#### Overview

The macrofinancial outlook has been improving since the start of 2019, and this trend became more evident since June. As the summary indicator constructed using the key indicators from the chapters of the Financial Stability Report briefly outlines, the macrofinancial outlook improved significantly in the third quarter of 2019, and the calculated index rose above its historical average (Chart I.1, Box I.1.II). This development was mostly driven by mildly accommodative global conditions, domestic macroeconomic rebalancing, declining nonfinancial corporate indebtedness and the favorable course in bank financials. On the other hand, bank loan indicators performed slightly weaker than historical averages until September 2019. However, in the upcoming period, the surge in loan growth and the moderate recovery in the economic activity is expected to make a positive contribution to the asset quality of the banking sector. In fact, according to the recent high-frequency data, the recovery in loan growth, which started in September, continues spreading across banks and loan types.

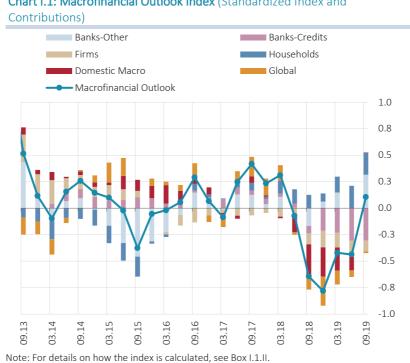


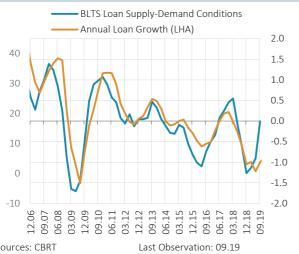
Chart I.1: Macrofinancial Outlook Index (Standardized Index and

Since the last Report, growth forecasts for advanced and emerging economies (EMEs) were revised downwards. Due to the changing growth and inflation outlook, major central banks moved towards expansionary monetary policies. Concerns over global growth, protectionist pressures on global trade and geopolitical developments add to the uncertainty surrounding global economic policies. Global debt levels remain a key source of fragility in advanced economies and EMEs especially due to rising real and public sector debts. Another fragility factor is the fact that banking sector capital profitability is generally low compared to pre-global financial crisis period. This is driven by weak global economic activity, country- and bank-specific factors such as worsening asset quality, and flattening yield curves on account of expansionary monetary policies of advanced countries.

In the third quarter of 2019, mild course of global financial conditions and the fall in domestic inflation and inflation expectations helped bring Turkey's risk premium and exchange rate volatility down. The domestic economic recovery, which was spurred mostly by net exports in the first half of 2019, was mainly driven by consumer spending in the third quarter. The decline in interest rates and improvement in financial conditions as a result of falling inflation and inflation expectations help boost economic activity. Despite the weak global growth outlook, Turkey remains competitive in international trade,

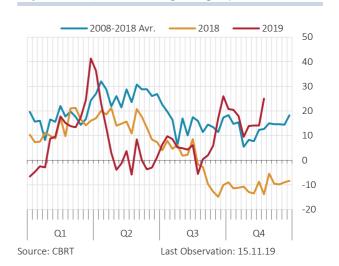
thanks to firms' flexibility in diversifying their export markets. Amid economic recovery and lower loan rates, loan demand has been on the rise in recent months. Loan indicators compiled from the Bank Loans Tendency Survey (BLTS) also point to a significant improvement in loan supply and loan demand conditions for the third quarter of 2019 (Chart I.2). The recovery in loan conditions are expected to feed more strongly into domestic demand by the fourth quarter.

Chart I.2: Credit Conditions and Loan Growth (4-Quarter Cumulative Standardized, Adjusted for FX, Annual %)



Note: The loan supply-demand conditions series is the standardized 4-quarter cumulative sum of the weighted average of answers given to the BLTS.

