# 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 for the upcoming 3-year horizon.

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

#### **Financial Conditions**

In the third quarter of 2017, portfolio flows into emerging economies remained strong on the back of the global economic upswing as well as sustained global risk appetite. However, geopolitical developments caused portfolio inflows to lose some momentum in Turkey. Amid upbeat global financial markets, Turkey's financial conditions remained mostly accommodative to economic activity. Loan growth started to stabilize at around historical averages in the third quarter as CGF-backed loans approached their pre-determined limits, and the pull-forward commercial loan demand normalized.

Notwithstanding the third quarter's bouncing risk appetite, the high levels of inflation and inflation expectations as well as the developments in core inflation indicators continue to pose a risk to pricing behavior. Thus, the CBRT kept the policy rates unchanged in the June-October period by stating that the tight monetary policy stance will be maintained until the inflation outlook displays a significant improvement and adopted an increasingly cautious tone in the statements communicated in September and October.

## Inflation

Consumer inflation edged up by 0.3 points from the end of the second quarter to 11.2 percent in the third quarter, overshooting the July Inflation Report forecast. This increase was largely driven by the Turkish lira depreciation against the currency basket, rising import prices and the methodology change for clothing items. Additionally, producer price pressures remained strong in the third quarter.

#### **Demand Conditions**

According to GDP data released in September, economic activity was more buoyant in the second quarter of 2017 than envisaged in the July Inflation Report. The main driver of GDP growth in this period was domestic demand, with private spending and construction investments in the lead. Machinery and equipment investments remained weak, whereas net exports continued to boost annual growth. The upward revisions to past data also signify the strength of economic activity. Accordingly, the support from demand conditions to disinflation lessened significantly as of the second quarter.

Leading indicators hint at ongoing robust economic activity for the third quarter. Exports remain strong despite some slowdown while investments show signs of recovery amid improving domestic demand. Thus, output gap forecasts for the first three quarters of 2017 are revised upwards compared to the July Inflation Report (Table 7.1.1, Chart 7.2.3).

The assumption for the annual growth rate of the export-weighted global growth index, which is an indicator of external demand, is revised upwards compared to the previous reporting period due to the upward revision in the growth forecasts of Turkey's trading partners (Table 7.1.1).

#### Oil, Import and Food Prices

In light of recent developments, crude oil price assumptions for the upcoming period are revised upwards compared to the July Inflation Report. In annual averages, crude oil price assumptions are revised up from 50 USD in July to 53 USD for 2017 and 56 USD for 2018. Along with crude oil and other energy items, prices of input commodities such as industrial metal have also escalated recently. Thus, the assumption for USD-denominated import prices is also revised upwards for both 2017 and 2018 (Table 7.1.1, Charts 7.1.1 and 7.1.2).

After the rapid rise in the first half of 2017, food inflation slowed to 12.50 percent in the third quarter, remaining slightly below the July Inflation Report forecast. This is attributed to the slowing unprocessed food inflation driven also by the measures of the Food Committee. On the other hand, the robust domestic demand and the recovering tourism industry helped push processed food inflation up in the third quarter. Accordingly, the forecast for food inflation is kept unchanged at 10 and 7 percent for end-2017 and end-2018, respectively.



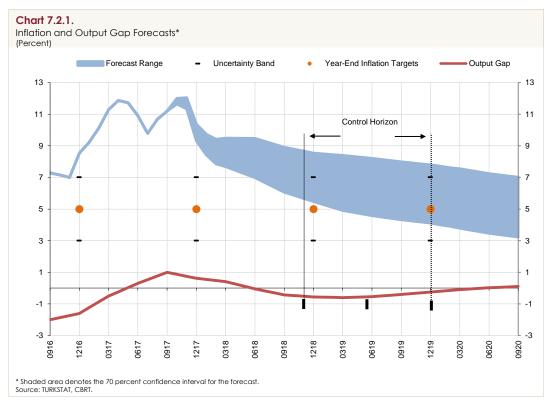
#### Fiscal Policy and Tax Adjustments

Medium-term projections are based on the assumption that fiscal discipline will be maintained, and administered prices and taxes will not be subject to any unanticipated increase. Forecasts are based on the assumption that adjustments to taxes and administered prices will be consistent with the inflation target and automatic pricing mechanisms. The medium-term fiscal policy stance is based on the MTP projections covering the 2018-2019 period.

