5. Financial Conditions and Monetary Policy

In the first quarter of 2017, the normalized perceptions regarding the post-election policies in the US besides the alleviated uncertainties in March helped to allay volatilities in global financial markets. Moreover, optimistic global growth prospects led to favorable risk sentiments towards emerging economies. As a result, emerging economies have recently witnessed intensified portfolio inflows, falling long-term rates, surging stock indices and appreciated local currencies.

Turkey also saw portfolio flows amid the higher risk appetite in the inter-reporting period. The slope of the yield curve was reversed owing to the tightened monetary policy, and partly offsetting past losses, the Turkish lira diverged positively from currencies of other emerging economies. On the other hand, macroprudential policies, fiscal incentives and public credit guarantees supportive of the financial system led to a further recovery in credit conditions. In the first quarter of 2017, owing to the virile course of consumer loans and TL-denominated commercial loans, total credit growth exceeded the past years' average. Moreover, standards applied to SMEs by banks eased partially on the back of the government's support for commercial loans.

The FCI summarizes all these developments in a nutshell. Accordingly, the index hints at minor tightening in financial conditions in the first quarter of 2017 (Chart 5.1). Lending conditions (loan rate and lending standards) had a positive contribution to the index, while the slope of the yield curve, the real effective exchange rate, the stock returns, the benchmark interest rate and EMBI had a downward impact on the index in the first quarter (Chart 5.2).

Chart 5.1.
Financial Conditions and Credit Growth*

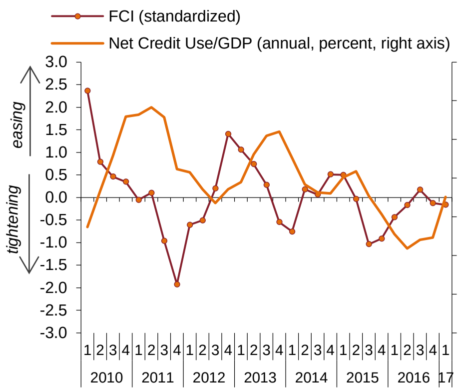
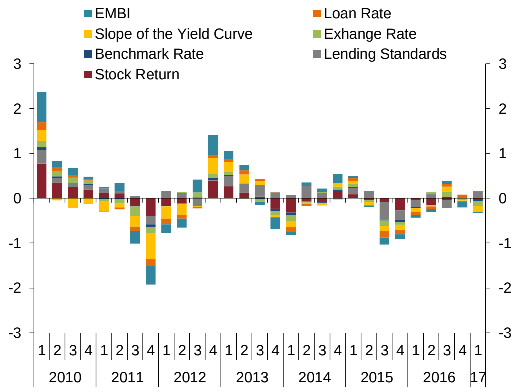


Chart 5.2.
Contributions to FCI**



* For further details on measuring FCI, see the CBRT Working Paper No. 15/13.
** Slope of the yield curve is measured by the spread between 10-year and 2-year bond rates.
Source: CBRT.

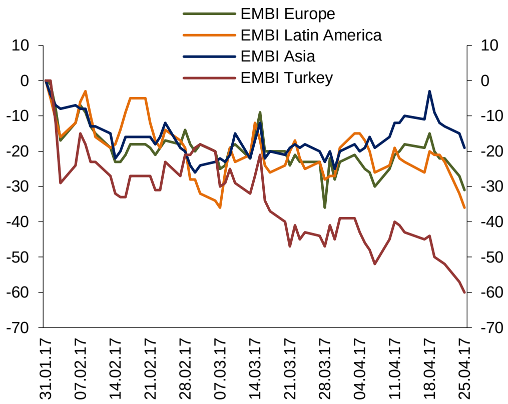
The policy stance of the CBRT remains tight against the inflation outlook, stabilizing for FX liquidity and supportive of financial stability. In order to curb the deterioration in the inflation outlook, the CBRT decided to opt for further tightening in the MPC meeting of April 2017. The tightening is also supported by additional measures on TL and FX liquidity (Box 5.1).

5.1. Relative Performances of Financial Markets

Risk Perceptions and Portfolio Flows

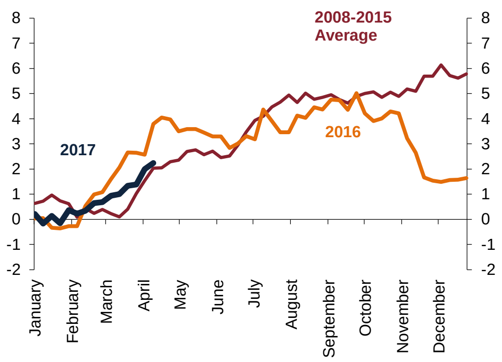
The recent signs of a rebound in global growth and waning uncertainties regarding the Fed's policies have favored the risk sentiment for emerging economies and portfolio flows have shifted towards emerging economies. Turkey's risk premium diverged positively from other emerging economies in the inter-reporting period (Chart 5.1.1). Meanwhile, portfolio flows to Turkey hovered close to past years' averages in cumulative terms (Chart 5.1.2). In the January-February period, Turkey attracted mostly stock funds while in March and April, Turkey also saw flows to domestic government bond funds.

Chart 5.1.1.
Regional Risk Premium
(Basis Points)



* Denotes changes since 31 January 2017.
Source: Bloomberg.

