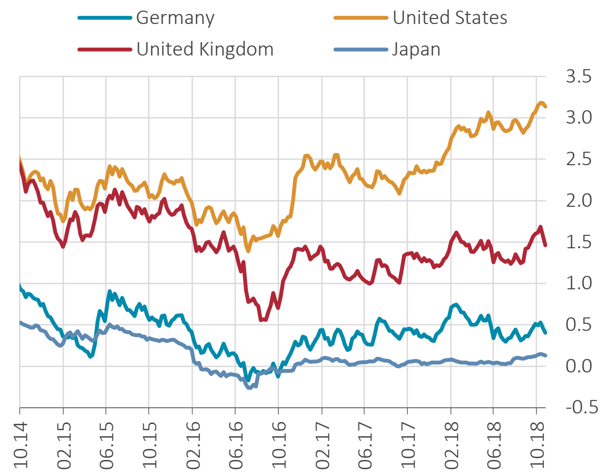
1. Overview

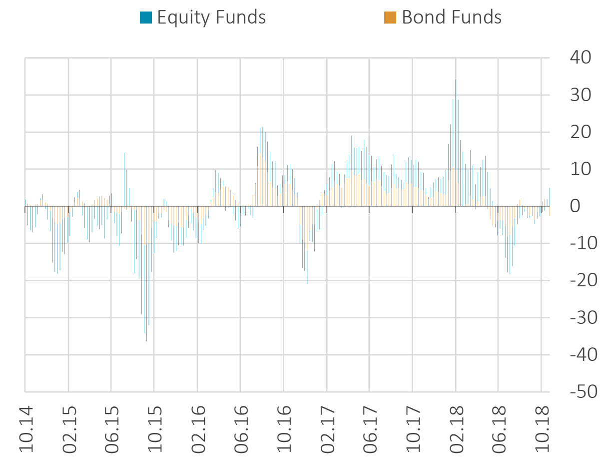
Indicators for global economic activity decelerated in the second quarter of 2018, signalling a moderate slowdown compared to the July Inflation Report. The deceleration was mainly driven by emerging economies' performances, while advanced economies such as the USA, Japan and UK performed relatively better. The slowdown in economic activity in the Euro Area became more discernible. Concerns over the budget deficit and public debt stock in Italy, the uncertainties pertaining to the Brexit process and the tariffs imposed on steel and aluminum imports by the USA indicate that economic growth may further decelerate in the Euro Area. In the third quarter, while crude oil prices increased, industrial metal prices remained relatively subdued owing to the trade dispute between the USA and China. Inflation in both advanced economy and emerging economy groups increased due to rising oil prices. Meanwhile, the global financial conditions further tightened compared to the previous reporting period. Long-term interest rates rose on the back of the normalization process in the Fed's monetary policy (Chart 1.1). In this quarter, the rise in yields in advanced economies and increased protectionist tendencies led to fluctuations in global financial markets. While risk premia of emerging economies increased, their currencies depreciated due to portfolio outflows (Chart 1.2).

Chart 1.1: 10-Year Bond Yields (%)



Source: Bloomberg.

Chart 1.2: Portfolio Flows to Emerging Economies (Billion USD, 4-Week Cumulative)



Source: EPFR.

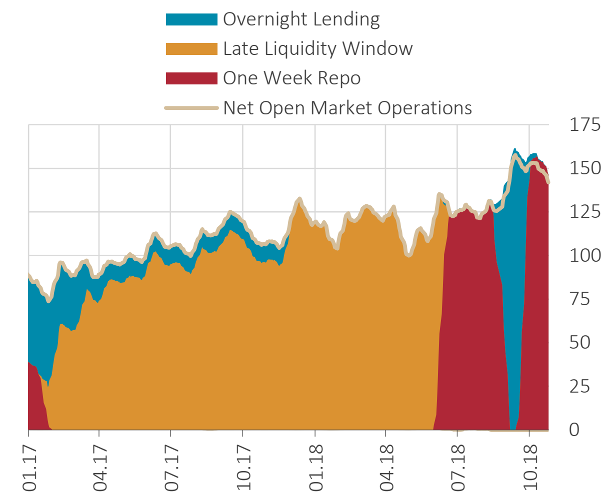
In a period marked by rapid portfolio outflows from emerging economies, the fluctuations observed in Turkey's foreign exchange markets in August were mitigated owing to the measures taken as well as the strong monetary tightening introduced in September. Market rates, which increased significantly due to the rise in inflation expectations and risk premium in the aftermath of the Turkish lira depreciation in August, remained high in September and October as well. As a result of these developments, banks' funding costs increased while the deposit-loan rate spread exceeded the historical averages due to the impact of the depreciation in the Turkish lira on firms' financial accounts and banks' assessments of credit risk outlook due to decelerating economic activity. Thus, the slowdown in credit growth became more evident in the third quarter.

