3. Medium-Term Projections

3.1 Current State, Short-Term Outlook and Assumptions

Changes in Key Forecast Variables

Economic activity remains robust, yet signs of domestic demand-induced rebalancing have recently emerged amid tightening financial conditions. In the second quarter of the year, private consumption provided the highest contribution to GDP growth on the expenditures side, which rose by 3.8% year-on-year and 3.5% quarter-on-quarter. In addition, the services sector continued to be the main driver of annual growth on the production side. On the other hand, net exports had a downward effect of 6.3 points on growth due to the weak external demand and strong domestic demand conditions. Leading indicators suggest that even though economic activity continued to grow on the back of domestic demand in the third quarter of 2023, it started to be balanced amid the strengthened monetary tightening. Moreover, exports remained almost flat quarter-on-quarter amid weak external demand, while the rebalancing in domestic demand started to have a dampening effect on import demand. Third-quarter data point to a buoyant and tight labor market. The output gap, which peaked in the second quarter, still stood in positive territory in the third quarter, albeit narrowing amid monetary tightening.

In the third quarter of 2023, consumer inflation rose to 61.5%, 7.9 points above the upper end of the forecast range presented in the previous Inflation Report. In the third quarter, non-energy commodity prices continued to follow a favorable course with a decline on a quarterly basis, yet inflationary pressures intensified amid rising global energy prices. The increase in fuel prices driven by the rise in exchange rates and global prices contributed to widespread price hikes through direct and indirect channels. Strong demand conditions, together with the adjustment in the minimum wage in July, facilitated the pass-through of widespread wage increases to consumer inflation. Although aggregate demand conditions lost momentum and started to be balanced in the third quarter, domestic demand conditions continued to have an upward effect on inflation. On the other hand, adjustments in taxes and fees, such as the increase in VAT and SCT on fuel products, contributed significantly to the rise in consumer inflation.

In the third quarter, the combination of negative shocks occurring in a short period of time led to a deterioration in inflation expectations and pricing behavior beyond projections. The exchange rate pass-through to inflation is rapid and strong during periods of major exchange rate changes. In addition, the ongoing rigidity in services inflation is driven by administered groups as well as items with a time-dependent pricing behavior and a strong tendency to backward indexation. Against this backdrop, the contribution of main groups, particularly the services sector, to annual inflation increased significantly quarter-on-quarter. As a result, the underlying trend of inflation posted a rise, and annual inflation in the B index increased in the third quarter (Table 3.1.1).

Table 3.1.1: Changes in Key Forecast Variables*

	2023-III
Consumer Inflation (Quarter-End, Annual % Change)	61.5 (51.2)
B-Index Inflation (Quarter-End, Annual % Change)	67.2 (57.8)

* Figures in parentheses are from the previous Inflation Report.

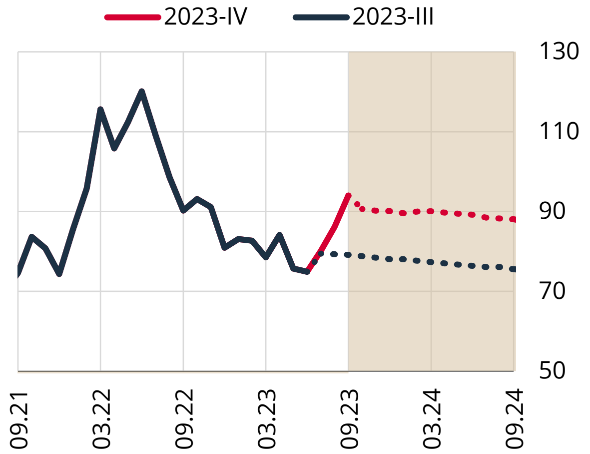
Assumptions on Exogenous Variables

Although global economic activity lost momentum in the current reporting period, expectations that economic growth would continue in 2023, albeit at a slower pace, were maintained. Global economic activity slowed down as the weak outlook for the global manufacturing industry started to be accompanied by the services sector. In this period, PMI indicators declined in both groups, being more pronounced in the services sector. The global growth index weighted by the export shares of Türkiye's trading partners remained flat despite the deterioration in leading indicators. The euro area manufacturing industry PMI indicator for October pointed to a decline in economic activity (Zoom-In 2.1). In addition, due to its significant weight in global trade, China's weakening growth dampens global demand through both direct and indirect production linkages.

While the downtrend in global inflation slowed due to energy prices, the persistence in core inflation started to break down. Although headline inflation declined in the advanced economies , it remains significantly above the central banks' targets. In emerging economies (excluding Türkiye), it remained almost flat. On the other hand, core inflation, especially in advanced economies, lost some momentum and receded compared to the previous reporting period owing to the effects of tight monetary policies. The improvement in global supply conditions and the slowdown in demand for services had an effect on the global inflation outlook. The easing in supply-side inflationary pressures and the effects of tight monetary policies starting to be felt evidently on demand contributed to the decline in inflation. However, recent geopolitical developments keep the upside risks to energy prices, particularly oil prices, alive and pose risks to the inflation outlook. Moreover, the strong course of labor markets and inflation hovering above target rates raised expectations that central banks of advanced economies will maintain their tight monetary policy stance for a longer period of time, leading to a significant tightening in global financial conditions.