Chart 5.1.2.
Cumulative Portfolio Flows to Turkey*
(Billion USD)

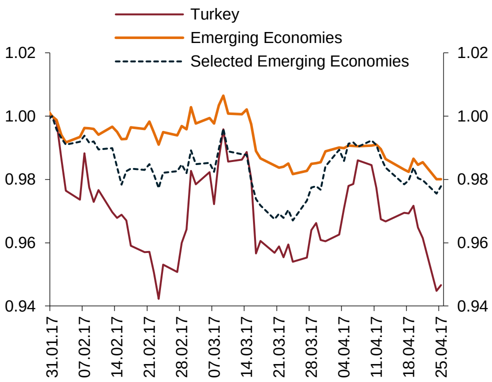


* Includes stock and domestic government bond funds as well as repo.
Source: CBRT.

Exchange Rates

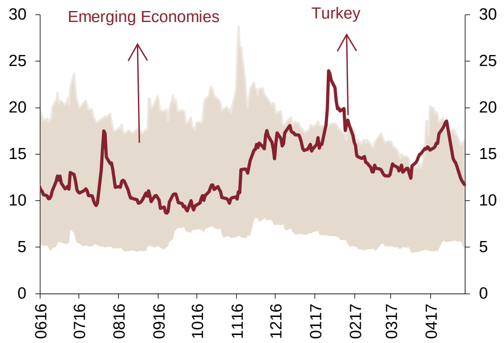
Emerging market currencies have appreciated slightly against the US dollar since the previous reporting period (Chart 5.1.3). Having diverged positively from other emerging market currencies, the Turkish lira also appreciated owing to the monetary tightening since January, thereby compensating for most of the past losses. In addition, the implied volatility of emerging market currencies also trended downwards amid the increased global risk appetite (Chart 5.1.4). However, signals of a possible balance-sheet downsize by the Fed at the year-end as well as political developments and geopolitical turmoil in South Africa have recently caused volatility in the Turkish lira and other emerging market currencies. As a result, the implied volatility of the Turkish lira has receded since the previous reporting period.

Chart 5.1.3.
Turkish Lira and Emerging Market Currencies against US Dollar*
(31 January 2017=1)



* Emerging economies include Brazil, Chile, Colombia, Hungary, Malaysia, Mexico, Poland, Romania, South Africa, India, Indonesia, Philippines and Turkey, while selected emerging economies include Brazil, South Africa, India and Indonesia.
Source: Bloomberg.

Chart 5.1.4.
Implied FX Volatility against US Dollar*
(1-Month-Ahead, Percent)



* Emerging economies include Brazil, Chile, Colombia, Mexico, Poland, Philippines, Malaysia, South Africa, Indonesia, Romania and Hungary.
Source: Bloomberg.

Market Rates

Since the January Inflation Report, market rates in emerging economies have largely been shaped by expectations regarding the monetary policies of advanced economies, the US in particular, and their macroeconomic prospects. Amid the favorable global risk appetite, both short and long-term rates decreased in many countries (Charts 5.1.5 and 5.1.6). In Turkey, market rates increased in short terms due to the CBRT's steps towards monetary tightening, and diverged positively from other emerging economies.

Chart 5.1.5.
5-Year Market Rates*
(Percent)

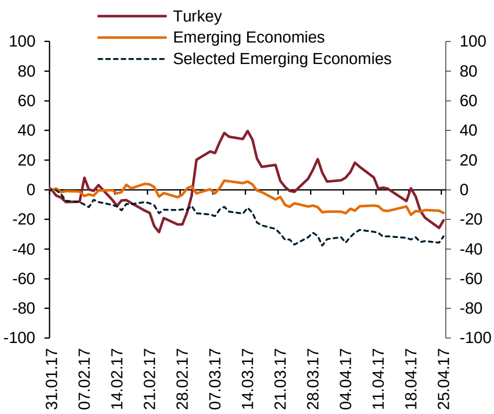
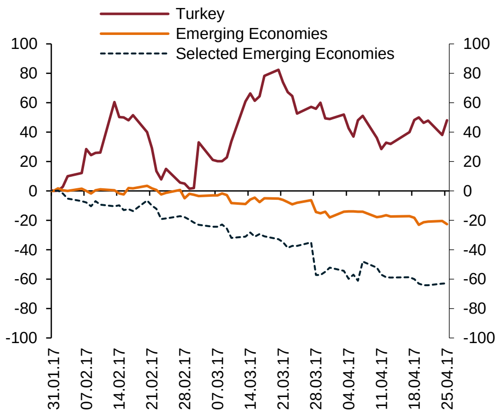


Chart 5.1.6.
6-Month Market Rates*
(Percent)



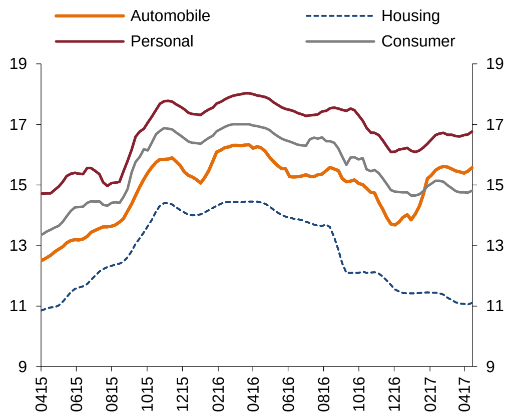
* Emerging economies include Brazil, Chile, Colombia, Hungary, Malaysia, Mexico, Poland, Romania, South Africa, India, Indonesia, Philippines and Turkey, while selected emerging economies include Brazil, South Africa, India and Indonesia. Denotes changes since 31 January 2017.
Source. Bloomberg.