Chart I.3: Weekly Total Credit Developments (Annualized, Adjusted for FX, 4-Week Moving Average %)



An analysis of weekly data reveals that since September 2019, total credit growth led by retail loans, has been increasing on a path consistent with historical averages (Chart I.3). General-purpose loans posted the highest upward trend among retail loans due to the realization of the deferred demand, higher competition among banks, and the decline in interest rates. The recovery recorded in housing loans on the back of the competitive pricing led by state banks has also been a factor affecting recent retail loan growth. As for corporate loans, a moderate credit growth is observed across all firm sizes led by large-scale firms. This development was driven by the decrease in TL interest rates, especially for large-scale firms (Chart I.4). The TL interest rate spread across firm sizes, which had narrowed in favor of small-scale firms in the previous Report period, returned back to historical averages.

Chart I.4: Average TL Funding Costs of SMEs and Large Firms (4-Week Moving Average, %, % Difference)

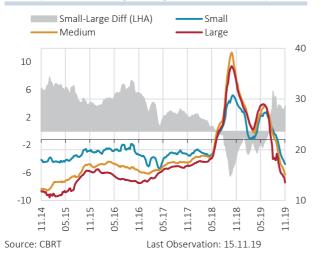
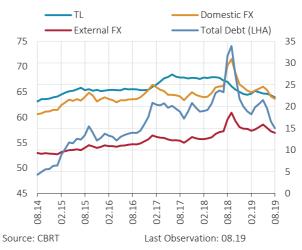


Chart I.5: Share of Corporate Sector's Financial Debt in GDP (%)



Note: GDP is converted to monthly basis and the value for August 2019 is the estimate of the CBRT.

Before August 2019, the impact of private banks' cautious stance on the loan stock was balanced by state banks' pro-active stance and pricing in the loan market. The CBRT's new credit-growth-linked TL required reserve (RR) policy, announced on 19 August 2019, encourages a sector-wide and convergent credit growth. In fact, starting from September 2019, private banks also started to behave more competitively in the loan market and increased their loan stock. In the upcoming period, credit growth is expected to become widespread across the banking system, and in line with economic outlook; due to the increase in TL liquidity, the fall in funding costs, expectations that improved owing to the favorable macroeconomic developments, as well as the effect of the new RR framework.

Household indebtedness remains stable at low levels. The average ratio of household indebtedness to GDP, which was 42 percent in EMEs in the first half of 2019, is 14 percent in Turkey. As of July 2019, corporate sector's indebtedness ratio decreased to 58 percent (Chart I.5). The contraction in current account deficit during the rebalancing process reduced the need for additional FX borrowing. The ratio of the corporate sector's domestic and external FX financial debt to GDP decreased due to a contraction in FX loan balances given the limitations on the issuance of FX-indexed and FX loans introduced in May 2018 with amendments made to the Law No.32 Regarding the Protection of the Value of Turkish Currency, decline in investment demand, and the enhanced awareness of FX risk management. Despite the curtailing effect of the economic rebalancing process, the ratio of corporate sector's TL debts to GDP remained flat as the IVME Package announced in May 2019 and the amendments to the RR framework supported TL borrowing.

Chart I.6: NPL Ratios (%)

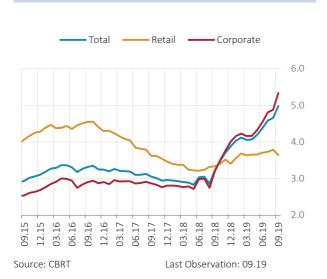
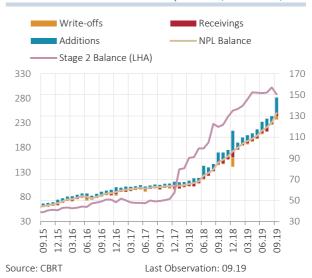


Chart I.7: NPL Balance and Components (TRY Billion)



In September 2019, non-performing loan (NPL) ratios and additions posted an upward movement driven by corporate loans, and the banking sector's NPL ratio rose to 4.9 percent (Charts I.6 and I.7). In the scope of the recently conducted asset quality review, the Banking Regulation and Supervision Agency (BRSA) concluded that certain loans should be classified as NPLs by the end of 2019, and stated that the NPL ratio might further increase to 6.3 percent accordingly. Despite the rise in the unemployment rate, the NPL ratio in retail loans remains flat due to macroprudential measures taken previously. In the upcoming period, the upward trend in the NPL ratio will decelerate and asset quality-driven risks will remain subdued, as the recovery in economic activity becomes more apparent and the loan growth stabilizes.