Consumer inflation reached 24.5 percent in the third quarter of 2018. This rise was mainly driven by the 37 percent-depreciation in the Turkish lira in this period. Nevertheless, the fact that the rise in annual inflation is widespread across all sub-categories and high price increments are observed even in goods groups with relatively low FX pass-through indicates that the pricing behavior has deteriorated significantly. The deterioration in pricing behavior can be attributed to heightened fluctuations in exchange rates fueling inflation uncertainty, stronger pass-through from exchange rates to consumer inflation and a rising backward inflation indexation tendency. Despite domestic demand conditions exerting a disinflationary effect on inflation as of the third quarter, the continued positive outlook in tourism activities led to price increases in items closely related to this sector. Moreover, cost-side pressures stemming from producer prices that reached 46.2 percent in September constitute another factor determining consumer inflation. Economic activity in the second quarter was slightly stronger than envisaged in the July Inflation Report, notwithstanding the deceleration with respect to the previous quarter. Net exports have been the driver of the quarterly growth as a result of both the decrease in imports due to the weakening of domestic demand in the second quarter and the strengthening of the recovery in tourism. The slowdown in economic activity is judged to have slightly accelerated in the third quarter on the back of high volatility in exchange rates, deterioration in uncertainty perceptions and tightening in financial conditions.

1.1 Monetary Policy and Financial Markets

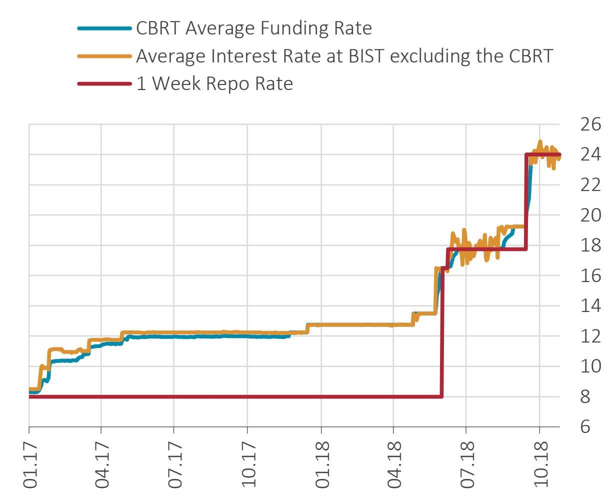
After the monetary tightening introduced in May and June, the CBRT did not change its monetary policy stance in the July MPC meeting and stated in the MPC decision that the deceleration in domestic demand conditions and the lagged effects of the monetary policy would be closely monitored. It was also stated in the decision that the elevated levels of inflation and inflation expectations continued to pose risks on pricing behavior, and thus the MPC assessed that it might be necessary to maintain a tight monetary stance for an extended period. Due to the unhealthy pricing in FX markets and elevated volatility on 10 August 2018, the CBRT introduced some measures regarding FX and TL liquidity and changed its funding strategy. Accordingly, the CBRT did not hold any one-week repo auctions between 13 August 2018 and 14 September 2018, but instead the CBRT funding was carried out by overnight lending at the CBRT lending rate (Chart 1.1.1). In the September MPC meeting, in response to the upside risks posed by the pricing behavior on the inflation outlook, the CBRT delivered a strong monetary tightening to support price stability and raised the policy rate to 24 percent from 17.75 percent (Chart 1.1.2). Moreover, the CBRT funding started to be carried out via weekly repo auctions again. The CBRT maintained the tight monetary policy stance in the October MPC meeting due to prevailing upside risks on pricing behavior, notwithstanding the judgment that weaker domestic demand conditions also owing to tighter financial conditions would partially mitigate the deterioration in the inflation outlook.

Chart 1.1.1: CBRT Funding (2-Week Moving Average, Billion TL)



Source: CBRT.

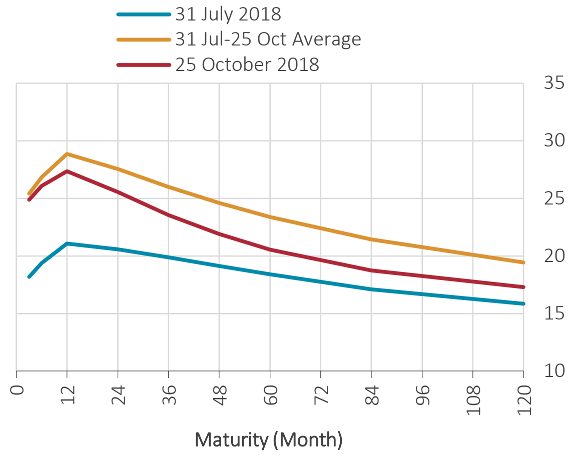
Chart 1.1.2: Short-Term Interest Rates (%)



Source: BIST, CBRT.

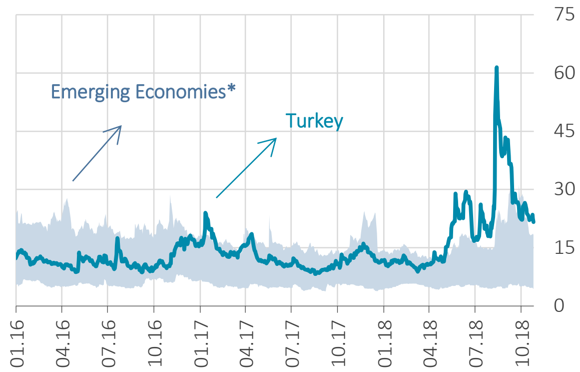
The monetary tightening delivered in September coupled with the rise in quarterly averages in Turkey's risk premium led to a rise in currency swap rates in all maturities compared to the July Inflation Report (Chart 1.1.3). Thus, in this reporting period, Turkey continued to have the lowest yield curve slope among emerging market economies. Yet, following the measures taken and the strong monetary tightening delivered in September, both long-term Turkish lira and foreign currency interest rates and the implied volatility of the Turkish lira, which climbed significantly in August (Chart 1.1.4), decreased in September and October, the former mainly due to the fall in risk premium and inflation compensation.

