3. Medium-Term Forecasts

3.1 Current State, Short-Term Outlook and Assumptions

Changes in Key Forecast Variables

Economic activity remains robust, supported by domestic demand. In the first quarter of 2023, the services sector was the main driver of the 4% annual GDP growth, while weak external demand and the temporary loss of production due to the earthquake limited the industrial sector's contribution to growth. The final domestic demand played a driving role in the first quarter through private consumption and investment spending, which increased on the back of strong credit impulses. Data for the second quarter of 2023 suggest that the economic activity maintained its uptrend supported by domestic demand and that the negative effects of the earthquake on production activity were largely compensated. Credit growth, which accelerated compared to the previous reporting period driven by retail loans, remained robust in the second quarter with the contribution of credit card spending. Financial conditions continued to support domestic demand in the second quarter.

Annual consumer inflation, which was 38.2% in the second quarter, continued to decline as projected, but remained 1.5 points above the upper end of the forecast range presented in the previous Inflation Report. Although some exogenous assumptions such as the global growth, crude oil prices, and external import prices were in line with projections in the previous Inflation Report period, the rise in food prices exceeded forecasts. The rise in food prices was driven by the higher-than-expected increase in unprocessed food prices due to supply-side factors. In addition, prices of alcoholic beverages and tobacco products rose more than expected in the second quarter due to producer-induced price increases in tobacco products in June. In June, the effects of the rise in exchange rates started to feed into consumer inflation, particularly through consumer durables. Moreover, high price increases were observed in the services group amid strong domestic demand, while developments such as backward indexation and supply-demand mismatches in related markets stand out as factors delaying and limiting disinflation. On the other hand, the free supply of natural gas for households led to a higher-than-expected decline in energy prices. Against this background, the underlying trend of inflation increased in the second quarter, and annual inflation in the B index rose more than forecasts (Table 3.1.1). The recent depreciation of the TL, elevated exchange rate volatility and rising labor costs are expected to put an upward pressure on inflation. It should be noted that these effects are reflected on consumer inflation faster especially at times of strong domestic demand.

Table 3.1.1: Changes in Key Forecast Variables*

	2023-II
Consumer Inflation (Quarter-End, Annual % Change)	38.2 (34.3)
B-Index Inflation (Quarter-End, Annual % Change)	46.6 (41.7)

* Figures in parentheses are from the previous Inflation Report.

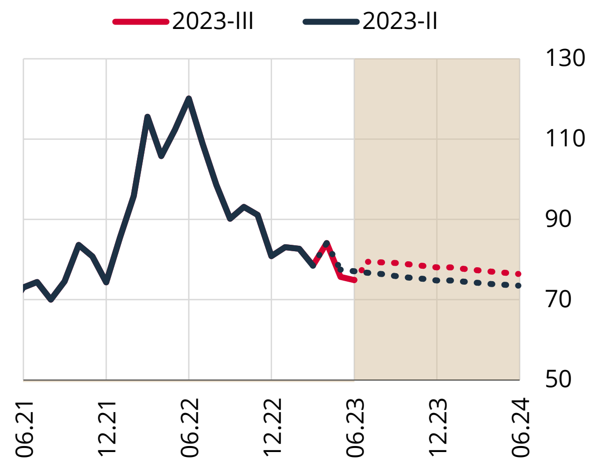
Assumptions on Exogenous Variables

The global demand outlook remained flat despite the tightening in financial conditions, and expectations that economic growth will continue in 2023 were maintained, albeit at a slower pace. The improvement in global supply conditions continued in this period as well and supported the growth outlook. Financial conditions are projected to tighten further due to the resilient outlook in demand conditions and the ongoing tightness in the labor market. The composite PMI index, which rose to 54.3 on a quarterly basis, indicates that global economic activity has strengthened compared to the previous reporting period, while the widening gap between services and manufacturing is closely monitored. Accordingly, the annual average change in the Export-Weighted Global Growth Index for 2023, which reflects the external demand outlook for the Turkish economy, has been slightly revised down to 1.7%, while the growth assumption for 2024 has been revised downwards from 2.4% to 2.1%.