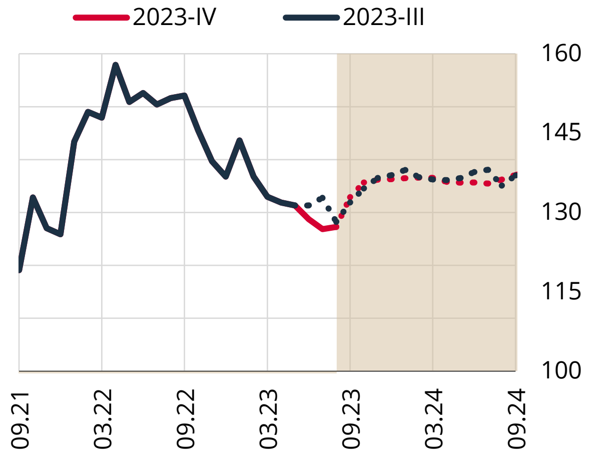
While the downward trend in non-energy commodity prices continues in line with the global growth outlook, geopolitical risks, financial conditions and supply-side factors continue to have an impact on commodity prices. Compared to the previous reporting period, the headline commodity index excluding energy posted a broad-based decline, but still remains above the average of the last decade. OPEC+ countries' continued production below capacity and geopolitical risks kept the upward pressure on oil prices alive and led to increased price volatility. Other industrial commodity prices, on the other hand, remained flat compared to the same period of the previous year, in line with the global growth outlook and especially China's growth. Accordingly, the average oil price assumption was revised upwards from USD 79.4 to USD 84.2 for 2023 and to USD 88.7 for 2024 (Chart 3.1.1). Assumptions for the average annual change in import prices for 2023 and 2024 were slightly revised to -10% and 2.7%, respectively (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 are revised upwards for 2023 and downwards for 2024. In the third quarter of 2023, despite the decline in global agricultural commodity prices and food prices, the upward trend in food prices continued at a stronger pace due to ongoing domestic supply-side problems and inadequacies in the market structure. The upward trend is mostly driven by the unprocessed food item, which is affected by supply-side factors beyond the control of monetary policy. The exchange rate pass-through was assessed to be higher and faster in 2023, and the assumptions for food prices for 2024 were revised downwards. In the upcoming period, food inflation is assumed to end 2023 at 66.7% and 2024 at 31.0% (Table 3.1.2).

Table 3.1.2: Revisions in Assumptions*

	2023	2024
Export-Weighted Global Production Index (Annual Average % Change)	1.7 (1.7)	2.0 (2.1)
Oil Prices (Average, USD)	84.2 (79.4)	88.7 (76.3)
Import Prices (USD, Annual Average % Change)	-10.0 (-9.5)	2.7 (2.4)
Food Prices (Year-End % Change)	66.7 (61.5)	31.0 (35.0)

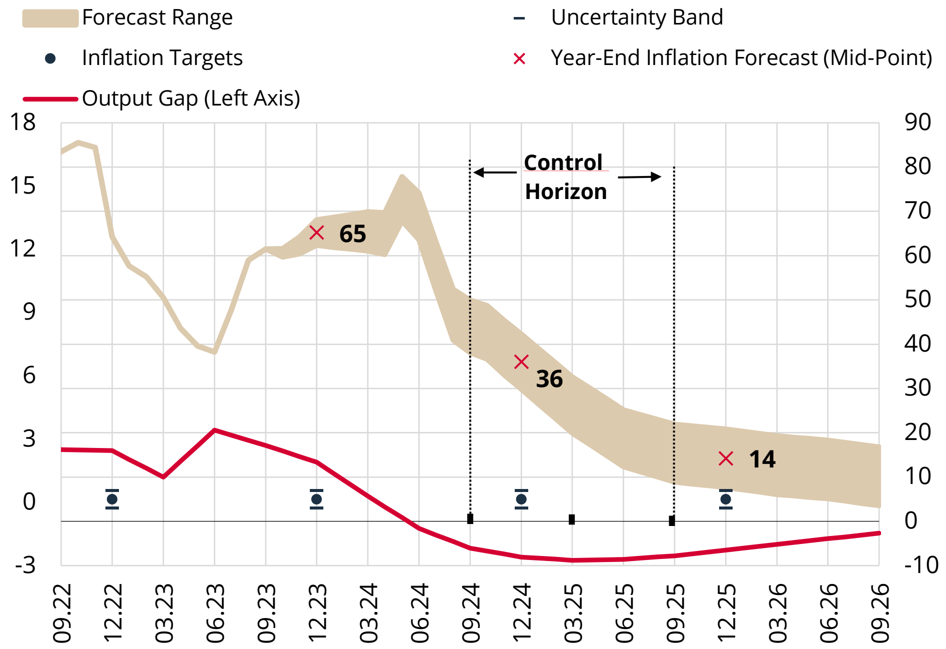
* Figures in parentheses are from the previous Inflation Report.

3.2 Medium-Term Outlook

Inflation is projected to be 65% at the end of 2023, to fall to 36% at the end of 2024 and sustain the downtrend by receding to 14% at the end of 2025. As a result of the increase in inflation above the forecasts due to exchange rates, supply-side effects in some unprocessed food products and fuel prices, coupled with additional impacts of this development on the expectations, the year-end forecast has been revised upwards by 7 points to 65%. On the other hand, assumptions for global growth and import prices were kept at levels consistent with the previous reporting period. The end-2024 forecast has been raised to 36% stemming from revisions in the assumptions for administered prices and energy import prices. Moreover, volatilities in commodity prices, particularly oil, driven by geopolitical developments and the effects of tight monetary policy on global financial conditions as well as uncertainties regarding administered prices and wages have been factored into the uncertainty band of inflation forecasts (Box 3.1).

It is projected that inflation will rise throughout the first half of 2024, and consumer inflation will assume a steady decline as of the second half of 2024. The policy rate hikes as well as actions taken to strengthen the monetary transmission mechanism, such as quantitative tightening, selective credit policy and steps to simplify the macroprudential framework, started to be mirrored in financial conditions. Leading indicators also give signs of a gradual balancing in domestic demand amid slower consumer loan growth and increased demand for Turkish lira savings instruments (Box 3.2). Medium-term forecasts are based on an outlook in which the monetary policy stance will be determined in a way that ensures a significant decline in inflation. This tight monetary policy stance is expected to reinforce the balancing in domestic demand and the gradual improvement in the current account balance. Additionally, it is anticipated that with firm and steady adherence to monetary tightening, monthly inflation will decelerate in the short run and inflation expectations, which are highly sensitive to inflation realizations, will improve (Box 2.3). Accordingly, with 70% probability, inflation is projected to be between 62% and 68% (with a mid-point of 65%) at end-2023; between 30% and 42% (with a mid-point of 36%) at end-2024, to come down to 14% 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.

