IV. Financial Sector

In the current Report period, loan growth posted a significant increase on the back of improving credit supply and demand conditions. In the period preceding the coronavirus pandemic in particular, the credit growth led by TL loans diffused across sectors on account of supply conditions backed by falling interest rates and expanding liquidity opportunities in addition to the consumption-driven rebound in domestic demand. Due to the rapid elevation in retail loans, to channel the credit supply towards manufacturing and productivity-oriented sectors, loans extended to selected sectors were given greater emphasis in the context of the eligibility for RR incentives. Since mid-March 2020, mobility restrictions associated with the coronavirus pandemic have significantly weakened economic activity, primarily in the services sector. In order to mitigate the resulting risks to the credit market, public authorities took coordinated policy steps. The liquidity measures introduced averted any interruption in accessing finance. Moreover, incentivized credit packages geared towards the corporate sector and households to boost the functioning of the credit channel re-accelerated the credit growth.

Together with the balance classified as NPL following the lagged implications of growth dynamics on asset quality and the BRSA’s asset quality review, the NPL ratio peaked in December 2019 at 5.4%. In the current Report period, thanks to the improvement in individual and corporate repayment capabilities in addition to the recovery in economic activity, the NPL ratio started to decline. Actions taken by commercial banks and public authorities in response to the weakened income and cash flows of households and firms contain the effect of the pandemic on the sector’s asset quality.

Amid global market volatilities due to the pandemic, risks to the banking sector’s liquidity outlook became more discernible in the second half of March 2020. However, measures taken by central banks of advanced economies led by the Fed as well as those of EMEs reduced the difficulties in accessing global liquidity. As the outbreak was also seen in Turkey, the CBRT took action to increase domestic liquidity opportunities for the sector and contributed to financial stability by supporting banks’ management of TL and FX liquidity. In the current Report period, TL deposits continued to increase strongly, thereby reducing the sector’s demand for non-core funding sources. The decrease in TL funding costs after the policy rate cuts became influential in the increase of the share of domestic funds. This contributed to the deepening of domestic markets and limited the sector’s sensitivities to external volatilities. Following the actions taken by the CBRT and the BRSA, the TL funding provided by banks through currency swaps has been concentrating in the domestic market and at longer maturities. The external debt balance of the sector continued to decline in line with the falling demand for FX funding due to the weak FX credit demand and TL-driven credit growth. While TL funding costs declined after the policy rate cuts, FX funding costs decreased somewhat due to falling interest rates abroad, despite the elevated risk premium. Owing to favorable FX liquidity indicators and the decreased need for FX financing of the banking sector, banks have maintained their pre-pandemic debt rollover ratios by partially renewing their external debts that have matured. The decline in the external debt balance stands out as a positive development in terms of banks’ short-term debt repayment capacities. With adequate buffers, the banking sector continues to be resilient to liquidity shocks.

In the current Report period, while profitability indicators generally remained flat until the end of the year, they showed an uptrend in the first two months of 2020 because of the strong TL credit growth, positive duration gap and favorable asset quality developments. Meanwhile, due to pandemic-driven uncertainties in March, banks acted with prudence and increased credit provisions and as a result the sector’s equity and asset profitability ratios regressed back to the end-2019 levels. Compared to the same period last year, the interest rate risk that the TL and FX-denominated on-balance sheet and off-balance sheet assets and liabilities of the sector face via the repricing channel increased slightly.
IV.1 Credit Developments and Credit Risk

In the period from the second half of 2019 to mid-March 2020, an acceleration in loan growth was observed, thanks to a recovery in economic activity led by consumer spending, a pick-up in income and employment opportunities, an improvement in banks’ liquidity conditions owing to the rise in TL deposits, and decreasing financing costs. However, in the following period, the effects of the coronavirus epidemic, which started to spread globally, began to be felt in Turkey as of mid-March 2020. In this period, interest rate cut decisions taken by the CBRT on the back of the downside effect of commodity prices and demand conditions on inflation coupled with the liquidity measures introduced to contain the impact of the pandemic on economic activity, as well as the Treasury-backed loan packages introduced have all played an important role in credit dynamics. Credit growth, which strengthened in Autumn 2019 primarily led by public banks, spread across the entire sector with the increase in credits extended by private banks at the end of 2019 and in early 2020, although public banks became the leaders in credit growth again due to increased perceptions of uncertainty because of the pandemic. Thus, by March 2020, the total annual loan growth of BTS was 15.6%. In the current Report period, the uptrend in loan growth rates in retail loans was more remarkable than in corporate loans (Chart IV.1.1). Annual growth rates of BTS total consumer and corporate loans are 23.1% and 12.6%, respectively.

The corporate loan growth continued to increase on the back of the rise in loan demand spurred by interruptions in cash flow during pandemic and prudential liquidity demand as well as the rise in loan supply supported by liquidity measures and Treasury-backed loan packages. The objective of the sector-oriented change made in the RR regulation by the CBRT on 7 March 2020 was to limit the effects of the significant increase in consumer loans on growth composition, inflation and external balance. In this context, the importance of eligibility for incentives grew in driving the loans extended to selected industries. The new implementation aimed to channel the credit supply to sectors focusing on production and efficiency rather than consumption.

In the current Report period, until mid-March 2020, the retail loan growth was considerably higher than the long-term average. However, as of mid-March, when the effects of the coronavirus pandemic started to be observed in our country, retail loan growth began to trend lower because purchases of services and durable consumer goods were postponed due to social isolation practices, and household consumption was mostly limited to basic necessities because of the risks posed by the pandemic on employment conditions and household income. Moreover, for the first time, during the pandemic, a CGF-guaranteed loan package for individuals was announced to alleviate the hardship that low-income households may...
experience during this period (Box IV.1.II). Thus, a sharp contraction in retail loan growth was prevented. As this loan package addresses the low-income households with a prominent marginal consumption tendency, it also supports economic activity through consumption expenditures. It is projected that once the isolation implementations due to the pandemic are terminated, the demand for deferred consumption may rise and the demand for retail loans may increase again.

In this Report period, the ratio of domestic credits to GDP rose and reached 65% in March (Chart IV.1.2). The annual change in this ratio has recovered as the base effect that occurred due to the increase in exchange rates in September 2018 started to fade away in September 2019.

Starting from the second half of March, the risks posed by the coronavirus outbreak to economic activity have become more evident. The weakening of production and consumption activities, the damage inflicted on global trade networks and supply chain, and increased risk perceptions have affected the credit market outlook. Isolation measures imposed to prevent the spread of the pandemic, mobility restrictions and changes in consumer behavior have significantly interrupted domestic demand, except for the core goods groups. Indeed, high-frequency leading indicators such as consumer confidence, sectoral confidence indices, the PMI, electricity consumption and capacity utilization rates confirm the significant slowdown in economic activity in March and April 2020 (Chapter II.2). Moreover, the spread of the Covid-19 virus in Turkey’s leading export markets such as the Euro area as well as downward revisions made in global growth and trade volume projections pose downside risk to exporting firms’ activities and cash flows via the external demand channel. In this respect, a policy set was introduced simultaneously aiming to meet the liquidity needs of banks amid increasing global uncertainty, to support economic activity by preventing any possible deterioration in the cash flow of the corporate sector through loans based on selective liquidity facilities and to protect the purchasing power of households.

As the effects of the outbreak started to be observed in Turkey, similar to other central banks, the CBRT has taken steps to support market liquidity and protect the functioning of the credit channel. Within the scope of the measures announced on 17 March, 31 March and 17 April 2020, the CBRT offered additional liquidity facilities to banks in order to provide flexibility in their TL and FX liquidity management and to ensure uninterrupted credit flow to the non-financial corporations; and expanded maturities and amounts in rediscount credits for export and foreign exchange earning services to support exporters’ access to finance (Box I.1.I). Moreover, in a press release on 17 March 2020, reserve requirement ratios were reduced by 500 basis points in all liability types and all maturity brackets for banks meeting real credit growth conditions within the context of the reserve requirement practice. Thus, an additional FX and gold liquidity at the amount of approximately USD 5.1 billion was provided for banks. Moreover, the Asset Ratio (AR) practice was introduced by the BRSA on 18 April 2020 to reduce the negative impact of the coronavirus outbreak on growth, production and employment, to support the balanced distribution of liquidity in the system and to ensure the efficient use of bank resources. Asset Ratio denotes the ratio of the sum of loans, weighted CBRT swaps and securities to TL deposits and weighted FX deposits, and it was stipulated that the monthly average for the AR shall be calculated at the end of each month and the lower limit shall be 100% for state banks and 80% for private banks. With this practice, alongside state banks, private banks were encouraged to be more active in the credit market.

