

INFLATION REPORT

2025-II

May 22, 2025



Contents

1. Overview	1
1.1 Monetary Policy Decisions	3
2. Economic Outlook	6
2.1 Global Economy	6
2.2 Financial Conditions.....	11
2.3 Economic Activity	16
2.4 Inflation	25
3. Medium-Term Projections	46
3.1 Current State, Short-Term Outlook and Assumptions.....	46
3.2 Medium-Term Outlook	48
3.3 Key Risks to Inflation Forecasts and Possible Impact Channels	51
Boxes	
Box 2.1 Findings from Interviews with Firms	32
Box 2.2 Multivariate Trend Inflation Indicator	36
Box 2.3 Last Resort Supply Tariff and Its Implications for Residential Electricity Prices	40
Box 2.4 Household Inflation Expectations: How Important is Past Experience?	43
Box 3.1 Government Spending Multiplier	54

1. Overview

The ongoing uncertainties over global trade policies have heightened in the wake of recent protectionist steps, and risks to the global economy and financial markets have become more pronounced.

The new tariffs announced by the US on April 2 added to global uncertainty. While most tariffs were postponed, uncertainty over global trade and economic policies remains high. The tariff steps seriously worsened the global growth outlook, with growth expectations were revised significantly downwards in both advanced and emerging economies. The deterioration in the demand outlook led to broad-based declines in commodity prices excluding precious metal prices, most notably in energy prices. On the other hand, inflation uncertainty increased, and inflation expectations were revised slightly upwards. Against this background, global disinflation is expected to slow, especially in countries directly facing tariff increases, and central banks are expected to maintain their cautious approach in rate cuts. In this period, volatility in financial markets intensified due to heightened global uncertainties, and portfolio outflows from emerging markets continued.

In an environment where the global risk appetite remained weak amid heightened tariff uncertainties and the deteriorating global economic outlook, risk sentiment towards TL-denominated assets worsened as of mid-March due to domestic developments.

In this period, global risk aversion remained elevated, driving risk premiums up across emerging economies. Meanwhile, in Türkiye, portfolio outflows and the rise in the CDS premium were higher compared to other emerging economies due to domestic developments. With the policy steps taken and mild improvement in global risk appetite, the deterioration in financial indicators of Türkiye has ended, and signals of recovery have emerged. Türkiye's CDS premium reached 297 basis points as of May 16. The implied volatility of the Turkish lira picked up throughout the reporting period, albeit retreating from its elevated levels amid heightened uncertainty. The CBRT's gross international reserves, in spite of the recent recovery, declined by USD 23.2 billion to USD 144.3 billion as of May 9. Due to the worsening of risk sentiment, bond yields also recorded increases across all maturities, being more pronounced in short maturities.

Financial conditions tightened following the policy rate hike and measures to support the tight monetary stance.

From December 2024, when policy rate cuts kicked off, to mid-March, when volatility in financial markets started to be visible, deposit rates declined significantly in line with the transmission mechanism. However, following the developments in financial markets, deposit and loan rates went up on the back of the proactive and market-friendly steps taken by the CBRT to support the tight monetary policy stance. In line with the steps taken to phase out FX-protected deposits (KKM) and the tight monetary policy stance, KKM accounts continued to decline. Moreover, FX commercial loan growth slowed down with the reduction in the growth limit for FX loans in order to support the tight monetary stance, while TL commercial loan growth accelerated slightly. With the support of the moderate course of retail loan growth, FX-adjusted total loan growth remained flat in the current reporting period, with the 13-week annualized growth rate at 30.3 percent as of May 9.

Economic activity recovered in the fourth quarter of 2024.

In that quarter, GDP increased by 3% year-on-year and 1.7% quarter-on-quarter. Demand brought forward by campaigns and upcoming wage revisions contributed to the strong household demand for goods in that period. Accordingly, private consumption made a positive contribution to growth. On a quarterly basis, exports of goods and services decreased, while their imports increased, and the contribution of net exports to quarterly growth turned negative. The balanced demand composition deteriorated somewhat in the last quarter of the year, while the positive contribution of net exports stood out amid the significant decline in the contribution of domestic demand to annual growth in 2024. On the production side, the services sector remained the main driver of annual growth.

Leading indicators suggest that domestic demand lost pace in the first quarter but remained above projections, with a declining disinflationary impact.

In this period, retail and trade sales volume indices went up quarter-on-quarter. The quarterly rate of increase in retail trade, trade of motor vehicles and wholesale trade decelerated, resulting in a slower quarterly increase in the trade sales volume index. In the first quarter of the year, sales of white goods declined, while automobile sales remained on the rise, albeit at a slower pace. Providing insight into both the production of services and their demand, the services production index increased quarter-on-quarter. The increase in services production was milder excluding sectors with relatively weaker direct relationships with household demand, such as professional, scientific,

and technical activities as well as information and communication. Information on consumption expenditures obtained from interviews with firms pointed to a slowdown in domestic demand in the first quarter of the year. Having declined in January, card spending increased slightly in February and then rose further in March, particularly in the second half of the month, driven by the seasonal rise in demand in leading up to the religious holiday. Against this background, the growth of card spending declined in quarterly terms. Current data on card spending as of April suggest a flat monthly course and a moderate quarterly increase. On the production side, industrial production continued to increase on a quarterly basis in the first quarter, albeit at a slower pace. Survey indicators such as the Business Tendency Survey (BTS) and PMI suggest a flat course in the underlying trend of industrial production for April. The construction production index, on the other hand, indicates that economic activity in the sector remained strong in the first quarter on the back of the ongoing support from earthquake-driven construction activities. However, demand conditions are expected to be more in line with the disinflationary path in the remainder of the year due to the tightening in financial conditions and global developments.

Employment declined in the first quarter of the year, and the unemployment rate continued to fall. In this period, seasonally adjusted employment decreased by 0.8% (266,000 people) on a quarterly basis. The unemployment rate, on the other hand, fell by 0.4 points quarter-on-quarter to 8.2%. However, the labor underutilization rate remained elevated, rising by 0.4 percentage points quarter-on-quarter, suggesting that the labor market may not be as tight as implied by main indicators. Wage developments indicate that non-farm real unit wages increased as the rise in real per capita wages had outpaced the rise in partial labor productivity in the last quarter of 2024.

The seasonally and calendar-adjusted current account deficit narrowed in the first quarter. In this period, while the foreign trade surplus excluding gold and energy decreased slightly and the energy trade deficit widened, the balance-of-payments-defined foreign trade balance showed improvement due to the fall in the gold trade deficit. Provisional foreign trade data for April indicate a rise in both exports and imports, with a higher increase in imports, and thus a widening in the foreign trade deficit. The rise in imports may also be attributed to the demand brought forward due to the uncertainty over tariffs. Foreign trade volume indices for the first quarter indicate a quarterly increase in exports and imports. The rise in imports was driven by investment and intermediate goods, while consumption goods contributed negatively, led by jewelry products. The services trade surplus was unchanged at its high level in the first quarter. The transportation revenue balance increased on a quarterly basis, while the travel revenue balance maintained its strong performance, despite a decline. On the financing side, net capital inflows were recorded through loans, portfolio and direct investment channels in the first quarter. The financing need was higher in the first quarter compared to the previous quarter due to the widening current account deficit and increased outflows from the net errors and omissions item. Official reserves declined with realized net capital inflows falling short of financing needs. According to April data, equity and debt securities markets experienced outflows, and official reserves saw a decline.

Annual consumer inflation fell to 37.86% as of April, falling below the mid-point of the forecast range presented in the previous Report. The disinflation process continues. In the first quarter of the year, the disinflationary impact of aggregate demand conditions is estimated to have diminished compared to the previous reporting period, and the output gap is assessed to have remained close to the neutral level. Nevertheless, demand conditions are expected to align more closely with the disinflationary path for the rest of the year due to tightening financial conditions and global developments. During the reporting period, commodity prices declined on the back of energy prices, while global supply conditions remained fairly moderate. The impact of the increase in the basket exchange rate during the first four months on inflation is expected to be partially offset by the decline in commodity prices following global developments. Moreover, the weaker courses of inflation expectations and aggregate demand conditions compared to previous years are expected to curb the pass-through of the exchange rate to inflation. The real unit wage, which was estimated to have increased in the first quarter of 2025, is expected to weaken in the second quarter. While the monthly producer inflation posted a slowdown in February and March, pressures were felt in April due to the rise in the basket exchange rate. The downtrend in inflation expectations interrupted in April, and this outlook did not change significantly in May. The impact of tax and administered items on headline inflation weakened slightly in the last three-month period. Among the adjustments in administered prices, the significant downward revision of medical examination co-payments in the Health Practices Communiqué (SUT) stood out, along with the increases in national tariffs following the End-Source Supply Tariff adjustment to electricity tariffs. The ultimate impact of the SUT on annual

consumer inflation remained limited at 0.34 points. Annual services inflation maintained its high course even though it receded. Education and rent items, which have a strong backward-indexation tendency, continued to drive this course. Meanwhile, core goods inflation, which had followed a mild course in the first quarter, was affected by recent exchange rate developments in April. During the first four months of the year, adverse weather conditions and Ramadan-specific factors were notable contributors to food price developments, while the agricultural frost heightened the risks for the subsequent period. The underlying inflation had slowed following its temporary rise in January and recorded a partial increase in April due to the developments in financial markets.

The year-end inflation forecasts for 2025 and 2026 remained unchanged at 24% and 12%, respectively.

Inflation is projected to decline to 8% in 2027 before stabilizing at the medium-term inflation target of 5%. The last quarter of 2024 and the first quarter of 2025 data indicate a more limited slowdown in demand than was projected in the previous reporting period. The underlying inflation is expected to temporarily rise in April due to developments in financial markets and continue to slow down gradually in the upcoming period. The downtrend in inflation expectations has been slower than projected, and the basket exchange rate has increased. Furthermore, the food inflation assumption increased, driven by unprocessed food price developments. Consequently, these factors had an upward impact on inflation forecasts. Financial conditions have tightened due to the increase in the policy rate and the measures taken to support the tight monetary stance. Moreover, the tightening of the monetary policy stance supports the disinflation process through demand, real exchange rate and expectations channels. Additionally, the downward revision in oil and import price assumptions due to recent global developments, and the fact that the January increase to the medical examination co-payments in the SUT was partially revised down in February had a downward impact on the inflation forecast. The end-2025 inflation forecast remained unchanged at 24%, as these upside and downside effects offset each other with the policy response. Inflation is projected to fall to 12% by end-2026 as the monetary stance remains tight.

Medium-term forecasts are based on an outlook in which the tight monetary policy stance would be maintained until the inflation outlook displays a sustained decline and price stability is achieved, and the coordination among economic policies will be strengthened. The convergence of inflation expectations to the Inflation Report forecasts in the short term and to the inflation targets in the medium term is critical for ensuring a permanent decline in inflation. The improvement in inflation expectations halted in April, due to the recent developments in financial markets. The level of inflation expectations continues to pose risks to the disinflation process. With the monetary policy tightening, inflation expectations are expected to resume their downward trend and to fall to levels consistent with the disinflation path. Moreover, the rise in the basket exchange rate is expected to have a limited effect on the short-term inflation outlook due to the decline in commodity prices and weak demand conditions. It is expected that on the back of macroprudential policies that support the monetary transmission mechanism, the credit growth will remain consistent with the projected disinflation path. With the cumulative effects of the tightening in financial conditions and the tight monetary stance, the demand outlook is projected to contribute further to the disinflation process. Accordingly, inflation is projected to continue to decelerate in items that are highly sensitive to demand conditions. The ongoing mild course of producer price pressures will help core goods inflation to remain low. With the weakening in real unit costs becoming more pronounced, the decline in the underlying inflation is expected to strengthen. Lastly, in the forecast period, the continuation of a stronger coordination among monetary and other economic policies will contribute to disinflation through demand, cost and expectation channels.

1.1 Monetary Policy Decisions

The CBRT cut the policy rate by further 250 basis points at its third consecutive meeting in March after December and January. In addition, an interim meeting was held in March to evaluate the recent financial market developments. At this interim Monetary Policy Committee (MPC) meeting on March 20, the CBRT assessed the risks that these developments might pose to the inflation outlook and took measures to support the tight monetary stance. Accordingly, the CBRT decided to raise the overnight lending rate to 46% from 44%, while the policy rate and the overnight borrowing rate were kept at 42.5% and 41%, respectively. In addition, the one-week repo auctions were suspended for a period of time, and the CBRT provided funding at the overnight lending rate.

In April, the CBRT raised the policy rate by 350 basis points. Drawing attention to the effects of financial market developments on the underlying trend of inflation, the CBRT decided to raise the policy rate from 42.5% to 46%, the overnight lending rate from 46% to 49%, and the overnight borrowing rate from 41% to 44.5%. Moreover, the CBRT announced that it would resume the one-week repo auctions.

The CBRT reiterated that the tight monetary policy stance will be maintained until price stability is achieved via a sustained decline in inflation. The CBRT highlighted that inflation expectations and pricing behavior continue to pose risks to the disinflation process and also stated that the potential effects of the rising protectionism in global trade through global economic activity, commodity prices and capital flows are closely monitored. Accordingly, it was underlined that the policy rate will be adjusted prudently on a meeting-by-meeting basis, in a way to ensure the tightness required by the projected disinflation path taking into account realized and expected inflation and the underlying trend. The CBRT emphasized that the decisiveness regarding the tight monetary stance will strengthen the disinflation process through moderation in domestic demand, real appreciation in the Turkish lira and improvement in inflation expectations, and that increased coordination of fiscal policy will also contribute significantly to this process.

Considering the developments in credit growth, additional measures were taken to preserve macro financial stability and to support the tight monetary stance. With the adjustment to the loan growth-based reserve requirement practice on March 1, 2025, the monthly growth limit for FX loans was reduced from 1% to 0.5%, while the scope of FX loans exempted from the FX loan growth limit was narrowed. Beginning on March 29, 2025, overdraft loans that have more than three installments (except expenditures related to education), which were exempt from the loan growth limit for general-purpose loans to consumers, were included in the loan growth-based reserve requirement practice. Additionally, the scope of investment loans exempted from the FX loan growth limit was revised.

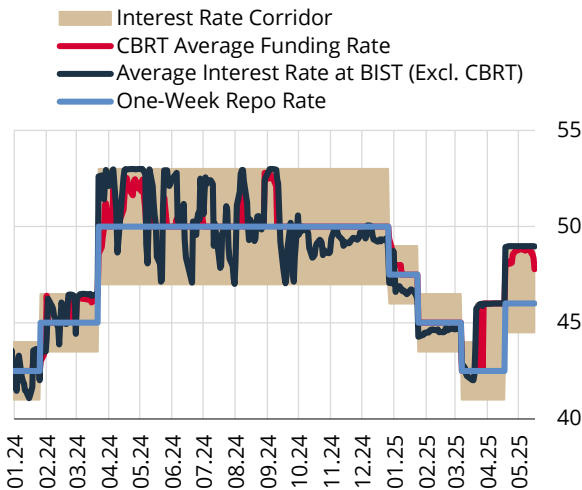
Several amendments were made in the macroprudential framework implemented to promote the exit from KKM accounts and the transition to the Turkish lira. As part of the strategy to phase out KKM accounts, the opening and renewal of all KKM accounts held by legal entities were terminated as of February 15, 2025, and KKM accounts of legal entities were excluded from the scope of KKM's transition to TL and renewal targets. On April 26, 2025, the remuneration rate applied to required reserves maintained for Turkish lira deposits was revised from 84% of the policy rate to 84% of the CBRT's weighted average funding cost. Reserve requirement ratios for FX deposits were raised by 200 basis points across all maturities on May 3, 2025, while the reserve requirement ratio for funds that are derived from FX repo transactions with residents that have a maturity up to one year was increased by 400 basis points and the calculation method was changed. A monthly increase target of 0.3 points for TL deposit share of legal persons was introduced for banks with a share lower than 60%, and the remuneration rate applied to required reserves maintained for Turkish lira deposits was raised from 84% to 86% of the CBRT's weighted average funding cost. In addition, with an amendment made to the Exports Circular as per the decision of the Ministry of Treasury and Finance, the minimum share of export proceeds to be sold to the CBRT was set at 35% until July 31, 2025. Likewise, the share to be sold to the CBRT from FX earning services' proceeds that are sold to banks was revised up to 35%. The FX conversion support rate, which is applied to firms' FX export proceeds conversion to the Turkish lira, was raised to 3% until July 31, 2025.

Excess liquidity was drained during the current reporting period, and the funding need of the system increased to reach positive levels as of April. Up until mid-March, the CBRT's FX transactions and the change of the TL account balance of the Ministry of Treasury and Finance played an important role in the level of excess liquidity in the system. In the period between February 7 and March 20, the excess liquidity fluctuated around TRY 1.4 trillion. Excess liquidity was sterilized mainly through overnight deposit buying auctions in this period, accompanied by weekly, monthly and two-month deposit buying auctions as well as sell-side Turkish lira FX/gold swap auctions. Financial market developments as of the second half of March led to a more pronounced risk aversion tendency and a selling pressure on Turkish lira assets. During this period, the CBRT's FX position decreased due to transactions to curb the volatility in exchange rates. As a result of the CBRT's FX transactions, the level of excess liquidity within the system started to decrease, and eventually a liquidity deficit within the system occurred by April (Chart 1.1.2). In view of the liquidity developments, the CBRT ceased the sell-side Turkish lira FX swap auctions as of March 21 and also stopped conducting deposit buying auctions as of April 18.

In response to the developments in financial markets, the CBRT took additional measures to support the monetary transmission mechanism. Accordingly, a two-month TL deposit buying auction was held on March 20, and the average maturity of sterilization was extended. In addition, the CBRT started to issue liquidity bills to enrich the diversity of liquidity toolset. Through liquidity bills with maturities up to 32 days issued, a total of TRY 269.2 billion was sterilized between March 24 and April 4. On March 28, the CBRT started outright bond purchases to support liquidity conditions in the bond market, in coordination with the Ministry of Treasury and Finance. Through these outright purchase auctions, the latest of which was held on April 11, nominal TRY 123.7 billion worth of securities were added to the Open Market Operations (OMO) portfolio. Thus, the size of CBRT's OMO portfolio reached a nominal TRY 289.7 billion.

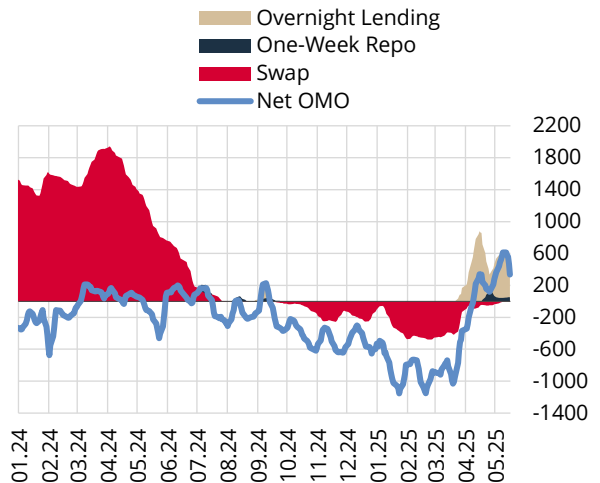
Taking measures to support its tight monetary stance, the CBRT ensured that overnight interest rates hover around levels close to the overnight lending rate (Chart 1.1.1). Through the MPC meetings on March 20 and April 17, the CBRT's policy rate (the one-week repo auction rate) was raised by 350 basis points, while the overnight lending and borrowing rates were increased by 500 and 350 basis points, respectively. On March 20, 2025, the one-week repo auctions were suspended, with funding provided at the overnight lending rate. The CBRT resumed the one-week repo auctions on April 18, 2025. However, the funding provided at the policy rate via repo auctions was kept limited so as to ensure that BIST overnight interest rates and the CBRT's average funding cost hover around levels close to the CBRT's overnight lending rate.

Chart 1.1.1: CBRT Interest Rates and Short-term Interest Rates (%)



Source: BIST, CBRT.

Chart 1.1.2: CBRT OMO and Swap Transactions (One-Week Moving Average, TRY Billion)



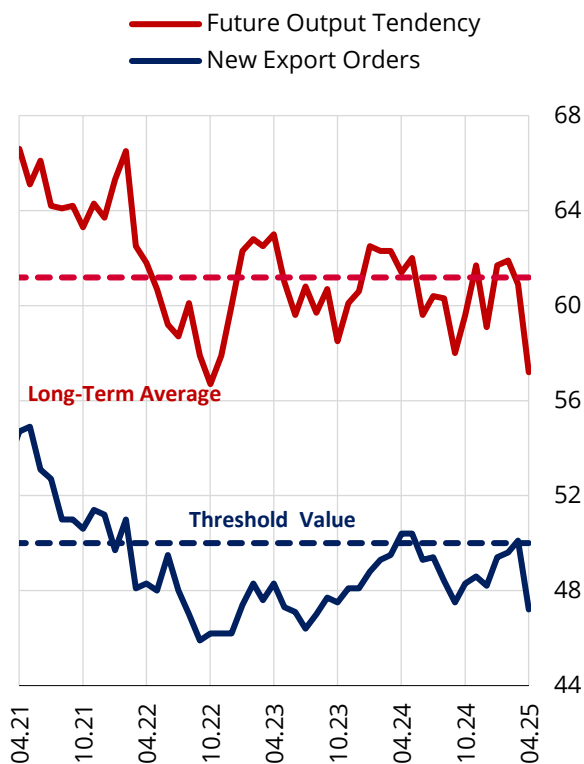
Source: CBRT.

2. Economic Outlook

2.1 Global Economy

The ongoing uncertainties over global trade policies have heightened in the wake of recent protectionist steps, and risks to the global economy have become more pronounced. Despite the postponement of a significant portion of the new tariffs announced by the US on April 2, uncertainty over global trade and economic policies remains high. (Zoom-in 2.1). In fact, leading indicators of global production and export orders reveal a decline both in the production trend and export orders in April (Chart 2.1.1). Moreover, the growth forecasts of emerging and advanced economies, with the US in the lead, have recently been revised downwards notably (Table 2.1.1). According to the Consensus Bulletin, growth forecasts for 2025 were revised downwards from 2.2% to 1.2% for the US, from 1.2% to 0.8% for the UK and from 1.0% to 0.9% for the euro area when compared to the previous reporting period. In China, despite the slight downward revision in the growth forecast, deflationary concerns and the stronger protectionism in trade policies lead to increased uncertainty over economic activity. Accordingly, the global growth index weighted by the export shares of Türkiye's trading partners is projected to increase by 1.9% in 2024 and 2.1% in 2025. Thus, external demand is estimated to weaken to a more limited extent in 2025 compared to last year and recover gradually in 2026. The recently heightened uncertainty over global economic and trade policies as well as geopolitical developments are considered to be the leading risks to the course of global economic activity.

Chart 2.1.1: Global PMI Indices (Level)



Source: S&P Global.

Table 2.1.1: Growth Forecasts for Türkiye's Main Trading Partners* (%)

	2024 Forecast/ Realization	2025 Forecast		2026 Forecast	
		IR 2025-I	IR 2025- II	IR 2025- I	IR 2025-II
Euro Area	0.7	1.0	0.9	1.2	1.1
Germany	-0.2	0.4	0.0	1.0	1.2
USA	2.8	2.2	1.2	2.0	1.5
UK	1.1	1.2	0.8	1.4	1.0
Iraq	0.5	0.6	0.6	1.7	2.0
Italy	0.7	0.7	0.5	0.9	0.7
France	1.1	0.7	0.6	1.1	0.9
Spain	3.2	2.3	2.4	1.8	1.8
Holland	0.9	1.5	1.2	1.3	1.2
Russia	4.3	1.6	1.7	1.3	1.2
UAE	3.9	5.0	5.1	5.0	5.0
Romania	0.9	2.3	1.9	2.9	2.6
Poland	2.9	3.4	3.3	3.3	3.2
Bulgaria	2.8	2.7	2.8	2.7	2.8
Greece	2.3	2.0	2.2	1.9	2.0
Belgium	1.0	1.1	0.9	1.4	1.1
Egypt	2.4	4.0	4.0	4.9	4.5
Saudi Arabia	1.3	3.8	3.7	4.1	3.9
Ukraine	2.9	3.6	3.6	5.2	5.2
China	5.0	4.4	4.3	4.1	4.0

Source: Consensus Economics, S&P Global.

* Countries are ranked according to the size of their share in Türkiye's exports in 2024.

Uncertainties regarding global trade policies as well as the global growth outlook and composition, geopolitical risks, financial conditions and supply-side factors continue to shape commodity prices.

Following the steps taken by the US about tariffs, the weakened global growth outlook led to a broad-based decline in prices of commodities excluding precious metals driven by gold prices. This decline was more evident in energy commodities. Expectations for a lower demand and the US-led higher supply despite the sanctions enforced by the US against Iran and Russia caused the Brent oil prices to fall. In addition to the demand outlook, European natural gas prices receded by 36.1% compared to the previous reporting period

amid ongoing geopolitical developments, the mild course of weather conditions as well as lower storage and liquefied natural gas transportation costs. Commodity prices excluding energy edged up in the inter-reporting period due to precious metals. On the other hand, industrial commodity prices fell due to the heightened deflation concerns in China and the lower global demand outlook. Moreover, the agricultural commodity price index exhibited an overall decline compared to the previous reporting period (Table 2.1.2).

