 45.4%, 42.3%, and 12.4%, respectively.

Profitability indicators of publicly traded firms continue hovering above historical averages.

Although firms' profit margins have decreased to some extent since early 2023, they remain above historical averages (Chart III.2.9). The growth trend in firms' deflated annual net sales as well as in earnings before interest, taxes, depreciation and amortization (EBITDA) continued from the second quarter of 2021 to the second quarter of 2023 on the back of favorable financing conditions, followed by a partial fall due

to tightened financial conditions. Despite this fall, the growth in these indicators is above historical averages.

Chart III.2.9: Profitability Indicators of BIST Firms (%)



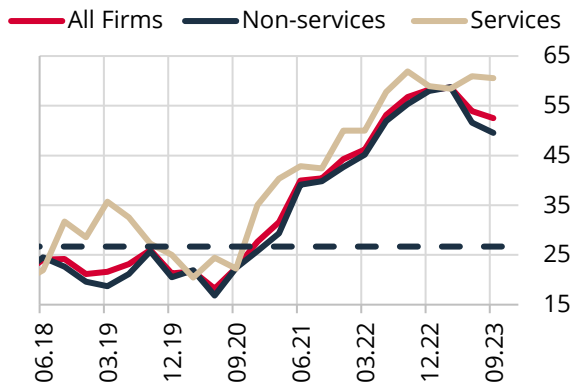
Source: FINNET

Last Observation: 09.23

Note: The analysis includes 298 corporate sector firms. EBITDA shows the sum of Net Operating Profit/Loss + Amortization expenses. Dashed lines show the average annual real changes in long-term EBITDA/Asset, Net Profit Margin/Asset, EBITDA, and Net Sales Income. These average values are calculated for the 2012Q1 - 2021Q4 period. The chart on the right shows the annual real change in annualized EBITDA and Net Sales Income. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

Although the share of publicly traded firms with a Net Profit/Asset ratio above 10% in total firms has declined due to increased financing costs, it is still above historical averages (Chart III.2.10). Meanwhile, the ratio of firms with an EBITDA/Asset ratio above 10% to total firms does not diverge across sectors. The fact that these ratios hover above historical averages indicates that firms operating in services and non-services sectors have high profitability in general (Chart III.2.11).

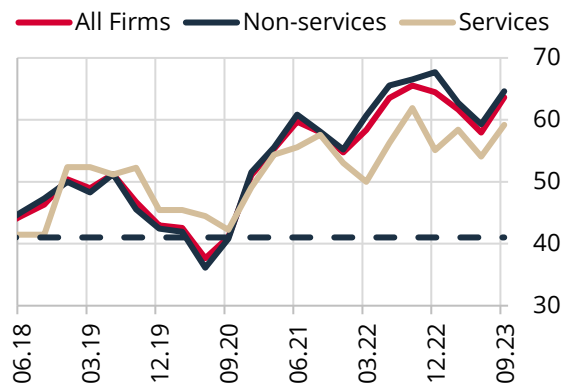
Chart III.2.10: Share of Firms with a Net Profit/Asset Ratio Above 10% (%)



Source: FINNET

Last Observation: 09.23

Chart III.2.11: Share of Firms with an EBITDA/Asset Ratio Above 10% (%)



Source: FINNET

Last Observation: 09.23

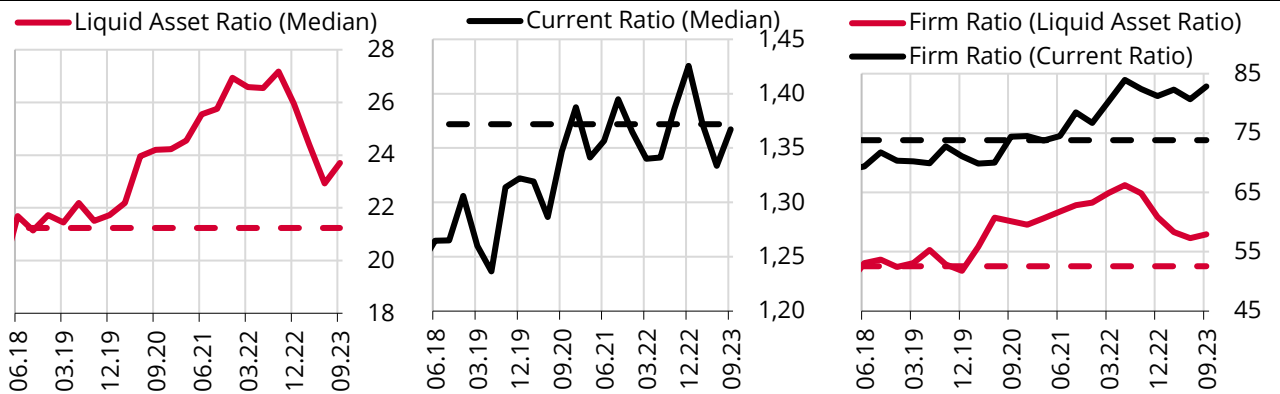
Note: The analysis covers 298 corporate sector firms. The shares of services and non-services firms are calculated using the number of firms in these sectors. The dashed line indicates the historical ratio average of firms. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

Firms listed on the BIST began to apply inflation accounting starting with their annual financial reports for the accounting period that ended on 31.12.2023.¹ In periods of high inflation, sales of firms increase due to price revisions and brought-forward demand while their costs arising from inventories and fixed assets are not revised at the same rate as inflation. This causes firms' profitability to seem nominally higher. Firms' profitability ratios are expected to diverge from normal periods after the revisions to be made in assets and equity items on firms' inflation accounting-applied balance sheets. In particular, revaluations of inventories and fixed assets will increase the asset values of firms' balance sheets, and may drive a fall in the net end-of-period profit-before-tax ratios by leading to a rise in amortization expenses of the relevant items. This fall may be larger in the manufacturing industry due to large inventories and equipment pools. On the other hand, inflation accounting will bring tax advantages to some firms. Although inflation accounting is expected to have the abovementioned general effects, the direction of its effect on an individual firm will depend on multiple valuations such as the firm's fixed asset structure, dates of entry of fixed assets and inventories into assets, inventory turnover, and equity/debt ratio.

Strong liquidity structures of publicly traded firms make them resilient against possible shocks.

The liquid asset ratio, which shows the share of liquid assets and inventories in assets, continues to hover above its historical average despite a fall in 2023. On the other hand, the current ratio, which shows firms' capacity to cover their short-term debts with current assets, maintained its upward trend until the end of 2022 despite fluctuations. As of the third quarter of 2023, the liquid asset ratio was 24% and the current ratio was above the threshold value of 1, which indicates that firms have adequate liquidity to meet their working capital requirements and cover their short-term debts. Although the share of firms with a liquid asset ratio above 20% in total firms has declined after the second quarter of 2022, 58% of firms have strong liquid assets. On the other hand, the ratio of firms with a current ratio above 1 is close to 85%. The sustained course of these ratios above the historical average shows that firms in general have adequate liquidity in the face of possible shocks and financial tightening that affect the cash flow (Chart III.2.12).

Chart III.2.12: Liquidity Indicators of Firms (%)



Source: FINNET

Last Observation: 09.23

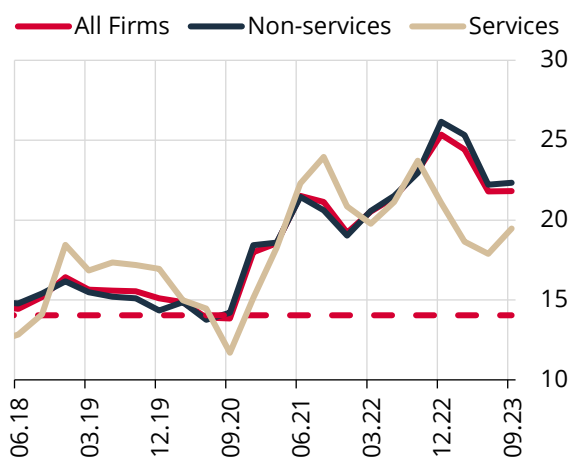
Note: Based on the latest data, 298 corporate sector firms were included in the analysis. Liquid asset ratio is calculated as the ratio of the sum of liquid assets and inventories to assets for all firms. The median liquid asset ratio is the median value of the liquid asset ratios calculated for all firms. The firm ratio gives the ratio of firms with a liquid asset ratio above 20% to the total number of firms. The median current ratio is calculated as the ratio of current assets to short-term liabilities. The firm ratio for current ratio is the ratio of firms with a current asset/short-term debt ratio above 100% to the total number of firms. Dashed lines show the historical average of the relevant data. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

¹ According to the Tax Procedure Law, income and corporate taxpayers that determine their earnings on the balance sheet basis should make an inflation adjustment in their financial statements if the increase in the price index (D-PPI) exceeds 100% over the last three accounting periods (including the financial period) and 10% in the current accounting period. Pursuant to the relevant article of the law, the inflation adjustment practice will end if and when these two conditions do not appear concurrently. In addition, taxpayers that are allowed to keep their books in currencies other than the Turkish lira will not make an inflation adjustment even though they are subject to the relevant article. Accordingly, a number of BIST firms have not applied inflation accounting.

Prospects for firms' debt repayment ability remain strong.

The EBITDA/total debt ratio, which shows the degree of firms' ability to cover debts with their operating profits, hovered above its historical averages as of the third quarter of 2023 (Chart III.2.13). The ratio of firms with an EBITDA/total debt ratio above 25% to total firms also remains well above the historical averages despite falling somewhat in 2023 (Chart III.2.14). This indicates that annual profits of almost half of firms are adequate to cover at least a quarter of their total debts. The rise in financing costs is expected to cause a slight decline in this ratio in the upcoming period.

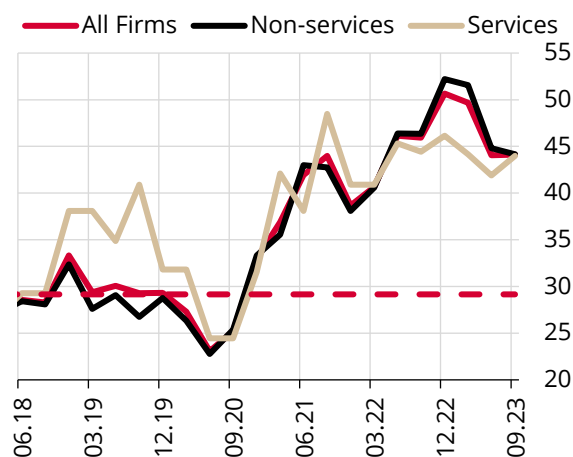
Chart III.2.13: EBITDA/Debt Ratio of BIST Firms (Median, %)



Source: FINNET

Last Observation: 09.23

Chart III.2.14: Share of Firms with an EBITDA/Debt Ratio Above 25% (%)



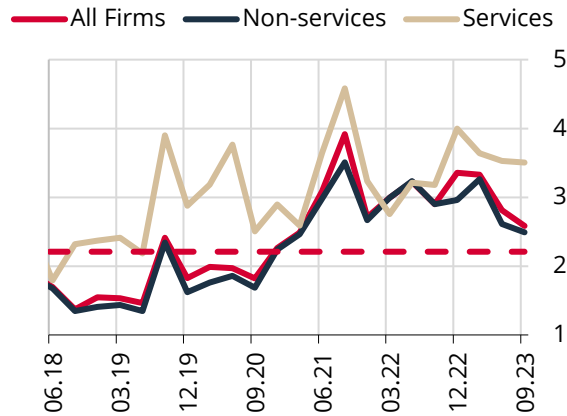
Source: FINNET

Last Observation: 09.23

Note: The chart on the left shows the median EBITDA/Total Debt ratio. The chart on the right shows the ratio of firms with an EBITDA/Total Debt ratio above 25% to the total number of firms. The analysis includes 298 corporate sector firms. Dashed lines show the historical average of the financial expenses coverage ratio for all firms. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

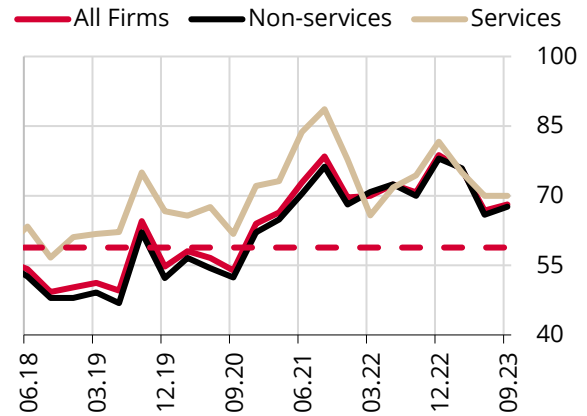
Financing costs that increased due to upward exchange rate movements and tightening steps in the third quarter of 2023 triggered a fall in the financial expenses coverage ratio (FECR) of publicly traded firms (Chart III.2.15). The year-end data for 2023, to which inflation accounting was applied, suggest that the fall in firms' FECR also continued in the last quarter of the year (Table III.2.3). Despite the decline in the FECR throughout 2023, the FECR level remains above its historical average across firms and sectors. In the current Report period, 70% of publicly traded firms have an FECR above the threshold level of 1.5. The fact that the majority of firms have an FECR above 1.5 limits the risks to the solvency of firms and asset quality of banks (Chart III.2.16).

A comparison of BIST firms' year-end balance sheet items for 2022 and 2023 revised in line with inflation accounting provides information about the performance of firms over the last one year (Table III.2.3). Accordingly, in general, profitability ratios of firms increased somewhat in 2023 compared to the previous year. On the other hand, threshold value ratios that measure the spread of the improvement in the relevant indicator point to a decline in profitability and liquidity indicators. Meanwhile, the FECR dropped compared to the previous year due to increased financing costs during the monetary tightening process in 2023. While the rise in profitability ratios of firms despite increased inflation and costs is considered a favorable development, the fall in the spread of the improvement in these indicators as well as in the FECR is closely monitored.

Chart III.2.15: BIST Firms' Financial Expenses Coverage Ratio (Median, Ratio)

Source: FINNET

Last Observation: 09.23

Chart III.2.16: Share of Firms with Financial Expenses Coverage Ratio Above 1.5 (%)

Source: FINNET

Last Observation: 09.23

Note: FECR= EBITDA/Financial Expenses. The chart on the right shows the ratio of firms with an FECR ratio above 1.5 to the total number of firms. The analysis includes 298 corporate sector firms. Dashed line shows the historical average of the financial expenses coverage ratio for all firms. Historical averages are calculated for the 2012Q1-2021Q4 period. As the financial statements for 2023Q4 were based on inflation accounting, they are analyzed in comparison with the inflation accounting-based revised financial statements for 2022Q4 in Table III.2.3. Financial statements for 2024Q1 were not completed as of the current Report period.

Table III.2.3: Profitability, Liquidity and Indebtedness Indicators of Corporate Sector Firms Based on Inflation Accounting

	2022Q4	2023Q4
Net Profit/Asset (%)	9.2	9.6
EBITDA/Asset (%)	14.0	11.7
Net Profit/Net Sales (%)	7.9	11.0
EBITDA/Net Sales (%)	12.1	13.4
Share of Firms with Net Profit/Asset > 10% (%)	35.1	30.3
Share of Firms with EBITDA/Asset >10% (%)	57.5	51.3
Liquid Asset Ratio (%)	23.7	21.9
Current Ratio	1.46	1.42
Share of Firms with Liquid Asset Ratio > 20% (%)	60.4	54.6
Share of Firms with Current Ratio > 100% (%)	85.9	84.1
EBITDA/Debt (%)	25.3	22.7
Financial Expenses Coverage Ratio (FECR)	2.4	1.95
Share of Firms with EBITDA/Debt > 25% (%)	50.5	45.0

Note: The analysis includes 271 corporate sector firms that applied inflation accounting as of 2023Q4.

IV. Financial Sector

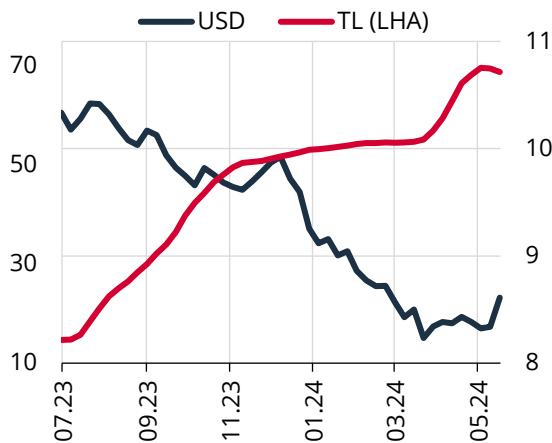
IV.1 Credit Developments and Credit Risk

IV.1.1 Credit Developments

In addition to the policy rate hike, macroprudential measures for credit growth led to an increase in Turkish lira loan rates and further tightening in financial conditions.

Macroprudential measures to support the monetary policy stance and the monetary transmission mechanism led to a notable increase in credit costs. In addition to policy rate hikes, the introduction of the rule on loan growth-based reserve requirement maintenance drove the rise in TL commercial loan rates (Chart IV.1.1). Moreover, the maximum interest rate applicable to credit card cash advances and overdraft accounts was raised to 5% per month in March 2024 and the maximum interest rate applicable to credit card shopping transactions was elevated to 4.25% in April 2024 (Chart IV.1.2). On the other hand, improved expectations for the depreciation of the Turkish lira, reduced exchange rate volatility and the widening of the expected cost gap between TL and FX commercial loan costs pushed the FX loan demand upwards. Banks' FX liquidity increased amid the decelerating TL loan growth and the reduced need for swaps as depositors started to switch from FX deposits to TL deposits, which had a downward impact on FX loan rates.

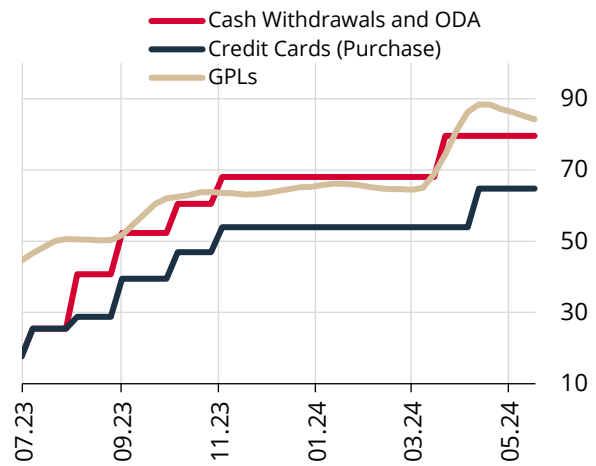
Chart IV.1.1: Commercial Loan Rates (Flow, 4 WMA, %)



Source: CBRT

Last Observation: 17.05.2024

Chart IV.1.2: General-purpose Loan and PCC Interest Rates (Flow, 4 WMA, %)



Source: CBRT

Last Observation: 17.05.2024

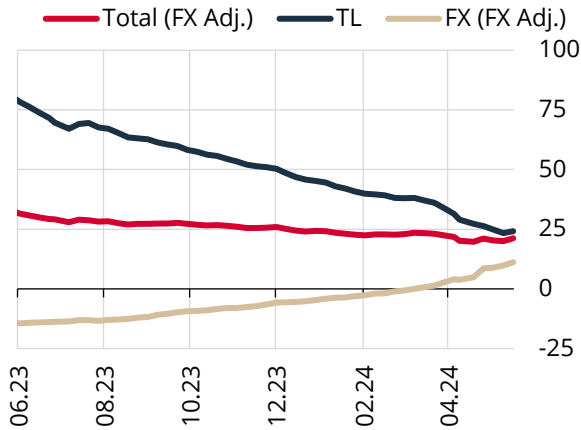
Note: TL investment and export loan rates exclude zero-interest loans, and are calculated excluding Türk Eximbank. TL and USD commercial loan rates exclude corporate credit cards, legal entity overdraft accounts and zero-interest loans, and are calculated including Türk Eximbank. To reflect the cost of the loan other than interest (excluding banking and insurance transactions taxes and resource utilization support fund taxes), the costs of all items including all kinds of fees, expenses and commissions other than interest (including fees and commissions that are not reflected as income to the bank such as appraisal, mortgage and insurance services) are also taken into account in retail loan rates. Real person overdraft account interest is excluded from general purpose loan interest.

Turkish lira commercial loan growth, which gained momentum in the first quarter of 2024, has slowed down in the wake of the policy rate hike and macroprudential measures.

Having followed a steady growth course until February, commercial loans witnessed higher-than-expected demand as of the second half of that month, which accelerated commercial loan growth in a short period of time. To balance this demand, which was also driven by expectations, in addition to the policy rate hike in March, loan growth limits were lowered to 2% and a reserve requirement rule was imposed on the amount exceeding the growth limit. Following these steps, TL commercial loan growth decelerated, while FX loan growth accelerated. In the current reporting period, rising TL commercial loan rates and the improvement in exchange rate expectations prompted the FX commercial loan demand. A monthly growth limit of 2%

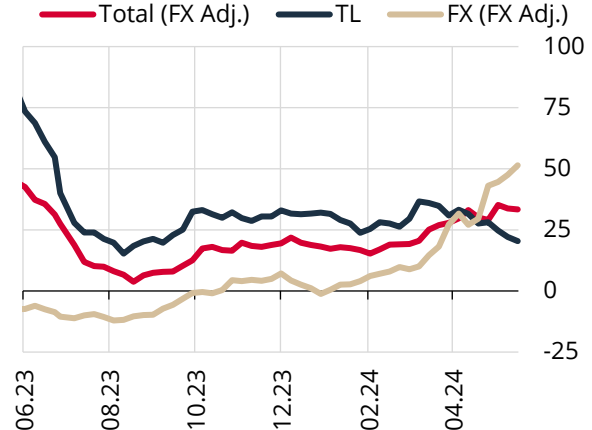
was introduced to FX loans in May and it was decided to block TL-denominated required reserves for one year for the amount of loans exceeding the limit (Charts IV.1.3 and IV.1.4).

Chart IV.1.3: Annual Growth of Commercial Loans (%)



Source: CBRT Last Observation: 17.05.2024
 Note: FX-indexed loans are included in FX loans. FX-adjusted loan growth is the ratio of the sum of the yearly change in TL loans and TL equivalent of change in FX loans, measured by multiplying one-year FX (basket) loan change with the one-year average basket exchange rate, by the total credit balance a year ago.

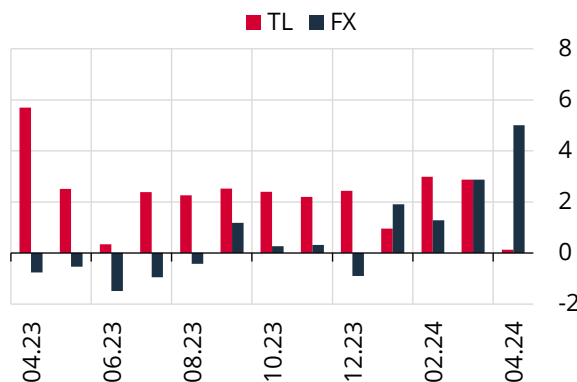
Chart IV.1.4: 13-Week Growth of Commercial Loans (Annualized, %)



Source: CBRT Last Observation: 17.05.2024
 Note: FX-indexed loans are included in FX loans. FX adjusted loan growth is the annualized ratio of the sum of the 13-week change in TL loans and TL equivalent of change in FX loans, measured by multiplying 13-week FX (basket) loan change with the 13-week average basket exchange rate, by the total credit balance 13 weeks ago.