Chart I.8: Ratio of Non-Deposit Funding Sources to External Funding Sources (%)

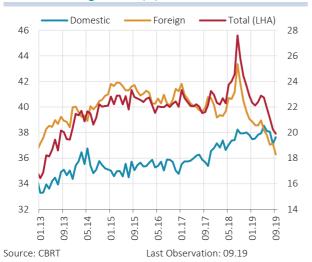
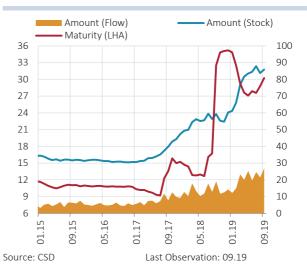


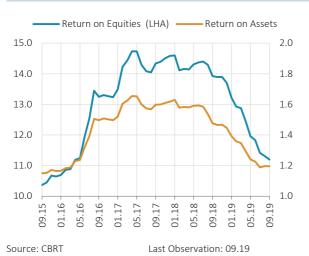
Chart I.9: Domestic TL Bond Issues (TRY Billion, Month)



Note: External funding sources include all liabilities except equity.

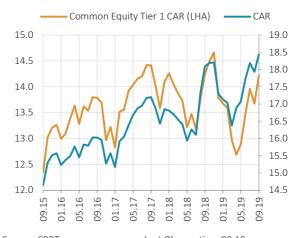
In the current Report period, there has been a prominent increase in domestic funding sources of the banking sector, which maintains its resiliency in terms of short and long-term funding structure. While the growth in deposits drives the share of core liabilities in funding sources higher, it also contributes to rendering banks' balance sheet structures more stable. The fact that this growth is particularly evident in TL deposits, due to the recent improvement in inflation expectations and the decline in exchange rate volatility, also supports financial stability. The share of non-deposit liabilities in foreign funding sources slightly decreased to 38 percent as of September 2019 (Chart I.8). As a result of the recent strong increase in domestic bond issuances and subordinated debts, the share of domestic funds in total external sources rose, exceeding the share of foreign funds to external sources. This curbs the vulnerability of the banking sector to the volatilities in interest rates and exchange rates in international markets. The increase in domestic TL funding that banks obtain via securities issuances and the product diversity continue in the current Report period, which adds to the financial deepening in the domestic securities market (Chart I.9, Box II.2.I). On the external front, the decline in the external debt rollover ratio and external debt balance persists due descending need for financing.

Chart I.10: Asset and Equity Profitability (%)



Note: Profitability ratios are calculated by dividing the one-year cumulative profit by the one-year average value in the denominator.

Chart I.11: CAR and Common Equity Tier 1 CAR (%)



Source: CBRT Last Observation: 09.19

The downtrend observed in the banking sector's profitability indicators due to the weak loan growth and asset quality developments, was replaced by a flattening course in the current Report period (Chart I.10). Meanwhile, the recent rise in the capital adequacy ratio (CAR) was primarily driven by the weak loan growth and the actions taken by banks to strengthen their equity structures (Chart I.11, Box IV.4.I). Following its asset quality review, the BRSA's decision concluding that certain loans should be classified as NPLs by the end of the year may slightly affect the sector's CAR but the sector is expected to maintain its robust capital structure.

In sum, in the current Report period, the mild course of global conditions, the domestic macroeconomic rebalancing, the improvement in expectations, the cautious monetary policy stance, the downtrend in the non-financial sector indebtedness, the increase in TL liquidity, and the favorable course of bank financials positively contributed to macrofinancial stability. The increase in the share of domestic funds and core liabilities in banks' financing reduces the vulnerability to external volatilities. Although the financial sector's asset quality has deteriorated slightly, asset quality-driven risks are expected to remain contained in the upcoming period due to a more pronounced recovery in economic activity and loan growth. Underpinned by its robust capital and liquidity structure, the banking sector remains resilient to risks. Despite the overall favorable economic activity outlook; the possibility of negative developments regarding the global growth prospects, risk appetite and perceptions of uncertainty, as well as geopolitical events are considered to be the relevant risk factors.

