

Box 1.1

Recent Credit, Collateral and Liquidity Policy Steps

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

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

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

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

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

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

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

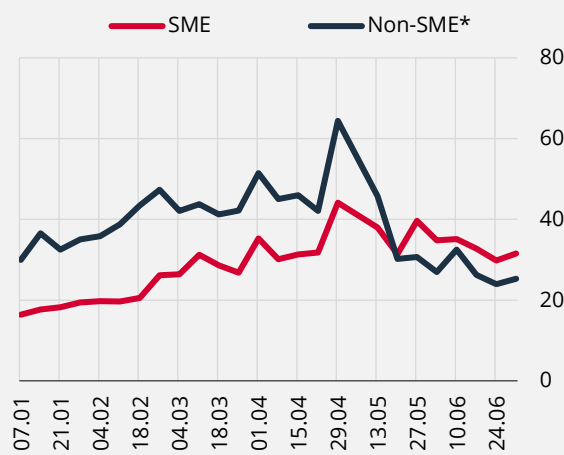
On 23 June 2022, the loan-to-value (LTV) ratio for housing loans was reduced by differentiating it according to the value of the house and whether the house is new-build or old-build, while loans were no longer offered for houses with a value over TRY 10 million. On the other hand, the risk weight to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

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

Reserve Requirement Regulations

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

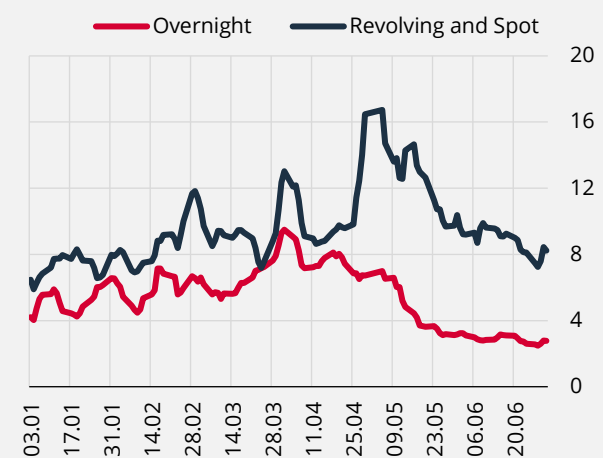
Chart 1: Weekly TRY Commercial Loan Disbursement (TRY Billion)



Source: CBRT.

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

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



Source: BRSA.

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

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

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

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

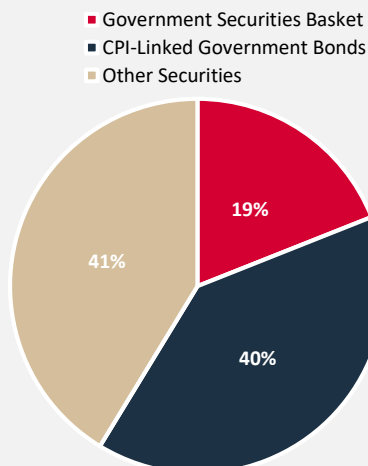
Changes to Collateral Management

Table 1: Changes to Collateral Management

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

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

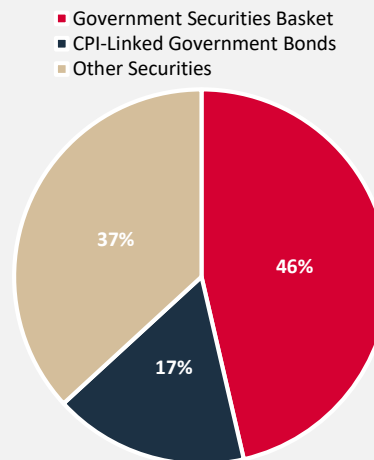
Chart 3: Distribution of Banks' Collateral Held at the CBRT (% , 13 May 2022)



Source: CBRT.

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

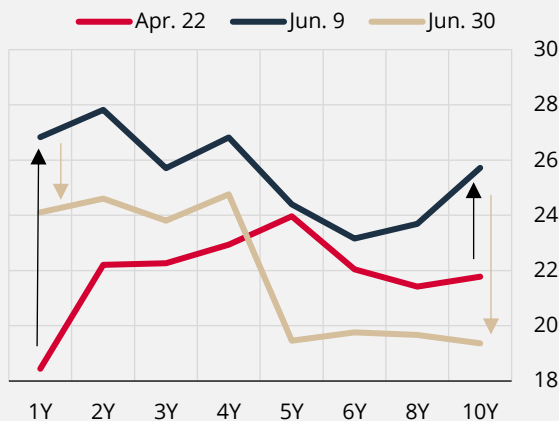
Chart 4: Distribution of Banks' Collateral Held at the CBRT (% , 14 July 2022)



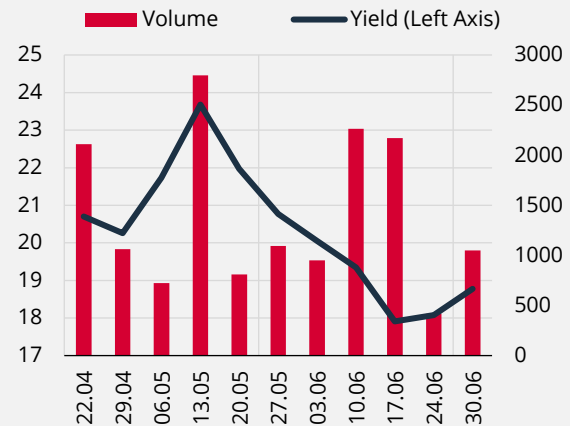
Source: CBRT.

