

## 7. Medium-Term Projections

This chapter summarizes the underlying forecast assumptions and presents the medium-term inflation and output gap forecasts as well as the monetary policy outlook over the next three-year horizon.

### 7.1 Current State, Short-Term Outlook and Assumptions

#### Changes in Key Forecast Variables

**Inflation:** As projected in the January Inflation Report, consumer inflation slightly decreased in the first quarter of 2019 compared to end-2018 and stood at 19.7% (Table 7.1.1). The main drivers of this decrease were the decline in lagged effects of exchange rate consistent with projections, the extension of temporary tax cuts, the persisting downtrend in the annual core goods inflation due to weakening domestic demand, and the fall in energy inflation led by the decreases in administered energy prices. Meanwhile, core inflation posted a more visible decline, standing at 17.7%, a level that is below the January Inflation Report projections (Table 7.1.1). The fall in headline inflation was rather limited relative to the fall in core inflation due to the elevated levels of unprocessed food inflation.

**Economic Activity:** In the fourth quarter of 2018, economic activity remained subdued, consistent with the projections in the January Inflation Report. However, after the contraction in the second half of 2018, economic activity performed slightly better than projected in the first quarter of 2019 due to the support of public expenditures, the easing of financial tightness following the fiscal incentives and the partial improvement in risk premium, and the strong contribution of net exports. Accordingly, the output gap forecasts for the second quarter have been revised upwards (Table 7.1.1). The output gap forecasts for the upcoming period have been based on an outlook where net exports will further contribute to growth, fiscal policy will be formulated in line with the rebalancing process in the economy and the tightness in financial conditions will gradually taper off.

**Table 7.1.1: Changes in Key Forecast Variables\***

	2018- IV	2019-I
Output Gap	-4.2 (-4.2)	-4.2 (-4.5)
Consumer Inflation (Quarter-end, Annual % Change)	20.3 (20.3)	19.7 (19.8)
B** Index Inflation (Quarter-end, Annual % Change)	20.2 (20.2)	17.7 (19.2)

\* Numbers in parentheses denote the values from the January Inflation Report.

\*\* B index is the CPI excluding unprocessed food, alcohol, tobacco, energy and gold.

**Financial Conditions:** The ongoing normalization process in monetary policies of advanced economies has come to a halt since the end of 2018, and expectations that the completion of this process will take longer have led to a partial improvement in global risk appetite. Consequently, risk premiums of emerging economies have slightly improved whereas the risk premium of Turkey negatively diverged from those of other emerging economies due to uncertainties and geopolitical factors. Despite this weak outlook in global funding, TL commercial loan growth converged to its historical averages in the first quarter of 2019 due to measures and incentives (Chart 5.2.9), while the TL commercial loan and deposit rate spread significantly decreased (Chart 5.2.5) and the tightness in financial conditions somewhat eased (Chart 5.1). However, it is assessed that financial conditions continue to have a restrictive effect on economic activity.

**Monetary Policy:** The CBRT maintained its tight stance by keeping the policy rate constant at 24% in its Monetary Policy Committee meetings in January, March and April 2019 in view of the persistent risks to

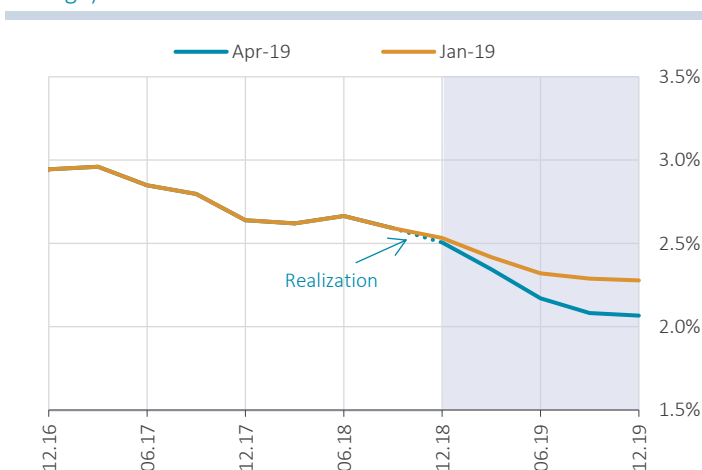
the inflation outlook. Additionally, to support effective functioning of markets and the transmission mechanism in the face of volatilities and unhealthy price formation in financial markets in the second half of the first quarter, and also taking into account the financial market developments in the last period of the first quarter, the CBRT suspended its one-week repo auctions and provided funding via the overnight lending rate of 25.5% for a short time. With the ongoing tight monetary policy stance in the current reporting period, the yield curve remained inverted, yet the increase in the country risk premium pushed the currency swap rates higher across all maturities.