## Box I.1.I

# Market Oriented Steps

In this Report period, in addition to the short-term interest rates used as the key monetary policy instrument and various market rates determined under market conditions as per the law, several additional measures and arrangements were introduced with the objective of supporting financial stability and contributing to the efficient functioning of markets (Table I.1.I.1).

Table.1.I.1 Main Measures and Regulations Targeting the Markets

Scope	Date of Effect	Measures and Regulations
Decree No. 32 on the Protection of the Value of the Turkish Currency	31 August 2019	In the scope of the Communiqué regarding export proceeds related to the Decree No. 32, the implementation that stipulated repatriation of export proceeds and conversion of at least 80% of these proceeds into TL, was further extended by six months to end on 4 March 2020. Consistent with this revision, the implementation period of the Exports Circular dated 6 November 2018 that lays out the procedures and principles for the repatriation of export proceeds was also extended by six months.
Reserve Requirements (RR)	14 June 2019	Both TL and FX RR ratios of financial companies was set as 0% across all maturities. Therefore, financing companies' requirement to keep RR was terminated as of the calculation period of 14 June 2019 with a maintenance period starting on 28 June 2019.
	19 July 2019	With an amendment to the Central Bank Law No. 1211, not only the liabilities, but also on and off-balance sheet items of banks and other financial institutions deemed appropriate by the CBRT became possible to be taken into consideration in RR implementation.
	26 July 2019	RR ratios for FX deposits/participation funds were increased by 100 basis points for all maturity brackets.
	5 August 2019	Remuneration rate for US dollar-denominated RRs, reserve options and free reserves held at the CBRT were decreased by 100 basis points and set as 1%.
	9 August 2019	With the intention of using RRs more flexibly and effectively as a macroprudential tool to support financial stability, the RR ratios and the remuneration rates for TL-denominated RR were changed. Accordingly, for banks with a loan growth between 10% and 20% (reference values), the RR ratios for TL liabilities in all maturity brackets excluding deposits and participation funds with 1-year or longer maturity and other liabilities with maturities longer than 3 years were set at 2%. Additionally, the remuneration rate applied to TL-denominated RRs was set at 15% for banks with loan growth within the reference values, and at 5% for other banks.
	19 September 2019	Remuneration rate for US dollar-denominated RRs, reserve options and free reserves held at the CBRT were decreased by 100 basis points and set as 0%.
	20 September 2019	RR ratios for FX deposits/participation funds were increased by 100 basis points for all maturity brackets.
	4 October 2019	The remuneration rate applied to TL-denominated RRs was set at 10% for banks with a loan growth within the reference values, and at 0% for other banks.