Chart 1.1.3: Swap Yield Curve (%)



Source: Bloomberg.

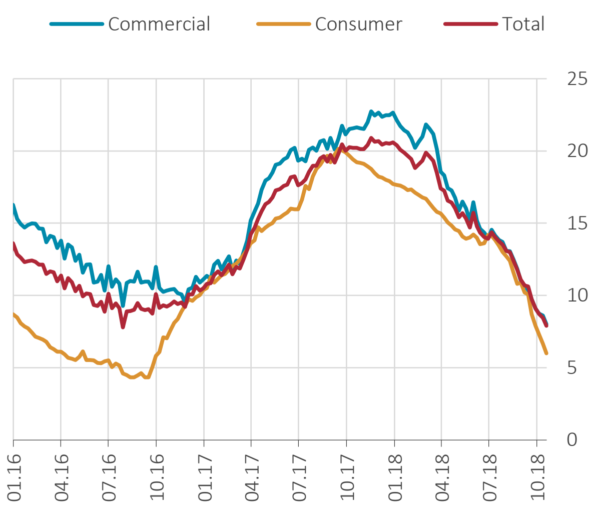
Chart 1.1.4: Implied FX Volatility (1-Month-Ahead, %)



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

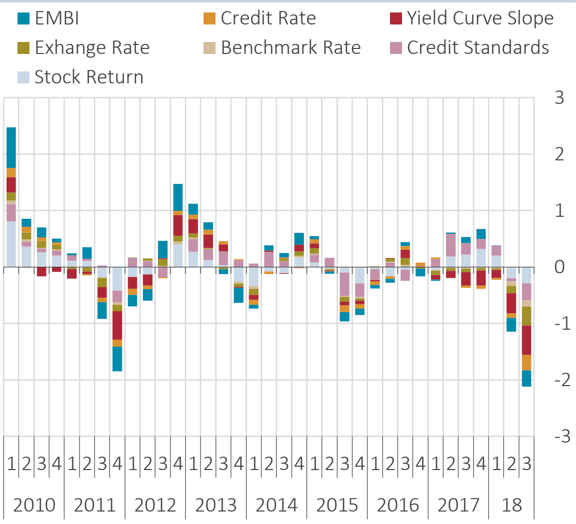
In the third quarter, loan growth decelerated significantly due to the tightening in banks' credit conditions on the back of the exchange rate developments in August and the drop in credit demand because of the slowdown in economic activity (Chart 1.1.5). The significant tightening in the Financial Conditions Index (FCI) in the second quarter became stronger in the third quarter (Chart 1.1.6). All components implied a significant tightening in the financial conditions index, with tightening in credit conditions, real depreciation in Turkish lira, rise in loan rates, and the negative shift in the slope of the yield curve being the major factors.

Chart 1.1.5: Annual Loan Growth (Adjusted for Exchange Rates, YoY % Change)



Source: CBRT.

Chart 1.1.6: Contributions to FCI*



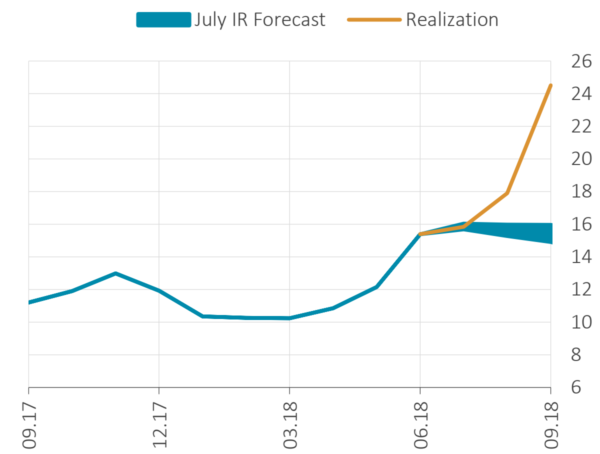
Source: CBRT.
* For further details on measuring the FCI, see the CBRT Working Paper No. 15/13.

1.2 Macroeconomic Developments and Main Assumptions

Inflation

Consumer inflation increased by 9.1 points from the end of the second quarter to 24.5 percent in the third quarter, a level significantly higher than the July Inflation Report forecast (Chart 1.2.1). A similar pattern was observed in the forecast for the CPI excluding unprocessed food, alcohol and tobacco (Chart 1.2.2). The rise in inflation was driven by the sharp depreciation in the Turkish lira and the resulting deterioration in pricing behavior (Box 3.1). Prices posted high increases even in those subcategories with relatively low exchange rate pass-through, such as the services group, and the tendency for price hikes displayed a generalized pattern.