## Assumptions for External Variables

### Global Growth

Figures in the final quarter of 2018 reveal that the euro area growth decelerated significantly and growth in emerging economies lost pace. Leading indicators for the first quarter of 2019 suggest that this deceleration in the global economy continues. It is assessed that downside risks to the global growth outlook for 2019 predominate due to heightened uncertainties over global economic policies, geopolitical developments, protectionist discourses and the likelihood of limited policy room in case of deepened downtrend in economic activity in the following period. Accordingly, compared to the January Inflation Report projections, medium-term forecasts have been based on a slight downward revision in the growth path assumption for the upcoming period implied by the export-weighted global production index used as a measure for external demand (Chart 7.1.1).

**Chart 7.1.1: Export-Weighted Global Production Index\* (Y-o-Y % Change)**



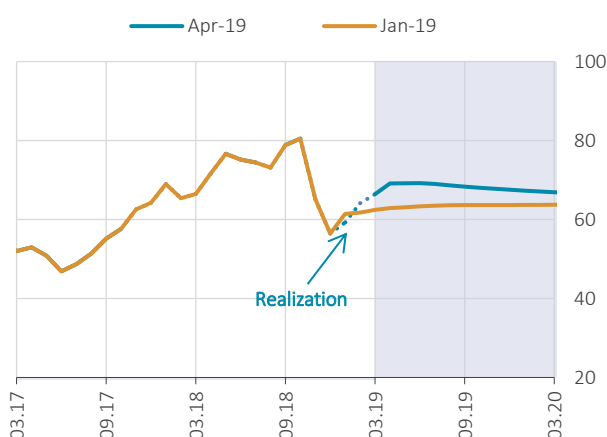
Source: Bloomberg, Consensus Forecasts, CBRT.

\* Shaded area shows the forecast period.

### Import prices

The average annual increase in international crude oil prices and USD-denominated import prices stood above the January Inflation Report assumptions. Due to the recent rise in crude oil prices on spot and futures markets and the views about the course of factors setting the crude oil prices, the assumption for crude oil prices in the January Inflation Report has been revised upwards to USD 67 from USD 63 for 2019 (Table 7.1.2, Chart 7.1.2). This revision was triggered by supply-side factors arising from voluntary or geopolitical risks-driven cuts in oil production, whereas the slowdown in global growth contained the upside movement in assumptions. The assumption for the annual rate of increase in USD-denominated import prices has also been revised upwards for 2019, consistent with the assumption for oil prices (Table 7.1.2, Chart 7.1.3).

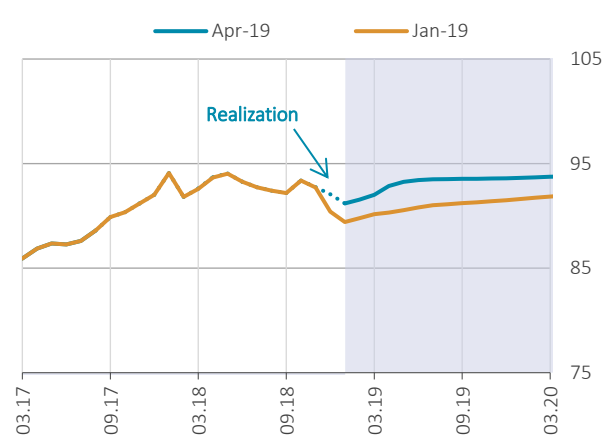
Chart 7.1.2: Revisions in Oil Price Assumptions\* (USD/bbl)



Source: Bloomberg, CBRT.

\* Shaded area denotes the forecast period.

Chart 7.1.3: Revisions in Import Price Assumptions\* (Index, 2010=100)



Source: Bloomberg, CBRT.

\* Shaded area denotes the forecast period.

## Monetary Policies of Advanced Economies

The ongoing normalization in monetary policies of advanced economies was noticeably interrupted in the first quarter of 2019. Although economic activity in the US economy did not weaken markedly, the deceleration in the global economic outlook and the inverted slope of the yield curve caused the Fed's normalization process to come to a halt. The ECB altered its forward guidance in the March meeting, and postponed a likely rate hike from mid-2019 to 2020. Likewise, expectations for a deceleration in the normalization processes of other advanced economy central banks also strengthened. In fact, for the UK and Japan in addition to the Fed and ECB, policy rates implied by end-2019 options were lower than projected in the January Inflation Report (Table 2.3.1). Accordingly, the exogenous assumption for the foreign interest rate path in the making of medium-term forecasts has been revised slightly downwards compared to the January Inflation Report. Our forecasts are based on the assumption that the global risk sentiment will not worsen further over the upcoming period.