5.2. Credit Conditions

Loan Rates, Funding Costs and Interest Rate Spreads

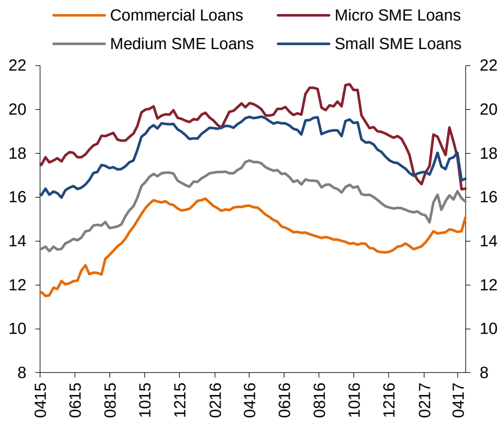
The ongoing downtrend in consumer and commercial loan rates came to a halt in early 2017 (Charts 5.2.1 and 5.2.2). In the first quarter of 2017, both consumer and commercial loan rates increased, albeit at a slower pace compared to the hike in the CBRT's average funding cost. This is attributed to the increased appetite of banks for lending on the back of the relatively positive expectations regarding economic activity coupled with public credit guarantees. Across sub-items of consumer loans, the fall in mortgage loan rates has continued, while automobile and personal loan rates have displayed mild increases since the previous Report. As of 14 April 2017, average consumer and commercial loan rates stood at 14.8 percent and 15.1 percent, respectively.

Chart 5.2.1.
Consumer Loan Rates
(Flow, Annualized, 4-Week Moving Average, Percent)



Source: CBRT.

Chart 5.2.2.
TL Commercial Loan Rates*
(Flow, Annualized, 4-Week Moving Average, Percent)

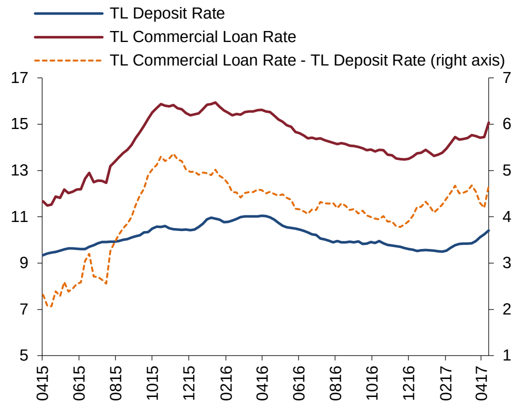


* Excluding overdraft accounts, credit cards and non-zero interest rate loans.
Source: CBRT.

Deposits, which are the primary funding source of the banking sector and mostly have maturities shorter than three months, had moderately increasing rates since the previous Report. Commercial loan rates acted likewise, and the spread between commercial loan rates and deposit rates inched up to 467 basis points by 14 April 2017 (Chart 5.2.3). The loan-deposit rate spread remains elevated compared to its historical averages.

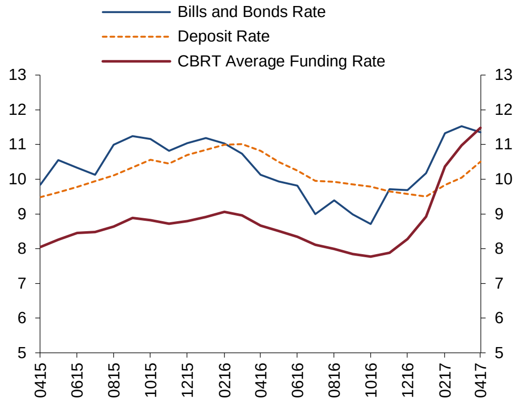
In the first quarter of 2017, deposit rates increased and banks' non-deposit funding costs escalated as well (Chart 5.2.4). In the inter-reporting period, deposit rates increased by 91 basis points, and rates on bills and bonds issued by banks rose by 118 basis points.

Chart 5.2.3.
TL Commercial Loan Rate and TL Deposit Rate*
(Flow, Annualized, 4-Week Moving Average, Percent)



* Excluding overdraft accounts, credit cards and non-zero interest rate loans.
Source: CBRT.

Chart 5.2.4.
Indicators on Banks' Funding Costs
(Percent)

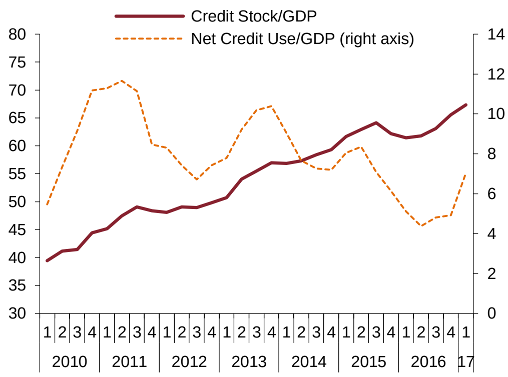


Source: CBRT, BIST.

Credit Volume

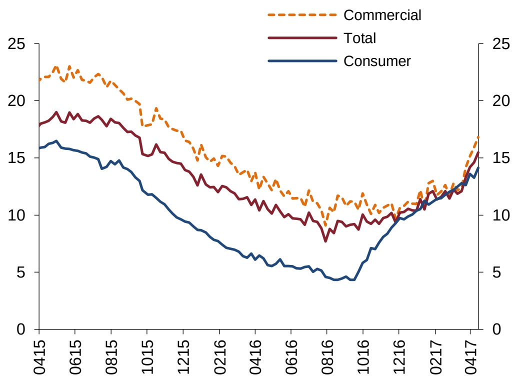
In the first quarter of 2017, credit growth recovered further amid macroprudential policies supportive of the financial system, fiscal incentives and public credit guarantees. The ratio of net credit use to the GDP, which is critical as a measure of financial stability, also summarizing the relation of credit growth with economic activity and aggregate demand, posted a quarter-on-quarter uptick and reached 7 percent in the first quarter of 2017 (Chart 5.2.5).