Table 3.2.1: Revisions in Year-End Inflation Forecasts for 2023 and 2024 and Sources of Revisions

	2023	2024
Inflation Report 2023-III Forecast (%)	58	33
Inflation Report 2023-IV Forecast (%)	65	36
Forecast Revision Compared to IR 2023-III	7	3
Sources of Forecast Revision (% Points)		
TL-Denominated Import Prices (Including the Exchange Rate, Oil and Import Prices)	+2.0	+1.8
Output Gap	+0.8	-0.7
Food Prices	+1.3	-1.0
Administered Prices (Including Energy)	-	+1.5
Realization – Forecast Difference and Its Reflection on Underlying Inflation	+2.9	+1.4

Source: CBRT.

The end-2023 inflation forecast was revised upwards from 58% to 65%. In comparison to the forecasts of the previous reporting period, TL-denominated import prices pushed the end-2023 inflation forecasts up by 2.0 points. While the impact of stronger-than-expected demand conditions on the forecasts was 0.8 points, the change in the assumption for food prices brought forecasts up by 1.3 points. The forecast deviation due to the current inflation realizations exceeding the forecasts of the previous reporting period and the effect of the increase in the underlying trend of inflation are estimated to push year-end inflation up by 2.9 points (Table 3.2.1).

The end-2024 inflation forecast was revised upwards from 33% to 36%. The inflation forecasts were revised upwards by 3 points compared to the previous Inflation Report, with TL-denominated import prices and administered prices contributing 1.8 and 1.5 points, respectively. On the other hand, the forecast deviation and the revision of the underlying trend of inflation increased the end-2024 inflation forecast by 1.4 points.

Lastly, the balancing in demand conditions and the assumption for food prices are estimated to reduce the end-2024 inflation forecast by 0.7 and 1.0 points, respectively.

Forecasts are based on an outlook in which global growth and the external demand outlook display a slowdown compared to the previous reporting period, and global inflation remains above the inflation targets, albeit at a slightly slower pace. Inflation remaining significantly above the inflation targets raises the expectation that monetary policies of particularly advanced economies' central banks will stay on a tight path for a longer period of time. Moreover, recent geopolitical developments have adversely affected the global risk appetite, and the risk premium indicators of emerging economies have risen. Accordingly, global financial conditions are assumed to be slightly tighter in the upcoming period than projected in the previous reporting period.

Although temporary rises in inflation are expected in the coming period, the disinflation process is projected to begin in the second half of 2024. The cost pressures driven by wages and exchange rates, as well as the tax adjustments have broadly passed through to prices in the recent period, and the underlying trend of monthly inflation has been expected to decline as of September. However, monthly inflation is expected to see temporary rises in November, January and May owing to several factors that fall outside the scope of the monetary policy. In the last quarter of the year, households exceeding the free natural gas utilization limit of 25 cubic meters will have an upward mechanical effect on monthly inflation. As for January 2024, minimum wage adjustments, the developments regarding services items with time-dependent price setting and automatic tax adjustments are expected to kick in. Annual inflation is expected to peak in May 2024 due to base effects stemming from natural gas prices. In the second half of 2024, a strong and uninterrupted disinflation process is projected to begin as the cumulative effects of monetary tightening take hold.

Inflation forecasts are based on a policy framework in which the monetary stance that will steer inflation closer to the 5% target in the medium term will be decisively maintained. The current course of inflation expectations and the deterioration in pricing behavior keep upside risks to the inflation outlook alive. The strong monetary tightening initiated in June aims to bring inflation expectations closer to the forecasts at first and then to medium-term targets. Moreover, controlling expectations is also essential for mitigating the trade-off between inflation and growth during the disinflation process. Re-anchoring of expectations and reverting price-setting behavior back to historical norms will be the key factors that support the disinflationary process in 2024 and prevent the propagation of shocks to the economy. In addition to the interest rate hikes, selective credit policy, which will complement the monetary tightening process, will contribute to balancing of the domestic demand and contain demand-side pressures on inflation. Meanwhile, the simplification of the micro and macroprudential framework that is carried out in coordination with the gradual strengthening of monetary tightening will sustainably increase the demand for TL-denominated financial assets, support stability in the foreign exchange markets, enhance the effectiveness of market mechanisms and further strengthen monetary transmission. Accordingly, a monetary policy outlook in which macro financial stability will support price stability has been adopted. In short, owing to the impact of the implemented policies, disinflation in 2024 is estimated to be driven by the anchoring of inflation expectations, the balancing in domestic demand and the stable course of the Turkish lira amid increased demand for TL-denominated financial assets.

Analyses on the effects of the monetary tightening on macroeconomic and financial conditions support that additional steps can be taken decisively, if necessary, in the fight against inflation. The fact that approximately half of the banks' Turkish lira loans and securities portfolios are at floating rates, that Turkish lira fixed-rate securities are mainly accounted for at amortized cost, which is not sensitive to interest rate changes, and that the maturity of deposits is extended with the backing of reserve requirement practices reduce the sector's vulnerability to interest rate changes. The capital position 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.

For the upcoming period, a medium-term outlook is adopted in which taxes, administered prices and other fiscal policies will be determined in coordination with monetary policy and within a macro framework in line with the projected disinflation path. It is assumed that fiscal discipline will be maintained and public finances will support the disinflationary process when temporary earthquake expenditures are excluded. Against this background, maintaining the tight monetary policy stance until strong indicators point to a permanent fall in inflation and to price stability, will contribute further to the improvement in the country risk premium.

3.3. Key Risks to Inflation Forecasts and Possible Impact Channels

Geopolitical risks and supply-side factors put pressure on commodity prices. OPEC+ countries continue to produce below capacity and to make further production cuts, which keeps supply-side pressures on oil prices alive. Moreover, geopolitical developments exacerbate supply-driven risks to oil prices. Despite the decline in commodity prices excluding energy, uncertainties may also arise in other commodity prices parallel to the news flow regarding geopolitical developments.

