



INFLATION REPORT 2022-II

April 28, 2022



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1.Overview

Economic activity remained strong in the fourth quarter of 2021 owing both to domestic and external demand. In the last quarter of the year, firms' access to the loans they need for their economic activities was enhanced. Therefore, loans extended to firms was the determining factor in total loan growth. Real sector confidence and capacity utilization ratios remained high, and investment and employment tendencies remained strong. Against this background, in the last quarter, Gross Domestic Product (GDP) increased by 9.1% year-on-year and 1.5% quarter-on-quarter, while the annual growth rate was 11% in 2021. On the production side, the industrial and services sectors were the main drivers of annual and quarterly growth, whereas the construction sector restrained growth. On the expenditures side, the main driver of both quarterly and annual growth was final domestic demand, with private consumption in the lead.

The share of sustainable components in the composition of growth posted an increase. Machinery-equipment investments, one of the drivers of potential growth, have been increasing on an annual basis for the nine consecutive quarters since the last quarter of 2019. Meanwhile, the contribution of components that support the current account balance, such as net exports, was high after the pandemic. In 2021, machinery-equipment investments and net exports made significant contributions to the annual growth by 2.3 and 4.9 percentage points, respectively. These developments observed in the sustainable components of the growth composition had a positive effect on the labor market as well. By the end of 2021, Türkiye ranked first among the OECD countries in terms of the increase in employment compared to the prepandemic period. In this period, seasonally adjusted employment growth was over 1.5 million, and employment increases spread across all sectors. Owing to the rise in employment, the unemployment rate fell by 2.3 points compared to the pre-pandemic period, while the decline in the non-agricultural unemployment rate was 2.8 points.

Leading indicators for the first quarter of 2022 reveal that economic activity has lost some momentum due to domestic demand. Increasing supply constraints, uncertainties and energy prices amid geopolitical developments increased the downside risks on the global economy. The Turkish economy, on the other hand, displayed a resilient outlook against these unfavorable developments, and being backed by foreign demand, economic activity remained robust in the first quarter. Adjusted for seasonal and calendar effects, the Industrial Production Index (IPI) in January-February increased by 2% compared to the previous quarter. Industrial production is buoyant due to the strong external demand in exporting sectors. While industrial turnover indices point to a slowdown in domestic demand in the January-February period, the increase in external turnover indices indicates that external demand continues to support industrial production. On the other hand, the January-February average of retail sales volume indices decreased compared to the previous quarter, indicating a loss of momentum in domestic demand.

Despite the sustained positive performance of exports and the recovery in services revenues, the current account deficit increased amid rising energy costs. The strong course in exports continued in the first quarter of 2022. Backed by the global economic recovery trend and rising export prices in this period, exports remained high, albeit with differences at the regional level. Regional losses in exports stemming from geopolitical developments were compensated thanks to the market diversification flexibility of exporting companies. While the economic activity continued to be robust, the accelerated increases in energy prices pushed imports upwards in the first quarter of 2022. Excluding price effects, the quantity of exports remains high, while the quantity of imports has also increased but more moderately compared to exports. Service revenues continue to recover with the contributions of travel and transport revenues, as they retained pre-pandemic levels in the last quarter of 2021. Hence, service revenues contribute further to the current account balance. In 2021, the seasonally adjusted current account deficit decreased, with the strong course of exports and the fast recovery in service revenues in the lead. However, energy imports, which have increased since the last quarter of 2021, affected the current account balance adversely. In the first months of 2022, the 12-month cumulative current account balance continued to post a surplus excluding gold and energy.

The exchange rate volatility implied by options in emerging economies posted an increase, while the implied volatility of the Turkish lira receded notably. The increase in exchange rate volatility amid the Russia-Ukraine conflict was more limited in the Turkish lira and the one-month exchange rate volatility registered a decline compared to the previous reporting period. A similar course was seen in the 12-month exchange rate volatility of the Turkish lira (TL), but this decline remained more limited.

The increase in loans extended to firms in the first quarter of 2022 played a significant role in the level of total loan growth. In the first quarter of the year, banks' funding costs remained low, and loan growth rates remained above historical averages. The results of the Bank Loans Tendency Survey (BLTS) indicate that the acceleration in corporate loans is driven by working capital requirement. Business loan growth gained momentum, while the growth rates of housing and personal loans lost pace. The Central Bank of the Republic of Türkiye (CBRT) evaluates that the growth rate of loans, including long-term TL investment loans, and the targeted use of accessed funds for economic activity is important for financial stability. Against this background, the CBRT strengthened its macroprudential policy toolkit and introduced changes to the reserve requirement regulation to enhance financial stability and promote liraization in line with the main objective of price stability. In this context, required reserves, which were applied to the liability side of the balance sheets, are now applied also to the asset side of the balance sheets to strengthen the macroprudential policy toolkit. Moreover, TL commercial cash loans were included in the scope of reserve requirements.

Consumer inflation was 61.14% on an annual basis in the first quarter of 2022, and annual inflation increased across all sub-categories. In the first quarter of the year, supply constraints became more evident amid geopolitical developments. As a result, hikes in global commodity prices, especially energy, metal, food and agricultural product prices added to inflationary pressures. Meanwhile, international food prices hit historically high levels. In addition to the uptick in import prices, supply-side factors such as high transportation costs and supply constraints had further adverse effects on inflation developments. The stable course of the Turkish lira in the first quarter averted a more negative outlook for inflation. While the upsurge in commodity prices, supply constraints and transportation costs continued to shape producer prices in the first quarter of the year, price adjustments for electricity and natural gas producers emerged as another deteriorating factor. Against this backdrop, monthly rates of increase in B and C indices lost momentum, while their annual inflation rates increased compared to the previous quarter.

In the February-April period, the CBRT kept the policy rate unchanged at 14%. In the Monetary Policy Committee (MPC) meetings for the February-April period, the CBRT stated that inflation increased due to the rise in energy costs driven by the environment of heightened regional conflict, temporary effects of pricing formations detached from economic fundamentals, the supply-side factors such as rising global energy, food and agricultural commodity prices and supply constraints as well as demand developments. In the April Meeting, the CBRT underlined the effects of supply-side factors on inflation as supply constraints became increasingly evident due to ongoing geopolitical risks. It is envisaged that the disinflation process will start on the back of measures taken and decisively pursued for sustainable price and financial stability along with the resolution of the ongoing conflict and the elimination of the base effects on inflation. In consideration of all these factors, the CBRT decided to keep the policy rate unchanged in the February-April period. The CBRT also stated that the cumulative impact of the policy decisions was being closely monitored, and communicated that to create an institutional basis for sustainable price stability, the comprehensive review of the policy framework continued with the aim of encouraging permanent and strengthened liraization in all policy tools of the CBRT.

One of the essential elements of the CBRT's policy review process is the liraization strategy. The CBRT launched a comprehensive review of the monetary policy strategy that will yield long-term and lasting success rather than short-term temporary gains, with an eye to sustainable price stability. The liraization strategy is at the center of this process. With this strategy, while the sensitivity to the exchange rate in inflation and pricing behavior is taken into account in the short term, structural steps are being taken to strengthen the permanent improvement in the current account balance by supporting production and exports in the medium term.

The liraization is expected to support monetary policy instruments in the medium and long term in the fight against inflation through three channels. The first channel will be to encourage TL savings with FX-Protected Deposits and similar instruments, ensuring that their returns are not lower than those of alternative instruments. The second channel is the gradual management of the transition to TL instruments for the CBRT liquidity and provisioning operations. In this framework, Turkish lira collateral and instrumentswill be prioritized in accessing the TL, and in particular, the share of currency swap transactions in total funding will be reduced. Thirdly, to secure permanent gains in disinflation by improving production capacity, it is important to meet the funding needs of sectors that support the sustainable improvement of

the current account balance and engage in foreign exchange earning activities at appropriate maturities in TL terms.

The liraization strategy is grounded in the construction of the financial system through Turkish lira instruments. The liraization strategy is designed with a holistic approach that focuses on the use of the Turkish lira through new financial products, collateral diversification and liquidity management practices. With the liraization process, it is expected that the main store of value in the financial system will be the Turkish lira and TL-denominated assets, the weight of Turkish lira in the balance sheets will increase significantly, the CBRT will use TL-denominated assets in liquidity transactions, and the Turkish lira will be the only medium of exchange in domestic commercial transactions. Accordingly, an important focus of the practices to be implemented in the near, medium and long term will be to ensure the liraization of the financial system to reshape price stability on a sustainable basis.

1.1. Monetary Policy Decisions

In the February Meeting, the CBRT underlined pricing formations detached from economic fundamentals and decided to keep the policy rate unchanged. In the summary of the February MPC meeting, it was emphasized that the rise in inflation was driven by pricing formations detached from economic fundamentals, supply-side factors such as increases in global energy, food and agricultural commodity prices, and supply shortages as well as demand developments. In addition, the prediction that the disinflation process will start on the back of the elimination of the base effects on inflation was shared with the public. It was announced that in addition to the decisions taken, a comprehensive policy framework review process was carried out to encourage permanent liraization in all policy tools to reshape price stability on a sustainable basis.

Within the scope of the liraization strategy, in February, the CBRT took measures to encourage non-resident Turkish citizens to repatriate their savings to Türkiye and companies that are not net exporters to convert to TL deposits. The CBRT enabled non-resident Turkish citizens to open a "Deposit and Participation Scheme for Non-Resident Turkish Citizens" (YUVAM) account with domestic banks, and companies that are not net exporters to use foreign currency rediscount credits, provided that the FX-Protected Deposit (KKM) conversion is made. It was decided that the company limits of export and foreign exchange earning services rediscount credits be converted into the Turkish lira, and the total limit of these loans and the limits allocated to banks be converted into Turkish lira as of the end of the year (Table 1.1).

In the March MPC Meeting, emphasizing inflationary risks stemming from the heightened regional conflict, the CBRT decided to keep the policy rate unchanged. In the summary of the MPC meeting, it was stated that the increase in inflation was driven by rising energy costs resulting from the heightened regional conflict, temporary effects of pricing formations that are detached from economic fundamentals, supply-side factors such as the rise in global energy, food and agricultural commodity prices, supply constraints, and demand developments. It was also assessed that credit growth including long-term investment loans and the targeted use of accessed funds for economic activity was important for financial stability.

In March, new steps were added to those taken within the scope of the liraization strategy. Accordingly, the opportunity to renew overdue KKM deposits was introduced and the shortest maturity for KKM deposits was reduced from 6 months to 3 months for legal entities residing in Türkiye. For foreign exchange sales to be made to account holders by using the end of the maturity account balance of the accounts, it was decided to use the CBRT fixing rate of 11:00 a.m. and the banking and insurance transactions taxrate in the said foreign exchange sales was lowered to zero. In addition, the scope of the YUVAM system was expanded, and foreign natural and legal persons were included in the system. In order to bring physical assets in gold, which is an important savings tool for domestic residents, into the financial system, physical gold assets deposited by real and legal persons in their gold accounts in banks were allowed to be converted into TL-denominated deposits and participation accounts.

In April, the CBRT decided to keep the policy rate unchanged, emphasizing that the rise in global energy, food and agricultural commodity prices causes strong negative supply shocks. The CBRT stated that the recent increase in inflation was driven by rising energy costs resulting from geopolitical developments, temporary effects of pricing formations that are detached from economic fundamentals, strong negative supply shocks caused by the rise in global energy, food and agricultural commodity prices. In March, the CBRT assessed that credit growth including long-term investment loans and the targeted use of accessed funds for economic activity were important for financial stability. In April, the CBRT highlighted this

assessment with the decision to strengthen the macroprudential policy toolkit. To this end, a regulation was introduced to reserve requirements (RR). According to this regulation, the RR, which used to be applied to the liability side of balance sheets of banks, is now applied also to the asset side of balance sheets of financing firms as well. RR ratios were differentiated according to the loan growth rates of banks since 31 December 2021. Meanwhile, RR ratios of financing companies, which were 0%, have now been set at the same level as banks, and their liabilities to domestic banks were included in the scope of reserve requirements.

In April, the scope of the liraization strategy was expanded to include RR and foreign exchange legislation. The interest/remuneration rate to be applied to RR established in Turkish lira was determined as zero percent, and the practice of applying additional interest/remuneration to Turkish lira required reserves was terminated depending on the transformation of the accounts of resident real persons. Regarding the practice of no commission for the amounts held in foreign currency in RR and noticed FX deposits, the 20 percent conversion criterion date was updated from 7 July 2022 to 2 September 2022 and the commission rate for the 10 percent conversion criterion was rearranged. In order to encourage the conversion to Turkish lira time deposits/participation accounts and liraization, the foreign currency deposit/participation fund RR ratios were differentiated according to the real person conversion ratio. With the amendment made in the foreign exchange legislation, the obligation to fulfill and accept the contractual payment obligations in Turkish lira started to be implemented in the sales contracts. It was stipulated that all contracts and pricing of companies that use investment committed advance loans with residents in the country should be made in Turkish lira.

In the current reporting period, the CBRT continued to provide funding within a simple operational framework through Open Market Operations (OMO) and swap transactions, and the overnight interest rates hovered around the CBRT policy rate. Owing to the CBRT's predictable liquidity management framework, Borsa Istanbul (BIST) overnight repo rates continued to hover around the CBRT policy rate (Chart 1.1.1). The amount of swap transactions, which was TRY 613 billion as of 31 January 2022, decreased to TRY 589 billion as of 22 April 2022. In the same period, the net OMO funding also declined to TRY 293 billion from TRY 366 billion (Chart 1.1.2).

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

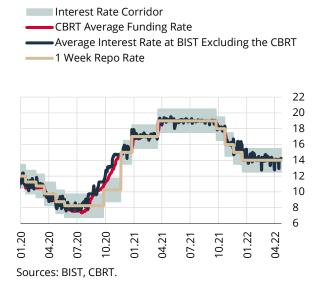


Chart 1.1.2: CBRT OMO and Swap Transactions (One-Week Moving Average, TRY Billion)

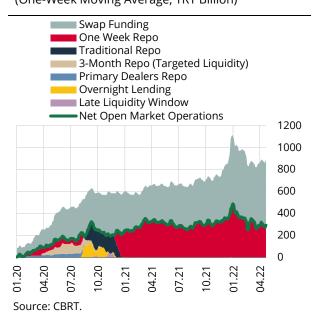


Table 1.1: Monetary Policy Implementations

Date	Institution	Policy Decision
1 February 2022	CBRT	 In order to encourage non-resident Turkish citizens to repatriate their savings to Türkiye, the CBRT decided to introduce YUVAM accounts to be held in domestic banks.
8 February 2022	CBRT	 The maturity of Turkish lira rediscount credits was reduced to 180 days. Firms that would use Turkish lira rediscount credits were provided with the facility of an interest rate reduction of: 100 basis points if they make a commitment to maintain/increase employment, 100 basis points if they make a commitment to be a net FX seller, and 100 basis points if they make a commitment to increase their exports by 10% in the calendar year in which the credit is used compared to the previous year. It was decided that the total limit of rediscount credits would be converted to Turkish lira at the amount of TRY 405 billion, effective from 01.01.2023.
10 February 2022	CBRT	 Firms that are not net exporters were granted the right to use foreign currency-denominated rediscount credits on condition of conversion to KKM. Steps were taken towards increasing the share of TRY rediscount credits.
1 March 2022	CBRT	 It was stipulated that the amounts of advance loans against investment commitment should be held in blocked accounts, and should be transferred by an intermediary bank to the account of the supplier of goods or services to which the firm would make the payment, against vouchers. It was stipulated that all contracts and pricing that the firms using advance loans against investment commitment would conduct with residents regarding the relevant investment should be in Turkish lira only. It was stipulated that firms using the credits should make the domestic pricing and sale of the goods, produced via the relevant investment, in Turkish lira only. A facility was introduced allowing for the use of credits at a fixed interest rate only and with a maximum total interest rate reduction of 500 basis points over the policy rate depending on the following commitments: A reduction of 150 basis points for a commitment of export growth and/or import substitution (compulsory commitment). A reduction of 150 basis points from the credit interest rate for an investment that will be made in the fourth, fifth and sixth regions according to the Socio-Economic Development Ranking Survey of Provinces and Regions Report prepared by the Turkish Ministry of Industry and Technology, or in an Organized Industrial Zone located in the third region. A reduction of up to 150 basis points depending on the rate of use of domestic machinery. A reduction of 150 basis points for investments with a minimum external financing of 20%.
7 April 2022	CBRT	 To support the Primary Dealership system, primary dealer banks were provided with a facility to sell TRY-denominated fixed-coupon Government Domestic Debt Securities (GDDS) to the CBRT.
13 April 2022	CBRT	 Of the rediscount credits for export and foreign exchange earning services used before 4 April 2022 for which the export commitment was not fulfilled by this date, an additional twelve- month period was given for those for which it was declared that the commitment would be fulfilled through exports of goods or services to Russia and/or Ukraine.