## Unprocessed Food Prices

Another exogenous variable underlying the medium-term forecasts is the path of unprocessed food prices. Annual unprocessed food inflation was 42% in the first quarter of 2019, standing far above its historical averages due to the impact of unfavorable supply conditions and exchange rate-driven cost effects. In the upcoming period, the supply from the new harvest is expected to facilitate some correction in prices of fresh fruits and vegetables, one of the sub-items of unprocessed food. On the other hand, the persistent downtrend in red meat prices reversed in March, while upside risks to processed food prices continued due to accumulated cost pressures. Against this background, year-end food inflation forecasts for 2019 and 2020 have been raised to 16% and 11%, respectively, from 13% and 10% projected in the January Inflation Report (Table 7.1.2). The upward revision in unprocessed food inflation forecasts has been higher.

## Fiscal Policy, Administered Prices and Tax Adjustments

In the first quarter of 2019, fiscal policy underpinned economic activity through measures and incentives as well as increased public expenditures, as projected in the January Inflation Report. The framework drawn for the remainder of the year assumes that primary budget expenditures will be gradually reduced in line with budget targets, the ratio of tax revenues to GDP will be gradually increased, and thus the contribution of the public sector to economic activity will be relatively moderate compared to the first quarter.

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. Accordingly, it is assumed that the fiscal policy will continue to be formulated in a way to contribute to the economic rebalancing in 2019, and administered prices under the public mandate will be largely determined to support the disinflation process. The robust policy coordination to lower inflation and ensure macroeconomic stabilization is critical for a gradual improvement of the risk premium and perceptions of uncertainty.

**Table 7.1.2: Revisions in Assumptions**

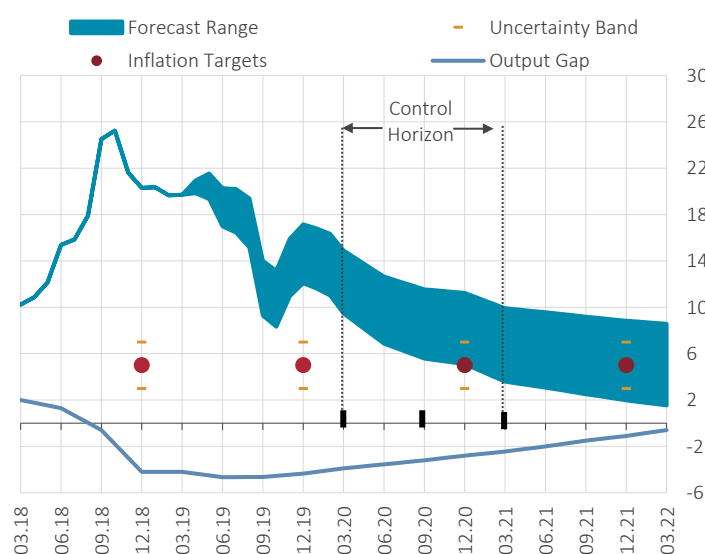
	2019	2020
Export-Weighted Global Production Index (Annual Average % Change)	2.07 (2.28*)	2.37 (-)
Oil Prices (Average, USD)	67.2 (63.1)	66.2 (63.8)
Import Prices (USD, Annual Average % Change)	0.0 (-2.2)	0.8 (1.5)
Food Price Inflation (Year-End % Change)	16.0 (13.0)	11.0 (10.0)

\*Due to the methodological change in the calculation of the index, the assumption for 2019 differs from the value shared as 2.57% in the January Inflation Report. Details of the new index are explained in Chapter 2.

## 7.2 Medium-Term Projections

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 14.6% at the end of 2019, 8.2% at the end of 2020 and 5.4% at the end of 2021, and to stabilize around 5% over the medium term. With a 70% probability, inflation is expected to be between 12.1% and 17.1% (with a mid-point of 14.6%) at end-2019, and between 5.1% and 11.3% (with a mid-point of 8.2%) at end-2020 (Chart 7.2.1).

**Chart 7.2.1: Inflation and Output Gap Forecasts\***



Source: CBRT, TURKSTAT.  
\*70% confidence interval.

In the period after the January Inflation Report, the relatively mild course of the Turkish lira, demand conditions and tax cuts have been the drivers of disinflation. In the current reporting period, although the hikes in unprocessed food prices and Turkish lira-denominated import prices affected the inflation outlook upwards, the improvement in the underlying trend of inflation under a tight monetary policy stance consistent with the targeted path, widening of the output gap and the downward revision to the administered price hikes offset these upward effects. As these downward and upward effects have balanced out, the inflation forecasts for 2019 and 2020 have been kept unchanged. Reasons for the revisions in inflation forecasts are given in Table 7.2.1.