Chart 5.2.5.
Domestic Credit Stock and Domestic Net Credit Use*
(Percent)



* Domestic credits are comprised of total banking sector credits including participation banks, foreign branches and credit cards not adjusted for exchange rate. Net credit use is measured as the annual change in nominal credit stock adjusted for exchange rate. First quarter of 2017 is forecast.
Source: CBRT.

Chart 5.2.6.
Annual Loan Growth
(Adjusted for Exchange Rate, Percent)



Source: CBRT.

In the first quarter of 2017, the annual rate of change in total loans extended to the non-financial sector hovered around 15.5 percent adjusted for exchange rate (Chart 5.2.6). Annual growth across sub-items of loans reveals a partial recovery in consumer confidence, and a sustained uptrend in consumer loans amid macroprudential measures and incentives. Moreover, in line with the recently launched incentives for commercial loans like SMEDO loans and the Credit Guarantee Fund, commercial loan growth has also registered an increase. Accordingly, the annualized growth rate of total loans, which has trended upwards since the fourth quarter of 2016, has accelerated due to commercial loans since March 2017 and climbed above past averages to 33.4 percent by 14 April 2017 (Chart 5.2.7).

Chart 5.2.7.
Annualized Loan Growth
(Adjusted for Exchange Rate, 13-Week Moving Average, Percent)

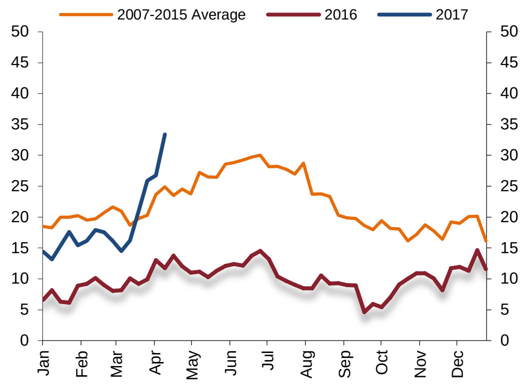
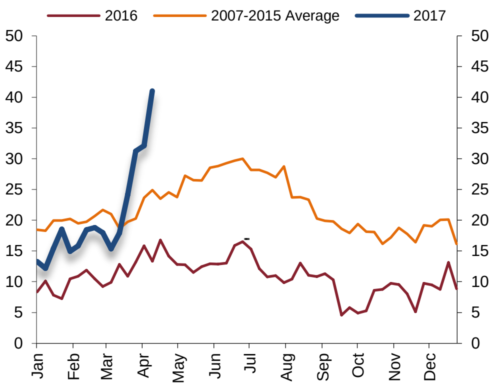


Chart 5.2.8.
Annualized Commercial Loan Growth
(Adjusted for Exchange Rate, 13-Week Moving Average, Percent)



Source: CBRT.

The commercial loan growth rate, which accelerated in March 2017, exceeded past averages (Chart 5.2.8). Also boosted by accommodative fiscal policies, this hike is attributed to the robust increases in the annualized growth rate of TL-denominated commercial loans (Chart 5.2.9). However, the annualized growth rate of FX-denominated commercial loans has stood below zero since the start of the year due to exchange rate developments, the rise in FX funding costs and the weak investment appetite.

Chart 5.2.9.
Annualized TL and FX Commercial Loan Growth
(Adjusted for Exchange Rate, 13-Week Moving Average, Percent)

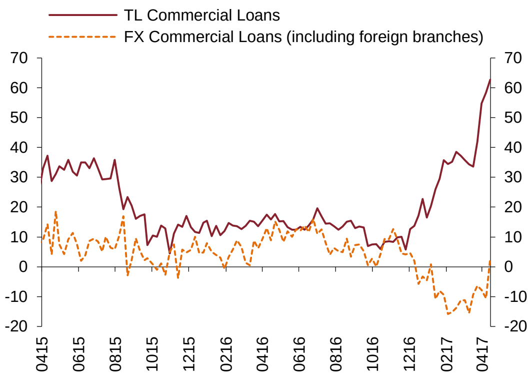
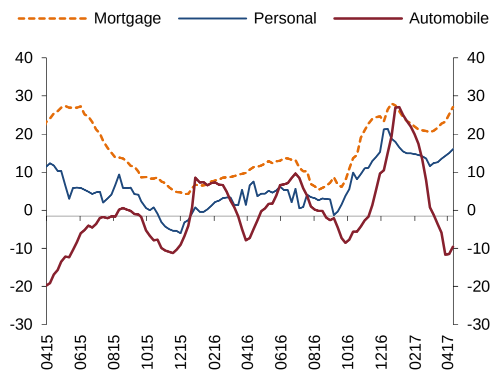


Chart 5.2.10.
Annualized Consumer Loan Growth
(13-Week Moving Average, Percent)



Source: CBRT.

The breakdown of consumer loans suggests that mortgage and personal loans maintained a brisk course in the first quarter of 2017 (Chart 5.2.10). Accounting for the largest share within consumer loans, the annualized growth rate of mortgage loans remained above past averages due to accommodative macroprudential policies and fiscal policy incentives, and hovered around 27.1 percent as of 14 April 2017. Growth of personal loans lost some pace, yet remained strong in the last quarter and its annualized growth rate hovered around 16 percent. In the meantime, having accelerated upon increased demand amid the SCT rate hike announcement in the last quarter of

2016, the growth rate of automobile loans, has recently returned to seasonally normal figures and hit -9.6 percent as of 14 April 2017.