Revised Assumptions			
		July 2017	October 2017
Output Gap	2017Q2	-0.6	0.3
Опри Сар	2017Q3	-0.3	1.0
Food Inflation	2017	10.0	10.0
(Year-end Percent Change)	2018	7,0	7.0
Import Prices	2017	6.2	7.1
(Average Annual Percent Change, USD)	2018	2.0	3.1
Oil Prices	2017	50	53
(Average, USD)	2018	50	56
Export-Weighted Global Growth Index	2017	2.1	2.3
(Average Annual Percent Change)	2018	2.2	2.3

### 7.2. Medium-Term Forecasts

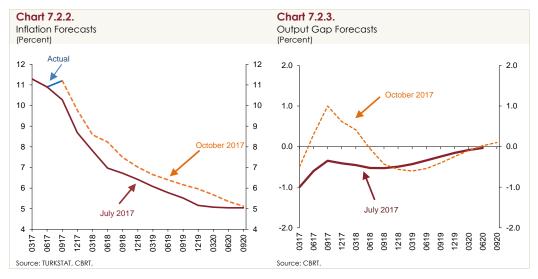
Given a tight policy stance that focuses on bringing inflation down, inflation is estimated to converge gradually to the 5-percent target. Accordingly, inflation is likely to be 9.8 percent at end-2017 and stabilize around 5 percent in the medium term after falling to 7 percent by the end of 2018 and to 6 percent at the end of 2019. Hence, inflation is expected to be, with 70 percent probability, between 9.3 percent and 10.3 percent (with a mid-point of 9.8 percent) at end-2017 and between 5.5 percent and 8.5 percent (with a mid-point of 7 percent) at end-2018 (Chart 7.2.1).



The Turkish lira depreciation against the currency basket and soaring international commodity prices have added to cost pressures on inflation since the previous reporting period. In addition to cost pressures, demand conditions have also stopped providing disinflationary support due to robust economic activity. According to September's GDP data, economic activity was stronger in the second quarter of 2017 than envisaged in the July Inflation Report. Leading indicators signal that economic recovery gained momentum in the third quarter. Therefore, output gap forecasts are revised upwards for 2017 (Chart 7.2.3). After peaking in the third quarter, the support from CGF loans and macroprudential incentives to growth is expected to subside gradually in the next period and economic activity is anticipated to revert back to its trend.

Accordingly, the year-end inflation forecast is revised upwards by 1.1 points from the July Inflation Report (Chart 7.2.2). The upward revision to TL-denominated import price assumption is expected to drive the inflation forecast for end-2017 up by 0.5 points. Having been revised up from the previous reporting period amid the improved economic outlook, the output gap pushed the end-2017 forecast up by 0.4 points. Moreover, the higher-than-projected inflation in the third quarter and the elevation in underlying inflation added 0.2 points to the end-2017 inflation forecast. Thus, the year-end consumer inflation forecast for 2017, which was announced as 8.7 percent in the July Inflation Report, is revised upwards to 9.8 percent.

On the other hand, the consumer inflation forecast for end-2018 is revised upwards by 0.6 points from the July Inflation Report. More specifically, the assumption for TL-denominated import prices which was revised mainly due to higher oil prices pushed the inflation forecast up by 0.4 points. Meanwhile, the upward revision to the output gap is expected to bring the end-2018 inflation forecast up by 0.1 point. In addition, the raised inflation forecast for end-2017 and the rise in underlying inflation have added 0.1 point to the end- 2018 inflation forecast. Therefore, the year-end consumer inflation forecast for 2018 was raised to 7 percent from the July's 6.4 percent.

