3. Medium-Term Projections

3.1 Current State, Short-Term Outlook and Assumptions

Changes in Key Forecast Variables

In the first quarter of 2024, demand conditions were slightly stronger than projected in the previous Inflation Report, and domestic demand remained resilient. In the first quarter, the contribution of private consumption to growth decreased, while that of net exports increased, signaling a more balanced demand outlook in terms of the composition of growth. Despite pointing to a slowdown compared to the first quarter, demand indicators for the second quarter of the year are still at inflationary levels and above the projections of the previous Inflation Report. Accordingly, the output gap forecasts for the first and second quarters of 2024 have been revised upwards (Table 3.1.1).

Consumer inflation, which fell to 61.8% in July, was well within the forecast range presented in the previous Inflation Report. The contribution of energy prices to inflation went up as projected following the expiry of the free natural gas use for households. Meanwhile, global commodity prices and the exchange rate were on a mild track. Consequently, consumer inflation was in line with the Inflation Report 2024-II projections in the second quarter. As for July, annual inflation was slightly above the mid-point of the previous Report's forecast due to the adjustments in administered prices and taxes as well as the developments in unprocessed food prices, which are largely outside the control of monetary policy (Table 3.1.1).

In the second quarter of 2024, the underlying trend of inflation eased in line with the projections of the previous Inflation Report. Seasonally adjusted data indicate that price increases across all subgroups of the B index slowed in the second quarter of the year. Price increases in core goods weakened due to the mild course of the exchange rate and the slowdown in domestic demand, while price increases in services remained relatively strong, albeit at a slower pace than in the previous quarter. In July, the underlying trend of inflation was mostly in line with the projections. Despite the decline in the 12- and 24-month-ahead inflation expectations compared to the previous reporting period, year-end inflation expectations for 2024 and 2025 are still above the forecasts presented in the previous Inflation Report.

Table 3.1.1: Changes in Key Forecast Variables*

	2024-I	2024-II
Output Gap	3.1	1.5
(%)	(2.8)	(1.0)
Consumer Inflation**	69.8	61.8
(Annual % Change)	(69.8)	(61.2)
B-Index Inflation**	72.7	60.3
(Quarter-End, Annual % Change)	(72.7)	(60.4)

* Figures in parentheses denote values presented in the previous Inflation Report.
** Denotes inflation in April for 2024-I and July for 2024-II.

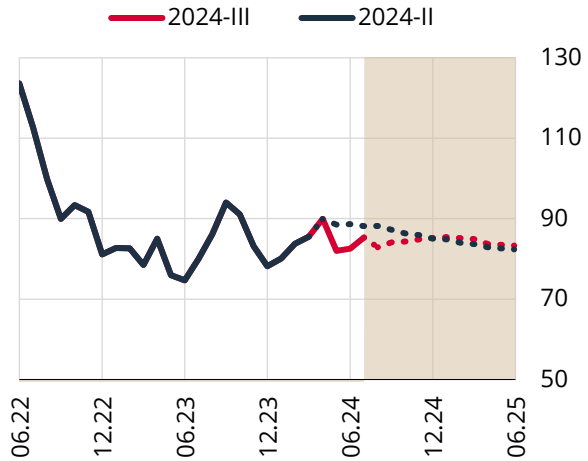
Assumptions for Exogenous Variables

The assumptions for the global growth outlook have been largely maintained compared to the projections of the previous Inflation Report. The indicators for global growth edged up further in the second quarter of the year, led by the services sector. For the rest of the year, growth forecasts for the euro area, one of Türkiye's trading partners, have been revised upwards, while the growth outlook for the countries in the Middle East and Africa deteriorated significantly. Against this background, the assumption for the Export-Weighted Global Growth Index, based on Türkiye's foreign trade partners, has been revised downwards by 0.1 percentage points to 2.0% for 2024 and upwards by 0.1 percentage points to 2.4% for 2025 (Table 3.1.2).

Despite the favorable inflation outlook in advanced economies, central banks continue to communicate that they will be cautious in cutting interest rates. As global labor markets have started to rebalance, price increases in the services sector have eased, while fluctuations in commodity prices and geopolitical developments adversely affect the global disinflation process. The underlying trend of services inflation has recorded a decline, which was more evident in the US data. Accordingly, even though rate-cut pricing regarding the advanced economy central banks has strengthened amid the favorable developments in the inflation outlook, central banks maintain their cautious stance with a data-driven approach. Emerging economies, on the other hand, have been more cautious about rate cuts due to slower convergence of inflation to targets. Against this background, in line with the decline in inflation, interest rate cuts are likely to continue in the coming period in advanced and emerging economies. However, given the current level of global inflation, stickiness and geopolitical risks, the cuts are expected to continue in a manner that will maintain monetary tightness and support disinflation.