**Table 7.2.1: Revisions in Year-End Inflation Forecasts for 2019 and 2020 and Underlying Reasons**

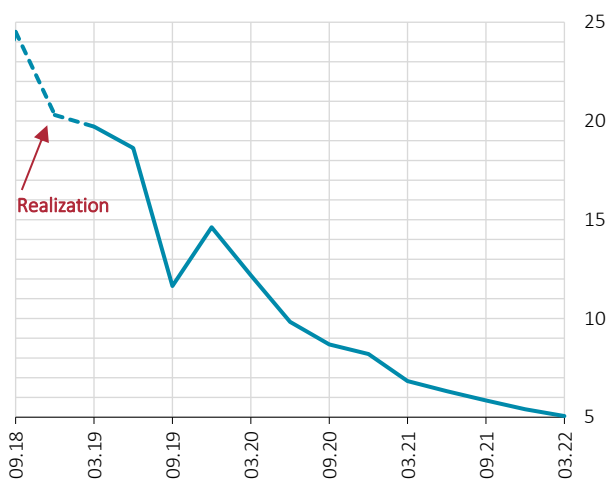
	2019	2020
2019-I (January 2019) Forecast	14.6	8.2
2019-II (April 2019) Forecast	14.6	8.2
<b>Revision in Forecasts Compared to 2019-I</b>	0.0	0.0
<b>Reasons for Forecast Revisions</b>		
TL-Denominated Import Prices (Inc. Exchange Rates, Oil and Import Prices)	+0.3	-
Deviation from Inflation Forecast/Underlying Trend of Inflation	-0.3	-0.2
Food Inflation	+0.7	+0.2
Taxes and Administered Prices	-0.6	-
Output Gap	-0.1	-

Source: CBRT.

The consumer inflation forecast for end-2019, which was announced as 14.6% in the January Inflation Report, has been left intact in the current reporting period (Chart 7.2.2). The upward revision in food inflation assumption to 16% from 13% pushes the consumer inflation forecast up by 0.7 points. The rise in the assumption for TL-denominated import prices stemming from oil prices adds 0.3 points to the year-end consumer inflation forecast. Meanwhile, the improvement in the underlying trend of inflation compared to the previous reporting period has pulled the end-2019 inflation forecast down by 0.3 points. Moreover, due to the sustained implementation of the sliding-scale tariff and tobacco price hikes that materialized below the rates implied by the tax adjustments, changes in administered prices and taxes assumptions have decreased the year-end inflation forecast by 0.6 points. The output gap, which is expected to be slightly wider during the rest of the year compared to the January Inflation Report projections, contributes to the forecast revision by -0.1 points.

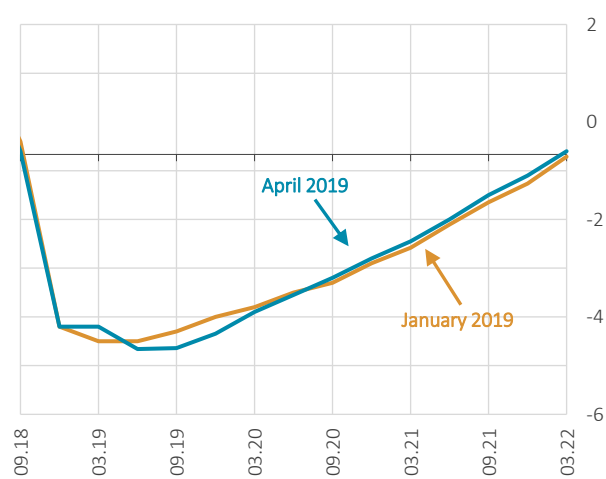
As for the inflation forecast for end-2020, the upward revision in the food price assumption is estimated to increase the year-end inflation forecast by 0.2 points. Meanwhile, the improvement of the underlying trend has pulled the inflation forecast down by 0.2 points. All in all, the inflation forecast for end-2020 has been kept constant at 8.2%.

Chart 7.2.2: Inflation Forecast



Source: CBRT, TURKSTAT.

Chart 7.2.3: Output Gap Forecast



Source: CBRT.

The above-mentioned forecasts are based on a framework in which the increases in the country risk premium and financial volatility since the previous report period would be recovered partly and no additional shock would be observed. Against this background, projections rely on an outlook in which the tight monetary policy stance would continue, and the monetary policy will focus on bringing down inflation to single-digit figures and ultimately to the 5% target. Additionally, a fiscal policy stance determined in line with the NEP targets and the macroeconomic rebalancing process as well as the support of the measures and incentives outlined as part of the Structural Transformation Steps to the recovery in financial conditions are assumed to contribute to the improvement in the country risk premium and contain the volatility in exchange rates in the rest of the year.

Consistent with the January Inflation Report projections, the loan and deposit rate spread decreased and a recovery process started in credit conditions in the first quarter of the year due to policy measures introduced in commercial and consumer loans. Policies supporting financial stability are expected to contain downside risks to the credit market and domestic demand in the upcoming period, thereby contributing to macro balancing. The improvement in the risk premium and the decline in exchange rate volatility are expected to facilitate an improvement in banks' access to external financing and a sustained gradual recovery in credit conditions.