Although the deceleration in global inflation lost pace in the current reporting period, it remained considerably above targets. Although the core inflation rate and the underlying trend have relatively improved in advanced economies pursuing a tight monetary policy stance, inflation developments on a global scale still hover above the central banks' targets. This leads central banks to adopt a discourse that entails stronger tightening in financing and credit conditions. Expectations that global monetary policy will remain tight for a longer-than-projected period may exert pressure on capital flows and the Turkish lira, which may pose upside risks to inflation and downside risks to commodity and import prices.

Expectations regarding the global growth outlook for 2023 remain flat compared to the previous reporting period, while the deterioration in the growth outlook became more pronounced for 2024. Despite the tightening in financial conditions, growth is expected to continue in 2023, albeit at a slower pace, and the effects of the tight monetary policy are projected to be visible in 2024. Global growth expectations do not pose an additional upside risk to end-2023 inflation forecasts through the external demand channel but may pose a downside risk to end-2024 inflation forecast.

The tight monetary policy stance coupled with the balancing in domestic demand is considered to decelerate imports and support the improvement in the current account balance. Policies adopted mainly by advanced economies limit external demand from Türkiye’s major trading partners and cause exports to display a flat outlook. While the decelerating effects of the tight monetary policy on imports became visible, rising global energy prices keep the direct upside risks to energy imports alive.

Recent indicators point to a decline in the underlying trend of monthly inflation. Recently, the depreciation of the Turkish lira accompanied by domestic and external cost developments have led inflation to settle on a higher course. Inflationary pressures such as tax adjustments, administered prices and wage adjustments can have an adverse impact on pricing behavior and expectations and magnify the passthrough of shocks. Persistence of these conditions that will exert pressure on the underlying trend poses an upside risk to the inflation forecasts for the year end.

Inflation expectations remain elevated. High levels of medium-term inflation expectations indicate that upside risks to price-setting behavior persist.

Growth and composition of credits have started to normalize. In the first half of 2023, retail loan growth that fed into inflation considerably by supporting domestic demand lost pace. In the upcoming period, contained by the sustained monetary tightening and selective credit policies, credit growth is expected to contribute to the balancing and disinflation process in the economy. On the other hand, in the case of a reversal in these conditions, an upward pressure on inflation may occur.

Recent geopolitical risks pose additional risks to energy prices and export dynamics. Geopolitical risks stemming from the Israeli-Palestinian conflict may pose upside risks to energy prices and downside risks to external demand and export revenues. These channels and their effects on inflation are closely monitored.

Adjustments to be made through taxes to finance earthquake-driven expenditures may pose a risk to inflation. The quantity and timing of earthquake-related expenditures will be important for maintaining fiscal discipline. Maintaining fiscal discipline is significant to anchoring pricing behavior and the course of sovereign risk premium. On the other hand, increased weight of indirect taxes in fiscal revenues can have direct effects by pushing prices up and also indirect effects by distorting inflation expectations.

Minimum wage, taxes and administered prices shape both inflation and inflation expectations. The level and frequency of minimum wage and public salary adjustments may affect inflation and expectations through production cost and demand channels. Taxes and administered prices that are not aligned with the inflation target may exert pressure on inflation. The coordination of economic policies is of critical importance to attain the inflation target in the shortest time possible.

Table 3.2.2: Key Risks to Inflation Forecasts and Possible Impact Channels*

Risk	Evaluation of Risks Compared to the Baseline Scenario and Possible Effect on Inflation (↑ | ↔ | ↓)		Tracked Indicators
Risks to the course of energy prices	• Sustained underproduction by OPEC+ countries and additional cuts on production keep supply-side pressures on oil prices alive.	↑	• Crude oil prices and demand-supply balance • OPEC+ decisions • Indicators for domestic energy market • Administered prices
	• If the recent geopolitical developments inflict a wider area, upside risks to energy prices will emerge from both supply and demand sides.	↑	
Risks to global financial markets and macroeeonomic outlook	• Despite the improvement in core inflation and underlying trends, inflation rates hover above the targeted inflation rates in advanced economies adopting a tight monetary policy. The persistence of these circumstances poses an upside risk to domestic inflation through imported products.	↑	• Global inflation rates • Monetary policy response in advanced and emerging economies • Global risk appetite indicators • Export-weighted global economic activity index • Global trade volume and inflation developments • Import and commodity prices
	• On the other hand, tight monetary policies in advanced economies are expected to be maintained for the remainder of 2023, with the main effects to be seen in 2024. Uncertainty persists over the level of tightening and the timing of easing. A longer-than-anticipated duration of tight monetary policy will pose an upside risk to inflation due to global financial conditions and a downside risk to import prices.	↔	

Economic activity and geopolitical risks	• After a robust course in the second quarter, demand conditions started to decelerate in the third quarter, yet aggregate demand conditions are still considered to be inflationary. A delay in complete rebalancing of aggregate demand conditions may exert pressure on inflation. • A faster-than-estimated rebalancing in domestic demand may pose downside risks to inflation. • Recent geopolitical developments entail additional risks to energy prices and export dynamics. Geopolitical developments are considered to involve upside risks to energy prices and downside risks to external demand and exports.	↑ ↓ ↑	• Export, import and current account balance indicators • Oil prices
High course of medium- term inflation expectations	• The high levels of medium-term inflation expectations indicate that upside risks to pricing behavior persist.	↑	• Main inflation indicators • Indicators for past-indexation behavior in inflation expectations • Distribution of inflation expectations • Inflation uncertainty indicators • Survey and market pricing-based inflation and exchange rate expectations
The underlying trend of inflation	• Taxes, administered prices and general and minimum wage adjustments weigh on cost pressures and pose risks to pricing behavior, entailing upside risks to inflation forecasts. • In case such shocks continue, they may pose upside risks to inflation forecasts.	↑ ↑	• Tax adjustments • Increase in the weight of indirect taxes in total taxes • Administered prices • Minimum wage adjustments • Real unit labor costs • Private sector wage-setting process • Real earnings indices

