7. Medium-Term Forecasts

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

The environment of uncertainty, which dominated the global financial markets throughout 2015, led to volatility in the third quarter as well. Signs of slowdown in emerging economies spurred by the adverse outlook in China along with the perceived vagueness regarding the Fed's future monetary policy stood out as the prominent causes of the volatility in markets. In the first half of the third quarter, financial markets were mostly driven by expectations of a policy rate hike by the Fed; while following the FOMC meeting in September, markets pushed policy rate hike expectations into spring 2016. Against these developments accompanied by the policy rate cut by the People's Bank of China in late August, the tumbling global risk appetite in the third quarter reversed through the end of the quarter. Amid the subdued global risk appetite and rising sovereign risk premiums, currencies of emerging economies have depreciated against the US dollar since the July Inflation Report; however, these losses were partially taken back thanks to the recent rebound in the global risk appetite.

In the third quarter, external developments in addition to internal uncertainties and geopolitical developments also led to deterioration in the financial market indicators in Turkey. The Turkish lira depreciated on par with the currencies of other emerging economies, and market rates particularly longer than one year registered an increase. Amid the developments in loan standards and rates, the FCI got remarkably tighter in the third quarter. Meanwhile, the CBRT maintained its tight monetary policy stance. The share of marginal funding rose gradually within the CBRT funding and the average funding rate was increased above the previous Report's readings. On the other hand, remuneration of TL reserve requirements by the CBRT was raised in September, which constituted an improving step for the loans-to-deposits ratio of the banking sector.

Inflation

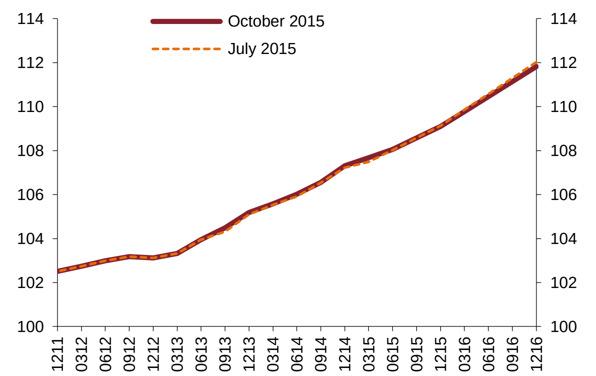
Amid developments in food and core goods prices, annual consumer inflation posted a quarter-on-quarter increase by around 0.75 points in the third quarter of 2015 and rose to 7.95 percent, remaining above projections of the July Inflation Report. Despite the improvement in the second quarter, unprocessed food prices accelerated in the third quarter and remained higher than implied by the July Inflation Report's assumptions. Moreover, the ongoing depreciation of the Turkish lira not only pushed the core goods inflation up, but also limited the positive effects of the decline in international oil prices and import prices on domestic prices in the third quarter. However, the mild outlook in aggregate demand conditions limited the pass-through of the depreciation in the Turkish lira to non-energy items. Services inflation posted a slight fall due mostly to the base effect, yet inflation increased in subcategories sensitive to food prices and the exchange rate. Against this background, the underlying trend of inflation remained above target-consistent levels despite a slight improvement in quarterly terms.

Demand Conditions

In the second quarter of 2015, economic activity followed a stronger course than envisioned in the July Inflation Report. The GDP rose by 3.8 percent year-on-year in the second quarter, which is mostly attributed to the industrial value added. Accordingly, the output gap was revised slightly upwards for the second quarter of 2015 (Table 7.1.1 and Chart 7.2.3). On the expenditures side, quarterly growth was mostly fed by private investments, while consumption demand followed a moderate course. The contribution of net exports to growth proved negative in the second quarter.