Loan Standards

The tightening in commercial loans halted in the first quarter of 2017 (Chart 5.2.11). Standards for loans extended to SMEs were eased, while loans extended to large-sized firms remained unchanged. In terms of maturity, standards for both short and long-term loans were also eased. As for currency denomination, TL-denominated loan standards were relieved, whereas standards for FX-denominated loans witnessed some tightening. According to banks, the foremost factor tightening loan standards is expectations for the overall economic activity, yet it had a smaller tightening impact compared to the previous quarter. Collateral conditions for commercial loans remained unchanged in this period.

Banks responding to the Loan Tendency Survey indicated that loan demand declined slightly in the first quarter (Chart 5.2.12). In terms of scale, loan demand from SMEs recorded an increase, while in terms of maturity and currency denomination, the demand for both short-term loans and TL-denominated loans stood almost the same, whereas long-term loans and FX-denominated loans posted a decline. The sluggish course of fixed investments has been the major reason for the contraction in loan demand, whereas the need for debt restructuring remained as a factor to stimulate loan demand. Banks expect that commercial loan standards will not change, while commercial loan demand will increase excepting FX-denominated loans in the second quarter of 2017.

Chart 5.2.11.
Loan Standards*

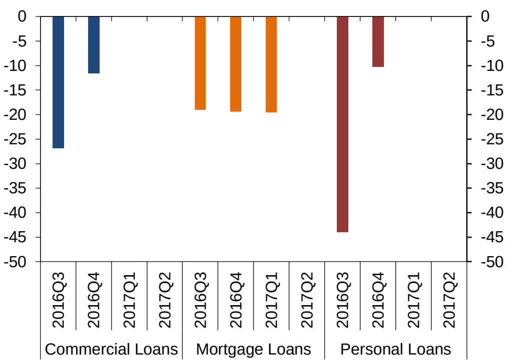
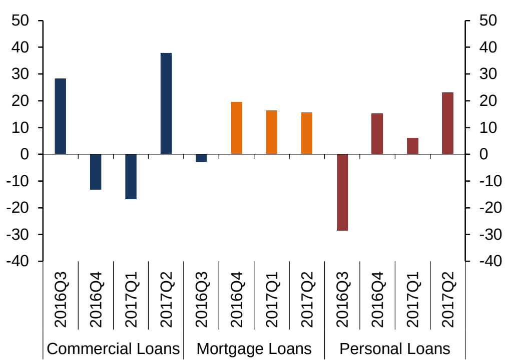


Chart 5.2.12.
Loan Demand*



* Net percentage change. Positive values indicate easing and negative values indicate tightening. Second quarter data for 2017 is forecast.
Source: CBRT.

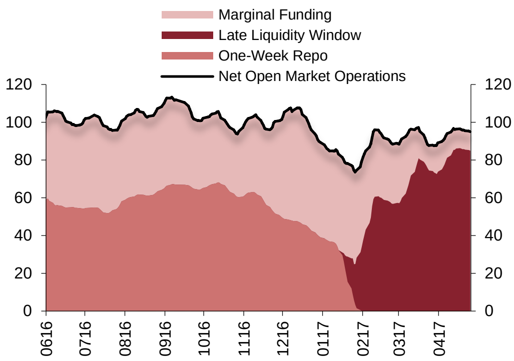
As for consumer loans, results of the Loan Tendency Survey indicate that standards for mortgage loans tightened, while those for personal loans remained unchanged in the first quarter of 2017 (Chart 5.2.11). Meanwhile, the demand for mortgage and personal loans displayed an uptick (Chart 5.2.12). According to banks, mortgage loan demand is dampened by consumer confidence and stimulated by expectations for the housing market. In personal loans, purchase of securities and spending on durable consumption goods push demand up, while deterioration in consumer confidence as well as taxes and similar burdens are the leading factors to drive demand down. Expectations of banks for the second quarter of 2017 indicate no change in standards in consumer loans, but an increased demand in mortgage and personal loans.

5.3. Monetary Policy

Market Developments

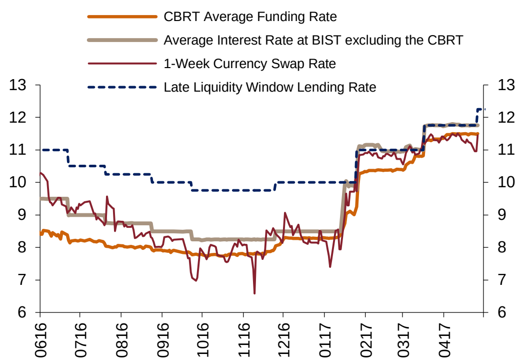
The CBRT funding was provided mostly via one-week repo auctions throughout 2016. However, the CBRT delivered an aggressive monetary tightening against the volatility in FX markets in early 2017, which cannot be justified by economic fundamentals. Accordingly, as of 12 January 2017, one-week repo auctions have been suspended, marginal funding has been reduced gradually and the system's funding need has increasingly been met by the late liquidity window facility (Chart 5.3.1).

Chart 5.3.1.
CBRT Funding*
(2-Week Moving Average, Billion TL)



* Marginal funding is provided from the upper band of the interest rate corridor.
Source: CBRT.