The Ministry of Treasury and Finance introduced the Economic Stability Shield package to support the economy by providing a financing exceeding TRY 250 billion (Box IV.1.II). In this context, the Treasury support in CGF guaranteed loans was increased to TRY 50 billion and the amount of guarantee was increased to TRY 500 billion. It has been decided to support firms experiencing cash flow disruptions caused by the measures taken related to the coronavirus outbreak by postponing the credit principal and interest payments of firms to banks for a minimum period of 3 months and providing additional financial

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1 With the revision made on 30 April 2020, the banks whose total deposits (excluding interbank deposits) are less than TRY 5 billion are provided additional time till 31 December 2020 to be harmonized with the regulation.
support if necessary. Moreover, in order to maintain capacity utilization rates during the temporary slowdown in exports, it was decided to provide inventory-financing support to exporters. With a regulation issued by the Ministry of Treasury and Finance, the SMEs were offered a state-sponsored commercial receivable insurance.

Due to the coronavirus pandemic, the Banks Association of Turkey (BAT) issued a recommendation for banks towards improving access to credit and keeping credit channels functional, and in response to the recommendation, public and private banks have delayed installments, as well as principal and interest payments in commercial and retail segments. Demands for restructuring of corporate loans are supported depending on the needs of the sectors and cash flow disruptions. In addition, although they vary on a bank basis, additional limits are set up for corporate sector firms in order to help firms meet their working capital needs, continue commercial activities and finance operational expenses. In order to improve the credit risk outlook and to protect the credibility of firms, some other steps have also been taken such as extension of the minimum delay period for non-performing loans to 180 days and including a “force majeure” note on the credit registry of companies that have defaulted in this period.

On top of sound liquidity and capital structure of the banking system, financial and fiscal measures taken by the authorities are assessed to limit the downside risks on credit market and to support the credit growth in the upcoming period.

IV.1 Corporate Loans

The annual corporate loan growth has been increasing since the last quarter of 2019 (Chart IV.1.3). The TL-denominated corporate loans have been extended to firms in scales and increased by 19.1%. The annual growth rate of TL loans used by large firms increased by 29.3% in March. In the SME segment, loan growth reached 8.9%. The decrease in commercial loan rates in real terms to historically low levels and the strengthening in economic activity, particularly in consumer demand, supported credit expansion in the commercial segment. The rise in firms’ demand for loans was mainly driven by the need for working capital and loan utilization for cash management purposes considering credit restructuring and future payments. Meanwhile, it was observed that the demand for loans for investment purposes remained limited.

In the current Report period, selective loan practices that provided the corporate sector with access to financing with favorable conditions continued to influence corporate loan dynamics. The IVME
(Advanced, Productive, Indigenous Industry) Financing Package, which was introduced to support sectors with a high contribution to employment and export potential, supported loan demand especially in the last quarter of 2019. Another selective loan implementation pioneered by public banks and introduced to support commercial loan growth was the Employment Oriented Business Loan (ISTOD) Package. In the scope of this package, companies with high employment potential in the manufacturing industry, services, ongoing housing projects and overseas construction sectors will be extended loans with a maturity up to 5 years with a non-payment period of 2 years and low-cost loans intended for working capital needs. Thus, restrictions experienced by labor-intensive sectors’ access to finance will be reduced and the labor market will be supported.

Having FX income set as a prerequisite to obtain FX loans as per the amended Decree No 32 on the Protection of the Value of the Turkish Currency in May 2018, the increased awareness of foreign exchange indebtedness and weak investment appetite all played a role in the downtrend in FX loan growth. While this trend continued in the current period, by March 2020, domestic FX loans contracted by 9.9% in terms of currency basket (Chart IV.1.4). On the back of decline in TL loan interest rates, some firms preferred to convert their FX loans to TL loans, which also played a role in the decrease in FX loans. Amid favorable domestic funding costs, the decrease in FX loan demand has been influential in the decline in banks’ external foreign borrowing appetite. Across firm scales, FX loan growth in large-scale companies continued to shrink moderately while the contraction in SMEs’ FX loans became more evident as a result of the change in SME definitions, the regulation linking FX loans with FX revenue, increased awareness of currency risk and subdued investment outlook. Likewise, foreign-sourced FX loans of firms remained on the decline.

Isolation measures introduced to address the coronavirus pandemic such as the prolonged stay-at-home periods, the closure of workplaces, and transportation restrictions pose significant risks to sales, profitability and cash cycle of companies, particularly in the service sector. Important steps have been taken to manage relevant risks, to facilitate firms’ access to finance and to prevent increases in borrowing costs. Treasury support in CGF-guaranteed loans was increased to TRY 50 billion and the guarantee amount was increased to TRY 500 billion for the use of all firms experiencing collateral difficulties in access to finance (Box IV.1.II). On the back of the measures taken, commercial loan growth has accelerated owing to TL loans mostly extended by state banks (Chart IV.1.5). The acceleration in loan growth was driven by firms’ need for cash and demand for prudential liquidity, yet, this acceleration is expected to normalize in the upcoming period once the cash flow in the economy normalizes. The
mentioned policy implementations that support the commercial loan market are envisaged to help protect the production potential and financial stability by limiting the setbacks of the pandemic.

The TL loan and deposit rate spread, which started narrowing as of the second half of 2019 owing to the monetary policy steps taken, the improvement in liquidity and financial conditions and the decline in inflation expectations, decreased moderately in this Report period (Chart IV.1.6). This decline was driven by the flat course of TL deposit rates due to TL loan demand and the need for TL funding from the beginning of 2020 till May, the availability of low-cost loans during the epidemic as well as the fall in TL corporate loans rates. Throughout the current Report period, the increase in banks’ credit supply appetite kept interest spreads below the averages of the recent period. On the FX side, interest spreads showed a relatively fluctuating outlook due to risk premium, funding conditions, the regulation related to FX required reserves and the volume effects.

According to the BLTS results of March 2020, credit standards particularly for corporate loans and consumer loans as well as supply/demand conditions have significantly loosened. Survey questions regarding loan demand indicate that there was an increase in demand in all types of business loans and retail loans in the first quarter of 2020.

According to the BLTS results regarding factors affecting corporate loan demand, inventory buildup and working capital need in tandem with recovery in domestic demand and debt restructuring have been the key drivers (Chart IV.1.7). According to the survey results that were completed before the breakout, rise in consumption and recovery in economic activity had a moderate and lagged impact on investment behaviour, and demand for fixed investment loans displayed a gradual rise. The answers to survey questions in the second and third weeks of March 2020 indicate that the recovery in commercial loan demand was spread across firms sizes and maturity types and that recovery in TL loans was more significant.

In terms of corporate loans, BLTS results show that the improvement in risk perceptions, ongoing policy steps taken and the decrease in TL funding costs supported the loan supply. Before the effects of the epidemic was observed in Turkey, banks’ expectations for the general economic activity as well as for he sectoral outlook had turned positive underpinning the decline in risk perceptions. Meanwhile, factors

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2 It should be born in mind that the BLTS was conducted between 9 and 20 March period and the results may not be reflecting the effects of the pandemic in the best way.
pertaining to bank balance sheet restrictions supported loan supply mainly owing to banks’ strong liquidity positions (Chart IV.1.8). Similar to demand factors, the recovery in the supply outlook spread across all firm sizes and maturities, while in terms of currency, the recovery was more evident in TL loans.

### IV.1.7 Factors Contributing to Corporate Loan Demand-Financing Needs (Net % Change)

![Chart IV.1.7: Factors Contributing to Corporate Loan Demand-Financing Needs](chart)

Source: CBRT

Note: The quarterly survey asks banks to compare the current quarter to the previous. Zero is the neutral state indicating no change.

### IV.1.8 Factors Contributing to Corporate Loan Supply (Net % Change)

![Chart IV.1.8: Factors Contributing to Corporate Loan Supply](chart)

Source: CBRT

Note: The quarterly survey asks banks to compare the current quarter to the previous. Zero is the neutral state indicating no change. Series displayed in the chart are the arithmetic average of related subcategories in the BLTS.

### IV.1.2 Retail Loans

The rise in consumer loan growth since the last quarter of 2019 was mainly driven by state banks-led campaigns, deferred consumer spending, recovery in the labor market, decline in consumer inflation and decreasing loan costs. While the increase in annual growth rates spread across all retail loan types, the annual growth rate of general-purpose loans was 37.5% in March 2020 (Chart IV.1.9). BLTS results in March also show that the demand for retail loans was strongly affected by the recovery in consumer confidence and expectations for asset markets.