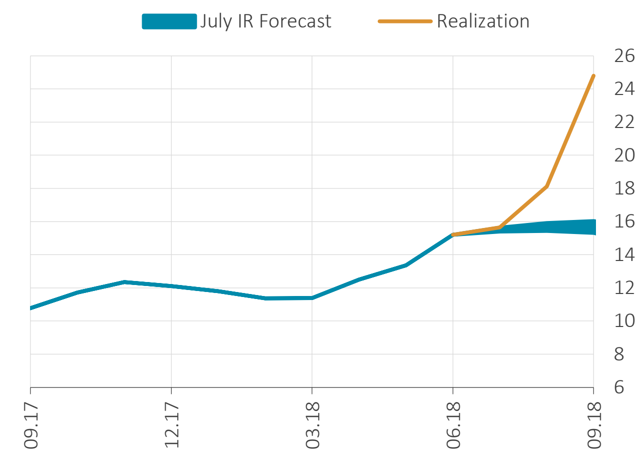
Chart 1.2.1: July Inflation Forecast and Actual Inflation* (%)



Source: CBRT, TURKSTAT.

* Shaded area denotes the 70 percent confidence interval for the forecast.

Chart 1.2.2: July Forecast and Actual Rates for Inflation excl. Unprocessed Food, Alcoholic Beverages and Tobacco Products* (%)



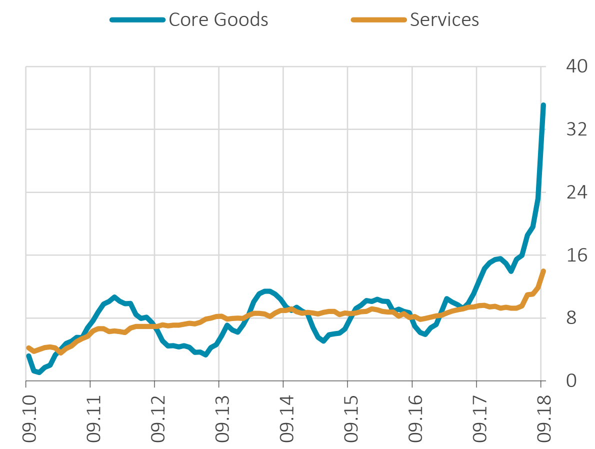
Source: CBRT, TURKSTAT.

* Shaded area denotes the 70 percent confidence interval for the forecast.

In the third quarter, the main factor pushing annual inflation up was the core goods group that is highly sensitive to exchange rate developments. Sharp price increases were observed in durable goods with high imported input content, such as automobiles and white goods. The inflation outlook deteriorated in both processed and unprocessed food groups. Inflation in the energy group also increased due to price hikes in electricity and natural gas as well as the rate increase in SCT on fuel products introduced in August. In this period, oil prices displayed an upward trend but the continued sliding-scale pricing implementation curbed the possible pressures on inflation. Annual services inflation was also driven higher by several factors such as the weaker Turkish lira, widespread backward indexation, worsening food and energy inflation, and the buoyant tourism activities (Chart 1.2.3).

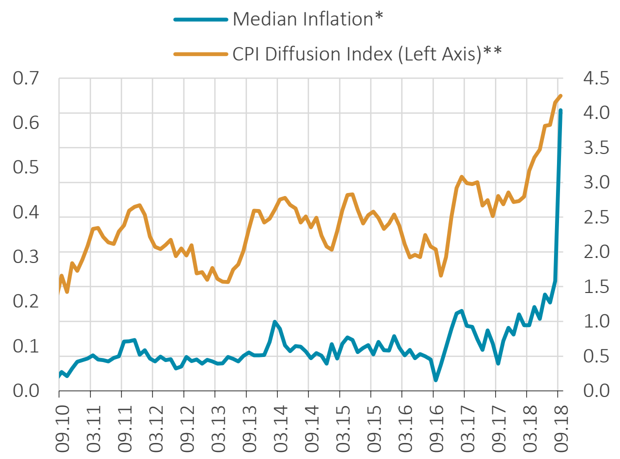
As producer inflation hit 46.2 percent as of the third quarter, cost pressures on consumer prices further intensified. Although aggregate demand conditions started to make a disinflationary impact on inflation in the second half of the year, cost pressures that were amplified by the deterioration in the pricing behavior and the cumulative depreciation in the Turkish lira affected the course of inflation. The deterioration in core inflation indicators and inflation expectations continued in this period while trend- and pricing behavior-related indicators suggested a notable deterioration in the underlying trend of inflation (Chart 1.2.4).

Chart1.2.3: Prices of Core Goods and Services (Annual % Change)



Source: TURKSTAT.

Chart 1.2.4: CPI Diffusion Index and Median Inflation (Seasonally Adjusted 3-Month Average)

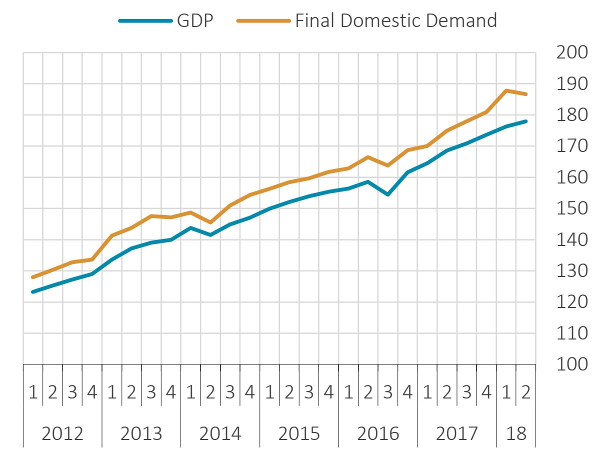


Source: CBRT, TURKSTAT.