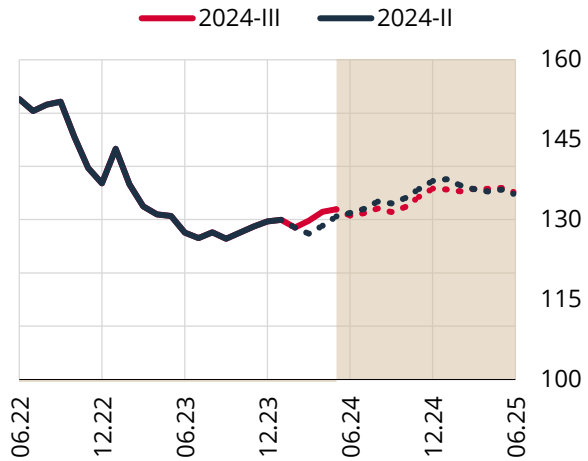
Geopolitical developments and the global growth outlook continued to shape commodity prices. After falling in May, oil prices edged up in June and July, reaching the levels projected in the previous Report. The recent fluctuations in oil prices have been due to geopolitical developments, particularly the tension in the Middle East and Ukraine. The ongoing production cutback by OPEC+ member countries has had a supply-side impact on oil prices as well. Accordingly, while assumptions for the rest of the year are in line with the projections of the previous reporting period, the assumption for the 2024 average oil price decreased from USD 86.4 to USD 84.2 due to the realizations (Chart 3.1.1). On the other hand, prices of industrial metals and agricultural commodities recorded a decline in this period. Thus, the rise in energy commodity prices was offset by non-energy commodity prices, resulting in a minor revision in assumptions for import prices in general (Chart 3.1.2).

Chart 3.1.1: Revisions in Oil Price Assumptions* (USD/bbl)



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

Chart 3.1.2: Revisions in Import Price Assumptions* (Index, 2015=100)



Source: CBRT, TURKSTAT.
* Shaded area denotes the forecast period.

The assumption for 2024 food prices is maintained. Annual food inflation stood at 68.1% in the second quarter of 2024, falling below headline inflation for the first time in many months. In July, the annual change in food prices dropped to 59.9%, in line with the assumptions of the previous Report. Accordingly, the assumption for food price inflation is maintained at 35.5% and 15% for 2024 and 2025, respectively (Table 3.1.2).

Table 3.1.2: Revisions in Assumptions*

	2024	2025
Export-Weighted Global Growth Index (Annual Average % Change)	2.0 (2.1)	2.4 (2.3)
Oil Prices (Average, USD)	84.2 (86.4)	82.9 (82.3)
Import Prices (USD, Annual Average % Change)	0.7 (0.8)	2.8 (2.6)
Food Price Inflation (Year-End % Change)	35.5 (35.5)	15.0 (15.0)

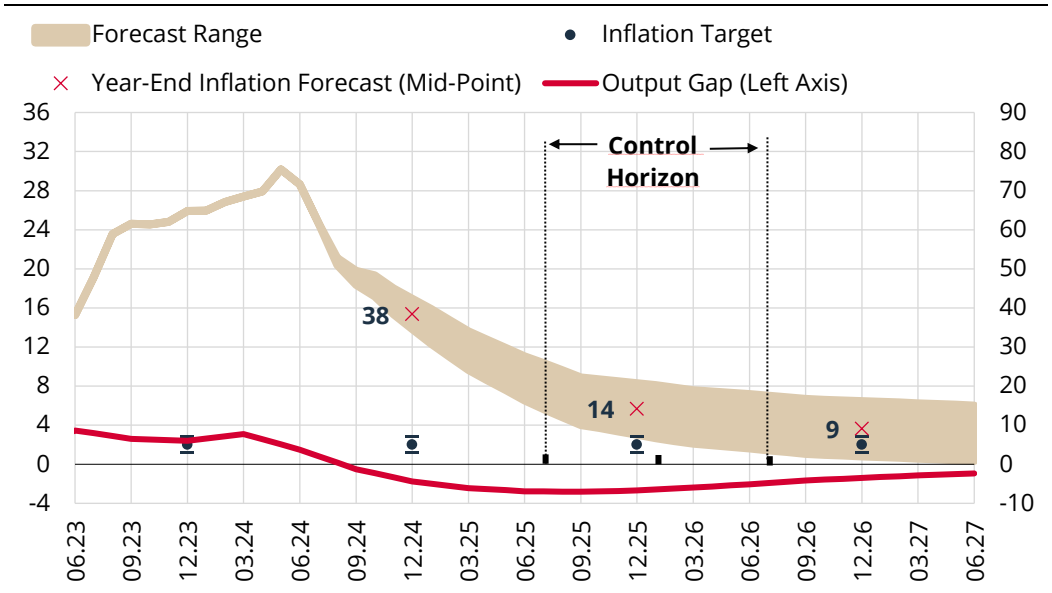
* Figures in parentheses denote values presented in the previous Inflation Report.