### Chart IV.1.9: Annual Growth Rates of Retail Loans (%)

![Chart IV.1.9: Annual Growth Rates of Retail Loans](chart)

Source: CBRT

Note: The quarterly survey asks banks to compare the current quarter to the previous. Zero is the neutral state indicating no change.

### Chart IV.1.10: Retail Loan Growth (13-Week MA, Annualized %)

![Chart IV.1.10: Retail Loan Growth](chart)

Source: CBRT

Note: The blue area marks the 10th and 90th percentage range used in the 2013-2018 averages.

In order to contain the risks that the significant increase in consumer loans may pose to growth composition, inflation and the current balance, the CBRT made a change in the reserve requirement regulation on 7 March 2020 and updated the definition linking the reserve requirement ratios and
renumeration rates to loan growth (Box IV.1.i). In this framework, as a criteria for eligibility for the reserve requirement incentive, it was decided that for banks with a real annual loan growth rate below 15%, 75% (it was 50% in the previous regulation) of the real change in retail loans excluding housing loans with a five-year and longer maturity would be deducted from the numerator of the growth rate formula. The aim of the new practice was to help channel loan supply towards productive and production-oriented sectors and support financial stability. As a matter of fact, the momentum of retail loan growth, which increased rapidly in the current Report period, converged again to historical averages in March reflecting the effects of the regulation and demand shocks caused by the coronavirus outbreak (Chart IV.1.10).

The impact of the CBRT’s policy rate cuts on retail loan rates through the effective functioning of the monetary policy transmission mechanism has been one of the key factors supporting retail loan growth (Chart IV.I.11). As interest rates in all loan segments decreased, retail loan rates fell below the levels observed before the financial fluctuations in 2018.

The rapid rise in retail loans was mainly driven by the rebound in consumer spending and deferred credit demand that was observed after decrease in retail loan rates. In addition, refinancing demand, additional credit demands from existing customers, debt consolidation tendency, low domestic household indebtedness, and improvements in the employment market were among the factors that supported the general-purpose loan growth in the current Report period.

On the other hand, the effects of the coronavirus epidemic led to a decrease in the consumer spending trend since the last week of March. In addition to the slowdown in consumption expenditures because of the pandemic, the decrease in mobility is believed to have made a negative effect particularly on individuals using loans through bank branches. In this process, the Basic Needs Support Loan package allocated by state banks aimed to support the basic consumption expenditures of the households by reducing the risks relevant to credit access and the cost of financing. Within the scope of this package, individuals with a monthly income less than TRY 5 thousand were offered a financing facility of TRY 10 thousand with a maturity of 36 months and a payment-free period of 6 months, and the allocation was carried out by the Credit Registry Office via an electronic approval system linked to the individual’s mobile phone. The mentioned loan facility will contribute to financial stability by facilitating access to financing of an income group that is likely to suffer a temporary income loss due to the epidemic. As a matter of fact, as of the second half of April, the annualized 13-week moving average of the weekly general purpose loan growth rose to 70% again (Chart IV.1.12). It is projected that the general-purpose loan trends would normalize in the upcoming period, as the demand for retail loans within the scope of loan packages and incentives are met and the disbursements are reduced.
In the current Report period, housing loan rates remained below historical averages and loan conditions in the housing market eased. Private banks’ joining of campaigns put into practice by state banks helped reduce the borrowing costs in house purchases and contributed to the extension of financing maturities. The recovery in house sales was more remarkable in second-hand houses. In this period, the 100 Thousand Social Housing Project offered by TOKI through state banks was also an important step supporting the housing market. Within the scope of this Project, participants were offered a low-cost financing facility with a maturity of 20 years. The expected recovery in economic activity and the incentives put into practice are projected to support the housing sector and its financing in the upcoming period.

Despite the high level of exchange rates, retail sales in the automobile and light commercial vehicle segments recovered and vehicle loan growth accelerated on the back of the increase in household income and decreasing financing costs. Nevertheless, share of banks in the retail vehicle loan market as well as the share of vehicle loans in consumer loans remained low.

**Chart IV.1.13: Debit and Credit Card Expenditures** (Weekly Amount, Monthly Average, % Change)

The growth of PCC balances was flat in the current Report period. Nevertheless, the recent measures introduced in response to the pandemic, and changes in individuals’ consumption behavior pose a downward pressure on growth in this segment. Even if it was observed that PCC spending increasingly shifted to online shopping because of the decrease in mobility, high frequency data shows that there was a decrease in debit and credit card spending across all sectors particularly in April (Chart IV.1.13). Except for sectors covering durable and non-durable consumer goods, card spending declined rapidly in airlines, accommodation, food and beverage services and transportation sectors. Meanwhile, the BRSA issued a decision on 30 March and decreased the minimum payment ratio of PCC to 20 percent in order to reduce the credit risk of individuals facing an income decrease in this period. In addition, individual customers, whose card balances were postponed, were offered a grace period option, including the minimum payment amount, until the end of the year.

**IV.1.3 Non-Performing Loans**

NPL ratios have increased as a result of the lagged effects of the weakening in economic activity on balance sheets in the previous periods and the BRSA’s recommendation to transfer a loan balance of TRY
46 billion to non-performing accounts at the end of 2019. Before the coronavirus outbreak, economic activity had registered a significant recovery in the second half of 2019 thanks to the dynamic structure of the Turkish economy and policies implemented. In the last quarter of 2019, the NPL ratio marked a peak at 5.4% and then assumed a downtrend. Actually, according to March 2020 data, the NPL ratio decreased to 5%; while it was 5.5% in corporate loans and 3.1% in retail loans. Compared to the previous Report period, the retail NPL ratio decreased by 0.60 percentage points and corporate NPL ratio increased by 0.14 percentage points (Chart IV.1.14).

The breakdown of the NPL balance shows that on the back of the lagged effects of the recovery in economic activity, the NPL additions have decreased since the beginning of 2020 and collections/receipts increased in this Report period (Chart IV.1.15). It is also noteworthy that banks continue to manage their NPL balances by writing them off and/or selling them to asset management companies. As of the third quarter of 2019, collections have accelerated, additions have slowed down and NPL balance decreased on the back of improvements in firms’ balance sheet structures, BRSA’s decision on 27 November 2019 allowing deduction of loans classified as loss from the NPL records, continued restructuring in corporate loans and collateral value increases realized in line with real estate market conditions. While the Stage 2 credit balance remained flat in the reporting period, the ratio of loans that have been restructured in Stage 2 credits has increased.

When credit risk indicators are evaluated on a cross-country basis, it is observed that changes in the NPL ratio in Turkey diverged from the average of the peer countries after the recommendation made by the BRSA for transfer to NPL accounts in 2019 (Chart IV.1.16).

On the corporate side, the NPL ratio has been decreasing across all firm sizes (Chart IV.1.17). In March 2020, total, large firm and SME NPL ratios came in at 5.5%, 4.1% and 8.6%, respectively. The strong growth in retail loans coupled with the moderate recovery in the labor market that started before the coronavirus period have had a positive effect on individuals’ solvency which supported small-scale firms’ cash flows and contributed to the decrease in NPL additions originating from the SME segment. Although the reflection of the improvements in asset quality on the indicators was delayed in the SME segment, the fact that the SME loan amount started to increase again particularly as of the end of 2019 was a factor slowing down SME NPL ratios. In the period preceding the coronavirus epidemic, the shortening of the cash cycle of the companies also positively affected payment performance.
After the restrictions related to the coronavirus epidemic, companies’ payment performances are likely to get weaker, particularly for companies operating in the service sector led by the tourism, transportation and transportation sectors. During such times, the commercial segment, which includes financially-balanced and highly-liquid corporate firms, experience a more limited deterioration while small-scale enterprises in the service sector are more severely affected by weakening commercial and social activity. Recently, public authorities have made some adjustments in coordination with commercial banks to limit the impact of these risks on the asset quality of the banking sector (Box I.1.I). Accordingly, the legal period for the delayed payment in the NPL classification, which was 90 days was increased to 180 days (240 days in financial leasing companies); while the delayed payment period for Stage 2 loans was increased from 30 days to 90 days. A facility was offered for bad checks allowing payment by installments, and the execution of sentences for crimes related to bad checks that have been convicted before 24 March 2020 has been suspended. Moreover, all enforcement proceedings have been suspended until 15 June 2020 and improvements have been made regarding the registry amnesty. It was decided to offer state-sponsored commercial receivables insurance to SMEs with revenues lower than TRY 125 million. The measures taken are expected to reduce the upward pressure on the NPL ratio by slowing down transition to NPL accounts. It is projected that the path that economic activity will follow in the upcoming period is expected to determine the development of credit risk and asset quality indicators.