Despite the downtrend in global inflation, core inflation remained high. In the emerging economies monitored, compared to December 2022, headline inflation fell by 3.5% to 5.9%, while core inflation decreased by 1.6% to 6.7%. In advanced economies, core inflation remained flat at 5%. Headline inflation declined on the back of energy and commodity prices, while core inflation decreased owing to strong demand conditions in the services sector, yet, remained above historical averages. Improving supply conditions and waning supply-demand mismatches were instrumental in the improvement in the global inflation outlook.

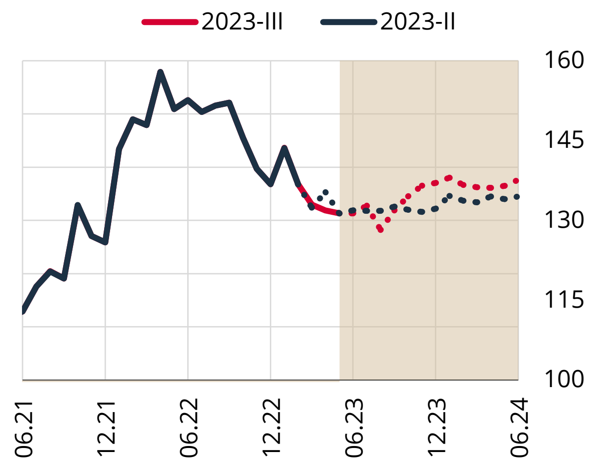
The downtrend in commodity prices continues due to the normalization in global demand conditions and the improvement in supply conditions. Compared to the previous reporting period, the headline commodity index posted a widespread decline, yet the index remains 13.8% above the average of the last decade. The normalization of the demand outlook in consumer countries, particularly in China, exerts a downward pressure on oil prices, while supply conditions are expected to be the determining factor on prices. Accordingly, the average oil price assumption for 2023 was revised upwards from USD 78.1 to USD 79.4, and to USD 76.3 for 2024 (Chart 3.1.1). Although similar dynamics were also at play for the annual percentage change of the general level of import prices, assumptions for 2023 were slightly revised downwards to -9.5%. The assumption for a rise for 2024 was raised from 0.4% to 2.4% (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.

Assumptions for food prices for 2023 have been revised upwards. In the second quarter of 2023, despite the decline in global food prices, the uptrend in food prices continued due to persisting domestic supply-side problems and inefficiencies in the market structure. Although the uptrend was mostly driven by the unprocessed food item, which is affected by supply-side factors beyond the control of monetary policy, exchange rate developments and wage adjustments are projected to exert upward pressure on sub-items of food prices through demand and cost channels. In the upcoming period, food prices inflation is assumed to end 2023 at 61.5% and 2024 at 35.0% (Table 3.1.2).

Table 3.1.2: Revisions in Assumptions*

	2023	2024
Export-Weighted Global Production Index (Annual Average % Change)	1.7 (1.6)	2.1 (2.4)
Oil Prices (Average, USD)	79.4 (78.1)	76.3 (73.6)
Import Prices (USD, Annual Average % Change)	-9.5 (-9.8)	2.4 (0.4)
Food Prices (Year-End % Change)	61.5 (27.9)	35.0 (11.5)

* Figures in parentheses are from the previous Inflation Report.