On the other hand, with the announcement made on 10 June 2022, banks were obliged to maintain additional Turkish lira long-term fixed-rate securities for foreign currency deposits/participation funds and maintenance rates are differentiated according to the conversion rates of banks. The aim of this regulation is to increase the effectiveness of the monetary policy within the scope of the liraization strategy. There has been a tendency towards long-term fixed-interest bonds in the GDDS market since mandatory long-term TRY denominated fixed-interest securities were enforced and collateral management was changed. As a result, interest rates at the short-term and long-term ends of the yield curve shifted downwards. While there was an increase in both the short and long-term ends of the

yield curve before the regulation, there was a decrease of around 300 bps in the short-term and more than 400 bps in the long-term after the regulation (Chart 5). Short-term interest rates, which serve as a benchmark for the market, remained above the April level. In addition, transaction volumes in long-term fixed-rate securities generally increased. While the transaction volume for bonds maturing in 2030 increased by approximately TRY 1 billion in the second and third weeks of June compared to the week before the regulation, their yield decreased by approximately 200 bps in the same period (Chart 6).

Chart 5: GDGS Yield Curve (%)


Source: Bloomberg.

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


Source: Bloomberg.

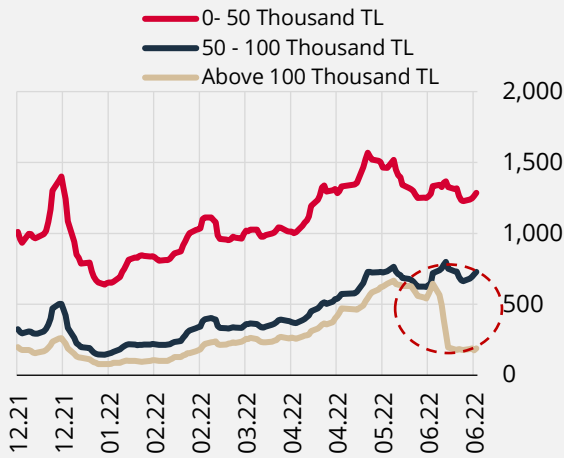
In addition, while the interest in long-term fixed-rate bonds has increased significantly in the borrowing auctions held by the Ministry of Treasury and Finance in the recent period, the bids for CPI-indexed bonds have lost momentum. After the announcement of the regulation, the first issue of 5-year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

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

Macprudential Policies for Consumer Loans

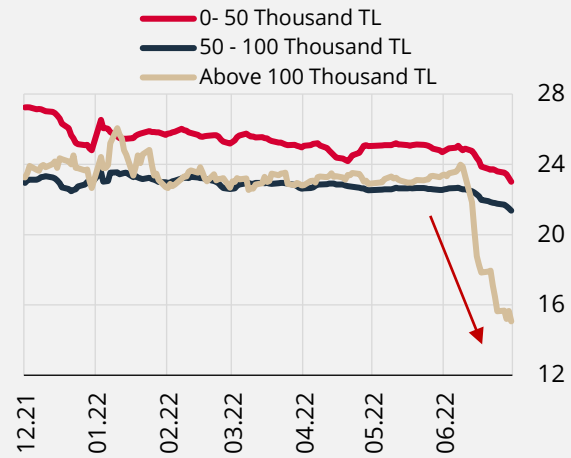
General purpose loans (GPLs) saw an uptrend after April, which was more evident in GPLs of high amounts. Daily GPL extensions, which averaged TRY 2.2 billion in the first three months of the year, rose to TRY 3.6 billion TL after April, marking a significant acceleration. Individuals tended to reduce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

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



Source: Risk Center.
Holidays and weekends are excluded.

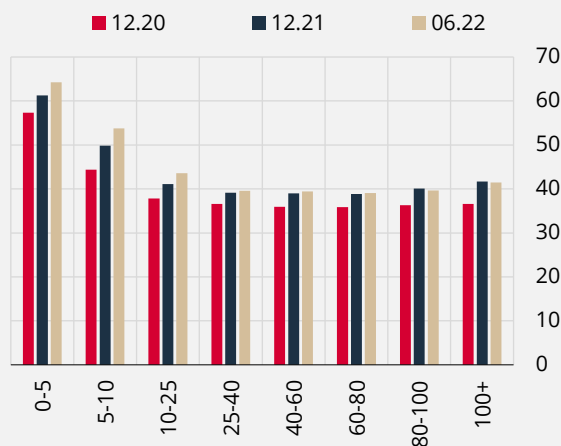
Chart 8: Daily GPL Weighted-Average Maturity (Month)



Source: CBRT.