In the current Report period, the decrease in NPL ratios of retail loans were stronger than corporate loans. This decrease is observed in all sub-categories in retail loans except for credit cards (Chart IV.1.18). The significant increase in the amount of performing loans in the retail loans segment, the increase in the solvency on the back of the fall in interest rates, debt service capacities supported by prolonged maturities and campaigns as well as increased debt collectibility played a role in the decrease in NPL ratios. In addition, improvements in the labor market lowered credit risk in the retail loans (Special Topic V.1). Comprehensive macroprudential arrangements introduced for retail loans have historically limited the increase in NPL ratio in this loan type. An analysis of data for March indicates that the NPL in housing loans fell to 0.6% and this rate is low compared to global examples. In the same period, the NPL ratio in vehicle loans was 2.4%; NPL ratio in consumer loans was 3.9%; and NPL ratio in PCC was 5.2%. The findings of the aging analysis indicate that in this period, there has been no significant divergence from the previous period with respect to transition of newly extended loans to NPL accounts (Chart IV.1.19).
The impact of the outlook for economic activity, labor market and financial conditions on individuals’ income and solvency capacities in the aftermath of the coronavirus pandemic will be determinant on the NPL ratios of retail loans in the upcoming period.

As BRSA has extended the periods for registry of Stage 2 loans and NPL, the effects of the volatility in financial markets and the weakening in economic activity stemming from the pandemic on asset quality will be observed with a lag. During the pandemic, interest rates fell globally while loan rates showed a downtrend and credit channel was kept functional thanks to monetary and fiscal measures taken. In addition to these positive factors, the expected recovery in economic activity in the second half of the year upon some easing in the outbreak, may limit the likely increase in NPL in corporate sector and household loans. The current capital structure of the banking sector is assessed to be strong enough to manage asset quality-driven risks.
Box IV.1.I

Reserve Requirements Based on Loan Growth

Introduction

As the emphasis shifted to financial stability in the period following the global financial crisis, reserve requirements (RR) in Turkey have become one of the monetary policy tools with a fine tuning quality that have, especially since the last quarter of 2010, been used to alleviate macrofinancial risks in a supportive way to the short-term policy rates, the main monetary policy tool. RRs have been employed in various ways according to needs to enhance financial stability with a macroprudential perspective and they have acted actively as a countercyclical tool supporting the recovery in economic activity as well as the functioning of the credit mechanism since 2019.

The CBRT Law no. 1211 as amended by the Law No. 7186 on “Amendment to the Income Tax Law and Certain Laws” published in the Official Gazette No.30836 (duplicate) dated 19 July 2019 enabled the inclusion in the RR implementation, of not only liabilities but also other on-balance sheet or off-balance sheet items of banks and other financial institutions to be deemed appropriate by the CBRT. This facilitated a more flexible and efficient use of RR as a macroprudential tool to alleviate macrofinancial volatilities and enhance financial stability.

Accordingly, in August 2019, RRs were differentiated according to loan growth to use them as a counter-cyclical policy tool and to encourage TL loan growth, and was revised according to emerging needs. Firstly, as of the liability calculation date of 9 August 2019 “RR Based on Nominal Loan Growth” was enforced (CBRT, 2019a), then as of the calculation date of 29 November 2019 “RR Based on Real Loan Growth” (CBRT, 2019b) and finally the RR based on real loan growth was revised as of the calculation date of 6 March 2020 (CBRT, 2020a). During this period, RR incentives provided to banks that comply with loan growth conditions regarding these practices were also changed.

This box presents details of RR based on loan growth and explains developments in loan growth from the start of this practice to the present day.

RR Based on Nominal Loan Growth

With the Communique on Amendment to the Communique on Reserve Requirements (No:2019/15) published in the Official Gazette No. 30864 dated 20 August 2019, as of the calculation date of 9 August 2019, the RR ratios for TL liabilities and the remuneration rates for TL-denominated RR were linked to the annual growth rates of the total of banks’ TL-denominated standard cash loans and cash loans under close monitoring, excluding foreign currency-indexed loans and loans extended to banks.

Accordingly, TL RR ratios of banks with a nominal loan growth rate between 10% and 20% (reference values) were set lower for short-term liabilities (Table IV.1.I.1).

Meanwhile, remuneration rates for TL-denominated RRs of banks with nominal loan growth rate between the reference values were set higher. Remuneration rates for TL RR were revised in view of the reductions made in the policy rate (Table IV.1.I.2).
For banks complying with loan growth conditions, rates were applied for six RR maintenance periods starting from the first maintenance period following the calculation period, and should the rates be subject to change within the six RR maintenance periods, new rates will apply for the remaining maintenance periods.

Affected by factors such as the decline in interest rates, inflation and inflation expectations, improvement in the banking sector liquidity, accompanied by the support of the implementation of RR, the annual TL loan growth rate of the banking sector, which was 1.9% in the calculation date of 9 August 2019, the date of enforcement of this practice, rose to 13.2% on 29 November 2019, the last RR calculation date pertaining to the RR based on nominal loan growth (Chart IV.1.I.1).

**RR Based on Real Loan Growth**

At the end of 2019, it was projected that the favorable outlook in loan demand and supply that emerged in the second half of 2019 would continue in 2020, and the loan growth will realize in line with the inflation target and growth forecasts for 2020, stemming mainly from TL loans. Against this background, a RR practice encouraging the loan supply to production-oriented sectors rather than consumption that would bolster sustainable growth, support financial stability and reduce the need to revise the bandwidth, was considered useful.

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1. Banks that started operating upon the permission of the BRSA are subject to the same rates as those banks that do not comply with the loan growth conditions, for two years from the start of their operations.

2. Banks that started operating upon the permission of the BRSA are subject to rates 200 bp lower than those banks that comply with the loan growth conditions, for two years from the start of operations.
Accordingly, the current practice was revised with the Communique on Amendment to the Communique on Reserve Requirements published in Official Gazette No. 30973 dated 9 December 2019 (No:2019/19) starting from the calculation date of 29 November 2019.\textsuperscript{3} Accordingly,

i. The real change obtained via dividing TL cash loans by the CPI in the relevant period will be taken into account in the calculation of annual real loan growth.

ii. The real annual growth rate of loans will be calculated based on the last three-month average of the real cash loan stock values, and the calculations will exclude the loans extended to financial institutions.

It was decided to offer RR incentives to banks under the following conditions:

a. For banks with a real annual loan growth rate above 15%: If their adjusted real loan growth rate, which is calculated by deducting the total of real changes in the commercial loans with maturity longer than 2-year and housing loans with 5-year or longer maturity from the numerator of the growth rate formula, is below 15%,

b. For banks with a real annual loan growth rate below 15%: If their adjusted real loan growth rate, which is calculated by deducting 50% of the real change in retail loans excluding housing loans with 5-year or longer maturity from the numerator of the growth rate formula, is above 5%.

The target here was to enhance long-term commercial loans with strong ties with production and investment and long-term housing loans with quite weak ties with imports compared to other consumer loans and orient resources to areas focused on production and supporting the external balance.

Following this arrangement, starting from the calculation date of 27 December 2019, RR rates applied to FX deposit/participation funds increased by 200 bp across all maturities. Meanwhile, to foster financial stability as well as the RR based on real loan growth, it was decided to offer these rates 200 bp lower to banks complying with real loan growth conditions. Therefore, after the TL RR rates, FX RR rates were also differentiated according to loan growth (Table IV.1.I.3).

\begin{table}[H]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
Date & 01/08/19 & 23/08/19 & 06/09/19 & 20/09/19 & 04/10/19 & 18/10/19 & 01/11/19 & 15/11/19 & 29/11/19 \\
\hline
Loan Growth Rate & 1.9 & 2.7 & 3.4 & 4.6 & 6.6 & 8.1 & 9.7 & 11.9 & 13.2 \\
\hline
\end{tabular}
\caption{Annual Loan Growth Rate of the Banking Sector (as of Calculation Dates, %)}
\end{table}

\textsuperscript{3} For the calculation date of 29 November 2019 RR based on nominal and real loan growth were implemented jointly and banks that are entitled to benefit from RR incentives according to nominal loan growth had this right reserved for six maintenance periods.
On 29 November 2019, the calculation date when RR based on real loan growth was put into implementation, the annual real loan growth rate of the banking sector was -2.9%. On 21 February 2020, the last RR calculation date before the revision, this rate increased to 3.9% (Chart IV.1.I.2). Moreover, the annual real growth rate of commercial loans with maturity longer than 2-year and housing loans with 5-year or longer maturity subject to incentives (A Group loans) increased from -1.6% to 5.9% in the same period. Meanwhile, the annual real growth rate of retail loans other than housing loans with 5-year or longer maturity included in loan growth calculation with a lower weight (B Group loans) rose from 1% to 9.8% in the same period (Chart IV.1.I.3).