15 April 2022	CBRT	 The obligation of exporters to sell 25% of their FX earnings to the CBRT was raised to 40%, effective from 18 April 2022. The remuneration rate applicable to Turkish lira reserve requirements was set at 0%, and the implementation regarding the payment of additional remuneration for Turkish lira reserve requirements depending on the conversion of resident real persons' accounts was terminated.
18 April 2022	CBRT	 With an amendment to the Regulation regarding "Invisible Balances", it was stipulated that in case FX proceeds from FX- earning services/ operations are sold to banks, at least 40% of this amount shall be sold to the CBRT.
20 April 2022	CBRT	 Tourism firms were also provided with the facility to use advance loans against investment commitment at an interest rate with reductions of up to 500 basis points in total over the policy rate, against a commitment to generate FX-earning services revenues, invest in tourism development regions, use domestic input, and receive external financing of at least 20%. The total credit limit was increased to TRY 150 billion, TRY 50 billion of which was allocated to advance loans against investment commitment to be used by firms operating in the tourism sector. A limit of TRY 250 million was allocated to firms with an SME status, and TRY 1.5 billion to other firms.
23 April 2022	CBRT	 It was decided that TRY commercial cash loans (excluding the exempt loans), which had been extended in four-week periods since 1 April 2022, should be subject to a reserve requirement of 10% of the said loans during the maintenance periods of four-week. Moreover, it was stipulated that banks with a loan growth rate above 20% by 31 May 2022 compared to 31 December 2021 should be subject to a reserve requirement of 20% of the difference between their outstanding loan balances on 31 March 2022 and 31 December 2021, for a period of six months. It was decided to differentiate FX deposit/participation fund reserve requirement ratios depending on the conversion rate of real persons' FX accounts to TRY accounts. Accordingly, an additional reserve requirement of 500 basis points will be applied for banks with a conversion rate below 5%, and of 300 basis points for banks with a conversion rate between 5% and 10%.
25 April 2022	CBRT	 The waiver limit for the implementation of repatriation of export proceeds was reduced from USD 30,000 to USD 15,000.

1.2 Medium-Term Projections

In the first quarter of 2022, consumer inflation and the B index reached 61.14% and 51.34%, exceeding the forecast range of the January Inflation Report. The deviation in forecasts was driven by temporary effects of pricing behaviors detached from economic fundamentals, the rise in energy costs due to the ongoing hot conflict, increase in food and agricultural product prices and strong adverse supply shocks such as supply chain disruptions.

The monetary policy stance will continue to be determined with the focus on evaluating the sources of the risks to inflation, their permanence and how they can be controlled by monetary policy, targeting sustainable price stability with a solid approach. The steps which focus on liraization to build price stability on a sustainable ground have been reinforcing the monetary transmission mechanism via various channels. Thus, the disinflationary effects of monetary policy decisions will become more visible and permanent following the resolution of the ongoing conflict and elimination of the base effects in inflation. Accordingly, inflation is projected to be 42.8% at the end of 2022; fall to 12.9% at the end of 2023; and fall to 8.2% by the end of 2024. With a 70% probability, inflation is expected to be between 46.9% and 38.7% (with a mid-point of 42.8%) at end-2022, and between 17.7% and 8.1% (with a mid-point of 12.9%) at end-2023, and between 13.2% and 3.4% (with a mid-point of 8.3%) at end-2024 (Chart 1.2.1).

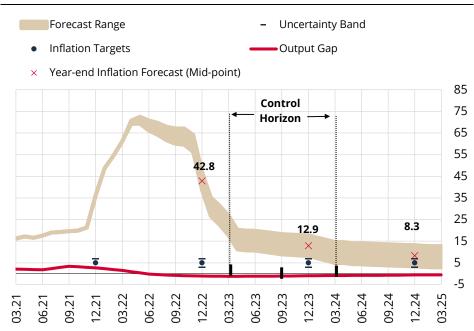


Chart 1.2.1: Inflation and Output Gap Forecasts* (%)

Source: CBRT, TURKSTAT.

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

Geopolitical risks that turned into a conflict have increased downside risks to the global economic activity. The recovery in the global economy continues albeit with some slowdown. Nevertheless, geopolitical risks that turned into a conflict coupled with new variants of the pandemic keep downside risks to the global and regional economic activity in place and cause uncertainties to increase even more. The recovery in global demand, the high course of commodity prices, supply constraints becoming more evident in some sectors, particularly in the energy sector, and the elevated level of transportation costs lead to an increase in producer and consumer prices on a global scale. Central banks of advanced economies consider that inflation may continue to increase for a longer period than expected due to rising energy prices and the supply-demand mismatch. Although concerns about the pandemic eased, the global risk appetite decreased in the current reporting period due to the rise in global inflation and the conflict between Russia and Ukraine. Moreover, in this period, exchange rate volatility implied by options in emerging economies increased.

The output gap is expected to decline gradually. Due to geopolitical risks, rising energy costs and risks related to possible supply shortages, downside risks to foreign demand are higher compared to the previous reporting period, and they indicate that regional divergences may become more severe. While the commercial loan-deposit interest spread decreased compared to the previous reporting period, the consumer loan-deposit interest spread increased. The goal is to make sure that market interest rates are formed in line with policy rates and at a level that supports the financing of investments and production. While on the one hand, exports and the current account balance, as well as investments and the employment are supported by targeted loans, on the other hand, macroprudential measures are taken to make sure that credit growth and credit composition contribute to the disinflationary process. Thus, the output gap is expected to contribute more to the disinflationary process.

The steps taken within the scope of the liraization strategy will be used decisively until strong indicators pointing to a permanent decrease in inflation are formed. The effectiveness of monetary policy will increase as a result of the increase in the weight of the Turkish lira in the balance sheets of households, companies and banks, the Turkish lira being the main payment instrument, and the development of loans with a speed and composition that will increase production and export capacity. The stability to be achieved in the general level of prices over time with the decisions taken within the framework of the liraization process, the decrease in country risk premiums, the continuation of reverse currency substitution and the upward trend in foreign exchange reserves, and the permanent decline in financing costs will positively affect macroeconomic stability and financial stability. In line with the goal of sustainable price stability in

monetary policy, a liraization-oriented approach that also takes into account the risks to financial stability will continue to be conducted.

1.3 Key Risks to Forecasts

The outlook underlying the medium-term projections presented in the Inflation Report is based on the Monetary Policy Committee's judgments and assumptions. The major downside and upside macroeconomic risks that may lead to a change in baseline projections and the associated monetary policy stance are as follows.¹

In this reporting period, the key risk factors on economic activity and inflation have been the Russian-Ukrainian conflict and the developments regarding the conflict. Geopolitical developments and the rise in commodity prices, particularly in energy prices, have kept downside risks to expectations for global and regional economic activity for 2022 in place and fueled uncertainties. The conflict has the potential to affect the global economy, particularly the euro area, through commodity prices, supply and trade channels and this increases risks to the global growth outlook.

Downside risks to foreign demand have increased compared to the previous reporting period and they indicate that regional divergences may become more evident. Capacity utilization levels and other leading indicators suggest that domestic economic activity is strong. The uptrend in the number of foreign visitors remains strong on the back of the acceleration of the post-pandemic normalization process and the relaxation of travel restrictions. Even if the Russian-Ukrainian conflict poses risks to travel and transportation revenues, there are factors that can partially compensate for these risks, such as the tourism sector's dynamic structure and firms' market diversification flexibility. Geopolitical risks, developments regarding new variants and waves related to the pandemic and the effects of these developments on domestic and international demand conditions are closely monitored.

There remain upside risks to the current account balance due to soaring energy prices amid the Russia-Ukraine conflict. Despite the continued positive performance of exports and the ongoing recovery in service revenues, the current account deficit is widening due to growing energy imports. A permanently balanced current account at sustainable levels is crucial for price stability.

Global inflation continues to rise sharply, while monetary policy communications of major central banks diverge. Major central banks consider that inflation may remain on the rise for a while due to higher energy prices and supply-demand mismatch. In this context, although there is divergence across their monetary policy communications, they still maintain their accommodative monetary stances and continue with their asset purchase programs, albeit at a reduced pace. The effects of high global inflation on inflation expectations and international financial markets will continue to be closely monitored.

Credit growth is expected to realize in line with economic activity, thus contributing to the disinflationary path. The CBRT considers that the growth rate of loans, including long-term Turkish lira investment loans, and the targeted use of accessed funds for economic activity are important for financial stability. In this sense, the macroprudential policy toolkit will be strengthened with deeper analysis of recent credit developments.

Pressures on producer prices keep mounting. The Russia-Ukraine conflict and additional pandemic restrictions in China's major trade and financial cities created a new wave of supply shocks and aggravated the current supply constraints. Historically high international food prices, rising commodity and energy prices, high transportation costs and supply chain disruptions are the main factors behind these pressures.

Recent data releases indicate that the deteriorated pricing behavior adds to upside risks to inflation. One of the main reasons that cause inflation to accelerate is the increased frequency of price updates and, thus, the decline in the average period for prices to remain unchanged.

¹ Evaluations of how and through which channel these risks may affect the inflation forecasts cited in the previous section are summarized in Table 3.3.1.

Survey-based indicators show that inflation expectations continue to rise, while the distribution of expectations points to inflation uncertainty. The volatility in financial markets, pricing behavior and heightened inflation pose an upside risk for the upcoming period through expectations.

The disinflation process may be delayed, should the path of administered price and tax adjustments exceed the path envisaged in this Report. Endorsement of inflation targets by all stakeholders and commitment to the price stability efforts with a common understanding and public accord, along with the determination of macro policies in a coordinated manner in line with the projected disinflation path, will strengthen the effectiveness of the monetary policy.

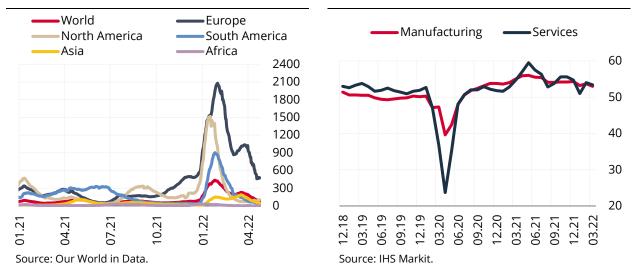
2. Economic Outlook

2.1 Global Economic Developments

Ongoing geopolitical risks keep the downside risks to global and regional economic activity alive, adding to uncertainties. A variety of approaches notwithstanding, most countries have eased their pandemic measures as the number of new cases drops (Chart 2.1.1). However, China's renewed lockdown measures in major trade and financial hubs amid a surge in new cases pose a risk to global demand and supply chains. Moreover, the Russia and Ukraine conflict has the potential to affect the global economy, especially the euro area, through commodity prices and supply and trade channels, adding to the risks to the global growth outlook. In fact, leading indicators announced in March signal a decelerated economic recovery (Chart 2.1.2). The Purchasing Managers' Index (PMI) remains above the threshold for manufacturing and services sectors across advanced economies, which means that their economic activity continues to be strong, but suggests that emerging economies, especially their services sectors, have been hit by the Russia and Ukraine conflict. The ongoing uncertainty about the direction of the conflict, and the magnitude and duration of its effects remains a risk to the global growth outlook.

Chart 2.1.1: Number of Cases (7-Day Moving Average, per million people)

Chart 2.1.2: Global PMI Indices (Level)

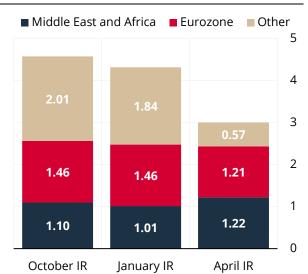


Global growth expectations have been revised downwards due to the uncertainty fueled by geopolitical risk across the globe. However, the structure of exports and the market diversification flexibility of exporters in Türkiye limit the negative effects on growth. Growth expectations for 2022 have been revised downwards due to geopolitical tensions and higher commodity prices, particularly for energy (Table 2.1.1). Accordingly, Türkiye's external demand outlook might see an update in 2022. Among subgroups, the euro area seems to have made a reduced contribution to external demand. On the other hand, the fall in external demand might be limited as rising energy prices may potentially drive up the revenues of energy exporting countries, such as Iraq, the United Arab Emirates (UAE) and Egypt, which account for a significant share of Türkiye's exports (Chart 2.1.3). Therefore, external demand is expected to recover in 2022.

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

	Realization	Foreca	Forecast for 2022				
	for 2021	Jan. 2022	Apr. 2022				
Eurozone	5,3	4,0	2,8				
Germany	2,8	3,7	2,2				
USA	5,7	3,9	3,2				
UK	7,4	4,3	3,9				
Italy	6,6	4,2	2,7				
Iraq	5,9	5,9	9,1				
Spain	5,1	5,6	4,6				
France	7,0	3,8	3,1				
Netherlands	5	3,3	3,2				
Israel	8,2	4,5	5,0				
Russia	4,7	2,6	-10				
UAE	2,3	4,3	5,7				
Romania	6	4,5	2,7				
Belgium	6,3	3,1	2,8				
Poland	5,7	4,7	3,9				
Egypt	3,3	5	5,2				
Bulgaria	4,2	3,6	2,7				
China	8,1	5,0	4,9				

Chart 2.1.3: Export-Weighted Global Growth Index for 2022 (% Points)



Sources: Consensus Economics, IHS Markit, CBRT.

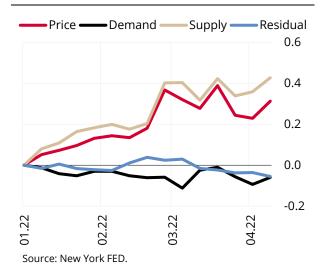
Having spread across all commodities, especially energy, price hikes gained momentum. In January and February, global energy prices increased sharply due to the easing of pandemic measures, supply-demand mismatches and supply chain disruptions. The conflict between Russia, one of the world's largest oil producers, and Ukraine has recently accelerated the increase in prices by feeding into worries over supply problems (Chart 2.1.4). Oil, natural gas and coal prices soared after the outbreak of the conflict. However, the release of strategic reserves by countries and the rising number of new cases in China have led to a drop in oil prices recently. On the natural gas front, Europe's sanctions against Russia, an important gas supplier, caused the demand to shift to liquefied natural gas and drove the prices of natural gas traded in the United States (US) stock exchanges considerably higher. Meanwhile, non-energy commodity prices, particularly for wheat and corn, have remained on the rise since the January reporting period (Table 2.1.2).

Table 2.1.2: Commodity Price Changes (%)

	Jan	Feb	Mar	Apr	12-Month Change	Since the 2022 January IR*	Since the Conflict**
Commodity Headline Index	9,3	8,0	15,8	-1,0	52,3	17,9	8,9
Energy	13,9	9,9	19,5	-1,7	72,5	21,2	11,8
Agricultural Com.	2,1	6,4	14,7	1,5	37,8	22,7	10,4
Industrial Metals	6,2	4,0	10,5	-2,1	31,9	4,5	-0,4
Precious Metals	1,5	2,3	5,4	-0,5	9,3	5,5	-1,8
Non-Energy	3,4	5,4	10,2	0,1	28,6	12,9	4,7
Brent Oil	15,1	12,0	20,7	-8,4	63,4	13,1	2,3
Natural Gas (USA)	10,3	4,8	11,6	33,7	148,1	6,4	46,0
Natural Gas (Europe)	-24,8	-5,1	62,0	-23,1	390,5	2,1	-19,0
Coal	27,3	12,7	46,1	-12,5	221,4	44,4	37,2
Aluminium	10,6	7,9	8,4	-5,9	42,9	-1,4	-10,0
Copper	2,4	1,5	4,0	0,3	11,4	0,6	-0,2
Iron	16,9	12,2	5,6	2,9	-10,2	14,7	5,3
Wheat	-2,3	4,5	39,6	-5,1	60,4	36,7	14,7
Soy Beans	8,3	13,7	5,7	-0,3	14,5	17,6	2,5
Rice	4,2	3,7	5,0	1,0	22,0	9,0	7,8
Corn	2,7	6,9	14,9	4,3	27,1	28,0	15,1
Cotton	9,2	4,1	1,8	9,6	66,1	16,3	15,4
Sugar	-3,7	-1,4	5,0	3,7	22,6	2,9	3,4

Source: Bloomberg.

Chart 2.1.4: Brent Crude Factor Decomposition (7 January 2022 = 0)



Sources: Consensus Economics, IHS Markit.

^{*} Countries are sorted according to the size of their share in Türkiye's exports in 2021.

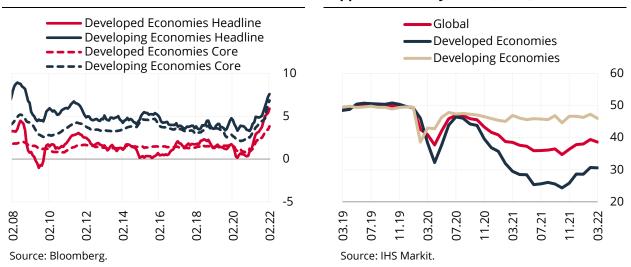
^{*} Percentage changes on 25 April and 27 January.

^{**} Percentage changes on 25 April and 24 February.

Global inflation continues to rise at a remarkable clip. Uncertainties over global food security, higher commodity prices, mounting supply constraints in some sectors, especially energy, and soaring transportation costs caused producer and consumer prices to surge around the world. Inflation gained momentum in both headline and core indicators globally, hitting historical highs for advanced economies (Chart 2.1.5). Thus, major central banks predict that high inflation may last longer than anticipated given the buoyant global demand, rising energy prices and supply-demand mismatches. Expected to disappear as the effects of the pandemic weaken, supply problems have yet to improve and seem set to push inflation further up in advanced economies (Chart 2.1.6). Moreover, geopolitical risks may affect inflation more adversely through commodity prices and supply chain disruptions.