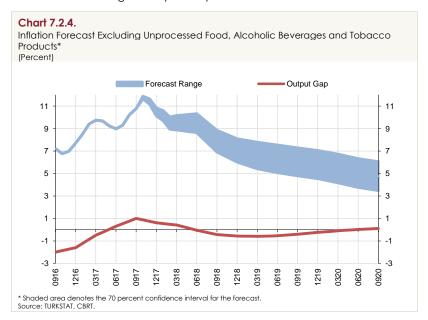


Recent indicators suggest that inflation will remain elevated in October and November and go down in December owing to base effects (Chart 7.2.1). Inflation is likely to see a more marked improvement in early 2018. In addition to the expected fall in food inflation, the gradually waning

cumulative effects of exchange rates and import prices on inflation as well as the return of economic activity to its underlying trend as of mid-2018 will contribute to the expected fall in inflation.

The recent depreciation of the Turkish lira, rising oil prices and the withdrawal of temporary tax cuts in October put upward pressure on core inflation. Moreover, the current elevated level of inflation and developments in core inflation indicators continue to pose risks to the pricing behavior. In the upcoming period, the CBRT will remain focused on underlying inflation rather than temporary fluctuations and keep a tight monetary policy stance until the inflation outlook displays a significant improvement consistent with the inflation target. Aside from committing to a tight monetary policy stance, stronger coordination between monetary and fiscal policies and continued efforts to eliminate the structural factors that cause persistence in inflation are crucially important in bringing inflation back on the projected path in the forthcoming period.

Unpredictable price fluctuations in items beyond the monetary policy domain, such as unprocessed food and tobacco, are among major factors that cause a deviation in inflation forecasts. Hence, inflation forecasts excluding unprocessed food and tobacco are also publicly announced. Accordingly, Chart 7.2.4 shows inflation forecasts excluding unprocessed food, alcoholic beverages and tobacco products. Despite the volatile course of headline inflation, consumer inflation excluding unprocessed food, alcoholic beverages and tobacco products is expected to decelerate starting from the end of 2017 and decline gradually to 4.6 percent in the medium term.



Comparison of the CBRT's Forecasts with Inflation Expectations

It is critical that economic agents take the inflation target as a benchmark in their plans and contracts and focus on the underlying trend of medium-term inflation rather than on temporary price fluctuations. Likewise, it is crucial that the CBRT's current inflation forecasts be compared with inflation expectations of other economic agents to serve as a reference guide. Currently, the year-end, 12-month-ahead and 24-month-ahead inflation expectations of the Survey of Expectations' respondents

are above the CBRT's baseline scenario forecasts (Table 7.2.1). The hovering of inflation expectations above the target and particularly the exceeding of the 24-month-ahead inflation expectations beyond the uncertainty band necessitate the tight monetary policy stance to be sustained.

**Table 7.2.1.**CBRT Inflation Forecasts and Expectations

	CBRT Forecast	CBRT Survey of Expectations*	Inflation Target
2017 Year-end	9.8	9.9	5.0
12-month-ahead	7.3	8.5	5.0
24-month-ahead	6.0	8.0	5.0
* As of October 2017. Source: CBRT.			

# 7.3. Risks and Monetary Policy

The global economic upturn is expected to continue in the remainder of 2017 and also throughout 2018. Although financial market volatility slightly increased in the third quarter, global financial conditions remain accommodative as the risk appetite is still strong. Despite the increase in crude oil prices in the third quarter owing to the benign global growth outlook, the OPEC output cut and the fall in oil production due to the hurricanes in the US, demand and supply-side factors specific to the oil market are containing the upward pressures on energy prices. On the other hand, risks related to other commodity prices are on the upside amid the global growth outlook.

The primary downside risk to the global economic outlook is the uncertainty surrounding monetary policy normalization across advanced economies. The communication after the FOMC September meeting reinforced financial market expectations that the Fed will stick to its previously announced path of normalization. The Fed started to downsize its balance sheet in October. In case of a faster-than-expected pace of normalization by the Fed as well as other major central banks, it is likely that the high risk appetite and low volatility cycle in financial markets will be reversed. In addition to these uncertainties regarding global economic policies, the lack of a clear-cut Brexit strategy, the tendency towards more inward-oriented policies in European economies and the ongoing geopolitical turmoil in Asia and the Middle East stand out as other downside risks to financial markets and global growth in the upcoming period. The fact that the size of private sector debt has reached high levels across some emerging economies, with China in the lead, might aggravate the impact of the risks related to financial markets.