Chart 5.3.2.
Bank's Funding Costs at the Money Markets
(5-Day Moving Average, Percent)

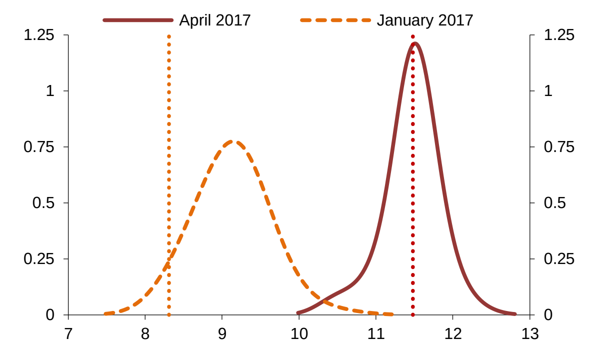


Source: BIST, CBRT.

The CBRT average funding rate increased amid the abovementioned liquidity policies as well as hikes to marginal funding and late liquidity window rates in January and a further increase in the late liquidity window lending rate in March. The aggressive monetary tightening was also reflected in the average rate for non-CBRT funding at the BIST Repo and the Reverse Repo Market and the one–week currency swap rate (Chart 5.3.2).

The probability distribution for the expected CBRT average funding rate derived from the CBRT Survey of Expectations implies a lower volatility expectation in April compared to January, while the mid-point of expectations indicates no change in the CBRT average funding rate in April (Chart 5.3.3).

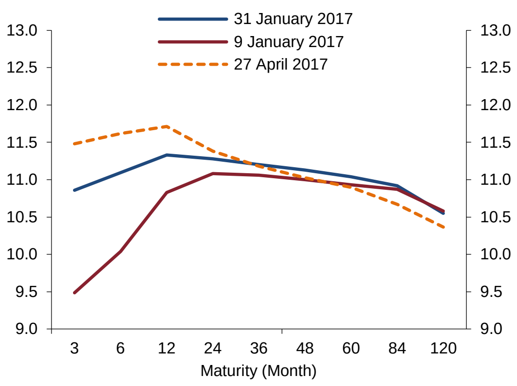
Chart 5.3.3.
Probability of Distribution for Expected CBRT Average Funding Rate*
(Percent)



* Measured by Kernel probability density function using CBRT Survey of Expectations. Vertical dashed lines show the CBRT's weighed average funding cost.
Source: CBRT.

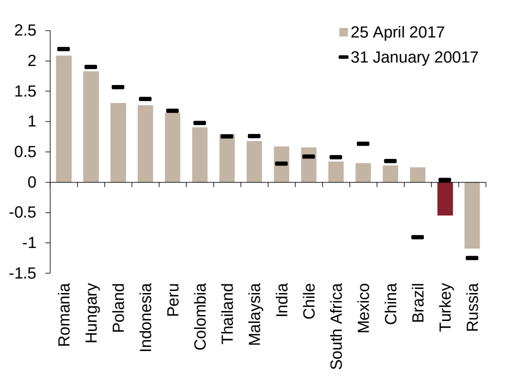
Returns on the short-term currency swap increased considerably compared to the previous Report owing to the CBRT's tightening monetary policy, while returns on the long-term currency swap remained unchanged (Chart 5.3.4). As a result, the yield curve of the currency swap reversed. Returns on bonds also displayed a similar movement and the slope of the yield curve flattened. Thus, Turkey was marked as the second emerging economy after Russia with the flattest yield curve slope (Chart 5.3.5).

Chart 5.3.4.
Yield Curve on Currency Swaps
(Percent)



Source: Bloomberg.

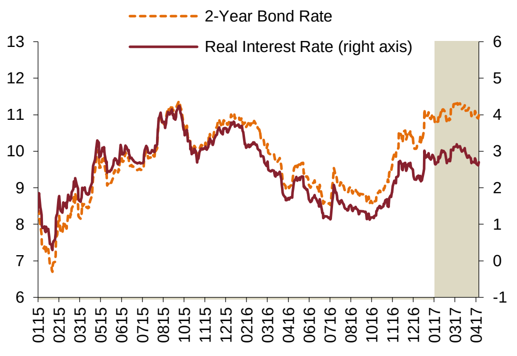
Chart 5.3.5.
Slope of Yield Curves in Emerging Markets*
(Percentage Point)



* Slope of the yield curve is measured as the difference between 5-year bond rates and 6-month bond rates, and the difference between 5-year currency swap rates and 6-month currency swap rates for Turkey.
Source: Bloomberg.

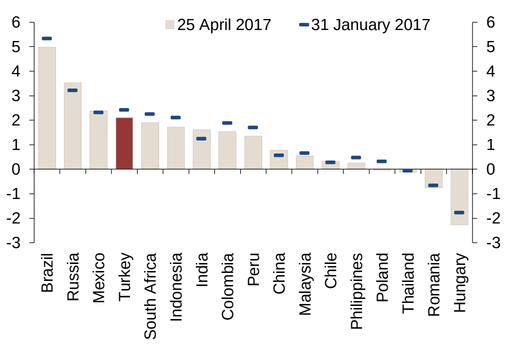
Owing to the tightening liquidity policies of the CBRT, 2-year bond returns also increased, albeit marginally (Chart 5.3.6). This pushed inflation expectations upwards, curbing the rise in 2-year real interest rates (Chart 5.3.7).

Chart 5.3.6.
2-Year Bond Rate and the Real Interest Rate in Turkey*
(Percent)



* Real interest rate is calculated as the difference between 2-year bond rate and the 24-month-ahead inflation expectations derived from the CBRT Survey of Expectations. As of 25 April 2017.
Source: Bloomberg, BIST, CBRT.