The forecasts are based on an outlook in which macroeconomic policies are determined in a coordinated manner focused on disinflation by adopting a medium-term perspective. In this context, it is assumed that fiscal policy will continue to be formed so as to contribute to the rebalancing process in the economy, and that administered prices, borrowing and tax and income policies will be determined to support the disinflation process. In addition, the outlook underlying our forecasts also implies that earthquake-related expenditures will be balanced and spread over a long period of time so as not to adversely affect budgetary discipline and macro financial stability.

3.2 Medium-Term Outlook

Year-end inflation forecasts for 2024, 2025, and 2026 are maintained at 38%, 14% and 9%, respectively. With 70% probability, inflation is projected to be between 34% and 42% (with a midpoint of 38%) at end-2024, between 7% and 21% (with a midpoint of 14%) at end-2025 and to fall to single-digit levels at 9% at end-2026, before stabilizing at 5%, the medium-term inflation target (Chart 3.2.1). Due to increased uncertainty amid recent geopolitical developments and global financial volatility, forecast ranges have been kept the same as in the previous Report. The projections are based on an outlook in which the tight monetary policy stance will be maintained, and the coordination of economic policies will be ensured until a significant and sustained improvement is achieved in the inflation outlook.

Chart 3.2.1: Inflation Forecasts* (%)



Source: CBRT, TURKSTAT.
* Shaded area denotes the 70% confidence interval for the forecast.

The year-end inflation forecast for 2024 is maintained at 38% as the upward and downward effects on forecasts offset each other. In July, consumer inflation stood at 61.8% year on year, remaining within the forecast range projected in the previous reporting period. The slowdown in demand was more limited than projected. Thus, the upward revision to the projected output gap pushed up the inflation forecast. In addition, the less-than-expected decline in inflation expectations also had an upward impact on the inflation forecast. On the other hand, the mild course of the Turkish lira and the downward revisions in assumptions for import prices and administered prices pulled the year-end inflation forecast down. The year-end inflation forecast has been maintained as these upward and downward effects offset each other (Table 3.2.1).

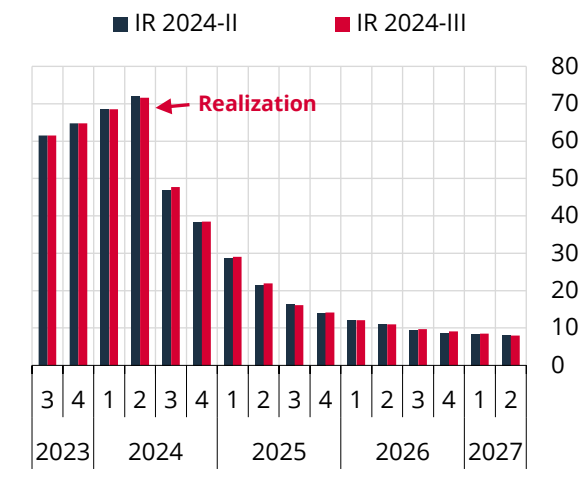
Table 3.2.1: Revisions in Year-End Inflation Forecasts for 2024 and Sources of Revisions

	2024
Inflation Report 2024-II Forecast (%)	38
Inflation Report 2024-III Forecast (%)	38
Forecast Revision Compared to Inflation Report 2024-II	0.0
Sources of Forecast Revision (% Points)	
Inflation Expectations /Underlying Trend	+0.2
Turkish Lira Import Prices	-0.1
Output Gap	+0.2
Administered Prices	-0.3

Source: CBRT.

