

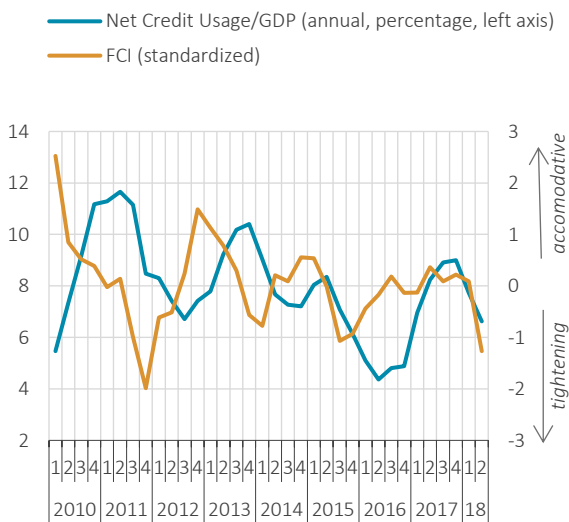
## 5. Financial Conditions and Monetary Policy

In the second quarter of 2018, the normalization process in monetary policies of advanced economies accelerated, and volatilities increased in global financial markets due to rising protectionism in international trade, as a result of which the risk premium of emerging market economies climbed and their currencies depreciated. Portfolio flows towards emerging market economies have been adversely affected by these developments. In this quarter, Turkey's financial indicators decoupled from other emerging market economies negatively mainly due to domestic uncertainties and the rise in the current account deficit and inflation. On the back of the CBRT's rate hike decisions taken to underpin price stability, slope of the yield curve remained negative.

The deceleration in credit growth continued in the second quarter of 2018 as well. According to the Bank Loans Tendency Survey, in the second quarter of 2018, banks tightened loan standards on commercial loans, and in response, businesses' demand for commercial loans decreased. Banks foresee further tightening in commercial loan standards and an increase in demand for these loans in the third quarter.

The Financial Conditions Index points to a tightening in the second quarter of 2018. Moreover, the decline in the ratio of net credit use to GDP continued due to the decrease in commercial loan supply and the base effect (Chart 5.1). All financial components had a contracting effect on FCI (Chart 5.2).

**Chart 5.1: Financial Conditions and Credit Growth\***

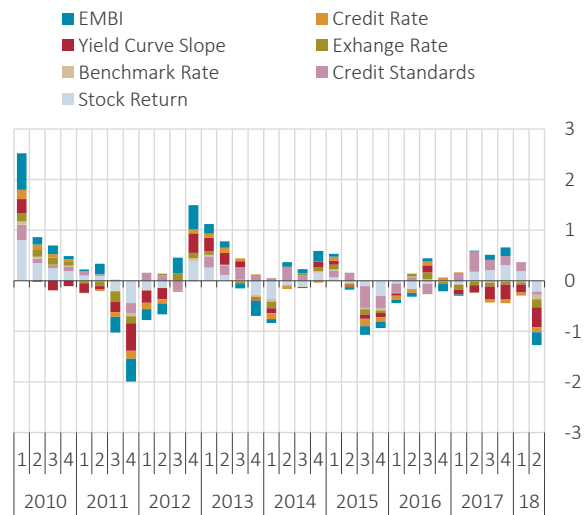


Source: CBRT.

\* For further details on measuring FCI, see the CBRT Working Paper No. 15/13.

Net Credit Use is defined as the annual change in the credit stock and it is adjusted for exchange rate. GDP data for the second quarter of 2018 is forecast.

**Chart 5.2: Contributions to the FCI**



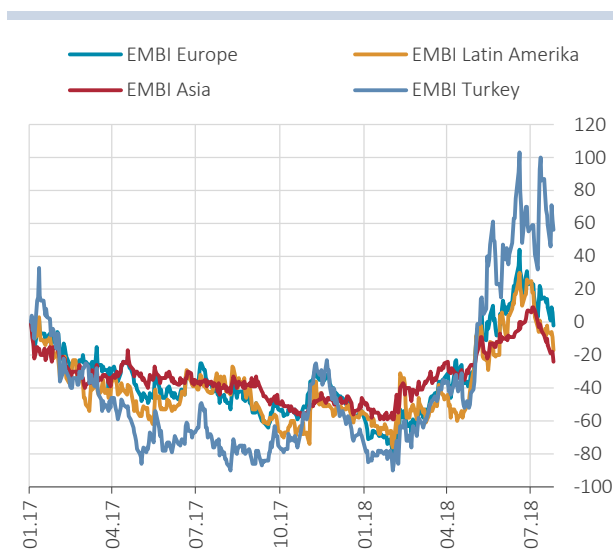
Source: CBRT.

## 5.1 Relative Performance in Financial Markets

### Risk Perceptions and Portfolio Flows

In the current reporting period, upside risks to global inflation outlook were heightened and central banks of advanced economies kept on tightening their monetary policy stances. In fact, compared to the previous reporting period, the Fed is now more likely to make a total of 4 rate hikes till the end of 2018; while at its June meeting, the ECB decided to terminate the asset purchase program at the end of December 2018. These developments fueling volatilities in global markets coupled with increased protectionist discourse have weakened risk appetite. As a result, regional risk premiums of emerging market economies have increased. Meanwhile, Turkey's risk premium has diverged negatively from other emerging economies due to its negative inflation and current account balance outlook as well as domestic uncertainties (Chart 5.1.1). This negative divergence can partly be attributed to the recent increase in Turkey's sensitivity to global developments (Box 5.1). As of February, portfolio flows into emerging economies started to decline with the impact of the volatilities in global markets. During the same period, portfolio flows into Turkey also decreased, and cumulatively, portfolio outflows have exceeded portfolio inflows (Chart 5.1.2). An analysis of portfolio movements by types of markets reveals that outflows mainly occurred in the Government Domestic Debt Securities-DIBS market.

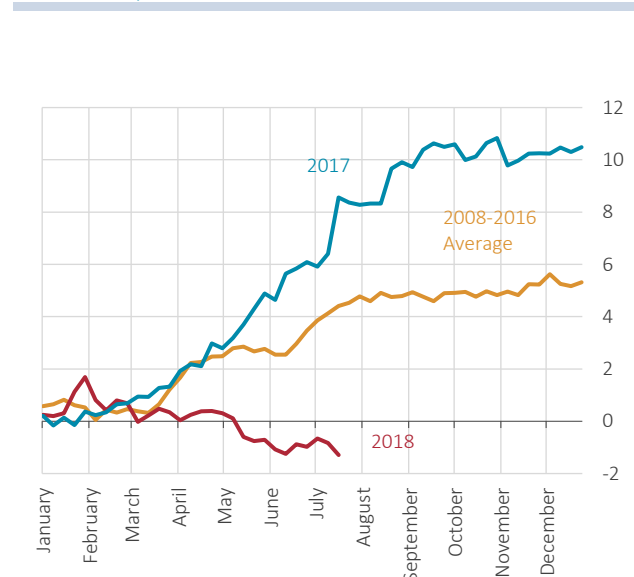
**Chart 5.1.1: Regional Risk Premium\* (Basis Points)**



Source: Bloomberg.