Third-quarter data suggest that the final domestic demand may add less to growth. In fact, the weak consumer confidence and tighter financial conditions curbed the production and imports of consumption goods in the July-August period, and sales of automobiles fell in the third quarter. Investor confidence remained sluggish, yet improved slightly in the third quarter. Accordingly, production of machinery and equipment posted a quarterly increase during July and August, whereas imports thereof registered a decline. Thus, the output gap is assessed to have a downside effect on inflation in the third quarter.

Chart 7.1.1. Export-Weighted Global Economic Activity Index*
(2008Q2=100)



* For methodology, see Box 2.1, Inflation Report 2010-II.
Source: Bloomberg, Consensus Forecasts, CBRT.

The slowdown in global economy coupled with geopolitical developments pulled down exports of goods and services in the second quarter. The third quarter was also marked by downward risks to external demand due to geopolitical developments and vagueness regarding the monetary policies of advanced economies. In fact, the annual growth rate of export-weighted global production index revised by September forecasts posted a limited decline compared to the July Inflation Report (Chart 7.1.1). Meanwhile, an evaluation of non-gold quantity indices, which are better indicators of external trade, reveals that the export quantity index excluding gold increased in the second quarter and August. Moreover, the rising demand from EU members affects Turkey's exports positively. Against this background, the growth composition is expected to shift gradually in favor of net exports in the upcoming period.

Oil, Import and Food Prices

The fall in international commodity prices, especially energy, continued into the third quarter. Mostly backed by the slack in China and other emerging countries, this downtrend caused import prices in Turkey to decline in USD terms. Therefore, assumptions for crude oil prices and USD-denominated import prices were revised downward (Charts 7.1.2 and 7.1.3). On an annual basis, the average crude oil price assumption was decreased from 59 USD to 54 USD for 2015 and from 63 USD to 54 USD for 2016. Additionally, assumptions for annual percentage changes in average import prices were revised downwards by 1.9 points each for 2015 and 2016. Meanwhile, year-end projections for unprocessed food prices have been left unchanged since the second quarter.

Chart 7.1.2.
Revisions in Oil Prices*
(USD/bbl)

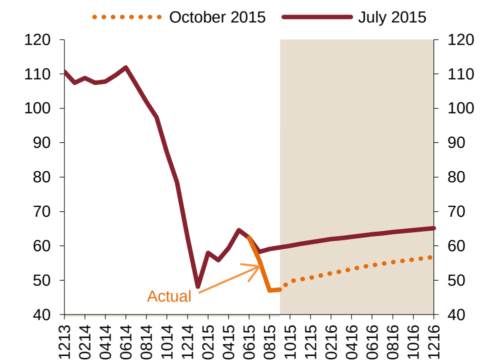
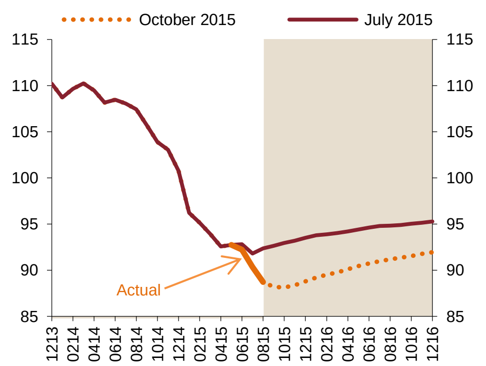


Chart 7.1.3.
Revisions in Import Prices*
(USD, 2010=100)



* Shaded area denotes the forecast horizon.
Source: Bloomberg, CBRT.

Fiscal Policy and Tax Adjustments

Medium-term forecasts are based on the assumption that tax adjustments and administered prices would be consistent with inflation targets and automatic pricing mechanisms. The medium-term fiscal policy stance is based on the MTP projections covering the 2016-2018 period. Accordingly, the projections envisage slightly higher revenues and expenditures as a ratio of the GDP in 2015 and a somewhat slower decline in these ratios in the following years. Conditional on this outlook, inflation is expected to improve gradually and reach the 5-percent target in the medium term.