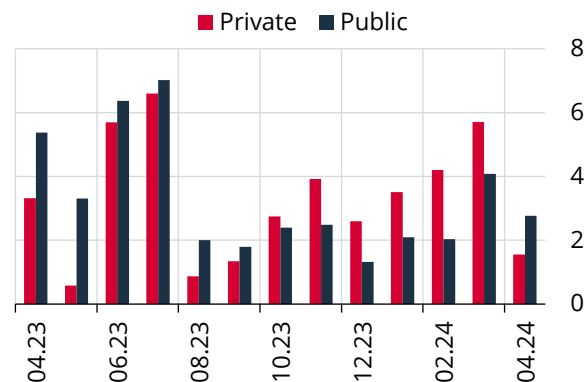
In addition to the slowdown in loan growth indicators, the composition of loan types has also been re-balanced (Charts IV.1.5 and IV.1.6). An analysis of monthly commercial loan growth rates reveals that after the acceleration in the TL commercial loan trend in February and March, a significant slowdown was seen in April due to the tight monetary policy stance and amended macroprudential regulations. The weight of FX loans in the loan composition has been going up since early 2024. The weight of private banks has recently increased in total commercial loan growth, which was largely driven by state-owned banks in past years.

Chart IV.1.5: Monthly Commercial Loan Growth (FX-Adjusted, %)



Source: CBRT Last Observation: 04.24
 Note: FX-indexed loans are included in FX loans. FX commercial loan growth is calculated as the ratio of the sum of the TL equivalent of the change in TL loans and FX (basket) loan change within one month multiplied by the currency basket average within one month to the total loan balance one month ago.

Chart IV.1.6: Monthly Commercial Loan Growth (FX-Adjusted, %)

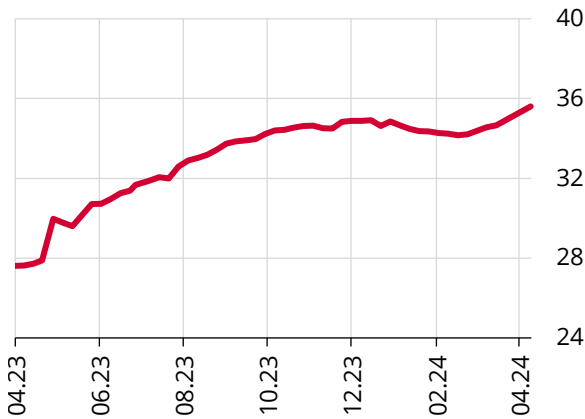


Source: CBRT Last Observation: 04.24
 Note: FX-indexed loans are included in FX loans. FX commercial loan growth is calculated as the ratio of the sum of the TL equivalent of the change in TL loans and FX (basket) loan change within one month multiplied by the currency basket average within one month to the total loan balance one month ago.

The share of export, investment, tradesmen and earthquake zone loans not subject to growth restrictions in commercial loan disbursements remains on the rise.

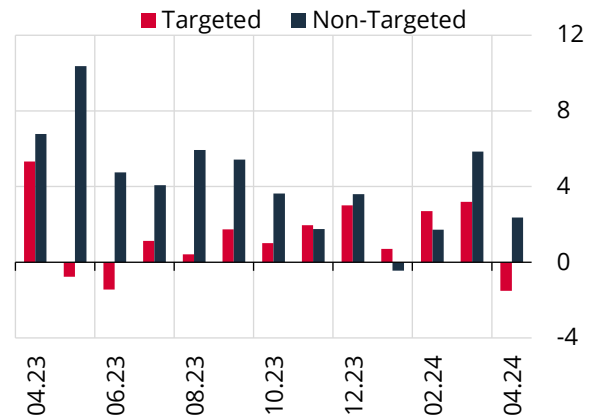
As of April 2024, the share of commercial loans not subject to growth restrictions (including TL-denominated investment, export, agricultural, tradesmen loans as well as loans extended to public institutions and to earthquake-stricken zones) in total TL commercial loans reached 35% (Chart IV.1.7). On the other hand, following the reserve requirement regulation for restricted loans in March, there was a significant increase in unrestricted TL commercial loans in terms of monthly growth (Chart IV.1.8).

Chart IV.1.7: Share of TL Commercial Loans Not Subject to Growth Restrictions (%)



Source: CBRT Last Observation: 26.04.2024

Chart IV.1.8: Monthly Growth of TL Commercial Loans Subject to and Not Subject to Growth Restrictions (%)



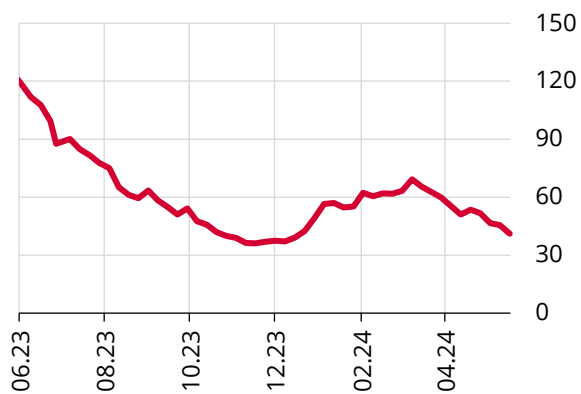
Source: CBRT Last Observation: 26.04.2024

Note: Commercial loans subject to growth restriction are calculated by subtracting investment, export, agricultural and tradesmen loans, loans extended to public institutions and organizations and exempted commercial loans in the scope of earthquake zone from TL commercial loans.

Retail loan growth, which accelerated in the first quarter of 2024 due to credit card and general-purpose loans amid elevated uncertainty, lost pace following the measures put into effect.

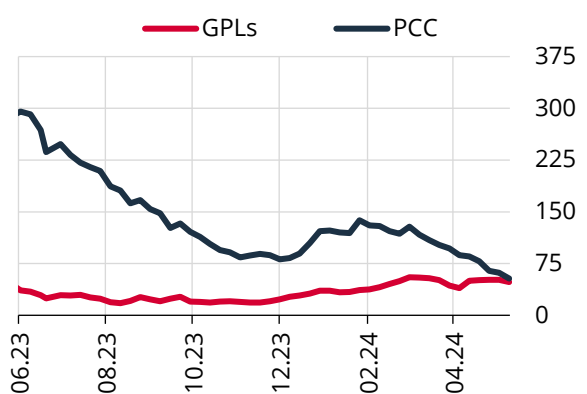
Due to the macroprudential measures introduced for retail loans and the tightening in financial conditions, retail loan growth weakened in April and fell to the average growth rate of the last quarter of 2023 (Chart IV.1.9). Given the current trend indicators, 13-week growth rates point to an annualized growth rate of 53% in the PCC segment and 48% in general purpose loans (Chart IV.1.10).

Chart IV.1.9: 13-Week Growth of Retail Loans (Annualized, %)



Source: CBRT Last Observation: 17.05.2024

Chart IV.1.10: 13-Week Growth of PCC and General-Purpose Loans (Annualized, %)



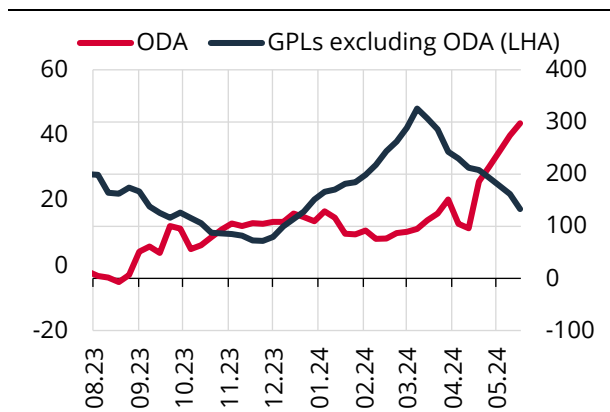
Source: CBRT Last Observation: 17.05.2024

General-purpose loans grew on the back of ODA (overdraft) loans, while cash advance utilization pushed the PCC growth upwards. Following the raised maximum interest rates on credit cards and ODA, growth of these loans registered a slowdown.

In the first quarter of 2024, the heightened perception of uncertainty led domestic demand to remain robust and boosted loan demand for consumption purposes. While the annualized 13-week growth rate of general-purpose loans (excluding ODA) approached 50% in March, the growth rate of general-purpose loans excluding ODA tumbled after the lowering of the growth limit and the introduction of the reserve requirement liability (Charts IV.1.11 and IV.1.12). On the other hand, growth in ODA that is not subject to the growth restrictions gained momentum. PCC borrowing exhibited a similar pattern. PCC growth followed a robust course until March due to factors such as the pulled-forward consumption demand amid higher prices of goods and services as well as the expected limitations on installments (Charts IV.1.13 and IV.1.14). Subsequently, interest rates on purchases with credit cards and cash advances were raised to levels in line with other types of retail loans, leading to a rebalancing in the growth of the PCC.

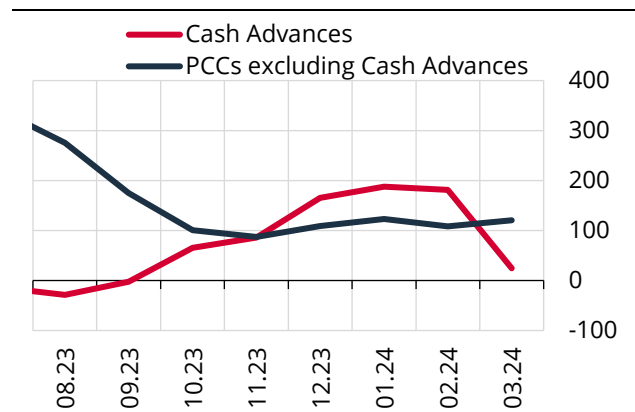
A breakdown of the PCC utilization reveals that the rebalancing on the PCC side is driven by payment in installments. On the other hand, it is obvious that the use of non-installment-based PCC is mostly for payment and transaction purposes. Along with the normalized consumption demand, improved expectations and the revisions introduced to the regulation, the retail loan demand is expected to lose further pace in the upcoming period.

Chart IV.1.11: 13-Week Growth of ODA and General-Purpose Loans (Annualized, %)



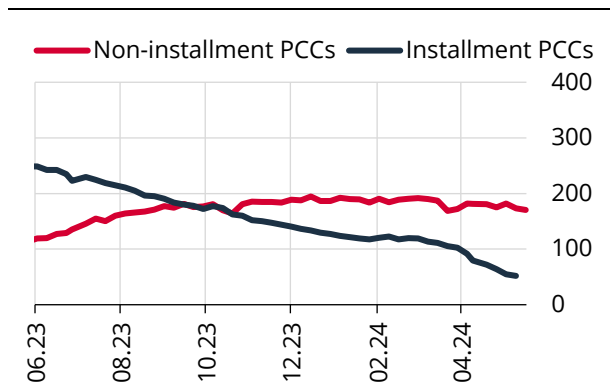
Source: CBRT Last Observation: 17.05.2024

Chart IV.1.12: 13-Week Growth of Personal Credit Card and Cash Advances (Annualized, %)



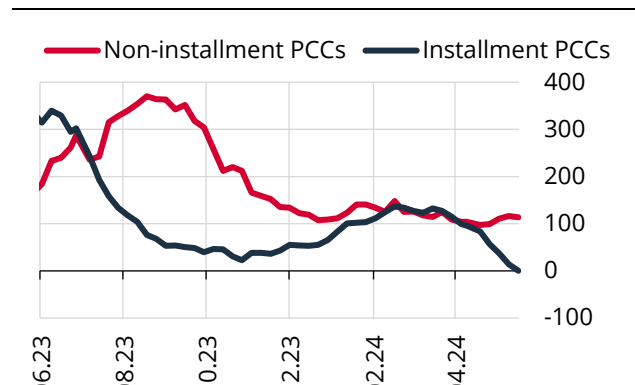
Source: CBRT Last Observation: 03.24

Chart IV.1.13: Annual PCC Growth (%)



Source: CBRT Last Observation: 17.05.2024

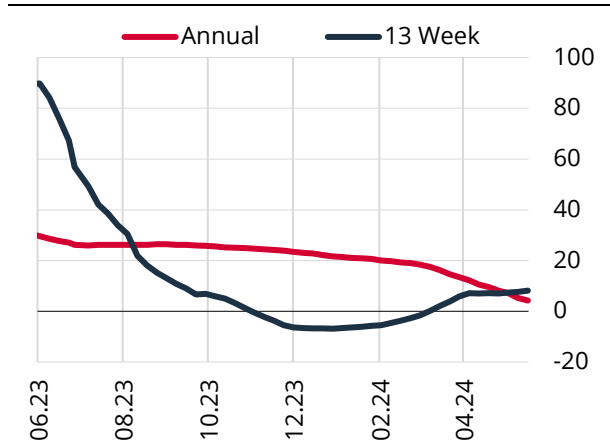
Chart IV.1.14: 13-week PCC Growth (Annualized, %)



Source: CBRT Last Observation: 17.05.2024

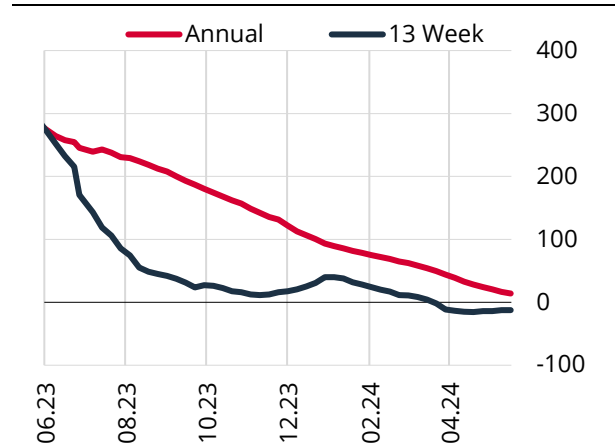
Due to factors such as rising interest rates, the elevated course of house prices, the mismatch between loan installment amounts and household income accompanied by the weak credit appetite of state-owned banks, the 13-week annualized housing loan growth rate fell into negative territory (Chart IV.1.15). The growth trend of vehicle loans, which was buoyant in the first half of 2023, lost considerable momentum amid growth constraints as well as the high course of vehicle prices (Chart IV.1.16).

Chart IV.1.15: Housing Loan Growth (%)



Source: CBRT Last Observation: 17.05.2024
 Note: Annual series indicate 12-month loan growth, while 13-week series show annualized 13-week growth.

Chart IV.1.16: Vehicle Loan Growth (%)

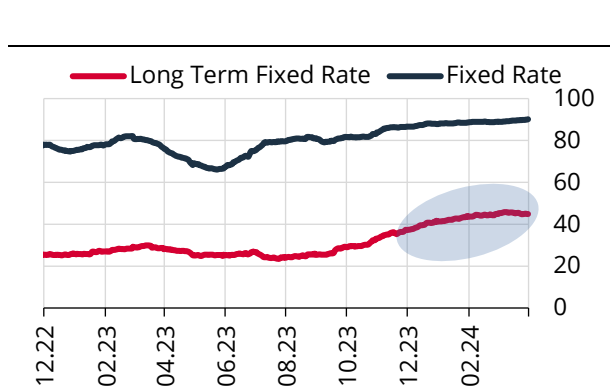


Source: CBRT Last Observation: 17.05.2024
 Note: Annual series indicate 12-month loan growth, while 13-week series show annualized 13-week growth.

In tandem with monetary tightening, banks' tendency to extend long-term and fixed-rate loans is high.

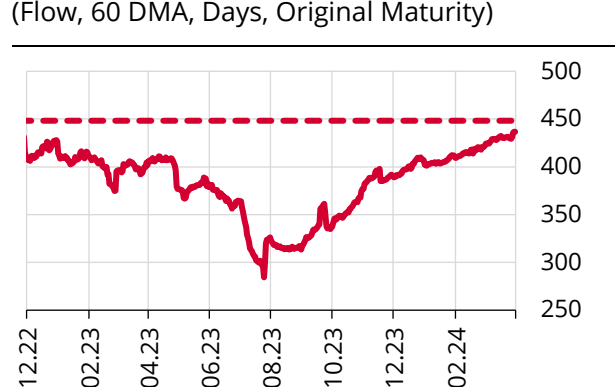
The share of fixed-rate loans in total TL commercial loans, which fell to 66% in May 2023, rose to 90% in March 2024 (Chart IV.1.17). Moreover, the average maturity of fixed-rate TL commercial loans started to rise again in the second half of 2023. The average maturity of fixed-rate loans, which had receded below 290 days, approached 440 days in March 2024 (Chart IV.1.18). Banks' net interest margins reached positive territory, which is considered to improve longer-term borrowing opportunities. Moreover, banks' appetite for long-term loan supply is considered to be strong given the potential of high loan rates to generate long-term interest income and improved expectations.

Chart IV.1.17: TL Commercial Loan Shares by Interest Rate and Maturity (Flow, 60 DMA, %)



Source: CBRT Last Observation: 31.03.2024
 Note: Long-term denotes loan disbursements over 365-day maturity. Shares of fixed-rate disbursements within total disbursements as well as long-term fixed-rate disbursements within the total are indicated.

Chart IV.1.18: TL Fixed-Rate Commercial Loans Average Maturity by Interest Rate (Flow, 60 DMA, Days, Original Maturity)



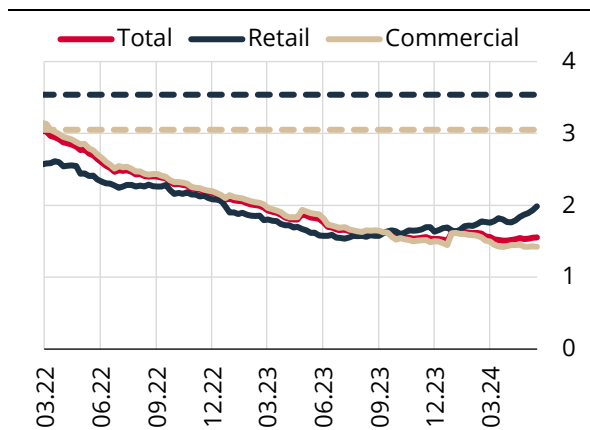
Source: CBRT Last Observation: 31.03.2024
 Note: Calculation excludes disbursements with zero maturity, zero-interest and non-reported interest rate structure. Dashed line shows the average of the series in the relevant color for the May 2019- March 2024 period.

IV.1.2 Credit Risk

Following the tightening of financial conditions, the retail loan NPL ratio deteriorated slightly.

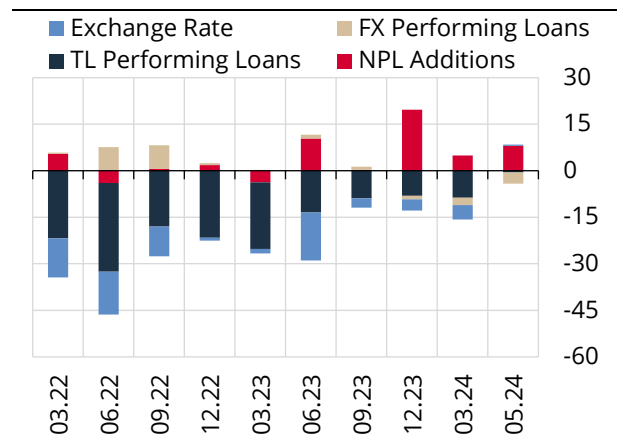
Despite the increase in the retail NPL ratio, the banking sector's total NPL ratio remained flat at 1.4% due to a decline in the corporate NPL ratio. Moreover, NPL ratios maintained their low levels below the historical average across all credit segments (Chart IV.1.17). An analysis of the factors contributing to the change in the total NPL ratio reveals that in the last quarter of 2023, the downward impact of loan growth and appreciation of the exchange rate on NPL ratio weakened, while the upward impact of NPL additions increased significantly. Despite the downward impact of the accelerated loan growth in the first quarter of 2024 on the NPL ratio, tighter financial conditions are expected to slow down loan growth and increase NPL additions in the upcoming period (Chart IV.1.18).

Chart IV.1.17: NPL Ratios (%)



Source: CBRT Last Observation: 17.05.2024
 Note: Dashed lines indicate the average of the relevant series for the 2012-2019 period.

Chart IV.1.18: Contributions to the Change in NPL Ratios (3-Month Total Contributions, bps)

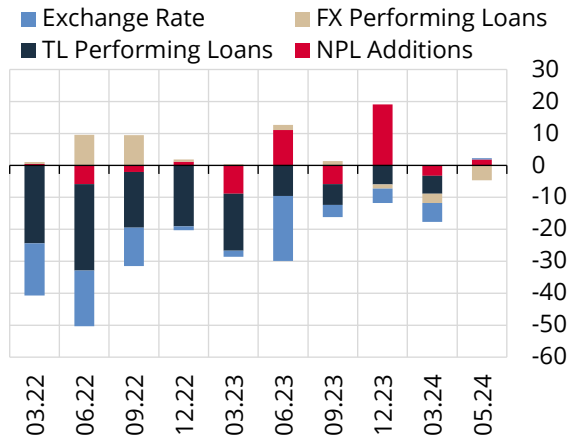


Source: CBRT Last Observation: 17.05.2024
 Note: Contributions show the total contribution amount in the relevant three months, and the last column includes the contribution total from 1 April to 17 May. For technical details on the methodology, see Financial Stability Report of November 2018, Box IV.1.1.

An analysis of the factors contributing to the change in corporate and retail NPL ratios reveals that in the first quarter of 2024, the change in the corporate NPL ratio was positively affected by performing loans and exchange rate effects as well as the decline in NPL additions (Chart IV.1.19). Meanwhile, the change in the retail NPL ratio was caused by the upward effect of NPL additions, which exceeded the denominator effect driven by loan growth (Chart IV.1.20). The effects of financial tightening on the retail loan asset quality outlook started to become more evident in the first five months of 2024.

The decline in the corporate NPL ratio was mainly due to SMEs. NPL ratios of SMEs and non-SME firms remained significantly below the average of the previous periods at 1.6% and 1.3%, respectively. Despite the tightening in financial conditions, the buoyant economic activity and firms' strong liquidity positions had a favorable impact on the NPL outlook of SMEs and other firms.

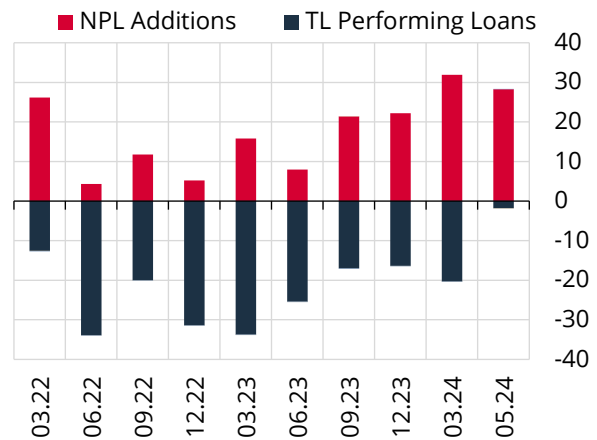
Chart IV.1.19: Contributions to the Change in Corporate NPL Ratios (3-Month Total Contributions, bps)



Source: CBRT Last Observation: 17.05.2024

Note: Contributions show the total contribution amount in the relevant three months, and the last column includes the contribution total from 1 April to 17 May. For technical details on the methodology, see Financial Stability Report of November 2018, Box IV.1.I.