Supply and Demand

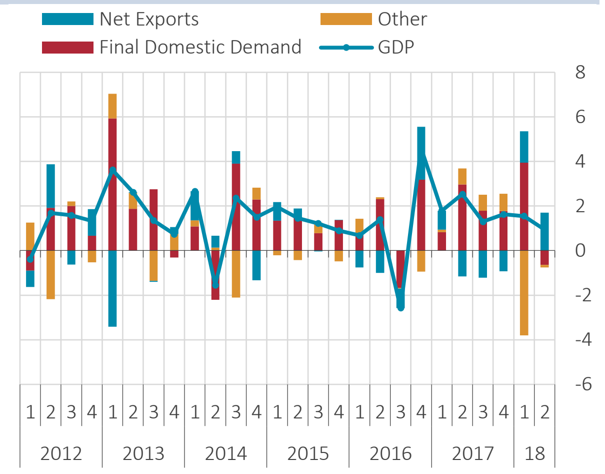
In the second quarter of 2018, economic activity was slightly stronger than projected in the July Inflation Report, notwithstanding the deceleration with respect to the previous quarter (Chart 1.2.5). Gross domestic product (GDP) increased by 0.9 percent on a quarterly basis and 5.2 percent on an annual basis in this quarter. Thus, economic activity slowed and headed towards its underlying trend, achieving a balanced composition at the same time. In this quarter, the main driver of quarterly growth was net exports on the back of robust tourism (Chart 1.2.6). Domestic demand contracted due to both private consumption and investment. The persistent weakening in machinery-equipment investments got deeper.

Chart 1.2.5: GDP and Domestic Demand (Real, Seasonally Adjusted, 2009=100)



Source: CBRT, TURKSTAT.

Chart 1.2.6: Contributions to Annual GDP Growth by Expenditure (% Points)



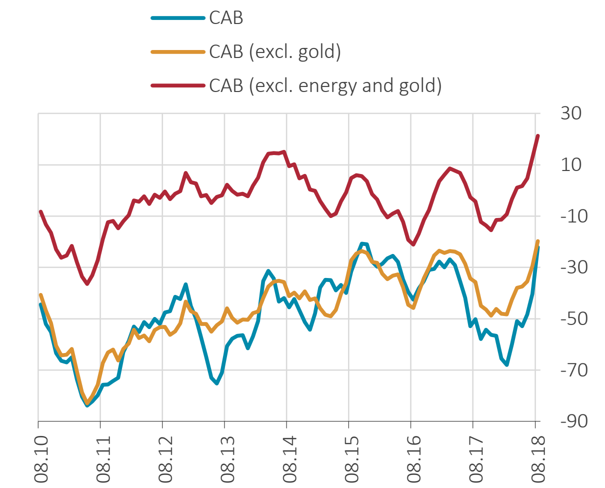
Source: CBRT, TURKSTAT.
* Other includes changes in inventories and statistical discrepancy due to the use of chain-linked index.

Recently released data show that the rebalancing trend in economic activity has become more noticeable. Indicators for the third quarter signal that the sharp depreciation in the Turkish lira and tightened financial conditions have decelerated domestic demand. This is also confirmed by the weakened production and orders of domestic market-oriented sectors, particularly construction and affiliated sectors. A significant decline is expected in spending items that are adversely affected by exchange rate volatility, particularly investment and durable consumption goods.

Increased external demand on the back of steady global growth outlook and the flexibility of external market diversification continue to underpin exports. Accordingly, exports of goods excluding gold hover above those in the previous quarter while tourism and other services revenues remain robust. Conversely, there is a contraction in import demand due to the slowdown in domestic demand and the depreciation in the Turkish lira. In this respect, the positive contribution of net exports to quarterly growth is projected to continue in an accelerated manner in the third quarter. Despite the negative effect of the rise in import prices, particularly oil prices, the improvement in the current account balance has become evident as a result of the slowdown in economic activity and the real depreciation in the Turkish lira (Chart 1.2.7). On the other hand, it is assumed that the envisaged slowdown in economic activity will trigger an increase in unemployment rates (Chart 1.2.8).

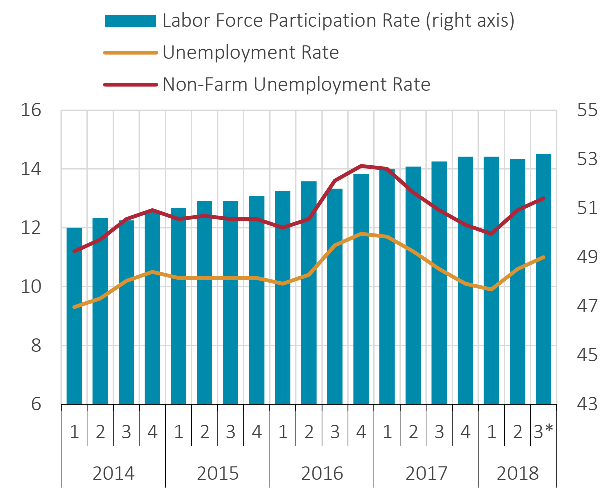
To sum up, indicators for the third quarter suggest that the rebalancing trend in economic activity has become more evident. Historically high levels of tightness in financial conditions along with the exchange rate- and input-cost-led deterioration of real sector's balance sheets keep the downside risks to the magnitude and duration of the slowdown in economic activity in place.