Chart 2.1.5: Global Inflation¹ (Annual, %)

Chart 2.1.6 PMI Manufacturing Industry Suppliers' Delivery Times (Level)



Monetary policy communications of major central banks diverge due to varying economic activity, labor market and inflation prospects. At its March meeting, the US Federal Reserve (FED) hiked the policy rate by 25 basis points in line with market expectations and stated that it was planning to start winding down its monetary stimulus. After the meeting, the number of rate hikes predicted by the market for 2022 went slightly higher than the median expectations of the Federal Open Market Committee (FOMC) members. The European Central Bank (ECB), on the other hand, continued to cut its asset purchases, but maintained its accommodative stance. Rising commodity prices and supply constraints exacerbated by the conflict have caused inflation to remain well above both the targets and historical averages in advanced economies (Chart 2.1.7). Thus, central banks put emphasis on uncertainty in their communications and say that they want to maintain policy flexibility against changing conditions. In fact, the ECB stated at its last meeting that it would assess whether to continue or stop buying bonds after June based on economic developments. The Bank of Japan, on the other hand, still pursues an expansionary policy stance. Across many emerging economies, consumer inflation went up from the January reporting period when it was already outside the tolerance band around the target (Chart 2.1.8). Therefore, some emerging market central banks hiked their policy rates. However, policy rates seem to hover below inflation in many emerging economies. On the other hand, having showed clear signs of an economic slowdown in the last quarter of 2021, China announced an economic program for 2022 that follows a monetary policy that supports stable and reasonable growth. In line with this policy, lending rates and reserve requirements have been reduced.

¹ Headline Inflation: Advanced Economies: The US, the Euro Area, Japan, the UK, Canada, S. Korea, Switzerland, Sweden, Norway, Denmark, and Israel. Emerging Economies: China, Brazil, India, Mexico, Russia, Türkiye, Poland, Indonesia, S. Africa, Argentina, Thailand, Czechia, Colombia, Hungary, Romania, the Philippines, Ukraine, Vietnam, Chile, Peru, Egypt,

Core Inflation: Advanced Economies: The US, the Euro Area, Japan, the UK, Canada, S. Korea, Switzerland, Sweden, Norway, and Israel. Emerging Economies: China, Brazil, Mexico, Russia, Türkiye, Poland, Indonesia, S. Africa, Thailand, Czechia, Colombia, Hungary, Romania, Chile, and Peru.

Chart 2.1.7: Consumer Inflation in Advanced Economies (Annual % Change)

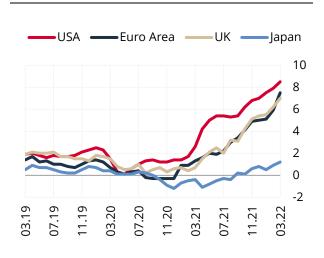
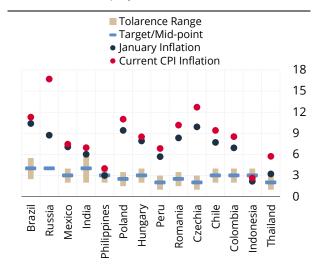


Chart 2.1.8 Consumer Inflation in Emerging Economies (Target, Tolerance Range and Current Inflation, %)



Source: Bloomberg.

Source: Bloomberg.

Inflows to emerging market equity funds have recently seen a slight recovery while outflows from debt funds are on the decline. Portfolio flows to emerging economies have been recovering thanks to ebbing COVID-19 concerns as the number of new cases falls. However, portfolio flows have been fluctuating due to geopolitical developments recently (Chart 2.1.9). Inflows towards equity markets have improved except for China where growth concerns triggered by new quarantine measures pose a risk to portfolio flows (Chart 2.1.10). The course of the pandemic and geopolitical developments and the expectations regarding the monetary policies of major central banks will continue to affect the global risk appetite and portfolio movements in the upcoming period.

Chart 2.1.9: Portfolio Flows to Emerging Economies (4-Week Cumulative, USD Billion)

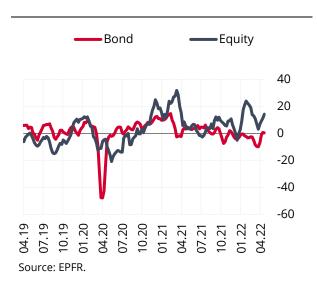
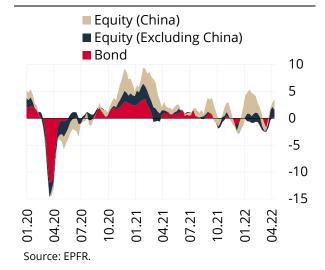


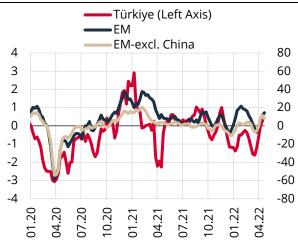
Chart 2.1.10: Portfolio Flows to Emerging Economies (4-Week Moving Average, USD Billion)



2.2 Financial Conditions

Although concerns about the pandemic eased, the global risk appetite decreased in February and March due to the rise in global inflation and the conflict between Russia and Ukraine. However, since late March, expectations that the conflict in Ukraine might end led to a partial recovery in global risk appetite. Moving in line with the risk appetite, portfolio inflows to Türkiye declined drastically until the last week of March, then posted a rapid recovery led by equity markets. Meanwhile, capital inflows to Türkiye moved similar to EMEs (Chart 2.2.1). Although Türkiye's risk premium increased in the same period, it diverged positively from EME risk premiums (Chart 2.2.2). In the current reporting period, net foreign outflows from Turkish GDDS and equity markets were USD 0.9 billion and USD 0.8 billion, respectively. In this period, portfolio outflows through the swap channel contributed negatively to the total portfolio movements.

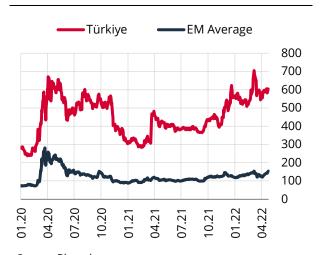
Chart 2.2.1: Portfolio Flows to Türkiye and **EMEs*** (4-Week Cumulative, USD Billion)



Sources: EPFR, CBRT.

* Türkiye data includes portfolio flows to equity and GDDS markets. Repo is included in the GDDS data. Emerging Markets data is taken from the EPFR database and includes all the database-covered funds' weekly net investments in equity and GDDS markets in emerging economies.

Chart 2.2.2: Risk Premiums of Türkiye and **EMEs** (5-Year CDS, Basis Point)

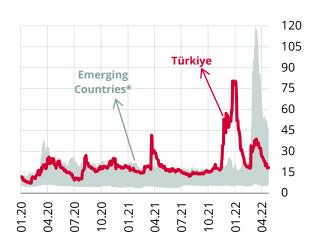


Source: Bloomberg.

EME: Brazil, Chile, Colombia, Indonesia, Malaysia, Mexico, Russia, South Africa and the Philippines.

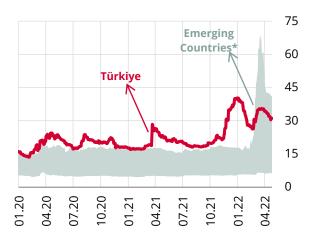
The exchange rate volatility implied by options in emerging economies posted an increase. Despite the increases in exchange rate volatilities amid the conflict, the one-month exchange rate volatility of the Turkish lira declined significantly compared to the previous reporting period thanks to the FX-protected deposit product and the liraization strategy. A similar course was seen in the 12-month exchange rate volatility of the Turkish lira, but this decline remained more limited (Chart 2.2.3 and Chart 2.2.4).

Chart 2.2.3: Exchange Rate Volatilities Implied by Options (against USD, 1-Month Forward, %)



Source: Bloomberg.

Chart 2.2.4: Exchange Rate Volatilities Implied by Options (against USD, 12-Month Forward, %)



Source: Bloomberg.

Despite the rise in risk premium, medium and long-term GDDS yields declined. Despite the increase in actual inflation, the two-year inflation compensation decreased, while the 10-year inflation compensation remained almost unchanged (Chart 2.2.5). In February and March, GDDS yields rose in all maturities, but the yield curve shifted down significantly along with the decline in the country risk premium since late March (Chart 2.2.6).

Chart 2.2.5: Long-Term GDDS Yields and Inflation Compensation (%)

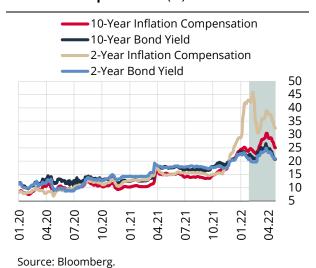
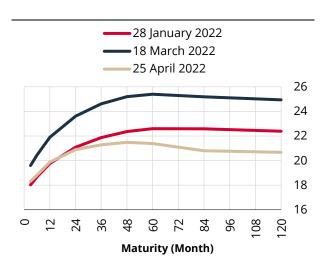


Chart 2.2.6: GDDS Yield Curve (%)



Source: Bloomberg.

In the first quarter of 2022, banks' funding rates have remained low. In this period, banks' domestic funding costs were low as the policy rate was kept at 14%. However, the divergence between the policy rate and deposit rates seen in early 2022 decreased due to the decline in deposit rates (Chart 2.2.7). Loan rates accompanied the fall in deposit rates during this period, with the exception of housing loans whose rates have slightly increased (Chart 2.2.8).

^{*} EMEs: Brazil, Chile, Colombia, Hungary, Indonesia, Malaysia, Mexico, Poland, Romania, Russia, S. Africa, and the Philippines.

^{*} EMEs: Brazil, Chile, Colombia, Hungary, Indonesia, Malaysia, Mexico, Poland, Romania, Russia, S. Africa, and the Philippines.

Chart 2.2.7: Indicators of Banks' Funding Costs (%)

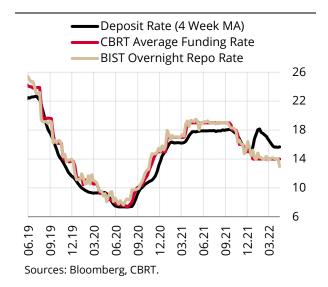
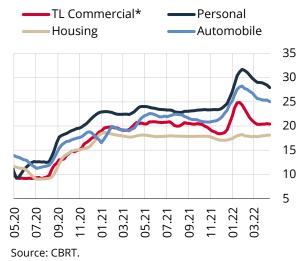


Chart 2.2.8: Interest Rates by Types of Loans (Flow Data, Annual Rates, 4-Week Moving Average, %)

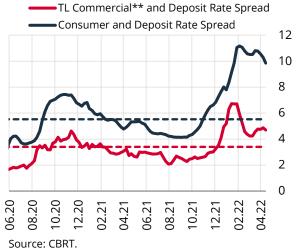


* Overdraft accounts and credit cards excluded.

Loan-deposit rate spreads, a proxy for banks' lending tendency, have diverged according to loan types.

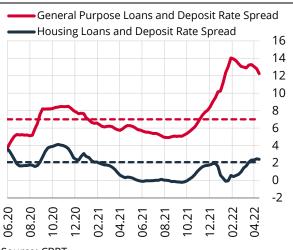
While the interest rate spread between commercial loans and deposits narrowed compared to the previous reporting period, the interest rate spread between consumer loans and deposits widened (Chart 2.2.9). While the increase in the interest rate spread between the general-purpose loans that account for the bulk of total consumer loans and deposit rates has been more significant, the spread between housing loan and deposit rates remains close to its historical average (Chart 2.2.10).

Chart 2.2.9: Loan-Deposit Rate Spread* (Flow Data, Annual Rates, 4-Week Moving Average, %)



* Dashed lines indicate the 2012-2019 average of the respective series.

Chart 2.2.10: Loan-Deposit Rate Spread* (Flow Data, Annual Rates, 4-Week Moving Average, %)



Source: CBRT.

* Dashed lines indicate the 2012-2019 average of the respective series.

The surge in commercial loans was the main driver behind total credit growth in the first quarter of 2022.

In the first quarter, credit growth rate has remained above historical averages due to falling real and nominal interest rates. The exchange rate-adjusted commercial and consumer loan growth by the second week of April was 47.89% and 17.67% (Chart 2.2.11). While commercial loan growth gained pace, the growth rate of housing and general-purpose loan has slowed down. Automobile loan growth has accelerated following the BRSA's increase of limits and maturities for automobile loans at the end of February, (Chart 2.2.12).

^{**} Overdraft accounts and credit cards excluded.

Chart 2.2.11: Loan Growth* (13-Week Annualized Growth, Adjusted for Exchange Rate, %)

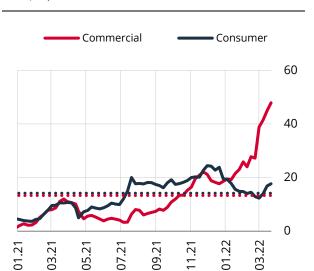
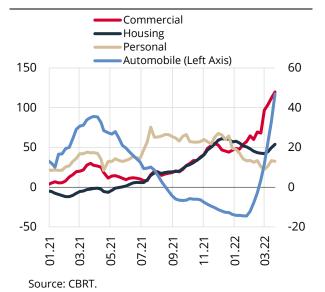


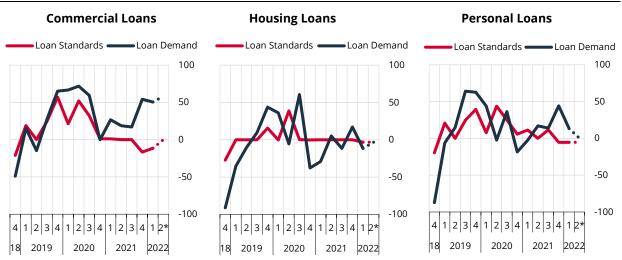
Chart 2.2.12: Loan Growth Rates by Types of Loans (13-Week Annualized Growth, Adjusted for Exchange Rate, %)



^{*} Dashed lines indicate the 2012-2019 average of the respective series.

Bank Loans Tendency Survey results suggest that the acceleration in commercial loans was driven by demand. According to the survey results, credit conditions were partially tightened for housing, commercial and general-purpose loans during the first quarter of 2022. In the same quarter, while demand for commercial loans and general-purpose loans has increased, demand for housing loans declined (Chart 2.2.13).

Chart 2.2.13: Loan Standards and Loan Demand



Sources: CBRT BLTS.

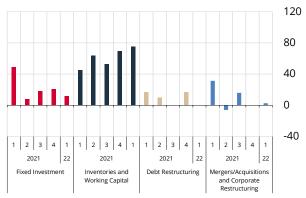
Source: CBRT.

Note: To calculate Loan Standards and Loan Demand indices, banks are asked how their loan standards (loan demand) have changed over the past three months. Net tendencies calculated based on response percentages indicate the direction of the change in loan supply (demand). Index values above 0 indicate easing in loan standards (increase in loan demand).

^{*} Expectations of banks.

In the first quarter, inventories and working capital needs remained major drivers for commercial loan demand. In that period, inventories and working capital needs were the major contributors to the commercial loan demand. Meanwhile, fixed investments, mergers/acquisitions and restructuring of debts constituted the other factors that affected loan demand (Chart 2.2.14). Loan demand for fixed investments and loan standards for long-term and FX-denominated commercial loans - potentially associated with fixed investments - imply that the investment tendency lost momentum compared to the fourth quarter (Chart 2.2.15). Banks expect that standards for FX-denominated and long-term loans will continue to tighten in the second quarter of 2022.

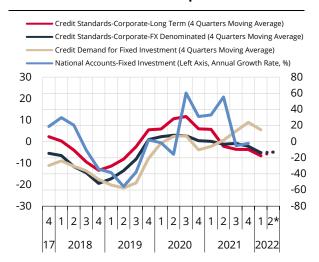
Chart 2.2.14: Leading Factors Affecting Firms' Loan Demand (%)



Source: CBRT BLTS.

Note: Net percentage changes in factors are the difference between the percentage ratio of the banks reporting that this factor increased the loan demand and those reporting that it decreased the loan demand.

Chart 2.2.15: Effect of Fixed Investment on **Loan Demand and Fixed Capital Formation**



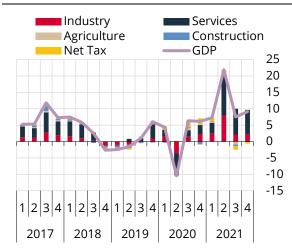
Source: CBRT BLTS. * Expectation of banks.

Note: Credit Demand for Fixed Investment is among the factors that affect loan demand. National Accounts-Fixed Investment has been calculated based on chain-linking values in GDP. The 2022 second quarter data is an estimate.

2.3 Economic Activity

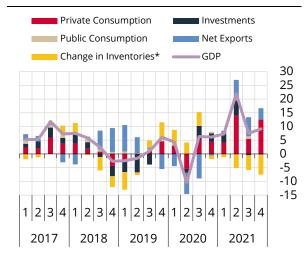
In the final quarter of 2022, economic activity remained strong driven by both domestic and foreign demand. In this quarter, the rate of increase of GDP was 9.1% year-on-year, and in seasonally and calendar adjusted terms, it was 1.5% quarter-on-quarter (Chart 2.3.1). Thus, the overall growth in 2021 realized as 11%. On the production side, the industrial sector and the services sector were the main drivers of annual and quarterly growth in the last quarter, while the construction sector had a limiting effect on growth (Chart 2.3.2). On the expenditures side, the final domestic demand led by private consumption was the main determinant of both quarterly and annual growth and the contribution of net exports to growth continued (Chart 2.3.3 and Chart 2.3.4). In this period, machinery-equipment investments, one of the sub-items of investments, continued to increase on an annual basis, while construction investments decreased. On a quarterly basis, the contribution of net exports to quarterly growth was 0.9 percentage points, while its contribution to annual growth was 4.2 percentage points (Box 2.1). Change in stocks, on the other hand, made a negative contribution to both quarterly and annual growth.

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



Sources: CBRT, TURKSTAT.

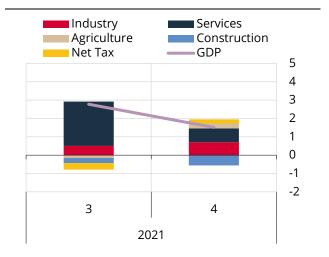
Chart 2.3.3: Annual GDP Growth and **Contributions from Expenditures Side (%** Points)



Sources: CBRT, TURKSTAT.

