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 last quarter of 2014, global financial markets followed a volatile course. The policy divergence among advanced economies grew more evident and oil prices had diverse effects on energy importers and exporters, resulting in countries to differ across the globe. The fall in oil prices affected inflation and the current account outlook favorably, bearing positive effects on risk perceptions pertaining to the Turkish economy. Additionally, quantitative easing packages announced by the ECB and the Bank of Japan accompanied by the Fed’s statement of patience for policy rate hikes limited the adverse effects of these fluctuations on domestic markets.

Inflation

Annual consumer inflation stood well above the target at end-2014 with 8.17 percent (Box 7.1). The quarter-on-quarter fall in inflation by 0.7 points was mostly attributed to receding energy prices amid the fall in international oil prices. Moreover, the slight fall in food inflation due to the partial correction in unprocessed food prices also had a positive effect. In this period, core goods and services, which are among the underlying inflation trend components, also decreased, albeit marginally. Thus, the underlying inflation trend declined more markedly in the last quarter.

Consumer inflation increased by 0.8 points compared to end-2013 readings. This rise was driven by the depreciation of the exchange rate and food price hikes across the year. Furthermore, the elevated course of the services prices also constituted a negative effect.

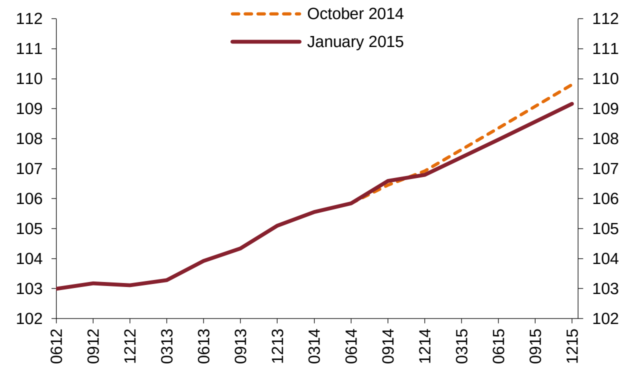
Demand Conditions

In the third quarter of 2014, the GDP increased slowly by registering a 1.7 percent year-on-year growth. Accordingly, the output gap was revised slightly downwards for the second half of 2014 (Table 7.1.1). The sluggish growth in economic activity was mainly driven by the sluggish export growth due to geopolitical factors. Moreover, the agricultural sector registered a lower value added, which also restricted growth. The seasonally adjusted data suggest a strong increase in private consumption expenditures after two consecutive quarters, and private sector investments signaled for recovery. Thus, final domestic demand developments displayed a slight improvement in the third quarter. However, this rise proved milder than expected. In sum, aggregate demand conditions provided higher contribution to the decline in inflation in the third quarter.

In line with the weak course of exports, the annual rate of increase in industrial production slowed in the last quarter compared to the third quarter. Industrial production lagged behind the third quarter readings in the October-November period. Meanwhile, domestic demand indicators exhibited no signs of further acceleration. Against this background, domestic demand continued with a trend of mild recovery, while external demand remained weak in the last quarter of 2014.

External demand developments signal increased downside risks. The persisting slowdown in the global economy and the expected fall in demand from oil exporting countries with reduced oil revenues due to decreasing oil prices may curb external demand. In fact, the export-weighted economic activity index displays some slowdown compared to the previous report. Accordingly, exports may contribute less to growth in the upcoming period (Chart 7.1.1).