Table 2.1.2: Commodity Prices (%)

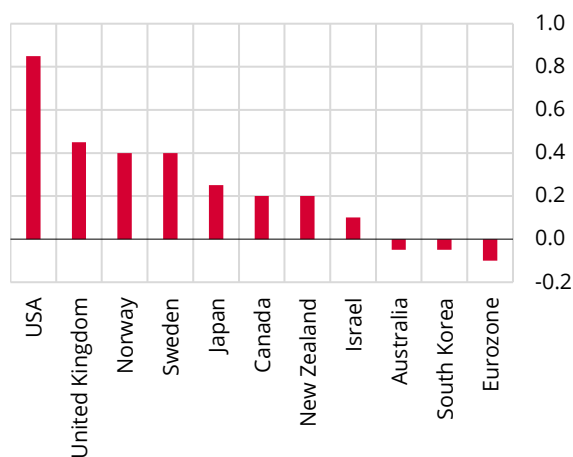
	February 2025	March 2025	April 2025	May 2025	Annual	Compared to the Previous Reporting Period*
Headline Commodity Index	0.2	-2.2	-4.0	-0.7	-8.9	-5.4
Energy	-2.4	-3.7	-7.6	-2.6	-19.1	-10.6
Agricultural Commodity	4.5	-5.8	0.7	-1.7	-4.2	-6.5
Industrial Metal	2.4	2.5	-7.3	2.5	-8.3	1.9
Precious Metal	6.2	3.3	6.5	1.6	36.1	10.3
Excl. Energy	3.3	-0.4	-0.1	1.2	3.9	0.6
Brent Oil	-4.8	-3.4	-6.6	-6.3	-22.5	-12.4
Natural Gas (USA)	0.3	10.6	-17.4	2.9	45.2	0.8
Natural Gas (Europe)	4.5	-17.1	-15.9	-1.8	8.2	-36.1
Coal	-10.4	-4.7	-3.8	2.7	-31.1	-7.7
Aluminum	2.9	-0.2	-10.2	2.7	-5.2	-5.6
Copper	6.8	7.7	-5.2	-0.8	-3.2	-0.7
Iron	6.3	-4.4	-1.9	-0.9	-15.6	-5.7
Wheat	6.1	-6.1	-1.4	-3.7	-21.6	-9.9
Soy	1.1	-3.3	2.4	1.9	-13.9	0.1
Rice	-4.5	-2.4	-1.0	-5.2	-32.2	-6.6
Corn	2.7	-7.0	4.4	-5.9	-2.1	-9.0
Cotton	-1.8	-1.0	0.9	1.8	-13.4	-1.1
Sugar	6.6	-5.6	-4.6	-3.4	-6.6	-9.5

Source: Bloomberg.

* Percentage change in prices between May 16, 2025 and February 7, 2025. Red and green colorings indicate increases and decreases in prices, respectively.

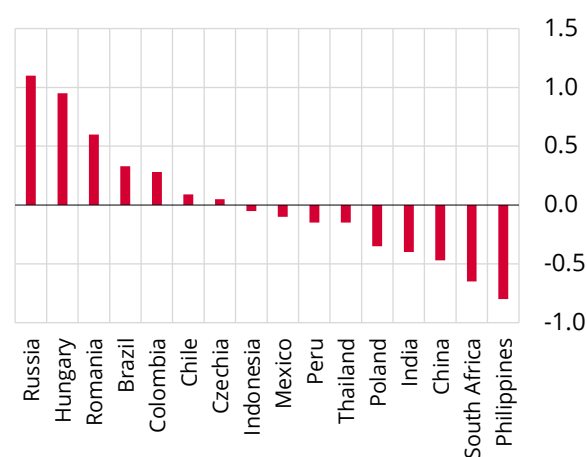
While the tariff steps lead to inflation uncertainty globally, inflation expectations for 2025 were revised slightly upwards. In the current reporting period, headline inflation in both advanced and emerging economies decreased owing to energy and goods prices. However, amid heightened uncertainty, global inflation expectations for 2025 have been revised upwards in many countries (Charts 2.1.2 and 2.1.3). This indicates that the fall in global inflation is expected to slow down due to protectionist tendencies and heightened uncertainties. April forecasts show that inflation in the US, Japan and the UK in 2025 will be higher than in 2024, albeit to a limited extent. However, central banks continue to communicate that inflation uncertainty has increased due to tariff steps. In the upcoming period, geopolitical developments, fluctuations in commodity prices and the monetary policy response will shape the course of global inflation.

Chart 2.1.2: Expected Inflation in 2025 in Advanced Economies (Change between IR-II and IR-I, % Points)



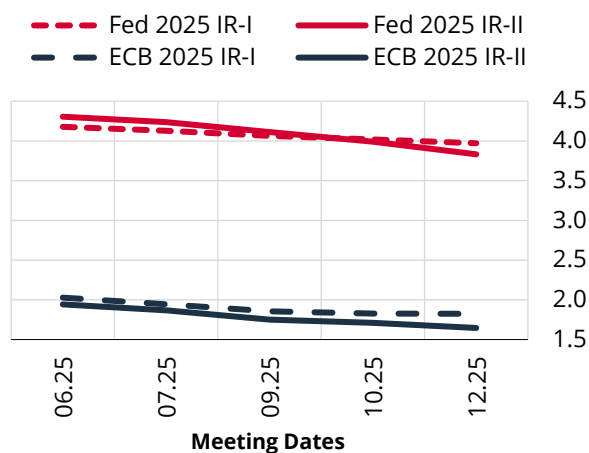
Source: Bloomberg.

Chart 2.1.3: Expected Inflation in 2025 in Emerging Economies (Change between IR-II and IR-I, % Points)

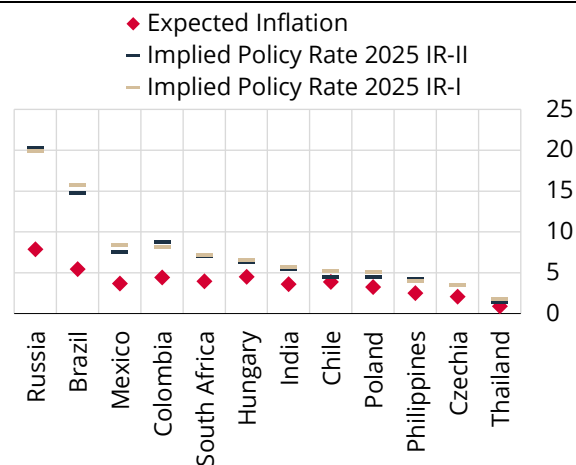


Source: Bloomberg.

While the weaker growth outlook leads markets to price a faster rate cut, central banks re-emphasize further cautious rate cuts in their policy communications. Market pricing points to a faster rate cut for both the Fed and the European Central Bank (ECB) compared to the previous reporting period. As of May 16, the amount of additional rate cuts priced until the end of 2025 is 50 basis points for the Fed and 53 basis points for the ECB (Chart 2.1.4). In the current reporting period, rate cuts continued in advanced economies, but some central banks paused their rate cuts. While the ECB continued to cut policy rates by 25 basis points in its March and April meetings, the Fed and the Bank of Canada kept policy rates unchanged in the last two meetings and in the last meeting, respectively. The Bank of England, on the other hand, kept its policy rate unchanged at its April meeting and continued with a reduction of 25 basis points in May. In this period, the Reserve Bank of Australia, the Czech National Bank and the Bank of Korea cut policy rates by 25 basis points each, while the National Bank of Denmark reduced rates by 50 basis points and the Reserve Bank of New Zealand by 75 basis points. In emerging economies, central banks maintained their cautious stance in rate cuts due to the slowdown in the inflation outlook and global uncertainties. India and Thailand cut rates by 25 basis points each in the last two meetings and Mexico by 50 basis points in the last three meetings, while the Philippines, Colombia and Peru cut rates by 25 basis points each in the same period. Moreover, after keeping it intact over the last year, the National Bank of Poland cut the policy rate by 50 basis points in May. On the other hand, Banco Central do Brasil, taking account of the inflation outlook, raised its policy rate by a total of 150 basis points in two meetings, while the Bank of Russia, which increased rates by a total of 500 basis points in 2024, kept the policy rate unchanged in the last reporting period. Meanwhile, in view of the risks to economic activity, China maintained its expansionary policy stance through reductions both in the policy rate and reserve requirement ratios. Similar to advanced economies, many emerging economies are pricing in lower rates for end-2025 compared to the previous reporting period, as risks to the growth outlook have increased amid protectionist trade policies. On the other hand, resulting higher inflation expectations pose a challenge against expectations management for the central banks of emerging economies and require them to adopt a certain level of tightness in monetary policy. In fact, the futures-implied policy rates and inflation expectations show that policy rates in emerging economies will be further set above inflation rates in 2025 (Chart 2.1.5).

Chart 2.1.4: Market-Implied Policy Rate Paths for 2025 (Effective, %)

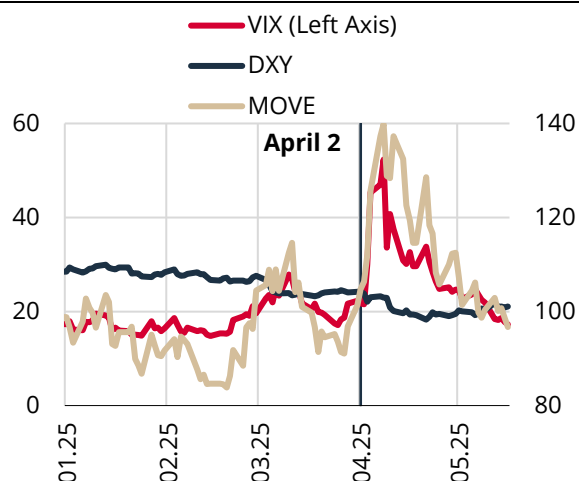
Source: Bloomberg.

Chart 2.1.5: Futures-Implied Policy Rates and Inflation Expectations for End-2025* (% Points)

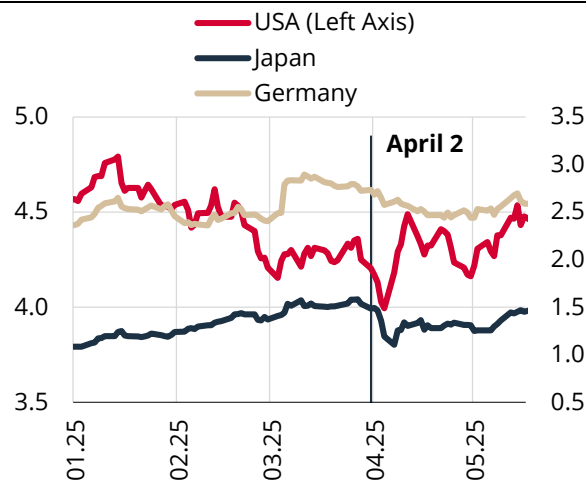
Source: Bloomberg.

*Inflation expectations are from the Bloomberg Survey.

Global uncertainties aggravate volatility in financial markets. Following the announcement of new tariffs by the US on April 2, the VIX and MOVE indices, which measure expected volatility, posted sharp increases. Subsequently, with the moderation in statements and decisions to delay the enforcement of higher tariffs, the indices declined and converged to the levels of the previous reporting period (Chart 2.1.6). In the meantime, the DXY declined, while bond yields in advanced economies and global stock markets followed a very volatile course (Charts 2.1.6 and 2.1.7). These fluctuations in asset prices weigh on macro financial risks through the balance sheets of the corporate sector and financial institutions, while exerting pressure on EME risk premiums and currencies. In the current reporting period, the deterioration in risk appetite led to portfolio outflows from equity and bond markets in emerging economies. Between February 8, 2025 and May 16, 2025, outflows from equity markets in emerging economies excluding China and bond markets were USD 27.7 billion and USD 9.5 billion, respectively. In this period, China, the focal point of protectionist trade policies, recorded an outflow of USD 12.5 billion from equity markets.

Chart 2.1.6: VIX and Move Volatility Indices and DXY (Daily)

Source: Bloomberg.

Chart 2.1.7: 10-Year Bond Yields (%)

Source: Bloomberg.

Zoom-in 2.1

Tariff Steps and Global Trade Policy Uncertainty

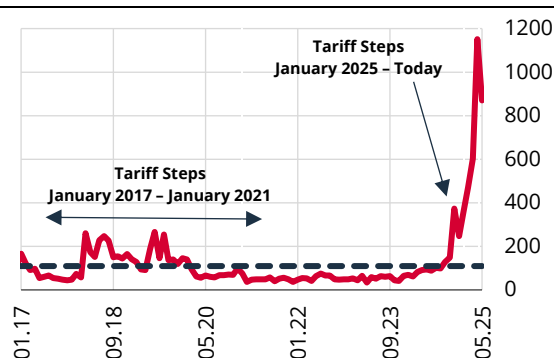
The tariff package announced by the US on April 2 was not sectoral or regional, unlike the 2017-2020 period, but comprehensive, covering more than 180 countries. Since the start of the process in January, the US and its trading partners have taken many steps that could affect global trade and the economic outlook. Protectionist policies, which peaked in early April, eased somewhat with the subsequent postponements and bilateral agreements in May (Table 1).

Table 1: Tariff Steps in 2025

January - March	<ul style="list-style-type: none"> The US announced tariffs of 25% against Mexico and Canada and 20% against China. It also imposed a 25% tariff on imports of automobiles and automobile parts and semiconductors. Canada and China responded in kind. All exemptions on steel and aluminum imports were removed, the scope of derivative products was expanded, and the tariff rate on aluminum was raised from 10% to 25%, while the 25% tariff rate on steel was maintained.
April 2	<ul style="list-style-type: none"> The US announced new tariffs with a baseline rate of 10%, covering more than 180 countries with Türkiye, the UK, Brazil, Argentina, Singapore, Singapore, the UAE, Saudi Arabia, Australia and New Zealand being subject to a baseline tariff rate. Tariff rates higher than 10% were set for countries with high bilateral trade deficits (European Union: 20%, China: 54%; Canada: 25%, Mexico: 25%, Japan: 24%, South Korea: 26%, Vietnam: 46%, India: 27%, Switzerland: 32%, Taiwan: 32%).
April 8	<ul style="list-style-type: none"> In retaliation, China announced an 84% tariff on all US products.
April 9	<ul style="list-style-type: none"> The US raised its tariff rate imposed on China to 125%, bringing the effective tariff rate against China to 145%. While the 10% baseline tariff rate went into effect for all trading partners of the US, the additional tariffs of other countries except China, Canada and Mexico were delayed for 90 days.
April 11	<ul style="list-style-type: none"> China announced an increase in the tariff rate imposed on the US to 125%.
April 12	<ul style="list-style-type: none"> The US unveiled tariff exemptions on certain technological products such as smartphones, computers, semiconductors and chips.
May 8	<ul style="list-style-type: none"> As a result of the negotiations between the US and the UK, it was announced that the US tariffs imposed on steel and aluminum would not be applied to the UK and that the tariff rate on automobiles would be applied to the UK at 10% per 100,000 vehicles per year.
May 12	<ul style="list-style-type: none"> The US and China agreed on the reduction of tariff rates to 30% by the US against China and to 10% by China against the US for the next 90 days.

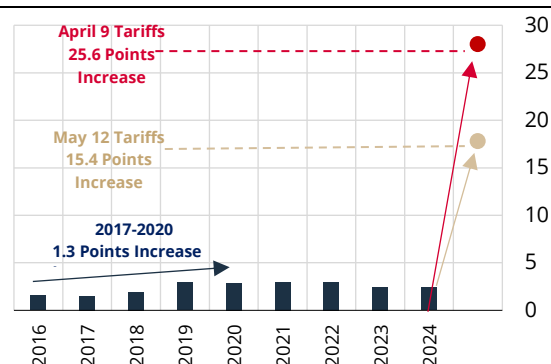
Against this backdrop, the global trade policy uncertainty index reached much higher levels in April than in the 2017-2020 period, the last time that tariff steps were taken. Despite recent agreements and postponements, the index remained elevated (Chart 1). Moreover, the US effective tariff rate, calculated by dividing total tariffs by imports, is projected to increase much more significantly compared to the 2017-2020 period if the announced tariffs are enforced. In 2025, if all the tariffs announced on April 9 are implemented, the effective tariff rate will be 28%, the highest since 1909. Even if the tariff rates temporarily agreed upon in the May 12 agreement between China and the US become permanent, the effective tariff rate is projected to increase by 15.4 percentage points in 2024, the highest level since 1934 (Chart 2).

Chart 1: Trade Policy Uncertainty Index



Source: The Economic Effects of Trade Policy Uncertainty, Caldara et al. (2020).

Chart 2: US Effective Tariff Rate* (%)



Source: Yale University Budgetlab.

* China's 14% import share is assumed to remain constant after tariffs, and the substitution effect is ignored.

2.2 Financial Conditions

In an environment of weak global risk sentiment amid mounting uncertainties over tariffs and a deteriorating global economic outlook, the risk perception regarding TL assets has worsened since mid-March due to domestic developments. After the monetary tightening and the liquidity steps, the selling pressure on TL assets eased. However, the global tariffs announced in early April and the deterioration in the risk sentiment towards emerging economies led to further outflows from TL assets. Against this background, Türkiye's CDS premium deteriorated more than that of emerging economies and reached 380 basis points but declined to 297 basis points as of May 16, thanks to the policy steps taken (Chart 2.2.1). The volatile and weak risk sentiment towards emerging economies prompted further outflows from emerging market assets during the current reporting period. However, amid the moderate improvement in global risk sentiment, inflows to emerging market assets resumed in May. Against this background, a total of USD 3.1 billion portfolio outflow was recorded, with USD 2.7 billion of net outflow from the Turkish Government Domestic Debt Securities (GDDS) market and USD 0.4 billion of net outflow from the equity market, while USD 2.9 billion of inflow was recorded in the last three weeks (Chart 2.2.2).

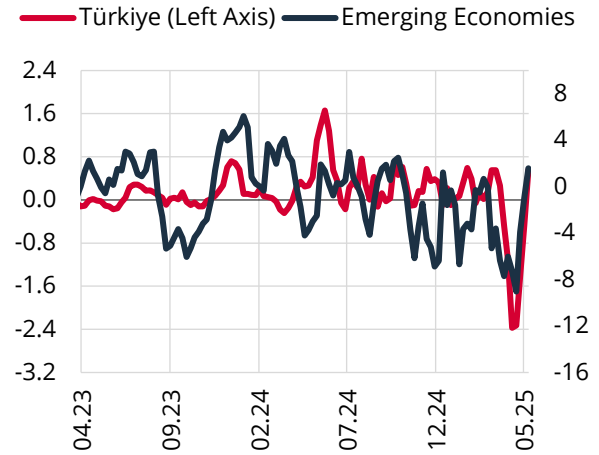
Chart 2.2.1: CDS Premium in Türkiye and Emerging Economies* (Five-Year, Basis Points)



Source: Bloomberg.

* Emerging economies include Brazil, Indonesia, the Philippines, South Africa, Colombia, Malaysia, Mexico and Chile.

Chart 2.2.2: Portfolio Flows to Türkiye* and Emerging Economies (Four-Week Average, USD Billion)



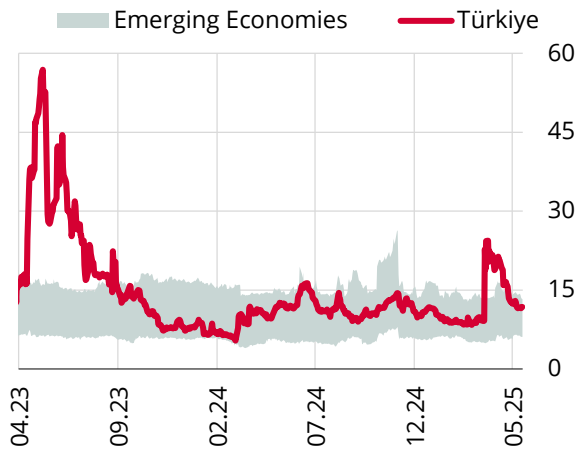
Source: CBRT, IIF.

* Data for Türkiye includes portfolio flows to equity and GDDS markets. Repo is excluded from the GDDS data.

The implied volatility of the Turkish lira increased amid domestic and international developments.

Exchange rate volatility, which rose in March due to the deterioration in risk sentiment, declined in response to the policy steps taken. Accordingly, the implied exchange rate volatility of the Turkish lira rose to 11.8% for one month and to 22.6% for 12 months (Charts 2.2.3 and 2.2.4). While the weak and volatile global risk appetite limited the decline in the volatility of the Turkish lira, the rigidity in the 12-month volatility indicates that the risk perception for the long term persists despite a decline over the last month.

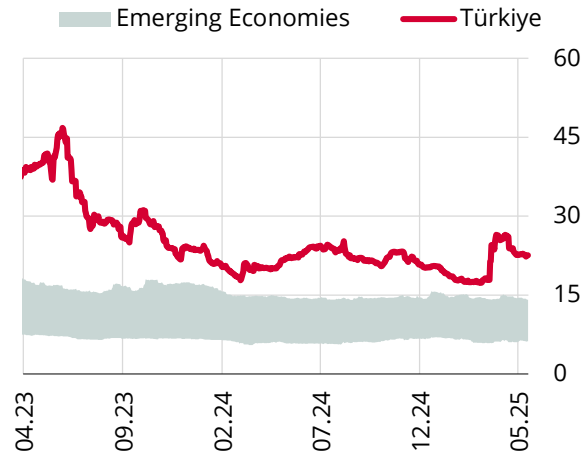
Chart 2.2.3: Implied Volatility of FX Options*
(Against USD, One-Month Maturity, %)



Source: Bloomberg.

* Emerging economies include Brazil, Chile, Colombia, Mexico, Poland, the Philippines, Malaysia, South Africa Indonesia, Romania and Hungary.

Chart 2.2.4: Implied Volatility of FX Options*
(Against USD, 12-Month Maturity, %)

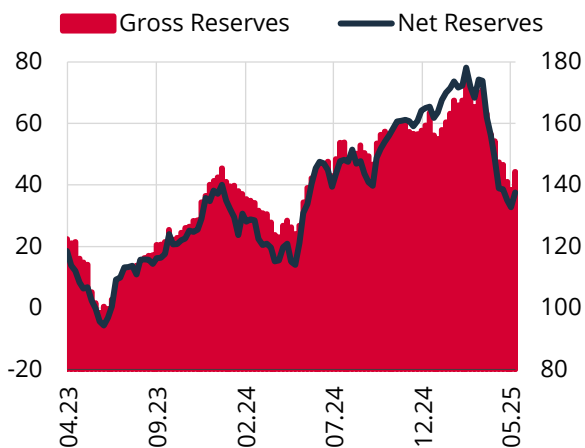


Source: Bloomberg.

* Emerging economies include Brazil, Chile, Colombia, Mexico, Poland, the Philippines, Malaysia, South Africa Indonesia, Romania and Hungary.

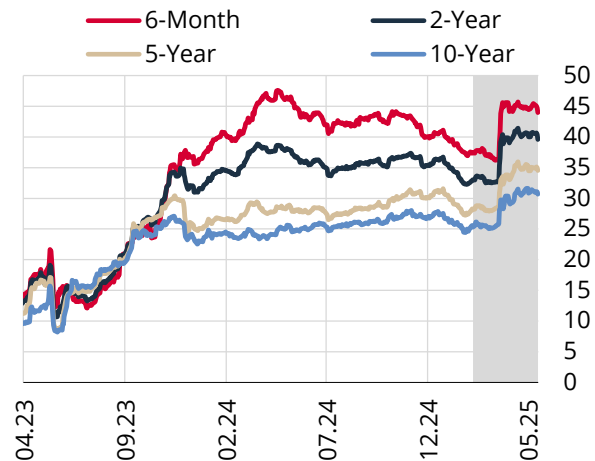
CBRT reserves declined led by non-residents' portfolio outflows. In the current reporting period, the CBRT's gross international reserves fell by USD 23.2 billion to USD 144.3 billion, due largely to portfolio and swap outflows of non-residents (Chart 2.2.5). CBRT's FX reserves curbed the adverse effects of the volatility on price stability and financial stability, which arose from the worsening risk sentiment towards TL assets due to domestic and global developments. In this period, the CBRT also introduced TL-settled foreign exchange forward transactions to ensure the sound functioning of the foreign exchange market, prevent possible volatilities in exchange rates and stabilize foreign exchange liquidity. The balance of sell-side FX and gold swap transactions used to diversify sterilization instruments fell to USD 0.1 billion in the same period. Meanwhile, with an amendment made to the Exports Circular as per the decision of the Ministry of Treasury and Finance, the minimum proportion of export proceeds to be sold to the CBRT was set at 35% until July 31, 2025. The rate of FX conversion support to promote conversion of firms' FX export proceeds to the Turkish lira was raised to 3% until July 31, 2025. This move is expected to strengthen net FX reserves in the upcoming period. CBRT reserves, which have increased by USD 3.3 billion over the last three weeks, are expected to resume their rise due to the disinflationary tight monetary stance and the favorable course of the current account balance in the summer months. However, the weak global risk sentiment may curb the pace of this rise to some extent.

Chart 2.2.5: CBRT's Gross International Reserves (Weekly, USD Billion)



Source: CBRT.

Chart 2.2.6: GDDS Yields (%)

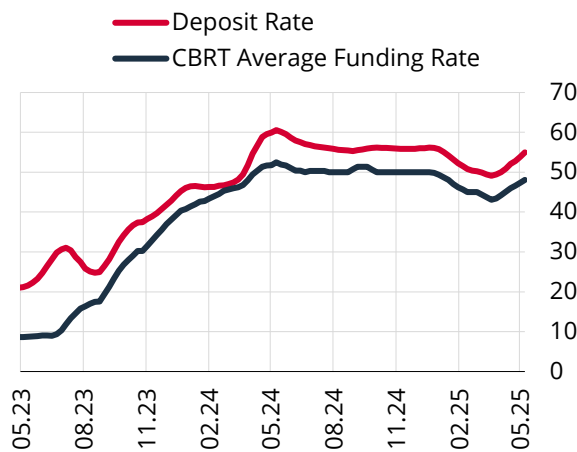


Source: Bloomberg.

GDDS yields rose across all maturities. While GDDS yields were on a decline until mid-March, more visibly in short maturities, they posted a rise across all maturities due to the deterioration in the risk sentiment towards TL assets (Chart 2.2.6). GDDS yields are expected to normalize and become more aligned with inflation and the monetary policy outlook as the risk sentiment towards TL assets improves in response to domestic and global developments.

Financial conditions tightened due to the increase in the policy rate and measures to support the tight monetary stance. From the start of policy rate cuts in December 2024 to the onset of volatility financial markets in mid-March 2024, the decline in deposit rates became apparent in line with the transmission mechanism (Chart 2.2.7). However, the CBRT's proactive and market-oriented actions to support the tight monetary policy stance in response to developments in financial markets led deposit rates to rise to 56.5% as of May 9 (Chart 2.2.8). Moreover, loan rates increased substantially in line with the tight monetary stance, with TL commercial loan and personal loan rates standing at 59.3% and 74.6%, respectively, as of May 9. While housing loan rates remained flat at 41.7% in the respective week, vehicle loan rates, which showed fluctuations due to promotional sales, stood at 48%.