\* Shows cumulative changes since 2 January 2017.

**Chart 5.1.2: Cumulative Portfolio Flows to Turkey\* (Billion USD dollars)**



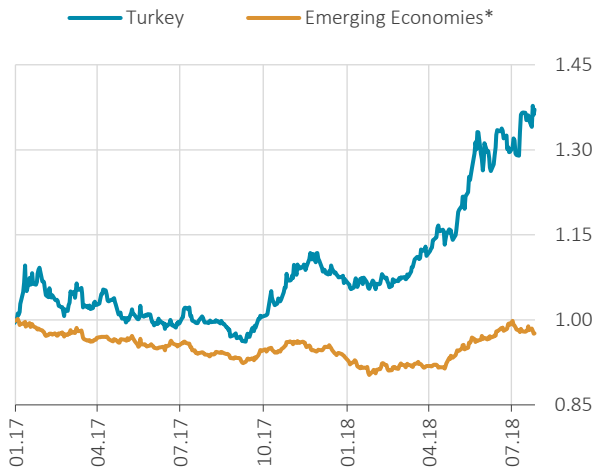
Source: CBRT.

\* Includes portfolio inflows to stocks and GDDS market. Repo is included in the GDDS data.

### Exchange Rates and Market Rates

In the current reporting period, risk perceptions for emerging economies deteriorated and currencies of these countries depreciated on the back of the appreciation trend of the US dollar and fluctuations in the global financial markets. Geopolitical tensions, outlook on macro indicators such as inflation and current account deficit, and concerns over macroeconomic policy mix increased Turkey's sensitivity to global fluctuations. In this period, the depreciation in the Turkish lira was much higher and assumed a more volatile trend compared to currencies of peer emerging market economies (Chart 5.1.3). Thus, the implied volatility of the Turkish lira increased as well. Nevertheless, volatility in the Turkish lira slightly decreased in July (Chart 5.1.4).

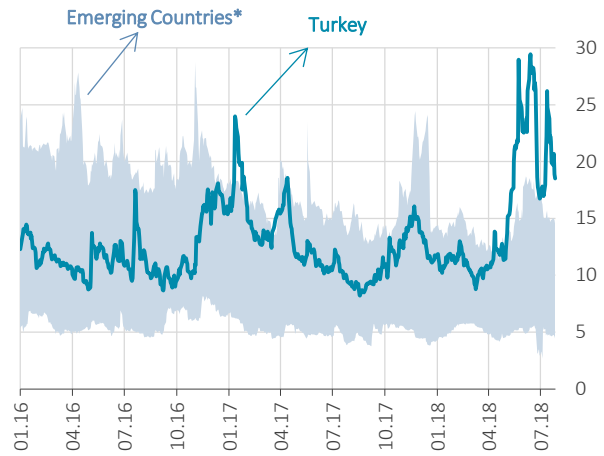
**Chart 5.1.3: Turkish Lira and Emerging Market Currencies against US Dollar (02.01.2017=1)**



Source: Bloomberg.

\* Emerging market currencies include those of Brazil, Indonesia, the Philippines, South Africa, India, Colombia, Hungary, Malaysia, Mexico, Poland, Romania and Chile.

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

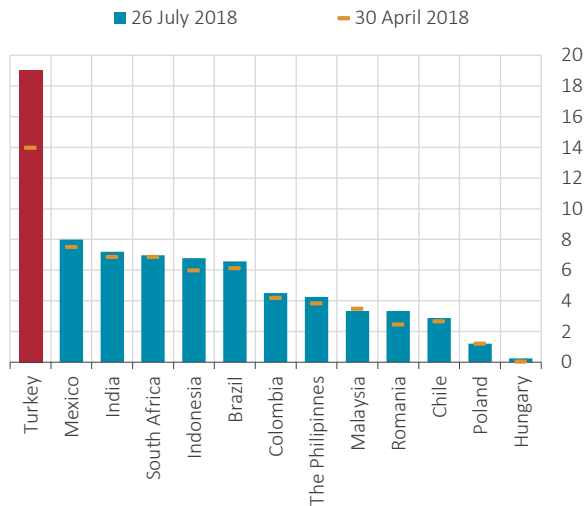


Source: Bloomberg.

\* Emerging market currencies include those of Brazil, Indonesia, the Philippines, South Africa, India, Colombia, Hungary, Malaysia, Mexico, Poland, Romania and Chile.

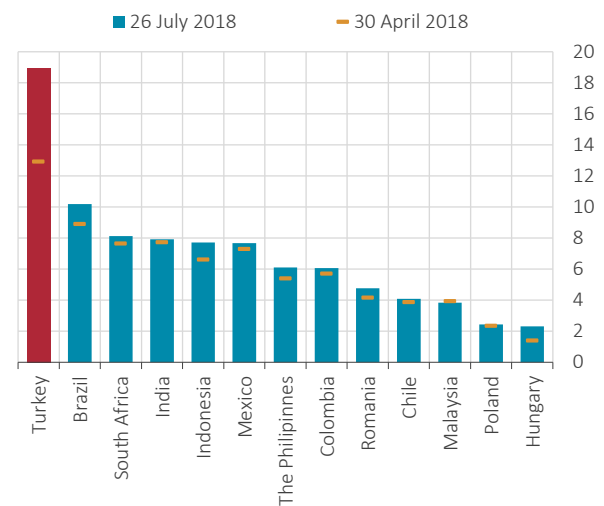
In the current reporting period, short and long-term interest rates in emerging market economies have been largely flat, whereas market rates in Turkey climbed significantly in May and June (Chart 5.1.5 and Chart 5.1.6).

**Chart 5.1.5: 6-Month Market Rates (%)**



Source: Bloomberg.

**Chart 5.1.6: 5-Year Market Rates (%)**



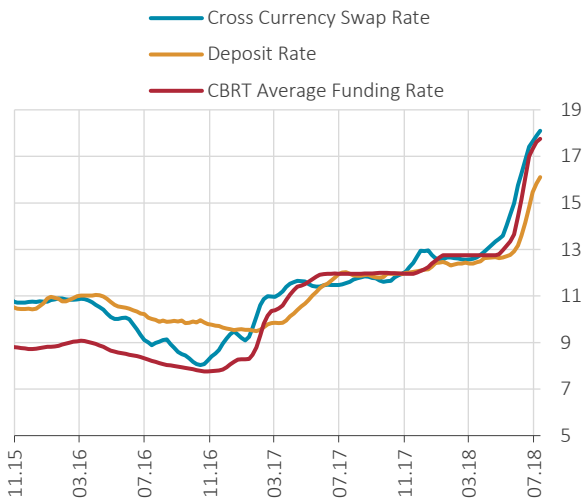
Source: Bloomberg.