Risks to financial markets and credit growth	• Retail loan growth, which supported domestic demand and contributed significantly to the rise in inflation in the first half of 2023, displayed a rapid deceleration. A reversal of this outlook may put upward pressure on inflation.	↑ ↑	• Risk premium indicators • Global risk appetite indicators • Capital flows • Financial conditions • Indicators for demand and activity • News flow regarding geopolitical developments
Risks to the coordinative efficiency of monetary, fiscal and financial policies	• Adjustments in the minimum wage and salaries of public employees may pose risks to the balancing in domestic demand. • Possible tax arrangements for earthquake expenditures, if made through indirect taxes in particular, will keep the upside risk on inflation alive. • Insufficient coordination among monetary, financial and fiscal policies within the recovery process poses risks to the current account balance, inflation and the balancing process in domestic demand.	↑ ↑ ↑	• Administered prices and tax adjustments • Developments in tax revenues and public expenditures • Medium Term Program and fiscal policy measures • Budget and public debt stock indicators • Structural budget balance forecasts

* Each risk row in the table indicates the possible channel and the direction for the change in inflation forecasts in the case that the mentioned risk materializes. The signs ↑, ↓ indicate that the risk on 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 column on the right.

Box 3.1

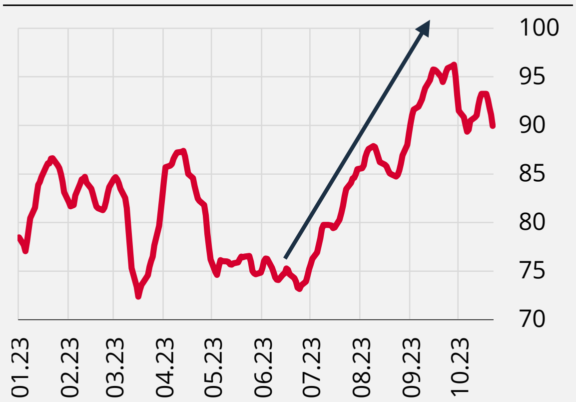
Risks and Uncertainty Band

While generating the medium-term forecasts, various shocks to the economy, external factors, economic policies and the dynamic interactions of macroeconomic quantities are examined in detail. Although the shocks and external factors that will affect the economy in the future cannot be predicted completely, assumptions regarding these factors are made in the light of data and expert judgements. While generating the forecast path for the Inflation Report 2023-IV, it was assessed that uncertainties were high regarding assumed paths for oil prices, global financial conditions, taxes, administered prices and wage adjustments, which are outside the monetary policy domain. This Box discusses the sources of these risks and their impact on forecasts and the range of uncertainty around those forecasts.

Since oil is a physically traded commodity, oil prices are affected by supply and demand conditions, the level of oil stocks and the change in stocks. In this regard, the decisions taken by oil oligopolies such as OPEC+, national strategies and global policies may create fluctuations in oil prices through supply and demand conditions. On the other hand, oil is not only a physically traded commodity but also a financial commodity that market participants trade in futures markets with a different set of motivations. The increasing financialization of the oil market may cause prices to react more quickly to news flow and geopolitical risks, leading to sudden movements in prices. As a historical phenomenon, numerous oil crises in the past show that oil markets strongly reflect their sensitivity to geopolitical uncertainties (Qin et al., 2020; Zhang et al., 2009). Jiao et al. (2023) also support the idea that speculative behavior increases in periods when geopolitical risk is high, and its impact on the level and volatility of oil prices comes to the fore.

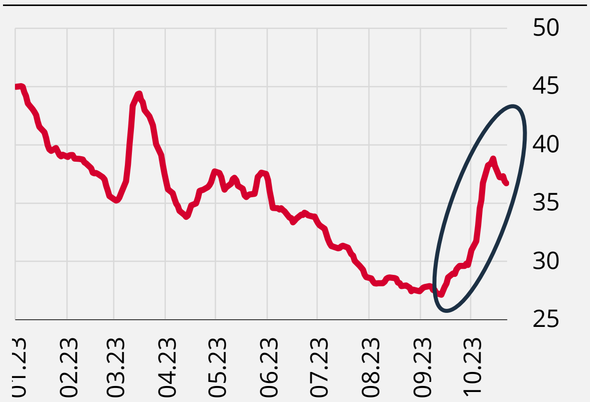
In this context, the tightening in supply conditions resulting from the decisions taken by OPEC+ member countries to reduce production in 2023 and the increase in geopolitical risks lead to a volatile course in oil prices. The price of Brent oil, which was traded around USD 83 per barrel in January 2023, dropped below USD 75 in June. With the effect of developments in supply conditions after this date, prices increased above USD 90 as of September (Chart 1). Amid recent geopolitical developments, indicators give signals that the volatile course of oil prices will continue in the coming period (Chart 2).

Chart 1: Brent Oil Prices
(USD Per Barrel, 5-Day Moving Average)



Source: Bloomberg.

Chart 2: Three Month Implied Brent Oil Price Volatility (5-Day Moving Average)



Source: Bloomberg.

The dual structure in the oil market mentioned above and the weak defense of the market against speculative and geopolitical risks, which has become evident recently, make it difficult to achieve satisfactory performance for traditional statistical-based forecasting methods. As a matter of fact, recently the 2024 oil forecast paths of international institutions and organizations are diverging from one another and their forecasts move in a wide range (Table 1). Uncertainties about the course of oil prices in the coming period pose a risk for inflation forecasts. The possibility that oil prices will continue to rise due to geopolitical developments has increased the uncertainty in the forecasts. On the other hand, in an environment where geopolitical developments fade quicker than expected, oil prices may converge to their historical averages, that is, prices may decrease in the coming period.

Table 1: Oil Price Forecasts* (Annual Average)

	2023	2024
Energy Information Administration	84.1	94.9
Consensus	84.0	87.8
ECB	82.7	81.8
IMF	80.5	79.9

* While Energy Information Administration (EIA), Consensus forecasts and ECB forecasts show Brent oil prices per barrel, IMF forecasts show the average of Brent, Dubai and West Texas Intermediate oil forecasts. EIA forecasts are taken from the October "Short-Term Energy Outlook" Bulletin, Consensus forecasts are taken from the October Consensus Forecasts Bulletin, ECB forecasts are taken from the ECB's September macroeconomic projections, and IMF forecasts are taken from the October World Economic Outlook.