Chart 5.3.7.
2-Year Real Interest Rates*
(Percent)



* Real interest rate is calculated as the difference between 2-year bond rate and the 24-month-ahead inflation expectations derived from the Consensus Forecasts for respective countries. As of 25 April 2017.
Source: Bloomberg, Consensus Forecasts, CBRT.

Monetary Policy Reaction

Excessively volatile exchange rates weighed on upside risks to the inflation outlook in January 2017. Against a possibility for a persistent rise in inflation in the short term given the lagged effects of the exchange rates and volatile unprocessed food prices, the CBRT decided to deliver more aggressive monetary tightening to hinder the deterioration in the inflation outlook. Accordingly, in the January

MPC meeting, the marginal funding rate was raised from 8.5 percent to 9.25 percent and the lending rate was raised from 10 percent to 11 percent under the late liquidity window facility.

The CBRT took some liquidity measures in early January 2017 to maintain price stability and financial stability in order to eliminate the negative effects of exchange rate volatility and the pricing behavior that is detached from economic fundamentals. Accordingly, as of 12 January 2017, the CBRT suspended one-week repo auctions. Additionally, banks' borrowing limits at the Interbank Money Market were gradually lowered from 22 billion TL to 11 billion TL as of 11 January 2017. CBRT funding through the BIST Repo and the Reverse Repo Market has also been restricted as of 16 January 2017 when deemed necessary.

In addition to these measures, FX required reserve ratios were lowered by 50 basis points in all maturity brackets on 10 January 2017. Moreover, Foreign Exchange Deposits against the Turkish Lira Deposits Market was opened on 17 January 2017 to enhance flexibility and instrument diversity of the Turkish lira and FX liquidity management. In order to enhance flexibility of foreign exchange liquidity management, the CBRT also enacted a decision on 17 February 2017 regarding the repayments of rediscount credits. Accordingly, the decision facilitated the repayments of rediscount credits for export and foreign exchange earning services, which were lent before 1 January 2017 and will be due by 31 May 2017 (included), to be made in Turkish lira provided that they are paid at maturity. It was announced that the CBRT buying exchange rates announced on 2 January 2017 would be applicable for these transactions.

The stronger monetary tightening in January led to an improvement in financial indicators. In the meantime, loan rates remain mild despite the rise in the CBRT funding rate, while loans continue to grow amid the partial recovery in growth prospects, macroprudential arrangements and public incentives. As of March, cost pressures stemming from the cumulative depreciation of the Turkish lira have boosted inflation despite the moderate course of economic activity. Volatile exchange rates weighed on the upside risks to inflation not only through the cost channel but also via expectations and the pricing behavior channel. Besides, lagged effects of the exchange rate developments coupled with the base effect from unprocessed prices are likely to push inflation further in the short term. Against this background, at the March MPC meeting, the late liquidity window lending rate was raised from 11 percent to 11.75 percent.

Cost-side developments and volatile food prices in the recent months led to an upsurge in inflation. Even though cost-side pressures are contained partly by the recent rise in risk appetite, the elevated inflation poses a risk against pricing behavior. Hence, in order to avert the deterioration in the inflation outlook, the CBRT decided to opt for stronger monetary tightening in April and raised the late liquidity window lending rate from 11.75 percent to 12.25 percent, while keeping the other CBRT rates unchanged.

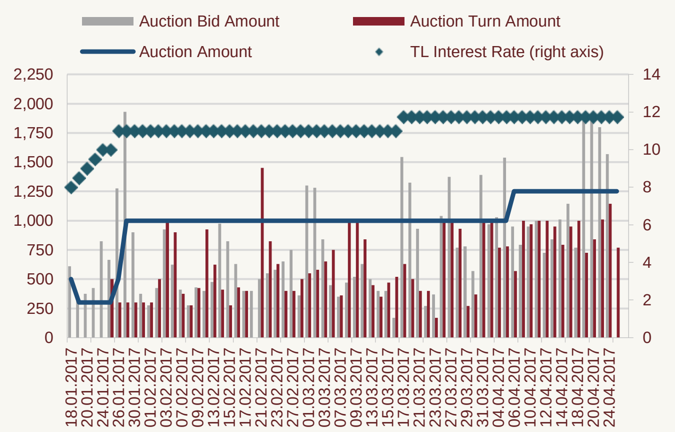
Coordinated policy decisions made in the first quarter of the year aimed at alleviating cost-side inflationary pressures induced by the exchange rate without posing an additional tightening in financial conditions. Accordingly, rather than deteriorating the credit channel, the CBRT pursued a policy oriented towards the FX market, which had more limited repercussions on the real economy. In fact, thanks to macroprudential policies and other measures to support credit access, the rise in loan rates remained limited. On the other hand, monetary tightening implemented since November 2016 had a remarkable effect on other market rates. In this period, the BIST repo rate and the currency swap market rates moved in tandem with the CBRT's weighted average funding cost and the FX market remained relatively stable, which indicates that the monetary policy decisions were transmitted as intended. The CBRT shall continue to employ all the instruments at its disposal to achieve the main objective of maintaining price stability. The tight stance in monetary policy will be sustained until the inflation outlook displays a significant improvement. Inflation expectations, pricing behavior and other factors affecting inflation will be closely monitored and further monetary tightening will be delivered, if needed.