## 5.2 Credit Conditions

### Loan Rates, Funding Costs and Interest Rate Spreads

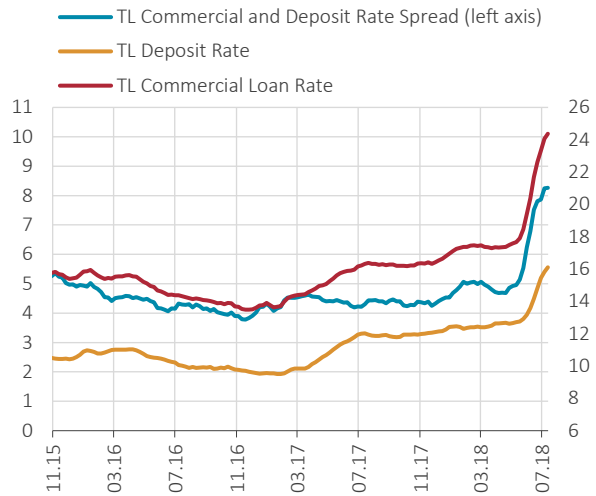
In the second quarter of 2018, banks' funding costs increased. The rise in funding costs was mainly driven by the rise in the CBRT's average funding rate as well as the hike in swap rates fueled by risk premium and exchange rate developments. The modest growth in loans curbed further increase in need for funding and deposit rates. In the second quarter, commercial loan rates outpaced deposit rates, which in turn pushed the loan-deposit rate spread beyond historical averages (Chart 5.2.1 and Chart 5.2.2).

**Chart 5.2.1: Indicators of Banks' Funding Costs (%)**



Source: Bloomberg, CBRT.

**Chart 5.2.2: TL Commercial Loan Rates and TL Deposit Rates\* (Flow, Annualized, 4-Week Moving Average, %)**

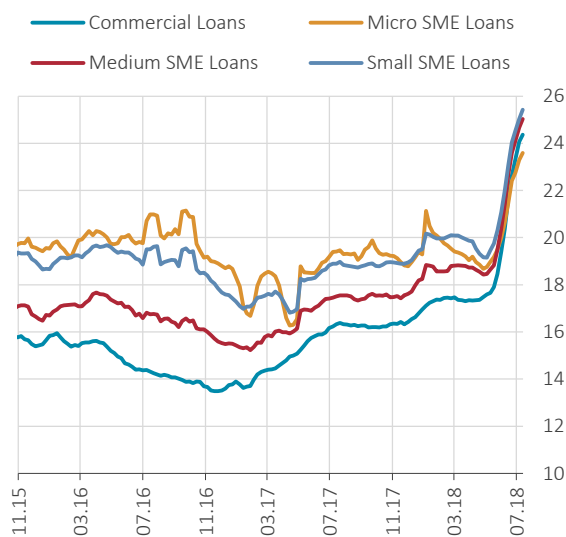


Source: CBRT.

\* TL commercial loans excluding overdraft accounts, credit cards and zero-rate loans.

An analysis of commercial loan rates by a breakdown of firm sizes reveals that rates have increased across all sub-categories (Chart 5.2.3). As suggested by the Bank Loans Tendency Survey, in the second quarter of 2018, banks tightened standards of loans that they extended to both SMEs and large corporations. The Survey answers suggest that this tightening was mainly determined by expectations pertaining to general economic activity, outlook for the industrial sector and firms as well as constraints on capital adequacy, and banks' liquidity positions. Moreover, consumer loan rates increased on the back of the rise in personal loan rates (Chart 5.2.4). The Survey results also suggest that funding costs and balance sheet constraints were also influential.

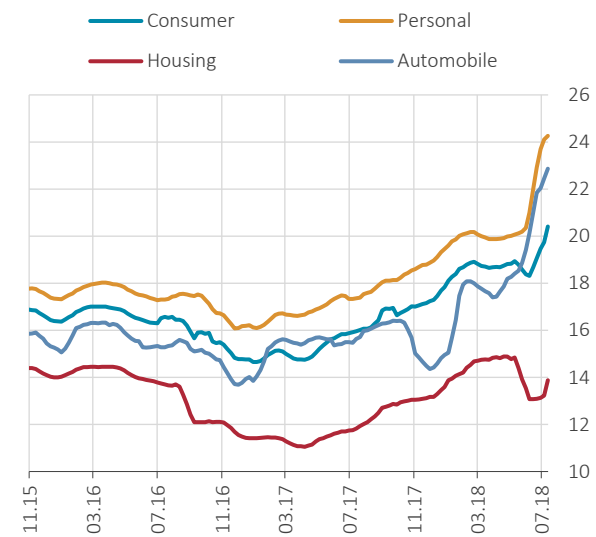
**Chart 5.2.3: TL Commercial Loan Rates\***  
(Flow Data, Annualized, 4-Week Moving Average, %)



Source: CBRT.

\* Excluding overdraft accounts, credit cards and zero-rate loans.

**Chart 5.2.4: Consumer Loan Rates**  
(Flow Data, Annualized, 4-Week Moving Average, %)



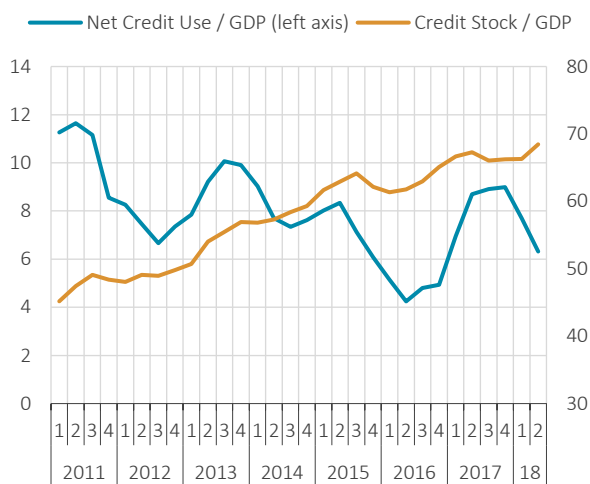
Source: CBRT.

## Credit Volume

In the second quarter of 2018, the ratio of net credit use to GDP continued to decrease due to the tightening in commercial loan supply and the base effect that had been observed since the first quarter (Chart 5.2.5). The decline in the total loan growth mainly stems from the deceleration in commercial loan growth (Chart 5.2.6). Actually, as suggested by the Bank Loans Tendency Survey, the decline in loan growth in this quarter can be predicated on the decrease in loan supply and loan demand.

Both commercial and total loan growth rates remained below historical averages in the second quarter of 2018 (Chart 5.2.7 and Chart 5.2.8).