Revision in RR Based on Real Loan Growth

In view of the likely adverse impacts of the surge in consumer loans on growth composition, inflation and the external balance as well as the rise in loan growth led by TL loans that were extended toward early repayment or restructuring of FX cash loans before maturity, the current RR regulation was revised. Accordingly, with the Communique on Amendment to the Communique on

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4 Banks that started operating upon the permission of the BRS are subject to the same rates as banks that do not comply with the loan growth conditions for two years from the start of operations.
Reserve Requirements (No:2020/6) published in the Official Gazette No. 31061 dated 7 March 2020, the calculation of adjusted real loan growth rates was changed as of the calculation date of 6 March 2020. Accordingly;

i. It was decided provide the banks with RR incentives under the following conditions:
   a. For banks with a real annual loan growth rate above 15%: If their adjusted real loan growth rate, which is calculated by deducting the total of real changes in the loans extended to selected sectors with maturity longer than 2-year and housing loans with a 5-year or longer maturity from the numerator of the growth rate formula, is below 15%,
   b. For banks with a real annual loan growth rate below 15%: If their adjusted real loan growth rate, which is calculated by deducting 75% of the real change in retail loans excluding housing loans with 5-year or longer maturity and the total TL loans extended as of 9 March 2020 for early closure of FX cash loans or their restructuring before maturity from the numerator of the growth rate formula, is above 5%.

ii. Selected sectors were determined as follows according to the “Statistical Classification of Economic Activities in the European Community” (NACE) (Table IV.1.I.4).

<table>
<thead>
<tr>
<th>Section Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Agriculture, Forestry and Fishing</td>
</tr>
<tr>
<td>B</td>
<td>Mining and Quarrying</td>
</tr>
<tr>
<td>C</td>
<td>Manufacturing (excluding 11.01-Distilling, rectifying and blending of spirits, 11.02-Manufacture of wine from grape, 11.03-Manufacture of cider and other fruit wines, 11.04-Manufacture of other non-distilled fermented beverages, 11.05-Manufacture of beer, 11.06-Manufacture of malt and 12-Manufacture of tobacco products)</td>
</tr>
<tr>
<td>D</td>
<td>Electricity, Gas, Steam and Air Conditioning Supply</td>
</tr>
<tr>
<td>H</td>
<td>Transportation and Storage</td>
</tr>
<tr>
<td>I</td>
<td>Accommodation and Food Service Activities</td>
</tr>
<tr>
<td>J</td>
<td>Information and Communication</td>
</tr>
</tbody>
</table>

Source: CBRT.

The RR practice aims at encouraging the channeling of loan supply to efficient sectors with high value added. Thus, the target is to channel the loan supply to efficient and production-oriented sectors that will support sustainable growth rather than consumption, provide improvements in the current account balance and foster financial stability.

In line with the measures announced on 17 March 2020 to mitigate the effects of the coronavirus pandemic and the volatility in global financial markets on domestic markets and to enhance financial stability, with the Communique on Amendment to the Communique on Reserve Requirements (No:2020/9) published in the Official Gazette No. 31072 dated 18 March 2020, as of the calculation date of 6 March 2020, the maintenance of which would start on 20 March 2020, FX RR rates for banks complying with real loan growth conditions were reduced by 500 bp across all types of liabilities and all maturities. Thus, after RR ratios applied to FX deposit/participation funds, RR ratios applied to other FX liabilities were also differentiated according to loan growth (Table IV.1.I.3).
Annual real loan growth rate of the banking sector, which was 5.1% as of the calculation date of 6 March 2020, the date of introduction of the revision, rose to 8.5% on the calculation date of 17 April 2020, according to the latest banks reporting (Chart IV.1.I.4). Moreover, the annual real growth rate of housing loans with 5-year or longer maturity and loans extended to selected sectors with longer than 2-year maturity provided with incentives (A Group loans) rose from 1.9% to 6.3% in the same period. Meanwhile, the annual real growth rate of retail loans other than housing loans with 5-year or longer maturity, the weight of which were reduced in loan growth calculation (B group loans) rose from 11.4% to 14.4% (Chart IV.1.I.5).

**Conclusion**

RRs, a macroprudential and fine-tuning monetary policy tool, have been used as a dynamic tool supporting the effectiveness of monetary policy since August 2019 by being associated with loan growth. This practice quickly spilled over into loan growth developments and the loan growth rate in many banks converged to reference values gradually. The RR regulation based on loan growth, which is used efficiently and effectively to support production via loan supply is believed to contribute to financial stability by supporting growth mainly through economic activities with high domestic value added in the upcoming period.

**References**


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5 In the calculation of annual real growth rates of A group loans (as stated in the Provisional Article 9 of the Communique), three-month average of the loans with maturity longer than 2-year extended to selected sectors between calculation dates of 6 September 2019 and 15 November 2019 is fixed as the base period until the calculation date of 27 November 2020.
Box IV.1.II

Treasury-Backed CGF Guaranteed Loan Packages

The coronavirus pandemic brought activity to a partial halt across many economic segments, the services industry in particular, which caused businesses to experience reduced turnover and deteriorated cash flow. With the Economic Stability Shield package, the Treasury support for CGF guaranteed loans was increased from TRY 25 billion to TRY 50 billion on 30 March 2020 to contain negative spillovers from the pandemic into households, businesses and banks. Thus, the Treasury-backed CGF guaranteed limit amounted to TRY 500 billion. In this period, the Treasury-backed CGF guaranteed program helps firms, SMEs in particular, access financing and, unlike previous CGF guaranteed loan packages, applies to retail loans as well.

The CGF program involves individual packages. The latest loan packages announced were the Business Continuity Support with a guarantee of TRY 121 billion TL, the Operating Expenses (Opex) with a guarantee of TRY 24 billion, the Cheque Payment with a guarantee of TRY 12 billion and the Basic Needs support with a guarantee of TRY 41 billion (Table IV.1.II). These loan packages were introduced to maintain employment, finance business expenses such as taxes and fixed costs, help pay cheques written for billable commercial transactions and support households’ access to credit.

Among these CGF guaranteed loan packages, Business Continuity Support and Basic Needs Support have a maturity of up to 36 months while the maturity for Operating Expenses and Cheque Payment is a maximum of 12 months. These credit programs are also eligible for grace periods for principal and/or interest payments, which are included in the total maturity.

CGF guaranteed loan costs have an edge over non-CGF guaranteed commercial loan costs. For instance, in addition to a CGF commission of 0.5% to 0.75%, annual interest rates are 7.5% for Business Continuity Support loans and 9.5% for Operating Expenses and Cheque Payment loans.

For corporate loans, upper limits differ depending on turnover, but the Basic Needs Support package for households offers loans up to TRY 10,000. A large portion of Business Continuity Support and Basic Needs Support loans seem to have been granted, while Operating Expenses and Cheque Payment loans are still available after banks made technical adjustments to their operations.