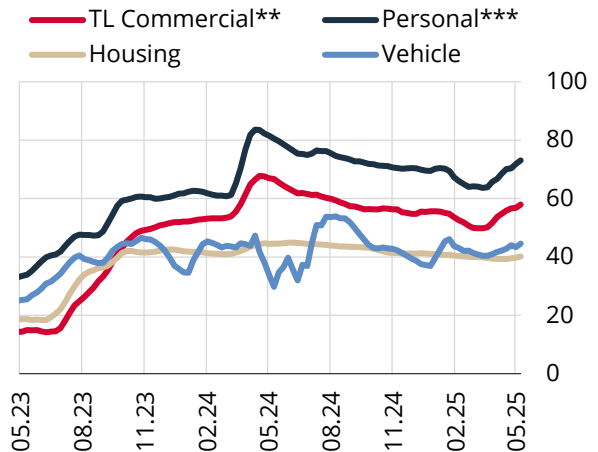
Chart 2.2.7: Turkish Lira Funding Rates* (Four-Week Moving Average, %)



Source: CBRT.

* Deposit rate is compound interest rate, while CBRT average funding rate is simple interest rate.

Chart 2.2.8: Loan Rates* (Flow, Four-Week Moving Average, %)



Source: CBRT.

* Loan rates are compound interest rate.

** Excluding overdraft accounts and credit cards.

*** Excluding overdraft accounts.

In banks' deposit composition, the share of KKM accounts continues to decline. As part of the strategy to exit from KKM accounts, the opening and renewal of KKM accounts, including YUVAM accounts, for legal entities were discontinued as of February 15, 2025. Besides, KKM accounts held by legal entities were excluded from the targets for KKM accounts' renewal and transition to Turkish lira, effective from March 14, 2025.¹ As a result of these decisions and the tight monetary policy, the KKM balance declined further to TRY 626 billion as of May 9. On the other hand, the share of TL deposits excluding the KKM accounts in deposit composition reached 60% at the end of February but declined slightly as the financial volatility in the second half of March led to a shift towards FX deposit accounts (Charts 2.2.9 and 2.2.10). That said, the CBRT took a series of macroprudential policy steps to limit the effects of the volatility in financial asset prices and to maintain the efficient functioning of financial markets. Effective from the calculation period of April 11, 2025, a decision was taken regarding the calculation of the TL equivalent of foreign currency denominated amounts in the TL share calculation. Accordingly, the exchange rate/price on the previous calculation date started to be used instead of the average exchange rate/price of the calculation period.² In addition, the ratio for blocking of reserve requirements to be maintained for TL liabilities was increased from 30% to 40% for institutions with asset size of TRY 500 billion and above, and from 20% to 30% for institutions with asset size of TRY 100 billion and above. Effective from April 28, 2025, the policy interest rate, which is used to calculate the remuneration amount to be paid to the required reserves maintained

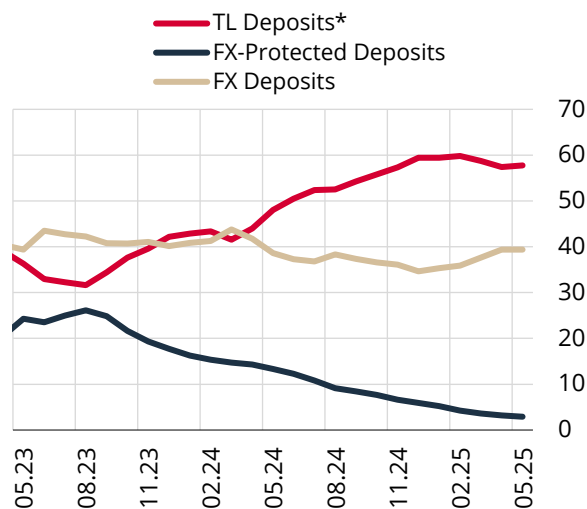
¹ Including also the accounts maturing as of February 15, 2025.

² However, it was also stated that as per the new calculation method, if the real person TL share calculated as of March 14, 2025 remains unchanged on the calculation date of April 11, 2025, the target will be considered to have been achieved, and having a TL share at 60% or above will be considered acceptable. The TL conversion rate targets for the calculation periods of April 11, May 9 and June 5, 2025 were discontinued.

for accounts under the CBRT's protection against exchange rates/prices and for TL deposit accounts/participation funds, was replaced with the CBRT's weighted average funding cost.

In addition to these steps, the CBRT made some changes in the macroprudential framework to support transition to the Turkish lira. Effective from April 25, 2025, the reserve requirement ratios for foreign currency deposits/participation funds and precious metal deposit accounts were raised by 200 basis points. Moreover, the CBRT made an increase of 400 basis points in the reserve requirement ratio for funds that banks obtain from foreign currency repo transactions with residents at maturities up to one year (including one year), which are monitored under banks' other liabilities subject to reserve requirements. Additionally, the calculation method for funds obtained from repo transactions and subject to reserve requirements was changed, ending the practice of taking the simple arithmetic average of the balances of 14 days that fall between two calculation dates. Effective from May 5, 2025, the remuneration of reserve requirements was amended. Accordingly, for banks with a legal entity TL deposit share below 60%, a monthly growth target of 0.3 percentage points was introduced for the relevant share, and the reserve requirements maintained for TL deposits started to be remunerated at 86% of the CBRT weighted average funding cost instead of 84%.

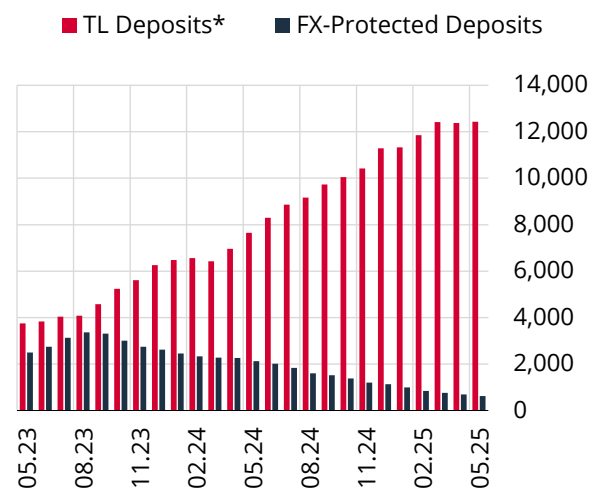
Chart 2.2.9: Deposit Composition (% Share)



Source: CBRT.

* TL deposits exclude KKM and FX-protected deposit accounts converted from FX.

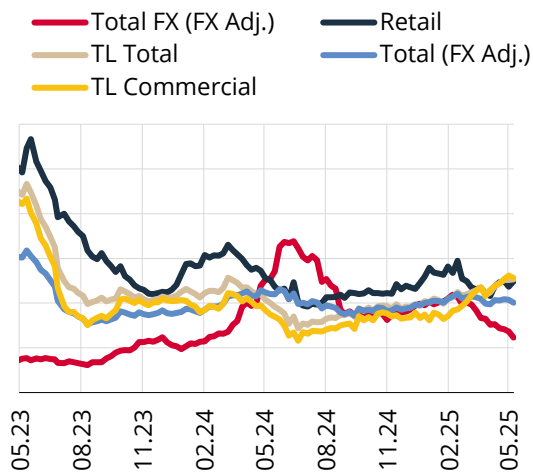
Chart 2.2.10: Turkish Lira Deposit Composition (TRY Billion)



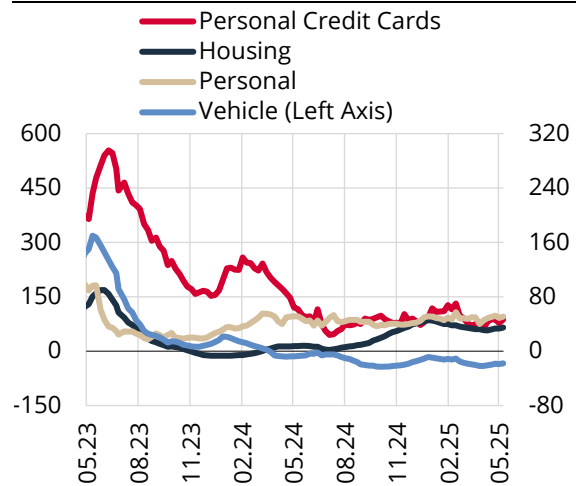
Source: CBRT.

* TL deposits exclude KKM and FX-protected deposit accounts converted from FX.

As a result of loan growth limits and the volatility in financial asset prices, FX loan growth slowed, while TL loans gained momentum, and exchange rate-adjusted total loan growth remained flat. The CBRT took a series of measures targeting the acceleration in FX loans in the reporting period. Accordingly, to support the tight monetary stance and the monetary transmission mechanism, the monthly growth limit of 1% for FX loans was lowered to 0.5% as of March 1, 2025, while the scope of loans exempted from the FX loan growth limit was narrowed. The tightening of the growth limit led to a slowdown in FX commercial loan growth, while the decline in FX loan growth gained pace due to the uncertainty driven by the volatility in financial markets. On the other hand, the deceleration in FX commercial loans was effective in the increase of TL commercial loan demand despite the rise in interest rates. As of May 9, the 13-week annualized FX commercial loan growth adjusted for exchange rates declined to 7%, while the TL commercial loan growth rose to 46.8% (Chart 2.2.11). Due in part to the moderate growth in retail loans, the total loan growth adjusted for exchange rates remained flat at 30.3% in the respective week.

Chart 2.2.11: Loan Growth (13-Week Annualized, %)

Source: CBRT.

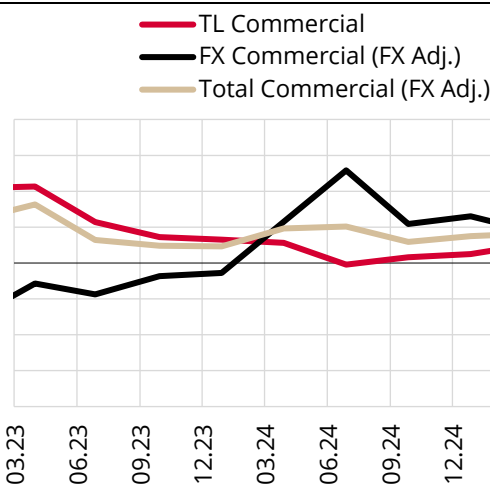
Chart 2.2.12: Retail Loan Growth (13-Week Annualized, %)

Source: CBRT.

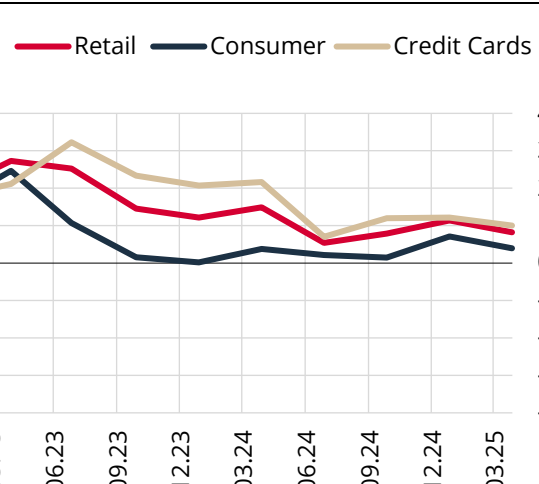
Retail loan growth has recently gained some pace due to the use of overdraft accounts and personal credit cards. The 13-week annualized growth rate of retail loans, which declined over the previous reporting period, increased in recent weeks due to the overdraft accounts and personal credit card growth and stood at 44.6% as of May 9.

The 13-week annualized growth rates of personal loans including overdraft accounts and personal credit cards were 50.6% and 46.6%, respectively. The share of overdraft accounts in personal loans was 33.4%, up from 31.2% in the previous reporting period. As a result of these developments, overdraft accounts with more than three instalments (excluding expenditures for education and tuition fees) which had been exempted from the loan growth-based reserve requirement practice in relation to personal loans, were included in loan growth limits upon the decision taken on March 28, 2025. Having declined slightly compared to the previous reporting period, the growth of housing loans tracked the flat course of interest rates and stood at 35.6% as of May 9. The 13-week annualized growth of vehicle loans, on the other hand, remained in negative territory in the current reporting period (Chart 2.2.12).

Real credit utilization is above long-term averages. FX-adjusted changes in real standardized total commercial loans have remained steady since the previous reporting period. This was mainly driven by TL commercial loans offsetting FX commercial loans that slowed due to tighter loan growth limits. Standardized real changes in retail loans, on the other hand, converged to their long-term averages in the current reporting period, more visibly in consumer loans (Chart 2.2.13).

Chart 2.2.13: Credit Change* (13-Week Average, Real, Standardized Value)

Source: CBRT.

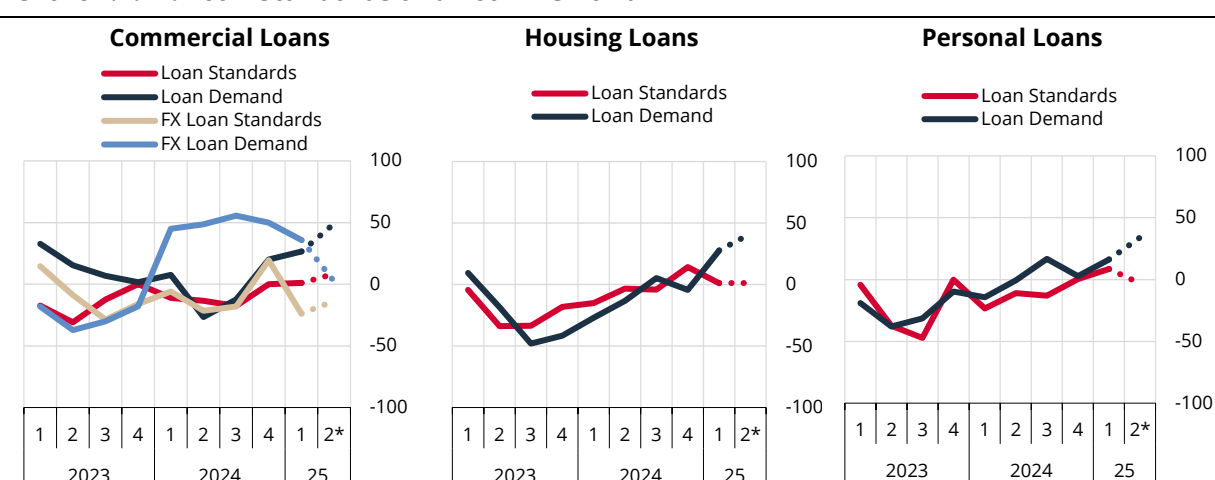


* Series are deflated by CPI. The mean and standard deviations of the series are calculated based on the 2006-2019 period. The 13-week average is taken after real weekly changes in loan stock balances are standardized. Consumer loans are composed of housing, vehicle and personal loans, while retail loans are the sum of consumer loans and personal credit cards.

According to the Bank Loans Tendency Survey (BLTS), banks expect that the TL loan demand will remain buoyant while loan standards will ease for commercial loans in the second quarter of 2025. In the first quarter of 2025, demand for commercial loans strengthened generally, while banks eased their loan standards slightly. Meanwhile, the demand for FX commercial loans was strong and banks tightened their FX loan standards amid tighter loan growth limits. Banks' expectation for the second quarter is that demand for commercial loans will remain brisk and standards will be eased. However, banks expect demand for FX loans to remain limited and FX loan standards to tighten further in the second quarter (Chart 2.2.14).

In the first quarter of 2025, the easing in standards for housing loans continued to a limited extent, while demand for these loans remained strong. Similarly, the easing of standards for personal loans continued in the first quarter of the year, while demand for these loans remained high. For the second quarter of 2025, banks expect that the easing in standards for housing loans will continue at a weak pace, while standards for other types of retail loans will tighten slightly. Loan demand in the second quarter is expected to be brisk for both loan types (Chart 2.2.14).

Chart 2.2.14: Loan Standards and Loan Demand



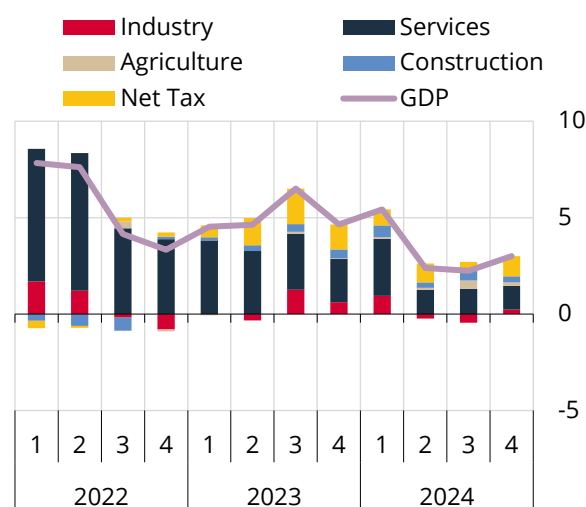
Source: BLTS, CBRT.

* Denotes banks' expectations. Loan standards and loan demand are calculated as follows: Banks are asked how their loan standards (loan demand) have changed in the past three months. Net trends, which are calculated using percentages of responses, show the direction of change in loan standards (loan demand). An index above zero indicates easing in loan standards (increase in loan demand)

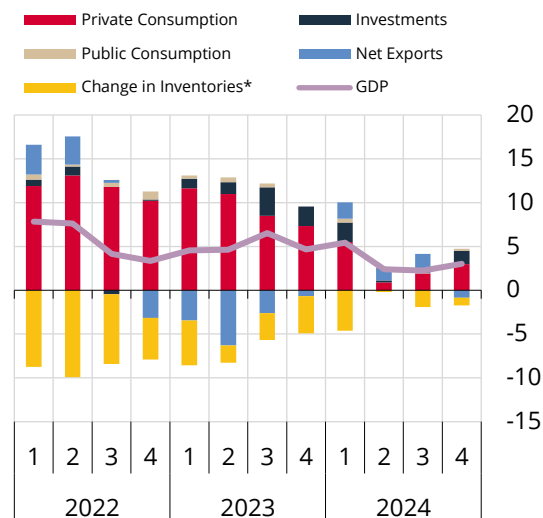
2.3 Economic Activity

Supply and Demand Developments

Economic activity recovered in the fourth quarter of 2024. In the fourth quarter, GDP increased by 3% on an annual basis and by 1.7% on a quarterly basis. In this period, the services sector remained the main driver of annual growth on the production side. After a year-on-year decline in the second and third quarters of 2024, industrial value added increased in the fourth quarter. Thus, all sectors contributed positively to annual growth on the production side (Chart 2.3.1). The manufacturing and services sectors made the largest contributions to the quarterly increase. On the expenditures side, the contribution of final domestic demand to annual growth increased in the fourth quarter. The change in inventories had a negative impact on annual growth, while the contribution of domestic demand to annual growth increased. In this period, the contribution of both private and public consumption increased. The rise in private consumption was more evident in the last quarter of the year due to the demand brought forward by the sales campaigns and upcoming wage revisions. While the contribution of net exports to annual growth was negative, investments made a positive contribution to growth, driven by the recovery in machinery-equipment investments (Chart 2.3.2). On a quarterly basis, the contribution of net exports was negative, and the contribution of domestic demand to quarterly growth increased significantly on the back of the strong rise in private consumption. In 2024, services made the largest contribution to annual growth on the production side. A significant portion of this contribution was from trade, transport, storage, accommodation and food services sectors. While all sectors contributed positively to annual growth, the industry and agriculture sectors contributed less. On the expenditures side, the contribution of domestic demand to growth declined significantly year-on-year due to the loss of momentum in private consumption. Meanwhile, the contribution of net exports increased and turned positive. Accordingly, contributions of domestic demand and net exports to growth in 2024 were more balanced compared to the previous year.

Chart 2.3.1: Annual GDP Growth and Contributions from Production Side (% Points)

Source: CBRT, TURKSTAT.

Chart 2.3.2: Annual GDP Growth and Contributions from Expenditures Side (% Points)

Source: CBRT, TURKSTAT.

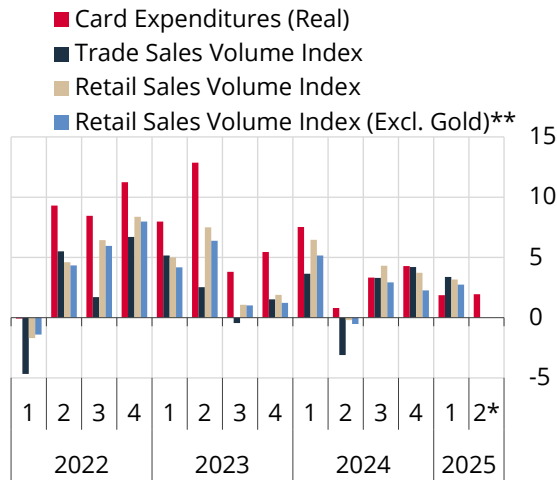
* Includes changes in inventories and statistical discrepancy due to chain-linking.

Leading indicators suggest that domestic demand lost pace in the first quarter but remained above projections, with a declining disinflationary impact.

In the first quarter, the retail sales volume index grew at a rate that was slower than the previous quarter, with an increase of 3.2% (Chart 2.3.3). The retail sales volume excluding watches and jewelry, which TURKSTAT began publishing in May, posted a more moderate increase of 2.7% in the first quarter. In the same period, in addition to retail sales volume, the deceleration in the growth rates of motor vehicle trade and wholesale trade volumes led to a quarterly slowdown in total trade sales. The services production index, which displays a very similar pattern to the services expenditures component of household final consumption, gained momentum and rose by 2.6% quarter-on-quarter (Chart 2.3.5). In the first quarter of the year, sales of white goods declined, while the rise in automobile sales continued, albeit at a slower pace (Chart 2.3.4). In the same period, survey data for manufacturing industry firms suggest that domestic market orders edged up, below the previous quarter's rise. Survey data for April imply a decline in domestic orders of manufacturing industry firms. After declining in January, card spending edged up in February and increased in March, especially in the second half of the month due to the seasonal increase in demand before the holidays. As a consequence, the growth in card spending decelerated on a quarterly basis. As of April, card spending data imply a flat monthly outlook and a moderate quarterly increase. Information on consumption expenditures obtained from interviews with firms points to a slowdown in domestic demand in the first quarter (Box 2.1). For the remainder of the year, the tightening of financial conditions and global developments are expected to have a more significant restraining effect on demand.

Chart 2.3.3: Consumption Indicators

(Seasonally and Calendar Adjusted, Quarterly % Change)



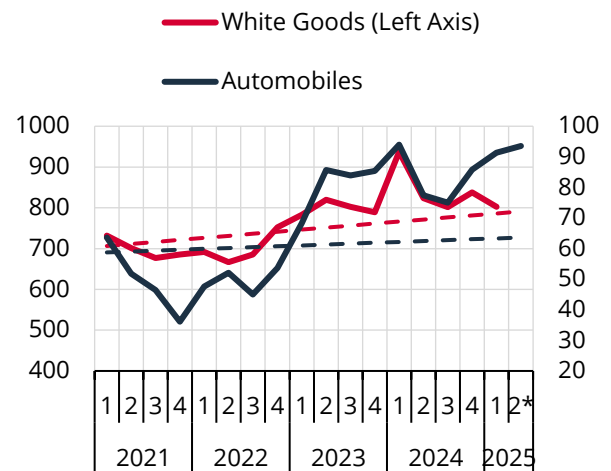
Source: CBRT, TURKSTAT.

* Card spending is as of April and deflated by the CPI.

** The retail sales volume index excluding gold is the retail sales volume excluding watches and jewelry items, published by TURKSTAT.

Chart 2.3.4: Sales of White Goods and Automobiles

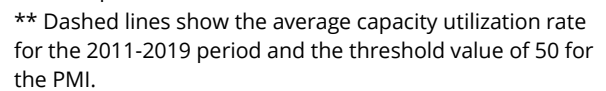
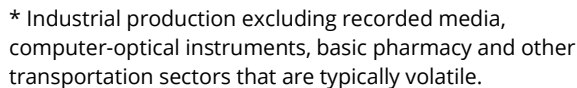
(Thousand, Seasonally and Calendar Adjusted)



Source: CBRT, ODMD, TURKBESD.

* Automobile sales are as of April. Dashed lines show the average for the 2010-2018 period.

Production indicators rose overall in the first quarter. Industrial production, which had posted negative growth in the second and third quarters of the previous year, increased in the last quarter of the year. After a month-on-month decline in January and February, industrial production rebounded in March and continued to recover in the first quarter of the year, with an increase of 1.8% (Chart 2.3.5). Services production also edged up by 0.6% in the last quarter of 2024, following a decline in the second and third quarters of the same year. Moreover, services production picked up in the first quarter of 2025, increasing by 2.6% on a quarterly basis. After posting a strong increase in January led by sectors with a relatively weaker relation to household demand such as professional, scientific and technical activities, and information and communication, the services production index declined slightly in February and remained flat in March. Excluding these sectors, the increase in the first quarter is more muted. In the same period, the index of production in construction posted a robust quarterly increase of 9.2% due to the ongoing support from earthquake-related construction. Survey-based indicators such as the BTS and PMI signal a flat outlook in the underlying trend of industrial production in the first quarter of 2025. In this period, survey indicators for production and orders posted quarter-on-quarter increases. The capacity utilization rate, on the other hand, continued to decline quarter-on-quarter and stood at 75%. As of April, the capacity utilization rate was at 74.6%. Excluding the oil production sector, which has recently displayed high volatility, the capacity utilization rate in the manufacturing industry has followed a relatively flat course since the second half of 2024. The PMI production indicator registered a limited quarterly increase in the first quarter, albeit remaining still below the threshold. As of April, it declined on a quarterly basis (Chart 2.3.6). In sum, production indicators suggest that the recovery in production in the last quarter of the previous year continued in both industry and services in the first quarter of the year.



Investment expectations of manufacturing industry firms declined slightly. Investment tendencies of firms have been declining since the second half of 2023 (Chart 2.3.7). Similarly, the production of capital goods excluding vehicles and other vehicles has been weak since the second half of 2023 but recovered slightly in the first quarter of 2025. However, imports of capital goods excluding transportation remained flat quarter-on-quarter in this period (Chart 2.3.8). BTS data indicate no substantial change in investment expectations in April amid heightened global uncertainty.