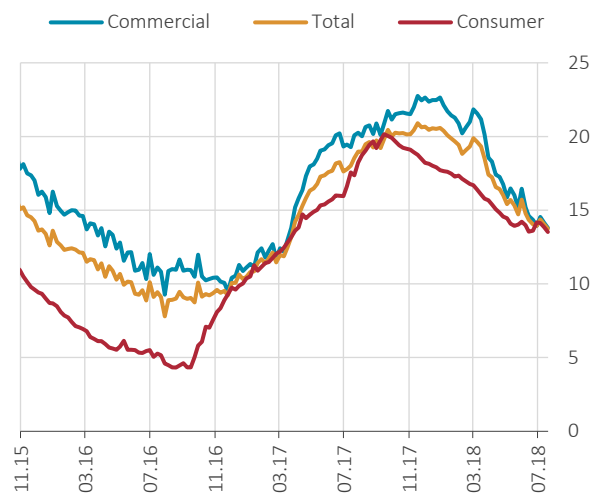
**Chart 5.2.5: Domestic Credit Stock and Net Credit Use\* (%)**



Source: CBRT.

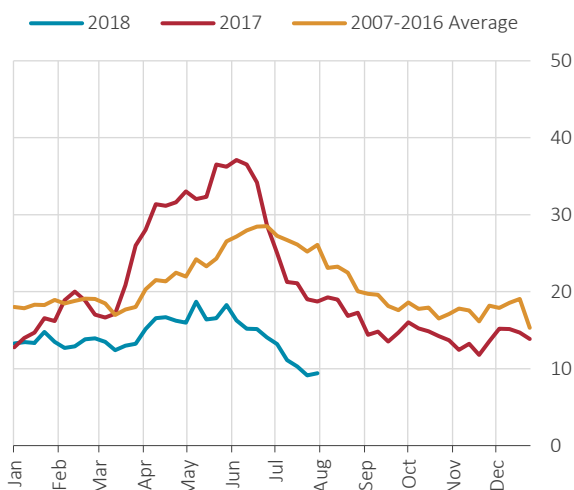
\* GDP data for the second quarter of 2018 is forecast.

**Chart 5.2.6: Annual Loan Growth (Adjusted for Exchange Rates, Y-o-Y % Change)**



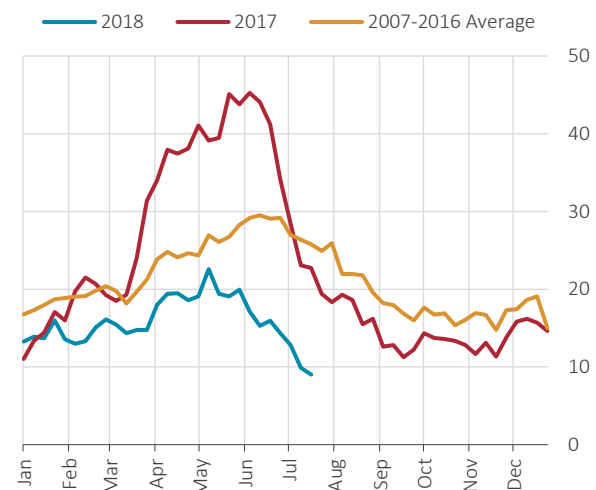
Source: CBRT.

**Chart 5.2.7: Annualized Total Loan Growth (Adjusted for Exchange Rates, 13-Week Moving Average, %)**



Source: CBRT.

**Chart 5.2.8: Annualized Commercial Loan Growth (Adjusted for Exchange Rates, 13-Week Moving Average, %)**



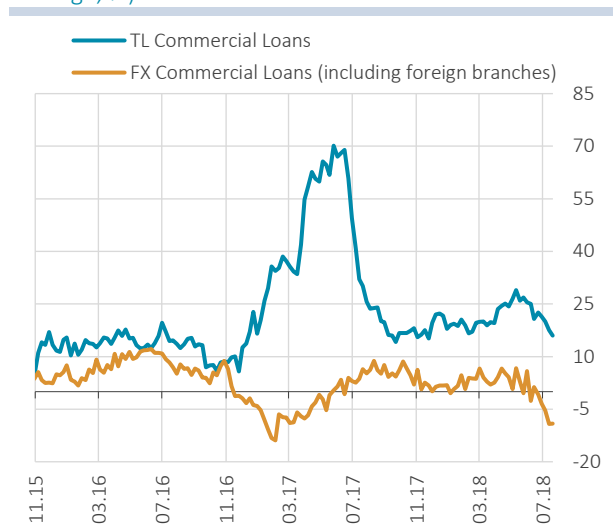
Source: CBRT.

FX commercial loan growth adjusted for exchange rates moderately decelerated in this quarter. This deceleration was driven by the rise in banks' FX borrowing costs, arrangements pertaining to FX risk

management, exchange rate developments and the decline in FX loan demand (Chart 5.2.9). Actually, the Bank Loans Tendency Survey results also suggest that banks have significantly tightened credit conditions on FX commercial loans while firms' demand for FX loans decreased in tandem.

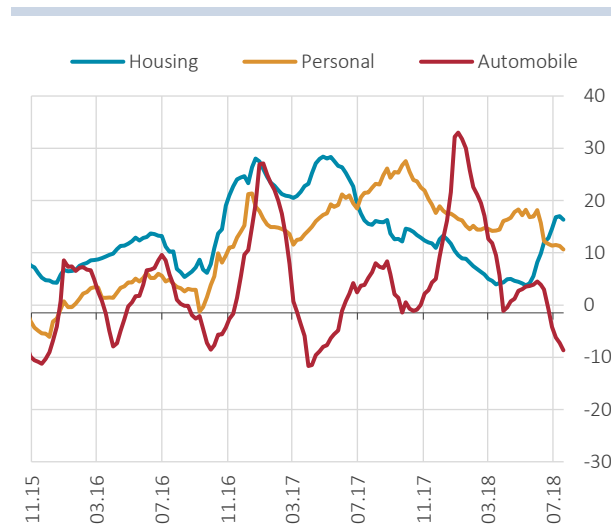
In the second quarter of 2018, the rise in banks' funding costs affected loan pricing behavior and in response, consumer loan rates increased while demand for consumer loans decelerated (Chart 5.2.10). Answering the Survey, banks have stated that they have tightened credit conditions on personal loans due to funding costs and balance sheet constraints. In the same quarter, the demand for personal loans decreased due to the fall in consumer confidence, the decline in security purchases and expenditures on consumer durables. On the other hand, there is an acceleration in housing loan growth. This acceleration is attributed to the incentive policies introduced for the sector.

**Chart 5.2.9: Annualized TL and FX Commercial Loan Growth** (Adjusted for Exchange Rates, 13-Week Moving Average, %)



Source: CBRT.