Chart IV.1.20: Contributions to the Change in Retail NPL Ratios (3-Month Total Contributions, bps)

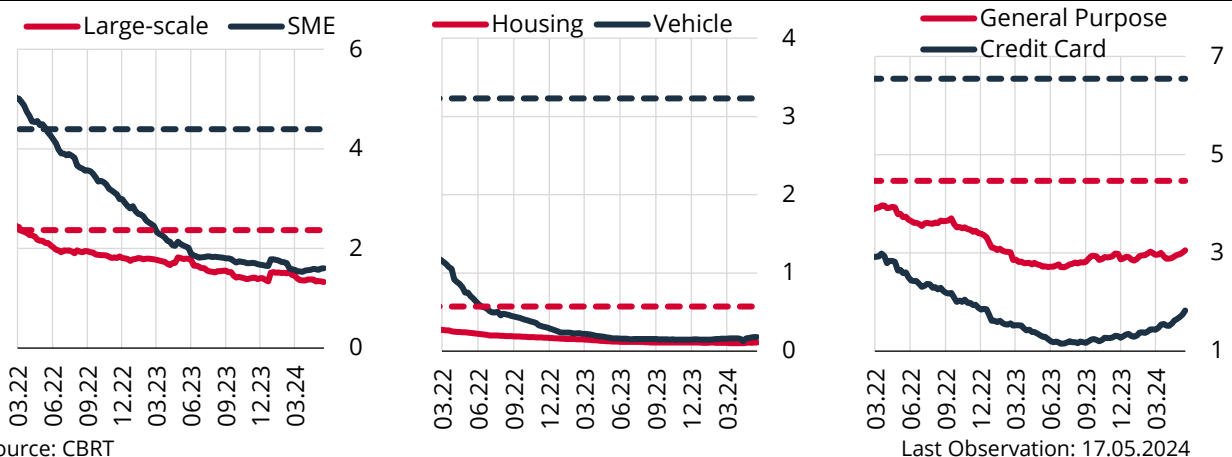


Source: CBRT Last Observation: 17.05.2024

Note: Contributions show the total contribution amount in the relevant three months, and the last column includes the contribution total from 1 April to 17 May. For technical details on the methodology, see Financial Stability Report of November 2018, Box IV.1.I.

Retail loan NPL ratios also remained below the average of the previous periods. Having rather low NPL ratios due to their collateralized structures and regulations limiting credit risk such as loan-to-value ratios, NPL ratios of housing and vehicle loans remained below the historical average at 0.1% and 0.2%, respectively. The NPL ratio of general-purpose loans remained flat at 3% in the current Report period. Given their short-term nature, personal credit card debt is directly affected by rising rates during a tightening process. The maximum interest rate limits for credit card cash withdrawals and transactions were raised in March and April, respectively. The NPL ratio of personal credit cards edged up to 1.8% due to the increase in interest rates yet remained below the long-term average.

Chart IV.1.21: NPL Ratios in the Breakdown of Credit Types (%)



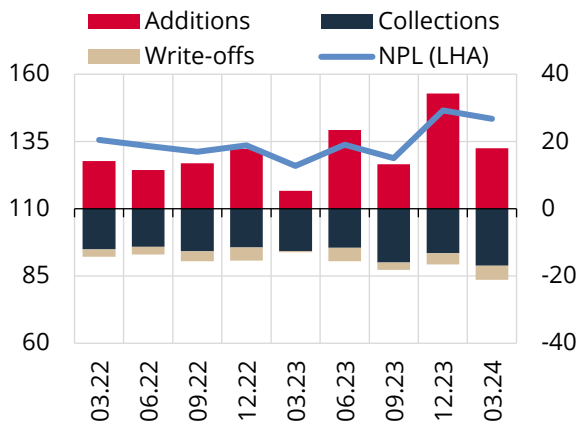
Source: CBRT

Note: Dashed lines indicate the average of the relevant series for the 2012-2019 period.

The ratio of NPL collections to additions eased, hovering above the long-term average in commercial loans and below the long-term average in retail loans.

Owing to the strengthened liquidity position of firms during favorable financing conditions, and the ongoing buoyant economic activity, NPL collections from commercial loans maintained their positive trajectory in the first quarter of 2024 (Chart IV.1.22). The ratio of corporate NPL collections to net NPL additions slightly lost momentum; however, it remains above its long-term average (Chart IV.1.23).

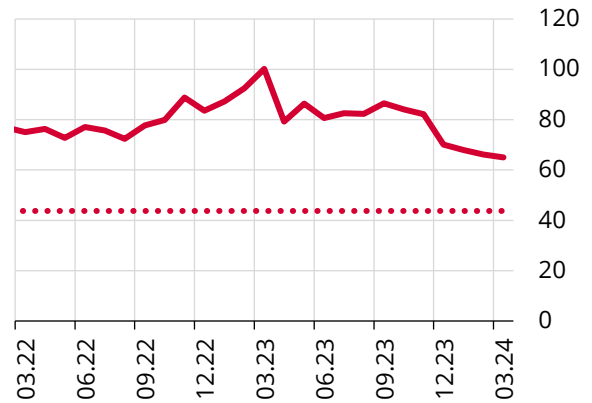
Chart IV.1.22: Components of Corporate NPL Balance (Billion TL)



Source: CBRT Last Observation: 03.24

Note: Series for collections and additions are based on three-month totals. An outlier was excluded from the data for 2022. Additions are calculated by subtracting the migrations to performing loans from new NPL additions.

Chart IV.1.23: Corporate Collections/Additions Ratio (%)

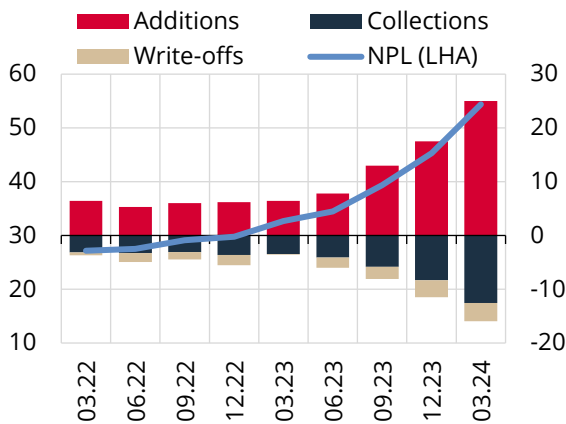


Source: CBRT Last Observation: 03.24

Note: The Collections/Additions ratio is calculated as the ratio of 12-month total NPL collections to 12-month total net NPL additions. Dashed line indicates the average of the relevant series for the 2014-2019 period. An outlier was excluded from the data for 2022. Additions are calculated by subtracting the migrations to performing loans from new NPL additions.

The retail NPL balance further increased as new NPL additions exceeded NPL collections and asset write-offs (Chart IV.1.23). The ratio of NPL collections to additions in the retail segment fell below its long-term average (Chart IV.1.24).

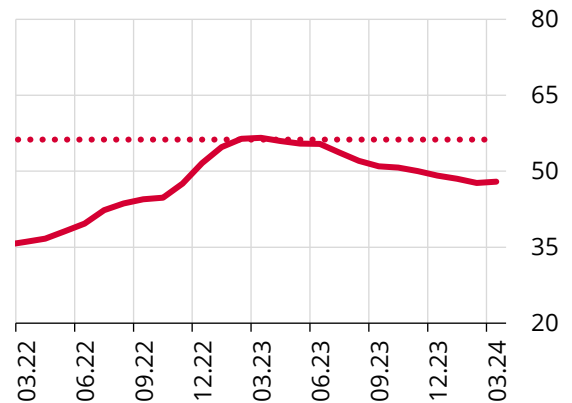
Chart IV.1.24: Components of Retail NPL Balance (Billion TL)



Source: CBRT Last Observation: 03.24

Note: Series for collections and net additions are based on three-month totals. Additions are calculated by subtracting the migrations to performing loans from new NPL additions.

Chart IV.1.25: Retail Collection/Addition Ratio (%)



Source: CBRT Last Observation: 03.24

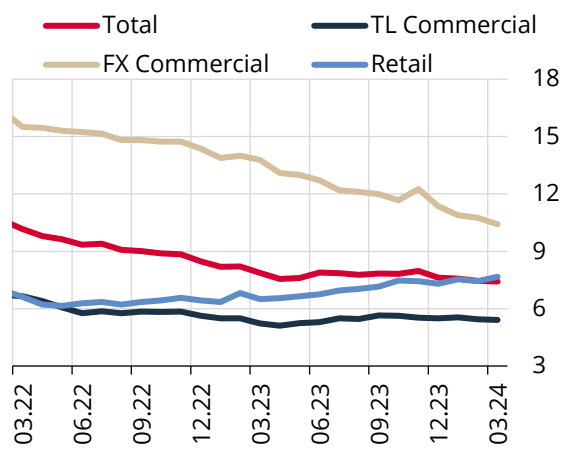
Note: The Collections/Additions ratio is calculated as the ratio of 12-month total NPL collections to 12-month total NPL additions. Dashed line indicates the average of the relevant series for the 2014-2019 period. Additions are calculated by subtracting the migrations to performing loans from new NPL additions.

Stage 2 loans display a similar pattern to that of NPL realizations. While the Stage 2 loan ratio for commercial loans continue to decline, the Stage 2 loan ratio for retail loans has increased.

The share of Stage 2 loans in total loans declined substantially in recent years, and was flat at close to 8% as of the second half of 2023 (Chart IV.1.26). The Stage 2 ratios of FX corporate loans have been hovering above other loan types for a long time. This is attributed to the classification in Stage 2 of firms with low FX income that faced difficulties in payment following the exchange rate developments in 2018 and whose FX loans were restructured. The removal of these loans from the Stage 2 classification over time has been effective in the decline of this ratio. On the other hand, as of the second half of the 2023, the share of Stage 2 loans of retail loans slightly increased due to the tightening in financial conditions.

The share of the sum of Stage 2 and NPLs in gross loans, a measure of total credit risk, has improved significantly as of the end of 2021, and fell below 9% (Chart IV.1.27). The share of the sum of NPLs and overdue Stage 2 loans, another measure of credit risk, is on the rise.

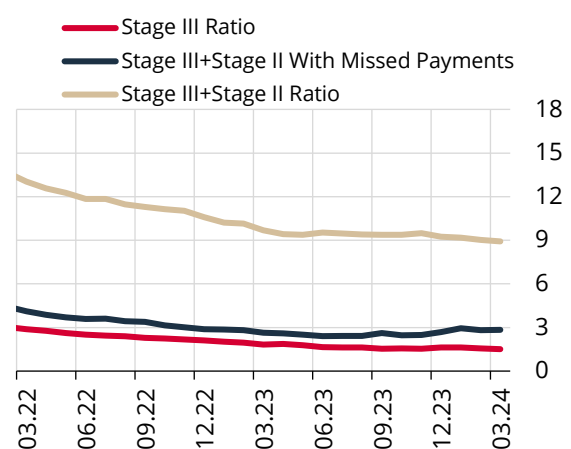
Chart IV.1.26: Ratio of Stage 2 Loans (%)



Source: CBRT Last Observation: 03.24

Note: Series show the ratio of Stage 2 loans to gross loans.

Chart IV.1.27: Asset Quality Outlook (%)



Source: CBRT

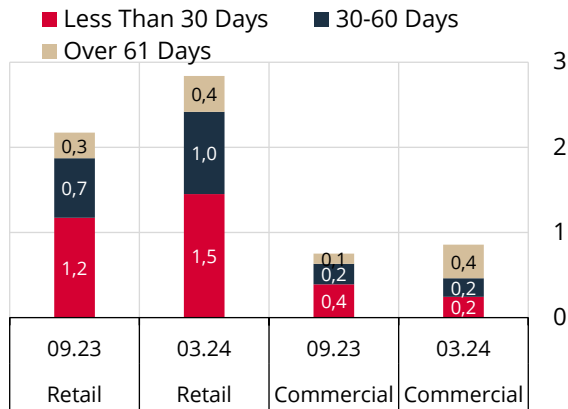
Last Observation: 03.24

Note: Asset quality indicators are proportioned to gross loans.

The ratio of overdue retail loans has risen, while that of commercial loans has shown no significant change.

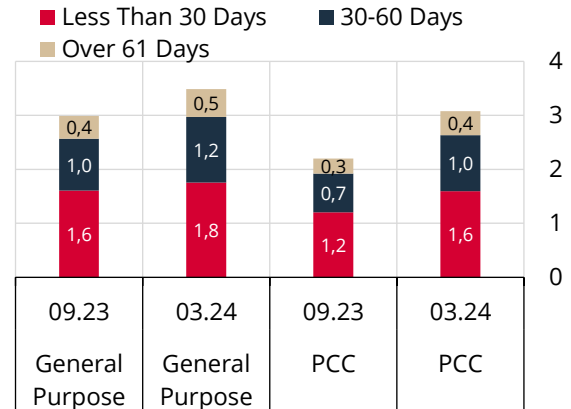
Banks have been using the TFRS-9 standard for loan classification since 2018 and even if the loans are not past due, they monitor them under Stage 2 if their models suggest a significant increase in credit risk. Accordingly, 82% of Stage 2 loans are not overdue but classified under Stage 2 loans due to a significant increase in credit risk based on banks' TFRS-9 models. A significant portion of overdue loans are classified under less than 30 days overdue. As of March 2024, the ratio of overdue loans in the commercial segment was almost flat at 0.9% over the past six months. The ratio of overdue loans in retail loans increased by 0.7 percentage points to 2.8%. In all loan delinquencies, the ratio of overdue retail loans increased (Chart IV.1.28). The breakdown of retail loans by subgroups reveals that the overdue ratio increased in general-purpose loans and credit cards (Chart IV.1.29).

Chart IV.1.28: Ratio of Overdue Loans (%)



Source: CBRT Last Observation: 03.24
 Note: The chart shows the ratio of overdue Stage 2 loans to gross loans.

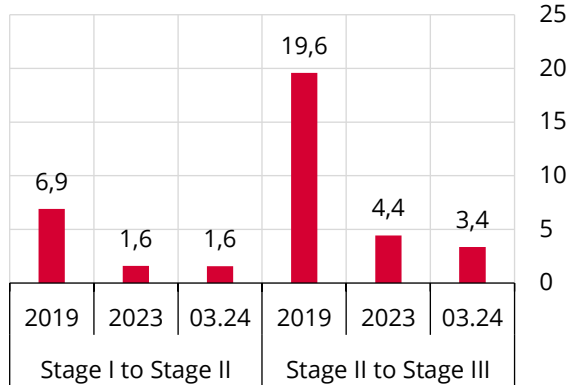
Chart IV.1.29: Ratio of Overdue Loans (%)



Source: CBRT Last Observation: 03.24
 Note: The chart shows the ratio of overdue Stage 2 loans to gross loans.

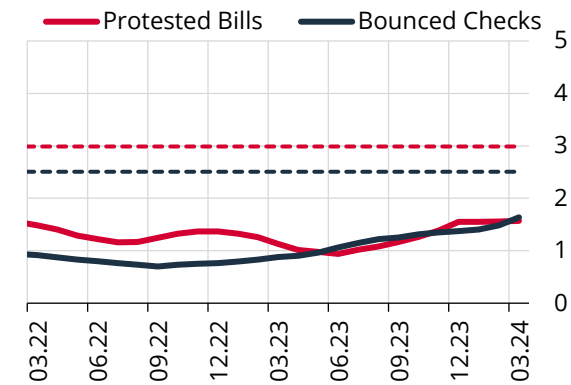
As a further indicator of credit riskiness, the probability of transition from Stage 1 to Stage 2 and from Stage 2 to NPL is monitored. Compared to the 2019 average, transition probabilities declined significantly for both from Stage 1 to Stage 2 and from Stage 2 to NPLs. However, the 2023 average indicates that the probability of transition from Stage 1 to Stage 2 for commercial loans remained flat, and that from Stage 2 to NPL decreased slightly (Chart IV.1.31). On the other hand, the ratios of protested bills and bounced checks increased slightly as of the second half of 2023. The ratio of bad checks to total checks submitted to banks increased from 1.1% in June 2023 to 1.6% in March 2024, while that of protested bills to commercial notes received for collection increased from 0.9% to 1.6% for the same period (Chart IV.1.31).

Chart IV.1.30: Transition Probabilities (Commercial Loans, %)



Source: CBRT Last Observation: 03.24
 Note: The transition probability from Stage 1 to Stage 2 is estimated as the ratio of the loan amount migrating from Stage 1 to Stage 2 a year ago to the Stage 1 loan balance a year ago. The transition probability from Stage 2 to NPL is estimated as the ratio of the loan amount migrating from Stage 2 to NPL a year ago to the Stage 2 loan balance a year ago.

Chart IV.1.31: Ratios of Protested Bills and Bad Checks (6-Month MA, %)

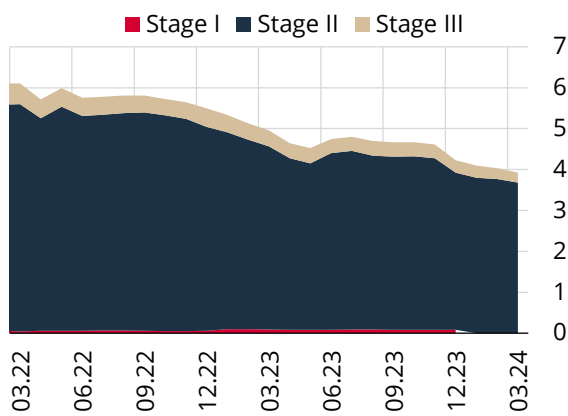


Source: CBRT Last Observation: 03.24
 Note: Denotes the ratio of bad checks to total checks submitted to banks and the ratio of protested bills to commercial bills collected. Dashed lines indicate the average of the 2014-2022 period.

The restructured loan ratio continues to decline, while banks preserve their policy of high provisioning against potential loan losses.

Restructuring of loans, which was widely used to provide flexibility in cash management for firms with increased credit riskiness in 2019 and throughout the pandemic, displayed a downward trend in the following period, and the ratio of restructured loans to gross loans dropped to 4% (Chart IV.1.34). Among the restructured loans, 92% are under Stage 2, 6% are under NPL, and only a very limited percentage are monitored under Stage 1. The banking sector prudently allocates high provisions for restructured loans. Provision ratios for loans for Stage 1, Stage 2, and NPL are 0.9%, 22.2%, and 81.8%, respectively (Chart IV.1.35). The provision ratio for Stage 2 loans that are restructured (31.2%) is above the provision ratio for the rest of Stage 2 loans (17.1%). The high provisioning by banks in a period of strong loan repayments may limit the impact of potential loan collection issues on banks' balance sheets and profitability in the upcoming period.

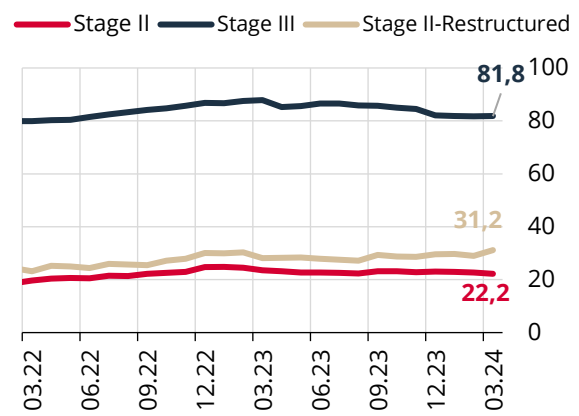
Chart IV.1.34: Restructured Loans (%)



Source: CBRT Last Observation: 03.24

Note: Series show the ratio of restructured loans to gross loans. Stage 1: Ratio of restructured loans monitored under standard loans. Stage 2: Ratio of restructured loans under close monitoring loans.

Chart IV.1.35: Expected Loss Provisioning Ratio (%)



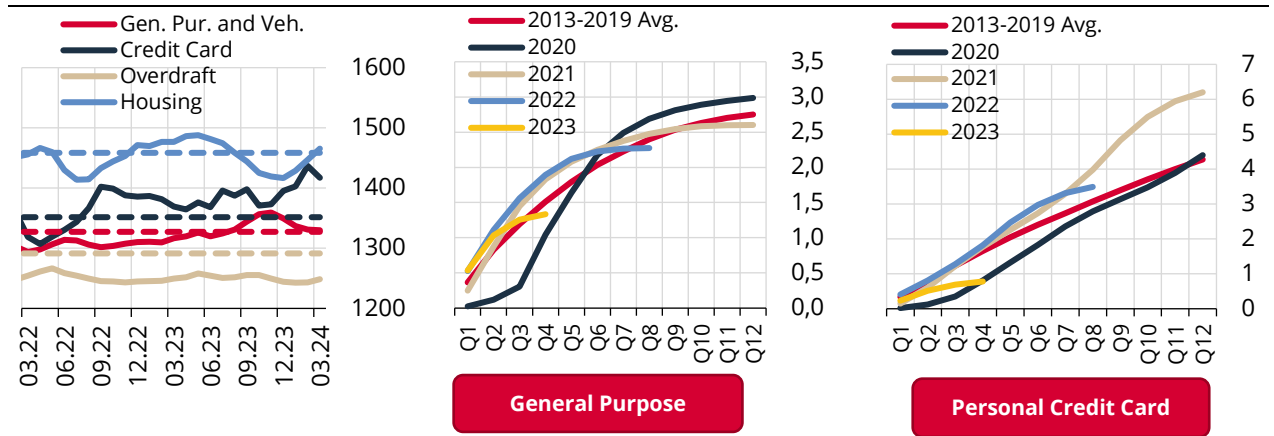
Source: CBRT Last Observation: 03.24

Note: Expected loss provisioning ratio is the ratio of the expected loss provision of the loan in the related category to the loan amount in that category.

The share of individuals with slightly lower credit ratings among retail loan applicants has risen amid the increase in loan interest rates.

In the second half of 2023, customers with relatively high credit scores applied for PCCs and general-purpose loans. However, in 2024, a period of tightening financial conditions, particularly interest rates, led to a slight decline in the retail credit scores of those applying for these loan products. High costs lowered the loan applications of customers with high credit ratings (Chart IV.1.36). The conversion performance of general-purpose loans and personal credit cards to NPL starting from the year of disbursement can be monitored by aging analysis. Accordingly, the NPL performance of general-purpose loans extended in 2020 during the pandemic negatively diverged from that of other years starting from the fifth quarter. This was caused by the increase in NPLs due to the termination of loan classification flexibilities provided during the pandemic. There is no significant divergence in the NPL performance of general-purpose loans extended in other years. The NPL conversion ratio of general-purpose loans extended in 2023 is currently around 1%. As for personal credit cards, 2021 diverges negatively from other years, however, the first four quarters of 2023 show a better performance than the average of the previous period (Chart IV.1.36)

Chart IV.1.36: Personal Credit Rating and Aging Analysis



Source: CBRT

Note: Personal credit ratings indicate the average credit rating of credit applicants in the respective period. Based on a 3-month moving average. Dashed lines show the average of 01.20-03.24 period. Aging analysis shows the cumulative development of NPL ratios for loans extended in the respective year across quarters. The figures are expressed as percentages.

Box IV.1.I: Personal Credit Card Limit and Utilization Trends

Introduction

The ease of use of credit cards and the relatively low level of credit card interest rates in a high inflation environment from 2022 to the third quarter of 2023 led the PCC balance growth to hit a historically high level. After 2022, there was also a notable and faster-than-inflation hike in credit card limits. Between January 2022 and January 2024, a period marked by a 2.6-fold increase in CPI, the average increase in PCC limits was 7-fold and in balances approximately 5-fold, which makes the analysis of the recent developments in view of limit groups important. In this box, PCC developments are analyzed in terms of limit groups and limit increase categories. In addition, limit increases as well as card usage preferences during the inflationary period are evaluated. The findings of the study suggest that limit increases are well above inflation in the highest limit group (above TRY 500,000), while limit increases are parallel to inflation in the lower limit segment (below TRY 100,000).