Following these stimulus packages, Eximbank introduced two credit programs, the Eximbank Credit Support of TRY 20 billion, and the Eximbank Stock Financing Support of TRY 10 billion, providing relief to the export industry. In April, two more loan packages were announced: the Respite Credit backed by the TOBB, with a CGF guarantee of TRY 2.4 billion, and the SME Lifeline Support, with a CGF guarantee of TRY 3 billion. These two loan packages feature an annual interest rate of 7.5%, and bank and CGF commissions of 0.3% to 0.75%.
| Guarantee limit (TRY bil.) | 121 | 12 | 24 | 41 | 2.4 | 3 | 20 | 10 |
| Loan limit (TRY bil.) | 152 | 15 | 30 | 50 | 3 | 3.75 | 23 | 12 |
| Participating banks | 5 state-owned banks | 18 Banks | 13 Banks | 5 state-owned banks | Denizbank | Halkbank | Eximbank | Eximbank |
| Upper loan limit (based on turnover) | TRY 125 million | TRY 12.5 million | TRY 62.5 million | TRY 10k | TRY 50k-100k | TRY 25k | SME: TRY 27.7 million Other: TRY 55.6 million | SME: TRY 27.7 million Other: TRY 55.6 million |
| Maturity | | | | | | | | |
| Grace period | Up to 6 months | Up to 3 months | Up to 3 months | Up to 6 months | 8 months | Up to 6 months | Up to 12 months | Single payment at the end of 12 months |
| Total maturity incl. grace period | 36 months | 12 months | 12 months | 36 months | 20 months | 36 months | 36 months | 36 months |
| Condition | | | | | | | | |
| End-February 2020 | | | | | | | | |
| number of employees to be retained | | | | | | | | |
| Cheques drawn until 30.06.2020 for commercial transactions billable by 25.03.2020 | | | | | | | | |
| Expenses documented by contract or invoice | | | | | | | | |
| Households without an open bank or Asset Management Company NPL track record, bad cheque or protested bill. Either spouse eligible. | | | | | | | | |
| Members of TOBB, Trade Association, Chamber of Industry, Chamber of Shipping and Commodity Exchange are eligible | | | | | | | | |
| Trade association-registered sole proprietorships with an annual turnover of up to TRY 3 million | | | | | | | | |
| March 2020 number of employees to be retained; export commitment | | | | | | | | |
| Stock purchase agreement for January-March 2020 | | | | | | | | |
| Loan amount (TRY billion) | | | | | | | | |
| Applications | 125.7 | 7.4 | 13.8 | 33.7 | 1.3 | 1.1 | 0.3 |
| CGFReceived/approved | 121.9 | 6.8 | 11 | 33.7 | 1.1 | 1.1 | 0.3 |
| Utilization | 113.9 | 5.6 | 8.7 | 27.1 | 0.5 | 0.4 | 0.1 |
| Firm/Household (Number) | | | | | | | | |
| Application | 180.8k | 15.9k | 18.9k | 5.7 million | 21k | 44.8k | 25 |
| CGFReceived/approved | 177k | 14.9k | 15.7k | 5.7 million | 17.2k | 44.8k | 19 |
| Utilization | 164.8k | 12.5k | 12.77k | 4.6 million | 8.5k | 14.7k | 7 |

Source: CGF

The performing CGF guaranteed loan balance of the banking sector increased by TRY 135 billion between 31 March and 8 May 2020 to TRY 273 billion (Chart IV.1.II.1). Most of these loans consist of TL corporate loans.

The stimulus packages initiated in April contributed to decreasing TL commercial loan rates (Chart IV.1.II.2). In this regard, the April decline in CGF guaranteed loan rates is quite striking. Compared to TL commercial loans without CGF guarantee, Treasury-backed CGF guaranteed loan rates were down about 410 basis points in the week ending 10 April 2020. The aforementioned spread for TL commercial loan rates with and without CGF guarantee decreased to 116 basis points during the week of May 8th.

In conclusion, stimulus packages introduced to minimize the negative effects of the coronavirus outbreak on the debt repayment capacity of the corporate sector and the households are being monitored closely from financial stability perspective. These loan packages offer advantages in terms of maturity and cost and support access to financing for the corporate sector, especially for businesses without adequate collateral. Another highlight of this period is the announcement of the first CGF guaranteed loan package tailored for also households, which helps to mitigate any financial strains on households.

Hence, CGF guaranteed loan programs are considered to be highly effective in reducing the negative effects of the coronavirus pandemic on the real economy and financial stability.
IV.2 Liquidity Risk

In February and March 2020, the coronavirus pandemic sent global financial market volatility to record highs, led to a liquidity squeeze and risks to the banking sector’s liquidity outlook became more discernible. The waning risk appetite and the rising liquidity requirement prompted advanced and emerging market central banks to take a series of liquidity measures (Boxes I.1.i and II.1.i). In the pre-pandemic period, domestic and external financing conditions were more favorable than in 2019, but then worsened due to the pandemic-led liquidity squeeze and the rising risk premium. The liquidity measures taken after the first case was reported in Turkey are supporting financial stability by providing banks with flexibility in liquidity management. The fact that banks renew overdue syndicated loans at a high rate shows continued ability to access external finance. Strong deposit growth and long-term TL issuances help maintain a benign liquidity outlook for the banking sector in Turkey. After the first coronavirus case in Turkey, the CBRT announced in statements on 17 March, 31 March and 17 April 2020 that the liquidity limits in the framework of OMOs were increased for primary dealers, that conventional swap auctions with maturities of one, three or six months, available against US dollars, could also be held against euros and gold, and, that within the targeted liquidity facility, swap auctions with six-month or one-year maturity could be held at an interest rate lower than the repo rate. In addition, the BRSA brought flexibility to existing liquidity ratio regulations (Box I.1.i). The liquidity injected by major central banks through unconventional policies intended to curtail the economic impact of the coronavirus might steer some investors seeking returns into EMEs in the upcoming period, leading to lower external financing costs and eased quantity restrictions and increased diversity of participating countries.

The banking sector remains resilient to short-term liquidity shocks. As of 1 January 2019, the minimum legal limits of the liquidity coverage ratio (LCR), which measures the capability of high-quality liquid assets on banks’ balance sheets to offset net cash outflows over a 30-day period, are 100% and 80% for total and FX assets, respectively. The sector’s LCRs, calculated for both total and FX assets, are well above the minimum legal limits, standing at 144% and 243%, respectively, as of April 2020 (Charts IV.2.1 and IV.2.2). The increase in banks’ FX-denominated unencumbered GDDS accounts and liquid assets supported the
sector’s LCRs in the current report period. Meanwhile, in response to the coronavirus pandemic and to support market liquidity, the CBRT reduced FX reserve requirement ratios by 500 basis points across all maturities for banks that meet real credit growth conditions. LCRs saw an increase from the last quarter of 2019 to March 2020 when a decrease followed, and the sector’s LCRs calculated for total and FX assets went slightly down in the current report period. In addition to these measures, the BRSA granted temporary exemption to banks with trouble meeting the minimum legal LCR requirement until 31 December 2020 (Box I.1.1).

The ratio of non-core liabilities to total funds in banks’ funding composition went slightly down to 36% (Chart IV.2.3). The acceleration in TL deposits over the current report period drove the share of core liabilities higher on the domestic side as depositors who earn a steady income postponed all non-essential spending during the pandemic, but there might be a decrease following normalization. The amount of the sector’s repo and TL-denominated issuances have increased since early 2020 to meet the liquidity need arising from the rapid TL credit growth. Funds obtained from abroad were somewhat down in the current report period, bringing the share of deposits up on abroad as well and triggering a fall in the ratio of non-deposit funds to external funds. The pass-through from policy rate cuts to TL financing costs helped raise the share of domestic funds, which contributes to the deepening of domestic markets and reduces the sector’s vulnerability to external fluctuations. The decline in non-deposits, consisting mostly of bank loans, bond issuances and repo transactions, supports the financing structure of the sector and financial stability.

The loan-to-deposit ratio (LDR), an indicator for the long-term liquidity position of banks, shows the extent to which loans are financed by deposits. The rebalancing of the LDR during 2019 continued into the current report period because deposit growth was even stronger than credit growth that has gained momentum since the previous report period, bringing the LDR to 98% as of March 2020 (Chart IV.2.4). Sluggish investment and FX loan demand and some firms converting matured FX loans into TL to benefit from favorable TL loan conditions caused FX credit growth to weaken further. The reduced exchange rate volatility and the increasingly benign inflation outlook in the pre-pandemic period led to a decline in dollarization, causing the FX LDR to fall only modestly. Despite heightened exchange rate volatility, there has been no rush to FX deposits since March 2020. On the TL side, the credit market has been on a

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1 Development and investment banks, which can grant loans but do not have the authority to collect deposits, are not included in the LDR calculation. With development and investment banks included, the sector’s LDR reaches 106% as of April 2020.
rebound since the final quarter of 2019 thanks to waning uncertainty, falling loan rates, IVME and ISTOD credit packages and the real credit growth-linked RR practice. On the other hand, due to a rapid growth in TL deposits, the TL LDR remained constant.\(^2\) As of April 2020, the TL and FX LDRs are 135% and 63%, respectively.