**Chart 5.2.10: Annualized Consumer Loan Growth** (13-Week Moving Average, %)



Source: CBRT.

## Loan Standards

The results of the Bank Loans Tendency Survey for the second quarter of 2018 suggest that banks have tightened loan standards compared to historical averages and they expect further tightening in the third quarter (Chart 5.2.11). A breakdown of these standards by scale, maturity and currency unit reveals that the tightening will continue across all sub-categories in the third quarter. Nevertheless, the tightening is more evident in FX loans and long-term loans and this trend will continue incrementally in the upcoming quarter.

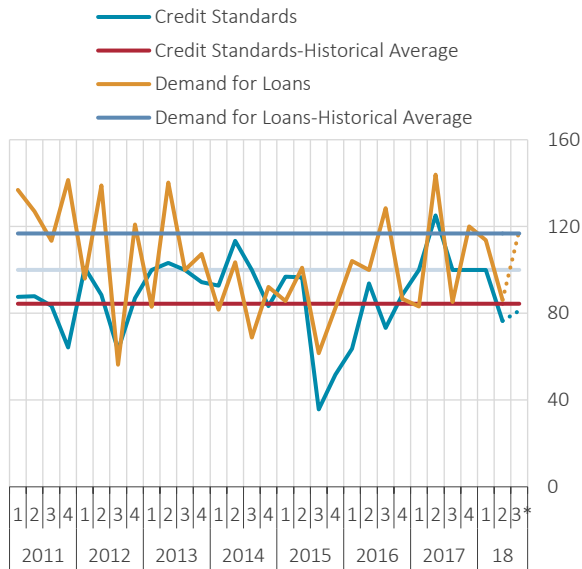
As for factors affecting commercial loan standards: prospects for general economic activity, outlook for the sector or firms, capital adequacy constraints, liquidity positions and risks to collaterals to be pledged against loans stood out as factors fueling tightening. There has been no factor having a loosening effect on loan standards. As for rules and conditions applied to commercial loans: profit margins, collateral requirements, maturity structure, loan limits and special loan agreement terms had a tightening effect on loan conditions. In other words, all factors except for charges and commissions other than interest, had a tightening impact on loan conditions.

Answers of banks participating in the Survey suggest that firms' demand for commercial loans fell significantly below the historical averages in the second quarter of 2018, but a moderate increase is expected in the upcoming period (Chart 5.2.11). A breakdown by maturities and currency shows that there has been a modest rise in the demand for short-term loans and in TL loans, respectively, whereas the decline in long-term and FX-denominated loans has continued. The demand for FX-denominated

loans is expected to decline further. Meanwhile demand for short-term loans, TL loans and loans extended to large-scale companies is expected to increase.

Factors affecting the demand for commercial loans reveals that the possibility of debt restructuring has an increasing impact on loan demand while fixed investment, inventory build-up, working capital and alternative financing possibilities have a downward impact on loan demand.

**Chart 5.2.11: Commercial Loan Standards and Commercial Loan Demand\*\***

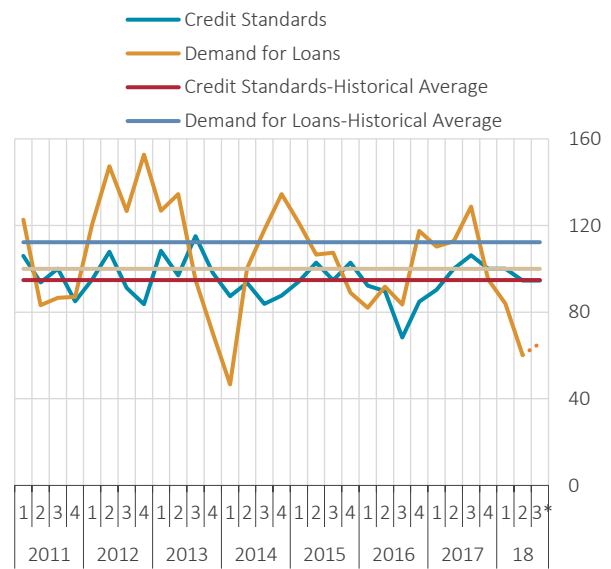


Source: CBRT.

\*Data for the third quarter of 2018 is forecast.

\*\*Index values above 100 indicate easing in loan standards; and increased loan demand.

**Chart 5.2.12: Consumer Loan Standards and Consumer Loan Demand\*\***



Source: CBRT.

\*Data for the third quarter of 2018 is forecast.

\*\* Index values above 100 indicate easing in loan standards; and increased loan demand.

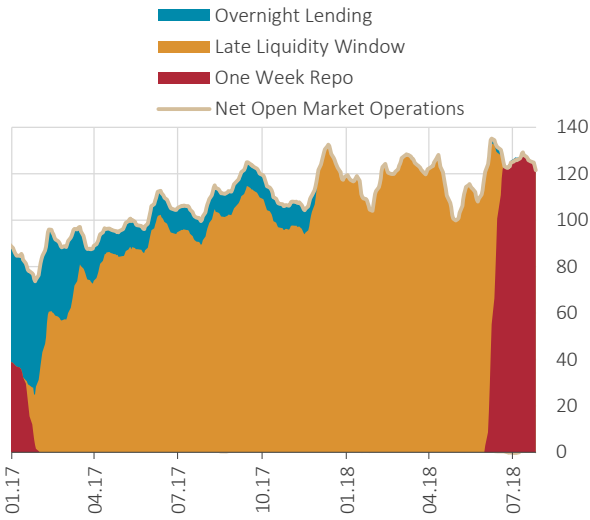
Respondents' answers to questions about consumer loans in the Survey suggest that the modest tightening in loan standards continued in the third quarter as well (Chart 5.2.12). The demand for consumer loans, which was prevalent across all sub-categories in the second quarter, is foreseen to continue in the third quarter driven mainly by the drop in mortgage and vehicle loan demand. Consumer confidence and house market prospects were the two key factors driving mortgage demand down. As for vehicle loans, all factors have driven demand down, while as for personal loans all factors except taxes and similar expenses have had a decreasing impact on demand.