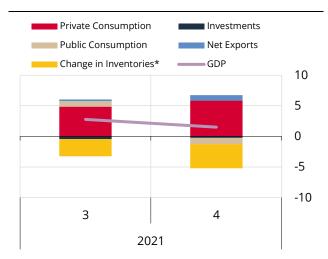
* Includes change in stocks and statistical discrepancy due to chain-linking.

Chart 2.3.2: Quarterly GDP Growth and **Contributions from Production Side (% Points)**



Sources: CBRT, TURKSTAT.

Chart 2.3.4: Quarterly GDP Growth and **Contributions from Expenditures Side (% Points)**



Sources: CBRT, TURKSTAT.

* Includes change in stocks and statistical discrepancy due to chain-linking.

Indicators for the first quarter of 2022 suggest that economic activity has lost some momentum due to domestic demand. Adjusted for seasonal and calendar effects, the average industrial production in January-

February increased by 2% quarter-on-quarter (Chart 2.3.5). The electricity and natural gas outages in industrial plants in the last 10 days of January were terminated in February. The production losses stemming from energy outages in January were compensated for in February and there was a correction in industrial production. In terms of export intensity, industrial production in exporting sectors is strong thanks to foreign demand. Industrial turnover indices suggest that in the January-February period, domestic demand slowed down, while the rise in foreign turnover indices continued (Chart 2.3.6). The average of January and February of retail sales volume indices declined in the second guarter (Chart 2.3.7). Likewise, spending with credit cards displayed a slight decline compared to the previous quarter (Chart 2.3.8). All these developments confirm that domestic demand has been slowing (Box 2.2).

Chart 2.3.5: Industrial Production Index

(Seasonally and Calendar Adjusted, 2015=100)

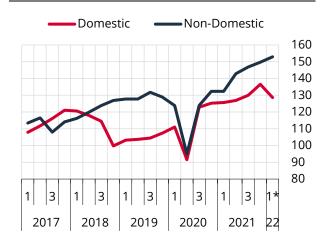




Source: TURKSTAT.

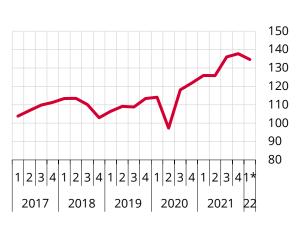
Chart 2.3.7: Retail Sales Volume Indices

(Seasonally and Calendar Adjusted, 2015=100)

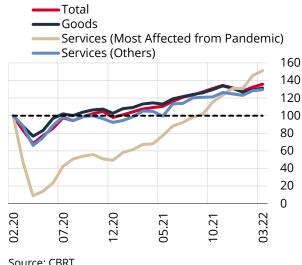


Sources: CBRT, TURKSTAT.

Chart 2.3.8: Expenditures on Domestic Credit Cards (Seasonally and Adjusted, Real, February 2020=100)



Source: CBRT.



Source: CBRT.

In the first quarter, the investment tendency of manufacturing industry firms for the next twelve months was high (Chart 2.3.9). An analysis of investment tendency by company size suggest that investment tendency was stronger in large-scale firms. In line with developments in investment tendency, the seasonally adjusted capacity utilization rate remained strong in the first four months of the year (Chart 2.3.10). A breakdown of IPI by main industrial groups reveals that capital goods production significantly increased by 7.9% quarter-on-quarter according to the average of January and February. The rise is still high even when other transportation sector production, which typically displays high volatility, is excluded. Imports volume indices suggest that imports of investment goods increased in the January-February period.

^{*} Average of January-February.

^{*} Average of January-February.

^{*} Average of January-February.

85

80

75

70

65

60

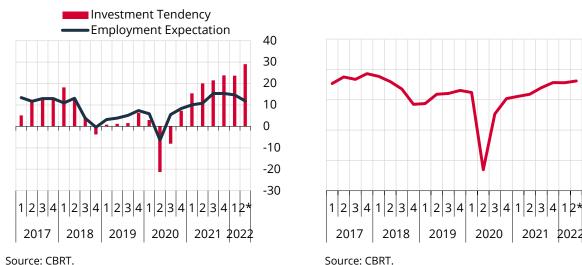
2021 2022

Chart 2.3.9: BTS Expectations for Fixed Capital Investment Spending and

Employment (Up-down, Seasonally Adjusted, %)

Chart 2.3.10: Capacity Utilization Rate

(Seasonally Adjusted, %)



Source: CBRT. * As of April.

* As of April.

Developments in the labor market moved in tandem with the outlook for economic activity. In the January-February 2022 period, the seasonally adjusted average total unemployment rate decreased by 0.2 percentage points to 10.9% compared to the previous quarter (Chart 2.3.11 and Chart 2.3.12). In the same period again, employment increased by 0.7% (approximately 200 thousand people), while the almost flat participation rate underpinned the decline in unemployment (Chart 2.3.13).

Chart 2.3.11: Unemployment Rates and Labor Force Participation Rate (Seasonally

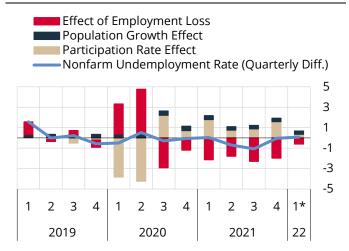
Adjusted, %)



* Average of January-February.

Chart 2.3.12: Contributions to Change in Total Unemployment Rate (Seasonally Adjusted, % Points)

2020



Sources: CBRT, TURKSTAT.

- * Average of January-February.
- ** Negative value indicates an increase in employment.

Leading indicators and high-frequency data indicate that employment expectations have been moderate.

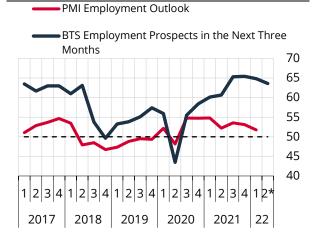
(Chart 2.3.14). Accordingly, it is anticipated that the rise in employment will continue in the upcoming period. An evaluation of the outlook for key determinants of total wages such as the rise in the minimum wage, labor market conditions and past inflation reveals that it is expected that real unit labor costs forecasts for 2022 would not have a negative effect on inflation.



Source: TURKSTAT.

Chart 2.3.14: Employment Outlook and **Expectation in the Industrial Sector****

(Seasonally Adjusted, Up-Down)



Source: IHS Markit, CBRT.

- * As of April.
- ** BTS indicator is adjusted so that its neutral level will be 50-in line with the PMI.

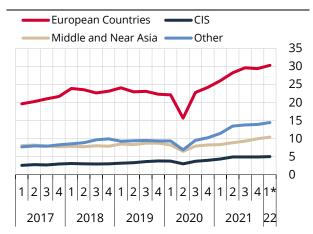
The strong trend in exports continued in the first quarter as well. In this period, the high level of exports was maintained on the back of the uptrend in the global economy and increasing exports prices, despite regional discrepancies (Chart 2.3.15). It is observed that regional losses stemming from the Russian-Ukrainian conflict are compensated for in the short term, thanks to export companies' dynamic capacity and market diversification flexibility. Nevertheless, geopolitical risks, rising energy costs and concerns over possible supply shortages increase the downside risks on foreign demand compared to the previous reporting period and suggest that regional discrepancies may become more pronounced (Chart 2.3.16).

Chart 2.3.15: Exports* (Adjusted for Seasonal and Calendar Effects, Billion USD)



Sources: CBRT, Ministry of Treasury, TURKSTAT.

Chart 2.3.16: Exports by Regions (Excl. Gold, Adjusted for Seasonal and Calendar Effects, Billion USD)



Source: TURKSTAT.

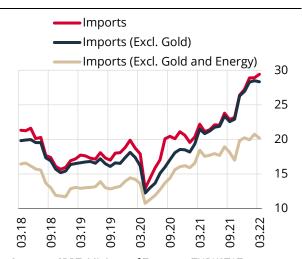
* Average of January-February.

The elevated level of energy imports was the main driver of the increase in total imports during this period. While economic activity remained relatively strong in the first quarter, imports increased due to both high energy demand and the accelerated increase in energy prices (Chart 2.3.17). Excluding gold and energy, imports of intermediate goods continued to rise in line with the rise in commodity prices excluding energy, while the increase in imports of consumption and investment goods remained relatively limited (Chart 2.3.18). Under this outlook, which led to an increase in the foreign trade deficit, the ratio of exports to imports was realized at 72%.

^{*} Average of January-February.

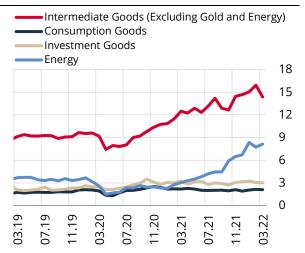
^{*} Provisional data for March.

Chart 2.3.17: Imports* (Adjusted for Seasonal and Calendar Effects, Billion USD)



Sources: CBRT, Ministry of Treasury, TURKSTAT.

Chart 2.3.18: Imports by Goods Groups* (Adjusted for Seasonal and Calendar Effects, Billion USD)



Sources: CBRT, Ministry of Treasury, TURKSTAT.

The divergence between export and import prices has been growing deeper because of high energy and commodity prices. This accelerates the downtrend in the terms of trade and negatively affects the foreign trade balance. The ongoing uptrend in imports prices has further accelerated after the start of the Russia-Ukraine conflict, while the rise in exports prices remained moderate (Chart 2.3.19). When price effects are excluded, the volume of exports is still high, and the rise in the amount of imports continues (Chart 2.3.20). The outlook in imports can be attributed to strong economic activity, inventory build-up, and pull-forward in import demand due to price developments.

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

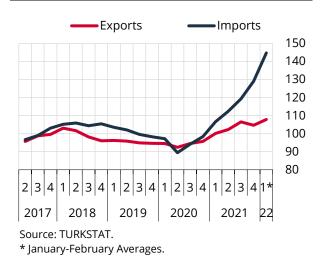
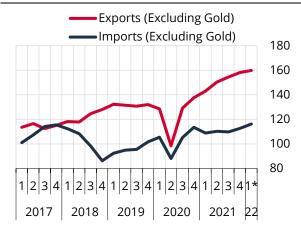


Chart 2.3.20: Foreign Trade Volume Indices (Exlc. Gold, Seasonally Adjusted, 2015=100)



Source: TURKSTAT.

The positive contribution of the services balance to the current account balance continues to rise. The recovery in services revenues carries on with travel and transportation revenues that reached prepandemic levels in the final quarter of 2021 (Chart 2.3.21). The rise in the number of foreign visitors, which accelerated in the second half of 2021 owing to increased vaccination and easing of travel restrictions, continues (Chart 2.3.22). While the Russia-Ukraine conflict poses downside risks to travel and transportation revenues, as Russian and Ukrainian tourists accounted for 28% of foreign visitors to Turkey in 2021, there are also factors that can partially compensate for these risks. Yet, the additional demand from European countries owing to the normalization process, and from Middle Eastern countries owing to

^{*} Provisional data for March.

^{*} Provisional data for March.

^{*} January-February Averages.

the likely rise in their income stemming from the rise in oil prices, is expected to contribute to service revenues (Box 2.3).

Chart 2.3.21: Services Revenues (Adjusted for Seasonal and Calendar Effects, Billion USD)

Chart 2.3.22: Number of Tourists (Adjusted for Seasonal and Calendar Effects, Million People)

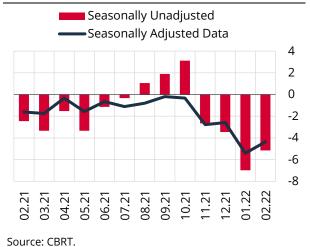


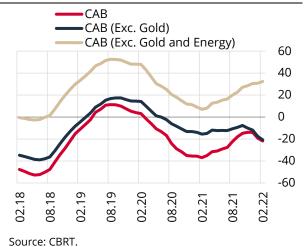


Despite the continued positive performance in exports and the recovery in services revenues, the current account deficit increased due to the rise in energy prices. The downtrend in the seasonally adjusted current account deficit, which was led by strong exports and rapid recovery in services revenues in 2021, was replaced by an uptrend because of the increasing energy imports as of the final quarter. In the first two months of 2022, the current account balance continued to run a deficit due to the rise in energy prices (Chart 2.3.23). In this context, the current account deficit, which had decreased to USD 14 billion at the end of 2021, climbed to USD 21.8 billion in February on a 12-month cumulative basis (Chart 2.3.24). While the 12-month cumulative current account balance excluding gold and energy continues to run a surplus, high energy imports play an important role for the future course of the current account deficit.

Chart 2.3.23: Current Account Balance (Billion USD)

Chart 2.3.24: Current Account Balance (12-Month Cumulative, Billion USD)





The uptrend in the current account deficit increases the financing needs. In the first two months of the year, foreign direct investment flows decreased compared to the previous quarter, while capital outflows from portfolio investments continued, albeit to a limited extent. In this period, debt rollover ratios for longterm loans from abroad remained high. With respect to the trend, the long-term debt rollover ratio for the private sector increased to approximately 150%, while it was close to 100% for the banking sector (Chart 2.3.25). Rising financing needs, due to the increase in the current account deficit in January and February, also brought about a disruption in the upward trend of official reserves. The CBRT's FX reserves recorded a net outflow of USD 3.2 billion in the first two months of the year, and the net official reserves inflows decreased to USD 15.7 billion on a 12-month cumulative basis (Chart 2.3.26). The increase in the share of

short-term capital inflows was driven by net liabilities arising from the currency agreements (swap) signed with other central banks.

Chart 2.3.25: Debt Rollover Ratios (Long-Term Loans, 6-Month Moving Average, %)

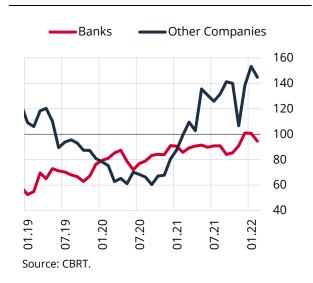
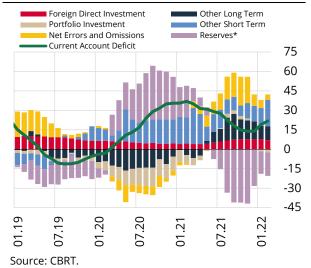


Chart 2.3.26: Financing of the Current Account Deficit (12-Month Cumulative, Billion USD)



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

In the first quarter of 2022, tax revenues increased significantly compared to the previous year, and so did public expenditures. With the positive contribution of the CBRT's profit transfer in the first quarter, the central government budget balance improved compared to the same period of the previous year. In the January-March period, total expenditures and primary expenditures increased by 77.9% and 78.7%, respectively, year-on-year, while total income increased by 75.1%. Thus, the central government budget ran a surplus of TRY 30.8 billion, while the primary surplus was TRY 115.6 billion. The annualized budget deficit and primary deficit to GDP ratios for March are estimated to be 2.2% and 0.4%, respectively.

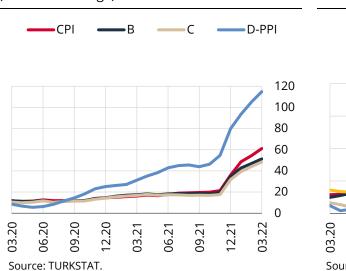
2.4 Inflation

In the first quarter of 2022, consumer inflation and B inflation stood at 61.14% and 51.34%, respectively, exceeding the forecast range presented in the January Inflation Report. In this quarter, sharp increases in global commodity prices, chiefly energy, metal, food and agricultural products, amid geopolitical developments added to inflationary pressures. In fact, international commodity prices in March registered one of their largest monthly increases ever recorded. The geopolitical developments created a new negative supply shockwave, which further crystallized the supply constraints. International food prices also hit their highest historical levels while supply-side factors such as the rise in import prices as well as the elevated course of transportation costs and supply constraints continued to affect the inflation outlook negatively. Data for the first quarter of 2022 suggest that economic activity lost some momentum due to domestic demand whereas output gap indicators remained in the positive territory on the back of the favorable contribution of external demand. Considered together with the main drivers of inflation, this development shows that the effect of the deterioration in commodity prices was at the forefront in the first quarter. In this period, despite the VAT reductions in essential food products, municipal water and electricity as well as the tax base arrangement in automobiles, the reflection of the six-month D-PPI increase in alcoholic beverages and tobacco on SCT amounts, price adjustments in the energy group (electricity, natural gas, and municipal water), and the rise in the raw milk reference price had a visible effect on consumer inflation while the total impact of administered prices and tax adjustments increased compared to the previous quarter. Despite the geopolitical developments, the stable course of the Turkish lira in the first quarter averted a more negative outlook in inflation. While annual inflation increased significantly across all subgroups in this period, the rise in inflation expectations continued and the

diffusion index pointed to economy-wide price increases. Against this background, consumer prices posted a substantial seasonally-adjusted quarterly increase (Table 2.4.1). While the strong increases in commodity prices, supply constraints, and transportation costs continued to shape the producer price hikes, price adjustments for electricity and natural gas were another factor that weighed on producers. Thus, producer price-driven pressures remained strong (Chart 2.4.1).

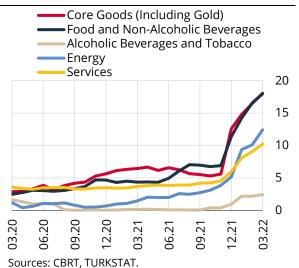
Energy and food were the main drivers of the rise in consumer inflation from 36.08% at end-2021 to 61.14% in the first quarter of 2022, followed by core goods and services groups. In this period, the contribution from energy to annual inflation rose by 7.23 points quarter-on-quarter to 12.43 points, while the contribution from food increased by 6.62 points to 17.99 points. In the first quarter, the contribution from core goods was 17.18 points, up by 5.24 points, while the contribution from services increased by 4.27 points to 10.24 points. Meanwhile, contributions from alcohol-tobacco and gold increased at a relatively slower rate (Chart 2.4.2).