Another indicator that is being monitored, the ratio of loans to the sum of deposits and other stable funds (L/D+), which serves as a more comprehensive means of measuring the liquidity outlook for banks and covers deposits plus other stable funds, remained flat in the current report period, coming in at 76% for total and 100% for TL as of March 2020 (Chart IV.2.5) as the acceleration in TL loans was financed by increased deposits, equities and long-term TL-denominated issuances. Despite accelerated credit growth, the sector’s long-term liquidity position is bolstered by both increased deposits and the rise in banks’ TL-denominated long-term domestic issuances and other stable funds.

\(^2\) For changes in annual credit growth, see Chart IV.1.1 in “Credit Developments and Credit Risk”.
Banks meet their TL financing needs through currency swaps as there has been a switch to TL in the credit composition and the gap between TL and FX LDRs has widened. Due to increased domestic TL borrowing by the sector and rising TL deposits, currency swaps accounted for a smaller share of net TL funding in the current report period. However, the recently increased demand for TL liquidity brought TL currency swap funding back on the rise, which reached TRY 275 billion as of April 2020 (Chart IV.2.6).

The BRSA’s decisions on 18 December 2019, 8 February 2020 and 12 April 2020 to limit short-term transactions with non-residents to a certain percentage of a bank’s equity for paying and receiving TL at the maturity date, steered banks towards domestic CBRT transactions and longer maturities (Chart IV.2.7 and Box I.1.1).

Improved external borrowing costs notwithstanding, the weak FX credit growth and record-low FX deposit rates drove banks’ demand for external funds lower and helped reduce the sector’s external debt balance (Chart IV.2.8). The currency mismatch arising from lower financing costs amid a rapid TL credit growth and policy rate cuts encouraged banks to use domestic funds rather than external funds. Meanwhile, costs of syndicated loans fell due to Libor rates, and nearly 80 percent of matured syndicated loans were renewed (Chart IV.2.9). Additionally, some banks have been issuing eurobonds and subordinated bonds since early 2020.

A lessened need for FX liquidity and falling yet still high external borrowing costs caused banks to renew their matured external loans at a rate below 100%. With external bond issuances and subordinated bond borrowings in the current report period, the total external debt rollover ratio somewhat increased to 88% as of March 2020 (Chart IV.2.10). The average maturity of external debts remained relatively flat at 37 months. High external financing costs led by pandemic-stricken financial markets also affected the maturity composition of banks’ external debt renewals, causing banks to renew low-interest short-term external debts in this period. Short-term and medium to long-term external debt rollover ratios were 96% and 58%, respectively, as of March 2020 (Chart IV.2.11).
The banking sector has enough buffers against any FX liquidity shocks. The sector’s liquid FX asset portfolio helps banks to be resilient to any shocks from international markets. Banks’ liquid asset portfolio, consisting of eurobonds, cash, accounts at foreign banks and ROM reserves, is enough to cover all their FX-denominated external debts due in one year (Charts IV.2.12 and IV.2.13).³

³ The banking sector’s external debt due within one year is USD 40.1 billion while banks’ cash, accounts at foreign banks, eurobonds and ROM reserves are USD 5.6 billion, USD 11.2 billion, USD 16.8 billion and USD 7.5 billion, respectively.
The weak demand for FX funds and high costs caused the issuing and maturity structure of FX-denominated foreign securities to flatten in the current report period (Chart IV.2.14). As the risk appetite recovers with increased global liquidity in the upcoming period, issuances of FX-denominated foreign securities and external debt rollover conditions may see some improvement. On the domestic front, the liquidity need arising from the accelerated TL credit growth is partly financed through TLREF-indexed TL issuances (Chart IV.2.15). Furthermore, within TL and foreign currency transactions held at the CBRT, ABSs and MBSs were added into the collateral pool on 31 March 2020. This decision helps boost the liquidity for issuances of similar securities, contributes to the financial deepening of capital markets and provides banks with flexibility in TL and FX liquidity management.
IV.3 Interest Rate and Exchange Rate Risk

The banking sector’s on and off-balance sheet interest rate-sensitive FX open position rose by 2% to TRY 49 billion compared to the previous Report period, while its TL excess position increased by 5% to TRY 686 billion. The rise in the interest rate-sensitive FX open position was driven by the increase in deposits, while the increment in the TL excess position was driven by the strong TL loan growth.

The sector’s interest rate-sensitive TL and FX positions’ sensitivity to repricing channel was exposed to a sensitivity analysis. In this regard, based on the economic value approach, these positions were exposed to a positive interest rate shock and the probable loss to capital ratio was calculated. Accordingly, up to 5 percentage points of a positive interest rate shock exposure on interest rate-sensitive TL positions leads to a probable loss of approximately 16% of capital. On the other hand, up to 2 percentage points of a positive interest rate shock exposure on interest rate-sensitive FX positions leads to a probable loss of 4% of capital. Compared to the same period last year, the positive interest rate shock-led probable loss to capital ratio posted a rise in both TL and FX positions (Chart IV.3.1).

Compared to the previous Report period, the average maturity of interest rate risk-sensitive TL assets became longer by two months to 19 months as a result of rise in the share of long-term loans. Meanwhile, the average maturity of interest rate risk-sensitive TL liabilities decreased by one month to five months due to the increase in the share of short-term deposits. The average maturity of interest rate-sensitive FX liabilities remained at 12 months while that of FX assets lengthened by one month to 24 months due to the increased share of long-term loans.

Chart IV.3.1: Interest Rate Risk via Repricing Channel Measured with Economic Value Approach (%)

| Source: BRSA, CBRT calculations | Last Observation: 03.20 |

Note: In the economic value approach, the change in the present value of interest rate-sensitive assets and liabilities is taken into account in the face of a change in interest rates. On the Chart, the upper and lower axis show the amount of the interest rate shock on TL and FX positions; while left and right axis show the probable loss to capital ratio that may incur on TL positions as a result of the interest rate shock.

Chart IV.3.2: Interest Rate Risk of Fixed Interest Rate Securities at Fair Value through Other Comprehensive Income (%)

| Source: BRSA, Bloomberg, CBRT Calculations | Last Observation: 03.20 |

Note: Since January 2018, when the TFRS 9 standards were put into effect, the Securities Available for Sale (Net) item on bank balance sheets has been renamed “Securities at fair value through other comprehensive income”. On the Chart, the upper and lower axis show the amount of the interest rate shock on TL and FX positions; while left and right axis show the probable loss to capital ratio that may incur on TL positions as a result of the interest rate shock.

Excluding participation banks.
Fixed interest rate securities at fair value through other comprehensive income may have an impact on capital through the channel of revaluation based on changes in interest rates. To measure the probable loss caused by such impact, likely interest rate hikes of up to 5 percentage points and 2 percentage points were imposed on TL and FX securities, respectively, as in the interest rate sensitive position analysis. The probable loss to capital ratio for TL securities was estimated to remain the same as the previous Report period at 1.9%. On the other hand, the probable loss to capital ratio for FX securities was estimated to be up from the previous Report period to 2.1% (Chart IV.3.2).

The banking system's on-balance sheet and off-balance sheet FX positions are largely shaped in line with the TL funding need. As the FX liquidity is in excess, the banking system meets its TL liquidity need predominantly through currency swaps. The CBRT covers a significant portion of the liquidity shortage in the market through currency swaps. Thus, the sector registers an on-balance sheet FX open position and an off-balance sheet FX excess position.

The banking sector's on-balance sheet FX open position and off-balance sheet FX excess position decreased by 4% and 11% compared to the previous Report period to USD 44 billion. In other words, the total on-balance sheet FX open position almost netted with off-balance sheet excess position, thus, banks continued their cautious stance with respect to net FX position. In March 2020, the sector’s FX net general position/capital ratio, which was -0.1%, was significantly lower than the two-way legal limit of 20% (Chart IV.3.3). In order to contain the adverse impact of the likely adverse financial developments due the coronavirus pandemic on legal limits, in a press release on 23 March 2020, the BRSA announced some supportive arrangements with respect to the FX net general position/capital ratio calculation to be effective until 31 December 2020. In the mentioned press release, it was stated that the provision for decrease in the value of FX securities portfolio may not be included in the FX net general position; and decrease in the value of fixed interest rate securities at fair value through other comprehensive income on 23 March 2020 may not be regarded as capital (Box I.1.I).

A breakdown of off-balance sheet FX transactions actively employed by the sector in FX risk management reveals that currency swaps continued to be used intensively. On the other hand, the share of options in this composition decreased (Chart IV.3.4).