## 5.3 Monetary Policy

### Market Developments

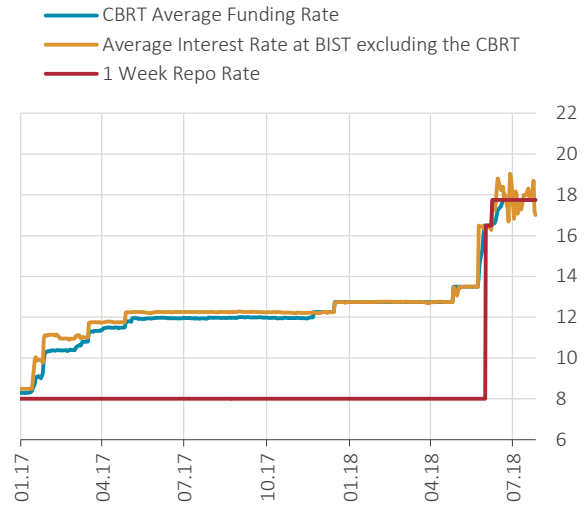
In a press release on 28 May 2018, the CBRT announced that the simplification process of the operational framework of monetary policy was completed. It was stated that the one-week repo rate would be the policy rate of the Central Bank and CBRT funding began to be carried out only via weekly repo auctions (Chart 5.3.1). At the BIST Interbank Repo-Reverse Repo Market, the average interest rate, which was calculated excluding the CBRT transactions, had been close to the CBRT funding rate for quite a long time. However, after the amendment in the operational framework, this rate has been hovering around the CBRT's one-week repo rate (Chart 5.3.2).

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



Source: CBRT.

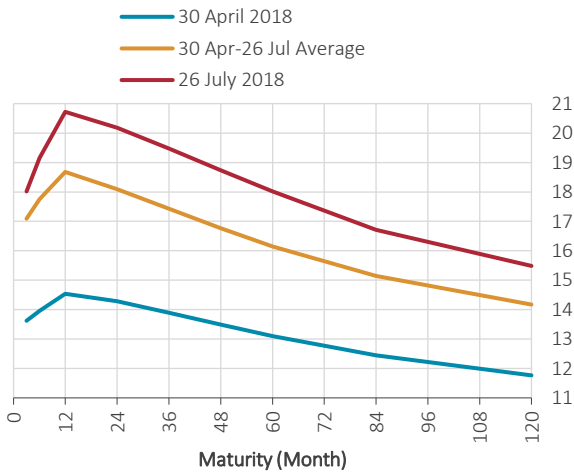
**Chart 5.3.2: Short-term Interest Rates (%)**



Source: BIST, CBRT.

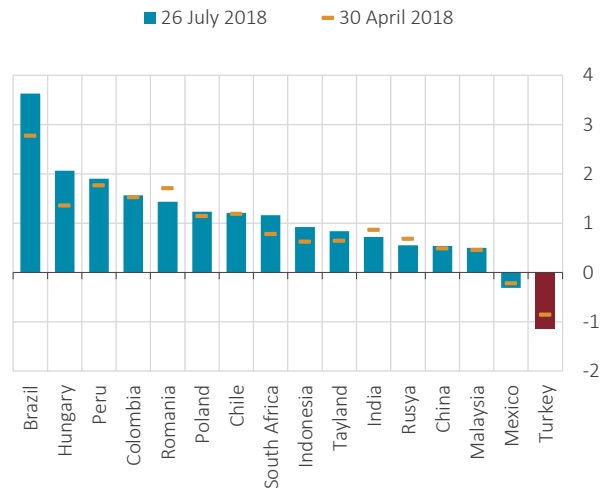
With the impact of the CBRT's rate hikes in May and June, currency swap rates increased compared to the last reporting period. The increase was also driven by the rise in Turkey's risk premium. As a result, short-term currency swap rates continued to hover above long-term currency swap rates (Chart 5.3.3). As was the case in the last reporting period, Turkey had the smallest yield curve slope among other emerging market economies due to increased monetary policy tightening (Chart 5.3.4).

**Chart 5.3.3: Swap Yield Curve (%)**



Source: Bloomberg.

**Chart 5.3.4: Yield Curve Slopes in Emerging Economies\* (% Points)**



Source: Bloomberg.

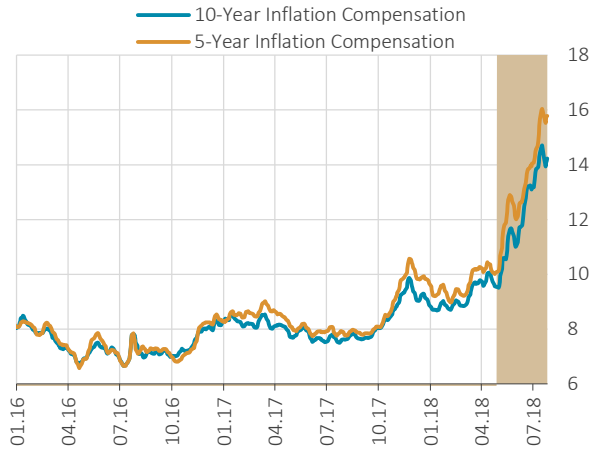
\* Yield curve slope is calculated by taking the difference between 5-year bond yields and 6-month bond yields. For Turkey, swap rates have been used instead of bond yields to calculate the yield curve slope.

Even though the CBRT continues to implement a tight monetary policy stance, inflation compensation increased in the current reporting period because the heightened headline inflation rate has influenced long-term inflation expectations and escalated the uncertainties pertaining to inflation (Chart 5.3.5).



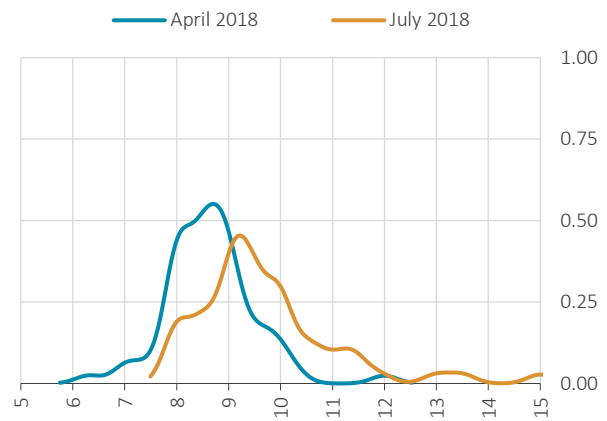
Despite the significant increase in inflation compensation, the distribution of 24-month-ahead inflation expectations obtained from the CBRT Survey of Expectations reveals that the uptick in inflation expectations in July compared to those in April remained at a limited level (Chart 5.3.6).

**Chart 5.3.5: Inflation Compensation (5-Day Moving Average, %)**



Source: Bloomberg.

**Chart 5.3.6: Distribution of 24-Month-Ahead Inflation Expectations\* (%)**

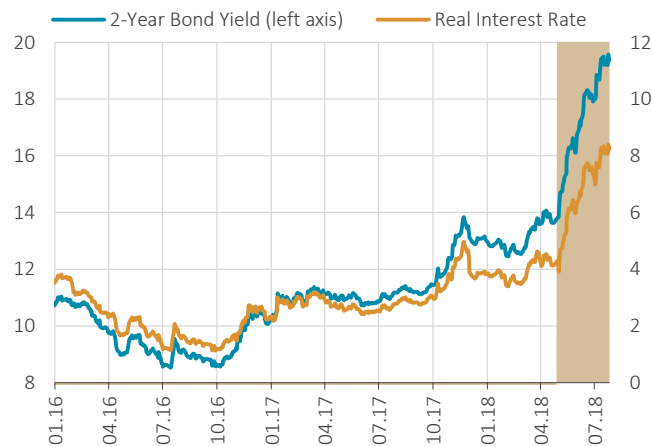


Source: CBRT.