Chart 1.2.7: Current Account Balance (CAB) (3-Month Moving Average, Cumulative, Billion USD)



Source: CBRT.

Chart 1.2.8: Unemployment Rates (Seasonally Adjusted, %)



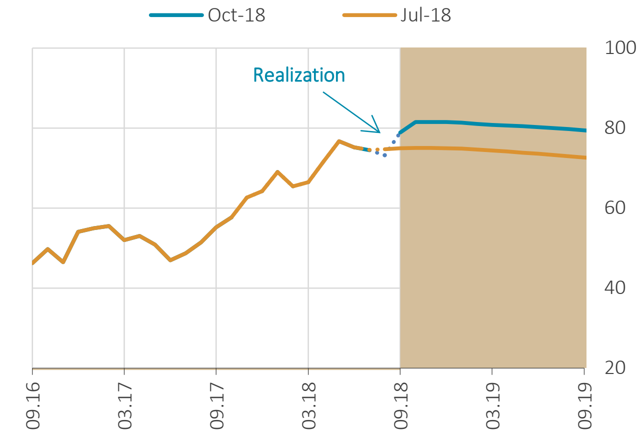
Source: TURKSTAT.
* July period.

Oil, Import and Food Prices

While crude oil prices on international markets increased significantly in the third quarter, the rise in industrial metal prices remained more subdued, mainly due to foreign trade tensions between the US and China. The recent increase in crude oil prices on spot and futures markets drove the assumption for crude oil prices per barrel in the July Inflation Report upwards to USD 75 from USD 73 for 2018 and to USD 80 from USD 73 for 2019 on average (Chart 1.2.9). The realization for average annual increase in import prices in USD terms remained below the July Inflation Report assumptions. Assumptions for 2019 have been revised slightly upwards (Table 7.1.1, Chart 1.2.10).

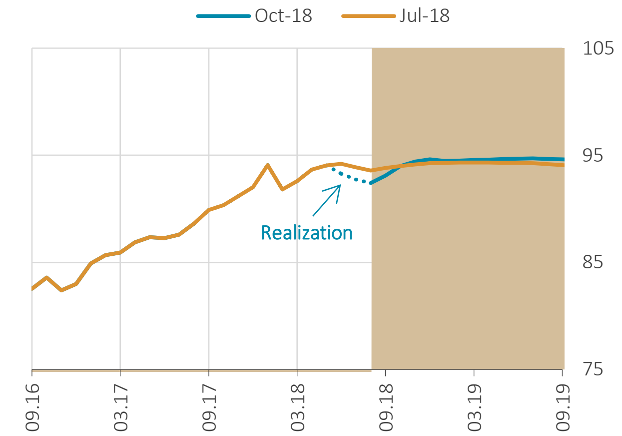
Unprocessed food inflation reached 34 percent by the end of the third quarter of 2018, significantly exceeding the assumption cited in the July Inflation Report. The expected correction to fresh fruit and vegetable prices in July and August remained limited, followed by a strong price hike in September. Cost-side developments stemming from the depreciation of the Turkish lira were the main drivers of the deterioration in the food inflation outlook in the third quarter. Accordingly, the food inflation forecast was revised upwards to 29.5 percent from 13 percent for end-2018 and to 13 percent from 10 percent for end-2019.

Chart 1.2.9: Revisions in Oil Price Assumptions (USD/bbl.)



Source: Bloomberg, CBRT.
Shaded area denotes the forecast period.

Chart 1.2.10: Revisions in Import Price Assumptions (Index, 2010=100)



Source: Bloomberg, CBRT.
Shaded area denotes the forecast period.

Fiscal Policy and Tax Adjustments

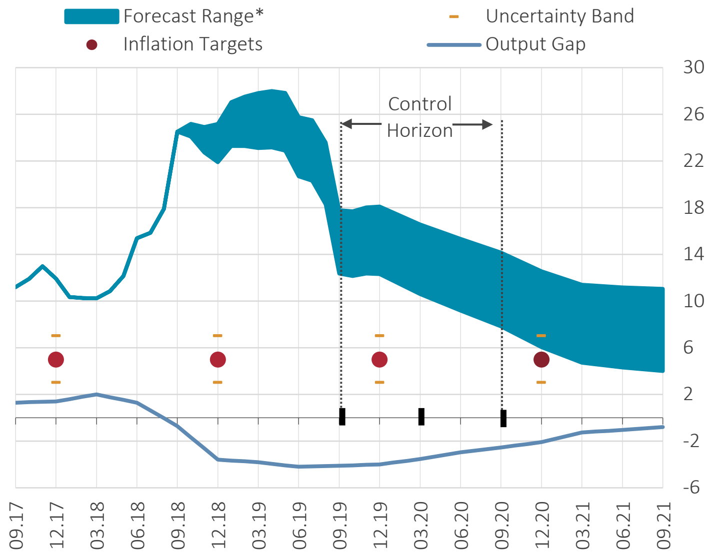
The fiscal policy became less supportive of economic activity compared to the July Inflation Report period. The sliding-scale tariff system continued to curb the effect of increases in international oil prices and exchange rates on fuel prices. However, adjustments to electricity and natural gas prices exceeded the rates envisaged in the July Inflation Report, thus had an impact on inflation. Medium-term projections are based on an outlook where macroeconomic policies are determined with a medium-term perspective and in a coordinated manner with a focus on bringing inflation down.