Steps Taken by the CBRT Regarding Liquidity Management	17 June 2019	To support the Primary Dealership System in view of its contributions to the deepening of financial markets and the effectiveness of monetary policy, Primary Dealer banks were provided with a liquidity facility within the framework of open market operations. The interest rate to be applied to this liquidity facility to be used through overnight repo transactions within predetermined limits was set at 100 basis points below the CBRT's policy rate.
	25 July 2019	The CBRT decided to cut the policy rate (one-week repo auction rate) from 24% to 19.75%.
	5 August 2019	With the aim of enhancing flexibility in TL and FX liquidity management, TL currency swap transactions at the Turkish Lira Currency Swap Market, which were carried out with 1 week maturity via the quotation method was decided to be executed with 1, 3 and 6 month maturities via the traditional auction (multiple-price) method. Moreover, the total swap sale limit within the CBRT's TL against FX swap market was decreased from 40% to 20% for outstanding swap transactions.
	12 September 2019	The CBRT decided to cut the policy rate (one-week repo auction rate) from 19.75% to 16.50%.
	2 October 2019	The Foreign Exchange Gold Swap Market was opened at the CBRT to increase the banks' efficiency in liquidity management, and it was decided that the transactions would be conducted both on the buy or sell sides via quotation method with banks authorized to make transactions in the Foreign Exchange and Banknotes Market within their predetermined limits.
	10 October 2019	The discount rates applied to rediscount transactions was lowered from 18.50% to 17.25%, and the advance rate was decreased from 19.50%. to 18.25%
	24 October 2019	The CBRT decided to cut the policy rate (one-week repo auction rate) from 16.50% to 14%.
	2 August 2019	Futures contracts based on the Turkish Lira Overnight Reference Rate (TLREF) started to be traded on the Derivatives Market operating under BIST.
Capital Markets	16 September 2019	TLREF governing rules were updated to revise TLREF calculation and announcement times, to clearly write down the method of calculation in case of a lack of data, and to include Istanbul Clearing, Settlement and Custody Bank in the TLREF Committee (Please see Box II.2.I).
	3 October 2019	The Communiqué on Equity Crowdfunding was enacted, which was prepared in the scope of the authority given to the Capital Markets Board of Turkey with an amendment made to the Capital Markets Law in 2017.
	4 October 2019	To align with international stock exchanges and increase interaction, the "midday single price" and midday "break", which were implemented for equities traded with "continuous transaction" method between 13.00-14.00 hours, were cancelled to allow uninterrupted transaction between 10.00-18.00 hours.

	16 October 2019	Short-selling of stocks of some banks was suspended, and it was stated that depository rule would be applied to those banks' stocks and that the sale of their shares would be only executed over the brokers holding these shares. The depository rule and rule stipulating sale of shares only over brokers holding these shares were abolished on 21 October 2019.
	4 November 2019	Taking into account the new criteria introduced, the equities traded on BIST Stars and BIST Main have been re-grouped to allow trading equities with similar size, depth and liquidity together.
Deposit/Participation Funds, Credit Cards and Payments Systems	1 July 2019	The monthly maximum contractual interest rate and monthly maximum overdue interest rate for TL credit card borrowings were revised as 2.00% and 2.40% percent; while those for FX were revised as 1.60% and 2.00%, respectively.
	25 September 2019	With an amendment made to the "Regulation on Deposits and Participation Funds Subject to Insurance and the Premium to be Collected by the Savings Deposit Insurance Fund", the scope of saving deposits and real persons' participation funds subject to insurance were increased from TRY 100 thousand to TRY 150 thousand, meanwhile, determining insurance premium ratios and premium categories have been revised.
	1 October 2019	The monthly maximum contractual interest rate for credit card borrowings was revised as 1.60% for the TL and 1.28% for FX transactions, whereas the monthly maximum overdue interest rates were revised as 2.00% for the TL and 1.68% for FX credit card transactions.
	1 November 2019	The maximum commission rate to be applied to merchants for purchases of goods and services was set at 1.60% if the transaction amount will be transferred to the merchant's account on the day following the transaction; and in case of installments, this rate shall be increased by a maximum of 0.89 points for each additional installment.
	21 November 2019 (6 months ahead for the article from the Law on Turkish Payment and Electronic Money Institutions)	"The Law Amending the Law No. 6493 on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions, and Some Laws" were enacted by the Turkish Grand National Assembly on 12 November 2019. Accordingly, the current dual structure involving the CBRT and BRSA regarding payment service providers and electronic money institutions was changed by transferring the mandate of BRSA to the CBRT to ensure unity in Law and provisions were provided addressing the needs that may arise thereto.
Other Regulations	7 August 2019	With an amendment to the Presidential Decree No.1 (Organization of The Presidency), the Ministry of Treasury and Finance's duties and powers were extended to include: (i) Upon a Presidential decree, facilitate participation of Treasury in domestic or foreign companies, (ii) Monitor and evaluate domestic and foreign developments in financial markets, carry out studies to develop the financial sector and strengthen the financial stability, (iii) Regulate, implement, monitor the implementation and inspect the activities regarding insurance and private pension systems and determine the principles to further develop these systems.