Chart 2.3.7: BTS Expectations for Fixed Capital Investment Spending (Up-Down, Seasonally Adjusted, %)

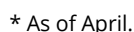


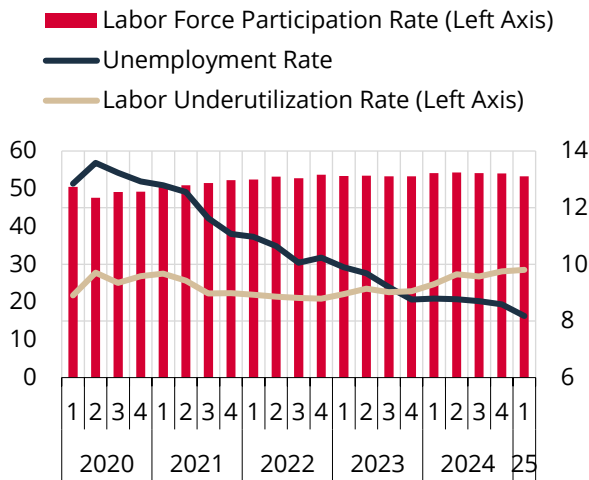
Chart 2.3.8: Production and Import Quantity Indices of Capital Goods Excluding Vehicles
(Seasonally Adjusted, 2021=100)



Labor Market Developments

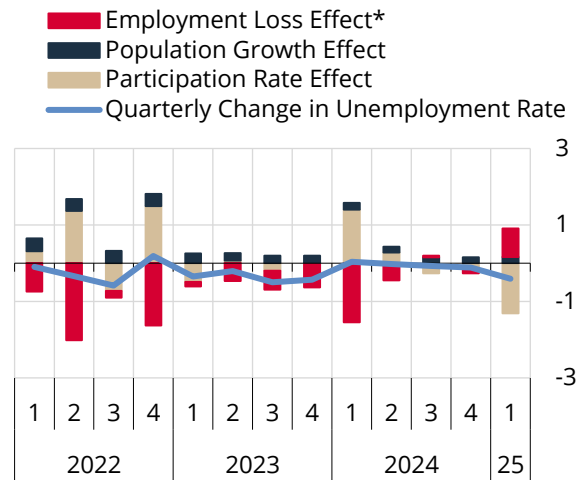
Employment declined in the first quarter, while the unemployment rate continued to fall. In the first quarter, seasonally adjusted employment was down by 0.8% (266 thousand people) quarter-on-quarter. The seasonally adjusted labor force participation rate dropped by 0.8 percentage points to 53.3% (Chart 2.3.9). In the first quarter of the year, the unemployment rate decreased by 0.4 percentage points quarter-on-quarter to 8.2%. In this period, population growth and the decline in employment had an upward effect of 0.16 and 0.74 percentage points, respectively, on the unemployment rate, while the fall in the participation rate had a downward effect of 1.31 percentage points (Charts 2.3.10 and 2.3.11). Meanwhile, the labor underutilization rate, a complementary indicator of the labor market, remained high, rising by 0.4 percentage points quarter-on-quarter, suggesting that the labor market is less tight than implied by headline indicators (Chart 2.3.9).

Chart 2.3.9: Total Unemployment Rate and Labor Force Participation Rate (Seasonally Adjusted, %)



Source: TURKSTAT.

Chart 2.3.10: Contributions to Change in Total Unemployment Rate (Seasonally Adjusted, % Points)



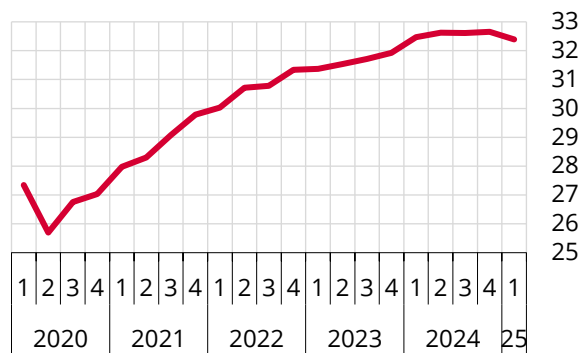
Source: CBRT, TURKSTAT.

* Negative value of the employment loss effect indicates an increase in employment.

Survey indicators point to an outlook weaker than the historical average in manufacturing firms' employment expectations for the future.

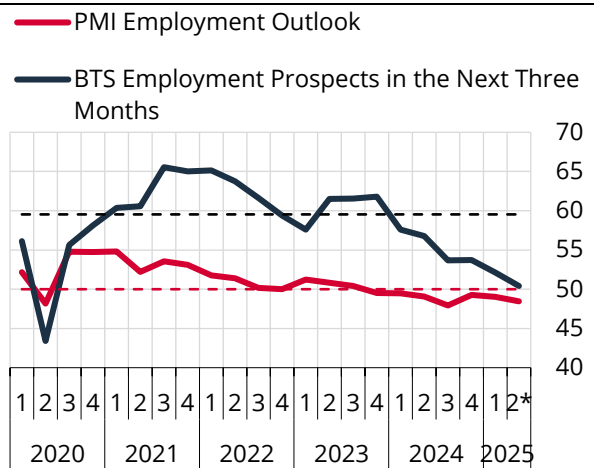
Survey data for manufacturing industry firms indicate that in the first quarter, firms' employment expectations declined compared to the previous quarter and continued to hover below their historical averages (Chart 2.3.12). April data, on the other hand, point to a further decline in manufacturing industry firms' employment expectations.

Chart 2.3.11: Total Employment (Seasonally Adjusted, Million People)



Source: TURKSTAT.

Chart 2.3.12: Employment Outlook and Expectation in the Industrial Sector (Seasonally Adjusted, Up-Down)**



Source: CBRT, S&P Global.

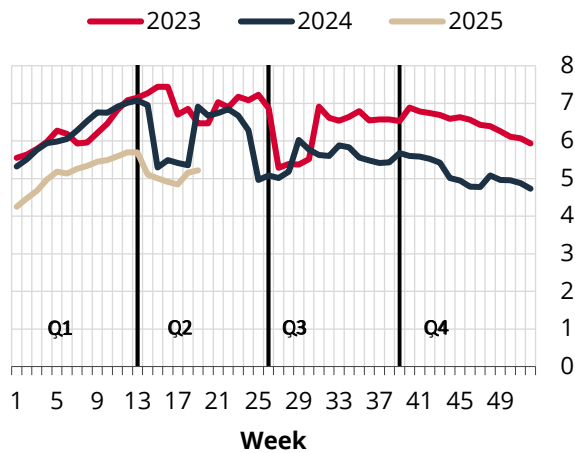
* As of April.

** BTS indicator is adjusted so that its neutral level will be 50 in line with the PMI. Dashed lines show the average of 2011-2019 for the BTS and the threshold value of 50 for the PMI.

High-frequency data imply that labor supply has largely maintained its strength despite a weaker outlook for labor demand compared to previous years.

According to data from Kariyer.net, a prominent job application platform, new job postings somewhat declined at the beginning of the second quarter due to holiday-related effects, following an upward trend in the first quarter. New job postings recovered by mid-May but are still below last year's levels (Chart 2.3.13). Job applications, which have been on a downtrend since the middle of the first quarter, hovered close to the previous year's levels following the holiday-driven volatility (Chart 2.3.14).

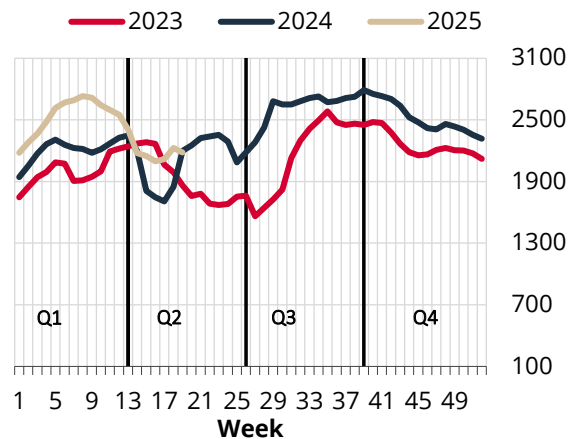
Chart 2.3.13: Kariyer.net – New Job Postings*
(Four-Week Average, Thousand)



Source: Kariyer.net.

* As of May 10. Vertical lines denote the beginning of quarters.

Chart 2.3.14: Kariyer.net – Total Job Applications*
(Four-Week Average, Million)



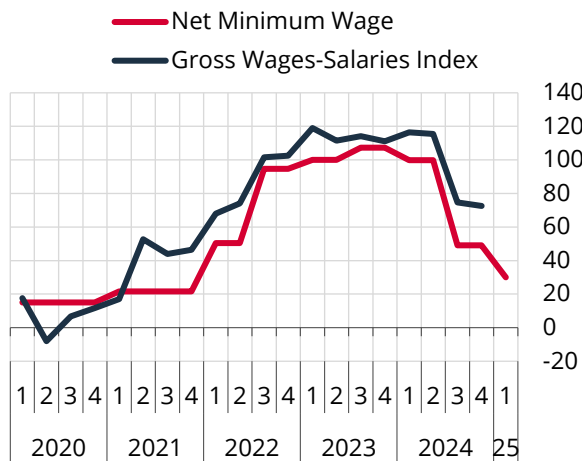
Source: Kariyer.net.

* As of May 10. Vertical lines denote the beginning of quarters.

The annual rate of increase in non-farm nominal wages was 72.7% in the fourth quarter of 2024

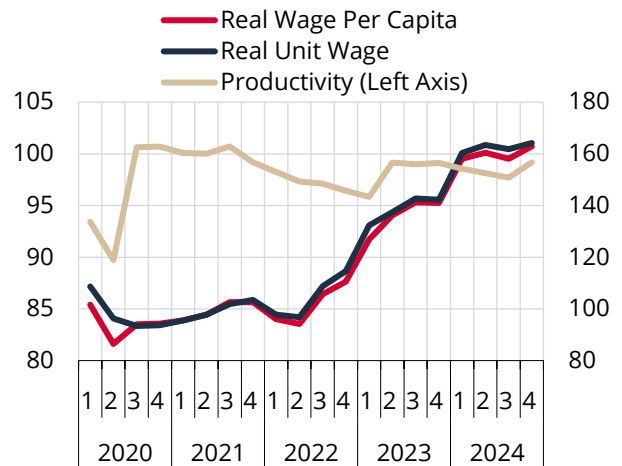
(Chart 2.3.15). Partial labor productivity in the non-farm sector (non-farm value added/non-farm employment) increased in the fourth quarter. Real unit wages in the non-farm sector (real per capita wage/productivity) rose in the last quarter, with real per capita wages increasing faster than the growth in productivity in this period (Chart 2.3.16). In 2024, real unit wages remained relatively flat compared to previous years. Accordingly, real unit wages are expected to increase in the first quarter but remain mild throughout the year, contributing to the disinflation process.

Chart 2.3.15: Non-Farm Wage Index and Net Minimum Wage (Nominal, Annual % Change)



Source: CBRT, Ministry of Labor and Social Security, TURKSTAT.

Chart 2.3.16: Non-Farm Partial Labor Productivity*, Real Per Capita Wage and Real Unit Wages** (Seasonally Adjusted, 2021=100)



Source: CBRT, TURKSTAT.

* Non-farm value added/non-farm employment.

** Real per capita wage/productivity. Deflated by the CPI.

Foreign Trade and Balance of Payments Outlook

Exports increased in the first quarter of 2025, while imports remained flat. In the first quarter of 2025, seasonally and calendar-adjusted total exports and exports excluding gold increased quarter-on-quarter on the back of the moderate growth in external demand (Chart 2.3.17). Unprocessed gold, petroleum and petroleum products, cereals, medical-pharmaceuticals, and iron-steel sectors contributed positively to export growth, while motor vehicles, other vehicles and clothing made a negative contribution. In the first quarter, gold imports decreased and seasonally and calendar-adjusted imports excluding gold and energy edged down, whereas total imports were flat quarter-on-quarter due to the rise in energy imports

(Chart 2.3.18). While seasonally and calendar-adjusted imports of consumption goods decreased, imports of investment and intermediate goods increased. When jewelry is excluded, the decline in imports of consumption goods turns to an increase, with the largest contribution coming from automobiles. Against this background, the seasonally and calendar-adjusted foreign trade balance improved in the first quarter of 2025 despite the limited deterioration in the energy balance. On the other hand, provisional foreign trade data point to an increase in both exports and imports in April in seasonally and calendar-adjusted terms, with a greater rise in the latter, and thereby a widening in the foreign trade deficit. The rise in imports is likely to have been driven by demand brought forward due to the uncertainties stemming from customs duties as well as the holiday-related calendar effects.

Chart 2.3.17: Exports (Seasonally and Calendar Adjusted, USD Billion)

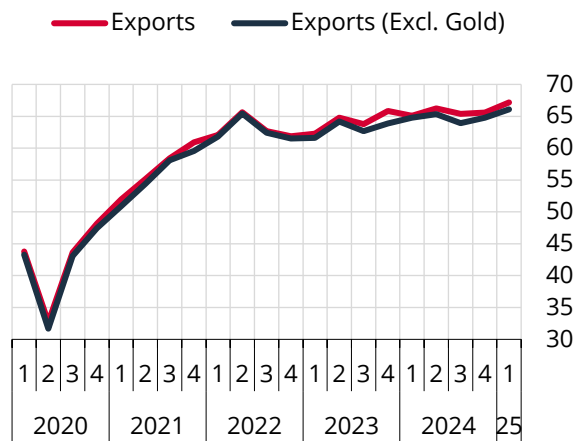
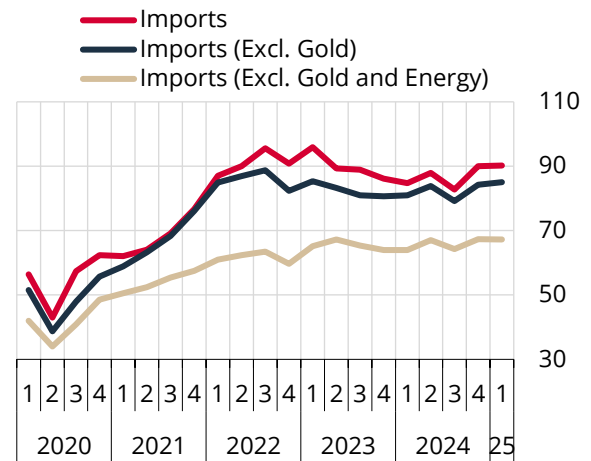


Chart 2.3.18: Imports (Seasonally and Calendar Adjusted, USD Billion)



Export and import quantity indices increased, and the terms of trade improved. In the first quarter of 2025, export prices went up quarter-on-quarter, while import prices went down. Accordingly, the terms of trade increased, compensating for the decline recorded in the previous quarter (Chart 2.3.19). This improvement in the terms of trade had a favorable impact on the foreign trade balance, while the decline in the prices of the imported intermediate products eased the pressure on input costs. In April, the uncertainty primarily stemming from tariffs adversely affected the global growth outlook and led to a decline in energy prices. The energy trade balance is expected to improve should energy prices remain at low levels in the coming months. Seasonally and calendar-adjusted foreign trade quantity indices for the first quarter indicate that both exports and imports increased on a quarterly basis (Chart 2.3.20). The rise in imports was driven by investments and intermediate goods, while consumption goods made a negative contribution driven by jewelry products (Chart 2.3.21). The volume of imports of consumption goods excluding jewelry increased in the first quarter.

Chart 2.3.19: Foreign Trade Unit Value Indices (2015=100)

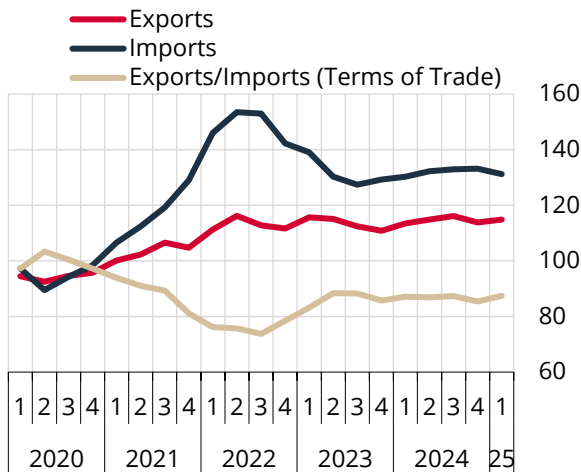
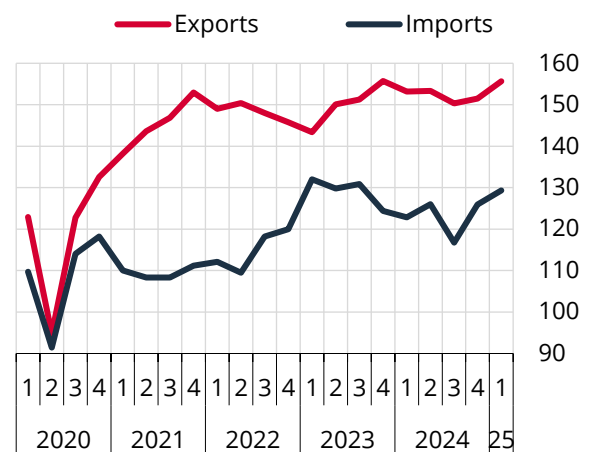
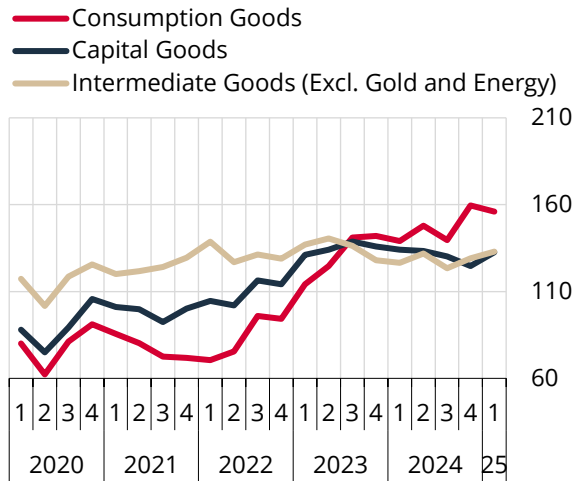


Chart 2.3.20: Foreign Trade Quantity Indices (Seasonally Adjusted, 2015=100)



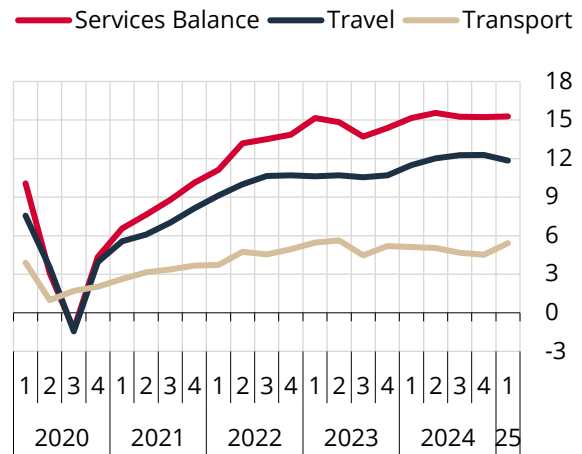
In the first quarter, the services trade surplus maintained its high level and remained flat. During the first quarter, when the seasonally and calendar-adjusted services trade surplus recorded no significant change, the transportation revenue balance increased from the previous quarter, while the travel revenue balance maintained its strong outlook, albeit with a decline (Chart 2.3.22). In the same period, the seasonally and calendar-adjusted total number of visitors also decreased. On the other hand, leading indicators suggest that the total number of visitors will increase in April and contribute positively to net travel revenues.

Chart 2.3.21: Import Quantity Indices by Goods Groups (Seasonally Adjusted, 2015=100)



Source: CBRT, TURKSTAT.

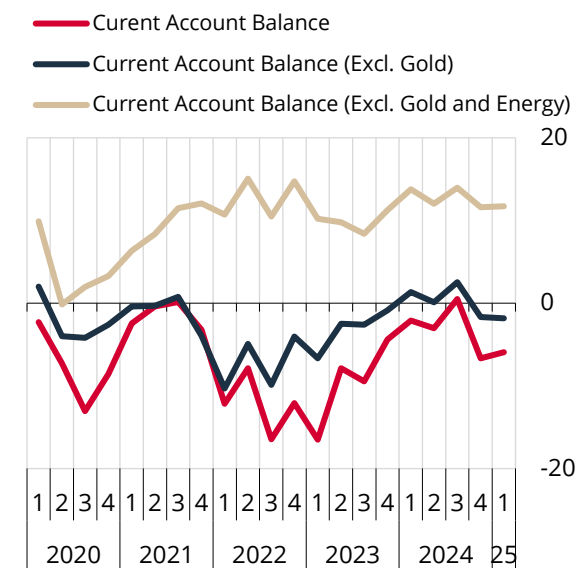
Chart 2.3.22: Services Balance (Seasonally and Calendar Adjusted, USD Billion)



Source: CBRT.

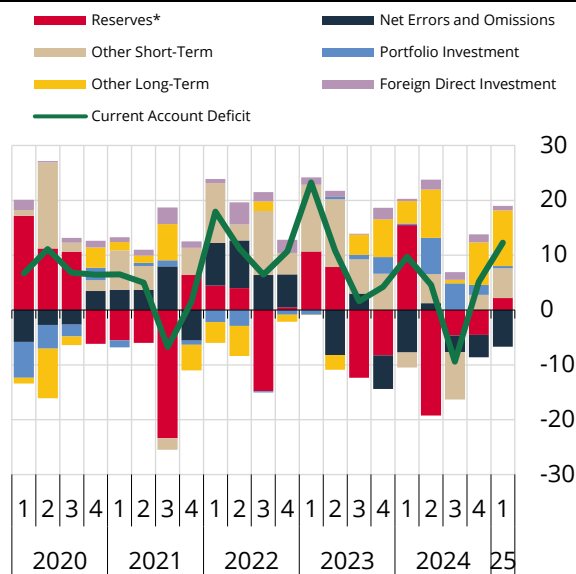
The seasonally and calendar-adjusted current account deficit declined in the first quarter (Chart 2.3.23). In seasonally and calendar-adjusted terms, the foreign trade surplus excluding gold and energy edged down, and the energy trade deficit widened slightly in the first quarter. Nevertheless, the balance of payments-defined foreign trade balance improved on the back of the decline in the gold trade deficit. The first quarter saw a quarter-on-quarter improvement in primary and secondary income balances, while the services balance surplus remained high and flat. Although recent developments have eased tariff-related uncertainties, they still have a downward impact on expectations for global demand. This exerts downside pressure on commodity prices, particularly those of energy. A decline in energy prices or their sustained low levels will be reflected positively on the current account outlook. The recent rise in the euro/USD parity, albeit limited, had a favorable impact on the foreign trade balance, and hence, the current account balance. If this parity trend continues, it will have a narrowing effect on the current account deficit in the upcoming periods. Moreover, tighter financial conditions brought on by the recent decisions are expected to slow domestic demand and have a favorable impact on the current account balance. Expectations regarding the gold price and the related course of gold demand are also crucial for the current account balance. The trajectory of the US tariffs, which vary by country, and the counter-tariffs imposed by other countries, as well as their global and Türkiye-specific implications, are expected to be decisive for the current account balance.

Chart 2.3.23: Current Account Balance
(Seasonally and Calendar-Adjusted, USD Billion)



Source: CBRT.

Chart 2.3.24: Financing of the Current Account Deficit (USD Billion)



Source: CBRT.

* Denotes the CBRT reserves plus cash and deposits at banks abroad. A negative value indicates an increase in reserves.

The first quarter saw net capital inflows through loans, portfolios and direct investment channels. In the first quarter, the financing need increased quarter-on-quarter due to the widening current account deficit and larger outflows from the net errors and omissions item. In this period, net capital inflows were mainly driven by banks' net external loan utilization. Non-residents were net sellers in the equity market while being net buyers in the debt securities market during the first quarter despite their net sales in March (Chart 2.3.24). There were also capital inflows from debt securities abroad issued by the general government, banks and firms. However, the first quarter's net capital inflows fell short of the financing need and official reserves were depleted. Data for April point to outflows from equity and debt securities markets and a decline in official reserves.

Public Finance Developments

In the first four months of 2025, the central government budget ran a deficit of TRY 885.5 billion and a primary deficit of TRY 160.9 billion. In this period, the Treasury remained a net borrower in domestic borrowing and a net payer in external borrowing to meet the financing need. In April 2025, the ratio of central government debt stock to GDP is estimated to be 22.3%, while the ratios of domestic and external debt stocks to GDP are estimated to be 12.6% and 9.6%, respectively.

In the first four months of 2025, revenues and expenditures were up by 50.7% and 45.3%, respectively, compared to the same period of the previous year. The ratio of primary expenditures covered by tax revenues was 79.7%. In the first four months of the year, current transfers and personnel expenditures, which make up a sizable portion of primary expenditures, rose annually by 38.9% and 36.8%, respectively. Transfers totaling TRY 66.7 billion and TRY 45.0 billion to Electricity Generation Corporation and BOTAŞ, respectively, as part of assignment expenditures, and TRY 20.0 billion to Türkşeker, as part of lending, stand out among the transfers to public enterprises in this period. On the other hand, income tax, which contributed the most to the recent rise in tax revenues, recorded a sharp annual increase of 100.2% in the January-April period of 2025. This favorable performance is attributed to wage developments as well as higher withholding tax rates on deposits. The contribution of other tax items, particularly corporate tax and value added tax on imports, to the increase in tax revenues has recently declined. Meanwhile, restructuring revenues of TRY 8.2 billion and privatization revenues of TRY 12.3 billion in the first four months of the year contributed to the budget.

As of April 2025, the annualized budget deficit to GDP ratio is estimated to be 4.8%. The end-2025 target shared in the Medium-Term Program (MTP) is 3.1%. The ratios of annualized primary expenditures and revenues to GDP are estimated to be 21.7% and 20.3%, respectively, as of April.