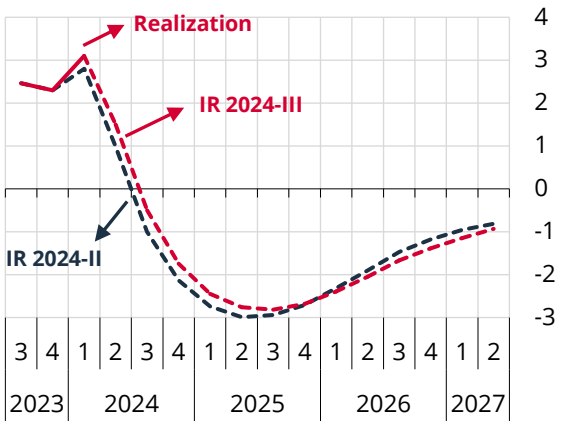
The year-end inflation forecast for 2024 is maintained at 38% (Chart 3.2.2). The slowdown in demand was less pronounced than projected in the previous Inflation Report (Chart 3.2.3). Against this background, the upward revision of the output gap forecast pushed the year-end inflation forecast up by 0.2 percentage points. The revision in TL-denominated import prices, on the other hand, brought the forecast down by 0.1 percentage point. The downward revisions in the assumptions for administered prices had a downward effect on year-end inflation forecasts of 0.3 percentage points (Table 3.2.1). The slower-than-projected decline in inflation expectations had an estimated upward impact of 0.2 percentage points on year-end inflation.

Chart 3.2.2: Inflation Forecast (Quarter-End, Annual, %)



Source: CBRT, TURKSTAT.

Chart 3.2.3: Output Gap Forecast (%)



Source: CBRT.

The forecasts are based on the assumption that there will be heightened uncertainty in global financial markets compared to the previous Inflation Report's projections, while the global growth outlook will remain largely consistent with past projections. Even though the ongoing improvement in the inflation outlook and recent developments regarding services inflation have bolstered expectations for rate cuts by advanced economy central banks, it is expected that a cautious and data-driven stance will be maintained in the coming period. Geopolitical risks, fluctuations in global risk appetite and uncertainty regarding interest rate cuts by advanced economy central banks have led to choppy portfolio inflows into emerging markets. The favorable reserve outlook in the current reporting period contributed to the improvement of Türkiye's risk premium. Therefore, the fact that Türkiye will maintain a tight monetary policy stance until sustained price stability is achieved will help mitigate the potential adverse effects of global financial market volatility on the country's risk premium.

Forecasts rely on a monetary policy that will remain tight until a significant and sustained decline in the underlying trend of monthly inflation is observed, and inflation expectations converge to the projected forecast range. With the contribution of the financial policies that will support and strengthen monetary transmission and the monetary policy communication that emphasizes the decisive tight stance, the convergence of inflation expectations to the Inflation Report forecasts in the short term and to the inflation target in the medium term is critical for ensuring a permanent decline in inflation. Macroprudential policies will continue to be implemented to enhance the effectiveness of monetary transmission, and the tightness in financial conditions will be maintained with the contribution of measures to support the monetary policy. The ongoing slowdown in loan growth will be a much more significant contributor to the moderation in domestic demand, and demand conditions will have a downward impact on inflation in the period ahead. In addition, the forecast is based on an outlook in which coordination among economic policies will be maintained.

The disinflation process under way since June will gain further momentum in the period ahead. Annual inflation, which peaked in May and began to decline in June, ended July at 61.8%, well within the forecast range presented in the previous Inflation Report. In July, monthly inflation increased temporarily due to the adjustments in administered prices and taxes as well as supply-side developments in unprocessed food prices. The third quarter of the year will see a notable decline in annual inflation, owing to the favorable base effect from the last year. On the other hand, increased electricity prices for businesses are likely to push services sector prices up in the coming months through the cost channel. The upward impact of education services on consumer inflation is expected to be significant in September due to private university tuition fees. However, with the maintenance of prudent monetary policy stance, inflation is projected to decline steadily over the rest of the year. The decline in inflation expectations was slightly smaller than projected in the previous Report. The slowdown in demand conditions is anticipated to become more pronounced in the upcoming period due to the maintenance of the tight monetary policy stance and the tightening in financial conditions (Chart 3.2.3). Moreover, the decisive monetary policy stance is expected to bring the underlying trend of monthly inflation down on the back of the moderation in domestic demand, the real appreciation of the Turkish lira and the improvement in inflation expectations, and disinflation will continue to grow stronger for the rest of the year. During this process, the seasonally adjusted average monthly inflation is projected to fall to around 2.5% in the third quarter and to slightly below 1.5% in the last quarter. As the stickiness in services inflation weakens during this process and the tight monetary stance is maintained in line with the targets, the downtrend in the underlying trend of inflation to its historical average will extend into 2025. The coordination of monetary and fiscal policies will contribute to this process.