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



* CPI excluding unprocessed food, energy, alcohol-tobacco and gold.

Chart 2.4.2: Contributions to Annual CPI (% Points)



While the monthly rates of increase in core indicators decelerated, their annual inflation rose compared to the previous quarter (Chart 2.4.3). Seasonally-adjusted data indicate that the monthly increases in the B and C indices as well as in alternative inflation indicators such as SATRIM and Median inflation maintained their high course but tended to decelerate (Charts 2.4.3, 2.4.4 and 2.4.5). In the core goods groups, in which the exchange rate pass-through is high, the price increase remained elevated despite losing momentum compared to the previous quarter (Table 2.4.1). Durable consumption goods also present a similar outlook. While the effects of the exchange rate and domestic demand on this group weakened compared to the previous quarter, the effects of international commodity price developments strengthened. The price adjustment process continued at full speed in the durable goods' subgroup of furniture, while the tax base arrangement in SCT averted higher levels in automobile prices. Price increases in the clothing and footwear group, which had accelerated considerably in the last quarter of 2021, decelerated somewhat in this period. Personal care products, maintenance and repair of dwellings, medicines, and household cleaning products were particularly effective in the acceleration of prices in the other core goods group. Processed food inflation remained strong in this quarter. This was mainly driven by developments in international agricultural commodity and food prices led by wheat and sunflower seed oil prices in particular that were negatively affected by the Russia-Ukraine conflict, increases in input costs, and developments in the raw milk reference price as well as in meat and sugar prices. International commodity prices, which rose significantly due to geopolitical developments, did not only affect tradable goods but also pushed up services inflation through the fuel and food prices channel in particular. While catering services inflation rose in line with food inflation, fuel price developments affected transportation services unfavorably, most

^{**} CPI excluding food and non-alcoholic beverages, energy, alcohol-tobacco and gold.

evidently in urban passenger transport by bus and intercity passenger transport by road. Thus, the high course of services inflation was mainly shaped by restaurants-hotels and transportation services whose annual inflation rates reached 60% levels. Inflation of the other services group was affected by health and education services, in which the backward-indexation behavior is prevalent, as well as by the developments in maintenance and repair services that also cover expenditures on materials and labor force. In tandem with consumer inflation, the upward trend in rents accelerated somewhat in the first guarter (Table 2.4.1).

Chart 2.4.4: Subgroups of Index B

* No seasonality detected for processed food.

25

20

15

10

5

0

-5

03.22

(Seasonally Adjusted, Monthly %

Change)

Chart 2.4.3: Indices B and C (Seasonally Adjusted, Monthly % Change)

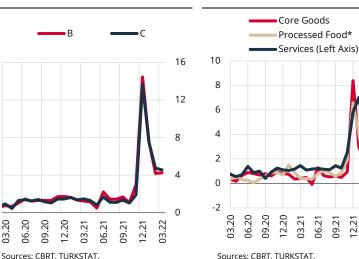
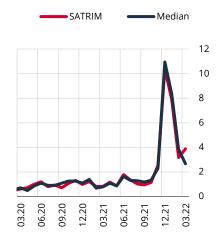


Chart 2.4.5: Core Inflation Indicators SATRIM* and Median ** (Monthly % Change)



Sources: CBRT, TURKSTAT.

- * SATRIM: Seasonally adjusted, trimmed mean inflation.
- ** Median: Median monthly inflation of seasonally adjusted 5-digit indices.

Table 2.4.1: Consumer Prices

	Quarterly % Change (Seasonally Adjusted)				Annual % Change				
	2021			2022		2022			
	II	Ш	IV	I	II	Ш	IV	ı	
СРІ	4.72	4.67	19.46	23.08	17.53	19.58	36.08	61.14	
1. Goods	5.56	5.78	22.88	24.09	19.29	21.55	41.10	70.38	
Energy*	3.88	9.22	21.61	47.10	17.28	22.77	42.93	102.94	
Food and non-alcoholic beverages	8.10	8.82	20.80	19.77	19.99	28.79	43.80	70.33	
Unprocessed food	10.95	13.75	14.88	21.96	18.70	32.06	39.83	77.52	
Processed food*	3.91	6.35	24.67	18.77	21.20	25.79	47.57	63.64	
Core goods	4.26	4.44	25.28	16.32	21.92	19.38	40.55	59.19	
Clothing and footwear	3.33	3.46	10.37	5.93	6.86	7.11	19.92	26.54	
Durable goods (excl. gold)	5.18	2.68	35.10	15.31	30.86	22.12	48.93	68.54	
Furniture	5.50	5.06	23.45	24.33	35.75	28.68	46.35	70.29	
Automobiles	4.63	-0.32	46.90	10.40	36.03	22.88	57.04	69.13	
Electrical and nonelectrical appliances*	5.01	3.87	26.55	20.72	20.17	16.16	38.00	66.64	
Other durable goods*	5.31	3.56	23.74	16.70	27.12	25.54	41.50	57.50	
Other core goods*	6.15	5.14	19.99	23.85	20.61	23.26	40.26	65.85	
Alcoholic beverages, tobacco and gold*	3.25	-0.38	24.58	24.39	9.12	2.92	27.90	59.40	
2. Services	3.51	3.75	9.82	15.91	13.46	15.06	22.33	36.72	
Rent	2.59	3.15	3.70	6.31	9.93	10.85	12.20	16.70	
Restaurants and hotels	6.11	8.05	17.88	18.46	18.86	23.27	40.85	60.40	
Transport	6.68	2.50	8.03	35.73	10.28	15.21	21.99	60.35	
Communication	1.58	1.94	1.91	3.66	7.36	6.68	6.32	9.77	
Other services	3.79	3.75	9.98	14.50	15.45	15.47	22.61	35.65	

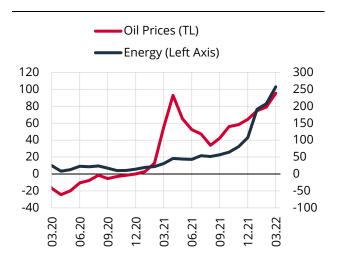
Sources: CBRT, TURKSTAT.

Energy prices accelerated significantly in the first quarter due to developments in international markets (Chart 2.4.6). Energy prices increased drastically by 47.10% in the first quarter of the year (Table 2.4.1). In January, administered prices such as those of residential electricity, natural gas and municipal water registered marked increases. Following that, electricity prices declined slightly on the back of the limit arrangements in the gradual tariff system and the VAT reduction.² International oil prices, which had been at around USD 74 at end-2021, rose throughout the first quarter and reached an average of USD 116 (with an increase of 56%) in March. The Turkish lira was on a stable course in January and February but depreciated somewhat in March following geopolitical developments. In addition, domestic fuel prices increased significantly in this period with the termination of the sliding-scale system. While international energy price hikes were broad-based in the first quarter including propane, butane, natural gas and coal, the dollar-based increase in coal prices exceeded 100% (Chart 2.4.7). Against this background, annual energy inflation soared by 60.01 points to 102.94% (Chart 2.4.6). In this period, consumer prices were also impacted by the secondary effects of marked increases in industrial electricity and natural gas prices, with electricity having a stronger effect.

^{*} No seasonality detected.

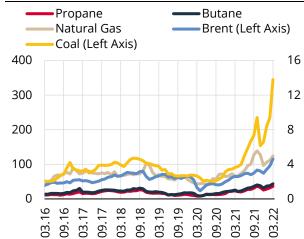
² With the Presidential Decision No. 5249 published in the Official Gazette No. 31765 dated 01.03.2022, the VAT on electricity delivery for residential and agricultural irrigation purposes was reduced to 8%.

Chart 2.4.6: Energy Prices (Annual % Change)



Sources: Bloomberg, CBRT, TURKSTAT.

Chart 2.4.7: Energy Commodity Prices* (USD)



Source: Bloomberg.

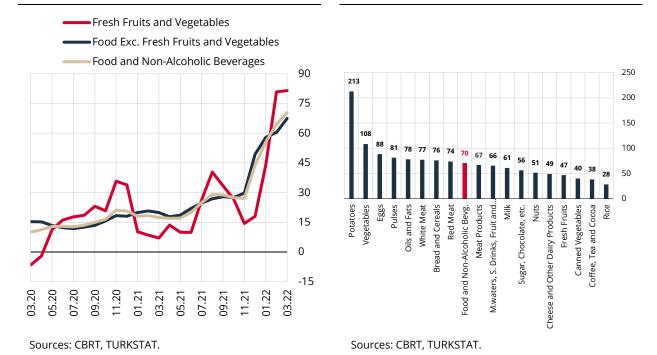
* Brent per barrel of oil, coal per ton, natural gas per MMBtu, and butane and propane per gallon.

Food inflation remained on the rise in the first quarter due to large increases in international agricultural commodity and food prices, the surge in input costs with energy in the lead, the impact of the drought from the previous year, and supply constraints. The acceleration of price hikes in food and non-alcoholic beverages has continued from the second half of 2021 through this period, and annual inflation in this group went up by 26.53 points to 70.33% (Chart 2.4.8). While seasonally-adjusted data point to a large quarterly increase in fresh fruits and vegetables in the unprocessed food group due to adverse weather conditions and rising input costs, the upward trend in the other unprocessed food group also persisted in this period. Risks to food prices became more evident amid the geopolitical developments that turned into a military conflict at the end of February while substantial increases in international agricultural commodity prices, wheat and sunflower oil prices in particular, exerted a considerable amount of pressure on domestic prices. VAT cuts introduced in mid-February limited a more negative outlook.3 In this period, FAO international food prices hit their highest historical level while they recorded the largest quarterly increase of all time on a USD basis with 19.15%, led by vegetable oils and cereals. In line with these developments, increases in fertilizer and feed prices as well as energy costs gained momentum, the effects of which were observed across the food group, most visibly in prices of red meat, white meat, eggs, and grains and legumes. The carry-over effect of the rise in the raw milk reference price delivered in December on food inflation was observed in January. Due to the rising feed costs, the raw milk reference price was further adjusted by approximately 21% to be effective from 1 April 2022. International wheat prices exerted significant pressure on domestic prices (Zoom-In 2.1). The Turkish Grain Board (TGB) continues to sell bread wheat to the flour industry at reasonable prices within the scope of regulation, which helps prevent a possible additional increase in bread prices. Following the evolution of the tension between Russia and Ukraine into a conflict, raw sunflower oil prices surged in the external market by approximately 50% in USD terms, which affected the fats and oils group, most visibly sunflower oil prices (Chart 2.4.9). An array of food supply security measures were introduced to alleviate the impact of the conflict. Accordingly, productbased measures, including export restrictions, were taken to support domestic supply while import duties on some products were either reduced or zeroed, public sector-backed supply of products at suitable prices continued, and additional input subsidies were provided.

³ With the Presidential Decision No. 5189 published in the Official Gazette No. 31749 dated 13.02.2022, the VAT on essential food products was reduced to 1%.

Chart 2.4.8: Food Prices (Annual % Change)

Chart 2.4.9: Prices of the Food Group and Sub-Items (March 2022, Annual % Change)



In the first quarter of the year, prices of alcoholic beverages and tobacco products rose by 27.23%. As of lanuary, the six-month PPI increase was reflected on the specific and minimum specific taxes in the alcoholic beverages and tobacco group while producer firms raised cigarette prices by approximately TRY 2 in March. Thus, in the first quarter, the prices of alcoholic beverages and tobacco products surged by 42.88% and 26.21%, respectively. The rise in prices of tobacco products had an impact of 1.36 points on consumer inflation.

Zoom-In 2.1

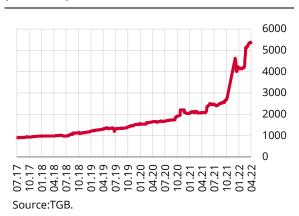
Observations Regarding the Pass-Through from Wheat Prices to Consumer Prices

The bread and cereals group has a substantial share in the consumer basket, and it is significantly affected by wheat price developments. The bread and cereals group under the consumer price index consists of flour, bulgur, bread, bakery products, types of pasta, etc. Considering the main cost factors in the production of these items, wheat prices constitute the leading input cost. Energy prices and transportation costs are the other important cost components. Since the second half of 2020, international wheat prices have been on the rise while domestic bread wheat prices have also assumed an upward trend amid the drought and exchange rate developments. Recently, the rise in international wheat prices accelerated significantly due to geopolitical developments (Chart 1). The ongoing geopolitical developments keep the risks to the bread-cereals group alive through the channel of international wheat prices and supply constraints. The TGB introduced the flour regulation in October 2021 to supply flour, the raw material of bread, to bakers at suitable prices, thereby aiming to prevent a possible increase in bread costs. Taken from the beginning of the Russia-Ukraine conflict, domestic bread wheat prices increased by approximately 28.3% between 23 February and 18 April (Chart 2).

Chart 1: International Grains Council (IGC) Wheat Index (USD, January 2000=100)



Chart 2: Domestic Bread Wheat Prices (TRY/Tons)



An equation has been estimated to evaluate the effects of wheat price developments on the CPI's bread-cereals group (Table 1). Accordingly, the monthly food inflation for the bread-cereals group has been estimated by using domestic bread wheat prices, the USD/TRY exchange rate, and diesel fuel prices. Estimations presented in Table 1 suggest that a 10% increase in domestic wheat prices has an effect of approximately 6 points on the bread-cereals consumer inflation over a period of four months.

Table 1: Price Dynamics of Bread-Cereals Products

Dependent Variable: Monthly % Change in the CPI's Bread-Cereals Group (2016:11-2022:02)

	Constant Term	Wheat Price	Wheat Price	Wheat Price	Wheat Price	USD	Diesel Fuel ^a	Dummy 09-2018	Dummy 05-2019	R ²
		(t)	(t-1)	(t-2)	(t-3)	(t)				
Equation	0.00	0.19***	0.20***	0.09***	0.11**	0.08*	0.15**	0.02***	0.02***	0.85

***, **, and * correspond to a significance level of 1%, 5%, and 10%, respectively. Average TGB prices have been used for domestic wheat price. a: average of the lags between t and t-6.

The findings of the empirical VAR model based on the impulse response function show that a 10% increase in domestic wheat prices has a cumulative effect of approximately 6 points on bread-cereals prices, similar to the findings of the equation (Chart 3). Considering that domestic wheat prices rose by approximately 28% between 23 February and 18 April, the possible additional impact of this development on the bread-cereals group is calculated to be around 17 points, ceteris paribus. Moreover, given the significant effect of price developments in cereals and oleaginous plants on red and white meat, eggs, milk, and dairy products through domestic feed prices, geopolitical developments have considerable impacts on consumer food prices through the channel of external price pressures.

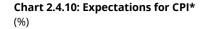
Chart 3: Cumulative Effect of a 1% Increase in Domestic Wheat Prices on the CPI's Bread-Cereals Prices* (% Points)



^{*} Based on the impulse response analysis of the VAR model (2016:11-2022:02) covering the IGC wheat prices (\$), the USD/TRY exchange rate, domestic bread wheat prices, diesel fuel prices, and bread-cereals consumer prices.

Drivers of Inflation

While the increase in inflation expectations continued, the distribution of expectations pointed to inflation uncertainty. The rise in inflation expectations continued in the last three months, more evidently for shorter terms. According to the April results of the Market Participants Survey, inflation expectations for the next 12 months hit 28.41%, while those for the next 5 years were 9.23% (Chart 2.4.10). Inflation compensations derived from the market data also remain high (Chart 2.2.5). On the other hand, multiple local peaks were seen in the distribution of 12-month CPI inflation expectations, implying a high level of uncertainty in inflation forecasts (Chart 2.4.11). The increase in inflation expectations and the course of uncertainty weigh on current inflation by elevating the impact of cost shocks on headline inflation. As a matter of fact, diffusion indices reached high levels, indicating that price increases were not limited to certain sectors (Chart 2.4.12).

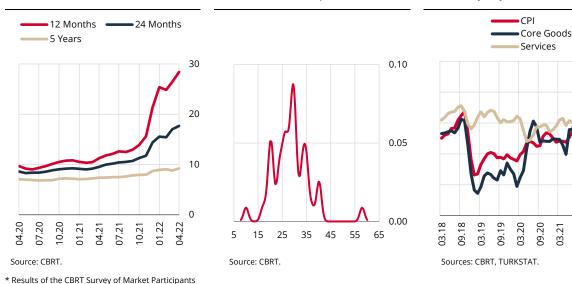


that polls real and financial sector representatives

as well as professionals.

Chart 2.4.11: Distribution of Survey of Market Participants (April, 12-Month-Ahead CPI Expectation)

Chart 2.4.12: Diffusion Indices of CPI and Main Expenditure Groups (Seasonally-Adjusted, 3-month Average)



back of external demand. Leading indicators reveal a slowdown in domestic demand conditions in the first quarter of 2022, after a brisk course in the second half of 2021. Despite the recovery in the labor market as well as the minimum wage raise and the supportive public finance stance, rising inflation has suppressed consumption expenditures. In this period, in spite of disruptions led by geopolitical problems, external demand remained robust, and the strong course in goods exports was accompanied by the recovery in exports of services. Against this backdrop, the output gap indicators monitored by the CBRT remained in positive territory, albeit with a slight fall compared to the last quarter of the previous year (Chart 2.4.13). In line with this outlook, the manufacturing industry capacity utilization rate remained above its historical average in the first quarter of the year, yet did not record a noticeable change compared to the previous quarter (Chart 2.3.10). After the reversal of the slowdown in the last quarter of 2021, credit utilization assumed an upward trend in the first months of 2022 and became another factor supporting economic activity. An analysis of sectoral breakdowns indicates that credit developments are driven by TRYdenominated corporate loans (Chart 2.4.14). Consumer credit-driven effects on inflation remained moderate, with consumer loans following a course close to the historical average. In sum, output gap

indicators have lost pace since the previous quarter, yet remained in the positive territory. Meanwhile, demand conditions have had a lower effect on the rise in inflation than other main drivers such as the

exchange rate, global commodity prices and supply-side setbacks.