In addition to oil prices, recent uncertainties regarding global financial conditions remain important. Global financial cycles, the main determinant of which is the monetary policies of advanced economies (Rey, 2015), are of great importance for economies that are commercially and financially connected to the rest of the world, such as Türkiye. The global financial cycle determines capital flows from advanced economies to emerging market economies, the relative position of emerging market currencies, the course of country risk premiums and trade and inflation developments through the exchange rate channel. Studies contributing to the literature show that emerging economies' interest rates move together with the policy rate in the USA and that there is contagion in interest rates (Georgiadis, 2016; Caceres et al., 2016 and Dedola et al., 2017). In this respect, the course of the US bond interest rates through which the Fed sets policy rates and expectations, which are the fundamental determinants of the global financial cycle, are of great importance for the macroeconomic and financial indicators of a small-open and oil-importing economy like Türkiye. Recent research on the Turkish economy has demonstrated that an external monetary policy shock seen in the Fed policy rates has a significant impact on the Turkish lira, inflation and growth (Tüzün, 2021).

In parallel with the findings and historical realizations, the course of the US bond market in the coming period is important in terms of risk appetite for TL-denominated assets, and therefore, the disinflation process. Tightening global financial conditions and deteriorating risk appetite, together with the tight monetary policies implemented by other central banks, make the Turkish lira more sensitive to US interest rates. In addition, this situation creates an environment suitable for an additional capital outflow shock unless the relative situation of an emerging economy such as Türkiye improves and may also cause an increase in the foreign exchange demand of domestic residents. The increase in borrowing costs from abroad negatively affects firms' balance sheets and causes additional increases in the exchange rate. All in all, and also considering the high exchange rate pass-through in the Turkish economy, these developments feed the cost channel and keep upside risks on inflation forecasts alive. In addition, fluctuations in global liquidity conditions and risk perceptions cause volatility in the exchange rate, increasing the uncertainty around forecasts. On the other hand, it is considered that as long as Türkiye improves its relative situation with the implementation of tight monetary policy and continues to do so with determination, the effects of the deterioration in the global risk appetite on the value of the Turkish lira may be limited. Under a scenario where US bond interest rates will remain tight for a shorter period than expected, it is considered that external inflationary pressures such as foreign monetary policy shocks in the economy will decrease and may also create a downward risk to inflation.

Another element that has recently come to the fore outside the control of monetary policy is administered price, tax and wage adjustments. Uncertainties regarding the timing, frequency and amount of these regulations pose risks to inflation forecasts. Shocks that are considered temporary during normal inflationary periods of the economy, such as tax and administered price increases and minimum wage regulation, may have longer-lasting negative effects than expected through expectations and inflation inertia in a high inflation environment. In addition to their direct effects on the inflation level, administered price and tax adjustments may also negatively affect expectations and pricing behavior by increasing the volatility of inflation. In addition, it becomes difficult to identify the effects of wage regulations on inflation due to cost and demand increases during high inflation periods.

Additionally, during periods of high inflation, the so-called “mathematical” or “mechanical” impact also takes into effect. Volatility in monthly inflation for any given month may have a larger impact on annual inflation through a multiplier effect if inflation in the other months are high. Therefore, volatilities in monthly inflation create uncertainty in both directions on annual inflation. Estimates are based on a framework in which the monetary policy stance will respond not to the primary effects of these external factors on consumer inflation, but to their possible secondary effects that may be observed in inflation expectations or pricing behavior. In addition, since increases in oil prices and uncertainties regarding global financial conditions may negatively affect the current account balance and its financing, macro financial risks are also considered when making a policy response. Scenario analyses that include all these risks show that uncertainties regarding the inflation path have increased temporarily for reasons specific to 2024. Considering all these effects, it was decided to expand the uncertainty range on medium-term forecasts.

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Box 3.2

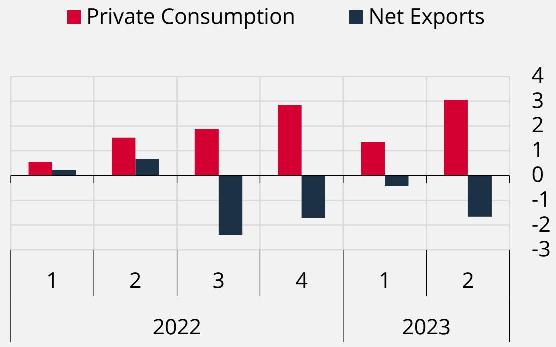
Balancing in Domestic Demand and Monetary Transmission Mechanism

The CBRT implements monetary tightening to achieve price stability through balancing in domestic demand, improving inflation expectations and increasing demand for TL-denominated assets. While monetary tightening encompasses policy rate hikes as well as quantitative and selective credit tightening policies, it is also supported by the simplification of the macroprudential framework and aims to reduce inflation permanently. A particular monetary transmission mechanism is envisaged for the tightening process to ensure disinflation, and policy steps are intended to strengthen this mechanism.

The monetary transmission mechanism includes the channels through which and to what extent the monetary stance determined by central banks affects inflation to achieve the price stability target. Monetary policy is conducted with the use of monetary policy instruments, chiefly the policy rate, and these instruments work through various channels such as domestic demand, exchange rates, financial markets, credits, company balance sheets, financial and real assets and expectations in the economy. The effects of these channels on inflation occur in different lags, and the period in which the effect is most pronounced may vary depending on the existing economic conditions. Therefore, examining monetary transmission channels is important to understand and monitor how the disinflation process, which is included in our medium-term forecasts, will occur. This Box will focus on the main transmission channels that will ensure the upcoming disinflation process, rather than providing a detailed explanation for the entire monetary transmission mechanism (See CBRT, 2013 for a detailed explanation of whole monetary transmission mechanism).