**Note:** FXNGP refers to FX net general position.
IV.4 Profitability and Capital Adequacy

After being flat from the last reporting period through the end of 2019, profitability indicators of the banking sector displayed an uptrend until February 2020 due to strong TL loan growth, a positive duration gap and better asset quality (Chart IV.4.1). In March 2020, however, loan provisions increased by banks stemming from their prudent behavior to the coronavirus uncertainty, brought their equity profitability and ROA back to the end-2019 level. The March fall in profitability was also driven by the restrictions that the CBRT and the BRSA successively imposed on the maximum amount of some fees that are charged to commercial customers and financial consumers (Box I.1.i).

In the current reporting period, increased net interest income and improved asset quality were the key drivers of better return on equity and ROAs. Lately, the increase in net interest income has been largely due to net interest margin rising on a positive duration gap. As rate cuts are fully passed on to loans, which have longer maturity than deposits, in time, there will likely be less contribution from the positive duration gap-backed net interest margin. Moreover, loans granted on favorable terms to minimize the financial impact of the coronavirus outbreak may drive the net interest margin lower.

With smaller loan growth and stronger equity structure of banks in the previous reporting period, the CAR remained on the rise until the end of 2019. However, the sector’s CAR went down in the first two months of 2020 due to widespread loan growth and increased risk-weighted assets (Chart IV.4.2). On 23 March and 16 April 2020, the BRSA made adjustments to the calculation of credit exposure and equity in order to alleviate any CAR volatility while the coronavirus dominates the economy and in the post-pandemic recovery period (Box I.1.i).

Chart IV.4.1: Return on Assets and Equities (%)

Note: Profitability ratios are calculated by dividing the annual cumulative profit by one year’s average denominator.

Chart IV.4.2: CAR and Core Tier 1 CAR (%)

Source: CBRT
Last Observation: 03.20

IV.4.1 Profitability

Among factors that affected the change in ROA over the past year, non-interest income and net interest income had a positive effect on profitability. On the other hand, special provisions of nonperforming loans and losses from financial derivatives had a negative effect on profitability (Chart IV.4.3). As of March 2020, the sector’s ROA was down 15 basis points to 1.2%.
Twelve-month cumulative net interest income posted a sharp increase after having remained flat from the previous reporting period to the end of 2019. In this respect, net interest income contributed positively to the sector’s ROA in the last 12-month period by around 31 basis points. This upsurge was a result of interest expense paid to deposits growing less than interest income received from loans. On the volume effect and interest margin effect side, the volume effect was flattened by the constant contribution from TL loan growth, while the net interest margin was significantly wider. The main driver of the change in interest income has recently been the wider net interest margin (Chart IV.4.4). Thus, the pass-through from rate cuts to deposit expenses will occur faster due to a positive duration gap, i.e. deposits having shorter maturity than loans. On the other hand, as rate cuts are broadly passed on to loans over time, the net interest margin will make less contribution to net interest income. In addition, the increased utilization of coronavirus stimulus loans with flexible payment options and low interest rates will likely cause the net interest margin to narrow.

The recent modest decline in the closely monitored loans to performing loans ratio was due to standard loans registering a larger growth than nonperforming loans (Chart IV.4.5). The NPL collection rate, on the other hand, remained flat. The NPL coverage ratio is the ratio of loan loss provisions to nonperforming loans. After remaining virtually constant from the previous reporting period to the end of 2019, this ratio increased around the end of the current reporting period as banks prudently raised provisions. This increase was also fueled by the BRSA’s decision on 17 March 2020 that increased banks’ threshold payment deferrals for non-performing loans from a minimum of 90 days to 180 days until 31 December 2020 and thus brought nonperforming loans down.

The other non-interest income/expenses item, in which banks record their profits and losses in securities trading, derivatives and foreign exchange transactions, had a negative impact on profitability compared to a year earlier. The underlying reason was losses incurred on cross-currency swaps trades. Meanwhile, transaction costs for currency swaps continued to drop due to interest rates (Chart IV.4.6).

ROA was up about 24 basis points thanks to a rise in non-interest income led by provision cancellations and increased revenues from banking activities in the current reporting period. Compared to a year ago, rising insurance commissions and credit card fees and commissions were the main drivers of the increased banking services income. However, there was a fall in revenues from credit card fees and commissions in the current reporting period following the CBRT’s regulation about the commission rate.
applicable to member businesses announced on 1 November 2019. In addition, new arrangements by the CBRT and the BRSA that introduced upper limits on some bank fees for certain products and services by 1 March 2020 put a cap on the increase of revenues from banking activities (Box I.1.I).

**Chart IV.4.5: Additional NPL Indicators (%)**

<table>
<thead>
<tr>
<th></th>
<th>03.16</th>
<th>06.16</th>
<th>09.16</th>
<th>03.17</th>
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<th>03.18</th>
<th>06.18</th>
<th>09.18</th>
<th>03.19</th>
<th>06.19</th>
<th>09.19</th>
<th>03.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closely Monitored Loans Ratio (LHA)</td>
<td>49</td>
<td>53</td>
<td>60</td>
<td>62</td>
<td>63</td>
<td>63</td>
<td>64</td>
<td>64</td>
<td>65</td>
<td>65</td>
<td>66</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Collection Ratio (LHA)</td>
<td>12</td>
<td>13</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>19</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
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<tr>
<td>NPL Coverage Ratio</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
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<td>4</td>
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</tr>
</tbody>
</table>

Source: CBRT  
Last Observation: 03.20

Note: Closely monitored loans ratio is the ratio of closely monitored loans to performing loans.

**Chart IV.4.6: Currency Swap Transaction Costs and Interest Rates (TRY Billion, %)**

<table>
<thead>
<tr>
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<th>03.16</th>
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<th>09.19</th>
<th>03.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Average of Currency Swap Interest Rate (LHA)</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>12 Months Accumulated Currency Swap Cost</td>
<td>64</td>
<td>68</td>
<td>72</td>
<td>76</td>
<td>80</td>
<td>76</td>
<td>72</td>
<td>68</td>
<td>64</td>
<td>60</td>
<td>56</td>
<td>52</td>
<td>48</td>
</tr>
</tbody>
</table>

Sources: CBRT, Bloomberg, Authors’ calculations.

Note: In calculating the currency swap interest rate, the monthly simple average of 3-month USD-TRY currency swap interest rates was used as a reference rate and the cost was estimated by using the monthly average net TRY-FX currency swap positions of banks and the monthly average USD rate.

### IV.4.2 Capital Adequacy

Over the past year, legal capital has been positively affected by the increase in subordinated debts and the level of profitability. Additionally, amid rate cuts, equities were buoyed up by positive valuation differences related to securities at fair value through other comprehensive income (Chart IV.4.7). The BRSA announced on 23 March 2020 that value losses in the Portfolio of Securities At Fair Value Through Other Comprehensive Income might not be passed on to equities until 31 December 2020 in calculating the CAR (Box I.1.I). In doing so, negative effects from this channel have been averted until 31 December 2020.

Although there has been no significant change in the composition of risk-weighted assets, credit exposure growth and asset growth have been trending upward in the current reporting period. Meanwhile, the ratio of risk-weighted assets to total assets has increased only modestly (Chart IV.4.8).

In the upcoming period, the pandemic-led financial volatility may put a strain on credit exposure and thus on the CAR. Therefore, on 23 March 2020 and 16 April 2020, the BRSA announced new arrangements to contain any negative impact of the FX asset portion of credit exposure on the CAR. On 23 March 2020, the BRSA fixed the FX buying exchange rate at its level on 31 December 2019 until 31 December 2020 for FX assets and related provisions, both a part of credit exposure, to limit the negative effects of exchange rate changes on the CAR through the valuation channel. Moreover, on 16 April 2020, the BRSA allowed a 0% risk weighting in calculating credit exposure for FX loans from the Turkish Central Government (Box I.1.I). The latter arrangement will likely help shield the CAR from exchange rate and interest rate volatility.
Having remained flat through the most of the current reporting period, the CAR displayed a drop in the first two months of 2020 due to a sector-wide TL loan growth. In March, limited loan growth due to the coronavirus-led financial uncertainty and the BRSA’s rearrangement of CAR calculation caused the CAR to rise in banks other than state-owned deposit banks. Meanwhile, as coronavirus stimulus loans that provide some relief to the corporate sector and households have been mostly granted by state-owned banks, the CAR of state-owned deposit banks remained constant. The sector’s strong capital structure will likely be immune to a temporary volatility in the CAR over the near future thanks to the BRSA’s supportive measures (Chart IV.4.9). This projection is also supported by the TWF’s announcement of a capital boost for three state-owned deposit banks (Box I.1.1).