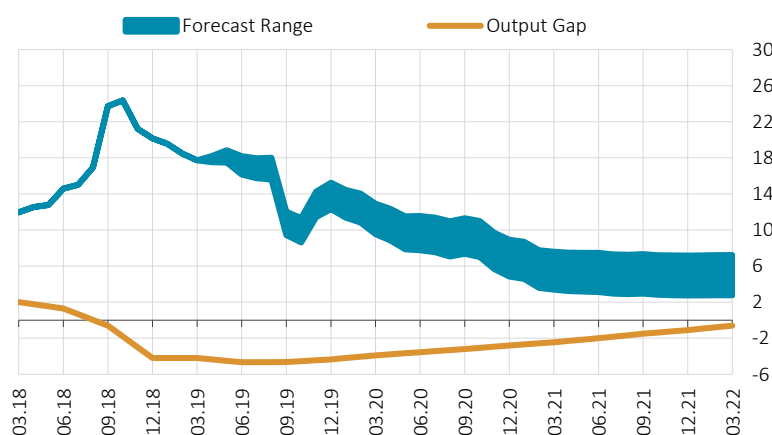
In the first quarter of the year, the support of the public sector to economic activity and the moderate easing of the financial tightness via measures and incentives triggered an upward revision in the output gap forecasts for this period. On the other hand, considering the recent increase in risk premium and financial volatilities as well as the expected moderation in public sector's support to economic activity, the output gap forecast has been revised slightly downwards for the rest of the year. In this respect, it is estimated that the disinflationary contribution of demand conditions will modestly increase compared to the previous report period (Chart 7.2.3).

Against this background, the moderation of cost pressures driven by a modest appreciation trend in the real exchange rate and the subdued domestic demand are judged to be the determinants of the fall in inflation in 2019. Despite the downward pressure of weak domestic demand conditions; cost pressures, deferred hikes in administered prices, the high course of inflation expectations and uncertainties over pricing behavior imply that risks to price stability remain significant. Under a tight monetary policy stance and strengthened policy coordination, it is forecast that consumer inflation will come down to single-digit figures in the second quarter of 2020 and approach the 5% target by the end of 2021. Along with the recovery in the risk premium, reducing backward indexation with the support of the stable course of exchange rates and the support of the strengthened policy coordination aimed at disinflation, and pulling

medium-term inflation expectations to levels consistent with forecasts and targets are crucial to the success of the disinflation efforts.

Unpredictable price fluctuations in items beyond the monetary policy domain, such as unprocessed food, energy and tobacco products, are a major factor causing deviation in inflation forecasts. For this reason, forecasts about the core inflation indicators are also publicly announced. Chart 7.2.4 shows inflation forecasts excluding unprocessed food, energy, alcoholic beverages, tobacco products and gold (B index). Annual inflation in the B index is projected to trend downwards and converge to the 5% target gradually in the medium term.

**Chart 7.2.4: B Index Annual Inflation Forecast\***



Source: CBRT, TURKSTAT.  
\* 70% confidence interval.

### Comparison of the CBRT’s Forecasts with Inflation Expectations

The current high level of inflation appears to have been triggered not only by cost increases and demand-side pressures; deterioration in the pricing behavior and inflation expectations also contributed to the economy-wide diffusion of the tendency to raise prices. Currently, 12 and 24-month ahead expectations of the respondents of the Survey of Expectations hover above those projected by the CBRT (Table 7.2.2). The fact that medium-term expectations have fallen outside the uncertainty band around the inflation target necessitates maintaining the tight monetary policy stance. Contributions from the fiscal policy to the rebalancing process and setting of administered prices and taxes in a way that weakens the backward-indexation mechanism and remains consistent with the inflation targets will offer significant contribution to the expectations management.

**Table 7.2.2: CBRT Inflation Forecasts and Expectations**

	CBRT Forecast	CBRT Survey of Expectations*	Inflation Target
2019 Year-End	14.6	16.2	5.0
12-Month Ahead	11.4	15.4	5.0
24-Month Ahead	6.6	12.1	5.0

Source: CBRT.

\* Data from April Survey of Expectations.

## 7.3 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. The major macroeconomic risks that might lead to a change in the projections and the monetary policy stance associated with the baseline scenario are as follows:

- Delay in the expected partial recovery of the risk premium,
- Uncertainties over pricing behavior and deterioration in inflation expectations,
- Risks to the coordination between monetary and fiscal policies (administered prices and tax adjustments),
- Persistent rise in food prices,
- Tighter financial conditions,
- Persistent weakening in the global growth outlook,
- Weakening in capital flows to emerging market economies,
- Volatility in international crude oil prices.

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.