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

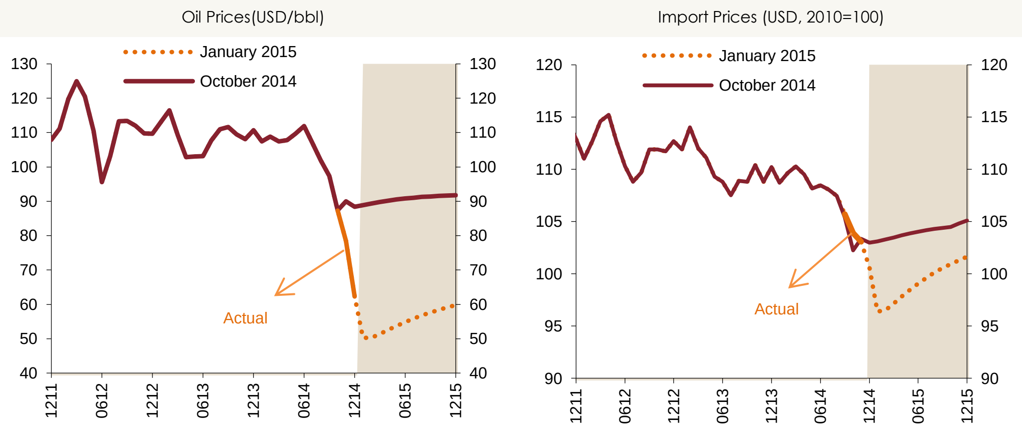


* For methodology, see Box 2.1, Inflation Report 2010-II.
Source: Bloomberg, Consensus Forecasts, CBRT.

Oil, Import and Food Prices

In the last quarter, oil and import prices stood far below the path projected in the October Inflation Report (Chart 7.1.2). Accordingly, the assumptions for average oil and import prices were revised considerably downwards for the medium term (Table 7.1.1). The direct and indirect effects of these developments pulled the end-2015 forecasts down by 0.6 points compared to the previous report. The end-2015 assumption for food prices was maintained as 9 percent.

Chart 7.1.2. Revisions to Oil and Import Price Assumptions*



* Shaded region denotes the forecast.
Source: Bloomberg, TurkStat, CBRT.

Fiscal Policy and Tax Adjustments

Medium-term forecasts are based on the assumption that tax adjustments and administered prices are consistent with inflation targets and automatic pricing mechanisms. The medium-term fiscal policy stance is based on the MTP projections covering the 2015-2017 period. Accordingly, it is assumed that a tight fiscal stance will be implemented and the primary expenditures to GDP ratio will taper off during this period.

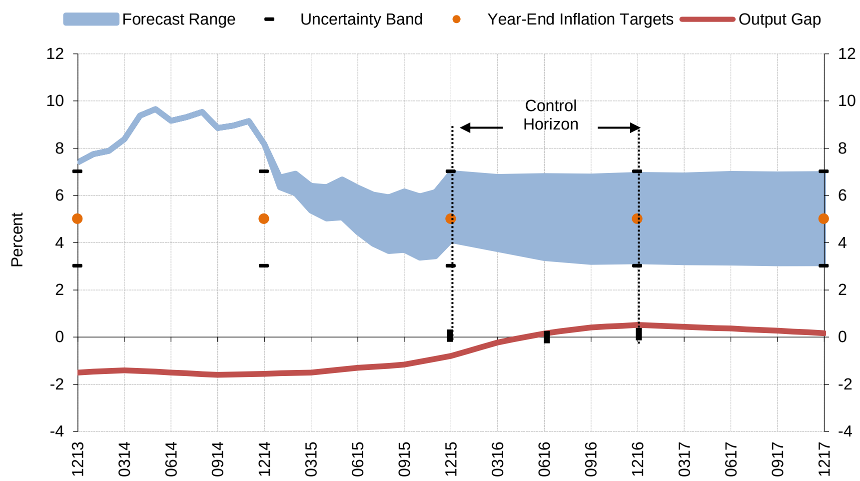
Table 7.1.1. Revisions to Assumptions

		October 2014	January 2015
Output Gap	2014Q3	-1.50	-1.60
	2014Q4	-1.50	-1.55
Food Prices (Year-end Percent Change)	2015	9.0	9.0
	2016	8.0	8.0
	2017	8.0	8.0
Import Prices (Average Annual Percent Change, USD)	2015	-3.3	-7.3
	2016	-	4.5
Oil Prices (Average, USD)	2015	92	55
	2016	-	64
Export-Weighted Global Production Index (Average Annual Percent Change)	2014	1.9	1.9
	2015	2.4	2.0

7.2. Medium-Term Forecasts

Medium-term forecasts are based on the assumption that a cautious approach is adopted for the permanent recovery of the inflation outlook and the tight monetary policy stance will be maintained to keep the yield curve nearly flat. It is further assumed that the annual loan growth rate will continue to post plausible readings in 2015 on the back of the adopted macroprudential measures. Accordingly, inflation is expected to be, with 70 percent probability, between 4.1 percent and 6.9 percent (with a mid-point of 5.5 percent) at end-2015 and between 3.2 percent and 6.8 percent (with a mid-point of 5 percent) at end-2016. Inflation is projected to stabilize around 5 percent in the medium term (Chart 7.2.1).