Total demand conditions lost momentum compared to the previous quarter, yet remained strong on the

1.0

0.8

0.6

0.4

0.2

0.0

03.22

09.21

Chart 2.4.13: Output Gap Indicators (%)

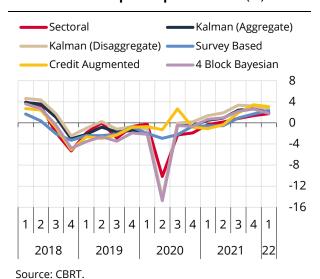
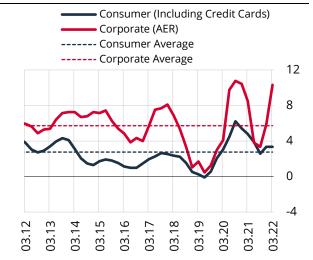


Chart 2.4.14: Net Credit Utilization* (%)

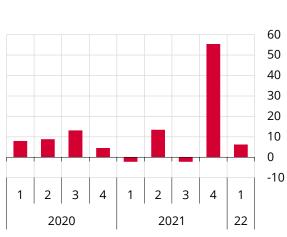


Source: CBRT.

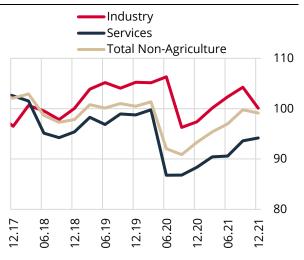
Although the Turkish lira remained stable despite the geopolitical developments in this period, the previous quarter's depreciation still weighs on inflation. After the depreciation in the last quarter of 2021. the Turkish lira followed a moderate course in the first quarter with the support of the financial instruments introduced. The exchange rate volatility decreased notably in January and February, but depreciated nominally again in March as the geopolitical problems between Russia and Ukraine turned into a conflict (Chart 2.4.15). The effects of the rise in the exchange rate in the previous quarter on consumer inflation persisted both in the goods and services sectors. Despite the nominal value losses triggered by geopolitical problems in this period, the CPI-based real exchange rate index rose compared to December - when it hit a historic low - pointing to real appreciation. In this period of an uptrend in commodity prices, which is strengthened by the conflict and accompanied by cumulative cost pressures, the stable course of the exchange rate has averted a more adverse outlook in inflation dynamics.

Chart 2.4.15: FX Basket* (Quarterly % Change)

Chart 2.4.16: Real Unit Wage per Hours Worked* (Value Added, 2015=100, Seasonally Adjusted)



Source: CBRT.



Sources: CBRT, TURKSTAT.

^{*} Net credit utilization is calculated as the ratio of the annual change in the nominal loan stock to the annual GDP of four quarters before. The historical average covers the period 2006Q1 to 2022Q1. Credit cards are included in utilization of personal loans. Corporate loan utilization is adjusted for exchange rate effects.

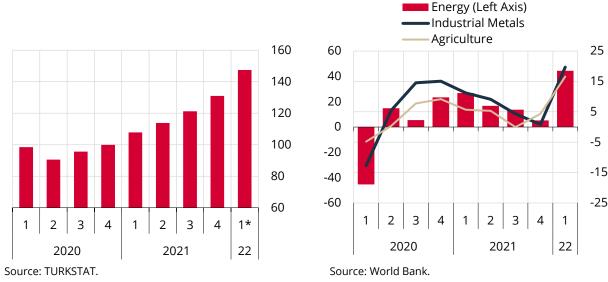
^{*} USD and euro have equal weights.

^{*} Deflated by the CPI. Real Wage per Hour/Productivity

The moderate upward trend in real unit wages was interrupted in the last quarter of the year. In the last quarter of the year, both hours worked and value added crept up, and partial productivity per hour worked edged down. On the other hand, as nominal wage increases stood below inflation, real wages declined and exceeded the fall in productivity. This led to a fall in the non-farm real unit wages and an end to the ongoing moderate trend of recovery. When analyzed by sectors, this appears to have been driven by the industrial sector, while the services sector showed a further increase in real unit wages (Chart 2.4.16).

Chart 2.4.17: Import Unit Value Index* (2019Q4=100, USD)

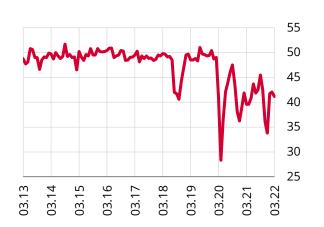
Chart 2.4.18: World Bank Commodity Price Indices (Quarterly % Change)



* Q1 data is the average of January and February.

Hikes in the import unit value index in tandem with commodity prices constitute the main factor pushing *inflation upwards.* The ongoing price increases due to supply-demand imbalances in commodity markets became more evident following the conflict between Russia and Ukraine. Soaring commodity prices had an adverse effect on import prices, and in January and February, the import unit value index rose by 12.6% from the previous quarter, a rate comparable to the global crisis period (Chart 2.4.17). While the upsurge in international commodity prices spread across the whole, the energy sub-index stood out with a quarter-onquarter rise of 44.4%. In the same period, the industrial metals sub-index rose by 19.7% and the agriculture sub-index increased by 16.6% (Chart 2.4.18). Both parties to the conflict are leading cereal exporters. In addition to this, Turkey is an importer in this product group. These two factors strengthened the impact of international developments on domestic food prices in the post-agricultural drought period. What is more, setbacks in the global supply chains continue. In addition to geopolitical problems, the tightening of pandemic measures in China due to an elevated number of new cases has impeded access to supplies in a shorter time (Chart 2.4.19) and caused international transportation costs to remain high. Besides global problems, developments in domestic energy prices also kept producer prices under pressure, and the course of producer prices was high in the first quarter of the year (Chart 2.4.20). Analyses of the passthrough from producer prices to consumer prices indicate that producer prices excluding administered energy items have been substantially and rapidly reflected on consumer prices (Zoom-In 2.2).

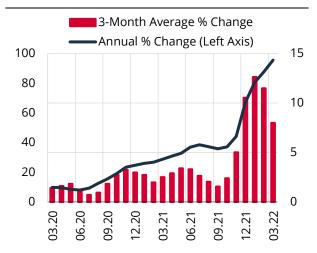
Chart 2.4.19: PMI Suppliers' Delivery Times* (Manufacturing, Seasonally Adjusted)



Source: IHS Markit.

* Lower values denote longer delivery times.

Chart 2.4.20: Manufacturing Prices excl. Petroleum and Base Metals



Sources: CBRT, TURKSTAT.

Administered items had a larger effect on headline inflation compared to the previous quarter. As of January 2022, a gradual tariff system was introduced to residential electricity, and tariffs were raised depending on the level of consumption. This regulation increased the residential tariffs by 69.96% in January. Although the change in tariff stages and the introduction of a VAT reduction in the subsequent two months caused falls by 4.84% and 9.70% respectively, residential electricity tariffs still increased across the quarter. Residential natural gas tariffs were raised by 25% in January, which was followed by another 35% increase as of April. Despite these increases, there is still significant state support for residential natural gas prices. Meanwhile, price increases have continued in natural gas supplied to the industrial sector and electricity producers since the last quarter of 2021, which put pressure on consumer prices through the producer prices channel. Soaring international crude oil prices had a negative impact on fuel prices. Moreover, with the raise in the SCT amounts, the sliding scale tariff terminated as of the first quarter of the year. In addition to its direct effects, the increase in fuel prices weighed on the transportation costs in all sectors, chiefly food, and pushed the headline inflation up through indirect channels. As the increase in producer prices in the second half of 2021 was reflected on specific taxes, prices of tobacco products and alcoholic beverages increased. In March, another raise of approximately TRY 2 was introduced to the prices of tobacco products by companies. While the effects of the increase in raw milk reference prices in December were visible in the first months of the year, there was another raise of 21% as of April.⁴ While the administered prices-driven developments pushed the headline inflation upwards, at the same time cost pressures were alleviated through various tax regulations. In this context, the VAT rate reduction in food products from 8% to 1% in mid-February is notable. The re-arrangement of SCT bases in January had a positive effect on automobile prices, albeit slightly, and curbed the inflation in durable goods. Another positive development was the VAT rate reduction in staple products from 18% to 8%, chiefly in cleaning products through the end of March.⁵ In addition to residential electricity tariffs, the VAT rate in municipal water was also brought down, and pressures for price increases on this item were reduced. Foreign trade measures were also taken. While customs duties on vegetable oils were eliminated, export restrictions were imposed on some pulses and cereals or exports were made subject to prior permits, hence supply-side concerns were alleviated. Türkşeker, which plays an important role in the regulation of sugar prices, still provides affordable products to the consumer, despite the price increase in March. Similarly, the TGB continues efforts to regulate flour prices.

⁴ The raw milk support premium was increased from 20 kurus to TRY 1 per liter to be effective as of 1 March 2022 in an attempt to limit the pass-through from soaring production costs led by the developments in the world markets to final prices.

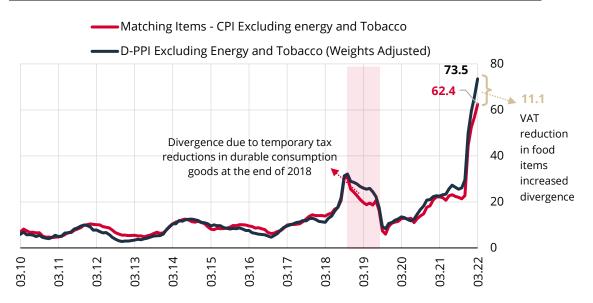
⁵ With the Presidential Decree No. 5359 published in the Official Gazette No. 31793 on 29 March 2022, the VAT rate applied to hygienic products was reduced to 8% as of 1 April 2022.

Zoom-In 2.2

Observations on the Pass-Through from Producer Prices to Consumer Prices

Producer price increases do not completely pass through to consumer prices. Their inflation rates can vary due to factors such as taxes, differences in scope and their positions in the supply chain. To be able to compare consumer and producer prices, it is important to distinguish between the factors causing the divergence in these two data. In this context, for comparison, a PPI index compatible with the CPI scope and weights was calculated by taking into account the difference in the production and consumption patterns (weight structure) of the economy, and energy and tobacco groups were excluded to reduce the effect of tax adjustments (Chart 1). These indices reveal that the consistency between producer and consumer inflation increases noticeably, and the pass-through between the two is fast and substantial.

Chart 1: CPI Items Matching the Harmonized D-PPI * (Goods excl. Energy and Tobacco, Annual % Change)



Source: CBRT, TURKSTAT.

Analyses indicate that producer prices excluding administered energy items are rapidly and substantially reflected on consumer prices. The recent producer and consumer inflation rates with harmonized indicators show that the gap between the series is lower than implied by the raw data. The latest data indicate that the difference mainly stems from food prices due to the VAT reduction on staple food products, which was introduced in February. Sectoral-based analyses point to some divergence in the clothing-footwear group and other core goods group in addition to food items. However, the most obvious differentiation in producer and consumer price dynamics is in the energy group. It is mostly attributed to the state subsidies and the timing of consumer price adjustments in electricity and natural gas coupled with the slight effect of the exclusion of taxes from D-PPI.

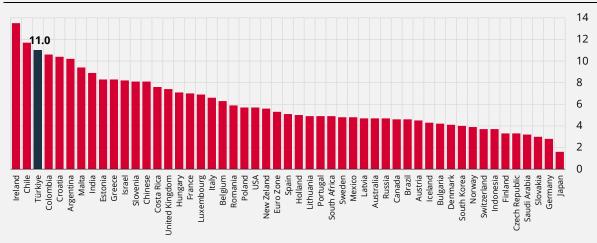
^{*} Items with matching producer and consumer prices are used.

Box 2.1

The Share of Sustainable Components in the Composition of Growth

Global economies recovered significantly in 2021 with the help of supportive policies and positive developments in the vaccination process. However, country-specific conditions and the measures they took against the pandemic caused a differentiation in their growth outlooks. In this period, as a result of the increase in vaccination, the gradual removal of pandemic-related measures on a global scale and the increase in mobility ensured the revival of activity in services, tourism and related sectors, which are highly sensitive to pandemic conditions, and a rapid recovery in global demand. Accordingly, with the improvement in global trade, production levels increased and employment losses decreased. The positive outlook in the global economy spread through national economies, lifting growth rates to high levels. However, problems stemming from supply chains, volatility in energy prices, emerging new variants, geopolitical tensions, rising debt levels, divergences in vaccination rates and the diversity of policies implemented against the pandemic caused the growth rates of countries to differ. With an overall annual growth of 11 percent in 2021, Türkiye was one of the countries with the highest growth rate (Chart 1).

Chart 1: Annual Growth (2021, %)

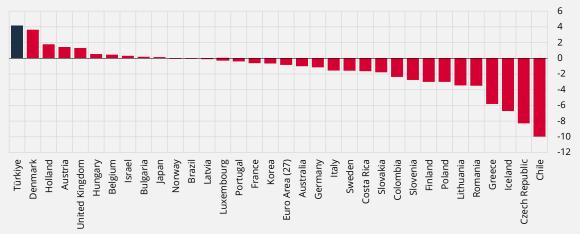


Source: IMF, OECD.

In order to strengthen the economy structurally, gain competitive advantage and reach a sustainable growth path through high value-added production, it is important to increase the weight and contribution of activities that increase potential growth, such as investments, and support the current balance with net exports in the growth composition. Net exports and machinery-equipment investments made strong contributions to growth in 2021. While net exports made a historically high contribution to the annual growth with 4.9 points, machinery-equipment investments continued to make a significant contribution with 2.3 points. In the last quarter of 2021, the Gross Domestic Product (GDP) increased by 9.1 percent on an annual basis. In this period, the contribution of net exports to annual growth was 4.2 points, while the contribution of machinery-equipment investments was close to 1.0 points. In this context, it was observed that Türkiye differed from other countries in terms of the contribution of sustainable components to growth in that period (Chart 2 and Chart 3).

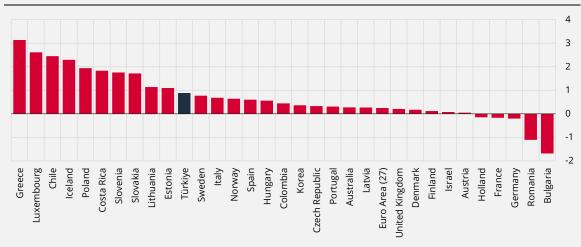


Chart 2: Contribution of Net Exports to Annual Growth¹ (2021 Q4, % Points)



Source: OECD and author's calculations.

Chart 3: Contribution of Machinery-Equipment Investments to Annual Growth (2021 Q4, % Points)



Source: OECD and author's calculations.

The share of net exports in national income, which recorded a significant decrease as a result of the decrease in foreign demand due to the measures and restrictions aimed at controlling and slowing the pace of the pandemic in 2020, converged to pre-pandemic levels in the following period due to the normalization steps in trade partners and the competitiveness of export companies and market diversification flexibility. In addition, the shares of machinery-equipment and net exports, which have recently contributed to sustainable growth and the current account balance, in GDP are above the long-term averages (Chart 4). The share of machinery-equipment investments, which ranked second in total investments for a long period of time, exceeded the share of construction investments as of the last quarter of 2020 and it exceeded 50 percent in the last quarter of 2021 (Chart 5). The annual increase in machinery-equipment investments for nine consecutive quarters since the last quarter of 2019 is considered important for sustainable growth.

¹ Estonian data is not included in the graph to preserve readability. In this period, the contribution of net exports to growth in Estonia was calculated as 20.3 points.

Chart 4: Share of Machinery-Equipment Investments and Net Exports in GDP (%)

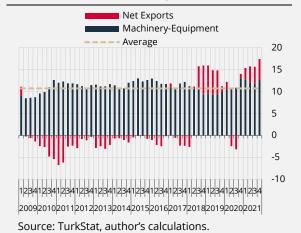
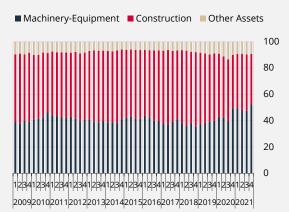


Chart 5: Share of Subcomponents in Total Investment Expenditures (%)

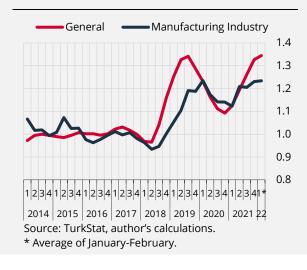


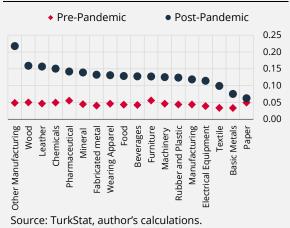
Source: TurkStat, author's calculations.