\* Kernel probability density functions are constructed using CBRT Survey of Expectations.

Two-year real interest rates, calculated using inflation expectations data obtained from the CBRT Survey of Expectations, have risen largely in tandem with nominal interest rates (Chart 5.3.7).

**Chart 5.3.7: 2-Year Bond Yields and the Real Interest Rate in Turkey\* (%)**



Source: Bloomberg, CBRT.

\*Real interest rate is calculated as the difference between 2-year bond yield and the 24-month-ahead inflation expectations data obtained from the CBRT Survey of Expectations.

### Monetary Policy Reaction

The CBRT maintained a tight policy stance against the inflation outlook in 2017. Nevertheless, the accommodative incentives and measures fueled domestic demand and curbed the transmission from monetary policy decisions. For this reason, the CBRT maintained its tight monetary policy stance in January and March 2018. In the April MPC meeting, the CBRT highlighted elevated levels of inflation and risks posed by high inflation expectations on the pricing behavior and decided to implement a measured monetary tightening by raising the LLW lending rate by 75 basis points.

Following the press release on 16 May 2018, which stated that the impacts of unhealthy price formations on inflation outlook were closely monitored, the CBRT decided to hold an interim meeting on 23 May 2018. At this meeting, the CBRT emphasized that the elevated levels of inflation and inflation expectations continued to pose risks to the pricing behavior and accordingly, decided to implement a strong monetary tightening to support price stability and raised the LLW lending rate by 300 basis points to 16.5 percent. At this meeting, the MPC also decided to simplify the operational framework in a short period of time to enhance the predictability of monetary policy and strengthen the transmission mechanism. In fact, in a press release dated 28 May 2018, the CBRT announced that the simplification process was completed. Accordingly, the one-week repo rate was set as the policy rate of the CBRT and it was stated that this rate would be equal to the LLW lending rate, which was 16.50 percent at the time. Moreover, the Central Bank overnight borrowing and lending rates were decided to be determined at 150 basis points below/above the one-week repo rate. Thus, overnight market rates would be determined around the policy rate within a symmetrical corridor of overnight borrowing and lending rates. The new operational framework took effect as of 1 June 2018. The strong policy response of 23 May coupled with the simplification of the operational framework contributed to alleviating the volatilities in domestic financial markets.

In the June MPC meeting, stating that the elevated levels of inflation and inflation expectations continued to pose risks to the pricing behavior, the CBRT decided to further strengthen the monetary tightening. Accordingly, the CBRT increased the policy rate, which is the one week repo rate, from 16.5 percent to 17.75 percent. In the July MPC meeting, the CBRT kept the policy rate unchanged, in order to closely monitor the deceleration in domestic demand and the lagged effects of the monetary policy decisions. However, it was also assessed that the elevated levels of inflation and inflation expectations continued to pose risks to the pricing behavior and it might be necessary to maintain a tight monetary stance for an extended period.

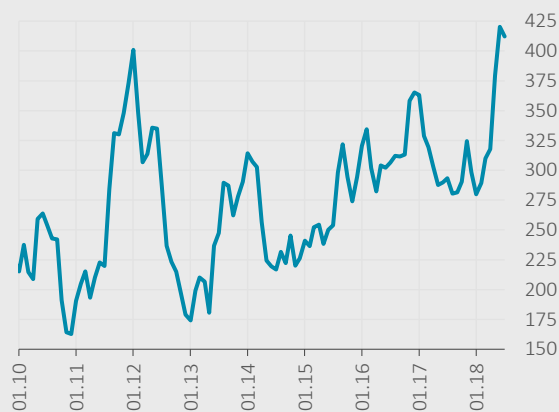
In response to the impact of the unhealthy price formations and excessive volatility in the markets on inflation outlook, after the April MPC meeting, the CBRT introduced some measures in addition to the measures explained above. Accordingly, with a press release on 7 May 2018, the upper limit for the FX maintenance facility within the reserve options mechanism was lowered to 45 percent from 55 percent and tranches were re-arranged. With this change, FX liquidity was provided for banks and TL liquidity was tightened. In a press release on 9 May 2018, it was announced that the daily amount of Foreign Exchange Deposits against Turkish Lira Deposits auctions was increased from 1.25 billion US dollars to 1.5 billion US dollars. Thus, the maximum total outstanding deposit amount in the auctions, which was 6.25 billion US dollars, was allowed to reach up to 7.5 billion US dollars. In another press release on the same day, the updated calendar for Turkish lira-settled forward foreign exchange sale auctions to be held in the second quarter of 2018 was announced. According to the new calendar, the maximum amount of forward foreign exchange sale position was raised to 7.1 billion US dollars. On 24 May 2018, the calendar was revised again and the maximum total amount of forward foreign exchange sale position was increased from 7.1 billion US dollars to 8 billion US dollars. The upper limit for the total amount of forward foreign exchange sale position was determined as 10 billion US dollars until end-2018. Moreover, the CBRT announced in a press release on 25 May 2018 that the repayments of rediscount credits for exports and foreign-exchange-earning services which will be due by 31 July 2018 (included), can be made in Turkish liras at a fixed exchange rate.

## Box 5.1

### Country Risk Premium and Macroeconomic Conditions When Global Financial Conditions are Tighter

Recently, Turkey's risk premium has negatively decoupled from other emerging economies (Charts 1 and 2). Economic factors specific to Turkey were effective in this decoupling in addition to the rise in US bond yields and a decline in international investors' risk appetite as the normalization process in monetary policy of advanced economies become more evident. This box analyzes the economic indicators determining risk premium to shed light on these evaluations.<sup>1</sup>

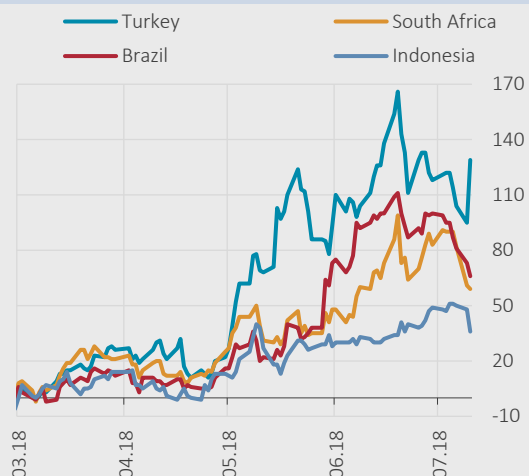
**Chart 1: Turkey-EMBI Global (Monthly Average, Basis Points)**



Source: Bloomberg.