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



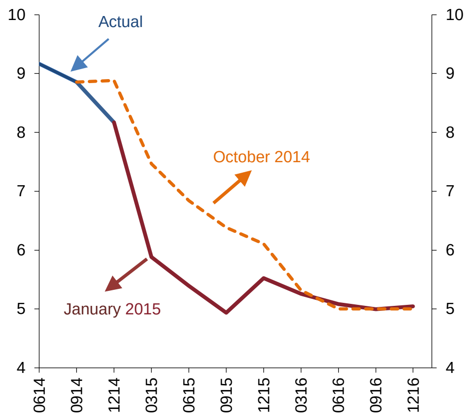
* Shaded region denotes the 70 percent confidence interval for the forecast.
Source: CBRT.

In sum, the end-2015 inflation forecast, which was 6.1 percent in the October Inflation Report, was revised downwards by 0.6 points to 5.5 percent (Chart 7.2.2). This revision stemmed from the decline in commodity prices, particularly oil. On the other hand, the course of inflation in 2015 will be determined by the base effects. Base effects are projected to pull inflation down until August, and push it up for the rest of the year (Box 3.3). Accordingly, the annual inflation will continue to decrease until the third quarter and reach 5.5 percent in the last quarter with a slight uptick due to the base effects.

Output gap forecasts are displayed in Chart 7.2.3. Accordingly, the output gap path was revised slightly downwards compared to the October Inflation Report. This revision was caused by the sluggish course of national income for the third quarter of 2014 and the further negative external demand outlook.

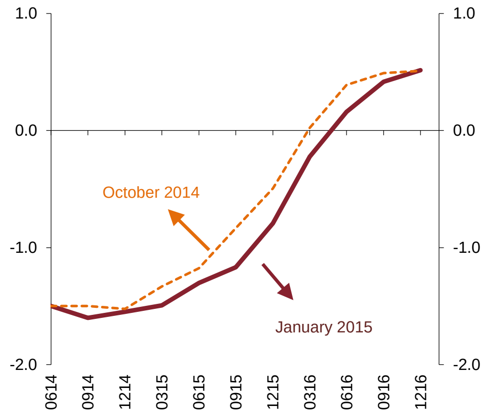
Comparison of October 2014 and January 2015 Inflation Report Forecasts

Chart 7.2.2.
Inflation Forecast
(Percent)



Source: TurkStat, CBRT.

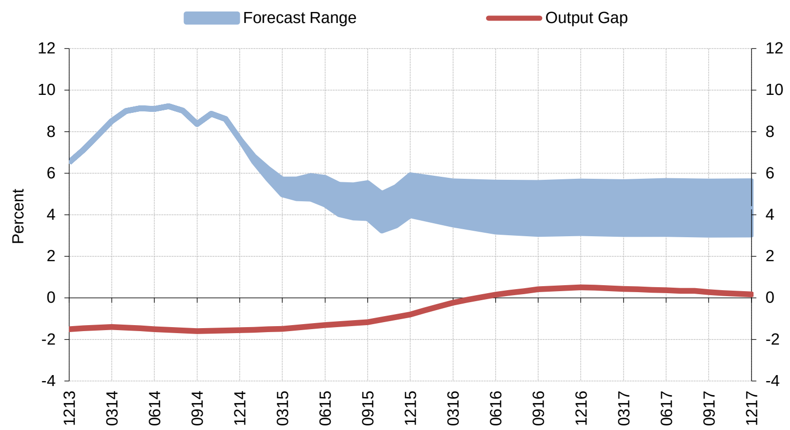
Chart 7.2.3.
Output Gap Forecast
(Percent)



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 also 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 fall in the first three quarters of 2015, but pick up slightly by the final quarter due to base effects and stabilize around 4.5 percent in the medium term.