The New Economy Program (NEP) announced on 20 September 2018 indicated that public finances would contribute to the macro rebalancing process by conducting a tight policy framework. The fact that the tight policy framework has been designed based on cutting down on expenses rather than increasing taxes will contribute to price stability. In this context, future projections are based on the assumption that the support of the public sector for economic activity will be replaced by a weaker stance that will be more pronounced in 2019 and therefore, the growth of spending and current transfers will decline and the prices and wages controlled by the government will be set broadly consistent with inflation targets to reduce backward-indexation. The strong policy coordination to lower inflation and achieve macroeconomic rebalancing is envisaged to gradually improve the risk premium and uncertainty perceptions (Box 6.1).

1.3 Inflation and the Monetary Policy Outlook

With a tight policy stance that focuses on bringing inflation down through enhanced policy coordination, inflation is projected to converge gradually to the target. Accordingly, inflation is projected to be 23.5 percent at the end of 2018 and then fall to 15.2 percent at the end of 2019, 9.3 percent at the end of 2020, stabilizing around 5 percent over the medium term. Thus, with a 70 percent probability, inflation is expected to be between 21.9 percent and 25.1 percent (with a mid-point of 23.5 percent) at end-2018, between 12.3 percent and 18.1 percent (with a mid-point of 15.2 percent) at end-2019 and between 6 percent and 12.6 percent at the end of 2020 (with a mid-point of 9.3 percent) (Chart 1.3.1). Forecasts are based on a monetary policy framework where the tight policy stance will be maintained for an extended period.

Chart 1.3.1: Inflation and Output Gap Forecasts*



Source: CBRT, TURKSTAT.

* Shaded area denotes the 70 percent confidence interval for the forecast.

The inflation forecast for end-2018 has been revised upwards to 23.5 percent from 13.4 percent, indicating a 10.1-point rise compared to the July Inflation Report. Of this rise, 4.1 percentage points was driven by the increase in import prices in terms of Turkish lira. The bulk of this increase stemmed from the depreciation of exchange rates along with the changes in pass-through from exchange rates to inflation in the third quarter; however, the increases in energy prices excluding fuel oil that remained above the assumptions of the previous report were also influential in this revision. The assumption that the sliding-scale tariff system will be maintained until the end of 2018 limits the additional pressure of exchange rate increases on the inflation forecast through the channel of fuel oil prices. The 9.1-point deviation in the consumer inflation forecast, along with the deterioration in the pricing behavior in the third quarter pushed the year-end inflation forecast by 2.5 points, and the revision in food inflation assumption drove the inflation forecast up by 3.8 points. The widening in the output gap that became more pronounced in the last quarter of 2018 is estimated to curb 2018 inflation by -0.3 points.

The disinflationary effect of demand conditions is estimated to become more apparent in 2019. Accordingly, the revision in output gap forecasts pulls the end-2019 inflation forecast down by -1.4 points compared to the previous reporting period. That said, due to the staggered exchange rate effect pushed forward to 2019 by inflation inertia, along with the expected effect of the rise in the oil price assumption for 2019 on energy prices, import prices in TL terms are estimated to push the end-2019 inflation forecast up by a total of 3.0 points. Of the 10.1-point revision in the end-2018 inflation forecast, 3.6 points is estimated to be influential on the end-2019 inflation forecast due to backward indexation. Finally, the revision of the food inflation assumption for 2019 to 13 percent from 10 percent added 0.7 points to the end-2019 inflation forecast. Accordingly, the inflation forecast for end-2019 has been revised upwards by 5.9 points to 15.2 percent compared to the previous reporting period.

The above-mentioned forecasts are based on a framework in which there would be no additional deterioration in the global risk appetite and the recent recovery in Turkey's risk premium would continue moderately. Projections rely on an outlook in which decisive implementation of a tight monetary policy stance and inflation-oriented policy coordination would continue, and the rebalancing process that is expected to continue in the current account deficit would contribute to the improvement of the country's risk premium, thereby containing exchange rate volatility. Accordingly, the determinants of the fall in inflation in 2019 are judged to be the moderation of cost pressures driven by a modest appreciation trend of real exchange rates and the expected slowdown in domestic demand. Breaking the backward-indexation behavior with the support of stable course of exchange rates and strengthened macro-policy coordination targeting disinflation, and pulling medium-term inflation expectations to levels consistent with forecasts and targets are critically important to achieve disinflation. Strengthened coordination between macroeconomic policies and particularly the policies supporting financial stability are expected to contain downside risks to the credit market and domestic demand, thereby contributing positively to macro balances and the disinflation process.

1.4 Key Risks to Inflation Forecasts and the Likely Monetary Policy Response

The outlook underlying the medium-term projections presented in the Inflation Report is based on the Monetary Policy Committee's judgments and assumptions. Nevertheless, various risks to these factors may affect the inflation outlook and necessitate changes in the monetary policy stance envisaged in the baseline scenario.