Latest Observation: July 2018.

**Chart 2: Change in EMBI Global in EMEs (Basis Points, 28.02.2018=0)**



Source: Bloomberg.

Latest Observation: 10 July 2018.

The risk premium is excess return that an investor asks for extra risk relative to a risk-free asset (such as US bonds) with the same maturity.<sup>2</sup> As discussed in the "External Vulnerability" literature<sup>3</sup>, the risk premium demanded by the foreign investor depends on several factors such as the country's current account deficit, the ratio of the country's international reserves to foreign exchange requirement, budget outlook, inflation level, sensitivity of company balance sheets to exchange rates and interest movements and other country-specific factors as well as global factors (i.e. global risk appetite, global trade outlook etc.).

Our main question is this: how are the changes in risk premium affected by the above-listed macroeconomic indicators reflecting external vulnerabilities and are these indicators more influential when global financial conditions are tighter?

In the light of these evaluations, the determinants of risk premiums for 8 peer emerging economies were studied in an econometric framework. Countries studied are: Brazil, Colombia, Indonesia, Malaysia, Mexico, Peru, South Africa and Turkey. Sampling period is 2005Q1-2017Q4. The method employed is dynamic system generalized method of moments (system GMM).<sup>4</sup> JP

<sup>1</sup> For details please see Akçelik and Fendoğlu (2018).

<sup>2</sup> This description is based on the assumption that the two assets are in the same currency denomination, are equally liquid, have the same transaction costs and the international investor has ample sources of funding.

<sup>3</sup> For further details on related literature, you can take a look at the IMF reports listed in the references and the references cited in these reports.

<sup>4</sup> The system GMM method uses the lagged effects of explanatory variables as instruments to mitigate the endogeneity problem.

Morgan's Emerging Markets Bond Index Global (EMBIG) has been used as the risk premium.<sup>5</sup> This index measures the difference between the weighted average of yields of bonds issued by Treasury of related emerging country in US dollar terms and the US Treasury bond yields with similar maturity and type.

**Table 1: System GMM Regression Results**

	EMBI Global (Logarithmic Change)
EMBI Global (Logarithmic Change, t-1)	0.225*** (0.025)
Current Account Balance /GDP (Change)	-0.020 (0.018)
Current Account Balance /GDP (Change) * Dummy Variable (1 if VIX Change > 0; 0 if VIX Change < 0)	-0.045*** (0.016)
Gross International Reserves/ GDP (Change)	0.008 (0.010)
Gross International Reserves/ GDP (Change) * Dummy Variable (1 if VIX Change > 0; 0 if VIX Change < 0)	-0.028*** (0.012)
Public Budget Balance/ GDP (Change)	0.028*** (0.001)
Public Budget Balance/ GDP (Change) * Dummy Variable (1 if VIX Change > 0; 0 if VIX Change < 0)	-0.042*** (0.004)
Real Annual GDP Growth (Change)	-0.008 (0.011)
CPI Annual Inflation (Change)	0.015 (0.015)
International Country Risk Guide (ICRG) Index (Logarithmic Change)	-0.680 (0.461)
Volatility Index (VIX) (Logarithmic Change)	0.570*** (0.013)
Number of Observations	400
Number of Countries	8

Standard deviations are indicated in parenthesis. \*\*\*, \*\*, \* denotes statistical significance of 1%, 5% and 10%, respectively.

**Table 2: Long-term impacts of Macroeconomic Changes on Country Risk Premium<sup>6</sup>**

	In Periods of VIX Increase	In Periods of VIX Decrease
1 Percentage Point Rise in Current Account Deficit / GDP Ratio	%8.32***	%2.56
1 Percentage Point Drop in International Reserves / GDP Ratio	%2.58***	-%1.01
1 Percentage Point Drop in Budget Balance / GDP Ratio	%1.81***	-%3.61***

\*\*\*, \*\*, \* denotes statistical significance of 1%, 5% and 10%, respectively.

<sup>5</sup> Average maturity of EMBI Global Turkey bonds is 12.2 years. In this context, EMBI Global reflects risks pertaining to Turkey's long-term outlook.

<sup>6</sup> These ratios are calculated by dividing short-term effects by (1- EMBI Global (Logarithmic Change, t-1)) coefficient. For instance, when the change in VIX is positive, the long-term effect of current account balance/ GDP is calculated as  $(-0.020 + (-0.045)) / (1 - 0.225) = -8.32\%$ .

The results suggest that in periods of adverse global financial conditions, the external vulnerability indicators affect changes in risk premium considerably and at a statistically significant level (Table 1 and 2)<sup>7,8</sup>. For instance, in periods of decreasing global risk appetite (when VIX rises), a 1 percentage point increase in current account deficit/ GDP ratio pushes up country risk premium by 8.32 percent in the long-term; in periods of positive global conditions, this impact weakens. Similarly, in periods of tighter global financial conditions (when VIX increases), a 1 percentage point drop in the international reserves/ GDP ratio leads to a 2.58 percent rise in country risk premium; whereas this impact is not significantly strong in periods of positive global conditions. A 1-percentage point decline in budget balance/ GDP ratio causes upward decoupling in country risk premium, particularly when global conditions are adverse.

These effects are significantly higher compared to the ones in periods of positive global risk appetite (when VIX is decreasing) (Tables 1 and 2). Similar results have been also found when the US dollar index (DXY) is used for global financial conditions (Table 3).

**Table 3: Long-Term Effects of Macroeconomic Changes on Country Risk Premium**

	In Periods of DXY Increase	In Periods of DXY Decrease
1 Percentage Point Rise in Current Account Deficit / GDP Ratio	%5.55***	%4.84***
1 Percentage Point Drop in International Reserves / GDP Ratio	%2.78***	-%2.59
1 Percentage Point Drop in Budget Balance / GDP Ratio	%1.60***	-%6.31***

\*\*\*, \*\*, \* denotes statistical significance of 1%, 5% and 10%, respectively.

To sum up, when global financial conditions become tighter, country-specific indicators have stronger effect on country risk premium. Therefore, in order to achieve a lasting improvement in risk premium in periods of decreasing global risk appetite, it is crucial to achieve improvement in these macro indicators.

## References

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<sup>7</sup> Due to the nature of the estimation method, conditional estimates were used when estimating these effects, assuming other factors were constant. For instance, when calculating the effect of deterioration in the budget balance, the current account deficit, reserves and other explanatory variables have been assumed constant. In this respect, should a worsening of the budget balance accompany a deterioration of the current account balance, the combined impact of the budget balance deterioration on the risk premium would be higher.

<sup>8</sup> The actual values of macroeconomic indicators have been used here. It should be noted that the change in expectations about these indicators would affect the change in risk premium instead of actual changes in these indicators. Our identification assumption here is that changes in expectations are generally in line with actual changes.