Personal Credit Card Limit Groups and Card Utilization Trends

As of January 2024, the total credit card limit allocated to individuals reached TRY 4.2 trillion and the total card balance hit TRY 1.3 trillion (Table IV.1.I.1). Accordingly, the limit utilization rate, which refers to the portion of the limit used, is 30% on average, and the card balance per person is approximately TRY 45,500. An analysis of individuals in the limit groups based on the total limit amount in all banks reveals that individuals with a limit of TRY 200,000 and above have more than half of the total PCC debts. Moreover, 1.4 million individuals (5% of the total number of cardholders) in the limit group above TRY 500,000 account for 25% of the total credit card balance. In other words, credit card holders with high limits have a significant portion of the overall credit card debt. While 51.6% of the credit card limits of individuals with credit card limits up to TRY 50,000 turn into debt balances, the limit utilization of individuals in upper limit groups is relatively low. The fact that the share of expenditures in installments is around 30% in all limit groups indicates that credit cards are mainly used for payment purposes through the non-installment channel.

Table IV.1.I.1: Personal Credit Card Indicators Based on Limit Groups

	Total Limit (TRY Billion)	Total Balance (TRY Billion)	Shares in Total Balance (%)	Limit Utilization Rate (%)	Share of Installments (%)	Number of People (Million)
TRY 0 – 50,000	171.3	88.3	7.0	51.6	23.4	8.7
TRY 50,000 – 100,000	417.5	154.5	12.3	37.0	32.5	5.6
TRY 100,000 – 200,000	965.2	289.0	22.9	29.9	34.1	6.7
TRY 200,000 – 500,000	1,566.3	407.2	32.3	26.0	31.9	5.3
Above TRY 500,000	1,130.9	321.3	25.5	28.4	32.2	1.4
Total	4,251.2	1,260.3	100.0	29.6	32.0	27.7

Sources: CBRT, Risk Center

Observation Date: 01.24

In addition to this picture of the distribution of limits and balances, the historical development of credit card limits and the borrowing trends within these limits were analyzed. The examination was performed on a random sample that significantly represents the distributions in the total population. The sample of 655,750 observations includes individuals with a limit of TRY 50,000 and above as of January 2024, and January data for the period between 2015 and 2024 were used in the analysis ($t=10$, $n=65,575$). While considering the individuals with card debt for each period, heterogeneity among individuals is controlled by keeping the individuals constant in the sample over the years.

Firstly, the inflation-adjusted limit and balance developments of the individuals in the groups based on their limit amounts in January 2024 were analyzed. Individuals' limits were deflated by backward indexation and the past limits of these individuals in real terms were compared. Charts IV.1.I.1 and IV.1.I.2 show the historical average real limit and balance levels of the groups based on the current limit amounts.

Chart IV.1.I.1: Personal Credit Card Real Limits (TRY Thousand)

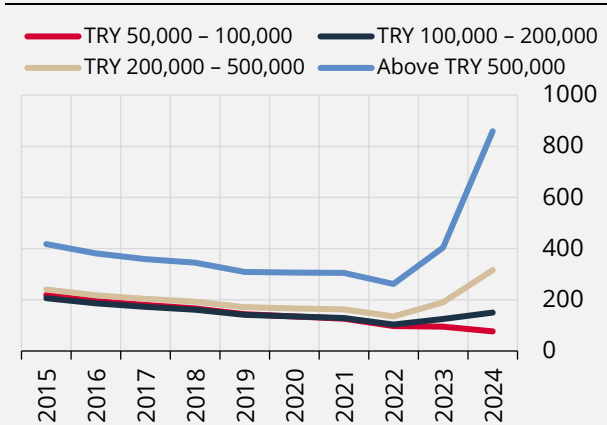
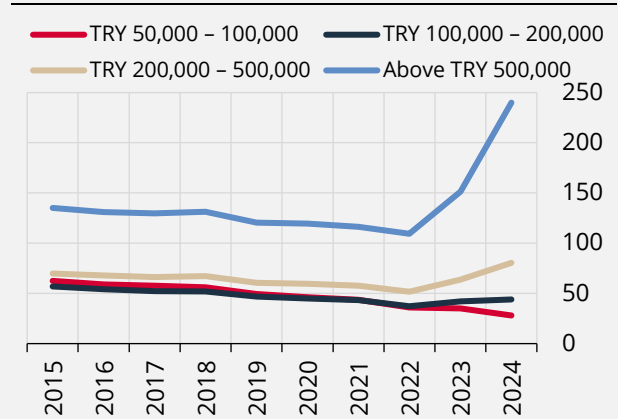


Chart IV.1.I.2: Personal Credit Card Real Balance (TRY Thousand)



Sources: Risk Center, Authors' estimations

Last Observation: 2024

Note: In real balance and limit calculations, nominal balance and limit values of the past year were expanded by CPI. Limit groups of individuals for the 2015-2024 period were set according to the limit size in January 2024 (TRY 50,000 - 100,000, TRY 100,000 - 200,000, TRY 200,000 - 500,000 and above TRY 500,000).

PCC real limit and balance development differs over time among limit groups. Until 2022, real limits of the individuals in the sample shrank to a limited extent. On the other hand, real limits surged after 2022, chiefly in the limit groups of TRY 200,000 and above. The group with the limit of TRY 500,000 and above differed from the other limit groups to a great extent, and the limits quadrupled compared to 2022 and doubled compared to 2023. While the real balance remained relatively more stable in groups with limits of TRY 200,000 and below, it jumped in higher limit groups as of 2022 (Charts IV.1.I.1 and IV.1.I.2). Moreover, a similar trend was seen in all limit groups before 2022, while the change in card limits and balances of individuals with high limits after 2022 diverged significantly from those of low limit groups.

Chart IV.1.I.3: Limit and Balance Change Based on Limit Increase Categories (As Multiples of Limit and Balance for January 2022)

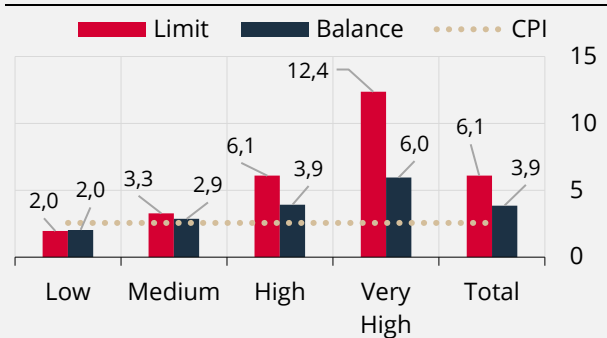
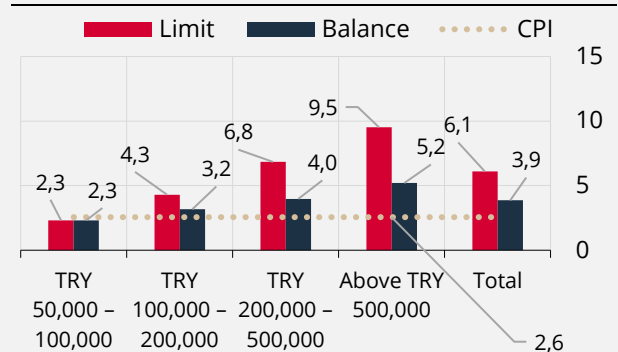


Chart IV.1.I.4: Limit and Balance Change Based on Limit Groups (As multiples of the Limit and Balance for January 2022)



Sources: Risk Center, Authors' estimations

Last Observation: 2024

Limits and Balances in a Period of High Inflation

In this part of the study, the rate of increase in credit card limits and balances between January 2022 and January 2024 is analyzed based on median observations according to categories of limit groups and limit increase. Limit increase categories are defined as 'low' (individuals with limit increases below inflation), 'medium' (individuals with limit increases above inflation and in the first 25% of the sample), 'high' (individuals with limit increases between 25 and 75% of the sample) and 'very high' (individuals with limit increases above 75% of the sample).

In this period when CPI rose 2.6-fold, the credit card limit surged by approximately 6.1-fold and the credit card balance by 3.9 times, which implies that in the recent period of high inflation, limit increases that exceeded what was necessary were provided for certain limit groups and categories (Charts IV.1.I.3 and IV.1.I.4). While the limits of individuals in the TRY 50,000 to TRY 100,000 group rose by 2.3 times, this value increased in the upper limit

groups and reached 9.5 for individuals with a limit of TRY 500,000 and above. This trend from lower limit groups to upper limit groups prevails across all limit increase categories (Table IV.1.1.2). This indicates that the tendency to increase limits beyond the need motive is stronger in the upper limit groups.

Table IV.1.1.2: Limit Change (As multiples of the Limit for January 2022)

		Limit Group as of January 2024				Total
		TRY 50,000 – 100,000	TRY 100,000 – 200,000	TRY 200,000 – 500,000	Above TRY 500,000	
Limit Increase Categories	Low	1.8	2.0	2.2	2.2	2.0
	Medium	3.1	3.3	3.3	3.5	3.2
	High	4.3	5.4	6.3	6.8	6.1
	Very High	-	9.5	11.5	13.8	12.4
	Total	2.3	4.3	6.8	9.5	6.1

Sources: Risk Center, Authors' estimations

Note: Values in the table are individuals' median " $Limit_{01.2024} / Limit_{01.2022}$ " values under the relevant group and category.

We see that, unlike the changes in limits, the increase in balances in the 2022-2024 period was relatively similar across the various limit groups and categories (Table IV.1.1.3). The median credit card limit increased by 6.1 times and the credit card balance rose by 3.9 times in the said period, supporting the view that limit increases beyond the motive of need were granted to certain limit groups and categories. On the other hand, given the two-way interaction, high limit increases may have brought about high expenditures and elevated PCC balances. In the limit group of TRY 50,000-TRY 100,000, balances rose as much as the limit increased, implying that this group did not witness a noticeable change in their abilities and habits in card utilization. As a matter of fact, the increase in balances of this group hovers quite close to the increase in CPI. On the other hand, the increase in the difference between limit increases and balance increases in higher denomination groups indicates that additional standing limit facilities have been obtained.

Table IV.1.1.3: Balance Change (As multiples of the Limit for January 2022)

		Limit Group as of January 2024				Total
		TRY 50,000 – 100,000	TRY 100,000 – 200,000	TRY 200,000 – 500,000	Above TRY 500,000	
Limit Increase Categories	Low	1.9	2.1	2.2	2.0	2.0
	Medium	2.9	2.8	2.9	3.2	2.9
	High	3.5	3.9	3.7	4.3	3.9
	Very High	-	5.3	5.0	6.6	6.0
	Total	2.3	3.2	4.0	5.2	3.9

Sources: Risk Center, Authors' estimations

Note: Values in the table are individuals' median " $Balance_{01.2024} / Balance_{01.2022}$ " values under the relevant group and category.

Conclusion and Assessments

Claiming ex-post installments for credit card expenditures or not paying the debt at all and allowing interest payments to accrue may weigh on the default risk of individuals, mostly in periods of mounting borrowing costs. Recently, it has been observed that the rapid growth of credit card balances was driven by borrowers with the highest limits. High limits granted to individuals may lead to spending behavior and consumption demand that is inconsistent with their incomes. It should be noted that the utilization of high-limit cards for non-essential purposes may adversely affect not only the current account balance through the consumption and imports of intermediate goods channels but also inflation through the pulled-forward demand channel. Although it is more critical in the high limit group, setting credit card limits and payment terms in line with individuals' incomes¹ and inflation is important to financial stability as well as the current account balance and price stability.

¹ As per the regulation, the total limit of individuals' credit cards is limited to a maximum of four times their monthly net documented income.

Box IV.1.II: Loan Behavior of Firms Based on Borrowing Rate Structure

Financing costs remained low throughout 2022 and in the first half of 2023, while the upper limits introduced for commercial loan rates in August 2022 in the scope of the securities maintenance practice caused commercial loan rates to stay significantly below inflation until June 2023. In that period, banks shortened loan maturities and concentrated on floating-rate loans as part of their interest rate risk management. Starting from the second half of 2023, the rise in commercial loan rates led to an increase in the interest rate risk borne by firms that had used floating-rate loans in the previous period.

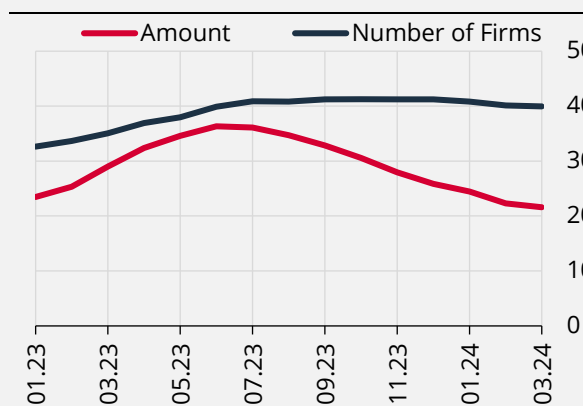
This box examines the post-tightening credit risk outlook and the change in loan composition of firms that had made intensive use of floating-rate loans before the tightening. It offers a comparative analysis of the evolution of loan preferences and the interest rate risk management of firms that had opted for floating-rate borrowing in the previous period. The analysis reveals that the floating-rate loan utilization has decreased across the sector due to increased financing costs. As of August 2023, the Turkish lira (TL) loans of firms borrowing predominantly at floating rates remained flat, and these firms were found to have tended more towards FX loans than firms that predominantly took out fixed-rate loans. On the other hand, no significant deterioration was observed in the credit risk indicators of firms that had opted for floating-rate loans.

The study employs firm- and loan-based data to identify the firm groups that predominantly use either floating-rate loans or fixed-rate loans. Accordingly, firms with a minimum 50% share of floating-rate TL commercial loans in their total TL commercial loans are categorized as floating-rate borrower firms:

$$\text{Criterion for Being a Floating – Rate Borrower Firm} = \left(\frac{\text{Floating – Rate TL Commercial Loans of the Firm}}{\text{Total TL Commercial Loans of the Firm}} > \%50 \right)$$

On the other hand, firms with a 50% or smaller share of floating-rate TL commercial loans in their total TL commercial loans are categorized as fixed-rate borrower firms. The share of floating-rate borrower firms' TL commercial loan balance in total TL commercial loans reached 36.3% in June 2023 before falling due to the monetary tightening and increased financing costs. Amid tighter financial conditions, the upward course in the share of floating-rate borrower firms stopped, and their share in total TL loans dropped to 22% as of March (Chart IV.1.II.1). The marked fall in loan shares despite the flat course in the number of firms implies that the new TL commercial loan utilization of floating-rate borrower firms is significantly below that of the sector.

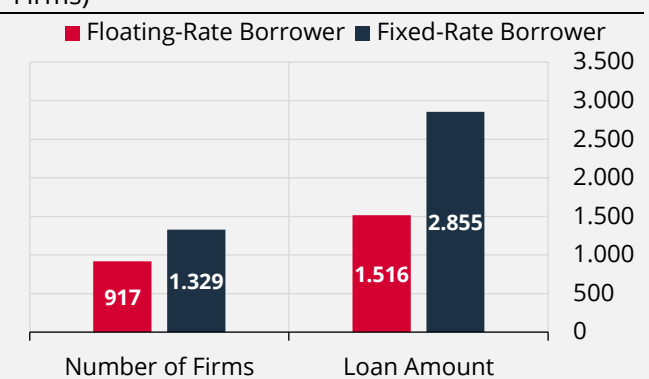
Chart IV.1.II.1: TL Commercial Loan Share of Floating-Rate Borrower Firms (%)



Sources: CBRT, Authors' Calculations Last Observation:03.24

Note: Shows the share of the number of floating-rate borrower firms and the total amount of their TL commercial loans for the relevant month in the total. Firms may change each month depending on their loan composition.

Chart IV.1.II.2: Number of Firms in the Sample and Their TL Loan Amount (Billion TL, Thousand Firms)



Sources: CBRT, Authors' Calculations

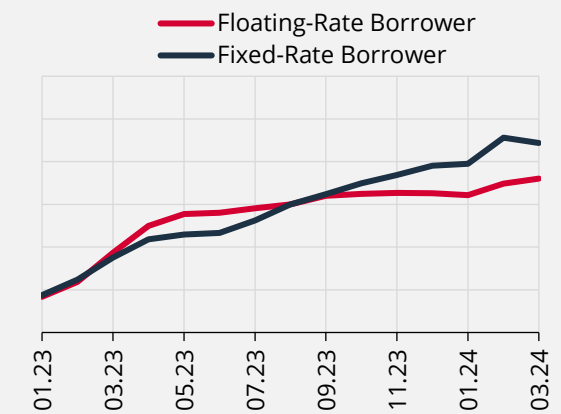
Last Observation: 08.23

Note: Shows the numbers of floating-rate and fixed-rate borrower firms in August 2023 as well as the amount of floating-rate TL commercial loans used by each group.

The following section includes analyses to separate out the changes in loan behavior of floating-rate borrower firms by taking into account cross-firm differences, using a fixed sample of firms. The sample of firms is determined based on data for August 2023, when the share of floating-rate loans in stock loans reached high levels and the policy rate was raised sharply. The firms in this period are categorized into two groups according to their interest rate structure. Based on this information, results regarding the changes in borrowing behaviors of each group from August 2023 to March 2024 and their credit risk outlook are presented in comparison. In the sample, the number of floating-rate borrower firms was approximately 917 thousand while that of fixed-rate borrower firms was 1.33 million as of August 2023. In the same period, total TL commercial loans of floating-rate and fixed-rate borrower firms amounted to TL 1.5 trillion and TL 2.9 trillion, respectively (Chart IV.1.II.2).

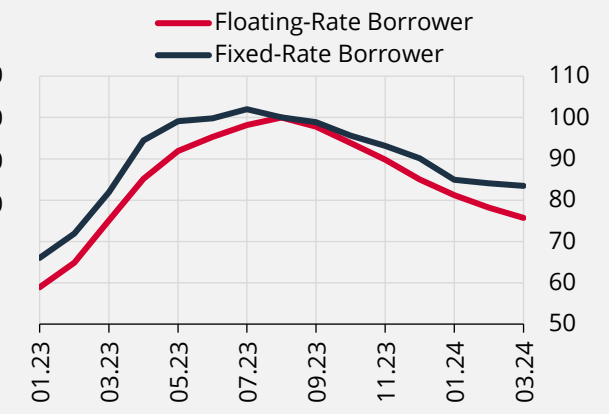
When the TL commercial loan amount in August 2023 is taken as 100, the TL commercial loan balance of floating-rate borrower firms remained flat in the following period but that of the other group continued to increase in the post-tightening period (Chart IV.1.II.3). Thus, floating-rate borrower firms can be assumed to have reduced their TL loan demand in order to manage their debts effectively. On the other hand, it can also be inferred that banks offered a more limited supply of commercial loans to floating-rate borrower firms in view of the potential interest rate risk of these firms. It is also noteworthy that firms in both groups significantly reduced their floating-rate TL loan balances in the post-tightening period (Chart IV.1.II.4). Specifically, the relevant loan amount for floating-rate borrower firms declined by approximately 25% in nominal terms. This indicates that firms have managed their interest-sensitive debts effectively.

Chart IV.1.II.3: Change in TL Commercial Loans (Index, 08.23=100)



Source: CBRT
Last Observation: 03.24
Note: The change in total TL commercial loans used by floating- and fixed-rate borrower firms is indexed to August 2023. The sample covers firms in August 2023.

Chart IV.1.II.4: Change in Floating-Rate TL Loans (Index, 08.23=100)

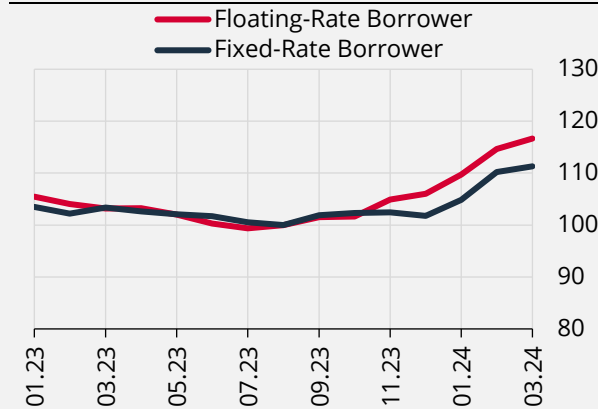


Source: CBRT
Last Observation: 03.24
Note: The change in floating-rate TL commercial loans used by floating- and fixed-rate borrower firms is indexed to August 2023. The sample covers firms in August 2023.

A look at the change in FX loans of firms in the sample reveals that the two firm groups had similar movements before the tightening. However, after the monetary tightening, floating-rate borrower firms recorded higher FX loan growth rates than fixed-rate borrower firms (Chart IV.1.II.5). While approximately 43% of the loan portfolio of floating-rate borrower firms was composed of FX loans, this ratio remained limited to 30% in the other group (Chart IV.1.II.6). This shows that floating-rate borrower firms opted for FX loans in their loan preference, while the preference for FX loans was moderate in the other group. Floating-rate borrower firms are assessed to have substituted FX loans for their declining floating-rate TL loan balances.

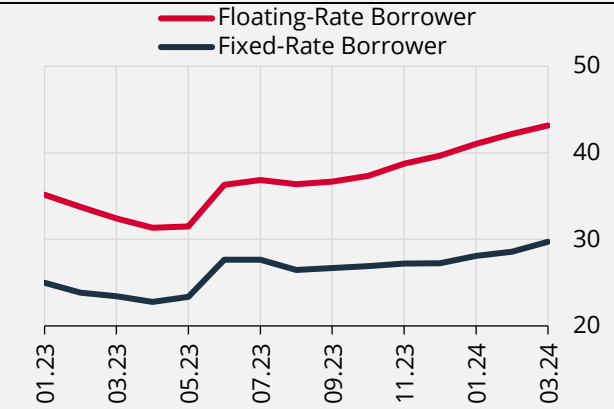
Lastly, we analyze the evolution of the credit risk outlook of the two groups. While for both groups non-performing loans (NPLs) and Stage 2 loans, which pose a risk to their credit quality, registered similar growth rates in the period before August 2023, floating-rate borrower firms diverged from the other group slightly in the upward direction during the monetary tightening period (Chart IV.1.II.7).

Chart IV.1.II.5: Change in FX Commercial Loans (Index, 08.23=100)



Sources: CBRT, Authors' Calculations Last Observation:03.24
 Note: The change in FX commercial loans used by floating- and fixed-rate borrower firms is indexed to August 2023. The sample covers firms in August 2023.

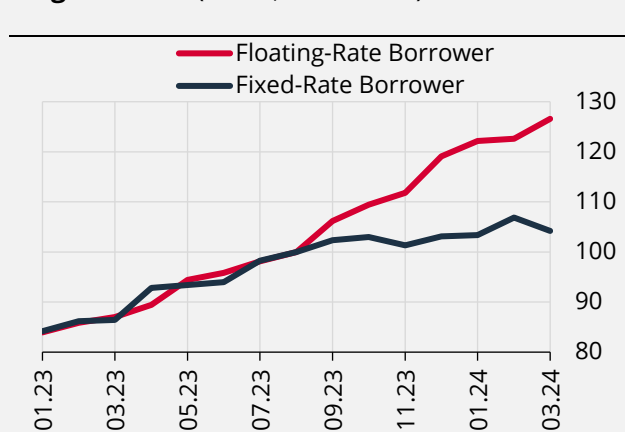
Chart IV.1.II.6: Share of FX Commercial Loans (%)



Sources: CBRT, Authors' Calculations Last Observation: 03.24
 Note: Shows the share of FX commercial loan balance of floating- and fixed-rate borrower firms in their total commercial loans. The sample covers firms in August 2023.