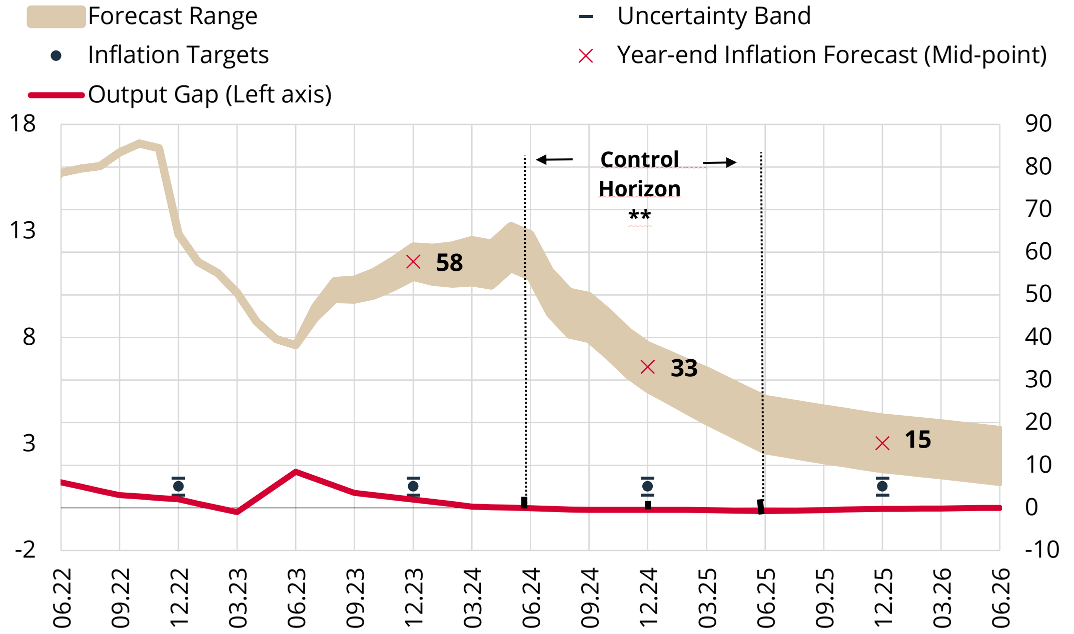
3.2 Medium-Term Outlook

Inflation is projected to be 58% by the end of 2023, to fall to 33% by the end of 2024 and sustain the downtrend by receding to 15% by the end of 2025. Medium-term forecasts are based on a framework in which monetary stance is tightened to achieve the 5% inflation target. Given the current inflation outlook and upside risks, it will take some time to reach the 5% inflation target. Factors such as the rise in exchange rates, price rigidities in the services sector, wage adjustments, expectations and the time required for pricing behavior to improve will cause inflation to rise especially in the rest of 2023, and the downtrend in inflation will start in 2024. The revision in forecasts in the current reporting period has been higher than in other reporting periods, and sources of the revision will be discussed in detail in the sources of revisions section.

While revising inflation forecasts, forecasts were based on a monetary stance consistent with a monetary tightening process, the steps of which will be gradually strengthened as and when needed. It was assessed that the monetary transmission mechanism will become more effective when the monetary tightening is accompanied by a gradual simplification process of the existing micro and macroprudential framework. A monetary policy stance, which will not allow an unbalanced demand formation that would put pressure on price stability, will help bring the underlying trend of inflation down, anchor expectations and contain the deterioration in the pricing behavior. The forecasts are based on a framework in which the growth rate and composition of credits will be shaped in a way to ensure price and financial stability, so that financial conditions will move in line with the envisaged disinflation process. The strong policy coordination and monetary policy framework as well as increased predictability and transparency will lower the country risk premium. The decrease in the risk premium is expected to support the disinflation process both through the expectations channel and through the channel of strengthening capital flows towards Türkiye.

Accordingly, with 70% probability, inflation is projected to be between 54% and 62% (with a mid-point of 58% at end-2023); between 28% and 38% (with a mid-point of 33%) at end-2024; come down to 15% at end-2025, and converge to the 5% target in the medium term and stabilize thereafter (Chart 3.2.1).

Chart 3.2.1: Inflation Forecasts (%)



Source: CBRT, TURKSTAT.
* Shaded area denotes the 70% confidence interval for the forecast.
** The control horizon denotes the period elapsed between a change in monetary policy and the final impact observed on inflation.