In addition to the rising uncertainty over inflation and forecasts due to changing inflation dynamics, major risks that have the potential to change the outlook that the baseline scenario hinges on are as follows:[1]

- Further deterioration in pricing behavior and expectations formation;
- Weaker capital flows towards emerging market economies;
- Further supply-side tightening in bank loans;
- Risks to the coordination between monetary and fiscal policies (administered prices, tax and wage policies);
- Higher backward indexation in wage inflation;
- Rise in international crude oil prices;
- Sustained rise in food prices.

The primary risk to the inflation outlook in the upcoming period would be a further deterioration in pricing behavior. In recent months, pass-through from exchange rates to consumer inflation has grown stronger, backward indexation has become more widespread, and pricing behavior has deteriorated considerably. Although exchange rate-related inflationary pressures are expected to remain relatively subdued under current circumstances, risks to the inflation outlook remain solid amid highly volatile exchange rates. In case of a failure to implement the macroeconomic rebalancing process rapidly and effectively enough to bring inflation down amid high inflation rates and risk premium levels, inflation and exchange rate expectations may feed each other and undermine the disinflation process. In such a case, any further deterioration in pricing behavior may necessitate a tighter monetary policy stance for a longer time in order to lower inflation.

The deteriorated pricing behavior, tight financial conditions and the financial state of the corporate sector have recently caused inflation dynamics to change and the uncertainty over inflation and forecasts to rise. The cumulative cost pressures on firms and the decrease in their profitability, coupled with increased working capital costs, may cause the disinflationary impact of the demand channel to be more limited compared to the implications of the historical data. In the short-run, monetary policy decisions will be more sensitive to incoming data and the monetary policy stance will be revised upon detection of changes in the inflation outlook.

There are also risks stemming from global monetary policies and risk appetite developments that may lead to a decline in capital flows towards emerging economies and feed into exchange rate volatility. The sustained monetary tightening trend and the increase in bond yields in advanced economies, heightened protectionism in global trade, Brexit developments, concerns over the budget deficit and sovereign debt

[1] Evaluations on the channels through which these risks may change inflation forecasts and the direction of this change are summarized in Table 7.3.1. in Chapter 7.

of Italy, and imminent sanctions on Iran may cause the risk appetite for emerging economies to display a fluctuating pattern in the upcoming period. This, in turn, may pose a downside risk to portfolio flows to emerging economies. In case of excessive market volatility due to fluctuations in global liquidity conditions and in perceptions of risk, the CBRT may use liquidity measures intended for providing the market with the needed FX liquidity in a timely, controlled and effective manner. In addition, it may introduce additional tightening in monetary policy to curb the impact of these risks on inflation and inflation expectations.

In the third quarter of the year, credit conditions recorded a significantly higher tightening than historical averages due to increasing risk premiums. The rate and extent of the normalization to be observed in credit conditions in the upcoming period are important in terms of the outlook for economic activity. As cash flows and balance sheets of firms have been adversely affected by the increase in exchange rates and loan rates as well as by the slowdown in economic activity, conducting the necessary assessments and analyses related to the asset quality of firms will have a decisive role in the credit market. Therefore, establishing a coordination between the financial sector policies that restrict the balance sheet effects of the corporate sector and the monetary policy that focuses on inflation has become crucial for preventing the financial conditions from falling into an unproductive tightening cycle.

A weaker coordination between the monetary policy and the fiscal policy than envisaged is regarded as a risk with respect to disinflation and macroeconomic rebalancing. The fiscal policy outlook that the medium-term projections in the Inflation Report are based on incorporates a policy stance that focuses on disinflation and macroeconomic rebalancing and that is coordinated with the monetary policy, which is in line with the New Economy Program announced in September. Accordingly, the projections rest on an outlook where the fiscal policy introduces a tight fiscal discipline, as envisaged in the New Economy Program. Moreover, it is assumed that administered prices, tax and wage adjustments will be formulated in a way that will help reduce the backward-indexation behavior. If the fiscal policy significantly deviates from this framework leading to an adverse impact on the medium-term inflation outlook, the monetary policy stance may be revised.

Another risk factor for the medium-term inflation outlook is the impact of the significant uptrend in inflation on wage increases in 2019. Despite the slowdown in economic activity as of the third quarter and the downward effects of increased unemployment, elevated levels of inflation are projected to have an upward impact on wages through the indexation channel. In addition to the efforts to weaken the indexation channel, assessments of the extent of the compensation for cost pressures by productivity increases in the upcoming period and assessments of the impact of real wage hikes on aggregate demand will have an important role in monetary policy decisions.

Crude oil prices and domestic food prices are also considered to constitute upside risks to inflation in the upcoming period. Although problems in the US regarding the supply of shale oil have been largely settled in the recent period, the supply shortage due to geopolitical developments in Iran and Venezuela continues to be the major upside risk to crude oil prices. On the other hand, increased protectionism in global trade stands out as a downward risk factor for commodity prices due to its likely adverse effect on global growth. Risks related to domestic food prices are projected to be on the upside because of cumulative cost-side pressures, particularly in the short term. In this framework, the monetary policy response will be determined in such a way to curb a possible deterioration in inflation expectations and pricing behavior, taking into account the direct and secondary effects of respective risks on inflation.