3.3. Key Risks to Inflation Forecasts and Possible Impact Channels

The outlook underlying the medium-term forecasts presented in the previous section is shaped by the assessments and assumptions of the Monetary Policy Committee. However, the inflation outlook may be subject to various risks associated with these factors, leading to a divergence in the monetary policy stance projected in the baseline scenario. The risks that are identified in the baseline scenario and have the potential to change the outlook are listed below and summarized in Table 3.3.1.

The ongoing stickiness in services prices poses an upside risk to consumer inflation. The prevailing price-setting behavior in the services sector leads to significant inertia, a protracted impact of shocks on inflation and causes price increases in this sector to be inconsistent with the disinflationary path. Price increases in services slowed in the second quarter compared to the first quarter yet remained relatively strong. In this

period, rents, communication and restaurants-hotels stood out as subgroups with strong price increases. In September, education services are likely to push consumer inflation up due to private university tuition fees. The strong course of services inflation continues to play an important role in the disinflation process by keeping the upside risks to consumer inflation alive.

Food prices displayed a mild course in July. However, above-average seasonal temperatures and supply-side factors may pose upside risks to prices in the food group, especially for fresh fruits and vegetables.

Inflation expectations are on the decline but remain above the Inflation Report forecasts. Inflation expectations of market participants, firms, and consumers play a key role in price-setting behavior, portfolio preferences, and consumption/credit demand. High inflation expectations may pose an upside risk to the consumption trend and credit demand. Thus, domestic demand may build resistance, and the process of moderation may be disrupted. According to the Survey of Market Participants (SMP), inflation expectations have recently declined across all time horizons, yet the current levels are still above the Inflation Report forecast range and continue to pose an upside risk to the inflation forecasts. Firms' and consumers' inflation expectations, on the other hand, remain high and are more sensitive to inflation and exchange rate realizations (Box 3.1). Maintaining inflation expectations in line with the CBRT's inflation forecasts in the short term and inflation targets in the medium term is critical to the disinflation process. This necessitates keeping a cautious and decisive stance in monetary policy.

Domestic demand weakened in the second quarter of the year yet remains at inflationary levels. Recent indicators suggest that domestic demand, which was strong in the first quarter of 2024, weakened to some extent in the second quarter. However, the two holidays and bridge days make it challenging to ascertain the extent of the demand slowdown in the second quarter. The output gap remained positive in the second quarter, and demand conditions were inflationary. Nevertheless, the moderation in domestic demand is expected to become more pronounced in the second half of the year due to the lagged effects of the current tight monetary policy and the ongoing tightening in financial conditions. The dampening effects of monetary tightening on domestic demand may not be immediate enough, and this may pose upside risks to forecasts.

Despite the more favorable course of commodity prices compared to the previous reporting period, the volatility stemming from geopolitical developments poses an upside risk to inflation forecasts. Non-energy commodity prices declined compared to the previous reporting period. On the other hand, oil prices picked up again. The ongoing geopolitical tensions in Russia-Ukraine, the Middle East and the Red Sea as well as the decisions of the OPEC+ member countries to cut production, create upward supply pressures on oil prices. The impact of these developments on transportation and input costs is being monitored. Geopolitical developments may also influence risk perceptions towards Türkiye through foreign demand and export revenues.

The coordination of monetary and fiscal policies is of utmost importance for the disinflation process. The incomes policy may affect inflation and expectations through the production cost and demand channels. Adjustments in administered prices and taxes that are not in line with the projected disinflation path may put pressures on inflation. Accordingly, the steps to be taken to increase the tax collection efficiency and the share of direct taxes in total tax revenues will support the disinflation process. In order to achieve the projected disinflation path, it is vital to take into account the CBRT's inflation forecasts in relation to the adopted policies, particularly in regard to the adjustments in administered prices and taxes, and to support the tight monetary policy stance with a prudent fiscal policy.