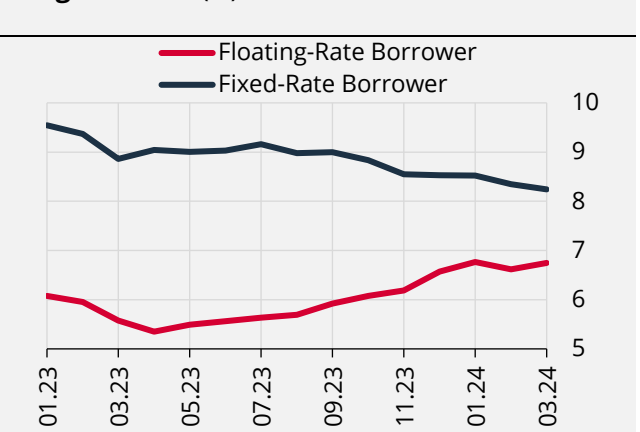
In the tightening period, the share of NPLs and Stage 2 loans increased among floating-rate borrower firms but decreased in the other group (Chart IV.1.II.8). However, floating-rate borrower firms have lower NPL and Stage 2 loan ratios than the other group in general, and the amount of their risky loans is still below the sector's average despite an increase in their credit risk. Additionally, NPL and Stage 2 loan balances of floating-rate borrower firms account for only a 20% share in the sector in the current period. Although the credit quality of these firms has been impaired slightly, the share of this impaired amount in total loans remains very small.

Chart IV.1.II.7: Change in Non-Performing and Stage 2 Loans (Index, 08.23=100)



Sources: CBRT, Authors' Calculations Last Observation: 03.24
 Note: The change in non-performing and Stage 2 loans of floating- and fixed-rate borrower firms is indexed to August 2023. The sample covers firms in August 2023.

Chart IV.1.II.8: Share of Non-Performing and Stage 2 Loans (%)



Sources: CBRT, Authors' Calculations Last Observation: 03.24
 Note: Shows the share of non-performing and Stage 2 loans of floating- and fixed-rate borrower firms in their total loans. The sample covers firms in August 2023.

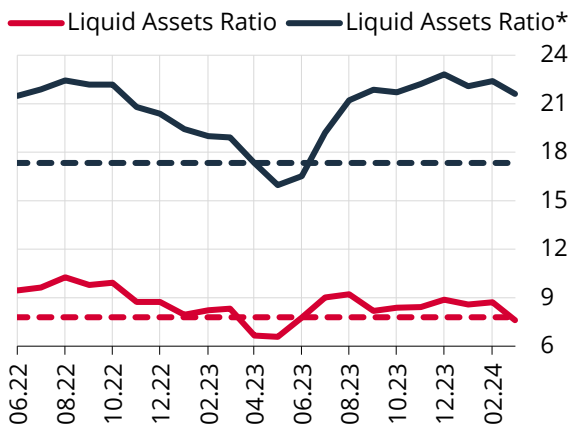
To conclude, TL commercial loan balances of floating-rate borrower firms have been flat, and these firms have increased their FX loan shares by diversifying their financing types. Moreover, the deterioration in credit risk indicators of firms that are more sensitive to interest rate changes remained low during the upward trend in loan rates. Therefore, risks to the corporate sector that may arise from increased financing costs are assessed to have a possibly limited impact on the asset quality of the banking sector.

IV.2 Liquidity Risk

Banks' liquid assets hover close to their historical average.

Having trended upwards in the second half of 2023, the liquid assets ratio declined partially in the first quarter of 2024 and converged to its historical average. The liquid assets indicator including reserve requirements (RRs) continued to hover well above the historical average (Chart IV.2.1). Following the increase in RR ratios to sterilize the liquidity mainly stemming from exchange rate difference payments to FX-protected deposits (KKM), the liquidity ratio has reached a high level. In the first quarter of 2024, the liquid assets ratio including RRs edged down due to the reduction in RRs maintained in line with the decline in the KKM balance. While the free account balance at foreign correspondent banks had an upward effect on the liquid assets ratio excluding RRs, the declining unencumbered GDS portfolio in the first quarter of 2024 had a downward effect (Chart IV.2.2). Due to the periodically high liquidity in the system in the first two months of the year, the unencumbered GDS balance increased as a result of the switch from blocked accounts, which banks used as collateral for open market operation (OMO) transactions, to free accounts. While the rise in the funding requirement of the system in March pushed banks to switch the unencumbered GDS used as collateral for OMO funding to blocked accounts, the unencumbered GDS ratio converged to its historical average. On 9 May 2024, with the termination of the securities maintenance practice, securities in blocked accounts were transferred to free accounts. Following this shift, banks' unencumbered GDS ratio is expected to go up by around 2 percentage points.

Chart IV.2.1: Share of Liquid Assets (%)

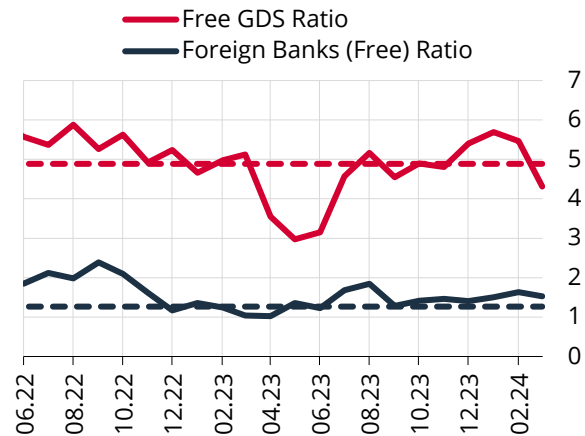


Source: CBRT

Last Observation: 03.24

Note: Liquid Assets Ratio = (Cash Reserves+ Free Accounts at Foreign Banks+ Unencumbered GDS+ Reverse Repo Receivables+ Takasbank and BIST Interbank Market) / Assets. Liquid Assets Ratio*=(Cash Reserves+ Free Accounts at Foreign Banks+ Unencumbered GDS+ Reserve Requirements) / Assets. Dashed lines represent the average of each series between 2014 and 2021.

Chart IV.2.2: Share of Selected Liquid Items (%)



Source: CBRT

Last Observation: 03.24

Note: Unencumbered GDS Ratio is the ratio of government debt securities that are not subject to collateral to assets. Foreign Banks (Free) Ratio = Free accounts at Foreign Banks / Assets. Dashed lines represent the average of each series between 2014 and 2021.

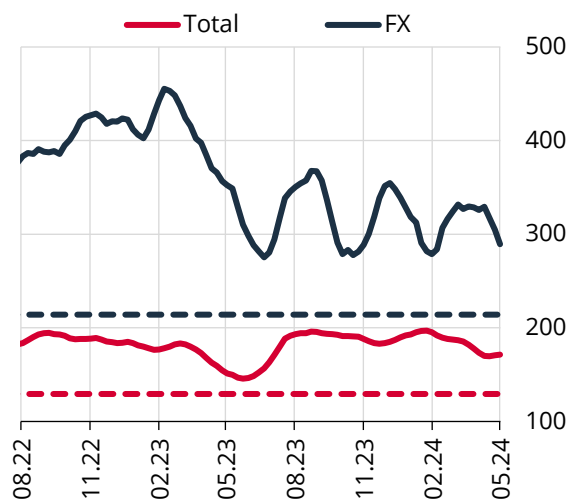
The positive outlook is maintained in other liquidity indicators such as liquidity coverage ratio and loan/deposit ratio.

Liquidity coverage ratios (LCR), which are indicators of banks' ability to meet net cash outflows within 30 days with high-quality liquid assets, hover above legal limits and their historical average (Chart IV.2.3). The banking sector's liquid assets are capable of meeting possible short-term cash outflows in both TL and FX. Since the second half of 2023, the FX LCR ratio has fluctuated following developments regarding currency inflows and outflows, CBRT swap transactions, capital movements, and FX deposit preferences.

The loan-to-deposit ratio (LDR) hit a historical low in the second half of 2023. In this period, while deposit growth accelerated due to exchange rate difference payments to FX-protected deposits, the LDR declined to 74% amid slowing loan growth. In the first quarter of 2024, despite a slight acceleration in loan growth, the LDR converged to

80%, driven by the shift from deposits to alternative investment instruments. As of April, the TL-denominated LDR has been on a declining trend due to the strong preference for TL deposits and slower TL loan growth (Chart IV.2.4). Meanwhile, deposits, as a stable source of funding, are significantly higher than loan balances, contributing positively to the sector's liquidity outlook.

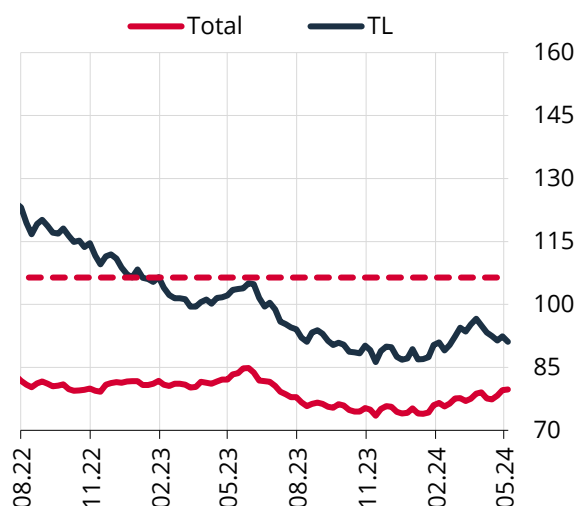
Chart IV.2.3: Liquidity Coverage Ratios
(4-Week MA, %)



Source: CBRT Last Observation: 10.05.24

Note: Development and investment banks (DIBs) are excluded. Based on nonconsolidated reports. Minimum legal limits for FX and total LCR are 100% and 80%, respectively. Dashed lines represent the average of each series between 2014 and 2021.

Chart IV.2.4: Loan/Deposit Ratio (%)



Source: CBRT Last Observation: 10.05.24

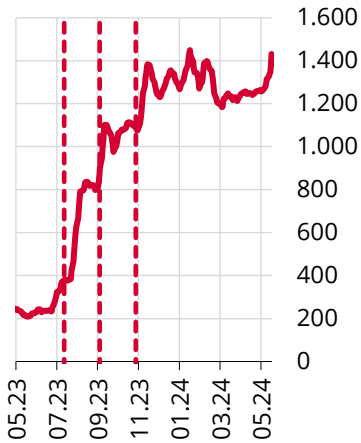
Note: DIBs are excluded. Loans extended to banks and bank deposits are not included. Dashed line represent the average of respective ratio between 2014 and 2021.

While the excess Turkish lira liquidity in the system was sterilized through reserve requirements and deposit transactions, the liquidity created by foreigners' greater interest in Turkish assets and residents' increased preference for Turkish lira deposits since April caused net OMO funding to turn negative.

Excess Turkish lira liquidity emerged in the system due to the exchange rate difference payments to KKM in the third quarter of 2023 as well as increased capital inflows, slow loan growth, and public transactions in the last quarter of the year. Excess liquidity was sterilized through deposit auctions and increases in the TL RR ratio in the related period (Chart IV.2.5). Banks' high liquidity levels put downward pressure on deposit rates, especially in January and February of 2024, which weakened monetary transmission and widened the gap between the policy rate and deposit rates. Turkish lira deposit rates rose and began to move in line with the policy rate, and the monetary policy transmission channel strengthened with the introduction of the Turkish lira reserve requirement practice for FX liabilities in February and renumeration on reserve requirements for banks that achieve their Turkish lira conversion targets, as well as the policy rate hike in March (Chart IV.2.7).

Since April, foreigners' increasing interest in Turkish assets and residents' accelerated switch from FX deposits to TL deposits have created excess liquidity, causing net OMO funding to turn negative (Chart IV.2.6). Deposit rates declined slightly due to the excess Turkish lira liquidity in May. The CBRT raised the reserve requirement ratios on 23 May in order to sterilize the excess Turkish lira liquidity in the system. Consequently, liquidity of approximately TRY 550 billion was withdrawn from the system.

Chart IV.2.5: TL RR Balance (14-Week MA, Billion TRY)



Source: CBRT

Chart IV.2.6: CBRT Funding (Billion TRY)

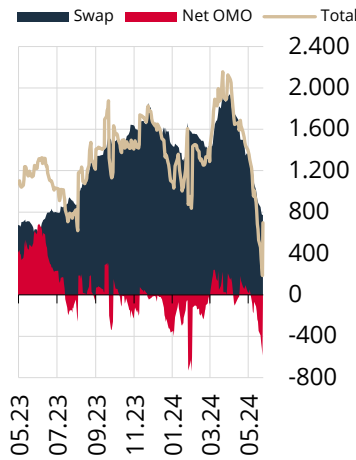
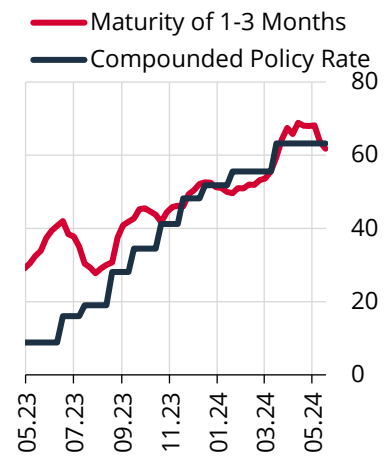


Chart IV.2.7: TL Deposit Rates (%)



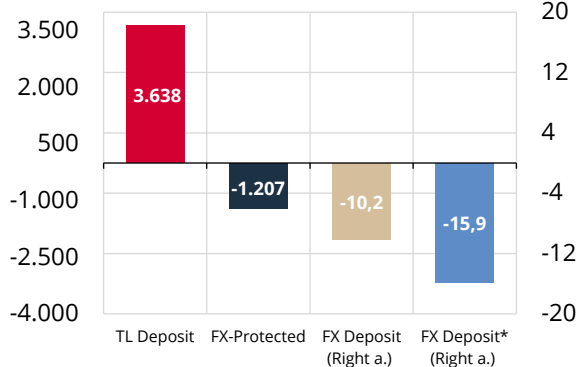
Last Observation: 24.05.2024

Note: Dashed lines represent the RR decisions taken on 21 July 2023, 14 September 2023, and 2 November 2023 regarding the KKM accounts. Since the deposit rate is reported as compound, the chart is based on compound policy rate.

While the share of TL deposits in the deposit composition increased significantly, that of the KKM accounts decreased.

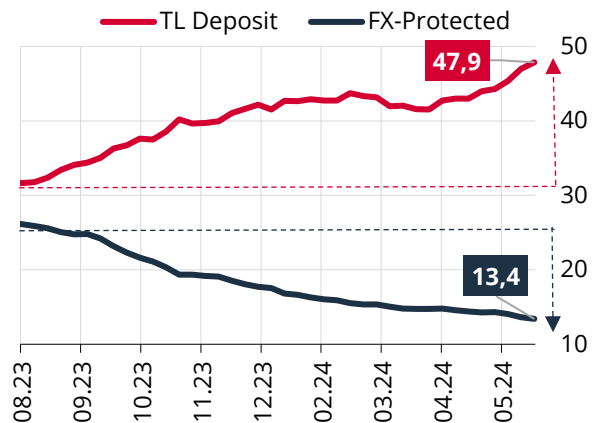
In addition to the monetary tightening steps, the regulations introduced in August 2023 to encourage the transition from KKM to TL deposits and to expand the share of TL deposits resulted in a TL 1.2 trillion decline in the KKM balance and a TL 3.6 trillion increase in TL deposits. Accordingly, the share of TL deposits in the deposit composition rose to 48%, while the share of KKM declined to 13%. Moreover, exchange rate and parity-adjusted FX deposits declined by USD 15.9 billion in the same period. The share of TL deposits is expected to grow further in the upcoming period given the current level of TL deposit rates and improving expectations (Charts IV.2.8 and IV.2.9). Moreover, on 23 May, the CBRT decided to reduce the total target including renewal to 75% and, upon achievement of this target, to decrease the remuneration rate applied to reserve requirements maintained for KKM accounts to 40% of the policy rate. These steps will contribute to the acceleration of the decline in the KKM balance by reducing the benefits of KKM accounts.

Chart IV.2.8: Change in Deposits (Billion TRY, Billion USD)



Source: CBRT

Chart IV.2.9: Distribution of Deposits (Share, %)



Last Observation: 24.05.24

Note: TL deposits do not include the KKM balance. The change in deposits chart represents the change between 25 August 2023 and 24 May 2024. FX Deposit* balance is adjusted for exchange rate and parity effects.

Banks' external debt rollover ratios have been rising owing to the decline in external financing costs following the improvement in the country risk premium.

While the banking sector's external debt stock increased on the back of strong foreign investor interest and an improved country risk premium, the share of external debt in the funding composition rose to 16% (Chart IV.2.10). The external debt rollover ratios of banks, which benefited from long-term borrowing facilities with lower costs stemming from the decline in the CDS level, are on an upward trend. The rollover of banks' medium- and long-term external debt over 170% extends the average maturity of external debt (Chart IV.2.11). Long-term borrowing is also considered a factor that mitigates the risks arising from maturity mismatches in banks' balance sheets.

Increased access to external borrowing sources enabled banks to diversify their external debt composition. Having declined in the previous years, Eurobond issuances accelerated in the current reporting period, and the Eurobond balance exceeded USD 20 billion, thus reaching the level in 2021. Similarly, banks strengthen their capital by increasing their subordinated debts (Chart IV.2.12).

Chart IV.2.10: External Debt and Share (Billion USD, %)

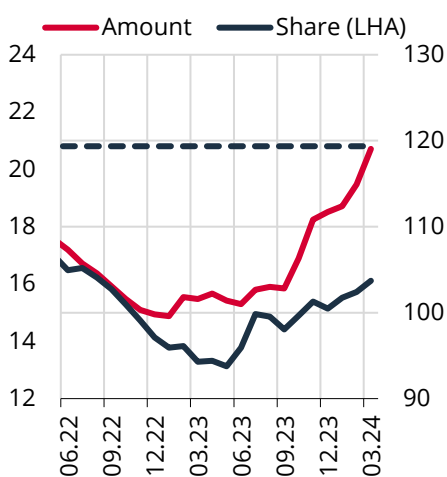


Chart IV.2.11: External Debt Rollover Ratio (%)

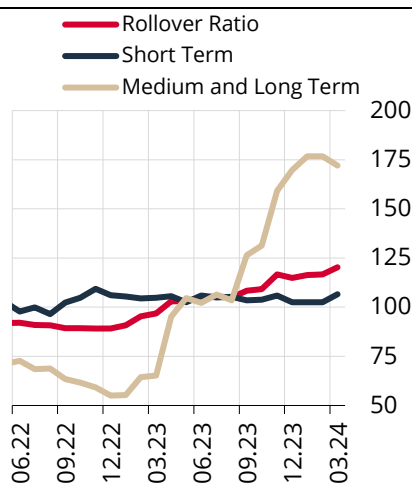
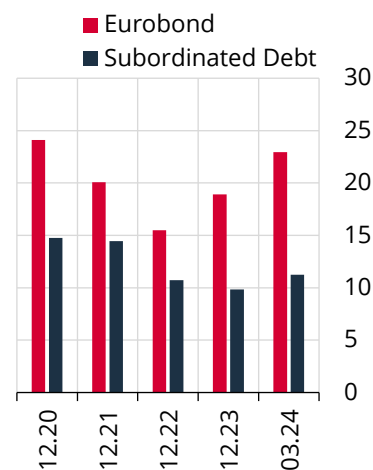


Chart IV.2.12: Eurobond and Subordinated Debts (Billion USD)



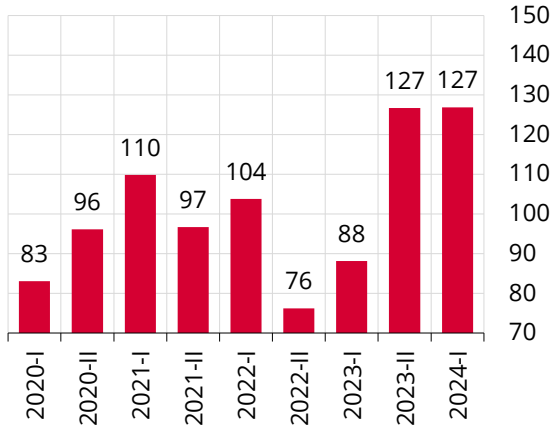
Sources: CBRT, CSD

Note: Parity-adjusted amount. The USD equivalent of Euro-denominated external debts is recalculated by the parity value of June 2018. The dashed line is the 2014-2021 average of share series.

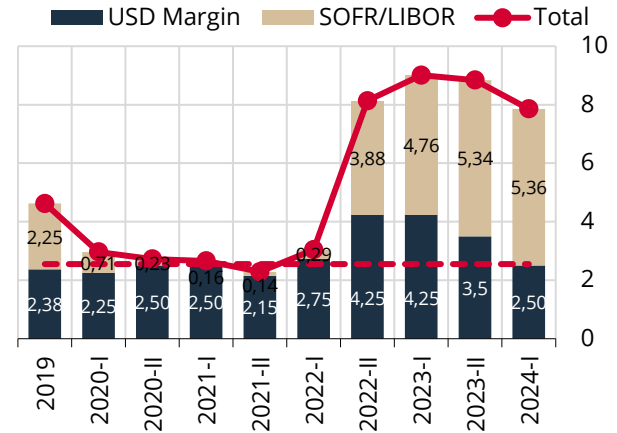
Note: External debt rollover ratios are calculated based on 6-month (for total), 3-month (for short-term) and 12-month (for long-term) moving totals of banks' total borrowings and repayments of external liabilities including securities issued abroad.

Last Observation: 03.24

Syndicated loans are being renewed at high rates amid declining financing costs. In the first syndicated loan period of 2024, the average renewal rate of five banks was 127% (Chart IV.2.13). In other syndication transactions to be renewed in the first half of the year, banks' planned renewal rate is above 100%. Although the SOFR reference rate remained similar to the previous period, the fall in margins pushed down the total cost of syndicated loans. The risk premium in syndication transactions dropped by 175 basis points year-on-year and by 100 basis points compared to the transactions conducted in the last quarter of the previous year (Chart IV.2.14). In the upcoming period, banks' external borrowing demand will be driven by the course of FX external debt placement facilities, FX loan demand and CBRT swap facilities.

Chart IV.2.13: Rollover Ratio of Syndicated Loans (%)


Sources: CBRT, KAP Last Observation: 05.24

Chart IV.2.14: Cost Margins of Syndicated Loans (%)


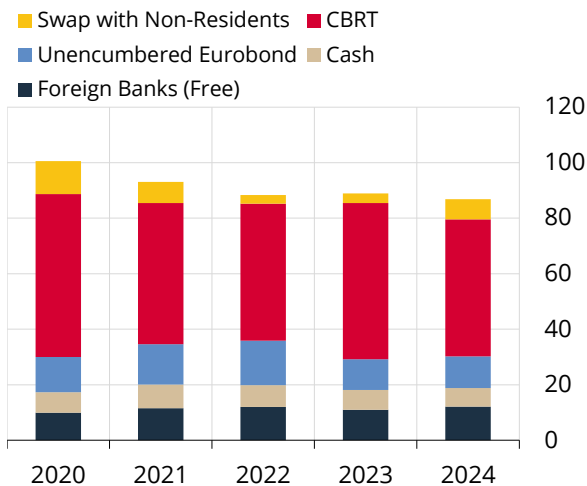
Sources: KAP, Bloomberg

Last Observation: 05.24

Note: Calculated for five banks for the 2024-I period and ten large-scale banks excluding DIBs for previous periods. I and II represent April-June and October-December syndication periods of the respective year. The external debt rollover ratio is calculated as the ratio of total borrowing and repayments in the specified periods. The USD margin shows the interest rate applied in addition to the SOFR/LIBOR rate. The dashed line is the average of the total cost for 2014-2021 period.

The sector's FX liquidity buffers against possible FX liquidity shocks remain strong.