Box 5.1 Foreign Exchange Deposits Against Turkish Lira Deposits Market Transactions

The CBRT may diversify its tools in order to enhance the effectiveness of the monetary policy in various markets. One such tool is the Foreign Exchange Deposits against Turkish Lira Deposits Market, which was announced on 17 January 2017 and came into effect on 18 January 2017. A deposit transaction is a temporary lending of a financial asset such as foreign currency, gold or Turkish lira to another institution. Accordingly, the market operates on the basis of a swap agreement between two deposit transactions where the CBRT provides banks with foreign currency while banks offer TL deposits in return. Accordingly, in the first stage, the CBRT lends foreign exchange deposits to banks in return for Turkish lira deposits for one-week maturity. In the second stage, i.e. at the expiration of the maturity after one week, banks pay back the foreign currency borrowed from the CBRT while the CBRT returns the Turkish lira borrowed from banks, both including the interest payment.

The CBRT uses foreign exchange deposits, effective buying-selling transactions against foreign currency and foreign exchange buying-selling transactions against Turkish lira as a tool to adjust FX liquidity in the market. Foreign exchange deposit transactions against Turkish lira deposits were launched with a view to enhancing the flexibility and tool diversity of TL and FX liquidity. The CBRT uses foreign exchange buying-selling transactions against Turkish lira as part of its liquidity management to withdraw liquidity from the system permanently and effectively. However, selling foreign exchange through this method causes the CBRT's foreign exchange reserves to diminish permanently. On the other hand, supplying FX liquidity to the market via foreign exchange deposit transactions against Turkish lira deposits does not diminish the CBRT's reserves permanently.

Chart 1. Auction Bid and Turn Amounts at the Foreign Exchange Deposits Against Turkish Lira Deposits Market (million USD) vs TL Interest Rate (percent)



Source: CBRT.

Chart 1 illustrates the auction amount and auction turn amount (funding) provided by foreign exchange deposit transactions against Turkish lira deposits as well as the TL interest rate. Overall, the bid-to-cover ratio is about 87 percent on average, and the TL interest rate was increased gradually from 8 percent to 11.75

percent on 17 March 2017, and the USD interest rate was raised from 0.75 percent to 1 percent on 16 March 2017.

Chart 2 displays the weekly cumulative volumes calculated by subtracting the total amount of expired transactions from the total USD amount lent to banks in one-week maturity auctions at the Foreign Exchange Deposits against Turkish Lira Deposits Market. The cumulative volume of these transactions reached a peak on 6 April 2017 amounting to 4.9 billion USD and the average volume is around 3 billion USD.

Interest rates and the auction amount to be applied to transactions at the Foreign Exchange Deposits against the Turkish Lira Deposits Market are determined on the basis of several indicators, some of which are listed as follows:

- Currency swap market rates with similar maturities,
- The CBRT's current liquidity policy and policy rates,
- Turkish lira and FX liquidity conditions in the banking system.

Hence, the interest rates and auction amount can vary on a daily basis according to changes in these indicators.

Chart 3 depicts the TL interest rates applied to transactions at the Foreign Exchange Deposits against the Turkish Lira Deposits Market along with various money market rates. Even though these transactions are used for liquidity management, the interest rates in these transactions also act as a policy tool, thereby constituting a reference for TL interest rates in the currency swap market. In fact, with the initiation of Foreign Exchange Deposits against the Turkish Lira Deposits Market, currency swap market rates started to get more aligned with other currency market rates.

Chart 2. Volume of Transactions at the Foreign Exchange Deposits against Turkish Lira Deposits Market (Billion USD)

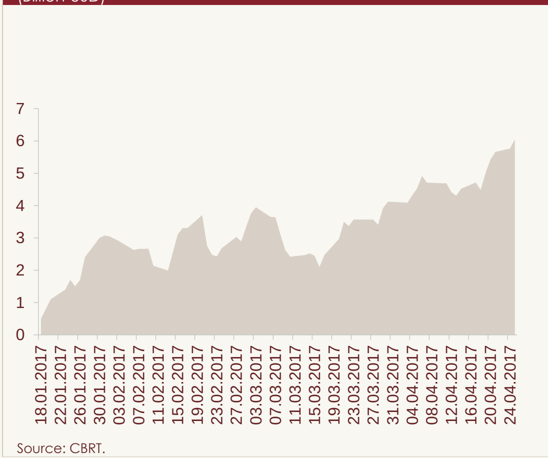
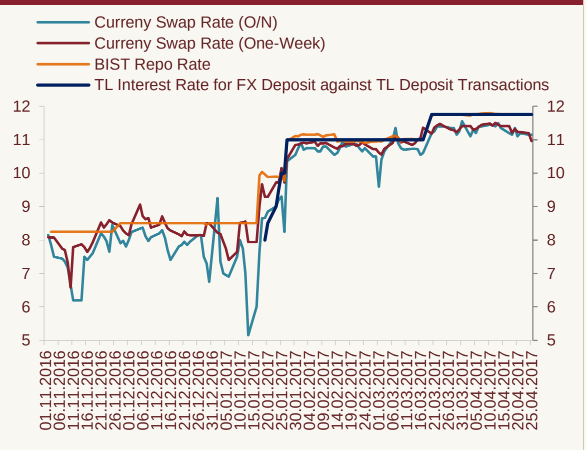


Chart 3. Currency Swap Rate, BIST Repo Rate and TL Interest Rates for FX Deposit against TL Deposit Transactions (Percent)



Source: CBRT.

In sum, the new policy eases the downside volatilities in the currency swap rates, a significant tool for TL funding of banks, and enhances the transmission of the monetary policy, which, overall, improves the effectiveness of the monetary policy.