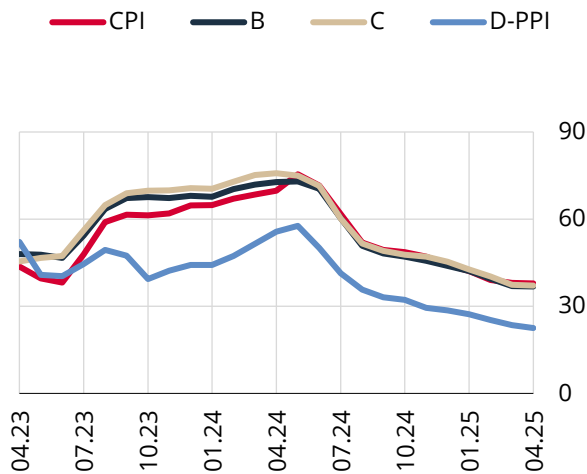
The Treasury cash balance posted a deficit of TRY 183.5 billion in April 2025. The annualized cash deficit to GDP ratio is estimated to be 4.9% as of April.

2.4 Inflation

In April, consumer inflation fell to 37.86%, below the midpoint of the forecast range presented in the previous Inflation Report. The disinflation process, which started in June 2024, continues (Chart 2.4.1).

Despite some decline, the services inflation is still high, while low course of goods inflation appears to have been affected by recent exchange rate developments. On the other hand, declining commodity prices, particularly oil prices, are supporting the decline in inflation. Demand conditions are expected to be more supportive in the remainder of the year due to the tightening in financial conditions and global developments. Monthly producer inflation, which strengthened in January, weakened again in the following two months before slightly picking up in April. Annual producer inflation continued to remain below annual consumer inflation and stood at 22.50% in April. Annual inflation declined in indicators B and C, with a slightly more pronounced decline in indicator C (Chart 2.4.1). An analysis of developments in the first four months of the year by sub-items reveals that the most significant contribution to the decline in annual consumer inflation came from the core goods group, followed by the services and food groups. The slowdown in the contribution of the services group was largely driven by items other than rents (Chart 2.4.2).

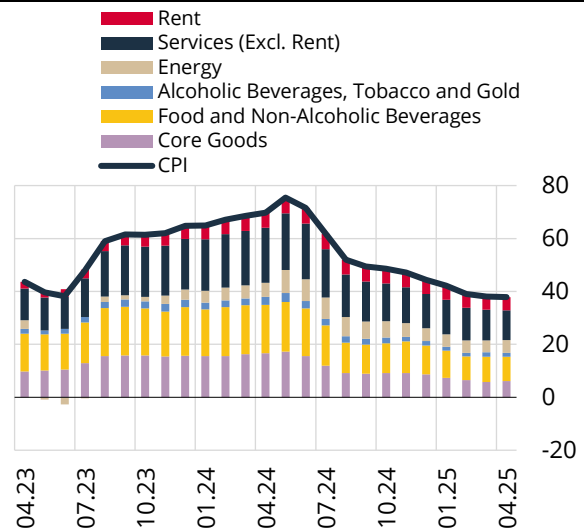
Chart 2.4.1: CPI, D-PPI, B Index and C Index*
(Annual % Change)



Source: TURKSTAT.

* B index: CPI excluding unprocessed food, energy, alcoholic beverages, tobacco and gold. C index: CPI excluding food and non-alcoholic beverages, energy, alcohol-tobacco and gold.

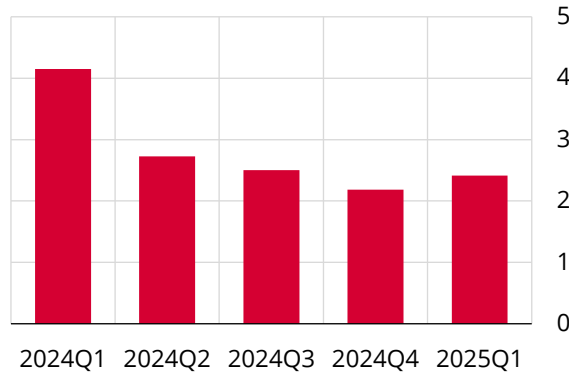
Chart 2.4.2: Contributions to Annual CPI
(% Points)



Source: CBRT, TURKSTAT.

The underlying inflation displayed an uptick in January to be followed by a significant deceleration in February and March, and a partial increase again in April. The seasonally adjusted quarterly average of the indicators monitored for the underlying inflation increased from 2.2% in the final quarter of 2024 to 2.4% in the first quarter of 2025 (Chart 2.4.3). Distribution and model-based underlying inflation indicators, which perform better in predicting the future inflation, took smaller values in the first quarter compared to exclusion-based indicators such as B and C. As for the median inflation, the underlying inflation appears to be more favorable. The fact that both the average of the six indicators and the annualized underlying trend of median inflation that has better forecasting performance, are slightly above 30% implies that annual inflation will decline (Chart 2.4.4). In April, however, there was a partial increase in the underlying inflation due to developments in financial markets. Meanwhile, it is estimated that the decline in the trend inflation indicator, which began with the start of tight monetary policy, will continue in the coming period (Box 2.2).

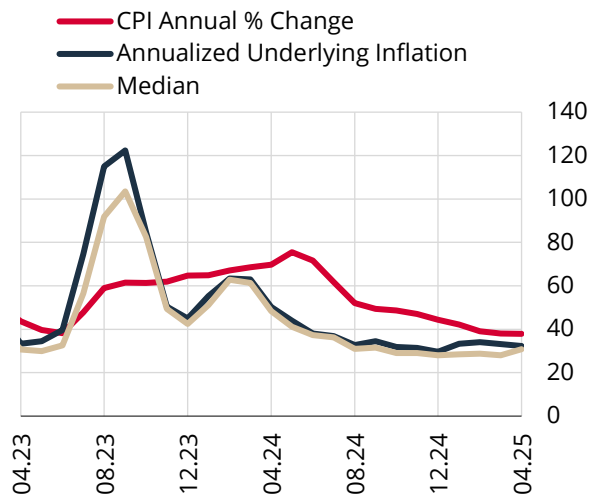
Chart 2.4.3: Indicators of Underlying Inflation* (Seasonally Adjusted, Monthly % Change, Quarterly Average)



Source: CBRT, TURKSTAT.

* Quarterly average of seasonally adjusted B and C indices and SATRIM, Median, exclusion of volatile items and DFM indicators.

Chart 2.4.4: CPI, Median and Underlying Inflation* (Annual % Change)

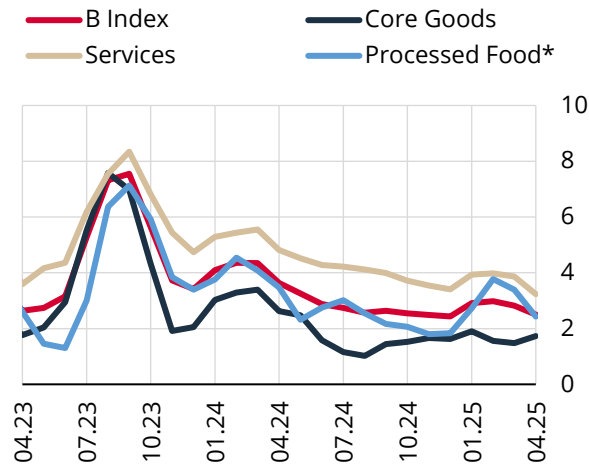


Source: CBRT, TURKSTAT.

* Annualized underlying inflation refers to the annualized value of the three-month average of six different indicators (seasonally adjusted B, C, SATRIM, Median, exclusion of volatile items and DFM). The annualized value of the three-month average of the monthly value is used for the Median.

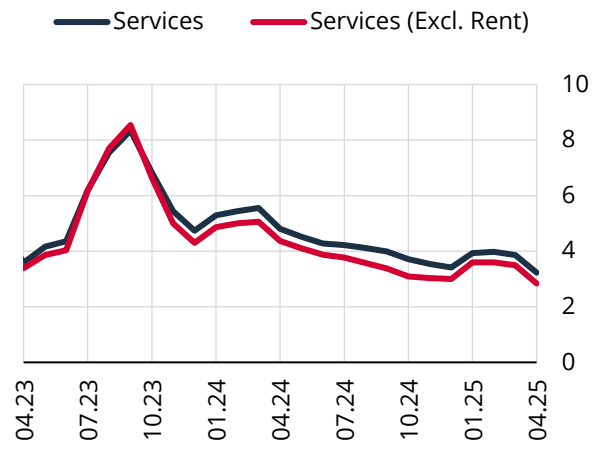
In the first quarter, price increases edged up in the services and processed food groups making up the B index, while weakened in core goods (Chart 2.4.5). In this period, core goods prices remained moderate, and the group's annual inflation stood at less than 20%, remaining well below the headline inflation rate. Meanwhile, the annual inflation for the services group remained high despite some decline. An analysis of quarterly developments reveals that the highest price increases in the services group were observed in education and rent items that have a strong backward indexation tendency (Table 2.4.1). Rents inflation exhibits a more pronounced inertia compared to the rest of the services group, also affected by factors specific to the housing sector, such as earthquakes and urban renewal projects. In services other than rents, inflation has been lower (Chart 2.4.6). In education services, sharp increases have been observed due to private school fees. Backward indexation in price-setting in education services and sensitivity to wage developments are limiting the pace of the slowdown in service inflation. Moreover, prices in the services sub-groups, which have relatively higher sensitivity to demand conditions, have displayed a more moderate trend in this period. As for inflation in the processed food group, bread prices and raw milk reference price updates have been influential. In April, the monthly core goods inflation recorded an increase. Depending on the content of imported inputs, price increases gained momentum in some core goods items, such as durable consumer goods that are highly sensitive to exchange rate developments. Meanwhile, actual prices in April implied that the initial impact of the increase in exchange rates on consumer inflation was more limited compared to 2023, also supported by the decline in commodity prices.

In the first quarter, domestic energy inflation increased compared to the previous quarter and was recorded at 9.93% (Table 2.4.1). In this quarter, energy group inflation was driven by the rise in municipal water tariffs as well as rising electricity prices due to electricity tariff adjustments for residential electricity consumers with high consumption rates as part of the transition to the LRST regulation (Box 2.3). The Brent crude oil price, which became more volatile due to global developments, declined due to the rise in customs tariffs and the accompanying uncertainty after the rise in January, and has been fluctuating around USD 65 since April 4, 2025. Recently, the Turkish lira has weakened, and the significant decline in international energy prices has offset part of the impact of exchange rates on inflation. The rise in domestic energy prices in April was primarily driven by adjustments to electricity tariffs for residential customers.

Chart 2.4.5: B Index and Subgroups of B Index
(Seasonally Adjusted, Monthly % Change, Three-Month Average)

Source: CBRT, TURKSTAT.

* Processed food is not adjusted for seasonality due to absence of statistically significant seasonal effects.

Chart 2.4.6: Services Prices (Seasonally Adjusted, Monthly % Change, Three-Month Average)

Source: CBRT, TURKSTAT.

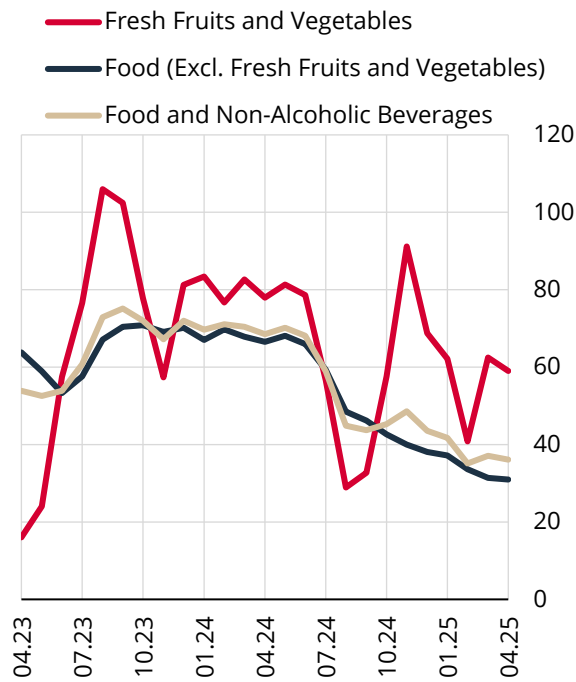
Table 2.4.1: Consumer Prices

	Quarterly Change (Seasonally Adjusted)				Annual % Change			
	2024			2025	2024			2025
	II	III	IV	I	II	III	IV	I
CPI	8.84	9.19	7.40	8.49	71.60	49.38	44.38	38.10
B	8.88	8.12	7.49	8.71	70.40	48.23	43.94	36.99
C	8.97	8.45	7.89	8.33	71.41	49.10	45.34	37.42
1. Goods	6.98	7.77	5.96	6.91	62.56	40.27	36.14	30.50
Energy	6.41	18.04	2.83	9.93	84.58	62.94	43.11	41.98
Food and Non-Alcoholic Beverages	8.88	6.23	9.68	7.93	68.08	43.72	43.58	37.12
Unprocessed Food	9.33	5.78	14.26	5.06	70.50	43.34	50.29	39.57
Fresh Fruits and Vegetables	20.07	2.45	27.57	3.44	78.61	32.70	68.78	62.46
Other Unprocessed Food	3.24	7.97	5.94	6.25	66.30	50.07	38.78	25.47
Processed Food	8.48	6.64	5.61	10.47	65.89	44.05	37.67	34.96
Bread and Cereals	11.09	7.04	6.54	13.71	71.15	42.83	41.87	44.05
Other Processed Food	7.28	6.45	5.16	8.86	63.43	44.77	35.72	30.73
Goods Excl. Energy and Food	5.79	5.64	4.33	5.24	52.56	31.00	28.77	22.19
Core Goods	4.82	4.38	4.96	4.49	50.62	28.26	27.43	19.39
Clothing and Footwear	4.73	3.98	6.45	0.46	46.87	29.93	31.67	13.99
Durable Goods (Excl. Gold)	3.69	3.98	3.62	5.58	46.89	22.77	22.46	17.95
Other Core Goods	6.76	5.30	5.99	5.98	59.17	36.60	32.62	26.27
Alcoholic Drinks, Tobacco	14.84	15.16	-0.10	11.07	67.93	52.35	39.28	46.74
Gold	2.41	11.22	2.87	9.06	59.22	46.54	36.01	27.79
2. Services	13.40	12.47	10.59	12.03	95.27	72.92	65.73	56.34
Rents	18.89	20.34	15.41	16.31	123.64	117.43	105.82	91.77
Restaurants and Hotels	11.32	10.30	8.22	8.03	90.67	65.41	57.13	43.38
Transport	13.01	8.82	10.13	10.63	103.54	53.92	47.51	49.64
Communication	11.31	6.45	4.90	7.17	67.45	55.08	44.19	33.22
Other Services	12.67	12.09	10.85	13.98	89.06	68.49	62.55	55.20

Source: TURKSTAT.

Although the slowdown in annual inflation in the food and non-alcoholic beverages group continues, risks remain elevated due to the agricultural frost. The decline in annual inflation in the food group observed in January and February was interrupted in March due to unprocessed food. This development was largely driven by fresh fruit and vegetable prices, which are highly sensitive to supply conditions and relatively outside the scope of monetary policy. Annual inflation in food items other than fresh fruits and vegetables continued to decline (Chart 2.4.7). As a result of adverse weather conditions in the first quarter (high temperatures above seasonal norms followed by agricultural frost), prices of potatoes and fruits recorded increases above their historical averages. While red meat prices increased largely due to the effects of Ramadan, the rise in eggs prices was affected by the Ramadan as well as factors related to foreign trade. Price increases in milk and dairy products gained momentum due to the rise in the reference price of raw milk. Price increments in the bread and cereals group also exceeded the first quarter averages of previous years (Chart 2.4.8). The high price increases in unprocessed food in March became more moderate in April due to the correction in vegetable prices. However, the agricultural frost, which affected the whole country in April, increased upward risks to fresh fruit and vegetable prices, particularly fruit prices, in the coming period.

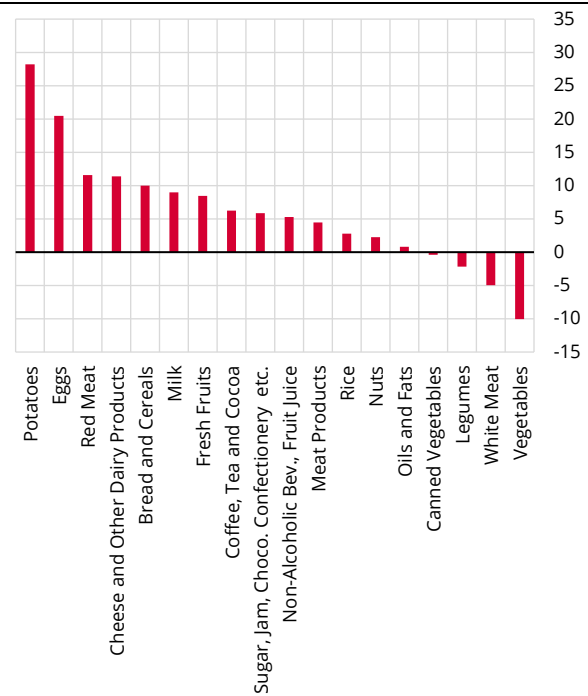
Chart 2.4.7: Food Prices (Annual % Change)



Source: TURKSTAT.

Chart 2.4.8: Food Prices by Sub-Items*

(2025Q1 % Deviation of Change from Historical Average, Ranked)



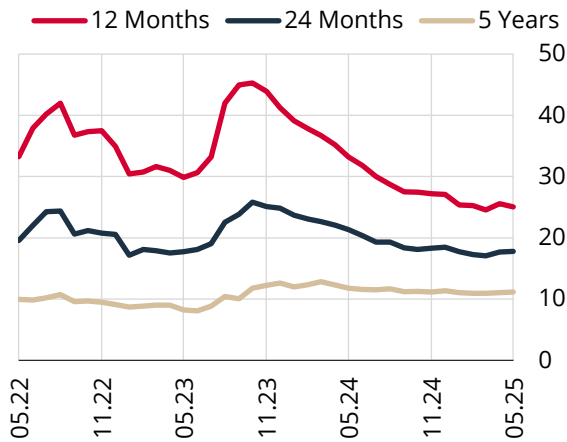
Source: CBRT, TURKSTAT.

* Based on food sub-items, the difference between the quarterly percentage change in 2025Q1 and the historical average (first quarter average of the 2012-2021 period).

Drivers of Inflation

The downtrend in inflation expectations has been interrupted. The May results of the Survey of Market Participants show that 12-month ahead inflation expectations decreased by 32 basis points compared to the previous Inflation Report, while 24-month-ahead and five-year-ahead inflation expectations did not show any significant change (Chart 2.4.9). Meanwhile, the inflation expectation for end-2025 rose to 30.35%, exceeding the forecast range stated in the report. The corporate sector's 12-month-ahead inflation expectation remained flat after a significant decline in February, while no remarkable change was observed in household' inflation expectations (Chart 2.4.10). Inflation expectations and pricing behavior continue to pose risk to the disinflation process (Box 2.4).

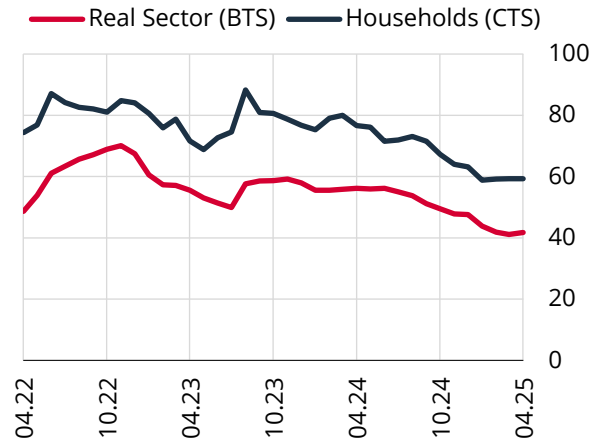
Chart 2.4.9: Consumer Inflation Expectations from the CBRT Survey of Market Participants* (%)



Source: CBRT.

* Results of the CBRT Survey of Market Participants that polls real and financial sector representatives as well as professionals.

Chart 2.4.10: Consumer Inflation Expectations of the Real Sector and Households* (Next 12 Months, %)

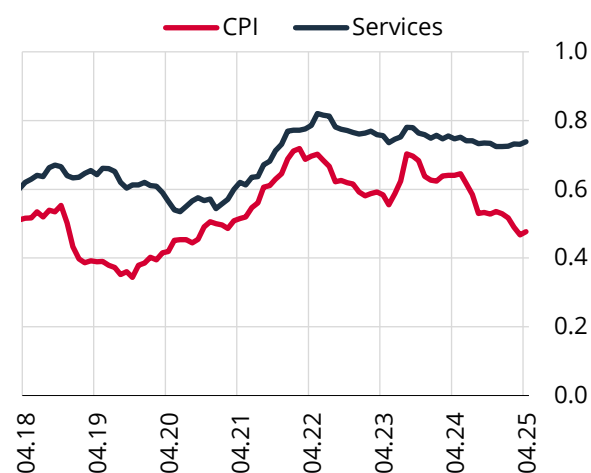


Source: CBRT, TURKSTAT.

* Inflation expectations of the real sector are obtained from the BTS, and those of households are obtained from the Consumer Tendency Survey (CTS).

The diffusion index has weakened slightly. When seasonally adjusted data are examined using three-month moving averages, it is observed that the diffusion index has declined somewhat over the last three months (Chart 2.4.11). The diffusion index for the services sector, on the other hand, has remained flat, limiting the downward movement in the main index. Distributions of price changes were produced based on five-digit items in order to obtain information about companies' pricing behavior. When distributions for April 2025 and April 2024 are compared, it is noteworthy that agreement on the median inflation rate has strengthened in 2025, but extreme values are observed more frequently on both ends (Chart 2.4.12).

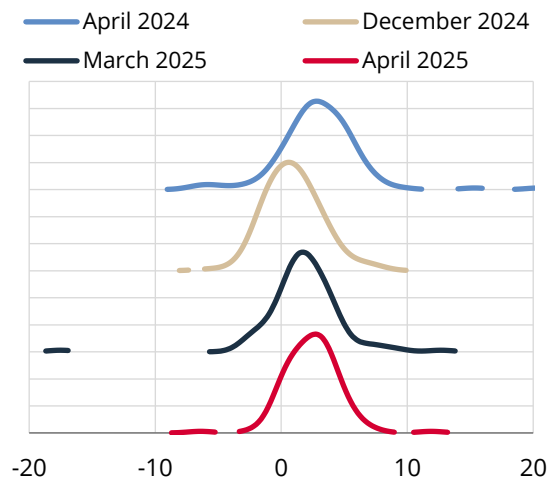
Chart 2.4.11: CPI Diffusion Index*
(Seasonally Adjusted, Three-Month Moving Average)



Source: CBRT, TURKSTAT.

* Calculated as the ratio of the difference between the number of items with increasing prices and the number of items with decreasing prices to the total number of items.

Chart 2.4.12: Distribution of CPI Monthly Inflation (Seasonally Adjusted, Five-Digit, CPI Excluding Fresh Fruits and Vegetables, Energy, Alcoholic Drinks and Tobacco)

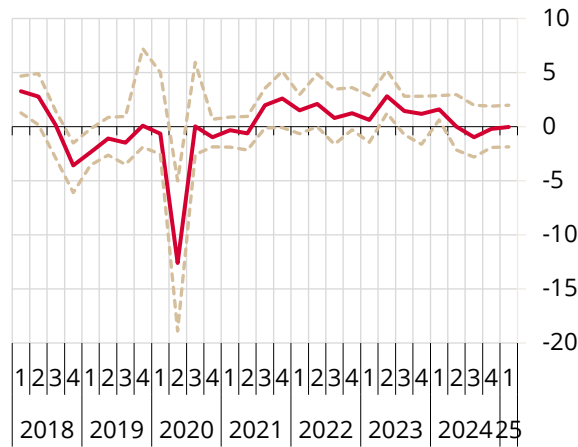


Source: CBRT, TURKSTAT.

The output gap is estimated to be close to neutral level. The recovery in economic activity, which started in the final quarter of 2024, is assessed to have continued in the first quarter of 2025, despite some weakening. Indeed, in the first three months of the year, production indices (Chart 2.3.5), particularly in services, and retail sales volume maintained their quarterly increases (Chart 2.3.3). Against this backdrop,

the output gap is estimated to have risen slightly and reached a value very close to the neutral level (Chart 2.4.13). In line with the tightening in financial conditions and escalating global uncertainties, leading indicators point to a weakening in economic activity in the second quarter of the year. Meanwhile real credit use (adjusted for exchange rate effects) has not shown any significant change during the current reporting period (Chart 2.4.14).

Chart 2.4.13: Output Gap* (%)



Source: CBRT.

* The average of eight output gap indicators calculated by using different methods are displayed with minimum and maximum values.

Chart 2.4.14: Total Credit Change* (13-Week Average, FX Adjusted, Real, Standardized Value)

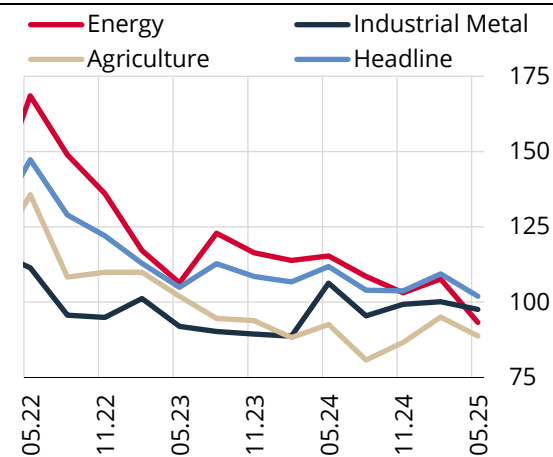


Source: CBRT.

* Weekly credit changes adjusted for exchange rates are deflated by the CPI. The 13-week average is taken after weekly real changes are standardized. The mean and standard deviations of the series are calculated based on the 2006-2019 period.

In the current reporting period, the Turkish lira depreciated while commodity prices declined. In tandem with global developments, commodity prices, excluding gold, displayed a broad-based decline (Chart 2.4.15). The most significant decline was in the energy sub-group, followed by agricultural products. Amid heightened uncertainty, gold prices rose remarkably, limiting the decline in the overall index. Over the last three months, the currency basket has risen significantly (Chart 2.4.16). Due to developments in the euro-dollar parity, the rise in the euro rate has been more pronounced. It is anticipated that the impact of the rise in the currency basket on inflation will be partially offset by the decline in commodity prices. Moreover, weaker aggregate demand conditions compared to previous years and the improvement in inflation expectations are expected to limit the pass-through from exchange rate to inflation.