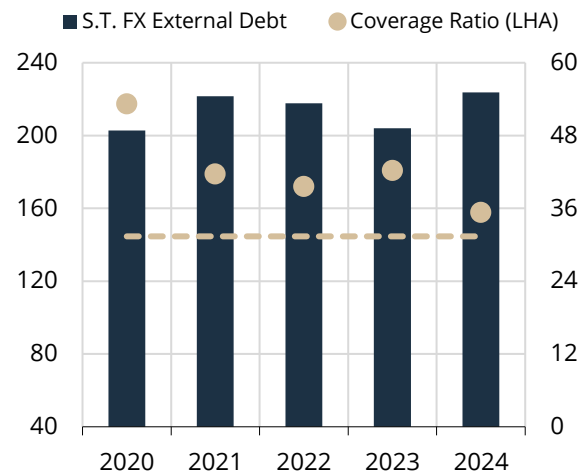
As of March 2024, banks held FX liquid assets worth USD 87 billion (Chart IV.2.15). As the sector's FX-denominated external debt stock that will fall due within one year to USD 55.1 billion, the capacity of FX liquid assets to cover short-term FX-denominated external debt is 158% (Chart IV.2.16). Banks' short-term FX external debt coverage ratio hovers above its historical average, indicating that they have strong FX liquidity buffers.

Chart IV.2.15: FX Liquid Assets (Billion USD)


Source: CBRT

Last Observation: 03.24

Note: The average of the last three months has been reported for each year. The CBRT item covers total FX balances that banks hold at the CBRT and includes swap and free accounts balances.

Chart IV.2.16: Short-Term FX External Debt and Coverage Ratio (Billion USD, %)


Sources: KAP, Bloomberg

Last Observation: 03.24

Note: External debt represents FX-denominated external debt that will fall due within one year and is calculated by excluding non-residents' FX deposit accounts. The most recent data pertaining to external debt is from March. Dashed lines show the average of coverage rates for the 2014-2021 period.

Banks' short-term FX external debt balance has increased slightly due to rising external borrowing. However, the fact that the capacity of FX liquid assets to cover short-term FX-denominated external debt is above the historical average suggests that external debt repayments do not constitute a risk factor for banks and that the sector is resilient to global liquidity developments. The FX-denominated required reserves amounting to USD 78 billion stand as an additional facility to support banks' liquid asset portfolios.

Table IV.2.1: Developments in Selected Liquidity Indicators

	May 2013	June 2018	May 2023	March 2024
FX External Debt (Billion USD)	127	164	101	119
Short-Term FX External Debt (Billion USD)	69	73	49	55
FX Liquid Assets (Billion USD)	75	125	88	87
Short-Term Debt Coverage Ratio (%)	108	170	177	158
Average Remaining Maturity of External Debt (Month)	32	37	36	33
FX Required Reserves (Billion USD)	28	42	77	78

Source: CBRT

Note: FX liquid assets are the sum of items listed in Chart IV.2.15.

IV.3 Interest Rate and Exchange Rate Risk

Following the gradual increase in the policy rate, the interest rate spreads between stock loans and deposits are converging to their historical averages.

Amid the rate hikes that started in June 2023, loan and deposit rates also trended upwards. Hikes in interest rates may have an impact on bank balance sheets through the loan-deposit rate spread and revaluation due to the maturity mismatch in the sector. Since the beginning of the rate hike cycle, the interest rate on newly extended loans has surged by 48.4 percentage points, and the weighted average interest rate on stock loans has risen by 29.7 percentage points in the May 2023 – March 2024 period to 47.3%. On the other hand, regarding the deposits, whose interest rate is renewed faster than loans due to their shorter maturity, the interest rate on newly opened deposits increased by 31.4 percentage points in the same period, while the interest rate on stock TL deposits excluding demand deposits rose by 26.7 percentage points, close to the increase in flow interest rates (Charts IV.3.1 and IV.3.2). Having been tilted to the downside at the start of the rate hike cycle, the stock interest rate margin improved in light of these developments, and core margin, adjusted for demand deposits, has moved up into positive territory since July. However, interest rate spreads between stock loans and deposits have recently started to converge to their historical averages (Chart IV.3.3). On the other hand, the market value of long-term and fixed-income securities that banks have on their balance sheets under the regulations saw impairment due to the upward movement in Turkish lira GDGS interest rates by 16 to 35 percentage points for different maturities (Chart IV.3.4). That said, as banks classify these securities mostly using the amortized cost method, the impact of these impairments on balance sheets remained limited.

Chart IV.3.1: TL Deposit Rate Curve* (Stock, %)

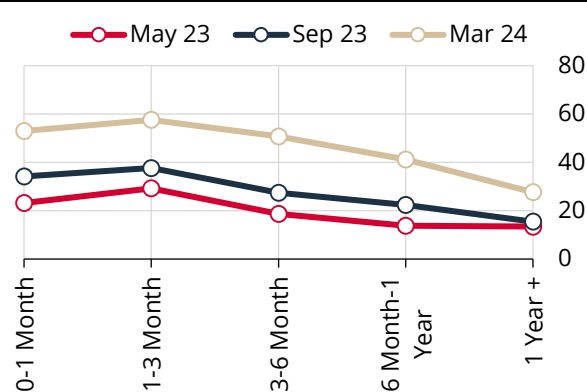
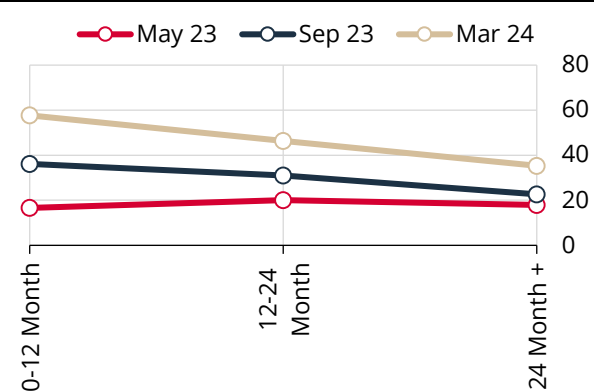


Chart IV.3.2: TL Loan Yield Curve* (Stock, %)

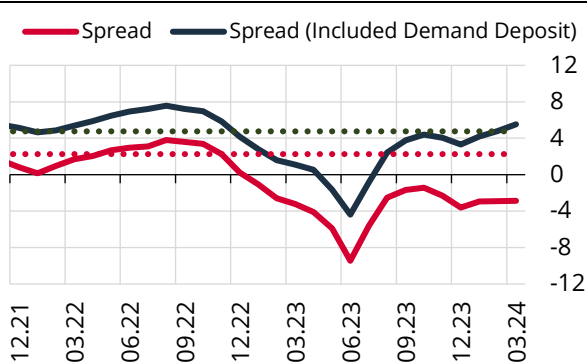


Source: CBRT

Last Observation: 03.24

Note: * Demand deposits and banks' deposits are not included in deposit interest rates. Participation banks are not included.

Chart IV.3.3: TL Loan*- Deposit Rate Spread (Stock, %)

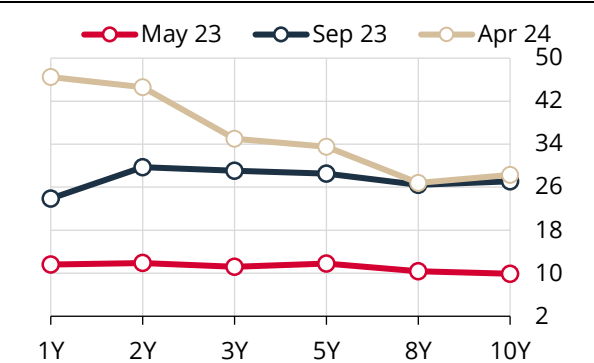


Source: CBRT

Last Observation: 03.24

Note: * Participation banks are excluded. Loan rates, credit cards and overdraft accounts are included. Dashed lines denote the 2013-2021 average. ** Data of the respective month's last day.

Chart IV.3.4: Yield Curve of Fixed-Rate TL GDGS** (Compound, %)



Source: Bloomberg

Last Observation: 04.24

The maturity mismatch between interest rate-sensitive assets and liabilities remains close to the historical average.

The weighted average maturity of banks' interest rate-sensitive TL assets remains almost steady at 14 months. The share of long-term fixed-income securities increased after the introduction of the securities maintenance practice, leading to an extension in the average maturity of TL assets, and the maturity has recently followed a flatter course. The average maturity of interest rate-sensitive TL liabilities stood at 4.8 months by March (Chart IV.3.5). The difference between the weighted average maturities of FX assets and liabilities has declined minimally since the last report period. The average maturity of FX assets was 17.8 months, while that of FX liabilities was 12.6 months (Chart IV.3.6). Meanwhile, the maturity spread between TL assets and TL liabilities was 9.6 months, close to the historical average, but the maturity spread between FX assets and FX liabilities declined to 5.2 months (Chart IV.3.7).

Chart IV.3.5: Weighted Average Maturity of TL Assets and Liabilities (Month)

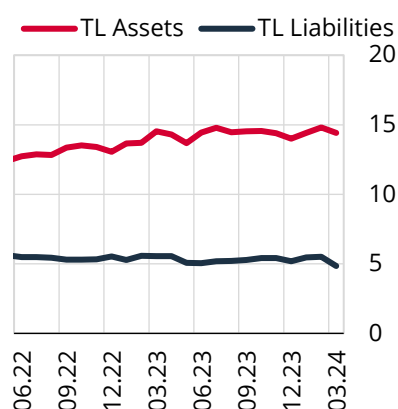


Chart IV.3.6: Weighted Average Maturity of FX Assets and Liabilities (Month)

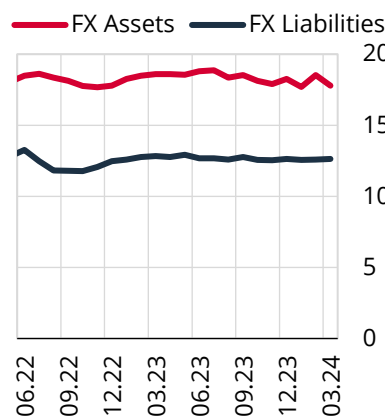
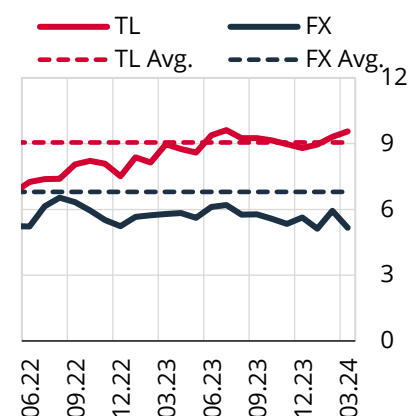


Chart IV.3.7: Weighted Average Maturity Difference Between Assets and Liabilities (Month)



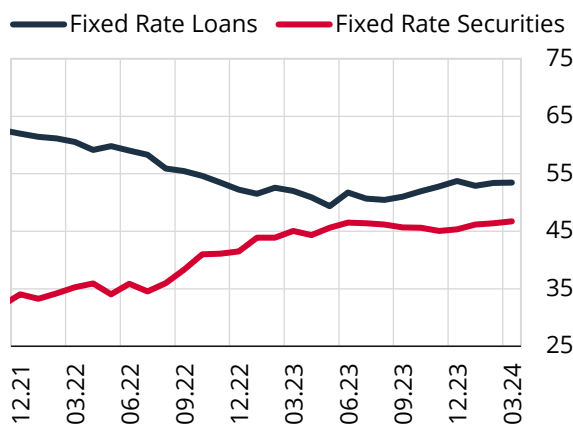
Source: CBRT

Last Observation: 03.24

Note: Maturities show the repricing period. Weighted average maturities are calculated based on the mid-points of maturity brackets and the cash flows of related financial assets and liabilities. The 2013-2020 averages are shown. Participation banks are not included. Banks can allocate core deposits, calculated based on demand deposits, across maturities up to three years.

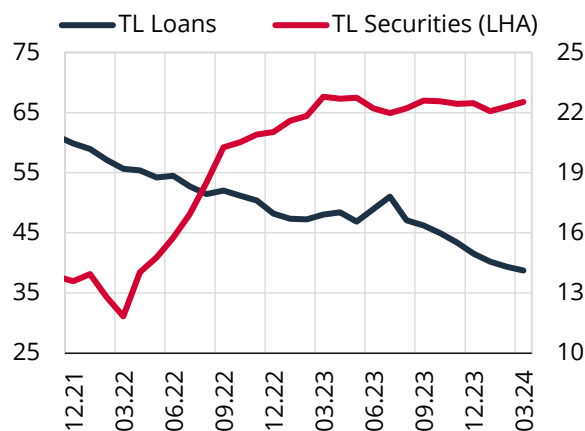
The share of fixed-rate loans in banks' loan portfolios is increasing.

The share of long-term fixed-income securities in banks' portfolios increased from the second half of 2022 until the start of the interest rate hike cycle. In that period, to manage the repricing risk they were exposed to, banks reduced the share of fixed-rate loans but increased the same after the rate hike cycle kicked off. This is attributed to the increase in banks' appetite for fixed-rate loans following the rise in loan rates. Meanwhile, as a result of the gradual simplification of the regulations that encouraged banks to purchase long-term fixed-income securities, the share of fixed-rate securities on balance sheets has been almost flat (Chart IV.3.8). On the other hand, while the average maturity of TL securities did not display a significant change, that of fixed-rate TL loans decreased (Chart IV.3.9).

Chart IV.3.8: Interest Structure of TL Securities and TL Loans (%)


Source: CBRT

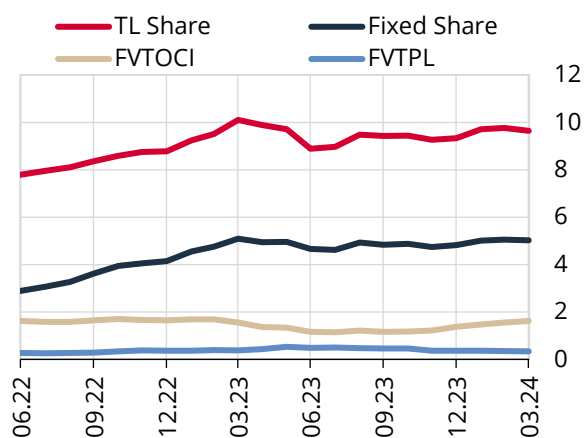
Note: Weighted average maturities are shown. Weighted average maturities are calculated based on the mid-points of maturity brackets and cash flows of fixed-rate TL loans. The maturity for TL securities is calculated based on total fixed-income securities held by banks. Participation banks are excluded.

Chart IV.3.9: Maturity of Fixed-Rate TL Securities and TL Loans (Remaining Maturity, Month)


Last Observation: 03.24

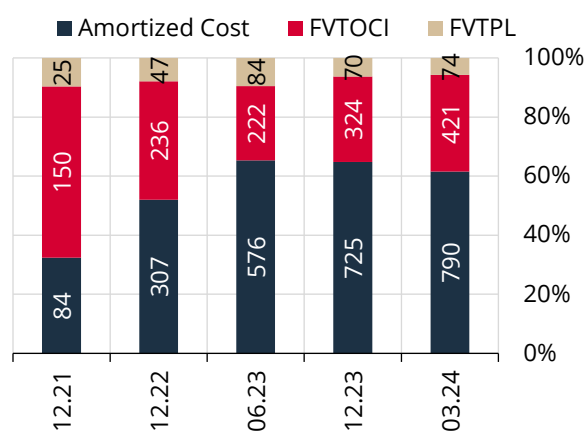
Banks offset the losses that may arise from impairment of securities by classifying securities at amortized costs on their balance sheets.

The share in assets of TL securities that banks have on their balance sheets is 9.6%, while the share of fixed-rate TL securities is 5% (Chart IV.3.10). Banks account for long-term and fixed-rate TL securities at amortized cost on their balance sheets to limit the adverse impact of impairment of securities on profitability and equity. The share of fixed-rate TL securities at amortized cost stood at 62% (Chart IV.3.11).

Chart IV.3.10: Asset Share of TL Securities (%)


Source: CBRT

Last Observation: 29.03.24

Chart IV.3.11: Fixed-Rate TL Securities (Billion TL, % Share)


Source: CBRT

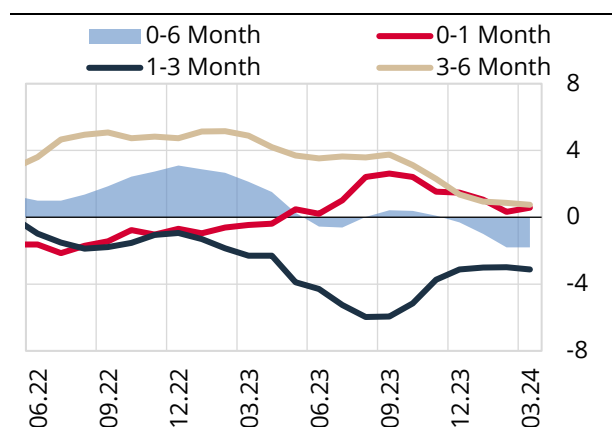
Last Observation: 29.03.24

Note: Securities that yield non-interest income are included in fixed-rate securities. FVTPL: Securities at fair value through profit or loss. Amortized Cost: Securities valued over amortized cost. FVTOCI: Securities at fair value through other comprehensive income.

The spread between TL assets and liabilities that banks have at maturities shorter than six months has shifted into negative territory.

On the back of the reserve requirement practice imposed on KKM accounts to sterilize excess TL liquidity in the system, banks' TL positions with maturities of up to one month shifted to positive territory in the third quarter of 2023. Moreover, due to the differentiation of reserve requirement ratios across maturities, banks reduced their negative positions with maturities of 1-3 months by channeling their TL positions to 6-month and longer maturities. Since the third quarter of 2023, banks' positions with up to one-month maturities have decreased slightly due to the decline in reserve requirements amid a faster shift from KKM deposits to TL deposits, (Chart IV.3.12). On the FX side, as FX deposits are predominantly kept in demand deposits, the positive position for maturities up to six months is maintained (Chart IV.3.13).

Chart IV.3.12: TL Asset-Liability Gap Analysis
(%, 3-Month MA)

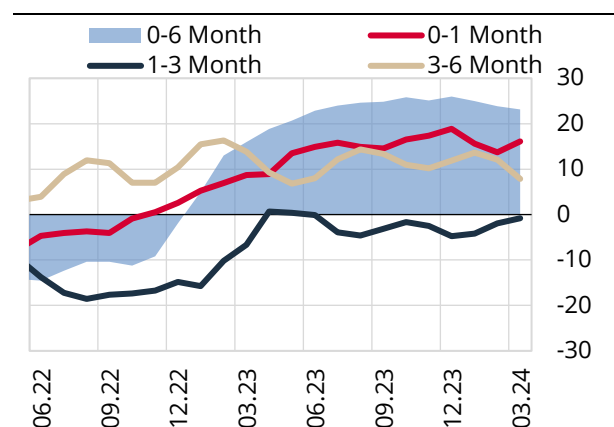


Source: CBRT

Last Observation: 03.24

Note: Participation banks are excluded. Demand deposit items are excluded.

Chart IV.3.13: FX Asset-Liability Gap Analysis
(Billion USD, 3-Month MA)



Source: CBRT

Last Observation: 03.24

The sensitivity of banking books to TL and FX interest rate shocks remains below historical averages.

According to the standard interest rate risk measurement approach, in the event of an upward shock of 500 basis points in TL interest rates and 200 basis points in FX interest rates, the likely loss arising from banking books remains quite limited for FX, while it stands at 4.9% of the regulatory capital for TL, which is well below the historical average (Chart IV.3.14)¹. Under the shock scenario, no bank incurs a loss of 15% or more of the regulatory capital, while the interest rate shock sensitivity of banks that have 10.2% of the sector's assets is in the range of 10-15% (Chart IV.3.15). Accordingly, the sector appears to have a risk outlook and balance sheet structure aligned with regulatory limits when an interest rate shock is applied.

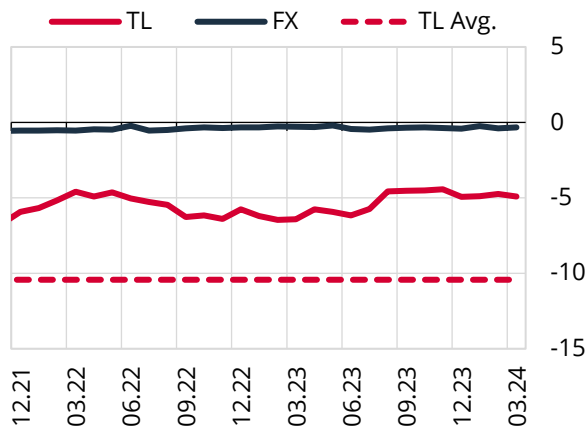
Although the sector's FX long position has declined slightly, the FXNGP/capital ratio has remained within legal limits.

The FX net general position (FXNGP) declined after October 2023 to USD 2.5 billion on May 10, 2024, but the FXNGP/capital ratio remained at 3%, within the legal limit² (Chart IV.3.16). The number of banks with an FX long position decreased, while the asset size of banks with an FX position in positive territory accounts for a significant portion of the sector (Chart IV.3.17). Meanwhile, the on-balance sheet FX short position showed fluctuations after October 2023, and stood at USD 40 billion in May 2024, slightly below the October level (Chart IV.3.18).

¹Under the BRSA's Regulation on the Measurement and Assessment of the Interest Rate Risk in the Banking Book via the Standard Shock Method, the interest rate risk-driven loss to regulatory capital ratio cannot exceed 20%.

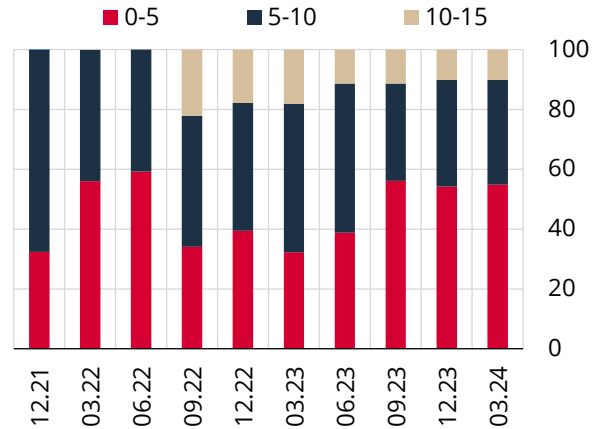
²The regulatory limit for the FXNGP/capital ratio, which was formerly 20%, was decreased to 5% with an amendment that took effect on January 9, 2023, but raised to 10% on March 9, 2023.

Chart IV.3.14: Loss-to-Capital Ratio After Positive Interest Rate Shock (Banking Calculations, %)



Source: CBRT Last Observation: 03.24

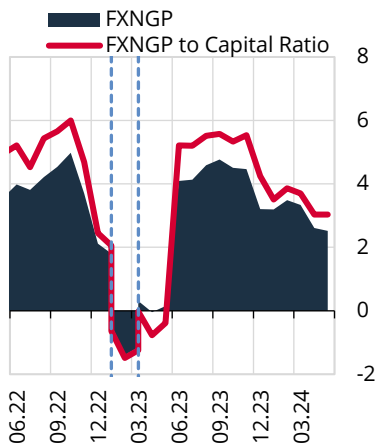
Chart IV.3.15: TL Asset Shares of Banks by Loss-to-Capital Ratio Intervals After TL Interest Rate Shock (%)



Source: CBRT Last Observation: 03.24

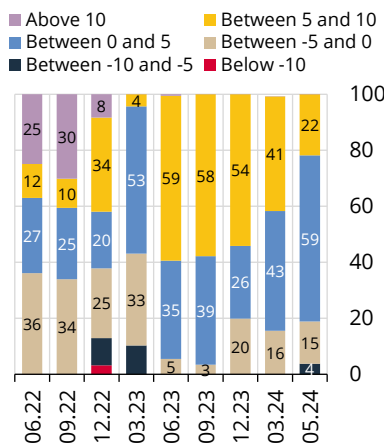
Note: The economic value approach takes account of the change in the present value of interest rate-sensitive assets and liabilities in the face of a change in the interest rate. The yield curve is assumed to display a parallel upward movement of 500 bps in a TL interest rate shock and 200 basis points in an FX interest rate shock. Losses under the interest rate shock scenario are divided into brackets. The total assets of banks in each bracket are proportioned to the total assets of the sector. Participation banks are excluded. Historical average is the average of 2013-2020 period.