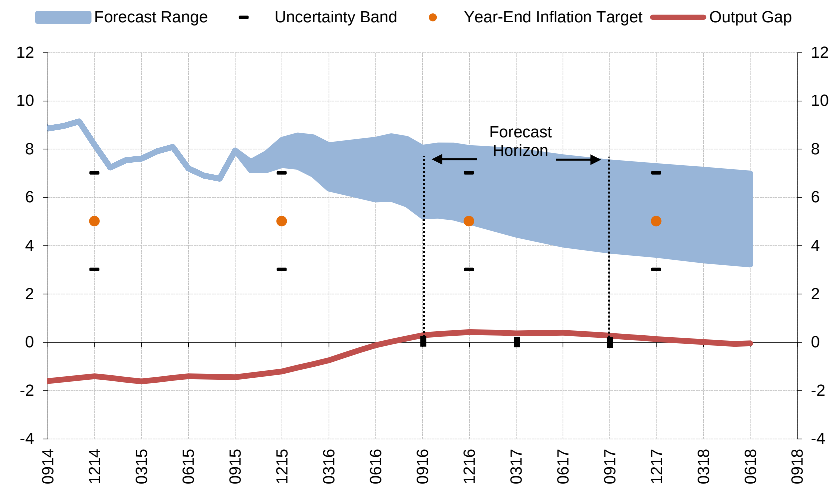
Table 7.1.1. Revisions in Assumptions

		July 2015	October 2015
Output Gap	2015Q2	-1.60	-1.40
	2015Q3	-1.30	-1.45
Food Prices (Year-end Percent Change)	2015	8.0	8.0
	2016-17	8.0	8.0
Import Prices (Average Annual Percent Change, USD)	2015	-12.8	-14.7
	2016	1.3	-0.6
Oil Prices (Average, USD)	2015	59	54
	2016	63	54
Export-Weighted Global Production Index (Average Annual Percent Change)	2015	1.9	1.9
	2016	2.4	2.3

7.2. Medium-Term Forecasts

Medium-term forecasts are based on the framework that the tight monetary policy stance will be maintained until there is a significant improvement in the inflation outlook. Moreover, the annual loan growth rate is envisioned to hover around reasonable levels, also on the back of macroprudential measures. Accordingly, inflation is expected to be, with 70 percent probability, between 7.4 percent and 8.4 percent (with a mid-point of 7.9 percent) at end-2015, and between 5.0 percent and 8.0 percent (with a mid-point of 6.5 percent) at end-2016. Inflation is projected to near 5 percent at end-2017 and stabilize around 5 percent in the medium term (Chart 7.2.1).

Chart 7.2.1.
Inflation and Output Gap Forecasts*
(Percent)



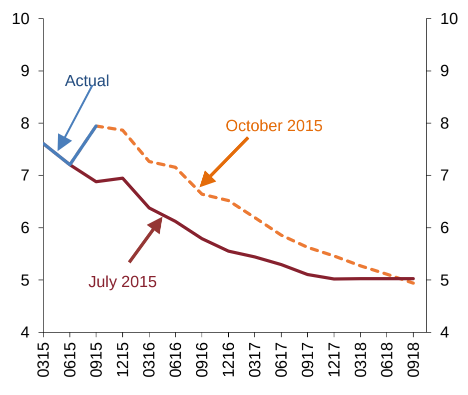
* Shaded area denotes the 70 percent confidence interval for the forecast.
Source: CBRT.

The rise in core inflation due to the exchange rate depreciation in the third quarter brought the end-2015 inflation forecast up by 1.2 points compared to the July Inflation Report forecast. Yet, the improvement in import prices in the inter-reporting period pulled down the year-end inflation forecast by 0.2 points. Accordingly, the end-2015 inflation forecast, which was set as 6.9 percent in the July Inflation Report, was revised upwards by 1 point (Chart 7.2.2).