The partial recovery in indicators related to financial volatility and risk premium in the first quarter of 2019 that came on the back of the policy steps and measures taken contributed to disinflation particularly via the imported input costs and also played an important role in the recovery in domestic demand and economic activity. In the upcoming period, Turkey's risk premium trend will be decisive in inflation and growth dynamics. The baseline scenario presented in the Report is based on an outlook where the risk premium, which has increased due to the recent uncertainties and geopolitical factors, will partly improve owing to partial normalization in these adverse factors coupled with a tight monetary policy stance and macro policy mix focusing on inflation. In case the improvement in risk premium and exchange rate volatility is delayed, expectations for inflation and the exchange rate may feed each other and make the disinflation process more difficult. Should this risk materialize, even if the likely additional squeeze in financial conditions would mean a more evident slowdown in economic activity than envisaged, there would still be a risk that the expectation and exchange rate channel would dominate due to the likely deterioration in pricing behavior. In such a case, all instruments of monetary policy and liquidity management will continue to be used to achieve price stability and support financial stability, and the monetary policy stance will be determined so as to keep inflation in line with the target path by taking into account all upside and downside factors affecting inflation. In this framework, the tight stance in monetary policy will be maintained and additional monetary tightening may be introduced. In case of such a scenario, in order to support the effectiveness of monetary policy and to minimize the likely inflation-growth trade-off, it will be crucial that macro-financial policies are determined with a focus on reducing financial volatility and risk premium, and that the predictability of fiscal policy continues to be reinforced.

Despite the restrictive impact of domestic demand conditions on inflation, the elevated levels of inflation and inflation expectations, the course of cost factors and the uncertainties about pricing behavior continue to pose risk to the inflation outlook in the upcoming period. Notwithstanding the recent improvement in inflation, there is no observable improvement in inflation uncertainty indicators and long-term inflation expectations. The elevated levels of inflation and exchange rate expectations have led to an upsurge in FX deposits recently. If this trend in FX deposits continues, it may put an extra cost burden on the banking sector with respect to balance sheet and liquidity management and may weaken the effectiveness of the monetary policy on exchange rates and financial conditions. In order to curb



these risks, it is crucial that inflation and exchange rate expectations are anchored with a tight monetary policy stance.

Another factor causing an upside risk to the inflation outlook in the short term is the continued rise in food prices. While accumulated cost pressures increase upside risks mostly to processed food prices, periodic factors may also exert an additional pressure on food and catering services prices. Meanwhile, in case the expected correction in the prices of fresh fruits and vegetables in the new harvest is delayed or lessened due to adverse weather conditions, forecasts of unprocessed food prices may need to be revised upwards.

Due to ongoing risks to price stability, monetary and fiscal policy coordination is crucial for the support from the macroeconomic rebalancing process to disinflation to be continued. It is equally important that the backward indexation behavior in administered price and tax adjustments is reduced with a view to anchoring expectations and decreasing inflation inertia. The medium-term projections in this Report are based on a fiscal policy stance focusing on disinflation and macroeconomic rebalancing, and supporting the monetary policy transmission mechanism in line with the New Economy Program. Accordingly, the projections are based on an outlook where the budget deficit remains under control for the rest of the year. Moreover, it has been assumed that the administered price and tax adjustments would be determined in a way to support the disinflation process and that they will remain broadly consistent with the inflation expectations and targets. In case the fiscal policy significantly deviates from the explained framework, the envisaged improvement in the risk premium and inflation expectations may be delayed, and a revision to the monetary policy stance may become necessary if the medium-term inflation outlook is adversely affected.

Credit conditions, which were tightened beyond historical averages in the third quarter of 2018, started to loosen gradually as of October. In the first quarter of 2019, commercial loan growth converged to historical averages on the back of the support from the partial recovery in financial indicators and the accommodative credit policies, thus the loan and deposit rate spread significantly decreased. In the upcoming period, the speed, scope and sustainability of normalization in credit conditions will be important with respect to the outlook for economic activity. The steps towards recapitalization of public banks are expected to underpin the recovery in financial conditions, whereas other arrangements concerning financing facilities and liquidity are expected to be decisive on credit growth. Meanwhile, if the recent fluctuations in financial markets continue, credit conditions may be tightened further and thus economic recovery may be delayed.

Besides the tightness in financial conditions, increasing uncertainties over global economic activity keep downside risks to domestic economic activity alive via capital flows and foreign trade channels. The lingering political uncertainties in the euro area, the likely additional vulnerabilities that may be observed in the banking sector due to expansionary policies introduced by China, extended trade problems between the USA and China, and geopolitical problems altogether cause an increase in uncertainties over global economic policies and continued vulnerabilities in global financial markets. Because of these factors, the existing downside risks to global economic activity persist.

In case of excessive volatility in markets due to global liquidity conditions and fluctuations in risk perceptions, measures might be taken to provide liquidity to the market in a timely, controlled and effective manner. Moreover, the impact of these risks on inflation as well as on inflation expectations will be monitored and a monetary policy response will be given when necessary.