Chart IV.3.16: FXNGP-to-Capital Ratio and FXNGP (% Billion USD)



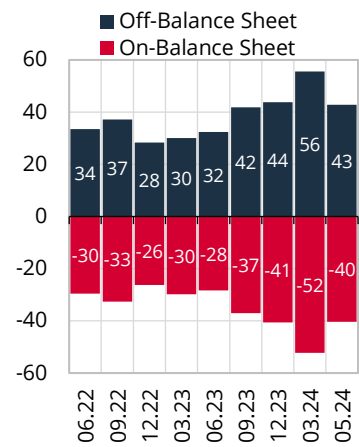
Source: CBRT
 Note: Weekly simple arithmetic mean of FXNGP/Capital ratio has been calculated. Dashed lines denote the dates of the regulatory amendments enacted by the BRSA.

Chart IV.3.17: Total Asset Shares of Banks by FXNGP/Capital Ratio (%)



Note: Asset aggregates of March were used in April and May calculations.

Chart IV.3.18: Banking Sector's FX Position (Billion USD)



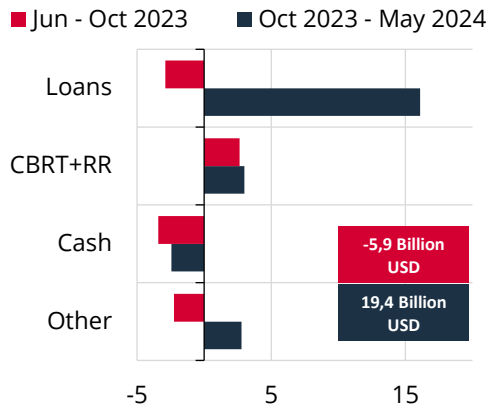
Last Observation: 10.05.2024

The decline in the on-balance sheet short position was driven by the growth of FX assets outpacing the growth of FX liabilities.

On-balance sheet FX assets increased by USD 19.4 billion between October 2023 and May 2024 (Chart IV.3.19). Banks' FX assets were supported by the FX loans channel as the recent rise in the cost of borrowing in Turkish lira and expectations regarding the exchange rate made FX loans more attractive. Additionally, the rise in CBRT and RR items was another driver of the increase in FX assets. Following the fall in the risk premium and the improvement in external borrowing conditions amid the tight monetary policy, banks' external Eurobond issuances, syndicated loan renewals and subordinated debts have been on the rise. Accordingly, banks' on-

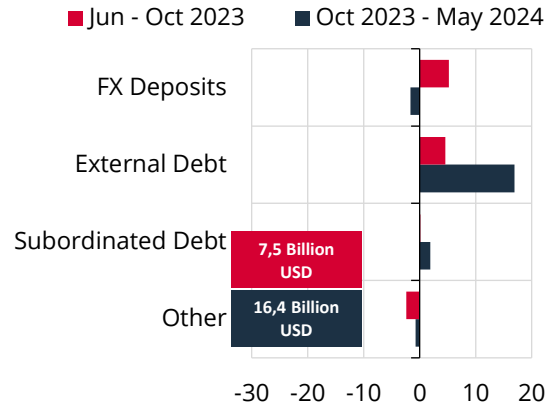
balance sheet FX liabilities were up by USD 16.4 billion in the October 2023-May 2024 period. The most important factor in the increase in liabilities was the rise in the external debts item (Chart IV.3.20).

Chart IV.3.19: Change in Banking Sector's On-Balance Sheet FX Assets (Billion USD)



Source: CBRT Last Observation: 10.05.2024
 Note: Cash also includes receivables from foreign banks and reverse repo transactions.

Chart IV.3.20: Change in Banking Sector's On-Balance Sheet FX Liabilities (Billion USD)

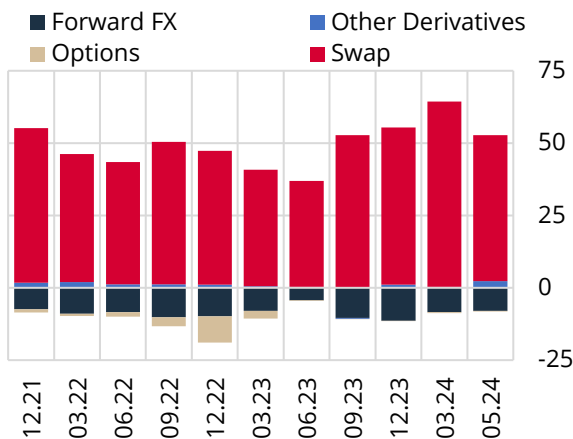


Source: CBRT Last Observation: 10.05.2024
 Note: FX deposits refer to the total of FX and precious metal deposit accounts. External debt includes loans from abroad, securities issued and funds from repo transactions.

Off-balance sheet transactions mostly feature currency swaps.

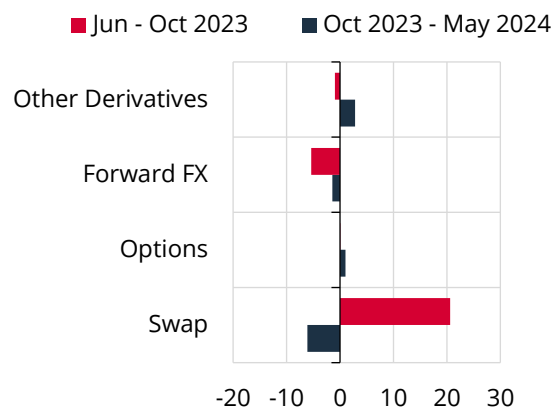
While banks mostly use currency swaps to close their on-balance sheet short positions, the volume of forward FX transactions among other derivative instruments is high but limited (Chart IV.3.21). Banks manage their balance sheets by converting their increasing foreign currency liquidity stemming from the rise in their on-balance sheet FX liabilities into TL through swap transactions. However, it is noteworthy that they reduced their swap receivables after October 2023. Regarding forward FX transactions, banks took action on the net buy side (Chart IV.3.22).

Chart IV.3.21: Banks' Off-Balance Sheet Net FX Assets (Billion USD)



Source: CBRT Last Observation: 10.05.2024
 Note: Currency options refer to the delta equivalent of currency options for this period. Forward FX position also includes FX position with a value date up to two days.

Chart IV.3.22: Change in Banks' Off-Balance Sheet Net FX Position (Billion USD)



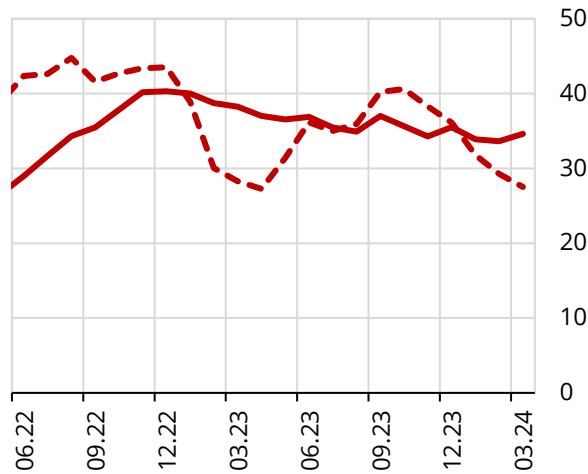
Source: CBRT Last Observation: 10.05.2024
 Note: Currency options refer to the delta equivalent of currency options for this period. Forward FX position also includes FX position with a value date up to two days.

IV.4 Profitability and Capital Adequacy

The profitability of the banking sector picked up in the third quarter of 2023 and continues to support internal capital generation, albeit with a decline since the last quarter.

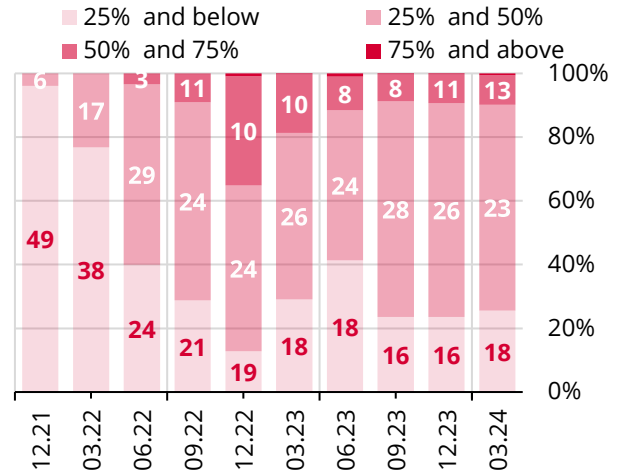
The sector's return on equity stood at 34.6% as of March 2024. The annualized return on equity for the last three months, which reflects recent trends, has been on a noticeable downtrend (Chart IV.4.1). The effects of policy rate increases on loan and deposit repricing and the cost of reserve requirements until February 2024 had a determinant impact on profit performance. As of the second quarter, the effects of interest rate hikes on repricing are expected to fade and the target-based remuneration rates applied to RRs will have a positive impact on sector profitability. Since the second half of 2023, there has been no significant change in the distribution of profitability among banks. Based on their asset aggregates, a significant portion of banks have a return on equity between 25-50% (Chart IV.4.2). Moreover, the sector's return on equity hits 38% when banks' free provisions of TL 66.4 billion as of March 2024 are considered.

Chart IV.4.1: Return on Equity (3-Month, 12-Month, %)



Source: CBRT Last Observation: 03.24
 Note: Dashed line shows the annualized three-month return on equity ratio.

Chart IV.4.2: Distribution of Return on Equity (12-Month, % Share in Assets)

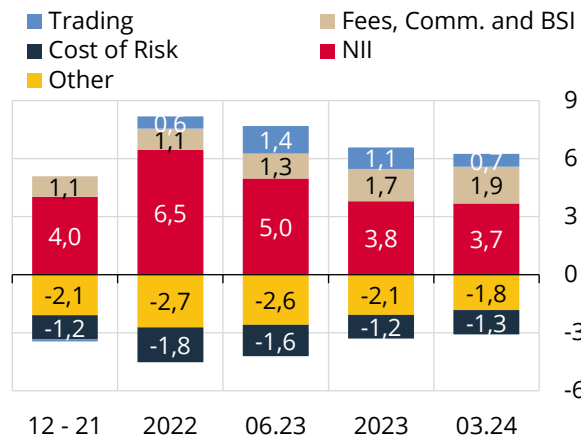


Source: CBRT Last Observation: 03.24

An analysis of the components of profitability reveals that the decline in net interest income has begun to slow down, fee and commission income has gained strength, and the cost of credit risk has hovered close to its historical average.

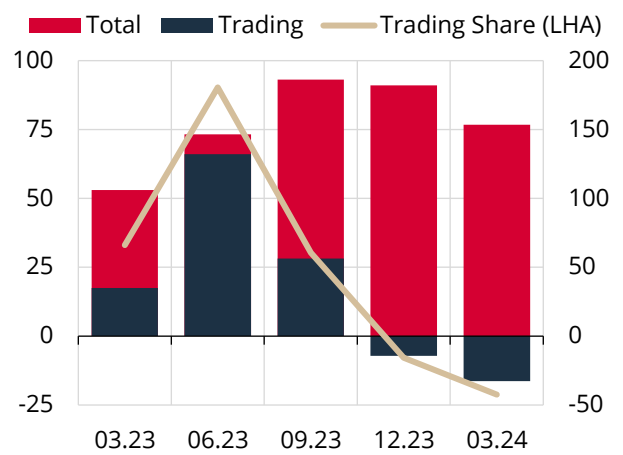
In the second half of 2023, the sector's net interest income declined significantly due to the impact of policy rate increases on loan and deposit pricing. As of the first quarter of 2024, this impact began to fade. On the other hand, the contribution of fee, commission, and service income to profitability continued to grow, while the contribution of income from capital market and foreign exchange transactions to profitability declined (Chart IV.4.3). In the first half of 2023, the profits from capital market and foreign exchange transactions, which increased as a result of exchange rate developments and widening of foreign exchange buying-selling spread, declined as of the second half of 2023. As a result of this development, the contribution of trading profit to net period profit turned negative in the last quarter of 2023 (Chart IV.4.4).

Chart IV.4.3: Components of Return on Assets
(12-Month, Annualized, % Points)



Source: CBRT Last Observation: 03.24

Chart IV.4.4: Components of Net Period Profit
(3-Month, Billion TL, %)



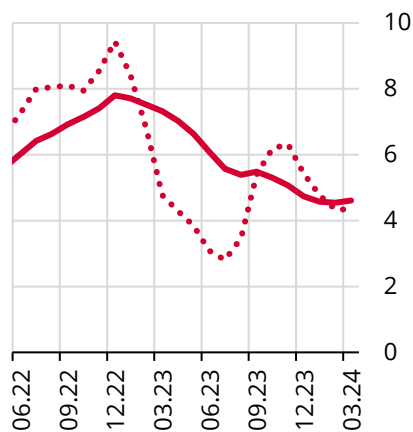
Source: CBRT Last Observation: 03.24

Note: Profits from capital market and foreign exchange transactions are defined as trading profit. Cost of credit risk is the sum of general and specific loan provisions.

After an improvement in the third quarter of 2023, the net interest margin declined in the last two quarters due to the loan-deposit spread.

The net interest margin ended 2023 at 4.7% level and edged down in the first quarter of 2024 to 4.6% in March (Chart IV.4.5). The lower net interest margin relative to 2022 was mainly caused by the decline in the loan-deposit spread. As of the second half of 2023, the impact of the loan-deposit spread has converged to zero (Chart IV.4.6). The interest margin curbs the annual increase in net interest income as of the third quarter of 2023, while volume growth supports interest income (Chart IV.4.7).

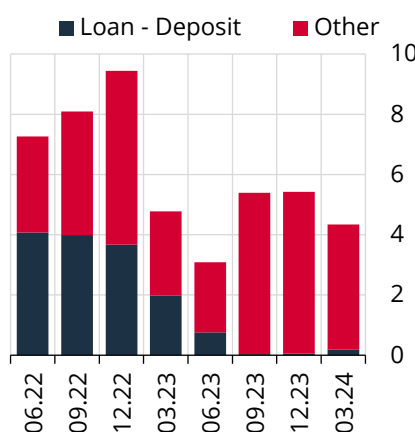
Chart IV.4.5: Net Interest Margin
(Annualized, %)



Source: CBRT Last Observation: 03.24

Note: Change in annualized three-month net interest margin is shown in light-colored line.

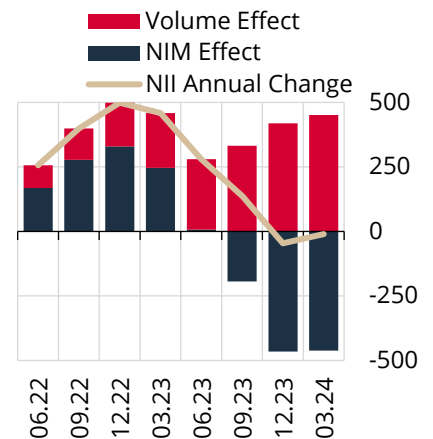
Chart IV.4.6: Components of Net Interest Margin
(3-Month, Annualized, %)



Source: CBRT Last Observation: 03.24

Note: Other interest margin is the sum of securities, other income and expenses items.

Chart IV.4.7: Annual Change in Net Interest Income and Contributions
(Annualized, Billion TL)

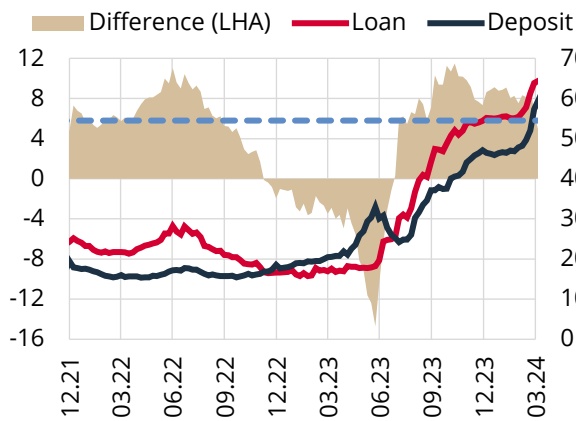


Source: CBRT Last Observation: 03.24

Note: The hypothetical effect that an annual change in the 12-month interest margin will bear through the interest-earning asset balance in the relevant period is defined as the interest margin effect, and the remainder of the change in the net interest income of the same period is defined as the volume effect.

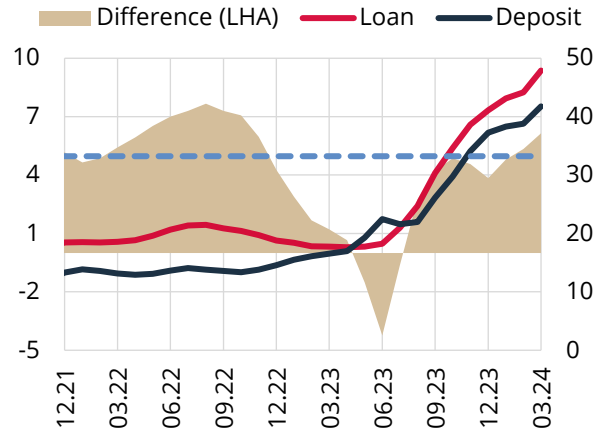
Loan rates reflect the impact of increases in the policy rate since the second half of 2023 as well as the macroprudential policies, particularly the implementation of securities maintenance and reserve requirements based on loan growth. The flow data show that the spread between TL loan and time deposit rates moved into positive territory in the third quarter of 2023 and reached its highest level by the end of the year, before stabilizing at 4% as of the last week of April. Notably, the flow interest rate developments affect the stock TL loan-time deposit spread with a lag due to the duration gap. Accordingly, the stock TL loan-time deposit spread maintained its uptrend in the first quarter of 2024, and reached 6.1%. Finally, both flow and stock data indicate that the interest rate spread is above the historical average for the period 2012-2021 (Charts IV.4.8 and IV.4.9).

Chart IV.4.8: TL Loan – Time Deposit Spread (Flow, %)



Source: CBRT Last Observation: 26.04.24
 Note: Dashed lines show the historical average of 2012-2021.

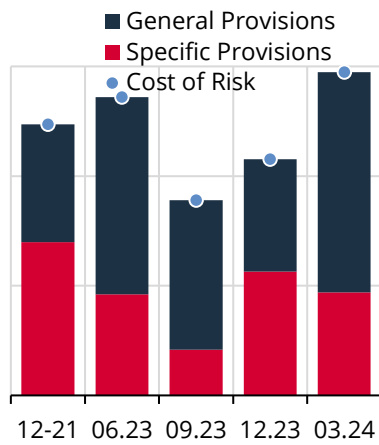
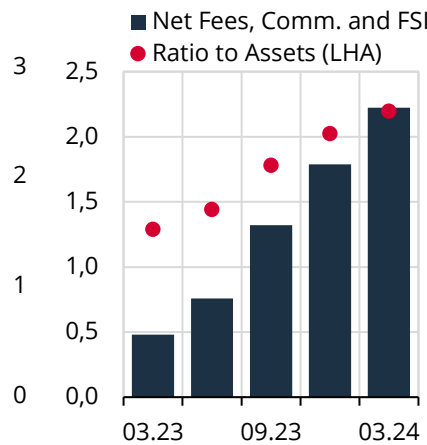
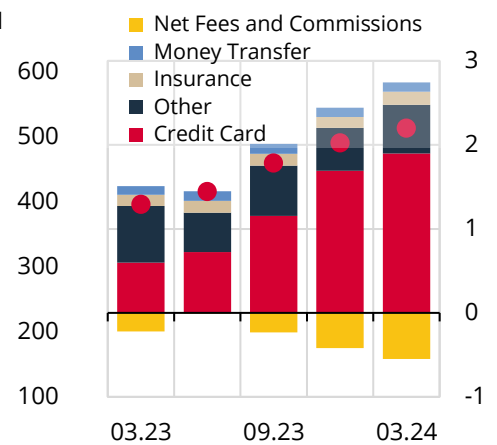
Chart IV.4.9: TL Loan – Time Deposit Spread (Stock, %)



Source: CBRT Last Observation: 03.24

Banks' credit risk costs showed no significant increase during monetary tightening, while net fee, commission, and service revenues supported sector profitability.

The credit risk cost of banks increased slightly as of the third quarter of 2023, and stood slightly above its historical average as of the first quarter of 2024 (Chart IV.4.10). The ratio of net fee, commission, and banking service revenues to assets continued to rise in the first quarter of 2024. Credit cards, which grew more strongly than other loans in the second half of 2023 and the first quarter of 2024, made the most significant contribution to this increase (Charts IV.4.11 and IV.4.12).

Chart IV.4.10: Cost of Credit Risk
 (3-month, Annualized, %)

Chart IV.4.11: Ratio of Net Fee, Commission, and Service Income to Assets
 (3-month, Annualized, TL Billion, %)

Chart IV.4.12: Distribution of Ratio of Net Fee, Commission, and Service Income to Assets
 (3-month, Annualized, %)


Source: CBRT

Note: The cost of risk is calculated by dividing the annualized three-month sum of specific and general provisions by the average gross loan amount for the respective period.

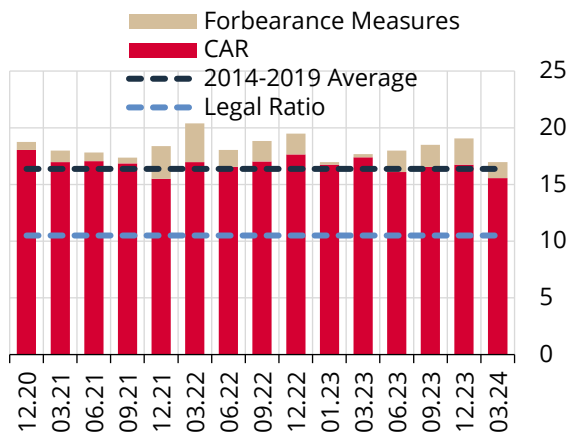
Last Observation: 03.24

Capital ratios maintain their course above regulatory thresholds. The capital position of the banking sector is capable of covering potential losses.

As of March 2024, the banking sector's capital adequacy ratio (CAR) is 17%, and core CAR is 13.3%. In this reporting period, the BRSA's forbearance measures regarding capital adequacy calculations have been amended. The first amendment is to use the June 2023 exchange rate instead of the end-2022 rate for FX items in calculating the amount subject to credit risk as of the start of the year pursuant to the Regulation on Measurement and Assessment of Capital Adequacy Ratios of Banks. The other is the option to exclude from equity the negative net revaluation difference of securities under the portfolio of securities at fair value through other comprehensive income as of 1 January 2024. The first amendment had a downward effect on CAR, while the second had an upward effect. However, the exchange rate regulation had a higher downward effect. Subsequent to these amendments, the effect of the BRSA's forbearance measures on headline capital ratios decreased. Excluding these forbearance measures, the sector's CAR was 15.6% and core CAR was 12.1%. Despite a slight decline observed in capital adequacy ratios, the capital adequacy ratios of all banks are above the regulatory thresholds and close to their long-term average (Charts IV.4.13 and IV.4.14).¹

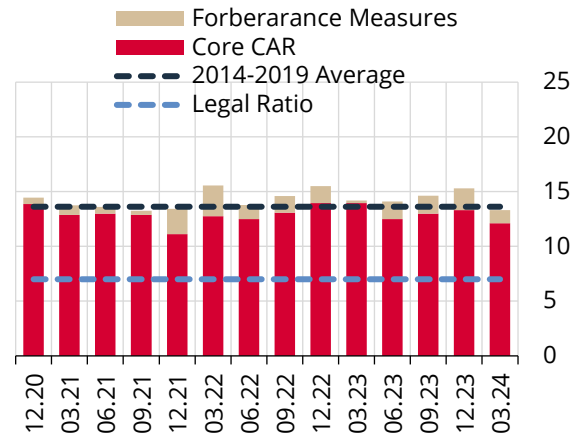
¹ Legal ratios are the sum of bank-specific countercyclical capital buffer, capital conservation buffer, and systemically important bank buffer ratio in addition to the minimum ratio of 8% as per Basel III regulations. In Türkiye, the countercyclical capital buffer ratio is 0%, the capital conservation buffer is 2.5%, and the systemically important bank buffer is 1-2%. Thus, the minimum consolidated ratios that banks in the sector are required to meet for CAR vary between 10.5% and 12.5% depending on the systemic importance of the bank. On the other hand, these ratios may be slightly higher than the bank-specific countercyclical capital buffer calculated according to banks' exposures in other jurisdictions.