The favorable global economic outlook and trade volume as well as the continuing of global risk appetite prompted an upturn in portfolio flows toward emerging economies recently, but heightened geopolitical risks caused portfolio investments to lose some momentum in Turkey. Portfolio inflows to Turkey have been more concentrated in government bonds since September, whereas flows to the stock market remained volatile and weak. The volatility in the foreign exchange market triggered a slight rise in long-term inflation compensation. Despite these developments, financial conditions remained mostly accommodative in the third quarter. Loan growth balanced at historical levels in the third quarter, as the CGF-backed loans neared their pre-determined limits. The strong acceleration of loan growth in the first half of the year and its gradual decelaration in the second half are monitored closely with regard to their impact on aggregate demand and economic activity.

The third quarter's economic activity and aggregate demand were mostly in line with the the July Inflation Report forecasts. After the third quarter, domestic demand might see some slowdown due to the reduced support of the additional credit boost to growth and the withdrawal of tax incentives for durable goods, and the economy is expected to move towards its underlying trend. Both the subsiding effect of the accommodative policies of 2017 and the fiscal measures announced in the recent MTP are being monitored closely with respect to their effects on economic activity. The continued recovery in tourism, the improving global growth outlook and the favorable course of the real exchange rate are expected to contribute further to growth and the current account balance in the coming months through the export channel. Having bolstered investment, the improving perceptions regarding uncertainty will continue to support investment in the upcoming period. As the recovery becomes widespread, employment and investment are expected to see some gains, feeding into further economic growth. Against this background, uncertainties over monetary policies of major central banks, the course of capital flows and geopolitical developments remain key to economic activity. Exchange rate volatility that may arise from these factors poses a downside risk to the timing and strength of the support that financial conditions could provide to the economic activity.

In the inter-reporting period, the rising commodity prices, particularly oil and metal prices, and depreciating exchange rate drove inflation higher through the cost channel, causing core inflation indicators to exceed forecasts. Inflation is expected to remain high in October and November before coming down markedly amid base effects to a still elevated level in December. Base effects from food prices, the withdrawal of temporary tax cuts for white goods and furniture in October and the methodology change for clothing are major factors that will cause inflation to fluctuate in the short term and core inflation to rise briefly. On the other hand, the inflation outlook is expected to improve gradually from December onwards.

The current elevated levels of inflation and developments in core inflation indicators continue to pose risks to the pricing behavior. These risks and elevated inflation expectations might dampen the expected improvement in the inflation outlook from December through the first months of 2018. The fact that inflation expectations and pricing behavior show no sign of improvement jeopardizes the inflation outlook. All these developments necessitate the maintaining of the tight monetary policy stance. Thus, the CBRT adopted a more cautious tone in communicating its monetary policy in September and October.

The tight stance in monetary policy will be maintained until the inflation outlook displays a significant improvement and becomes consistent with the targets. Accordingly, the monetary policy will aim to bring inflation down to 7 percent at end-2018, before reducing it gradually to 5 percent. Consequently, with the current reading of the data, this requires that the tight stance of the monetary policy be preserved until inflation displays a convincing fall. The CBRT formulates its monetary policy by taking the medium-term inflation into account, thus focusing on the developments in underlying inflation rather than the anticipated fluctuations driven by the base effects during the course of the year. Inflation expectations, pricing behavior and other factors affecting inflation will be closely monitored, and further monetary tightening will be delivered if needed.

Developments in fiscal policy and tax adjustments are being monitored closely with regard to their effects on the inflation outlook. The baseline monetary policy stance is formulated under the assumption that fiscal discipline will be maintained, and there will be no unanticipated hikes in administered prices and taxes. A revision of the monetary policy stance may be considered, should the fiscal policy deviate significantly from this framework, and consequently have an adverse effect on the medium-term inflation outlook.

In recent years, sustaining fiscal discipline has been one of the key factors in lowering the sensitivity of the Turkish economy to external shocks. The room provided by fiscal discipline facilitated the implementation of an expansionary fiscal policy. Structural measures to provide room for countercyclical fiscal policies will enhance the coordination of monetary and fiscal policy and improve macroeconomic stability.