Due to the high course of commodity prices, supply-demand mismatch in some sectors, especially energy, and high levels of transportation costs after the pandemic, the prices of goods subject to foreign trade increased. In this context, when interpreting foreign trade developments, it is considered that an analysis on the basis of quantity would be healthier by excluding the effect of incidental increases in prices. While the ratio between the seasonally and calendar adjusted export and import quantity indices hovered around 1 on average between 2013Q1 and 2018Q2, it showed an upward trend in 2018-2019 due to the developments in the real exchange rate. Although the rate decreased during the pandemic period, it showed an increasing trend again in the post-pandemic period and regained the averages of the 2018-2019 periods. The ratio calculated for the manufacturing industry, on the other hand, followed a more volatile course compared to the general average, but tended to increase in the post-pandemic period (Chart 6). On a sectoral basis, it is observed that the average monthly increase rate of the export quantity index across the manufacturing industry sectors has increased approximately 3 times compared to the pre-pandemic period. The increase rates in sectors such as other manufacturing, wood and cork and leather are particularly noteworthy (Chart 7). In this context, it is evaluated that the positive outlook spread across the sectors in terms of export volume growth contributes to sustainable growth.

Chart 6: Ratio Between Export and Import Quantity Indices (4-Quarter Moving Average)

Chart 7: Manufacturing Industry Export Quantity Index Monthly Average Increase Rates on a Sectoral Basis ² (%)

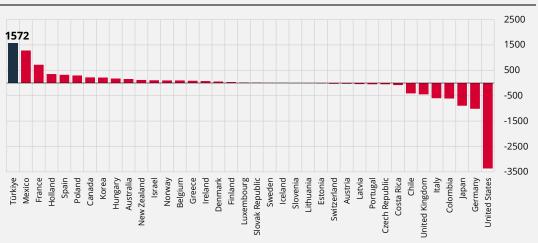




² The pre-pandemic period covers the years 2013-2019, and the post-pandemic period covers the average of January-February 2022 from the last quarter of 2019. The values in the charts are obtained by adjusting changes on a monthly basis in the relevant periods. Since the export quantity indices of tobacco, petroleum, computers and motor vehicles decreased in the post-pandemic period, they were not included in the chart.

These developments observed in the sustainable components of the growth composition have positive reflections on the labor market. By the end of 2021, Türkiye was the country that increased its employment the most among OECD countries compared to the pre-pandemic period (Graph 8). In this period, seasonally adjusted employment growth was over 1.5 million and employment gains spread across sectors. Industrial employment increased by around 12 percent with 684 thousand people compared to the pre-pandemic period and reached the historical highest level. In this period, construction employment increased by 309 thousand people, while the increase in service employment was 800 thousand people. While the employment rate increased by 0.9 points, the number of unemployed decreased. With the effect of the increase in employment, the unemployment rate decreased by 2.3 points compared to the pre-pandemic period, while the decrease in the nonfarm unemployment rate was 2.8 points. At the end of 2021, the employment rate increased by 3.4 points compared to the end of the previous year and stood at 46.4 percent. In the same period, the seasonally adjusted unemployment rate decreased from 13 percent to 11.1 percent by approximately 1.9 points. Non-farm unemployment rate, on the other hand, decreased by 2.1 percentage points from 15.1 percent to 13 percent. In addition, the number of unemployed decreased by 318 thousand people in this period.

Chart 8: Change in Employment* (Seasonally Adjusted, Change From 2019 Q4 to 2021 Q4, Thousand People)



Source: OECD and TurkStat.

^{* 2021}Q3 data is used for countries that do not have 2021Q4 data for employment.

Box 2.2

Findings Obtained from Interviews with Businesses

Within the Central Bank of the Republic of Türkiye (CBRT), studies are carried out under the name of "Economic Lens to the Real Sector", which is based on face-to-face meetings with businesses1. This box summarizes the findings from the interviews conducted during the period Jan-Mar 2022.

Information from the interviews indicated a loss of momentum in economic activity in the first quarter of the year compared to the previous quarter. It was observed that the buoyancy in exports reflected positively on production activities, whereas the slowdown in domestic demand limited the increase in production.

It was reported that the general level of prices, disruptions in supply chains, and firms' financing needs were highlighted as factors that put pressure on domestic demand.

It was observed that rising uncertainty perception and cost increases since mid-February due to the escalation of the Russia-Ukraine conflict have become important factors that affect domestic sales negatively. The fact that consumers and companies brought their purchases forward due to volatility in exchange rates in the previous quarter, was said to be another factor that slowed down domestic sales in this quarter. In this context, it was seen that the stable course of the value of the Turkish lira as of February and the positive effects of wage increases on domestic demand remained limited.

It was reported that the trade between companies in export-related sectors and the relatively buoyant consumer demand in certain product groups positively affected domestic sales. In this period, it was pointed out that the demand for some food products increased significantly due to the rise in supply concerns, and it was emphasized that the campaigns organized by the companies had supported the sales, especially of white goods. Apparel sales are reported to be positive in cities with buoyant tourism activities. It was also shared that sales of housing to foreigners continued and demand for investment stood out in the housing sector.

It is projected that overall demand conditions will improve in the second guarter as the postponed demand will step in, pandemic measures will be completely removed, supply problems will wane and tourism will gain strength in the coming months. It was frequently mentioned that a significant recovery in demand conditions is expected to begin by the second half of the year, depending on the improvement in economic parameters.

Similar to the previous quarter, it was widely stated that exports maintained their buoyant outlook.

Türkiye's attraction of higher demand during the pandemic period, exporters' ability to diversify their products and markets, the alleviation of pandemic measures in the main markets, and exchange rate developments were the main factors underlying this outlook. Besides, it was also observed that companies strategically tended to increase their exports with the aim of compensating the slowdown in domestic sales. In this context, it has been evaluated that export maintained its strength despite the regional trade adversity caused by the Russia-Ukraine conflict. It was observed that the positive outlook in exports spilled over into all sectors, especially in textiles, clothing, basic metal, furniture, and the automotive supply industry. It is reported that the USA market has started to gain importance in the apparel and textile sectors, besides Europe. However due to the capacity limit, some companies

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 businesses in different sectors. The findings obtained from the interviews constitute a high-quality and timely source of information for monetary policy decisions. Interviews are held with businesses in the manufacturing industry, and trade and services sectors within the framework of the sample created by considering their weight in the total economic activity at sectoral, regional and scale level. This study includes evaluations and inferences based on interviews with businesses and does not reflect the views of the Central Bank of the Republic of Türkiye. The information and findings obtained may differ from the official statistics, information and findings that will be published later.

need additional investment to meet their increasing export potential. Demand has started to normalize in the existing markets in the white goods sector, while the furniture sector targeted the European markets where more value-added sales can be made. While the demand for commercial vehicles in the automotive sector remained relatively robust, there were reports that companies had difficulty in responding to the increasing demand due to supply problems.

Optimistic expectations remain in place for export growth in the second quarter. Some companies stated that production and supply chain disruptions due to the Russia-Ukraine conflict may create new opportunities for companies in Türkiye. Nevertheless, the risk of global inflation suppressing foreign demand, disruptions in raw material supplies and uncertainties regarding the course of the conflict are monitored by companies as risk factors.

Despite the positive effects of buoyant exports, it was observed that the slowdown in domestic demand restrained the increase in production.

It was stated that supply shortages continued, albeit lessening, and put pressure on the production activities of companies especially in the automotive, white goods, furniture, clothing, food, and construction-related sectors. Exporting companies retained to produce with high capacity, and it is stated that this pace will be maintained in the upcoming period as well. Meanwhile production is expected to pick up in the second quarter in line with the improvement in domestic demand expectations.

It is observed that the investment stance of exporting companies is more positive than that of the companies operating in the domestic market.

While it was reported that global and geopolitical uncertainties and long-term financing conditions in particular restrained the capacity-building investment appetite, it was also reported that companies focused more on investments that were ongoing or those deemed obligatory to maintain competitiveness in this period.

On the other hand, the appetite for machinery investments was relatively high in the manufacturing industry companies, chiefly in the textiles, paper and cardboard, glass, ceramics, basic metal, electrical equipment, and automotive supplyindustry. Some manufacturers companies opted for investments that will reduce their dependence on imports. While some reported that software development and R&D investments aimed at increasing efficiency are prioritized by companies, it has been observed that companies in many sectors are planning solar energy investments following the recent increase in energy costs. It was emphasized that companies in the retail and services sector tended to develop ecommerce, while the appetite for opening new stores or renovation investment weakened.

In line with their investment stance, companies aimed to maintain their current employment level in the upcoming periods. Expectations regarding demand conditions and skilled worker shortages are expected to influence employment plans of the companies.

Firms' financing needs continued to rise due to the increase in their working capital needs.

Rising working capital needs are associated with rising raw material prices, higher costs led by energy and labor expenses and cash flow mismatches. Having been reported as tight in January, credit conditions and standards started to ease in February and this easing became more evident in March.

Busines to business conditions, which had tightened significantly in January, eased gradually in the remainder of the quarter. It was stated that there was no further deterioration in maturity and cash flow as of March, and the stability observed in the value of the Turkish lira throughout the quarter caused a relief in trade conditions.

It was emphasized that the increase in energy costs puts pressure on companies.

Energy was the most emphasized cost factor throughout the quarter, and it was followed by rising input costs and labor costs due to global commodity prices. The cost pressure is expected to continue if the Russia-Ukraine conflict is not resolved within short period of time. It was stated that the cost pressure stemming from the exchange rate had decreased significantly compared to the previous quarter. It is considered that the increase in liraization will support this process and will have a positive effect on pricing behavior.

Box 2.3

Possible Effects of Geopolitical Developments on Current Account Balance

Considering that Russia is an important energy supplier at the global level and bearing in mind Türkiye's place in goods and services trade with Ukraine, the conflict between the two countries will have effects on Türkiye's current account balance through foreign trade and tourism channels. This box evaluates the possible reflections of recent geopolitical developments on exports of goods and services and imports, especially energy, and their effects on tourism.

The direct impact of recent geopolitical developments on global energy prices is already being observed. With the start of the conflict, the oil prices hit high levels with the announcement of the sanctions against Russia, which has an important share in global oil production. On the other hand, the start of negotiations between Russia and Ukraine, the decisions of countries to use their strategic reserves, and concerns over global demand triggered by the increasing number of cases in China have caused oil prices to follow a volatile course (Chart 1). Sanctions against Russia, Europe's largest natural gas supplier, have sparked supply concerns in the natural gas market and increased natural gas prices. Netherlandsbased 1-month natural gas prices, which are indicative for European natural gas prices, dropped significantly and returned to pre-conflict levels after reaching historical highs. Although there is a similar outlook in coal prices, an increasing trend has been observed recently. On the other hand, natural gas prices in the USA showed an upward trend due to factors such as a demand shift to liquefied natural gas (LNG) and supply-side concerns (Chart 2).

Chart 1: Brent Crude Oil and Coal Prices (US Dollar)

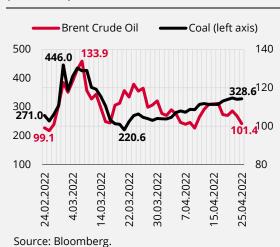
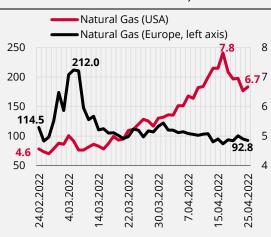


Chart 2: Natural Gas Prices (US Dollar/MMBTU and Euro/Mwh)



Source: Bloomberg.

Non-energy commodity prices, which were on the rise due to uncertainties in global food security, supply-demand mismatch, disruptions in the supply chain and high levels of transportation costs before the conflict, also displayed a volatile course due to the conflict, and have been moving in a wide range. When analyzed by sub-items, the high levels in wheat and iron prices are noteworthy. Although the course of energy and non-energy prices for the upcoming period will be largely shaped by the results of the negotiations between Russia and Ukraine, it is considered that global liquidity conditions, the increasing number of cases in China and the possible effects of the conflict on global growth will keep downside risks to prices alive.

Possible changes in energy import demand in the coming period will be a factor that may limit the sensitivity of the import bill to global energy prices. In recent years, the increase in the share of natural gas imports made through the LNG channel and the diversification of the number of import partners are seen as an important development in terms of supply conditions. In addition, it is predicted that the decrease in energy production from alternative energy sources such as hydroelectricity that was observed in 2021 due to the drought may not be repeated in 2022, and the share of natural gas in electricity production may decrease. This may limit the risks to the current account balance arising from energy imports.

Chart 3: Cyclically Adjusted Current Account Balance (Annualized, % of GDP)

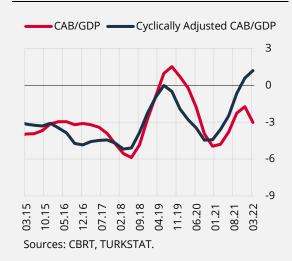
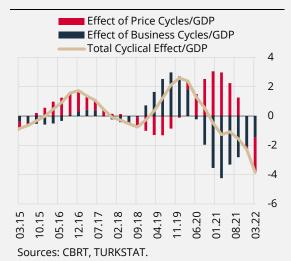


Chart 4: Contributions to the Cyclical Effect (Annualized, % Points)



The ongoing increases in the prices of both energy and other commodities such as industrial metals and food products cause import prices to remain above their trends, and thus widen the current account deficit. When adjusted for the effects of business cycles as well as price cycles, which are caused by the deviations of prices from their long-term trends, it is estimated that the annualized current account balance posted a surplus in the first quarter of the year (Chart 3). In the same quarter, the annualized total cyclical impact was negative and more than half of it is predicted to be driven by price cycles (Chart 4). It is also noteworthy that the business cycle effect on the current account balance is negative.

Chart 5: Exports (Special Trade System (STS), Per Work Day, Million USD)

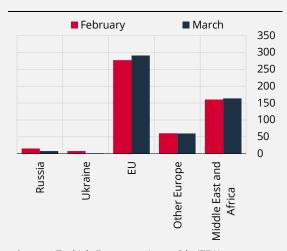
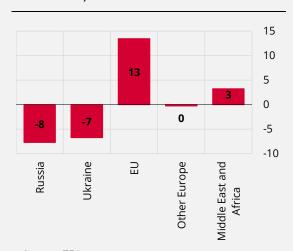


Chart 6: Change in Exports Between February and March (STS, Per Work Day, Million USD)



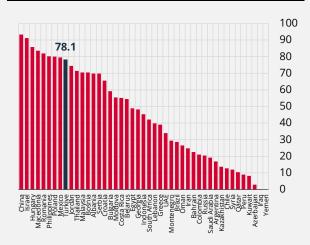
Source: Turkish Exporters Assembly (TEA). Source: TEA.

On the export side, it seems that the increase in exports to other countries, thanks to the dynamic capacity and market diversification flexibility of exporting companies, has compensated for short-term losses (Charts 5 and 6). Manufacturing industry products have a relatively large share of 78.1% in Türkiye's exports compared to most of its peers and neighboring countries (Chart 7). In addition, Türkiye has achieved a higher market and product diversification compared to similar countries by selling 4,308 products to 226 different countries and regions (Charts 8 and 9). The fact that the share of the three most exported products in total is relatively low, at 29.3%, indicates that exports are not concentrated in particular products (Chart 10). In this context, Türkiye can maintain its export performance despite the recent supply problems, thanks to its low country and product concentration in exports. On the other hand, besides the negative effects of increases in energy prices on the current account balance through a

rise in Türkiye's energy import bill, these increases may also have positive contributions indirectly via the external demand channel. The rise in energy prices may lead to sizeable increases in the incomes of energy exporting countries such as Iraq, Iran and Azerbaijan, which have a significant share in Türkiye's exports. With the increase in the import demands of these countries as a result of higher oil revenues, the growth of Türkiye's exports to these countries will be accelerated.

Chart 7: Share of Manufactured Goods in Exports (Average of 2018-2020, %)

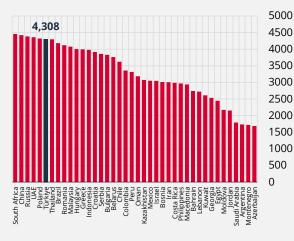
Chart 8: Number of Export Partners* (2019)

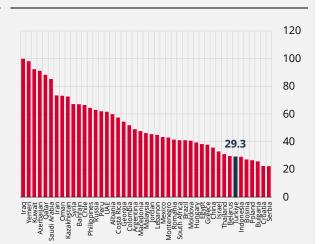


250 223 200 150 100 50

Chart 9: Number of Export Products (2019)

Chart 10: Share of the Top Three Export **Products** (2020, %)





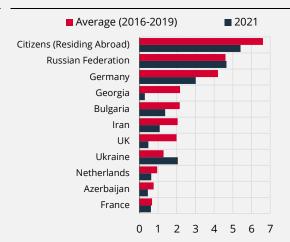
Sources: World Trade Organization, World Bank, United Nations Comtrade. * UN member states and self-governing/special status countries are included.

Travel revenues, which have contributed positively to the current account balance over the years, dropped significantly in 2020 to USD 10.1 billion due to the pandemic and the restrictions applied to reduce its impact. With the gradual lifting of restrictions, tourism activities revived in 2021, and travel revenues recovered and reached USD 20.8 billion (Chart 11). Data on the number of visitors in January and February of 2022 show that the recovery in tourism continues. Leading indicators regarding the number of visitors in March also indicate in the same direction. On the other hand, it is expected that the possible effects of the Russia-Ukraine conflict, which broke out at the end of February, on the tourism sector will be observed starting from May in particular, given that the visitors from these countries are mostly concentrated in the summer months.

Chart 11: Travel Revenues (Billion USD)







Sources: CBRT, TURKSTAT. Sources: TURKSTAT.

While it is inevitable that the number of visitors from Russia and Ukraine will be affected by the conflict, the average spending of visitors from these two countries is typically below the average spending level of visitors from other countries, limiting the potential negative impact of the conflict on travel revenues (Chart 12). Despite the conflict-related risks to tourism revenues in the near term, there are factors that can alleviate these risks. The increase in oil prices due to the Russia-Ukraine conflict brings along sizeable increases in the incomes of oil-exporting countries. This may lead to an increase in the number of tourists coming from oil-exporting countries, especially from countries that are geographically close to Türkiye. In addition, with the continuation of the post-pandemic normalization, the recovery in the number of visitors from regions with relatively higher average spending levels, such as Europe, is expected to accelerate in 2022. It is projected that the effects of the losses that may occur in the incomes of European countries due to the conflict on the tourism sector will be limited. It is predicted that the increase in the number of visitors due to the recovery will more than compensate for the decrease in the number of visitors from Russia and Ukraine, and travel revenues will continue to increase in 2022.