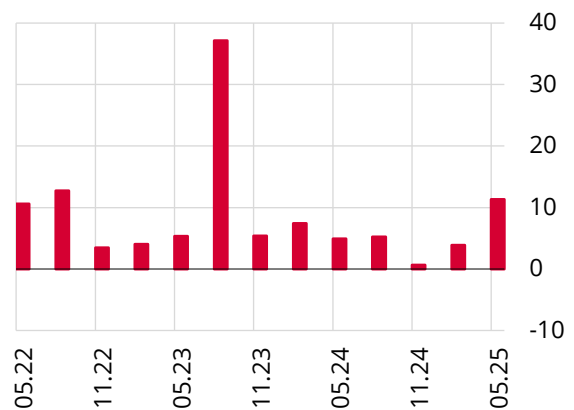
Chart 2.4.15: Commodity Price Indices* (2021=100)



Source: Goldman Sachs.

* As of May 16.

Chart 2.4.16: Currency Basket* (Three-Month % Change)



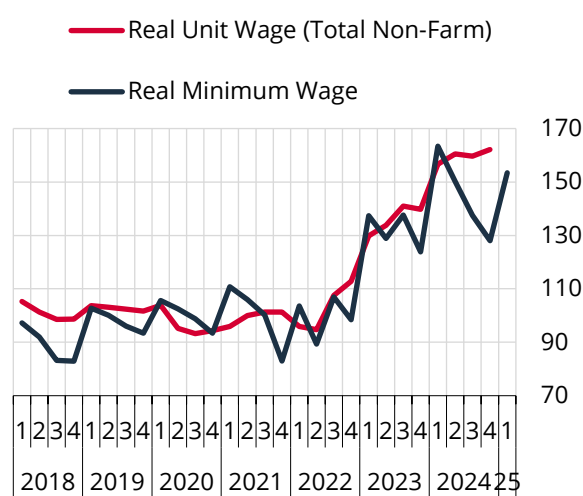
Source: CBRT.

* USD and euro have equal weights. As of May 16.

The underlying producer inflation is lower than the same period last year. Real unit wages remained relatively flat in the second half of 2024 (Chart 2.4.17). It is anticipated that, with the minimum wage

increase, real unit wage rose in the first quarter of 2025, but it has weakened in the second quarter as nominal wage increases slow down. In the current reporting period, container rates decreased while dry cargo transport costs increased. Meanwhile, it should be noted that all global shipping costs declined in April. In this reporting period, commodity prices decreased significantly, led by energy prices. The Global Supply Chain Pressure Index was slightly below its historical average in the first quarter of the year. While supply-side factors remained mostly moderate, the rise in the currency basket fueled cost pressures. On the back of these developments, an analysis using three-month moving averages reveals that producer inflation and the underlying manufacturing industry inflation started to pick up in January due to conditions specific to that month, but then began to decline again in April and remained at a lower level compared to the same period in 2024 (Chart 2.4.18). Over the past twelve months, producer prices have increased by 22.50%, playing a decelerating role in consumer inflation.

Chart 2.4.17: Real Unit Wage per Hour Worked* (Value Added, 2021=100, Seasonally Adjusted) **and Real Minimum Wage**** (2021=100)

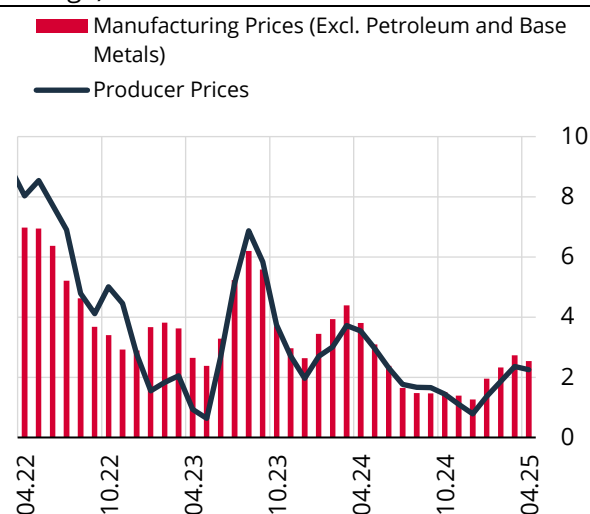


Source: CBRT, TURKSTAT.

* Deflated by the CPI. Real wage per hour worked/productivity.

** Net minimum wage is deflated by the seasonally adjusted CPI. Forecast is used for the 2025Q2 inflation data.

Chart 2.4.18: Headline and Manufacturing (Excluding Petroleum and Base Metals) Prices (Monthly % Change, Three-Month Moving Average)



Source: CBRT, TURKSTAT.

In the current reporting period, the impact of taxes and administered items on headline inflation weakened slightly.

The medical examinations copayment amounts were raised by the SUT in January, but part of the rise was rescinded in February. This step brought down February inflation, and the final impact of the SUT regulation on annual consumer inflation was limited to 0.34 points. Over the last three months, another important price update was made to electricity tariffs. In February, electricity prices rose as high-consumption users started to be billed according to the end-source supply tariff. In April, the rise in the active energy rate for households in the national tariff, in addition to distribution charges, was another development that pushed electricity prices upwards. Furthermore, the increase in industrial and commercial electricity tariffs as well as in industrial and electricity producer tariffs for natural gas will have indirect effects on consumer inflation in the coming period. In the first months of the year, hikes were observed in bread prices in the food group and in milk and dairy product prices following the revision in the raw milk reference price. Over the last three months, the rise in urban transportation fares continued. Tobacco products prices, which did not change despite the update in the lump-sum Special Consumption Tax (SCT) amount in January, posted a rise in March. This increase was due to both the delayed effects of the lump-sum tax update in January and factors related to producers. Moreover, with the amendment in March, the ad valorem SCT rate on tobacco products was reduced, while the specific SCT amount was increased by a lower rate than implied by the reduction in the ad valorem SCT.

Box 2.1

Findings from Interviews with Firms

The CBRT holds face-to-face meetings with firms as part of the study of “**Economic Lens to the Real Sector**” (ELRS).¹ This Box summarizes the findings from the interviews conducted in the January-March 2025 period.

Economic activity slowed down slightly in the first quarter of the year.

Aggregate demand lost momentum moderately due to domestic sales, exports continued to have a positive trend, and production kept its current level. The investment stance has continued to remain weak, reflecting also in employment plans throughout the quarter. While cost pressures on the firms increased specifically as a result of labor expenses, demand and competition conditions limited price increases throughout the quarter.

The growth in domestic sales decelerated in the first quarter.

Consumption expenditures, which were strong in the last quarter of 2024 due to intensive campaigns, slowed down in the beginning of the first quarter of the year as a result of previous periods' demand brought forward and price increases. In the relevant period, wage increases and ongoing campaigns with a lower intensity stood out as factors supporting sales. In business-to-business trade, in addition to uncertainty regarding the demand outlook, weak investment stance due to financial conditions, preference for keeping low inventories and receivables collection risks continued to suppress business volumes. Developments in the financial markets increased uncertainty in the short-term outlook on the firms' side. However, year-end projections were not changed as of the end of the quarter due to the fact that fluctuations in the markets did not last long. On the other hand, it was observed that the risk perception regarding the pace of economic activity in the second half of the year increased. On the consumers' side, demand was delayed slightly in some sectors.

While demand for **food** products remained strong, seasonal effect of Ramadan generally met firms' expectations. In the **cleaning, personal care, cosmetics** products group, firms intended to increase their market shares by competitive prices and campaigns. In **apparel**, demand in the upper segment was relatively more positive, and firms backed demand by increasing intensity of campaigns at the end of the season. While a decrease in the intensity of campaigns suppressed sales of **white goods**, sales of **consumer electronics** and **furniture** slightly slowed down. **Automotive** sales maintained their strength with the support of sales exempt from SCT and stock reduction campaigns of foreign dealers. **Housing** sales were strong throughout the quarter but then slowed down at the end of the quarter due to tightening in financial conditions and the increase in the return of alternative financial instruments.

Exports increased mildly in the first quarter of the year compared to previous quarter.

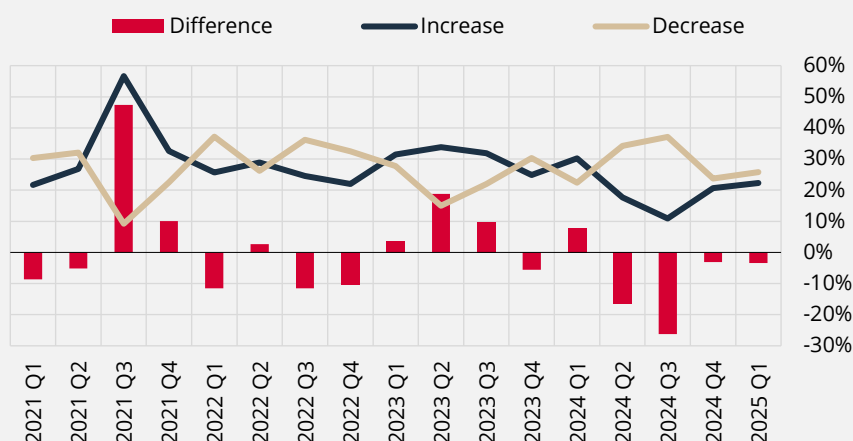
While costs in TL terms continued to depress exports, the initial impact of the global trade wars was positive for the firms which already had customers in the US market. Furthermore, exchange rate increases especially due to the euro/dollar parity in March supported exports, mainly in the European market. In this conjuncture, quality, fast delivery, capacity to access new markets and product development skills continued to support exports volumes. Meetings with firms held in April indicated that firms expected the positive outlook in exports to continue in the second quarter, while uncertainties stemming from global trade wars were at the forefront among risks for upcoming periods.

¹ The main purpose of this study is to obtain information on periodic production, domestic and international sales, investments, employment, credit conditions and cost and price developments in a timely manner, to closely monitor economic activity and to improve the communication between the CBRT and real sector representatives, through meetings with firms in different sectors. The findings obtained from the semi-structured interviews constitute a high-quality and timely source of information for monetary policy decisions. Interviews are held with firms in the manufacturing industry, and trade and services sectors within the framework of the sample created by considering their weight in the overall economic activity at sectoral, regional and scale levels. The charts are produced by scoring the anecdotal information obtained from the firm interviews. This study includes evaluations and inferences based on interviews with firms and does not reflect the views of the CBRT. The information and findings obtained may differ from the official statistics, information and findings that will be published later.

Basic metal exports were affected positively by global trade wars in the first quarter and rose slightly. On the other hand, in case that global trade wars make China more aggressive in the markets outside the USA, the increase in the exports might not be sustained. While the gradual launch of new projects in the **automotive industry** supported exports in the first quarter, the **automotive sub-industry** maintained its strength. In addition to Chinese pressure on the sector and harder competition conditions, a shift in European customers' preference from quality to price suppressed exports. Demand and competition conditions remained similar compared to previous quarter in the **white goods** industry and **sub-industry**, therefore exports did not show a significant change. While losses in **apparel** exports continued, parity and exchange rate developments within the quarter limited the weakness in exports. **Textile** exports kept their relatively positive position.

In tourism, occupancy rates were in line with seasonal expectations in the first quarter. Although the Easter holiday's shift to April this year caused losses in resort accommodations in March compared to last year, reservations implied that losses would be recovered in April. Hotels decreased their prices in response to cancellations of reservation in the second half of March, which also limited potential losses in upcoming months. As of the end of the first quarter, early bookings indicated a moderate increase in tourism demand for 2025.

Chart 1: Demand Perception of Firms* (Compared to the Previous Quarter)



Source: CBRT ELRS.

* Demand perception shows the evaluation made in view of the current sales, orders and expectations of the firms. The difference series shows the difference between firms with a positive perception of demand and those with a negative perception of demand compared to the previous quarter and provides information on the prevalence of the change in demand perception, not the size of the change.

Production increased slightly in the first quarter of 2025.

Uncertainties regarding the demand outlook, increasing import tendency, competition pressure from Chinese companies and cost increases suppressed activity in companies operating mainly in the domestic market. For exporters, external demand increased slightly. Additional US tariffs on imports resulted in positive expectations.

In terms of sectoral developments, in **automotive**, the introduction of new models came to the forefront in production processes in the main industry. In the sub-industry, while the difficulties in competition with imported products continue, preparations for new models in the main industry supported production. In **white goods**, while the plans to replace the decreasing inventories in the main industry supported production, the increasing share of imported input in production suppressed sub-industry production. In **basic metal**, the mainly export-oriented recovery in demand, cost reduction efforts and the expectations of the opening of the Syrian and Ukrainian markets supported production. For **construction material producers**, an improvement was observed due to housing production activity. In **machinery and equipment**, the weak course of investment expenditures in the domestic market and the difficulties in competition on the export side limited production. In **chemicals**, production maintained its strength with the effect of the positive course in construction

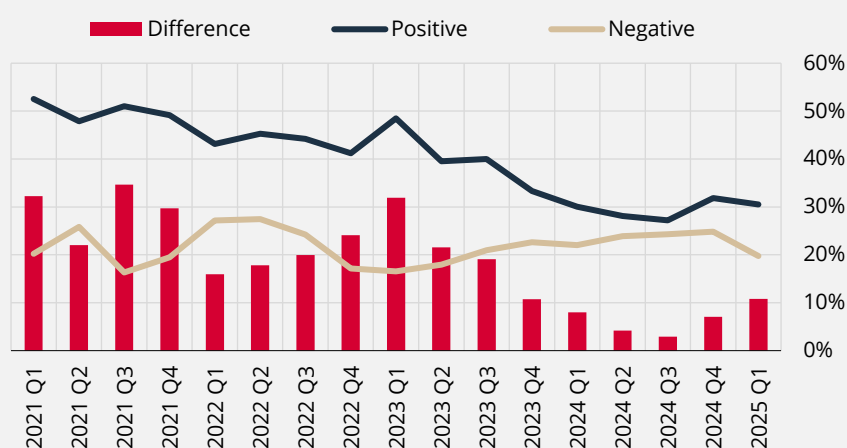
and cleaning products-related areas. In **apparel**, while the difficulties in demand and competition in exports suppressed activity, this situation was also reflected in **textile** production. In **furniture**, preparations for the campaign period supported production.

The investment stance of firms has continued to remain weak.

In this period, while no significant change was observed in most of the firms' investment stance, the number of firms considering investment cautiously decreased compared to the previous quarter. Among the reasons given by firms that did not plan investment, the prominent explanations were demand uncertainty and financing costs. The risk factors such as loss of competitiveness and geopolitical developments negatively affected the investment stance of firms that mainly export. Although the investment stance of firms operating predominantly in the domestic market continued to be weak, the investment plans such as store/warehouse in the trade and service sectors were prominent. On the other hand, the cautiousness in the investment stance of firms operating mostly in the domestic market increased due to the fluctuations in global and domestic markets.

In this period, the investment appetite of firms with a relatively more positive demand outlook and strong equity structure continued. Among the planned investments, automation and modernization investments aimed at increasing efficiency and competition and reducing costs came to the fore. Prioritization of managing working capital and cash flow suppresses the appetite for long-term investments such as production facilities. Firms' interest in solar power plant investments continued to decrease.

Chart 2: Investment Stance of Firms* (Next 12 Months)



Source: CBRT ELRS.

* Investment stance shows the evaluation made by considering the investment appetite of the firms for the next 12 months. The difference series shows the difference between the number of firms with a positive investment stance and firms with a negative investment stance and provides information on the prevalence of the change in investment stance, not the size of the change.

On a sectoral basis, the investment stance was relatively positive in the **food, metal, mineral** and **automotive sub-industry** sectors. Weakness in investment appetite continued in the **textile** sector due to idle capacity and weak demand conditions. The continuing weakening in exports and high costs in the **apparel** sector affected the investment stance negatively. In **trade and service** sectors, investment plans such as store/warehouse which stood out with positive expectations regarding demand in the second half of the year, were re-evaluated in light of recent market developments. High land prices and current financing conditions continued to suppress investment appetite in the **construction** sector.

While the weakness in investment stance is reflected in employment plans, the tendency to maintain the current status continued in majority of the firms.

The employment growth plans improved slightly for the next six months compared to the previous quarter. Investments expected to be completed within the year and expectations regarding store/warehouse openings in the trade and service sectors were effective in this improvement. On the

other hand, caution began to come to the fore in employment plans as a result of developments in the markets at the end of the quarter. Some firms stated that they will continue to observe domestic and foreign demand conditions for a while and shape their employment policies according to the course of the rest of the year.

The emphasis on the increase in financing needs increased slightly in the first quarter of the year.

The cost pressure originating from the wage increases at the beginning of the year affected the increase in the financing need mainly originating from working capital. However, firms maintained their tendency to continue their activities without creating additional financing needs. Firms reported that the financing need increased at the end of the quarter due to the disruptions in cash flow. The emphasis on the need for investment financing due to the continuing weakness in the investment stance was expressed with less emphasis.

While credit conditions improved slightly in the first quarter compared to the previous quarter, there was no significant change in access to credit. However, conditions tightened in TL and FX loans, especially in the interest channel, as of the end of the quarter. Firms that had to use credit throughout the quarter prioritized FX loans and preferred short-term TL credit due to high TL credit costs.

The volatility in the markets further increased the existing uncertainties and had a negative impact on business-to-business trade. Current receivable collection problems were at a manageable level throughout the first quarter of the year. However, firms which maintained their cautious stance against receivable collection risks continued to be selective about their customers, and continued to use Direct Debit System, credit cards, letters of guarantee and/or receivables insurance.

Although cost pressure on firms increased in the first quarter of the year, demand and competition conditions limited price increases during the quarter.

Labor costs were highlighted as the main reason for cost pressure, followed by input and supply costs, which increased due to wage updates. While references to exchange rate-related costs remained the same, the emphasis on financing and energy costs decreased compared to the previous quarter.

Although increasing costs caused price increases during the quarter, the fact that demand and competition conditions as well as the minimum wage increase rate were all in line with firms' expectations, and the moderate course of exchange rate and commodity prices limited price increases. However, the increase in automobile prices in March following the exchange rate movements was an exception.

After the price transitions, the rate of firms planning price increases for the upcoming period decreased compared to the previous quarter. Firms planned to gradually reflect their accumulated costs, which they could not reflect in their prices in the current quarter, to prices in the upcoming period depending on demand conditions. In addition, expectations that there will be an increase in energy expenses starting from the second quarter also affected the price increase plans of some firms.

Box 2.2

Multivariate Trend Inflation Indicator

Consumer inflation follows a volatile course from time to time due to exposure to various shocks. Therefore, policymakers monitor the underlying trend of inflation adjusted for temporary effects in order to both accurately assess the impact of monetary policy on inflation and design a policy framework appropriate to the level of inflation.

Inflation can be temporarily affected through various channels, such as food prices, tax adjustments or exchange rate developments. However, the duration of this impact and the extent to which it spreads across consumer prices can vary depending on the size and source of the shock. For this reason, the unobservable underlying trend of inflation, which excludes temporary effects, is represented using alternative and complementary methods. Indicators that *permanently exclude* items such as food or energy, which are assumed to be the fixed components of the consumption basket and to transmit shocks quickly to prices, play an important role in central bank communications (e.g. B and C indices). On the other hand, under the assumption that volatility may arise from product or service items that vary periodically, *distribution-based exclusion* indicators have been developed (such as SATRIM and Median). The inflation trend is also estimated using various *econometric methods* in addition to permanent or distribution-based exclusion methods (e.g. the DFM). Furthermore, policymakers monitor *trend inflation* indicators derived from econometric methods that filter out business cycle effects and relative price adjustments to reflect the medium-term trend of inflation.

Within this framework, this Box introduces a trend inflation indicator obtained using the Multivariate Unobserved-Components Stochastic Volatility Outlier-Adjusted (MUCSVO) model proposed by Stock and Watson (2016). In addition, the inflation forecasting performance of the indicator at different horizons is compared with the main trend indicators monitored by the CBRT.

a. Model

The model used to estimate the trend inflation indicator is as follows:

$$\pi_{i,t} = \alpha_{i,\tau,t} \tau_{c,t} + \alpha_{i,\varepsilon,t} \varepsilon_{c,t} + \tau_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$\tau_{c,t} = \tau_{c,t-1} + \sigma_{\Delta\tau,c,t} \eta_{\tau,c,t} \quad (2)$$

$$\varepsilon_{c,t} = \sigma_{\varepsilon,c,t} * s_{c,t} * \eta_{\varepsilon,c,t} \quad (3)$$

$$\tau_{i,t} = \tau_{i,t-1} + \sigma_{\Delta\tau,i,t} \eta_{\tau,i,t} \quad (4)$$

$$\varepsilon_{i,t} = \sigma_{\varepsilon,i,t} * s_{i,t} * \eta_{\varepsilon,i,t} \quad (5)$$

$$\alpha_{i,\tau,t} = \alpha_{i,\tau,t-1} + \lambda_{i,\tau} \zeta_{i,\tau,t} \text{ ve } \alpha_{i,\varepsilon,t} = \alpha_{i,\varepsilon,t-1} + \lambda_{i,\varepsilon} \zeta_{i,\varepsilon,t} \quad (6)$$

$$\Delta \ln(\sigma_{\Delta\tau,c,t}^2) = \gamma_{\Delta\tau,c} v_{\Delta\tau,c,t}, \Delta \ln(\sigma_{\varepsilon,c,t}^2) = \gamma_{\varepsilon,c} v_{\varepsilon,c,t}, \Delta \ln(\sigma_{\Delta\tau,i,t}^2) = \gamma_{\Delta\tau,i} v_{\Delta\tau,i,t}, \Delta \ln(\sigma_{\varepsilon,i,t}^2) = \gamma_{\varepsilon,i} v_{\varepsilon,i,t} \quad (7)$$

$$\text{Trend Inflation} = \tau_t = \sum_{i=1}^n w_{it} (\alpha_{i,\tau,t} \tau_{c,t} + \tau_{i,t}) \quad (8)$$

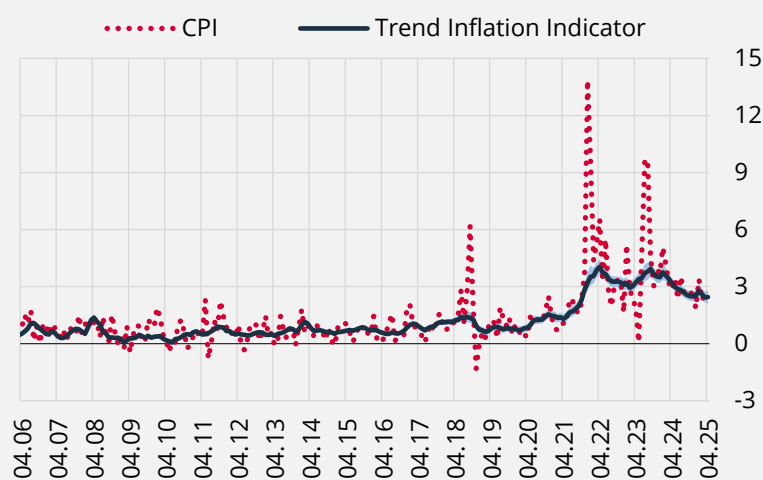
This model explains each group's inflation through common and sector-specific components. Each group's inflation ($\pi_{i,t}$) depends on common trend ($\tau_{c,t}$) and common transitory component ($\varepsilon_{c,t}$) as well as sector-specific trend ($\tau_{i,t}$) and sector-specific transitory component ($\varepsilon_{i,t}$) (1). Common trend ($\tau_{c,t}$) and subgroup-specific trend ($\tau_{i,t}$) follow a random walk process and the model allows stochastic volatility in their innovations ($\sigma_{\Delta\tau,c,t}$ and $\sigma_{\Delta\tau,i,t}$) (2, 4 and 7). Common transitory component ($\varepsilon_{c,t}$) and subgroup transitory component ($\varepsilon_{i,t}$) -the model allows stochastic volatility in their innovations ($\sigma_{\varepsilon,c,t}$ and $\sigma_{\varepsilon,i,t}$)- are modelled as stationary process (3, 5 and 7). The model allows the inclusion of outliers ($s_{c,t}$ and $s_{i,t}$) in common and sectoral transitory components (3 and 5). The factor loadings (α parameters) change over time (6). The trend

inflation indicator (τ_t) is obtained by aggregating the sectoral trends weighed by their consumer basket weights (w_{it}) (8).¹ In this Box, the trend inflation indicator is estimated using seasonally adjusted data for core goods, services and processed food groups.²

b. Model Results

Based on Chart 1, the estimated median value of the trend inflation indicator (τ_t) exhibits low fluctuations, but it has increased following the shocks after 2020 and declined recently due to tight monetary policy. Notably, its confidence interval has widened after 2020. As of April 2025, the trend inflation is estimated to be 2.5% (between 2.1% and 2.8% with 68% confidence interval).

Chart 1: CPI (Seasonally Adjusted, Monthly % Change) and Trend Inflation Indicator*



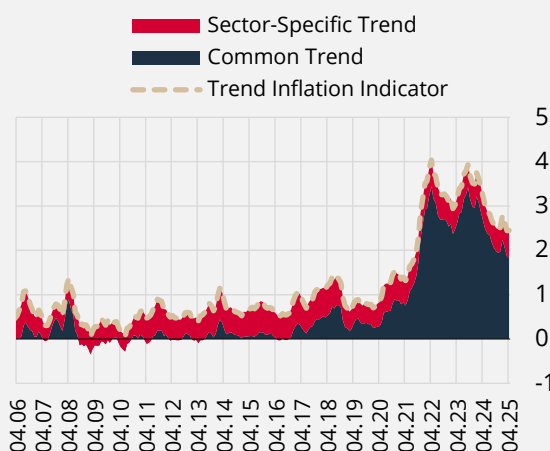
Source: Authors' calculation, TURKSTAT.

* The light blue shaded area represents the 68% confidence interval.