Table 3.2.1: Revisions in Year-End Inflation Forecasts for 2023 and Sources of Revisions

	2023	2024
Inflation Report 2023-II Forecast (%)	22.3	8.8
Inflation Report 2023-III Forecast (%)	58.0	33.0
Forecast Revision as Compared to 2023-II	35.7	24.2
Sources of Forecast Revision (% Points)		
Turkish Lira-Denominated Import Prices (Including the Exchange Rate, Oil and Import Prices)	7.5	8.3
Output Gap	1.3	0.4
Food Prices	8.5	6.0
Administered Prices and Unit Labor Costs	7.5	3.6
Forecast Deviation and Change in Forecasting Approach	10.9	5.9

Source: CBRT.

The end-2023 inflation forecast was revised upwards from 22.3% to 58%. The revision was mainly due to the forecast deviation and the change in the forecasting approach, which pushed end-2023 inflation forecasts up by 10.9 points. The main reason for this divergence is that, in the previous Inflation Report period, it was emphasized that the inflation forecasts paths were intermediate targets, whereas, in the current Report, the CBRT's technical forecasts are taken into account. TL-denominated import prices, which include cumulative effects of exchange rates as well as the effects of revisions in oil and import prices, raised end-2023 inflation forecasts by 7.5 percentage points. In the upcoming period, increases in taxes and fees, particularly in VAT, transfer expenditures to households, minimum wage and other salary adjustments are expected to have a significant impact on consumer inflation, and together with other administered prices, they are estimated to push the year-end inflation forecast up by 7.5 percentage points. The direct impact of stronger-than-expected demand conditions on inflation forecasts was 1.3 points upwards. Moreover, the revision in the food prices assumption pushed inflation forecasts up by 8.5 points. The strong revision in the food prices assumption was driven not only by the unprocessed food item, which remained high due to supply-side factors, but also by the processed food item, which is projected to trend upwards due to exchange rate developments and wage adjustments (Table 3.2.1).

The end-2024 inflation forecast was revised upwards from 8.8% to 33%. Compared to the previous reporting period, the most important source of revision was the revision in TL-denominated import prices. These revisions pushed end-2024 inflation forecasts up by 8.3 points. The change in the inflation forecast and forecasting approach drove inflation forecasts up by 5.9 points, while the revision in food prices contributed 6.0 points. Administered prices and unit labor costs increased2024 inflation forecasts by 3.6 points. The revision in output gap forecasts, on the other hand, added 0.4 points to the year-end inflation forecast.

Forecasts are based on an outlook in which global economic activity remains flat compared to the previous reporting period and global inflation remains high despite some slight slowdown. Central banks of both advanced and emerging economies continue their tightening cycles. The tightening in monetary policies has started to affect financial conditions, and central banks' emphasis on tightening credit conditions has strengthened. Leading indicators suggest that the global economic activity outlook will continue in 2023, albeit at a slower pace. Compared to the previous reporting period, growth forecasts for Türkiye's main export partners were revised moderately upwards for 2023 and downwards for 2024. The global demand outlook continues to be influential on commodity prices, while the improvement in supply conditions and indicators for supply chains continue. Risk perceptions, which had increased following the banking crisis in March, have normalized and risk appetite has recently recovered.

Inflation, which is expected to rise due to cost pressures, is projected to converge gradually first to its long-term average and then to the medium-term target as the lagged effects of monetary tightening become instrumental on the real and financial economy. The depreciation of the TL and recent wage adjustments keep upside risks to inflation alive for the rest of 2023. Moreover, the credit expansion in the first half of the year and the pressures on demand from strengthening tourism activities in the second half, the current course of inflation expectations and the deterioration in pricing behavior stand out as upside risks to the inflation outlook. In this respect, the simplification process of micro and macroprudential framework, which will be carried out in coordination with the gradually strengthened monetary tightening, will make market mechanisms more effective and support the monetary transmission mechanism. In this context, a monetary policy outlook is taken into account in which macrofinancial stability will support price stability. With the monetary tightening and micro and macroprudential simplification, which have been implemented decisively to restore the deteriorated price stability, the medium-term inflation target of 5% is projected to be achieved.