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



* Shaded region 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, even though the fall in inflation expectations in the inter-reporting period signals a considerable improvement, the fact that the expectations still hover above the inflation target 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	5.5	6.8	5.0
12-month-ahead	5.4	6.8	5.0
24-month-ahead	5.0	6.4	5.0

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

Box 7.1 Reasons for the Changes in end-2014 Inflation Forecasts

Throughout 2014, the main drivers behind the revision to end-2014 inflation forecasts have been commodity and food prices as well as exchange rate developments. The drought in 2014 led to upward revisions in food prices, while uncertainties over global growth and the monetary policies of advanced economies led to heightened volatility in the exchange rate and commodity prices, particularly in oil. Inflation receded to 8.2 percent at end-2014, remaining below the October Inflation Report projection of 8.9 percent.

The CBRT is liable to inform the public by publishing reports as per the inflation targeting regime. Accordingly, this box gives a summary of the revisions to year-end inflation forecasts throughout 2014, along with the underlying reasons.

January Inflation Report

Inflation forecasts were formed under the assumption that the liquidity policy would be tight and the annual credit growth rate would near the reference value of 15 percent as of the second half of 2014 on the back of the adopted macroprudential measures. Inflation was envisaged to remain high in the first half of the year due to tax adjustments and the lagged effects of exchange rate developments. However, inflation was expected to trend downwards starting from the second half of the year with the tapering of these effects. Accordingly, the year-end inflation for 2014 was projected to be 6.6 percent in the January 2014 Inflation Report. Core inflation indicators were estimated to decline gradually starting from the second quarter of 2014.

Table.1. Inflation Report Assumptions for 2014

	January	April	July	October	Realization
Food Prices (Annual Percent Change)	**8.0**	**9.0**	**9.0**	**12.5**	**12.7**
Export-Weighted Global Production Index (Annual Average Percent Change)	2.4	2.3	2.0	1.9	1.8*
Import Prices (Annual Average Percent Change)	**0.0**	**0.5**	**-1.8**	**-2.7**	**-3.1***
Brent Crude Oil Price/bbl (USD)	105	106	108	102	99

* As of January 2015.

April Inflation Report

In the last quarter of 2013, economic activity remained largely consistent with the outlook presented in the January Inflation Report. Final domestic demand accelerated slightly with the public demand, while private demand remained mild. Output gap forecasts were pulled slightly downwards due to tighter financial conditions since the previous reporting period as well as the leading indicators that signal a slowdown in the private final domestic demand.

Food price inflation for end-2014, which was assumed to be 8 percent in the January Inflation Report, was raised to 9 percent due to the unfavorable course of food prices in the first quarter. This revision pushed the 2014 year-end inflation forecast up by 0.3 points. On the other hand, assumptions for average oil and import price increases for 2014 were revised slightly upwards in the April Inflation Report compared to the previous Report and this revision raised the year-end inflation by 0.1 points. The pricing behavior deteriorated in the first quarter of 2014 due to the relatively high course of inflation and adversely affected the underlying inflation, adding around 0.3 points to the year-end inflation forecast.

July Inflation Report

Economic activity in the first quarter proved largely consistent with the projections of the April Inflation Report. The languishing private demand was compensated by the soaring public demand in this period, which resulted in the final domestic demand to remain flat. In view of the leading indicators on production and spending, economic activity in the second quarter was projected to follow the envisaged course in the April Inflation Report.

Consumer price inflation in the second quarter followed a rather negative course due to the rise in food prices, drought and the exchange rate developments, and increased by 0.8 points quarter-on-quarter to 9.2 percent. The second quarter saw higher oil prices and lower import prices than those projected in the April Inflation Report. Therefore, the average oil price assumption for 2014 was revised upwards, while that of import prices was revised downwards. As a result, due to the expected favorable course in import prices, waning cumulative effects of the exchange rate and the sluggish private final domestic demand, inflation was projected to decelerate and hit 7.6 percent at the year-end as envisioned in the April Inflation Report.

October Inflation Report

Economic activity lagged behind the projections of the July Inflation Report in the second quarter of 2014. Final domestic demand continued to slow down in the second quarter, while exports followed a weaker-than-envisaged course amid the developments in global growth. Consequently, the output gap was revised slightly downwards in the October Inflation Report (Chart 1). This revision pulled the end-2014 inflation forecast down by 0.1 points.