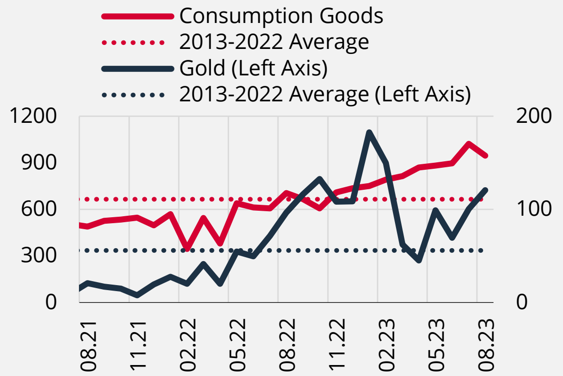
In addition to its direct effect on prices, excessive and high domestic demand created additional inflation by facilitating the pass-through from production costs to prices, and had negative effects on the current account deficit, central bank reserves and exchange rate expectations since some of the excessive demand shifted to foreign goods causing a surge in imports. In addition, expectations that prices will increase and the Turkish lira will depreciate have strengthened the increase in private consumption by causing savings to decrease, demand to be pulled forward and stockpiling behavior to increase. As a matter of fact, as seen in Chart 1, as of the second half of 2022, the contribution of private consumption expenditures to economic activity has risen well above its historical average, and the contribution of net exports has fallen below its historical average. This outlook in the composition of growth is also reflected in the current account deficit, with consumer goods imports significantly exceeding its historical average (Chart 2). On the other hand, the contribution of this excessive domestic demand to the economic growth is significantly offset by the rising imports, a natural reflection of excess consumption.

Chart 1: Contribution of Private Consumption and Net Exports to Quarterly Growth*



Source: CBRT, TURKSTAT.
* Seasonally and working day adjusted. Denotes % points difference from 2005-2021 average.

Chart 2: Consumer Goods Imports, Gold Imports and Historical Averages*

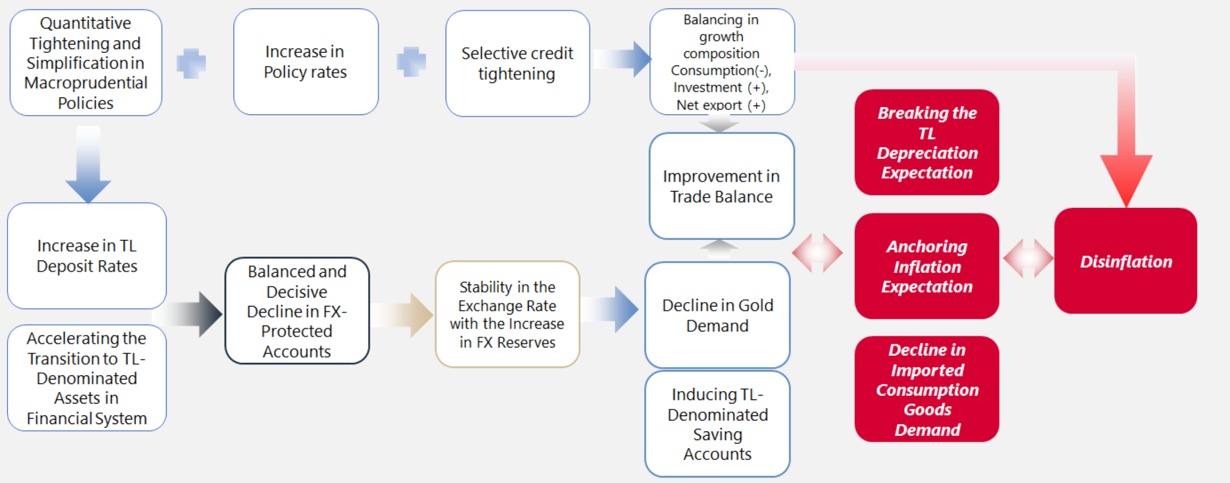


Source: CBRT, TURKSTAT.
* Population growth is controlled by dividing the quantity index by million people.

It is expected that domestic demand will be balanced by the activation of demand channel of monetary transmission through monetary tightening that began in June. Increases in interest rates are expected to stimulate savings and reduce the behavior of pulling demand forward. Monetary tightening accompanied by selective credit tightening aims to balance the consumption side rather than investments. Thus, in the upcoming period, it is planned that investment and exports will be the main drivers of economic growth, while consumption and imports decrease. In addition to the demand channel, it is anticipated that, through the expectations channel, the tight monetary policy will make a solid contribution to the disinflation process by positively influencing inflation and exchange rate expectations. Furthermore, the reduced uncertainty and the improved expectations will enable economic units to make long-term projects and investment decisions more confidently. As a result, the efficient allocation of resources will be achieved, leading to increased productivity as well as strong and sustainable growth.

In addition to demand and expectation channels, the macroprudential policies, which have been simplified and converged to their primary objectives, and the monetary tightening will strengthen the monetary transmission by increasing the demand for TL-denominated financial assets. It is assessed that, in addition to increasing demand for TL-denominated financial assets, strengthening the CBRT's international reserves through effective reserve policies will improve exchange rate expectations, and in turn, this will improve inflation expectations. The strengthening of demand for TL-denominated financial assets and the positive outlook in exchange rate expectations are also anticipated to reduce the demand for gold as a store of value, contributing to the improvement in the current account balance and the balancing of the growth composition. In sum, it is assessed that the disinflation process will commence in 2024 as the improvement in expectations, the balancing of the composition of the growth and the stability of the Turkish lira reinforce each other (Figure 1).