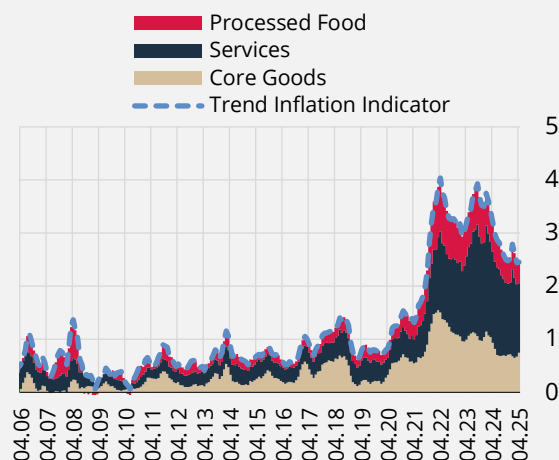
Chart 2 shows that the rise (and decline) in trend inflation after 2020 stems from the common trend, implying that the deterioration (and correction) in pricing behavior has become broad based. Moreover, the services group made the largest contribution to trend inflation (Chart 3). Across the subgroups, as of April 2025, services trend inflation is estimated at 3.1%, contributing 1.3 percentage points to trend inflation; core goods trend inflation is 1.8%, contributing 0.7 percentage points to trend inflation; and processed food trend inflation is estimated at 2.3%, contributing 0.5 percentage points to trend inflation (Chart 4).

¹ For detailed information on the model and prior distributions, see Stock and Watson (2016).

² As part of this study, trend indicators are constructed directly using MUCSVO proposed by Stock and Watson (2016) for both three main groups of the B index and also nine subgroups of the B index. Additionally, as an indirect approach, for both group classifications, trend inflation indicators are estimated by aggregating trends obtained from univariate model (UCSVO) with their weights. However, since the trend inflation derived from nine subcomponents of the B index using direct approach (MUCSVO) exhibits relatively high fluctuations, and the indirect approach (UCSVO) neglects the common part across all sectors, the trend inflation indicator presented here is derived from three main groups using the direct approach.

Chart 2: Contributions of Common and Sector-Specific Trends

Source: Authors' calculations, TURKSTAT.

Chart 3: Contributions of Main Groups

Source: Authors' calculations, TURKSTAT.

b. Performance Evaluation

In this section, the forecasting performance of the trend inflation is compared with other underlying inflation indicators currently monitored by the CBRT. Table 1 presents relative RMSFE values reflecting the forecasting performance of the indicators for inflation 1, 2, 3, 6, 12, and 24 months ahead. Lower relative RMSFE values indicate better forecasting performance. The trend inflation indicator performs better for forecast horizons of three months and beyond.

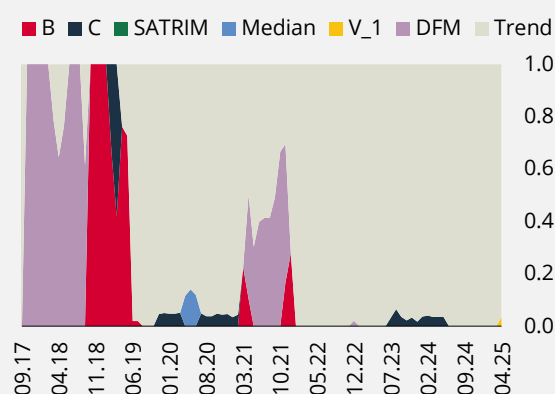
To observe the change in the forecasting power of the indicators over time, the optimal forecast combination weights that minimize the one-year-ahead forecasting error for the relevant period are calculated using an 18-month rolling window. An increase in the weight of the indicator indicates that the performance of the indicator has improved during that period. The results confirm that the trend inflation indicator largely forecasts 12-month-ahead inflation (Chart 4).

Table 1: Forecast Performance of Indicators* (RRMSFE)

h	Trend	B	C	SATRIM	Median	V_1	DFM
1	1.25	1.07	1.14	0.86	0.91	0.89	0.78
2	1.03	0.95	0.95	0.85	0.90	0.88	0.86
3	0.78	0.93	0.91	0.85	0.83	0.84	0.84
6	0.76	0.95	0.95	0.88	0.84	0.85	0.85
12	0.72	0.94	0.94	0.89	0.84	0.86	0.86
24	0.84	0.98	0.99	0.95	0.91	0.92	0.91

Source: Authors' calculations.

* RRMSFE is obtained by dividing the root mean squared errors (RMSFE) of each indicator for the 1, 2, 3, 6, 12, and 24-month-ahead seasonally adjusted 3-month average headline inflation by the RMSFE of the headline inflation.

Chart 4: Combination Weights Minimizing RMSFE-12 in 18-Month Rolling Windows*

Source: Authors' calculations.

* The optimal weights of the indicators minimizing the forecasting error in 18-month rolling windows have been calculated. The RMSFE values have been calculated as shown in Table 1. For detailed information on the calculation of the weights, see CBRT (2024).

In sum, the results of the trend inflation indicator obtained using the Stock and Watson (2016) study are presented in this Box. Additionally, the forecasting performance of the indicator is compared with the indicators monitored by the CBRT. The results indicate that since the beginning of tight monetary policy, trend inflation has permanently declined from 4% to 2.5%. It is expected that the trend inflation indicator will continue to decline in the coming period. Due to its design, being more long term in nature, the trend inflation indicator is not an alternative to the short-term underlying inflation indicators frequently used in CBRT's monetary policy communication. It will be used in addition to these indicators to contribute to the medium-term forecasting process and relative price analysis. The CBRT will continue its work on inflation dynamics under the Research Agenda.

References

CBRT (2024). Inflation Report 2024-IV, Box 2.5, Evaluation of Underlying Inflation Indicators.

Stock, J., Watson, M. (2016). Core Inflation and Trend Inflation, Review of Economics and Statistics, 98(4), 770-784.

Box 2.3

Last Resort Supply Tariff and Its Implications for Residential Electricity Prices

Electricity prices are one of the fundamental consumption items directly affecting all households and have a significant share in the CPI. Changes in pricing mechanisms in the energy market may cause fluctuations in monthly inflation rates. In this context, understanding the impact of the "Last Resort Supply Tariff" (LRST), effective from February 1, 2025, on residential electricity prices, on the CPI is crucial for accurately forming inflation forecasts and expectations. This Box aims to contribute to the understanding of this issue.

1. What is an Eligible Consumer?

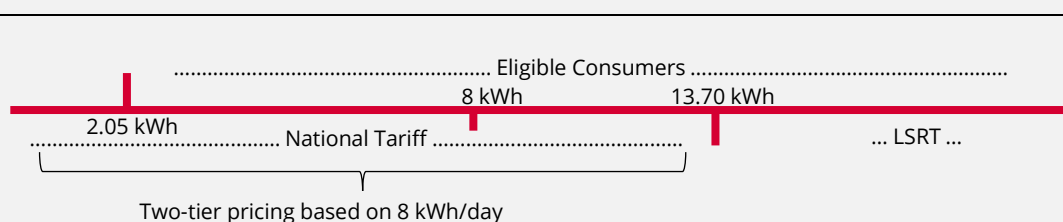
In the electricity market, an "eligible consumer" refers to all individual or institutions that exceed the annual consumption threshold (750 kWh/year or 2.05 kWh/day for 2025) set by the Energy Market Regulatory Authority (EMRA), or are directly connected to the transmission system or operate within an organized industrial zone. These consumers have the freedom to select their electricity suppliers. Consumers not classified as eligible can purchase electricity only through the national tariff determined by EMRA.

2. Tariffs: National Tariff and LRST

National Tariff: This tariff is fixed unit prices determined by EMRA, for consumers who are not classified as eligible or for eligible consumers who have not selected their suppliers. It is set periodically by EMRA and varies by consumer groups. Under this tariff, residential consumers are billed using two different unit prices depending on whether daily consumption is below or above 8 kWh, where a higher unit price is charged for consumption above 8 kWh (Figure 1). The tariff's fixed nature provides predictability in electricity pricing for this consumer group.

LRST: The LRST is applied to consumers entitled to eligible consumer status who do not exercise this right and do not enter into bilateral agreements, yet exceed a certain annual energy consumption level. This tariff structure targets consumers with high electricity usage, employing a principle where the average price increases with consumption levels, thereby establishing a fair pricing mechanism aligned with actual energy usage. Consumption thresholds for 2025 are set at 5,000 kWh/year (13.70 kWh/day) for residential consumers, 15,000 kWh for industrial and commercial consumers, and 100 million kWh for agricultural activities. All consumers exceeding these thresholds fall under the LRST, where electricity prices are determined based on market conditions.

Figure 1: Daily Consumption Levels in Residential Group: Eligible Consumers and LRST



3. Formation of LRST Prices

LRST electricity prices are calculated daily and comprise the following components:

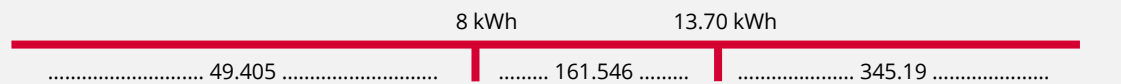
- **Market Clearing Price (MCP):** The hourly determined electricity unit price at the intersection of supply and demand curves in the Day-Ahead Market.
- **Renewables Support Mechanism (RSM) Cost:** The unit cost resulting from incentives paid to power plants producing renewable energy within the RSM (estimated monthly by EMRA).

- **Regulatory Coefficient (RC):** A coefficient determined by EMRA considering non-energy costs and a reasonable profit margin. As per EMRA's decision dated December 26, 2024 (No. 13166), the coefficient is set at 1.05 for residential consumers and 1.0938 for other consumer groups.

As indicated in Equation (1), the daily LRST price ($LRST_d$) used in inflation calculations is derived by multiplying the sum of the weighted average hourly MCP and the monthly RSM cost by the RC. The resulting price, recalculated daily, incorporates daily volatility, unlike fixed tariffs. As an example, energy charges for April 24, 2025, are illustrated in Figure 2.

$$LRST_d = (MCP_d + RSM) \times RC \quad (1)$$

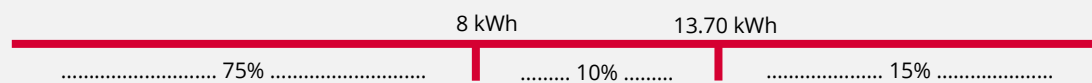
Figure 2: Energy Charges for Residential Consumers in 2025 (kr/kWh, Low Voltage, Single-Term)



4. Monthly Residential Electricity Price Calculation within CPI

Approximately 15% of all residential consumers — those whose annual electricity usage exceeds 5,000 kWh — fall under the LRST (Figure 3). Consumers billed under the national tariff with daily consumption below 8 kWh constitute around 75% of total residential electricity consumption, while approximately 10% exceed 8 kWh, yet remain within the national tariff.

Figure 3: Daily Consumption Shares of Residential Consumer Groups (% for 2025)



In this context, the following steps are applied when calculating residential electricity prices within the CPI:

- 1- **Weighted Average MCP (MCP_{awa}):** Daily arithmetic average weighted by hourly Matching Quantities in the Day-Ahead Market.
- 2- **Daily LRST value ($LRST_d$):** Calculated using Equation (1) based on the monthly RSM cost, MCP_{awa} , and RC.
- 3- The daily geometric average electricity price (EP_{dgwa}) is calculated by adding municipal tax, distribution tariff and Value Added Tax (VAT) to daily $LRST_d$ and national tariffs (below and above 8 kWh/day) weighted by consumption ratios.
- 4- **CPI monthly electricity price:** The geometric average of daily EP_{dgwa} is taken to obtain the final retail price used in CPI.

In other words, by adding municipal tax (5%), distribution tariff (kr/kWh), and VAT (10%) to the energy charges from daily LRST and national tariffs, and then weighting by consumption ratios, a geometric average is calculated. This monthly geometric average value yields the final residential electricity price used in the CPI, as presented in Equation (2).

$$Electricity Price = \prod_{d=1}^{30} \left([(8kWh \downarrow energy charge_d \times (1 + municipal tax) + distribution tariff) \times (1 + VAT rate)]^{8kWh consumption ratio} \times [(8kWh \uparrow energy charge_d \times (1 + municipal tax) + distribution tariff) \times (1 + VAT rate)]^{8kWh consumption ratio} \times [(LRST_d \times (1 + municipal tax) + distribution tariff) \times (1 + VAT rate)]^{LRST consumption ratio} \right)^{(1/30)} \quad (2)$$

5. Impact of LRST on CPI

The LRST affects CPI directly through residential consumers and indirectly through commercial and industrial consumers via production costs. The direct effect on CPI is driven by: (i) the share of LRST consumers within CPI and (ii) daily fluctuations in LRST prices.

Electricity holds a 1.79% weight within the CPI basket, with approximately 15% (or 0.27% of the total inflation basket) attributable to LRST-priced consumption. Although the number of LRST consumers may vary slightly throughout the year, the weights remain constant within the framework of the CPI methodology.

The most critical component affecting LRST prices is MCP. The share of the LRST in total electricity consumption makes the MCP a critical variable in terms of inflation.

The demand and supply balance in electricity generation varies depending on seasonal conditions (the distribution of generation resources changes with seasonal effects) and time of day. This leads to hourly and monthly fluctuations in MCP. Such variability directly impacts LRST prices and causes limited monthly fluctuations in CPI electricity prices. Additionally, monthly changes in RSM costs may also cause minor bi-directional fluctuations in CPI.

Lastly, the use of daily averages in the calculation of monthly electricity prices within the LRST framework may lead to delayed impacts from national tariff changes into the subsequent month. For example, as a result of the national tariff change effective as of April 5, 2025, electricity prices in the CPI increased by 20.8% in April, while the remaining effect of the first five days of April is expected to carry over into May.

6. Price Dynamics and Impact on Forecasts

The market-sensitive nature and dynamic pricing structure of LRST cause electricity prices to fluctuate on a daily basis compared to fixed tariffs. The fact that LRST residential consumers constitute approximately 0.27% of the CPI basket points to the importance of taking into account the scope of the LRST and its components (MCP and RSM) for the accuracy of inflation forecasting processes.

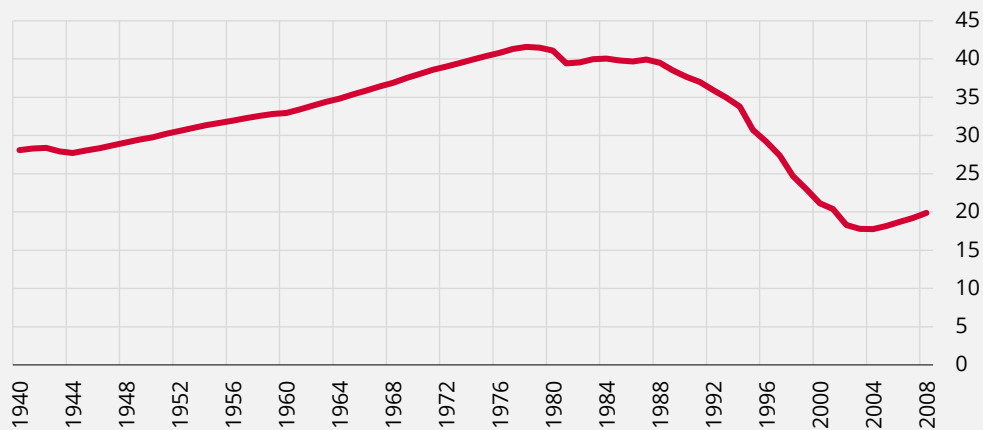
Box 2.4

Household Inflation Expectations: How Important is Past Experience?

Inflation expectations are of great importance for the course of monetary policy and sustainable price stability. In this regard, central banks take households' inflation expectations into account when formulating monetary policy. The economic literature shows that individuals' past experiences can significantly influence their inflation expectations (Piazzesi and Schneider, 2005; Malmendier and Nagel, 2016). Within this framework, this Box focuses on the impact of households' past inflation experiences on their inflation expectations, using individual-level data from the CTS.

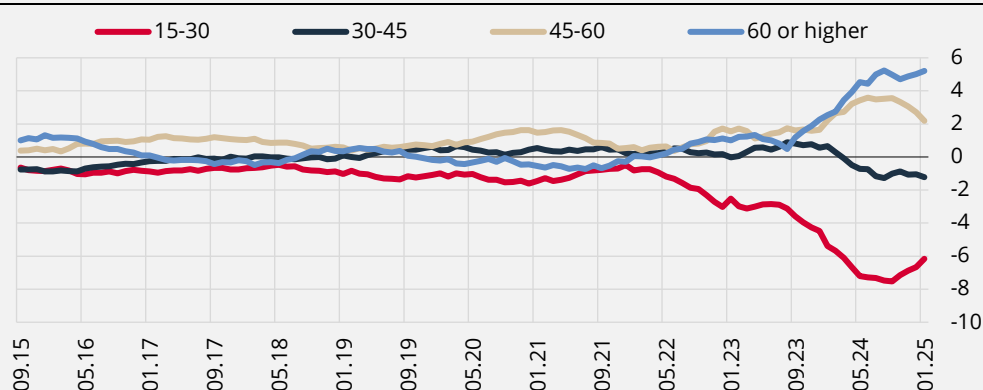
Chart 1 presents the average annual inflation rate that individuals born in each year have been exposed to over their lifetimes through the end of 2024. Accordingly, individuals born after 2000 have experienced, on average, lower inflation rates than older individuals. Those who lived through the 1980s and 1990s - periods marked by chronic inflation - faced higher average lifetime annual inflation.

Chart 1. Average Lifetime Inflation by Year of Birth* (As of End-2024, %)



* Displays the average annual inflation rate experienced by individuals born in each year from birth through 2024.

Chart 2 illustrates the evolution of deviations in annual inflation expectations from the average across different age groups. There is a significant divergence between the inflation expectations of younger and older individuals. Those aged over 45 have higher inflation expectations than those under 45. The gap is even more pronounced between individuals over 60 and those under 30. Since 2021, when inflationary pressures surged, the divergence among age groups has widened further. For instance, as of January 2025, individuals aged 15 to 30 expect an average inflation rate of 62.8%, while individuals over 60 expect an average of 71% for the next 12 months. When Charts 1 and 2 are evaluated together, it becomes evident that individuals who have been exposed to higher inflation throughout their lives also tend to have higher inflation expectations.

Chart 2. Evolution of Inflation Expectations by Age Group* (Deviation from Mean, %)

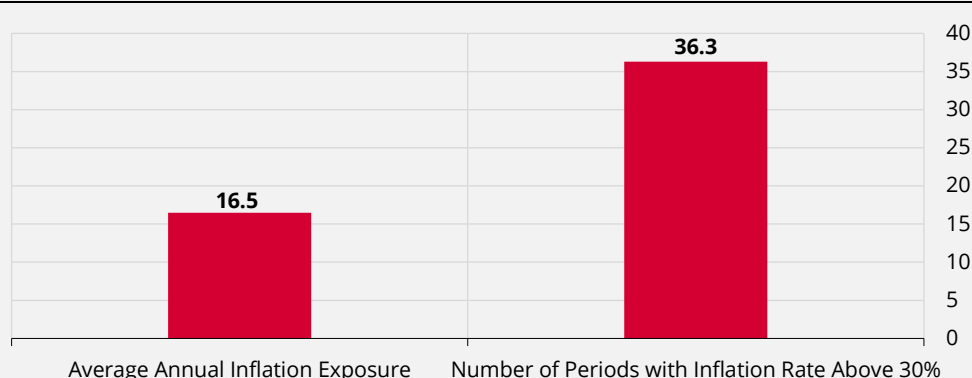
* Displays the deviation of average inflation expectations for each age group from the overall average inflation expectation for that month.

The variation in inflation expectations across individuals with differing past inflation experiences is also examined through an econometric analysis. The analysis is conducted using a fixed effects model with monthly data from October 2014 to February 2025:

$$Y_{i,a,c,t} = \beta \text{inflation exposure}_{i,t} + \lambda \text{controls}_{i,t} + \gamma_a + \delta_c + \theta_t + \epsilon_{i,a,c,t}$$

In the equation, i denotes the survey respondent, a denotes the respondent's age, c represents the birth year cohort and t refers to time (at the year-month level). $Y_{i,a,c,t}$ is the respondent's inflation expectation for the next 12 months. Inflation exposure refers to the average annual inflation the individual has been exposed to from birth until time t . The analysis also controls for individual characteristics related to inflation expectations. The controls include gender and income group dummies and years of formal education. A number of fixed effects are also included in the analysis. γ_a shows age fixed effects accounting for time-invariant age-specific characteristics. δ_c denotes cohort fixed effects, covering 10-year birth intervals. Finally, we control for year-month fixed effects, θ_t , to account for macroeconomic trends that affect inflation expectations, including current inflation levels, employment conditions and growth prospects. Standard errors are clustered at the age level.

The results show a positive and statistically significant relationship between the inflation individuals have experienced since birth and their current inflation expectations. According to the regression results presented in Chart 3, a one-percentage point increase in historical inflation exposure is associated with a 16.5 basis points increase in expected annual inflation. This relationship also holds when the number of periods with inflation above 30% is used as the main independent variable. Each additional period of exposure to inflation over 30% corresponds to a 36.3 basis points increase in inflation expectations.

Chart 3. Relationship Between Inflation Exposure and Inflation Expectations* (Basis Points)

* Presents regression results for the period October 2014–February 2025. In the analysis, the dependent variable is the respondent's answer to the CTS question: "By what percentage do you expect consumer prices to increase/decrease in the next 12 months?". In the first column, the independent variable is the average annual inflation experienced from birth to the date of the survey. In the second column, it is the number of periods in which the respondent experienced annual inflation of 30% or more.

In sum, households' inflation expectations are significantly influenced by their past inflation experiences. The persistently high inflation expectations in recent periods are partly driven by individuals' historical exposure to high inflation. It is observed that deteriorations in price stability not only have immediate negative effects but also generate long-lasting consequences. Therefore, achieving and maintaining the price stability target is of utmost importance.

References

Malmendier, U., Nagel, S. (2016). Learning from Inflation Experiences, *The Quarterly Journal of Economics*, 131(1), 53–87.

Piazzesi, M., Schneider, M. (2009). Inflation and the Price of Real Assets, Staff Report 423, Federal Reserve Bank of Minneapolis.

3. Medium-Term Projections

3.1 Current State, Short-Term Outlook and Assumptions

Changes in Key Forecast Variables

GDP increased by 3% annually and 1.7% quarterly in the last quarter of 2024, implying recovery in economic activity. On the expenditures side, final domestic demand continued to contribute positively to annual growth in the last quarter, while the contribution of changes in inventories was negative. Private consumption had a positive contribution due to public consumption and the demand brought forward by campaigns and impending wage adjustments in the final quarter of the year. On the other hand, net exports contributed negatively to annual growth. On the production side, the largest contribution to annual growth came from the services sector, while the industrial and agricultural sectors made a relatively more limited contribution. Against this background, the output gap forecast for the last quarter of 2024 was revised up to -0.2%. Leading indicators for the recent period suggest that domestic demand remained above projections despite some loss of momentum in the first quarter. Thus, the output gap for the first quarter of 2025 was revised upwards compared to the previous reporting period, bringing it close to the neutral level (Table 3.1.1). In the remainder of the year, demand conditions are assessed to contribute further to the disinflation process as the curbing effect of tighter financial conditions and global developments becomes more pronounced.

Consumer inflation was 37.9% in April, remaining below the mid-point of the forecast range presented in the previous Inflation Report. The disinflation process continues across subgroups. Despite having declined, services inflation remains elevated led by sectors with strong backward-indexation tendency. Goods inflation, which was hovering at low levels, was influenced by financial market developments in March and increased somewhat in April due to its imported input component. Although annual inflation decreased in the food and non-alcoholic beverages group, price increases exceeded historical averages as a result of adverse weather conditions in the first quarter. Inflation in April was mainly driven by developments in energy and core goods groups. Meanwhile, annual producer inflation stood at 22.5% in April, remaining lower than consumer inflation.

The annual rate of increase in core inflation indicators lost pace. Having slowed significantly in February and March, underlying inflation posted a partial rise due to financial market developments in April. On the other hand, annual inflation in core indicators continued to decelerate.

Table 3.1.1: Changes in Key Forecast Variables*

	2024-IV	2025-I
Output Gap	-0.2	0.0
(%)	(-1.1)	(-1.7)
Consumer Inflation**	44.4	37.9
(Annual % Change)	(44.4)	(38.8)
B Index Inflation**	43.9	36.8
(Annual % Change)	(43.9)	(38.4)

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

** Denotes inflation in December for 2024-IV and April for 2025-I.

Assumptions for Exogenous Variables

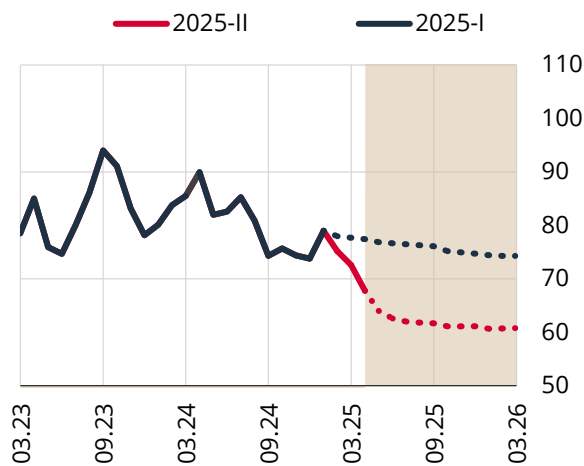
Protectionist trade policies led to an increase in downside risks to the global growth outlook. With the tariff package announced by the USA in April, uncertainties regarding international trade policies escalated. In the following period, statements of postponements and negotiations helped the movements in financial markets to subside somewhat, but expectations for global economic activity were affected adversely. In April, expectations for global production and exports responded to heightened uncertainties with a sharp downward movement, while growth forecasts were revised down for many countries, the USA in particular. Against this background, the assumption for the annual rate of increase in the global growth index based on Türkiye's export weights was revised down from the previous reporting period to 1.9% for 2025 and 2.1% for 2026 (Table 3.1.2).

Protectionist trade policies also negatively affected the risk sentiment in financial markets. In this context, a tightening tendency became prominent in global financial conditions compared to the previous reporting period, while uncertainties regarding monetary policies increased. Protectionist trade policies brought down growth expectations and also affected inflation expectations adversely for many countries. This outlook brings with it the possibility of a trade-off between inflation and growth for central banks, and reduces the predictability of monetary policies. Due to the deterioration in the growth outlook, for many countries, markets are pricing in lower levels of interest rates for end-2025 compared to the previous reporting period. On the other hand, the rise in inflation expectations prompts central banks to adopt a more cautious stance in rate cuts.