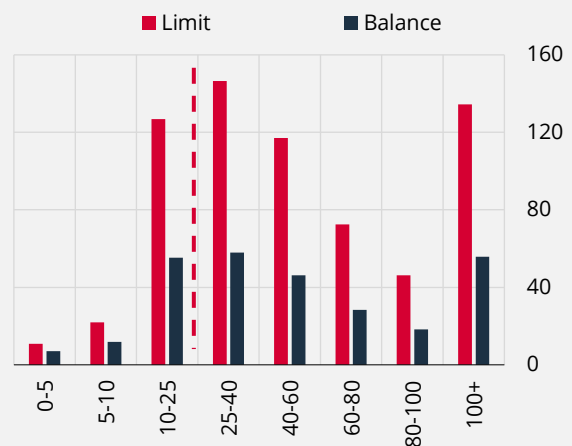
In order to support the payment capacity of individuals, the minimum payment rate for credit cards was reduced from 20-40% to 20% for all cards in the beginning of the pandemic. On 9 June 2022, the minimum payment rate for credit cards with a limit of more than TRY 25,000 was set at 40%. In the recent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

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



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

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



Source: Risk Center.

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

Table 2: LTV Ratio Regulation for Housing Loans

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

Source: BRSA.

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

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

Table 3: Impact Analysis of LTV Ratio Regulation

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

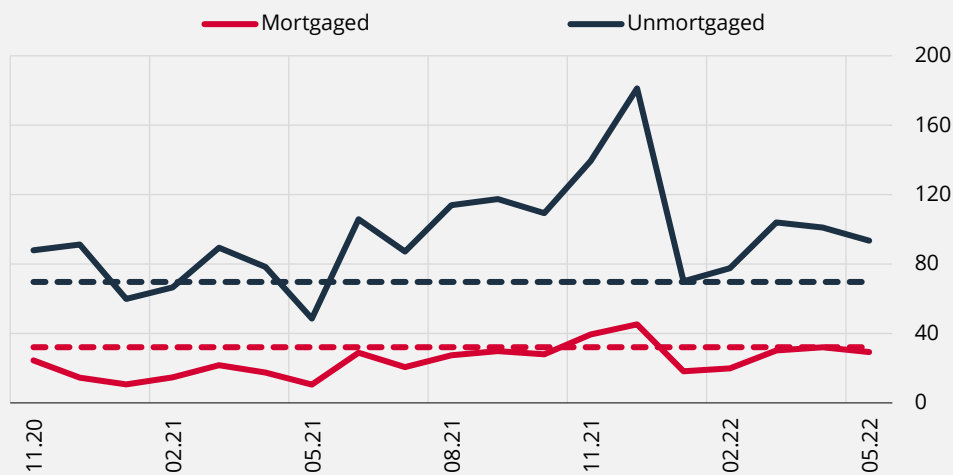
Source: CBRT, Authors' Calculations.

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

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

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

Chart 11: Mortgage and Unmortgaged Housing Sales (Thousand)



Source: CBRT.

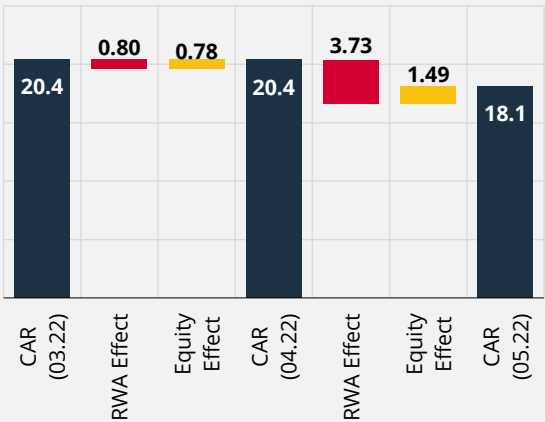
Note: Dashed lines show the 2012-2019 average of mortgaged and unmortgaged house sales.

Policy Measures Regarding Capital Adequacy

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

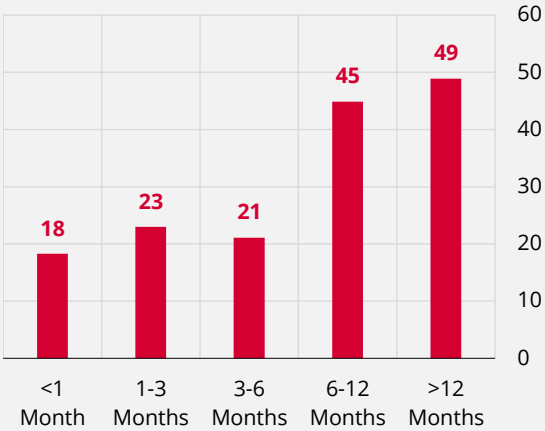
In May, the CAR of the banking sector decreased by 223 basis points compared to the previous month and stood at 18.1%. The increase in risk-weighted assets, driven mainly by the change in the exchange rate flexibility, was effective in this decline. In May, risk-weighted assets had an effect of approximately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

Chart 12: Components of CAR Change (%)



Sources: BRSA, CBRT.

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



Sources: BRSA, CBRT.