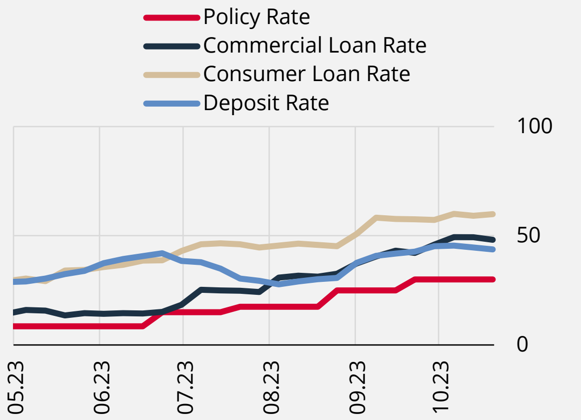
Figure 1: Simplified Monetary Transmission Mechanism*



* Monetary transmission mechanism is simplified such that only featured transmission channels in this Box are provided.

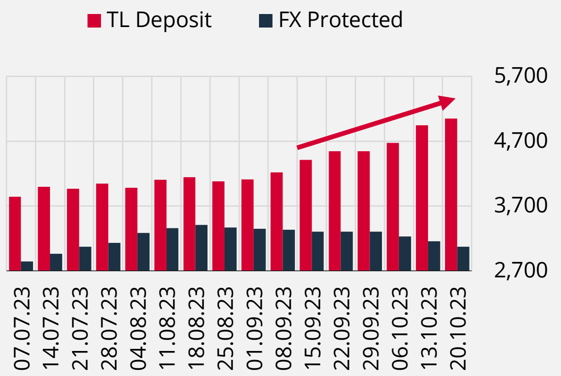
The monetary tightening that has been decisively implemented since June will cumulatively affect demand, savings, and pricing behavior over the upcoming several quarters. In this respect, the full effect of monetary tightening discussed here will be gradually observed contingent on other economic developments. In this regard, some initial effects have started to appear according to some leading indicators. The changes in financial markets are more pronounced. Market interest rates have moved in line with the policy targets (Chart 3), while the balance of Turkish lira-denominated deposits has increased, and balances of foreign currency and foreign exchange-protected deposits has started to decrease (Chart 4). Consumer loan growth has shown a declining trend with the implementation of selective credit tightening measures in addition to policy rate hikes (Chart 5). The CBRT reserves show an increasing trend (Chart 6). This supports the scheme that the simplified transmission mechanism shown in Figure 1 is currently operational regarding financial variables. On the other hand, the initial effects of the transmission mechanism on real activity have started to become evident though they are less pronounced. Domestic demand indicators, which remained strong since the second half of 2022, started to balance in the third quarter of 2023 (Chart 7). Additionally, with the balancing of domestic demand, imports have shown a declining trend in the third quarter, and the foreign trade balance has started to exhibit a better outlook (Chart 8).

Chart 3: Interest Rates (Annual, %)



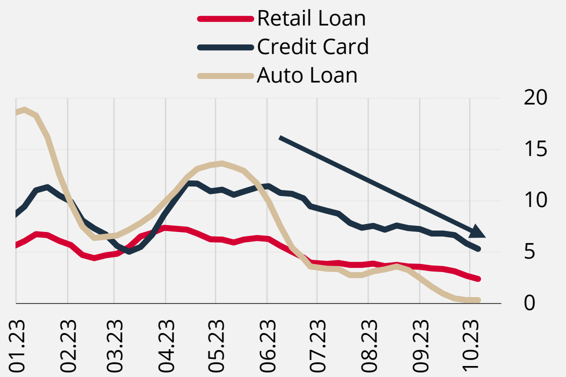
Source: CBRT.

Chart 4: Deposits (Billion TL)



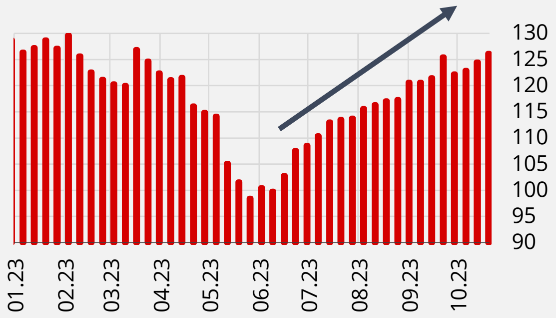
Source: CBRT.

Chart 5: Consumer Loan Rate Growth (4-Weeks-Moving Average of 4-Week Growth, %)



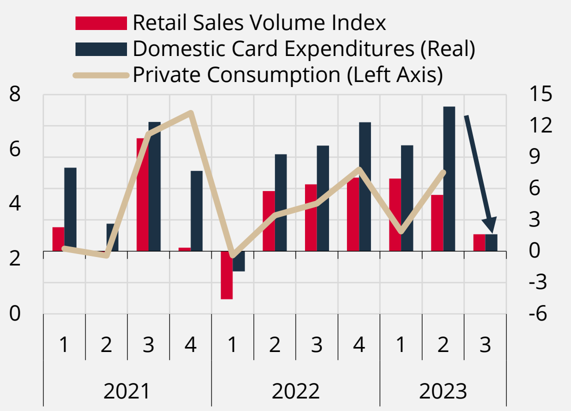
Source: CBRT.

Chart 6: CBRT International Reserves (Gross, Billion USD)



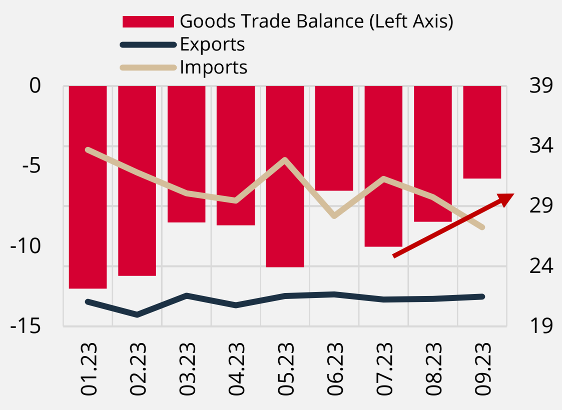
Source: CBRT.

Chart 7: Consumption Indicators (Adjusted for Seasonal and Calendar Effects, Quarterly % Change)



Source: BKM, CBRT, TURKSTAT.

Chart 8: Foreign Trade Balance, Imports and Exports (Adjusted for Seasonal and Calendar Effects, Billion USD)



Source: CBRT, TURKSTAT.

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