## Box I.1.II

### Macrofinancial Outlook Index

Technical details in the calculation of the Macrofinancial Outlook Index presented in Chart I.1 are shared in this box. The aim of constructing this index is to obtain a simple and summary display of the macrofinancial outlook using the main indicators regarding the chapters of the Financial Stability Reports. Variables used in the index in Table I.1.II.1 are listed according to sub-items and categories. In constructing the index, variables mentioned in the table are standardized (adjusted for average and dividing by the standard error) and aggregated in equal weight for the September 2013-September 2019 period. Each variable in aggregation is multiplied by the direction of its effect (+,-) stated in the last column of the table in parantheses.

Table I.1.II.1 Variables Used in Calulating Macrofinancial Outlook Index for Turkey

Sub-item	Related Chapter(s)	Variables used in the Index (Direction of the Effect)
Global	Macroeconomic Outlook - International Developments	10-year US treasury bill rate (-), MSCI EME index (+), Brent oil price (-), Global policy uncertainty index (-)
Domestic Macro	Macroeconomic Outlook - Domestic Developments	Budget deficit/GDP (-), Current accounts balance/GDP (+), Annual CPI Change (-), Adjusted for calendar effect, annual IPI change (+)
Household	Non-Financial Sector - Household Developments	Consumer Confidence Index (+), Household indebtedness (-), Household leverage ratio (-)
Firm	Non-Financial Sector - Corporate Sector Developments	Corporate Sector Confidence Index (+), Net FX position (Million USD) (+)
Bank-Credit	Financial Sector - Credit Developments and Credit Risk	FX-adjusted Net credit usage/GDP stability indicator (+), Total FX-adjusted credit growth stability indicator (+), NPL rate (-), Stage 2 rate (-)
Bank-Other	Financial Sector - Liquidity Risk, Interest and Exchange Rate Risk, Profitability and Capital Adequacy	Bank external debt rollover ratio (+),Loan-to-deposit ratio (-), Libor+CDS (-),  Euribor+CDS (-), FXNGP/Equity (+),  Amount pertaining to market risk (annual growth) (-), asset profitability (+),  equity profitability (+), CAR (+), Core CAR (+)

The index can be defined mathematically as the following:

$$Macrofinancial\ Outlook\ index_{t} = \sum_{j=1}^{m} \underbrace{\left(\frac{1}{m}\right) * \left(\frac{1}{n_{j}}\right) * \sum_{i=1}^{n_{j}} s_{ji} * \left(\frac{x_{tji} - \bar{x}_{ji}}{\sigma_{x_{ji}}}\right)}_{Contributions\ of\ Sub-items}$$

In the equation,  $j=1,\ldots,m$  denotes sub-items in the index, m presents the number of sub-items,  $i=1,\ldots,n_j$  are the variables placed in the respective sub-item,  $n_j$  displays the number of variables in the sub-item,  $x_{tji}$  is the respective variable,  $s_{ji}=\{-1,1\}$  is the sign of the effect,  $\bar{x}_{ji}$  is the historical average average,  $\sigma_{x_{ji}}$  is the historical standard deviation, and t is the period in which the historical average and standard deviations of the variables are calculated.

According to the information in the table, currently m=6,  $n_1=4$ ,  $n_2=4$ ,  $n_3=3$ ,  $n_4=2$ ,  $n_5=4$ ,  $n_6=10$  and t=2013Q3, ... ,2019Q3. An increase (a decline) in the index shows relative improvement (deterioration) in the macrofinancial outlook; values above (below) zero in the index denote more positive (negative) levels than historical averages in the index. The credit growth stability indicators are constructed by taking absolute values of standardized credit series with opposite signs; and adding 1.5 standard deviation. When the respective credit growth series reside within the 1.5 standard deviation band, these indicators take positive values; vice versa. In addition, when credit growth series converge to/diverge from historical averages, stability indicators display increases/decreases.