Chart IV.4.13: Capital Adequacy Ratio (%)



Sources: BRSA, CBRT's calculations Last Observation: 03.24

Chart IV.4.14: Core Capital Adequacy Ratio (%)



Sources: BRSA, CBRT's calculations Last Observation: 03.24

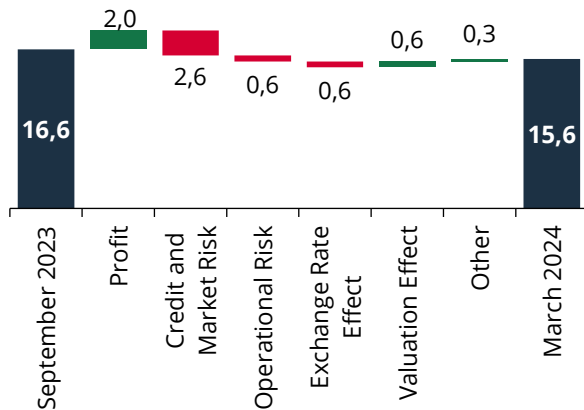
Note: Red bars indicate CAR and core CAR excluding BRSA forbearance measures.

Banks' internal capital generation supports capital, but the sharp increase in risk-weighted assets led to a decline in capital ratios.

Since the previous reporting period, the regulatory capital of banks has increased and profitability continues to be the most important factor that feeds capital adequacy. The new subordinated debts in 2024 also had a positive impact on capital ratios (Box IV.4.I). However, the growth in loans, the annual revision in the -value at operational risk, and the rise in exchange rates led to a faster increase in risk-weighted assets. Thus, CAR excluding BRSA forbearance measures declined slightly (Chart IV.4.15).

The regulatory capital of the banking sector is predominantly composed of core capital. Accordingly, approximately 78% of regulatory capital is composed of core capital, while profit and legal reserves stand out with a share of 56% in regulatory capital composition. On the other hand, FX-denominated subordinated debts provide banks with a diversity of instruments as well as protection from exchange rate increases due to their valuation effect. With improved financing conditions abroad and increased interest from foreign investors, banks issued additional Tier 1 and Tier 2 subordinated debt instruments in 2024. Thus, the share of subordinated debt in equity exceeded 16%. It is crucial to preserve the current structure of regulatory capital, which is mostly composed of core capital items with high capacity to absorb losses (Chart IV.4.16).

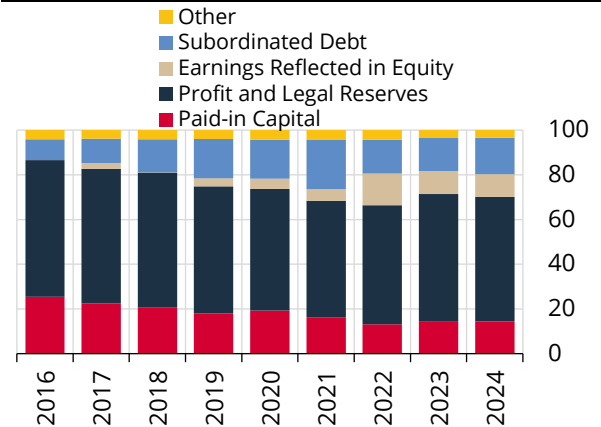
Chart IV.4.15: Change in CAR (%) (Excluding BRSA Forbearance Measures)



Sources: BRSA, CBRT

Note: "Other" primarily reflects the impact of subordinated borrowings.

Chart IV.4.16: Composition of Regulatory Capital (%)



Sources: BRSA, CBRT

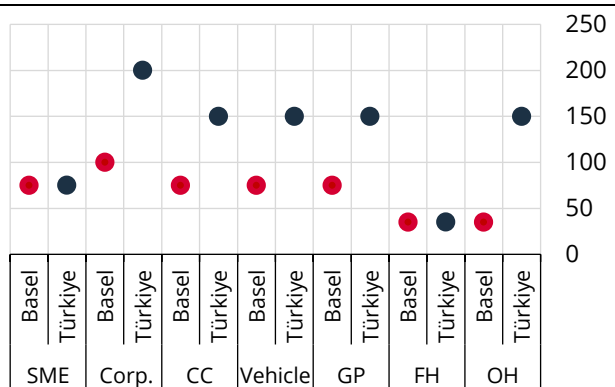
Last Observation: 03.24

Note: Share premiums are included in paid-in capital. "Other" covers other equity items, with general provisions having a larger weight.

Risk weights, one of the actively used macroprudential policy tools, are applied more prudently in Türkiye compared to international standards.

Risk weights used in the calculation of amounts subject to the credit risk vary between 0% and 200% depending on the credit type. For retail loan types, the risk weights were applied under the Basel standard at 35% for housing loans and 75% for other retail receivables. However, in Türkiye, the risk weight for retail loans other than housing loans was set at 150%. Moreover, the Basel standard recommends applying a 100% risk weight to unrated -corporate exposures, while Türkiye applies a 200% risk weight to certain types of commercial cash loans extended as of 1 May 2022 (Chart IV.4.17). Due to higher risk weights applied to retail and commercial loans in recent years, the amounts subject to the credit risk at risk weights of 150% and 200% have increased (Chart IV.4.16). On the other hand, as the rise in risk weights is applied to new loans, their impact on capital adequacy appears gradually and over time.

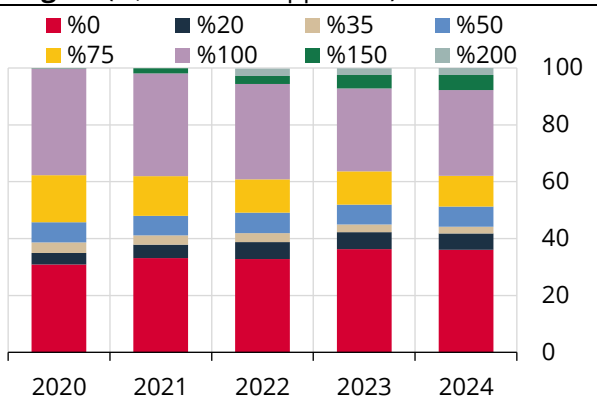
Chart IV.4.17: Credit Risk Weights (%)



Source: BRSA

Note: Corp., CC, GP, FH and OH represents corporates, credit cards, general purpose, first housing and other housing expect for first housing, respectively. The Basel standard recommends applying a risk weight of 100% to unrated -corporate exposures and a risk weight of 20% to 150% to rated -corporate exposures.

Chart IV.4.18: Distribution of Items with Amounts Subject to Credit Risk by Risk Weights (% (Standard Approach))



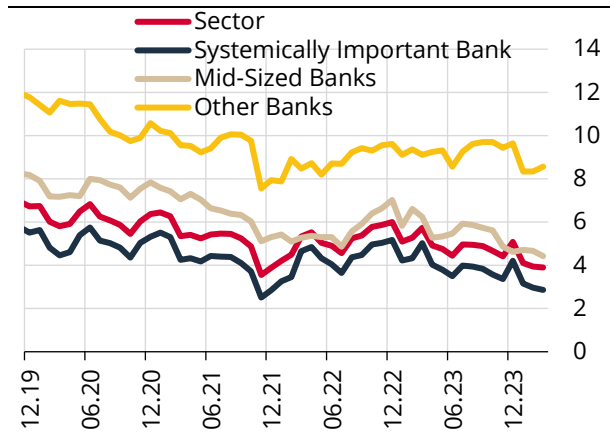
Sources: CBRT, BRSA

Last Observation: 03.24

Banks, systemically important banks in particular, generally seem to hold more capital than their capital requirements.

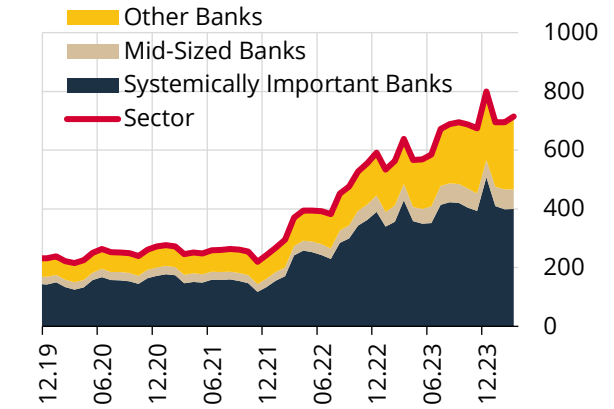
Excess capital increases banks' capacity to absorb unexpected risks and shocks in the short and medium term. It also helps banks finance the real economy and reduces concerns about banks' solvency during periods of economic slowdown and contraction. On the other hand, the fact that banks operate for extended periods with low asset quality risk against interest rate and exchange rate risks may affect their risk appetite and their decision to hold excess capital. Despite the nominal increase in banks' excess capital, the ratio of excess capital to risk-weighted assets has declined (Charts IV.4.19 and IV.4.20). However, in addition to banks' appetite for lending, exchange rate developments and the implementation of risk weights higher than international standards were also influential in this development. Moreover, more prudent provisioning (including free provisions) compared to previous years is a factor that has a downward impact on banks' excess capital buffers. However, the decline in excess capital through this channel does not mean a decrease in banks' loss absorbency capacity. The free provisions that banks set aside on a discretionary basis ensure that banks are prepared for any potential risks (Chart IV.4.21). Banks' tendency towards issuing subordinated debts in 2024 strengthens their capital buffers and provides additional room for growth.

Chart IV.4.19: Banks' Excess Capital Buffer (%)



Sources: BRSA, CBRT Last Observation: 03.24

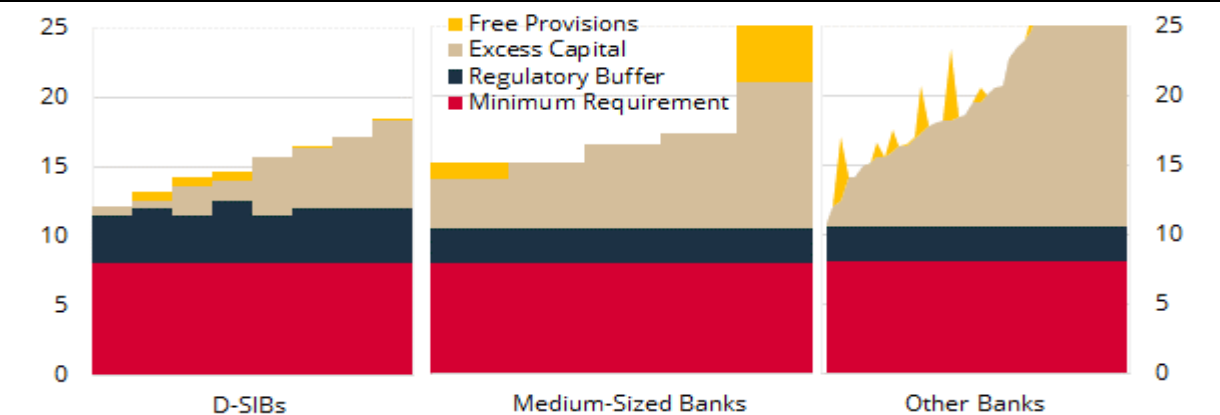
Chart IV.4.20: Banks' Nominal Excess Capital Buffer (Billion TL)



Sources: BRSA, CBRT Last Observation: 03.24

Note: CARs excluding BRSA forbearance measures are used. The calculation of excess capital buffers includes the systemically important bank buffer, capital conservation buffer, and bank-specific countercyclical capital buffer in addition to the 8% regulatory limit.

Chart IV.4.21: Banks' Regulatory Capital Ratios and Excess Capital Buffers (%)



Sources: BRSA, CBRT

Last Observation: 03.24

Note: CARs excluding BRSA's forbearance measures are used. Banks with a CAR above 30% are not shown in the chart on the right.

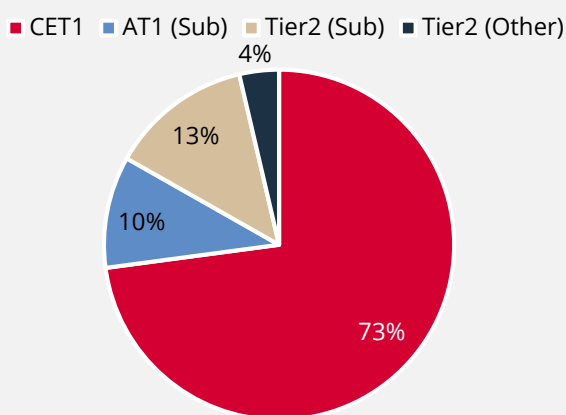
Box IV.1.I: Subordinated Debt Issues

The notable decline in the sovereign risk premium has had a positive impact on banks' access to foreign debt. The buoyant course in banks' external bond issues, which started in the second half of 2023, continued in the first five months of 2024. In addition to Eurobond issues, banks' subordinated bond transactions also registered an uptick. This box provides information on the purpose, types and advantages of subordinated bonds as well as the recent developments.

Subordinated bond transactions have become more widely used in Türkiye with the Basel III regulations and the deepening of the issuance market. The Regulation on Equity of Banks released by the BRSA in 2014 includes the definitions of regulatory capital and the components thereof in compliance with Basel III. Accordingly, there are requisites for the debt instrument issued to be considered 'subordinated'. In this context, the main criterion is that in the event of liquidation of the bank, the debt instrument holder will be entitled to claim receivables after the depositors and other senior creditors, and the repayment option can be exercised by the issuing bank after five years at the earliest. These features are necessary but not sufficient for a debt instrument to be subordinated. In the event that the operating license of the bank is revoked or the bank is transferred to the Fund, if the debt can be written off from the balance sheet or the bond debt can be converted into shares to offset the loss in question then this debt instrument is subordinated to capital.

Regarding capital adequacy regulatory capital consist of Common Equity Tier I capital (CET1), Additional Tier I (AT1) capital and Tier II capital. Accordingly, while Common Equity Tier I capital consists of the highest quality items with the highest loss-absorbing capacity such as paid-in capital and retained earnings, Additional Tier I capital and Tier II capital mainly consist of subordinated debts and general provisions. As of April 2024, approximately 73% of banks' regulatory capital consists of common equity Tier I capital, while the remaining portion is mainly composed of subordinated debt instruments (Chart IV.1.I.1).

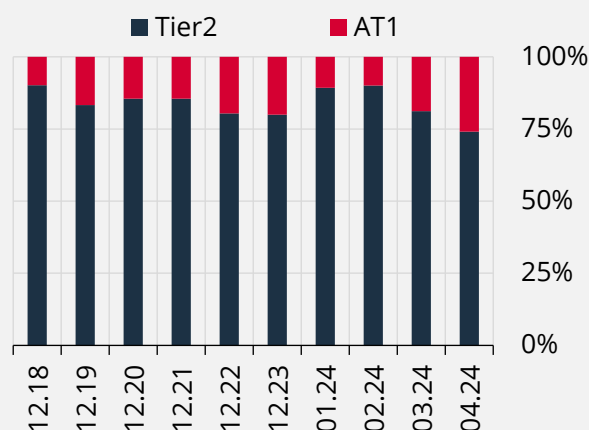
Chart IV.1.I.1: Components of Regulatory Capital (%)



Sources: CBRT, BRSA

Last Observation: 04.24

Chart IV.1.I.2: Distribution of Subordinated Debts (%)



Sources: CBRT, BRSA

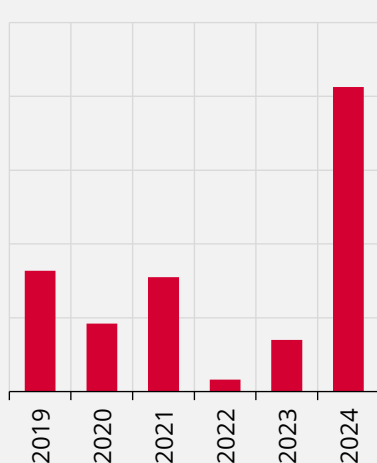
Last Observation: 04.24

One of the main differences in terms of eligibility for inclusion in additional Tier I or Tier II capital is related to the maturity structure of the debt instrument. The first one is the possibility to include debt instruments in AT1 subordinated bond items are issued as perpetual, while debt instruments that can be included in Tier II capital are issued with a maturity of at least five years. The second one is the ability of the debt instrument to be devalued or converted into equity shares in case the Common Equity Tier 1 ratio falls below 5.125%. Accordingly, subordinated bonds, which can be included in additional Tier 1 capital, is a debt instrument that is closer to common equity tier 1 (paid-in) capital, while bond instruments included in Tier 2 capital have much more noticeable bond characteristics. Subordinated bonds included in Tier II capital contributes to the hedging of regulatory capital against exchange rate fluctuations and offsets the negative impact of exchange rate increases on capital ratios to some extent. Accordingly, the weight of bonds that can be included in Tier II capital is high in the subordinated debt structure of banks (Chart IV.1.I.2).

The main driver for banks to issue subordinated bonds in this period is strengthening their capital base. Although the regulatory capital adequacy ratio (CAR) in Türkiye is 8%, the BRSA has set a more conservative target of 12%. In view of the capital conservation buffer and the systemically important bank buffer in Basel III, regulatory capital ratios on a bank basis are set between 10.5% and 12.5%. Therefore, even if the CAR is already above the minimum ratios, banks may prefer to strengthen their capital buffers to build a stronger shield with a forward-looking perspective.

In the first five months of 2024, Turkish banks issued USD 4.1 billion worth of subordinated debt, well above the past five years (Chart IV.1.1.3). These issues contributed around 50-230 bp to banks' CARs after taking into account the subordinated debt that matured or were repaid utilizing the early redemption option. The average cost of these transactions was 9.4%, which is approximately 1 percentage point below the average cost of transactions in 2023 (Chart IV.1.1.4). In the 2019-2021 period, the renewal of issues with early redemption dates and banks' further use of these instruments limited the decline in the subordinated debt balance. In the 2022-2023 period, when the sovereign risk premium hovered at high levels, the subordinated debt balance declined as a result of banks' utilization of the early redemption option and limited new issues. In this period, the high transaction cost as well as the falling FX loan demand hindered the renewal of subordinated bonds or utilization of the early redemption option. In 2024, following the upturn in banks' subordinated debt issues, the subordinated debt balance increased to USD 10.7 billion (Chart IV.1.1.5).

Chart IV.1.1.3: Subordinated Debt Issues (Flow, USD Billion)



Source: CBRT Last Observation: 08.05.24

Note: USD equivalents of euro and TRY-denominated borrowings are employed.

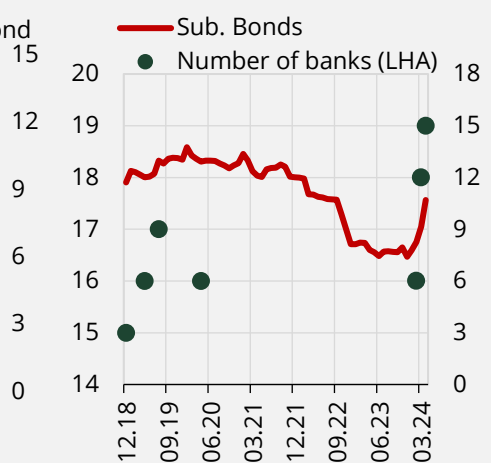
Chart IV.1.1.4: Cost of Issues (USD, Average, %)



Source: CBRT Last Observation: 04.24

Note: USD equivalents of euro and TRY-denominated borrowings are employed.

Chart IV.1.1.5: Subordinated Debt Balance and Number of Banks (Stock, USD Billion, Number)



Source: CBRT Last Observation: 04.24

Despite the tightening in global financial conditions, the notable decline in the sovereign risk premium in the second half of 2023 and the end of the interest rate hikes in advanced economies invigorated the investors' appetite for long-term lending. With the improvement in access to foreign financial markets, Turkish banks' bond issuances have revived, either as a replacement for the transactions that have been or will be redeemed or as fresh resources. This stimulus is considered important in terms of confirming the credibility and borrowing capacities of banks.

In sum, subordinated issues are instruments that strengthen the capital structure and underpin the funding structure of banks without changing their shareholder base. The recent issuances and similar transactions that may be carried out in the upcoming period contribute to extending the maturity of liabilities, increasing the diversity of financial instruments and deepening financial markets while strengthening the capital structure of the banking sector.

Abbreviations

AEs	Advanced Economies	IIF	Institute of International Finance
AES	Auto Enrollment System		
ALAIC	Advance Loans Against Investment Commitment	IMF	International Monetary Fund
AMC	Asset Management Companies	IPI	Industrial Production Index
BIS	Bank for International Settlements	KAP	Public Disclosure Platform
BIST	Borsa Istanbul	KKM	FX-Protected Deposit
Bps	Basis Points	LCR	Liquidity Coverage Ratio
BRSA	Banking Regulation and Supervision Agency	LDR	Loan-to-Deposit Ratio
BSMV	Banking and Insurance Transactions Taxes	LHA	Left-Hand Axis
CAI	Cash Advances in Installments	LIBOR	London Interbank Offered Rate
CAR	Capital Adequacy Ratio	MA	Moving Average
CBRT	Central Bank of the Republic of Türkiye	MKK	Central Securities Depository of Türkiye
CCI	Construction Cost Index	MTF	Ministry of Treasury and Finance
CDS	Credit Default Swap	NBFI	Non-Bank Financial Institutions
CMB	Capital Markets Board of Türkiye	NEO	Net Errors and Omissions
CPI	Consumer Price Index	NPL	Non-Performing Loan
DIB	Development and Investment Banks	ODA	Overdraft Account
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization	ODD	Automotive Distributors Association
EMEs	Emerging Market Economies	PCC	Personal Credit Card
EU	European Union	PMC	Pension Monitoring Center
FECR	Financial Expenses Coverage Ratio	PMI	Purchasing Managers Index
FXNGP	Foreign Exchange	PPI	Producer Price Index
FXNGP	Foreign Exchange Net General Position	PPS	Private Pension System
GDP	Gross Domestic Product	RR	Reserve Requirement
GDS	Government Debt Securities	RUSF	Resource Utilization Support Fund
ICI	Istanbul Chamber of Industry	SDIF	Savings Deposit Insurance Fund
		SME	Small and Medium-Sized Enterprises
		SOFR	Secured Overnight Financing Rate
		ST	Short-Term

TFRS	Turkish Financial Reporting Standards
TOKI	Housing Development Administration
TRY	Turkish Lira
TURKSTAT	Turkish Statistical Institute
USA	United States of America
WAFC	Weighted Average Funding Cost
WMA	Weekly Moving Average
YUVAM	Deposit and Participation Scheme for Non-Resident Turkish Citizens