Table 3.3.1: Key Risks to Inflation Forecasts and Possible Impact Channels*

Risk	Evaluation of Risks Compared to the Baseline Scenario and Possible Effects on Inflation (↑ | ↔ | ↓)	Tracked Indicators
Inertia in services inflation	• The ongoing stickiness of services prices keeps upside risks to inflation alive. ↑	• Key inflation indicators • Inertia in services inflation
Course of food prices	• Temperatures above seasonal norms and supply-side developments may exert upward pressure on unprocessed food prices. ↑	• Prices of fresh fruits and vegetables
Inflation expectations not converging to the projected forecast range	• Despite the improvement in medium-term inflation expectations, the elevated level of expectations keeps upside risks to inflation forecasts alive. ↑	• Key inflation indicators • Indicators for inflation expectations • Sectoral inflation expectations • Distribution of inflation expectations • Inflation uncertainty indicators • Survey and market pricing-based inflation and exchange rate expectations
Demand conditions	• Domestic demand remained inflationary in the second quarter, albeit at a slower pace, which continues to exert demand-side pressure on inflation. ↑ • Rebalancing in domestic demand is expected to become more evident with the contribution of tight monetary policy and tight financial conditions. ↓	• Domestic demand indicators • Retail Sales Volume Index and Trade Sales Volume Index • Interviews with firms and survey data • Credit card spending • White goods and automobile sales
Geopolitical developments and the course of commodity prices	• The ongoing geopolitical tensions in Russia-Ukraine and the Red Sea and the continued production cuts by OPEC+ countries pose upside risks to oil prices from the supply channel. ↑ • Oil and commodity prices are likely to remain volatile due to geopolitical risks. ↑	• Crude oil prices and demand-supply balance • OPEC+ decisions • Indicators for domestic energy market • Administered prices

Risks to the effectiveness of coordination between monetary and fiscal policies	• Lack of coordination between monetary and fiscal policies may pose risks to inflation and the moderation in domestic demand.	↑	• Adjustments in administered prices and taxes • Developments in tax revenues and public expenditures • MTP and fiscal policy measures • Budget and public debt stock indicators • Structural budget balance forecasts • Share of direct taxes in total taxes
	• Introducing reforms in direct taxes and/or tax collection efficiency may reduce the need for indirect taxes, thereby having a downward impact on prices.	↓	
	• Administered price adjustments being inconsistent with the projected downward path in inflation may pose an upside risk to inflation.	↑	

* Each risk row in the table indicates the possible channel and the direction for the change in inflation forecasts in case the mentioned risk materializes. The signs ↑, ↓ indicate that the risk to the inflation forecast is upward and downward, respectively. The ↔ sign is used when the net impact on the inflation forecast is not completely clear. The indicators through which the risk is monitored are also listed in the right column.

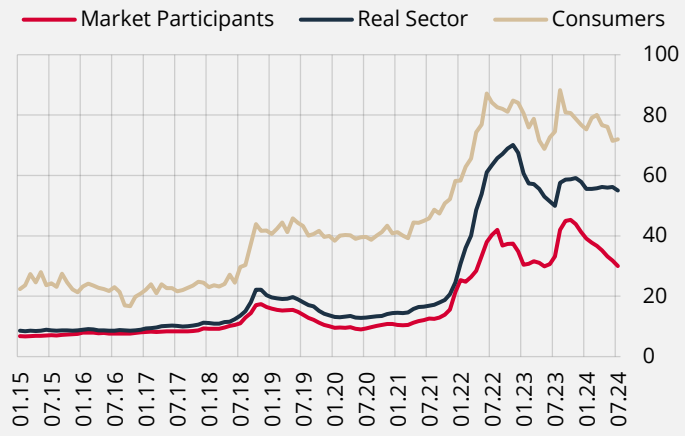
Box 3.1

Determinants of Sectoral Inflation Expectations

Inflation expectations play a critical role in decision-making processes by reflecting economic agents' estimates of future price increases. Therefore, inflation expectations are of great importance for central banks' policy decisions and the effectiveness of the monetary transmission mechanism. Expectations of different economic agents (firms, consumers/households, market participants) affect the economy through different channels. Firms determine their pricing, wage-setting, inventory holding and investment strategies in line with their inflation expectations. So, inflation expectations of firms are of great importance in terms of the future course of inflation, since they also have price-setting power. Another important expectation for monetary policy is the inflation expectations of consumers. Consumer expectations are watched closely as they matter for labor force participation, portfolio preferences and consumption-savings decisions. For instance, high inflation expectations of consumers may have a direct inflationary impact on the aggregate demand level in the economy by bringing demand forward. Finally, inflation expectations of market participants can be influential on pricing in financial markets, as they reflect the predictions of decision-making experts, especially in the field of finance.

The CBRT compiles the inflation expectations of different economic agents for the next 12 months through its SMP and the BTS, and the Consumer Tendency Survey (CTS) conducted in cooperation with TURKSTAT. In this context, in June 2024, in addition to the inflation expectations of market participants that it is already publishing, the CBRT started to share real sector and household inflation expectations with the public by combining them under the Sectoral Inflation Expectations. Chart 1, which compares sectoral expectations, shows that even in periods of low inflation, household expectations are higher than those of firms and market participants. While the expectations of firms were more moderate than those of households and at similar levels to those of market participants, they are significantly above the expectations of market participants after 2022. The exchange rate increases in 2018 and 2021, and the subsequent high course of inflation have led to a deterioration in the expectations of all sectors. On the other hand, with the monetary tightening process that started in June 2023, expectations started to decline gradually despite the rise in inflation, unlike previous periods. This divergence was driven by the tight monetary policy stance as well as the forward guidance that this stance will be maintained until a significant and permanent fall in inflation is achieved. Following the announcement of the lower-than-expected June inflation data, 12-month-ahead inflation expectations fell to 30% among market participants and 55% in the real sector in July. Consumer expectations increased slightly in July, reaching 72%. In this framework, in order to understand the reasons behind the divergence in inflation expectations of different sectors, this Box analyzes the sensitivity of revisions in inflation expectations of economic agents to key macroeconomic variables.