The global growth outlook, geopolitical risks and supply-side factors continue to affect commodity prices.

Amid the worsened global growth outlook, commodity prices decreased, particularly in energy. Industrial commodity prices declined due to the weak economic activity in China and the deterioration in the global demand outlook, while the agricultural commodity index also fell across the board compared to the previous reporting period. Accordingly, the average oil price assumption for 2025 based on futures prices was revised to USD 65.8 in the current reporting period, down from USD 76.5 in the previous reporting period (Chart 3.1.1). For 2026, the oil price assumption was set at USD 60.6. Assumptions for the general level of import prices point to a decline of 1.1% in 2025 and 1.3% in 2026 (Chart 3.1.2, Table 3.1.2).

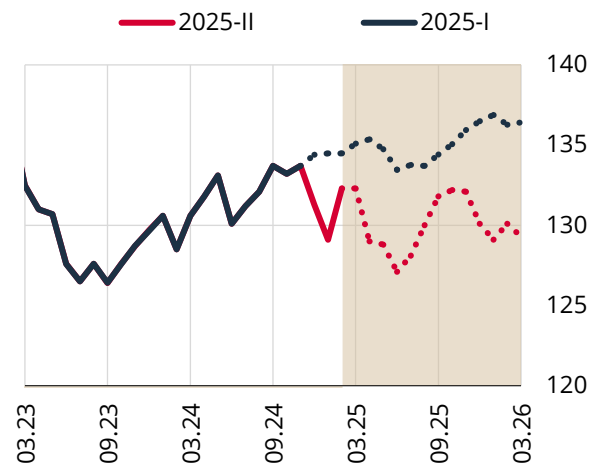
Chart 3.1.1: Revisions in Oil Price Assumptions* (USD/bbl)



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 food price assumption for 2025 was revised upwards. Food inflation ended 2024 at 43.6% and dropped to 37.1% in March. As the adverse weather conditions weighed on prices of fresh fruits and vegetables, the downward course in annual food inflation was interrupted at the end of the first quarter. However, annual inflation continued to decrease in food excluding fresh fruits and vegetables. Yet, the country-wide agricultural frost in April increased the upside risks to fresh fruit and vegetable prices, particularly in fruits, for the upcoming period. The food inflation assumption for 2025 was revised to 26.5%, and the assumption for 2026 was kept unchanged at 13.5% (Table 3.1.2).

Table 3.1.2: Revisions in Assumptions*

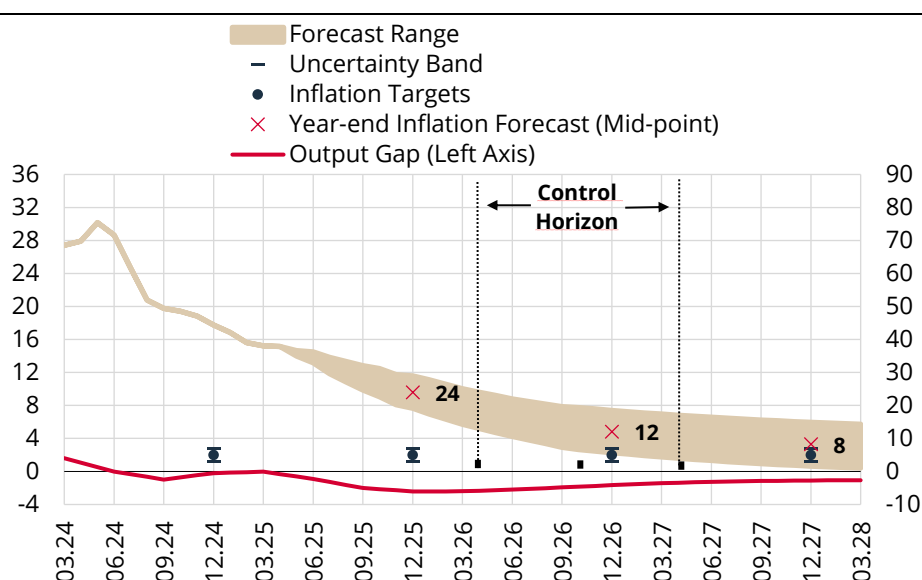
	2025	2026
Export-Weighted Global Growth Index (Annual Average % Change)	1.9 (2.2)	2.1 (2.4)
Oil Prices (Average, USD)	65.8 (76.5)	60.6 (74.0)
Import Prices (USD, Annual Average % Change)	-1.1 (2.6)	-1.3 (0.6)
Food Price Inflation (Year-End % Change)	26.5 (24.5)	13.5 (13.5)

* 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. Accordingly, medium-term forecasts are based on the assumption that the enhanced coordination of fiscal policy will contribute significantly to the disinflation process, and that policies regarding government-administered prices, borrowing, and tax and income will be determined so as to support the disinflation process.

3.2 Medium-Term Outlook

The year-end inflation forecasts for 2025 and 2026 have been kept unchanged at 24% and 12%, respectively. With 70% probability, inflation is projected to be between 19% and 29% (with a mid-point of 24%) at end-2025, between 6% and 18% (with a mid-point of 12%) at end-2026, and fall to single digits to 8% at end-2027 before stabilizing at the medium-term inflation target of 5% (Chart 3.2.1). The forecast ranges have been kept the same as those in the previous Report due to the recently heightened uncertainties. Forecasts are based on an outlook in which the tight monetary policy stance will be maintained until inflation displays a sustained decline and price stability is achieved, and the coordination among economic policies will strengthen.

Chart 3.2.1: Inflation Forecasts* (%)

Source: CBRT, TURKSTAT.

* Shaded area denotes the 70% confidence interval for the forecast.

The end-2025 inflation forecast has been maintained at 24%, as the upside and downside effects offset each other.

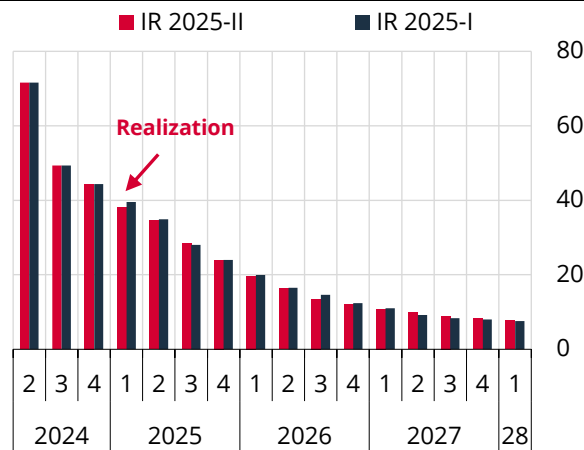
The output gap forecast has been revised upwards based on data for the last quarter of 2024 and the first quarter of 2025 that point to a more limited deceleration in demand than projected in the previous Inflation Report. Underlying inflation is estimated to have posted a temporary increase in April driven by financial market developments but to continue decelerating in a gradual manner in the upcoming period. The fall in inflation expectations was slower than projected, while the basket exchange rate rose due to developments in financial markets. Policy actions helped curb the unfavorable impact of demand conditions, underlying inflation and inflation expectations on year-end inflation. The food inflation assumption was increased due to unprocessed food price developments. All these factors had an upward impact on the inflation forecast. On the other hand, the downward revision in oil and import price assumptions due to recent global developments, and the fact that the January increase to the medical examination co-payments in the SUT was partially revised down in February had a downward impact on the inflation forecast. The end-2025 inflation forecast has been kept constant at 24%, as these upside and downside effects offset each other on the back of the policy response. Inflation is projected to fall to 12% by end-2026 as the monetary stance remains tight (Table 3.2.1).

Table 3.2.1: Revisions in Year-End Inflation Forecasts for 2025 and Sources of Revisions

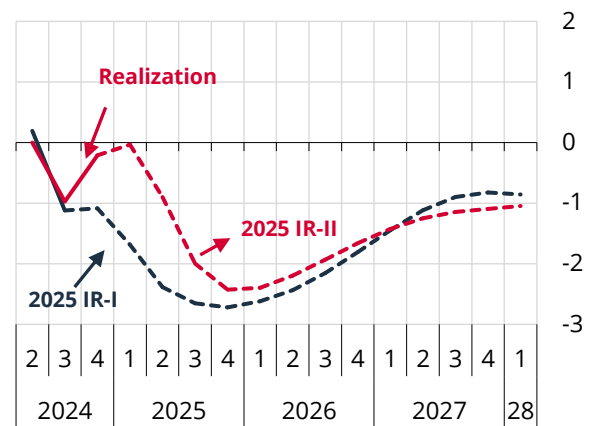
	2025
Inflation Report 2025-I Forecast (%)	24.0
Inflation Report 2025-II Year-End Forecast (%)	24.0
Forecast Revision Compared to Inflation Report 2025-I (% Points)	0.0
Sources of Forecast Revision (% Points)	
Food Prices	+0.5
Output Gap	+0.3
TL-Denominated Import Prices	+0.1
Initial Conditions, Underlying Inflation	+0.1
Administered Prices	-1.0

Source: CBRT.

The year-end inflation forecast for 2025 remains unchanged at 24% (Chart 3.2.2). The revision to the food price assumption stemming from unprocessed food prices pushed the inflation forecast up by 0.5 points. Demand conditions made a more moderate contribution to the disinflation process than projected in the previous Report. However, the net effect of this deviation remained limited to 0.3 points thanks to the tightening measures. Despite the decline in the oil and import prices assumption, TL-denominated import prices added 0.1 points due to basket exchange rate developments. Initial conditions and underlying inflation had a total upward effect of 0.1 points on the year-end inflation forecast. The monetary policy implemented in the recent period has prevented a severe deterioration in underlying inflation. The re-arrangement made in the SUT in February regarding the medical examination co-payments, which are among the administered health services prices, pulled the forecasts down by 1.0 point.

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

Source: CBRT, TURKSTAT.

Chart 3.2.3: Output Gap Forecast (%)

Source: CBRT.

Forecasts rely on an outlook marked by diminishing uncertainties about global trade policies and absence of an additional increase in the country risk premium stemming from global or domestic developments.

Although the movements in financial markets have somewhat subsided in the recent period on the back of the statements announcing postponed tariffs and negotiations, uncertainties regarding the extent of tariff implementation persist. This affects the global inflation and growth outlook unfavorably and causes the global risk appetite to remain weak. Forecasts are shaped by a framework in which global trade uncertainties will decrease and hence will not lead to further fluctuation in global financial markets. The tight monetary policy stance that will be maintained until the underlying inflation declines permanently and price stability is achieved will help contain the possible adverse effects of the volatility in global financial markets on the country risk premium.

Medium-term forecasts are based on an outlook in which the tight monetary policy stance will be maintained until inflation displays a sustained decline and price stability is achieved, and the coordination among economic policies will be strengthened. The convergence of inflation expectations to the Inflation Report forecasts in the short term and to the inflation targets in the medium term is critical for ensuring a permanent decline in inflation. The improvement in inflation expectations halted in April due to the recent developments in financial markets. The level of inflation expectations continues to pose risks to the disinflation process. With the monetary policy tightening, inflation expectations are expected to resume their downward trend and to fall to levels consistent with the disinflation path. Financial conditions have tightened due to the increase in the policy rate and the measures taken to support the tight monetary stance. Moreover, the tightening of the monetary policy stance supports the disinflation process through the demand, real exchange rate and expectations channels. It is expected that the credit growth will remain consistent with the projected disinflation path on the back of macroprudential policies that support the monetary transmission mechanism. Lastly, in the forecast period, the continuation of a stronger coordination among monetary and other economic policies will contribute to disinflation through demand, cost and expectations channels.

The disinflation process is projected to gain strength through moderation in domestic demand, real appreciation in the Turkish lira and improvement in inflation expectations. It is estimated that the output gap was close to the neutral level in the first quarter of the year, and the disinflationary impact of aggregate demand conditions weakened. However, leading indicators suggest that the demand conditions will lose strength starting from the second quarter of the year on the back of tightening measures and global uncertainties. Given the cumulative effects of the tightening in financial conditions and the tight monetary stance, the contribution of the output gap outlook to disinflation will become more pronounced in the second half of the year (Chart 3.2.3). Accordingly, the downward trend in inflation is projected to continue in items that are highly sensitive to demand conditions. Moreover, the rise in the basket exchange rate is expected to have a limited effect on the short-term inflation outlook due to the decline in commodity prices and weak demand conditions. Services inflation maintained its high course even though it receded. However, the expected weaker course of demand conditions in the upcoming period is projected to

support the weakening in services inflation inertia, particularly in items sensitive to demand. Although price increases have strengthened somewhat in certain core goods items with high sensitivity to exchange rate developments, the ongoing mild course of producer prices will help core goods inflation to remain low. Underlying inflation recorded a partial increase in April due to the developments in financial markets. Yet, underlying inflation is expected to decline with the weakening in real unit costs becoming more pronounced, the rigidity in services inflation easing, and the tight monetary policy being preserved.

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 MPC. However, the inflation outlook may be subject to various risks associated with these factors, leading to a divergence from 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 CBRT closely monitors the possible effects of rising protectionism in global trade on the disinflation process through global economic activity, commodity prices and capital flows. Despite the postponement of most tariff decisions and a number of agreements reached, uncertainty regarding global trade and economic policies remains elevated. Changes in tariff policies are expected to have a downward impact on global growth. Downward revisions in global growth forecasts despite the supportive monetary and fiscal policies pose downside risks to domestic inflation. On the other hand, the reversal of the tariff steps may change the risk sentiment, the global growth outlook and the course of commodity prices.

Although expectations for the global demand outlook have been revised downwards, uncertainties regarding tariff policies pose both upside and downside risks to inflation. Uncertainties over global growth have led to declines in commodity prices, particularly those of energy. The worsening global growth outlook and falling commodity prices pose downside risks to inflation, while potentially stronger pressure on the Turkish lira poses upside risks. Heightened uncertainties in financial markets dampen global risk appetite, and asset price fluctuations affect portfolio flows to emerging economies, potentially putting pressure on the Turkish lira. Moreover, a retreat in tariff steps that goes beyond what markets have priced in so far may push up global growth, commodity prices and risk sentiment, as well as creating a reverse effect through the previously mentioned channels.

The widespread frost that hit Türkiye in April poses an upside risk to the prices of fresh fruits in particular. Warm temperatures above seasonal norms in the first quarter and the frost in April increased supply-side pressures on fresh fruit and vegetable prices. If the impact of frost on agricultural yields extends into the following months of the year, it may pose upside risks to unprocessed food prices, particularly driven by fruits and vegetables. Along with the direct effects of price hikes in these items, the indirect effects through the processed food group may also drive inflation higher.

Inflation expectations and pricing behavior pose risks to the disinflation process. High levels of expectations held by consumers, firms and market participants affect the disinflation process through portfolio preferences, consumption tendencies, loan demand and pricing behavior. The high sensitivity to short-term unexpected data poses an additional risk in terms of anchoring expectations. Moreover, global inflation expectations were revised slightly upwards amid heightened uncertainty over global inflation. This may produce secondary upward effects on the domestic inflation outlook.

The strong tendency to backward indexation in pricing behavior dampens the disinflation process. This is particularly evident in some sub-items, most notably the services group. The ongoing uptrend in rents and the persistence of time-dependent and backward-indexed pricing behavior in some services items add to the stickiness of services inflation. While services excluding rents have a milder trajectory, the inertia in services inflation persists due to factors specific to the housing sector, such as earthquakes and urban renewal, and past inflation-indexed price-setting in private school tuition.

Strengthening the coordination between monetary and fiscal policies is of the utmost importance for the disinflation process. The incomes policy may affect inflation and expectations through the production cost and demand channels. Adjustments in taxes and administered prices in line with the projected disinflation path will contribute to curbing backward indexation behavior. The course of taxes and administered items may affect the disinflation path, as they may also have indirect effects on expectations. Additionally, achieving the budget balance targets envisaged in the MTP by prioritizing expenditure reduction over revenue increase will underpin macroeconomic rebalancing and the disinflation process (Box 3.1). The

budget and cash deficit may affect public borrowing, loans to be utilized by public subsidiaries liquidity and monetary supply, and also change the inflation outlook.

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

Risks	Evaluation of Risks Compared to the Baseline Scenario and Possible Effects on Inflation (↑ ↔ ↓)	Indicators Monitored
Geopolitical uncertainties and the course of commodity prices	<ul style="list-style-type: none"> Stronger protectionism in trade policies poses both upside and downside risks to inflation. ↔ Risks to global growth are considered to be weighted on the downside. ↓ Heightened downside risks to global demand may have a downward impact on inflation through commodity prices and external demand channels. ↓ Potentially stronger pressure on the Turkish lira may pose upside risks. ↑ A retreat in tariff steps that goes beyond what the market has priced in may have a reverse effect on the inflation outlook through previously mentioned channels. ↔ 	<ul style="list-style-type: none"> Global inflation and growth indicators and forecasts Global economy and trade policies World uncertainty index Global risk appetite indicators Export-weighted global economic activity index Crude oil prices and demand-supply balance OPEC+ decisions Indicators for domestic energy market Administered prices Import unit value index Financial conditions Exchange rate expectations
Inflation expectations	<ul style="list-style-type: none"> The high sensitivity of medium-term inflation expectations to short-term data and the persistently high levels of expectations keep upside risks to inflation forecasts alive. ↑ 	<ul style="list-style-type: none"> 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
Strong tendency to backward indexation in pricing behavior	<ul style="list-style-type: none"> The ongoing stickiness in services inflation, in particular, keeps upside risks to inflation alive. ↑ 	<ul style="list-style-type: none"> Key inflation indicators Inertia in services inflation
Food prices	<ul style="list-style-type: none"> The agricultural frost and temperatures above seasonal norms keep upside risks ↑ 	<ul style="list-style-type: none"> Prices of fresh fruits and vegetables

	to unprocessed food prices alive, mainly driven by fruit and vegetables.	<ul style="list-style-type: none"> • Marketplace Registration System data • International agricultural commodity prices • Indicators for climate change
Risks to the effectiveness of the coordination between monetary and fiscal policies	<ul style="list-style-type: none"> • Any disruption to the coordination between monetary and fiscal policies may pose risks to inflation and the rebalancing process in domestic demand. ↑ 	<ul style="list-style-type: none"> • Adjustments in administered prices and taxes • Developments in tax revenues and public expenditure • MTP and fiscal policy measures • Budget and public debt stock indicators • Structural budget balance forecasts • Share of direct taxes in total taxes • Minimum wage and public wage increases

* 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 upside and downside, 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

Government Spending Multiplier

The fiscal multiplier is defined as the effect of a one-unit exogenous change in government expenditures or tax revenues on national income. The multiplier value includes both the direct effect of the change in public spending, a component of national income, and the indirect effect of public expenditures on private sector behavior. This box estimates the government spending multipliers for the Turkish economy using the local projection (LP) method, distinguishing between public consumption and public investment components. A government spending multiplier greater than one suggests that fiscal policy is effective, whereas a multiplier less than one implies reduced fiscal effectiveness and the presence of crowding-out effects. While government expenditures and taxes are both important policy instruments, they can have different economic impacts, and the multiplier effects of the subcomponents within each main category may differ from one another. For example, changes in public consumption and public investment can yield different multiplier values and the timing of their economic effects can also vary.

The size and sign of the government spending multiplier are influenced by many factors and may differ significantly across countries or even across time within the same country. Determinants of the multiplier include the state of the business cycle, the exchange rate regime, trade openness, the nature of fiscal shocks, automatic stabilizers, fiscal stance, monetary policy, financial system soundness, and uncertainty (Batini et al., 2014). Economic literature provides several studies showing that fiscal multipliers vary depending on the level of public debt and business cycle phases¹.

In this study, three concepts are used to identify the government spending multipliers: impact multiplier, cumulative multiplier, and maximum multiplier. The impact multiplier is defined as the effect of a one-unit increase (positive fiscal shock) in government spending on GDP in the initial period. The cumulative multiplier refers to the ratio of the total change in GDP over a certain period to the total change in government spending during the same period. The maximum multiplier represents the peak value of the fiscal multiplier observed over time.

Data and the Model

The analysis investigates the effects of disaggregated components of public spending—namely, public consumption and public investment—on national income. The model includes the following variables: public consumption, public investment, tax revenues, and GDP. Quarterly data for the period 2007Q1–2024Q2 is used in the analysis. The budget data are obtained from the Ministry of Treasury and Finance, while the GDP data are sourced from TURKSTAT. Public consumption, a component of GDP, is measured using the final consumption expenditures of the general government. Public investment is proxied by capital expenditures from both central and local administrations. Public investment and tax revenue series are deflated using the total investment deflator and GDP deflator, respectively. Moreover, the real series in level form are first seasonally adjusted, then transformed into natural logarithms.

The impulse response functions necessary for calculating the government spending multiplier are derived using the local projection method developed by Jorda (2005). Compared to the traditional Vector Autoregression (VAR) approach the LP method is less sensitive to model specification errors and allows for a direct estimation of the impulse response function. To identify structural public spending shocks that are used as an exogenous input in the LP model, a four-variable structural VAR (SVAR) model including public consumption expenditures, public investment expenditures, tax revenues, and national income is used, following Blanchard and Perotti (2002) and Perotti (2004). The estimated LP model is shown below:

¹ See Baum and Koester (2011), Auerbach and Gorodnichenko (2012), and Huidrom et al. (2016).

$$x_{t+h} = \alpha_h + \psi_h(L)x_{t-1} + \beta_h shock_t + trend + \varepsilon_{t+h} \rightarrow h = 0, \dots, H-1$$

In this equation, the vector x_t represents the endogenous variables in the model: public consumption, public investment, tax revenues, and national income.² The model includes a constant term (α_h) and a linear time trend ($trend$). The coefficient vector, $\psi(L)$, captures the lag structure of the endogenous variables, and $shock_t$ represents the structural shocks identified through the VAR model. β_h measures the effect of the shock occurring at time t on the variable x at time $t+h$. The error term is denoted by ε_{t+h} .

Findings

The findings of the study are summarized in Table 1. A 1 TL increase (decrease) in public consumption raises (reduces) GDP by 1.6 TL in the first quarter, whereas the same change in public investment affects GDP by 0.9 TL. When looking at the cumulative multiplier values at the end of one year, the public investment multiplier is larger than the public consumption multiplier.

Table 1: Government Spending Multiplier

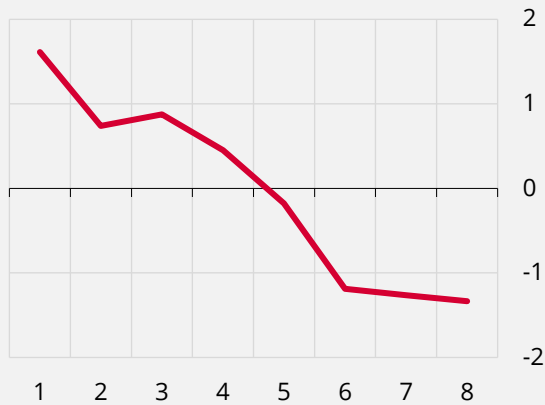
Type	Formula	Public Consumption	Public Investment
Impact Multiplier	$\Delta Y_t / \Delta G_t$	1.6	0.9
Cumulative Multiplier (1 Year)	$\sum_{j=0}^3 \Delta Y_{t+j} / \sum_{j=0}^3 \Delta G_{t+j}$	0.5	1.8
Maximum Multiplier*	$\max \sum_{j=0}^7 \Delta Y_{t+j} / \sum_{j=0}^7 \Delta G_{t+j}$	1.6	2.4

* The maximum impact for public consumption is observed in the first quarter, while for public investment, it occurs in the fifth quarter.

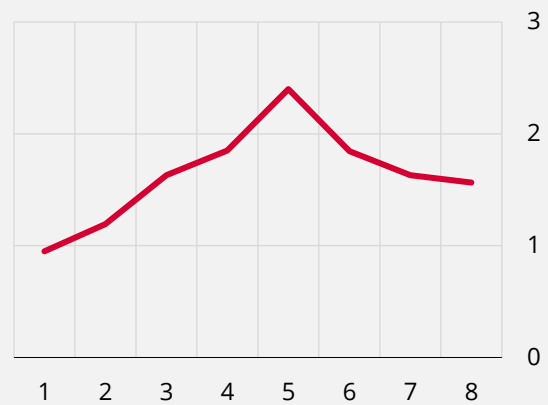
As shown in Figures 1 and 2, when calculations are evaluated over the eighth quarter, public investment generally yields higher multiplier values than public consumption (indicating a more effective fiscal policy tool) after the initial period. Another finding is that the maximum impact of public consumption on national income fades rapidly, with its cumulative effect remaining below 0.5 after one year (Figure 1). Accordingly, the effect of public consumption appears to be strong in the short term but diminishes over time, and its crowding-out effect on private sector behavior becomes more apparent. In contrast, the maximum impact of public investment on national income is observed with a delay (peaking in the fifth quarter, at 2.4), and throughout the period, the values taken by the fiscal multiplier exhibit a hump-shaped pattern (Figure 2). While the initial impact of a public investment shock on national income is below one (0.9), the cumulative multiplier reaches 1.8 at the end of the first year, indicating a gradual upward trajectory. Finally, the investment multiplier differs from the consumption multiplier not only in magnitude but also in the duration of its effect on national income. After the first year, while the impact of consumption quickly turns negative, the investment multiplier remains positive and relatively high for a longer period. This suggests that public investments are stronger and more effective complements to private sector investments.

In sum, public consumption appears to be a more effective tool for fiscal policy in the short term, while public investment is more impactful over the medium to long term. The maximum impact of public consumption on GDP is immediate, whereas the effect of public investment is greater but delayed. From a policy perspective, when the results are evaluated in the context of the disinflation process, the fiscal multipliers taking values above one suggests that public expenditure can meaningfully support monetary policy in controlling aggregate demand.

² The LP models used in the study include a lag length of four. Additionally, for each forecast horizon, the optimal lag length was determined using the Akaike Information Criterion. It was confirmed that the results do not significantly differ from models estimated with alternative lag structures.

Figure 1: Government Consumption Multiplier* (Cumulative)

Source: Authors' calculations.
 * Çebi and Özdemir (2025).

Figure 2: Government Investment Multiplier* (Cumulative)

Source: Authors' calculations.
 * Çebi and Özdemir (2025).

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