There are risks to crude oil prices and other commodity prices in both directions. A positive outcome in the USA-China trade negotiations, a sustained slowdown in US shale oil output and continued geopolitical problems in Venezuela, Iran and Libya pose upside risks to crude oil prices. Meanwhile, downside risks to crude oil prices can be listed as the possibility that Russia and OPEC decide to re-increase oil production following the meeting to be held in June as well as the possibility that the trade dispute between the USA

and China continues for an extended period and the slowdown in global economic activity becomes aggravated. Meanwhile, the uptrend in industrial metal prices is expected to become more evident due to the expansionary policies introduced by China to underpin domestic economic activity, the recovery in global risk appetite and the upside impact of supply cuts in industrial metal production since 2018. However, this trend might be mitigated by the slowdown in economic activity. Accordingly, in case upside risks stemming from energy and producer prices become more evident, the monetary policy response will be determined in a way to keep the likely deterioration in inflation expectations and pricing behavior under control.

**Table 7.3.1: Key Risks to Inflation Forecasts and Possible Impact Channels\***

Risk	Assessment of Risks as against the Baseline Scenario and Possible Impact on Inflation (↑   ↔   ↓)	Indicators Monitored
<p>Delay in the expected partial recovery of the risk premium</p>	<p><b>Pricing Behavior and Expectations Channel:</b></p> <ul style="list-style-type: none"> <li>• In case the improvement in risk premium is delayed, negative expectations for inflation and exchange rates may feed each other and make the disinflation process more difficult. ↑</li> </ul> <p><b>Financial Conditions and Demand Channel:</b></p> <ul style="list-style-type: none"> <li>• In case of a delayed improvement in risk premium, an additional tightening in financial conditions may lead to a more evident slowdown in economic activity. ↓</li> </ul>	<ul style="list-style-type: none"> <li>• Risk premium indicators</li> <li>• Global risk appetite indicators</li> <li>• Expectations for inflation and exchange rates</li> <li>• Implied volatility of exchange rates</li> <li>• Domestic macroeconomic indicators that may affect country risk premium</li> <li>• Financial conditions</li> <li>• Credit market indicators</li> <li>• Various output gap indicators</li> <li>• Leading indicators of demand and economic activity</li> <li>• Financial and real sector balance sheets</li> <li>• Capital flows</li> </ul>
<p>Uncertainties over pricing behavior and expectation formation</p>	<p><b>Pricing Behavior and Expectations Channel:</b></p> <ul style="list-style-type: none"> <li>• The elevated levels of inflation may cause additional deterioration in pricing behaviour and further increase the backward indexation behavior. ↑</li> <li>• Uncertainties over the speed and extent of the pass-through of accumulated costs to prices in different sectors will be decisive on the inflation path. ↑</li> </ul>	<ul style="list-style-type: none"> <li>• Key inflation indicators</li> <li>• Diffusion indices</li> <li>• Indicators pertaining to backward indexation behavior in inflation expectations</li> <li>• Inflation indicators by sectors and sub-sectors</li> <li>• Various output gap indicators</li> <li>• Survey and market-based expectations of inflation and exchange rates</li> </ul>