Chart 1: 12-Month-Ahead Inflation Expectations (%)



Source: CBRT, TURKSTAT.

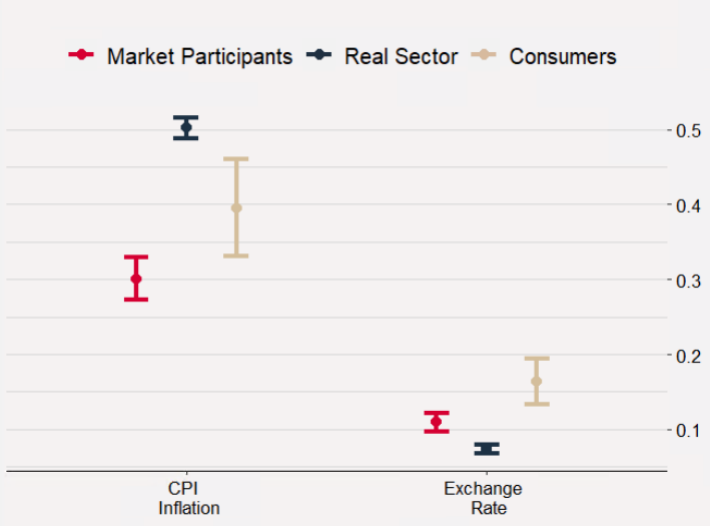
Gülşen and Kara (2021) find that inflation realizations and exchange rate changes have an impact on market participants' inflation expectations. Accordingly, in order to measure the sensitivity of sectoral inflation expectations to key macroeconomic variables such as inflation and exchange rates, econometric analyses were conducted using micro data from the three aforementioned surveys (SMP, BTS and CTS) in panel data format. The cross-sectional unit of the panels is the market participant in the SMP and the firm in the BTS. Since CTS is not applied to a fixed group of consumers, the pseudo-panel method is used for this data. In this method, consumers are grouped according to their gender, age, income and education, and the cross-sectional unit is formed over these groups. The inflation expectations of the group are obtained by averaging the expectations of consumers within this group. In all sectors, the dataset covers the January 2015 -July 2024 period.

In order to measure the sensitivity of the change in expectations to macroeconomic variables, Model 1 below is estimated using the 12-month-ahead annual consumer inflation expectation obtained from each survey. In the model, $\Delta\pi_{i,t|t+12}^{expectation}$ denotes the change (update) in the 12-month-ahead annual CPI inflation expectation of respondent *i* in month *t*. The one-month lagged value of monthly CPI inflation ($\Delta\pi_{t-1}^{CPI}$) and the monthly exchange rate change ($\Delta USD/TRY_t$) are used as explanatory variables. To control for unobservable survey respondent-specific fixed effects (μ_i), respondent fixed effects are included in the model for the SMP and the BTS, and group fixed effects are included for the CTS. The coefficients β_1 and β_2 indicating the sensitivity to monthly inflation realization and USD/TRY exchange rate change are shown in Chart 2 with 90%% confidence intervals for different sectors.

$$\Delta\pi_{i,t|t+12}^{expectation} = \beta_0 + \beta_1\Delta\pi_{t-1}^{CPI} + \beta_2\Delta USD/TRY_t + \mu_i + \varepsilon_{it} \qquad \text{(Model 1)}$$

All six coefficients estimated for market participants, firms and consumers are statistically significant at the 90%% level. The results suggest that all three groups are sensitive to realized inflation when forming their 12-month-ahead expectations. A sectoral comparison reveals that firms are most sensitive to the realization of monthly inflation, while consumers are most sensitive to the exchange rate. Professionals' sensitivity to both macroeconomic variables is more limited compared to other sectors. This suggests that consumers are more sensitive to the exchange rate that they observe on a daily basis in expectation formation.