The third quarter witnessed lower-than-estimated prices in oil and imports compared to the July Inflation Report, leading to downward revisions in oil and import price assumptions for 2014. These revisions pulled the end-2014 inflation forecast down by 0.3 points (Table 1).

Owing to the high course of food inflation in the third quarter, the year-end food inflation assumption was raised from 9 percent to 12.5 percent. This revision added 0.8 points to the end-2014 inflation forecast. Price increases in electricity and natural gas by 9 percent, which were announced in early October, proved higher-than-projected in the July Inflation Report, leading to an upward revision in the year-end inflation forecast for 2014 by 0.2 points. Meanwhile, the deterioration in the pricing behavior added 0.7 points to the year-end inflation forecast. As a result, the inflation forecast for end-2014 was revised upwards by 1.3 points compared to the July Inflation Report and set as 8.9 percent (Chart 2).

Table 2. Revisions to end-2014 Inflation Forecasts

	January	April	July	October
Inflation Forecast (Percent)	6.6	7.6	7.6	8.9
Contributions to Forecast Revisions (Percentage Point)				
	April-January	July-April	October-July	December-October*
Food	0.3	0.0	0.8	0.0
Import Prices and the Exchange Rate	**0.4**	**0.0**	**-0.3**	**-0.6**
Underlying Inflation	0.3	0.0	0.7	-0.1
Output Gap	**0.0**	**0.0**	**-0.1**	**0.0**
Electricity and the Natural Gas	0.0	0.0	0.2	0.0

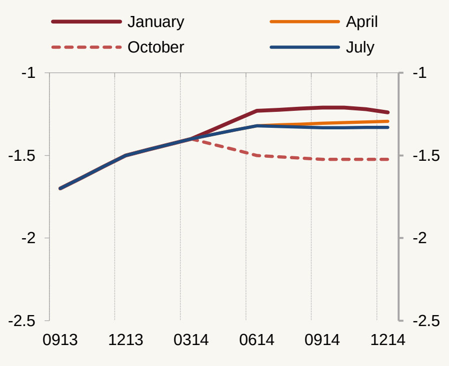
* The difference between forecast and the actual inflation. The year-end inflation for 2014 was realized as 8.2 percent.
Source: CBRT.

Inflation Realization at end-2014

Developments in import prices in the last quarter of 2014 stood out as the main driver of the lower-than-projected inflation. This was especially fuelled by the developments in oil prices. The downward course of import prices accounts for the 0.6 points of the difference between the end-2014 forecast presented in the October Inflation Report (8.9 percent) and the actual inflation of 8.2 percent (Table 2).

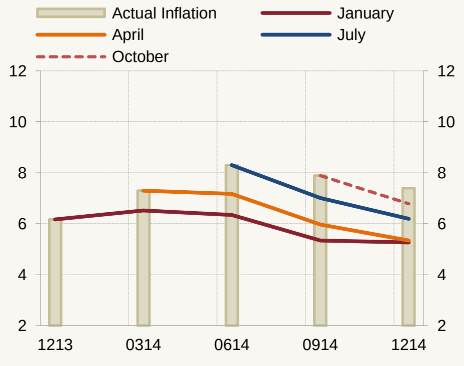
Food and tobacco prices remained largely consistent with projections in the last quarter of the year. On the other hand, the pass-through from import prices to the respective services sectors proved more favorable than anticipated. This indicates that the fall in import prices has started to affect the pricing behavior positively. Thus, the 0.1 points of the difference between the October Inflation Report forecast and the year-end realization was driven by the improvement in the underlying trend.

Chart 1. Revisions to Output Gap Forecasts in 2014



Source: CBRT.

Chart 2. Revisions to Inflation Forecasts in 2014



Source: TurkStat, CBRT.

In sum, the inflation forecast for end-2014 changed across quarters mainly due to food and import prices besides the underlying inflation (Chart 2). In line with its accountability principle, the CBRT has clearly informed the public about the revisions to inflation forecasts accompanied by the reasons via Inflation Reports, thus fulfilling the liability of accountability on a regular basis.