Table 7.3.1: Key Risks to Inflation Forecasts and Possible Impact Channels\*

Uncertainties pertaining to backward indexation behavior	<p><b>Pricing Behavior and Expectations:</b></p> <ul style="list-style-type: none"> <li>The strong backward-indexation mechanism in pricing and wages may limit sensitivity of inflation to business cycles and lead to slower disinflation. ↑</li> <li>In case labor cost pressure cannot be offset by productivity increases, the impact on consumer prices may be stronger. ↑</li> </ul>	<ul style="list-style-type: none"> <li>Real unit labor costs</li> <li>Real wage and earning indices</li> <li>Partial labor productivity and total factor productivity</li> <li>Private sector wage formation</li> <li>Consumer spending</li> </ul>
Risks to effectiveness of monetary and fiscal policy coordination	<p><b>Administered Prices and Tax Adjustments:</b></p> <ul style="list-style-type: none"> <li>The disinflation process may be delayed, should the path of administered prices and tax adjustments exceed significantly the path envisaged in this Report. ↑</li> </ul> <p><b>Risk Premium:</b></p> <ul style="list-style-type: none"> <li>A significant deviation of the budget balance from the NEP may increase public borrowing requirement and thus increase Turkey's risk premium. ↑</li> </ul> <p><b>Demand and Expectations Channel:</b></p> <ul style="list-style-type: none"> <li>The disinflationary effect of demand conditions may be reduced, should direct or indirect supportive impact of fiscal policy on domestic demand and economic activity be stronger than envisaged in the current Inflation Report. ↑</li> </ul>	<ul style="list-style-type: none"> <li>Administered prices and tax adjustments</li> <li>Envisaged fiscal policy measures as part of the New Economy Program and the 2019 budget</li> <li>Developments in spending items sensitive to fiscal policy measures</li> <li>Quasi-fiscal policy measures supporting economic activity</li> <li>Credit growth in public and private banks</li> <li>Government budget and public debt stock indicators</li> <li>Domestic demand indicators</li> <li>Output gap forecasts</li> </ul>
Persistent rise in food prices	<p><b>Unprocessed Food Prices:</b></p> <ul style="list-style-type: none"> <li>Inflation expectations may be adversely affected in case there is a delay in the correction in unprocessed food prices that have been increasing faster than long-term trends. ↑</li> <li>Accumulated cost pressures increase upside risks to processed food prices in particular. ↑</li> <li>An additional pressure may be observed in food and catering services prices due to periodic factors. ↑</li> </ul>	<ul style="list-style-type: none"> <li>Developments in food prices by categories and sub-categories</li> <li>Supply-side developments in agricultural production</li> <li>Deviation of unprocessed food prices from the historical trend</li> <li>Food Committee measures and their implications</li> </ul>
Sustained tightness in firms' access to finance	<p><b>Balance Sheet Channel:</b></p> <ul style="list-style-type: none"> <li>Exchange rate- and input cost-led deterioration of real sector's balance sheets and the slowdown in cash flows may lead to more significant slowdown in economic activity compared to Inflation Report projections. ↓</li> <li>Deceleration in the rate of increase in residential and commercial real estate prices may decrease the value of collaterals that the firms put up against loans, and firms may be exposed to tighter credit conditions. ↓</li> </ul>	<ul style="list-style-type: none"> <li>Credit use by firms</li> <li>Interest rates of deposits and loans</li> <li>NPL breakdown by sectors and loan types, NPLs, bad checks and protested bills</li> <li>Credit conditions (Bank Loans Tendency Survey)</li> </ul>

Table 7.3.1: Key Risks to Inflation Forecasts and Possible Impact Channels\*

	<p><b>Bank Lending Channel:</b></p> <ul style="list-style-type: none"> <li>Decline in banks’ profitability and CARs may affect credit supply adversely. ↓</li> </ul> <p><b>Expectations and Risk Premium Channel:</b></p> <ul style="list-style-type: none"> <li>The interaction between firms’ balance sheets and bank asset quality may affect inflation expectations adversely via risk premium and capital flows. ↑</li> </ul>	<ul style="list-style-type: none"> <li>Financial sector and real sector balance sheets, cash flows</li> <li>Residential and commercial real estate prices (nominal/real)</li> <li>House sales, construction sector value added</li> <li>Borrowing costs of Turkish banks</li> <li>Firms’ external borrowing</li> </ul>
Uncertainties regarding global growth outlook and capital flows to EMEs	<p><b>Foreign Demand and Global Financial Conditions:</b></p> <ul style="list-style-type: none"> <li>Increasing uncertainties over global economic activity outlook keep downside risks to domestic economic activity alive via capital flows and foreign trade channels. ↓</li> </ul> <p><b>Global Risk Appetite:</b></p> <ul style="list-style-type: none"> <li>Vulnerabilities specific to EMEs may weaken the positive impact of the improvement in global risk appetite owing to monetary policies in advanced economies on portfolio flows to EMEs. ↑</li> <li>Global risk appetite may be curbed by the US-China trade dispute, lingering political uncertainties in the euro area and geopolitical problems. ↑</li> </ul>	<ul style="list-style-type: none"> <li>Global inflation and growth indicators and forecasts</li> <li>Export-weighted global economic activity index</li> <li>Global economic policies and trade policies</li> <li>Global risk appetite indicators</li> <li>Trends and composition of global capital flows, Turkey’s share</li> </ul>
Fluctuations in crude oil and import prices	<p><b>Import prices:</b></p> <ul style="list-style-type: none"> <li>Geopolitical developments, recovery in global risk appetite and cuts in oil production pose upside risks to crude oil prices. ↑</li> <li>Higher risks regarding the weakening in global growth may pose downside risks to crude oil as well as commodity prices. ↓</li> <li>There may be upside risks to crude oil, some industrial metals and agricultural prices, should the trade negotiations between the US and China yield a positive outcome in the upcoming period, due to the increased demand from China. ↑</li> </ul>	<ul style="list-style-type: none"> <li>Crude oil prices and supply-demand balance</li> <li>Global trade policies</li> <li>OPEC’s decisions</li> <li>Adjustments in domestic fuel oil prices</li> <li>Imports and current account balance</li> </ul>

\* Each risk row of the table presents evaluations on the channel through which inflation forecasts may change, along with the direction of that change, if the respective risk materializes. The signs ↑, ↓ indicate the direction in which the risks influence the inflation forecast (upside and downside, respectively). The sign ↔ denotes circumstances where the net effect on the inflation forecast is not clear. Indicators used in monitoring the risks are listed in the right column.