Chart 2: Sensitivity of Expectations to Macroeconomic Variables* (Model 1 Results)



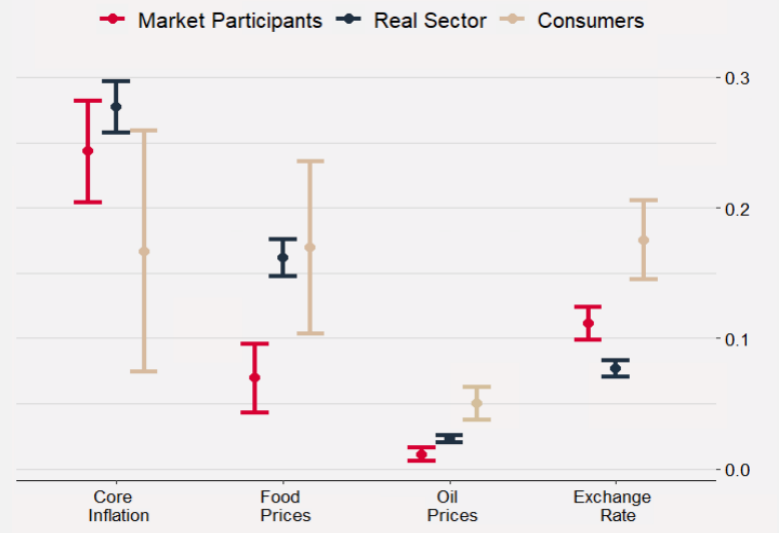
Source: CBRT.
* For each sector, the mid-point of the bars represents the estimated coefficient, and the length of the bars represents the 90% confidence interval.

D'Acunto et al. (2019) show that consumer expectations are more sensitive to prices of products that are frequently observed in daily life such as groceries and gasoline. Similarly, Angelico and Di Giacomo (2019) state that past shopping experiences are effective in determining consumers' inflation expectations. Based on these studies, Model 2 is estimated to measure the sensitivity of expectations to different price developments in more detail. In this model, instead of monthly CPI inflation, monthly change in C index ($\Delta\pi^{C}_{t-1}$), monthly food inflation ($\Delta\pi^{Food}_{t-1}$) and monthly change in Brent[1] oil price in USD ($\Delta Brent_{t-1}$) are included. The estimation results of Model 2 coefficients are presented in Chart 3.

$$\Delta\pi^{expectation}_{i,t|t+12} = \alpha_0 + \alpha_1\Delta\pi^{C}_{t-1} + \alpha_2\Delta\pi^{Food}_{t-1} + \alpha_3\Delta Brent_{t-1} + \alpha_4\Delta Dollar/TL_t + \mu_i + \varepsilon_{it} \qquad \text{(Model 2)}$$

The results suggest that market participants and firms attach more importance to core inflation than consumers when forming their inflation expectations. Consumers' sensitivity to core inflation is positive and significant but quite limited. On the other hand, food inflation, Brent oil and the USD/TRY exchange rate are more influential on consumers' forecast revisions, while their impact on professionals' forecasts is limited.

Chart 3: Sensitivity of Expectations to Macroeconomic Variables* (Model 2 Results)



Source: CBRT.
* For each sector, the mid-point of the bars represents the estimated coefficient, and the length of the bars represents the 90% confidence interval.

The backward-indexation behavior in expectations updated by market participants and firms is mostly based on core inflation, which reflects the underlying trend of inflation. On the other hand, consumers form their expectations by looking relatively less at core inflation and more at food prices, Brent oil prices and the exchange rate. This underlines the importance of frequently consumed products, such as food products and gasoline, which are affected by Brent oil prices, and the exchange rate, the price of which can be observed daily, in consumers' expectation formation. Moreover, the high sensitivity of consumer inflation expectations to food and gasoline prices, which are highly volatile and relatively outside the monetary policy sphere of influence, leads to a weakening in monetary transmission through the expectations channel.

In conclusion, the indexation behavior linked to the realizations in macroeconomic variables plays a significant role in determining inflation expectations in all sectors. While this behavior is mostly driven by core inflation for market participants and firms, it is mostly driven by food and energy prices and

[1] Due to the strong relationship between gasoline prices in Turkish lira and exchange rates, Brent oil prices were added to the model in order to capture the effect of gasoline prices.

exchange rate developments for consumers. Reduced sensitivity to past macroeconomic variables in expectation formation and more attention to the CBRT's forecasts with a forward-looking approach will have an impact on the costs of the disinflation process. Moreover, the decline in annual inflation and the stabilization in exchange rates are expected to have a favorable impact on inflation expectations of all economic agents in the upcoming period. The course of inflation expectations, which are closely monitored, will be decisive for the monetary policy outlook in the upcoming period.

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