Similarly, the end-2016 inflation forecast was revised upward by 1 point to 6.5 percent from 5.5 percent in the July Inflation Report. The upward revision in the end-2015 inflation forecast and the delayed effects of exchange rate movements are expected to drive the end-2016 inflation forecast up by 0.6 and 0.8 points, respectively. However, the decline in the average import price assumption for 2016 and the small downward revision to the output gap forecast for 2016 brought the end-2016 inflation forecast down by 0.3 and 0.1 points, respectively, from the previous Report.

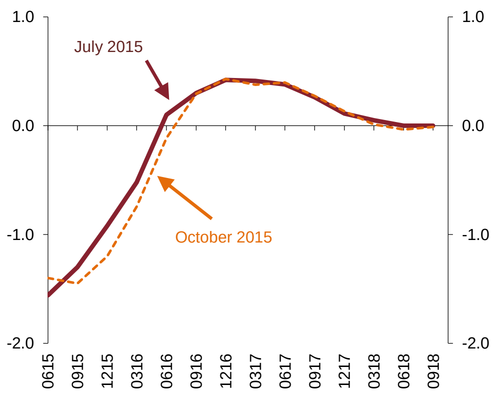
Revised output gap forecasts are displayed in Chart 7.2.3. As the national income realizations in the second quarter of 2015 proved more favorable than envisioned in the previous reporting period, output gap values pertaining to this period were revised slightly upwards. Meanwhile, the output gap forecasts for the third and fourth quarters of 2015 were revised slightly downwards compared to the July Inflation Report. Thus, the output gap is expected to keep the end-2015 inflation forecast intact compared to the previous reporting period.

Chart 7.2.2.
Inflation Forecasts



Source: TURKSTAT, CBRT.

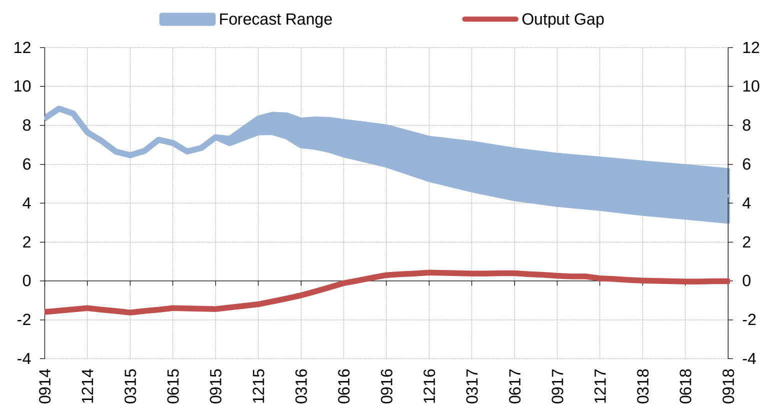
Chart 7.2.3.
Output Gap Forecasts



Source: CBRT.

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 prices are publicly announced. Accordingly, inflation forecasts excluding unprocessed food, tobacco and alcoholic beverages are presented in Chart 7.2.4. The inflation indicator as measured above is expected to decline gradually to 4.5 percent.

Chart 7.2.4.
Inflation Forecast Excluding Unprocessed Food, Tobacco and Alcoholic Beverages*
(Percent)



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

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 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. Accordingly, 12-month and 24-month-ahead inflation expectations of the Survey of Expectations' respondents are above the CBRT's baseline scenario forecasts (Table 7.2.1). Furthermore, the modest increase in inflation expectations in the inter-reporting period necessitates close monitoring of expectations and the pricing behavior.

Table 7.2.1.
CBRT Inflation Forecasts and Expectations

	CBRT Forecast	CBRT Survey of Expectations*	Inflation Target**
2015 Year-end	7.9	8.3	5.0
12-month-ahead	6.7	7.3	5.0
24-month-ahead	5.6	6.9	5.0

* October 2015 survey period results.
** Calculated by linear interpolation of year-end inflation targets for 2015- 2016.
Source: CBRT.