Analyses of the effects of the monetary tightening on macroeconomic and financial conditions support further steps to be taken decisively in the disinflationary process, if necessary. Stress tests conducted against possible scenarios of interest rate hikes for disinflation show that the banking sector displays a resilient outlook. The fact that about half of the sector's TL loans and securities are at floating rates, funding maturities have been extended owing to FX-protected deposit facility and maturities of fixed-rate TL loans have become shorter, reduce the sector's vulnerability to interest rate changes. The capital outlook of the banking sector, which is well above the legal limits, is considered to be sufficient to absorb losses that may stem from possible interest rate changes. On the other hand, despite the short-term inflationary effects, the supplementary budget law enacted in July demonstrated a decisive stance that fiscal discipline, which serves as an important anchor in the disinflationary process, will be maintained. Accordingly, it is assumed that fiscal discipline will be maintained and public finances will support the disinflationary process during the tightening process despite the high public costs due to earthquake expenditures and arrangements regarding salaries of civil servants and pensioners.

3.3. Key Risks to Inflation Forecasts and Possible Impact Channels

Cost pressures on producer prices have increased in the current reporting period. Increases in exchange rates and wages stand out as the main factors that raised cost pressures. The ongoing increase in domestic food prices has an upward effect on inflation forecasts. In addition, as OPEC+ output is still below country quotas, supply-side pressures on oil prices persist. However, with easing disruptions in global supply chains and moderate freight costs, the positive outlook for international prices strengthened. The disruptions seen in domestic supply chains after the earthquake were largely offset in the second quarter. Moreover, international energy and commodity prices are still on a decline, albeit at a somewhat slower pace. These developments lead to an easing in energy and commodity-driven cost pressures despite higher exchange rates.

Although global inflation continued to decline in the current reporting period, it remained at historic highs. Furthermore, the elevated levels of core inflation rate and inflation expectations cause global inflation to outpace central banks' targets. This prompts central banks to strengthen their rhetoric on tightening financing and credit conditions, thereby continuing to exert pressure on monetary policies and global financial conditions.

Easing concerns regarding the banking sector in advanced economies helped global risk appetite recover. The volatility in financial markets decreased on the back of reduced risks of a banking crisis, which strengthens portfolio flows towards emerging economies. The continuation of portfolio flows to emerging economies at a stronger pace amid easing concerns over markets will alleviate pressures on exchange rates and have a downward effect on forecasts.

Expectations regarding the global growth outlook for 2023 remain flat compared to the previous reporting period. Despite the tightening in financial conditions, strong demand conditions and the continued improvement in global supply conditions play an important role in maintaining the global growth trend. Global growth expectations pose an upside risk to forecasts through external demand channel. Meanwhile, the ongoing moderate course of energy and commodity prices poses a downside risk to inflation forecasts through import prices.

The fact that domestic demand remains strong compared to external demand poses an upside risk to inflation forecasts through the current account balance. While the decline in energy-commodity prices affects the current account balance favorably, the increase in the imports of consumption goods due to strong domestic demand feeds into risks upon the current account balance. Meanwhile, gold imports decelerated on account of restrictive measures taken in the second quarter, yet continued to be one of the main drivers of the widening in the current account deficit. The course of consumption goods imports is monitored as a risk factor for forecasts. However, the potential role of our country in regional energy distribution and the higher share of domestic energy resources will have a positive impact on the current account balance.

Recent indicators point to a rise in the underlying trend of inflation. This is mainly driven by strong domestic demand, stickiness of services inflation and cost-side pressures. Taxes, administered prices as well as general and minimum wage adjustments increase cost-side pressures and pose a risk to pricing behavior, driving up the inflation forecasts.

Inflation expectations remain elevated. It is critical that the decline in inflation expectations remains consistent with forecast assumptions. In this context, the monetary tightening will be strengthened gradually until a significant improvement in the inflation outlook is achieved. Moreover, increasing the functionality of the monetary transmission mechanism will have a significant impact in inducing a decline in inflation.

Despite fiscal revenues that will increase with additional taxes and fees, public sector salary adjustments and earthquake-related expenditures exert pressure on the budget balance. The quantity and timing of earthquake-related expenditures will be important for maintaining fiscal discipline. Maintaining fiscal discipline is essential as it contributes to anchoring pricing behavior.