In summary, risks to the current account balance arising from rising energy prices due to recent geopolitical developments continue. However, since energy prices are very sensitive to geopolitical developments, it is considered that there are also downside risks to prices. On the export side, the dynamic capacity and market diversification flexibility of exporting companies are effective in compensating for losses due to the conflict. Finally, although conflict-related risks to tourism revenues have emerged, tourism revenues can reach pre-pandemic levels in 2022 with the support of factors that can partially compensate for these risks.

3. Medium-Term Projections

3.1 Current State, Short-Term Outlook and Assumptions

Changes in Key Forecast Variables

Economic activity remained strong in the fourth quarter of 2021 on the back of external demand.

Although aggregate demand conditions were slightly below previous projections in this period, they were still above their trend. Thanks to strong economic activity, the labor market continued to recover while unemployment rates fell. Leading indicators suggest that economic activity lost momentum in the first quarter of 2022 due to domestic demand, as projected in the January Inflation Report. Thus, the outlook presented in the January Inflation Report regarding output gap forecasts for the last quarter of 2021 and the first quarter of 2022 has been left mostly unchanged (Table 3.1.1).

Having exceeded the forecast range of the January Inflation Report, consumer inflation and B index inflation came in at 61.1% and 51.3%, respectively, in the first quarter of 2022. This deviation from forecasts was driven through costs and expectations by pricing formations that are not supported by economic fundamentals and import prices that surged amid geopolitical developments. In line with the forecasts of the January Inflation Report, demand conditions that lost momentum due to domestic demand, a stable exchange rate despite geopolitical developments, and anti-inflationary public finance actions prevented a gloomier inflation outlook.

Table 3.1.1: Development of Main Forecast Variables*

	2021-IV	2022-I
Output Gap	2.7	1.5
(%)	(2.9)	(1.6)
Consumer Inflation	36.1	61.1
(Quarter-End, Annual % Change)	(36.1)	(50.1)
B** Index Inflation	34.9	51.3
(Quarter-End, Annual % Change)	(34.9)	(44.6)

^{*} Numbers in parentheses are from the January Inflation Report.

Assumptions on Exogenous Variables

The Russia-Ukraine conflict as well as China's renewed lockdown measures added to the downside risks to global economic activity. The tensions between Ukraine and Russia that turned into a full-fledged conflict at the end of February affect the global economy through commodity prices, supply and trade. Commodity prices are on the rise across the board, especially for energy and food, while the global growth outlook is adversely affected by supply constraints, which were about to ease thanks to the lifting of pandemic restrictions but tightened again after the sanctions against Russia. In fact, recently released high frequency data reflect such negative effects, and the course of the war and sanctions will play an important role in global growth. On the other hand, uncertainty remains as to how much China's renewed lockdown measures in major trade and financial hubs amid a surge in new cases will affect the global supply chain. Against this background, the export-weighted global growth index, a measure of Turkey's external demand outlook, was revised downwards. Meanwhile, the fact that higher energy prices benefit the growth outlook for energy exporting countries combined with Turkey's dynamic export structure offering market flexibility will curb the negative outlook for its external demand.

Global inflation continued to rise at a remarkable clip amid recent developments. Thus, global financial conditions are assumed to be tighter than anticipated in the previous reporting period. Supply constraints, production bottlenecks and international commodity prices, which have been increasing due to geopolitical developments, pushed up global inflation to historic highs. Therefore, monetary policy stances of central banks across advanced and emerging economies varied according to their macroeconomic outlooks, while their communications for the future reflected a similar divergence. Currently, major central

^{**} B index is the CPI excluding unprocessed food, alcohol, tobacco, energy and gold.

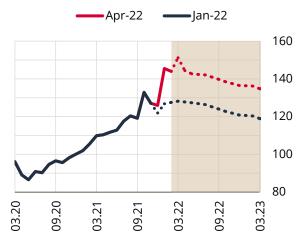
banks maintain their accommodative stances and continue with asset purchases, albeit at a reduced pace, but markets expect the Fed and ECB to tighten their policies in the upcoming period.

Assumptions regarding international crude oil prices and USD-denominated import prices have been revised upwards. After having soared in the previous reporting period, both the level and volatility of crude oil prices increased significantly due to the risks sparked by the war (Chart 3.1.1). In the following period, waning prospects of an EU oil embargo against Russia led to a slight decline in crude oil prices. On the other hand, the release of strategic reserves by countries and the pandemic-driven impending drop in China's energy demand helped bring prices down. In this period, nevertheless, sharp increases were seen in crude oil prices as well as import prices, particularly for other energy items and agricultural commodities (Chart 3.1.2). Thus, crude oil and USD-denominated import price assumptions based on futures price curves have been revised upwards (Table 3.1.2).

Chart 3.1.1: Revisions to Oil Price Assumptions* (USD/Bbl)

Apr-22 -Jan-22 120 100 80 60 40 20 03.23 03.22 20 09.22 20 03.21 93. 9 9 Sources: Bloomberg, CBRT.

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



Sources: CBRT, TURKSTAT.

Assumptions for food prices have been revised upwards for 2022 and 2023. Annual inflation in food and non-alcoholic beverages jumped to 70.3% in the first quarter of 2022. The rise in food inflation was largely driven by higher international prices of agricultural commodities and input items, primarily energy, due to geopolitical developments. Food price inflation is likely to remain elevated for some time amid supply constraints in the upcoming period, before falling later in the year due to a base effect and ending 2022 at 49.0% and 2023 at 15.0% (Table 3.1.2).

^{*} Shaded area denotes the forecast period.

^{*} Shaded area denotes the forecast period.

Table 3.1.2: Revisions to Assumptions*

	2022	2023
Export-Weighted Global Production Index (Annual Average % Change)	3.0 (4.3)	3.3 (3.0)
Oil Prices (Average, USD)	102.2 (80.4)	93.9 (74.3)
Import Prices (USD, Annual Average % Change)	22.2 (8.2)	-7.0 (-6.7)
Food Prices (Year-End % Change)	49.0 (24.2)	15.0 (10.0)

^{*} Numbers in parentheses are from the January Inflation Report.

Although adjustments to administered prices had a larger impact on inflation in the first quarter of 2022, public finances remain supportive of prices. In the first quarter of the year, prices of electricity, natural gas, alcohol, tobacco and raw milk, which are largely administered by the state, registered sharp increases. On the other hand, public finance actions such as tax reductions, subsidies, export restrictions, reduced customs duties and agricultural input stimulus hindered a more negative inflation outlook.

Medium-term projections are based on an outlook in which macroeconomic policies are determined with a medium-term perspective and in a coordinated manner with a focus on bringing inflation down. In this context, it is assumed that adjustments to administered prices will be determined to support disinflation in the medium term. A strong policy coordination prioritizing disinflation is critical to maintaining improvements in the risk premium and perceptions of uncertainty.

3.2 Medium-Term Projections

The CBRT formulates monetary policy decisions with a medium-term perspective based on all factors affecting inflation and their interaction, focusing on the achievement of price stability on a lasting basis.

The monetary policy stance will continue to be determined with the focus on evaluating the sources of the risks to inflation, their permanence and how they can be controlled by monetary policy, targeting sustainable price stability with a cautious approach. It is envisaged that the disinflation process will start on the back of the liraization-oriented steps taken and decisively pursued for sustainable price and financial stability along with the resolution of the ongoing conflict and the elimination of the base effects on inflation. Accordingly, inflation is projected to be 42.8% at the end of 2022; fall to 12.9% at the end of 2023; and fall to 8.3% by the end of 2024. With a 70% probability, inflation is expected to be between 46.9% and 38.7% (with a mid-point of 42.8%) at end-2022, and between 17.7% and 8.1% (with a mid-point of 12.9%) at end-2023, and between 13.2% and 3.4% (with a mid-point of 8.3%) at end-2024 (Chart 3.2.1).

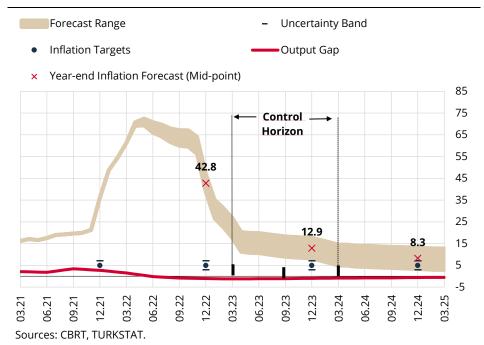


Chart 3.2.1: Inflation and Output Gap Forecasts* (%)

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

Given the recent inflation realizations and all the factors affecting inflation, year-end forecasts for 2022 and 2023 have been revised upwards compared to the previous Report period (Chart 3.2.2). Economic activity remained strong in the last quarter of 2021 owing both to domestic and external demand. Although data for the first quarter of 2022 indicate that economic activity decelerated slightly due to domestic demand, it remained strong. Besides, while the share of sustainable components in the composition of growth has increased, energy prices-driven risks to the current account balance remain in place. In the first quarter of 2022, the output gap forecasts were revised slightly downwards due to the slowdown in domestic demand conditions. The macroprudential measures in support of the monetary policy, and financial products such as FX-protected deposits served as a strong mechanism to restore stability in FX markets despite the large-scale global negative shocks seen in the first quarter. The recent increase in inflation has been driven by rising energy costs resulting from the heightened regional conflict, temporary effects of pricing formations that are not supported by economic fundamentals, supply-side factors such as the rise in global energy, food and agricultural commodity prices, and supply constraints. Moreover, high levels of inflation expectations continue to pose risks to pricing behavior and the inflation outlook. Against this background, inflation forecasts have been revised upwards.

Considering the analyses to decompose the impact of supply and demand shocks, the policy rate was kept unchanged at 14% in the first quarter of 2022. The MPC envisages that the disinflation process will start on the back of measures taken and decisively pursued for sustainable price and financial stability along with the resolution of the ongoing conflict and the elimination of the base effects on inflation. Accordingly, the MPC also decided to keep the policy rate unchanged in April. The cumulative impact of the policy decisions is being closely monitored, and to create an institutional basis for sustainable price stability, the comprehensive review of the policy framework continues with the aim of encouraging permanent and strengthened liraization in all policy tools of the CBRT.

Table 3.2.1: Revisions to Year-End Inflation Forecasts for 2022 and 2023 and Sources of **Revisions**

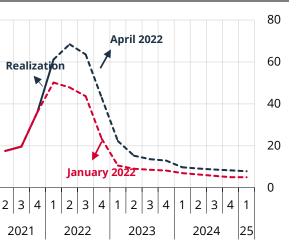
	2022	2023
2022-l (January 2022) Forecast (%)	23.2	8.2
2022-II (April 2022) Forecast (%)	42.8	12.9
Forecast Revision as Compared to the 2021-IV Period	19.6	4.7
Sources of Forecast Revisions (% Points)		
Turkish Lira-Denominated Import Prices	5.5	2.2
(Including the Exchange Rate, Oil and Import Prices)		
Food Prices	2.8	0.7
Administered Prices	2.1	-
Output Gap	-0.1	-0.1
Deviation from the Inflation Forecast / the Underlying Trend of Inflation	9.3	1.9

Source: CBRT.

The year-end forecast for 2022 was revised upwards by 19.6 points from 23.2% to 42.8%. Compared to the previous reporting period, the inflation forecast was increased by 5.5 points due to the revisions in the TRYdenominated import prices and by 2.8 points because of food prices. On the other hand, administered prices pushed the year-end inflation forecast up by 2.1 points largely due to hikes in alcohol-tobacco, electricity and natural gas prices, while the effect of the revision in initial conditions on the underlying trend of inflation increased the forecasts by 9.3 points. In addition, the revision in the output gap had a downward effect of 0.1 points on the inflation forecast (Table 3.2.1).

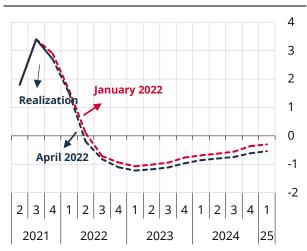
The inflation forecast for end-2023 was revised upwards to 12.9% from 8.2%. The effects of the revision in initial conditions on the underlying trend of inflation increased the year-end inflation forecast for 2023 by 1.9 points. On the other hand, the revision in the food inflation assumption increased the forecast by 0.7 points. While import prices in Turkish lira increased the forecast by 2.2 points, the revisions in the output gap had a downward effect of 0.1 points. (Table 3.2.1).

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



Sources: CBRT, TURKSTAT.

Chart 3.2.3: Output Gap Forecast (%)



Source: CBRT.

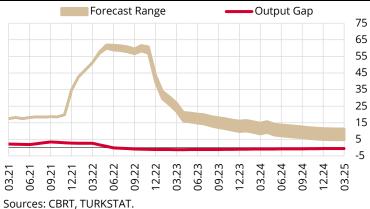
Projections are based on an outlook in which the geopolitical developments that turned into a conflict have increased downside risks to the global economic activity and the effects of rising global inflation on inflation expectations and international financial markets have become more visible. Leading indicators suggest that the global economy has been recovering albeit at a slower pace. However, geopolitical risks that turned into a conflict keep the downside risks to the global and regional economic activity in place and cause uncertainties to increase even more. The recovery in global demand, the high course of commodity prices, supply constraints becoming more evident in some sectors, particularly in the energy sector, and the elevated level of transportation costs lead to an increase in producer and consumer prices on a global scale. While the effects of high global inflation on inflation expectations and international financial markets are being monitored closely, central banks of advanced economies consider that inflation may continue to increase for a longer period than expected due to rising energy prices and the supply-demand mismatch. Although concerns about the pandemic eased, the global risk appetite decreased in the current Report period due to the rise in global inflation and the conflict between Russia and Ukraine. Moreover, in this period, exchange-rate volatility implied by options in emerging economies increased. The increase in longterm bond rates in advanced economies and the course of global financial conditions feed the risks to portfolio flows to emerging economies. The impact of such risks through the portfolio flows channel towards Türkiye are judged to remain more limited, considering the current levels of non-residents' portfolio positions.

The output gap is expected to decline gradually. Although data for the first quarter of the year show that the economic activity decelerated slightly due to domestic demand, it remains robust on the back of external demand. Nevertheless, due to geopolitical risks, rising energy costs and risks related to possible supply shortages, downside risks to external demand are higher compared to the previous reporting period, suggesting that regional divergences may become more evident. The loan-deposit spread indicating the lending tendency of banks has diverged according to loan types. While the commercial loan-deposit interest rate spread decreased compared to the previous reporting period, the consumer loan-deposit interest rate spread increased. Firms' access to Turkish lira financing sources at reasonable costs has become an essential part of the monetary policy strategy. Therefore, the goal is to make sure that market interest rates are formed in line with policy rates and at a level that supports the financing of investments and production. While on the one hand, exports and the current account balance, as well as investments and the employment are supported by targeted loans, on the other hand, macroprudential measures are taken to make sure that credit growth and credit composition contribute to the disinflationary process. Thus, the output gap is expected to contribute more to the disinflationary process.

Policy tools within the scope of the liraization strategy will be used decisively until strong indicators pointing to a permanent decrease in inflation are formed. The effectiveness of monetary policy will increase as a result of the increase in the weight of the Turkish lira in the balance sheets of households, companies and banks, the Turkish lira being the main payment instrument, and the development of loans with a speed and composition that will increase production and export capacity. The stability to be achieved in the general level of prices over time with the decisions taken within the framework of the liraization process, the decrease in country risk premiums, the continuation of reverse currency substitution and the upward trend in foreign exchange reserves, and the permanent decline in financing costs will positively affect macroeconomic stability and financial stability. In line with the goal of sustainable price stability in monetary policy, a liraization-oriented approach that also considers the risks to financial stability will continue to be conducted.

The volatilities that became more apparent in items that are beyond the control of monetary policy such as unprocessed food and energy cause a deviation in inflation forecasts. Core inflation indicators, which are obtained by excluding these items, contain more information about the underlying trend of inflation. For this reason, inflation forecasts excluding unprocessed food products, energy, alcoholic beverages, tobacco, and gold items (B index) are also shared with the public. Accordingly, the annual inflation of the B index is expected to take up a downtrend as of the last quarter of 2022 (Chart 3.2.4).

Chart 3.2.4: Annual Inflation Forecast for the B Index* (%)



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

3.3. Key Risks to Inflation Forecasts and Possible Impact Channels

Macroeconomic risks that may change the outlook, on which the inflation forecasts are based, and the monetary stance have been shared in detail in Section 1.3. Evaluations of the channels through which these risks may influence inflation forecasts presented in Section 3.2 and the direction in which they may change the forecasts are summarized in Table 3.3.1.

Table 3.3.1: Key Risks to Inflation Forecasts*

Key Risks	Tracked Indicators
Cost Pressures Pressures on producer prices keep mounting. The Russia-Ukraine conflict and additional pandemic restrictions in China's major trade and financial cities created a new wave of supply shocks and aggravated the current supply constraints. Historically high international food prices, rising commodity and energy prices, high transportation costs and supply chain disruptions are the main factors behind these pressures.	 Geopolitical developments and the course of the Russia-Ukraine conflict Crude oil prices and supply-demand balance OPEC+ decisions Industrial metal prices Agricultural commodity prices Supply-demand balance in agricultural products
	Administered prices

Table 3.3.1: Key Risks to Inflation Forecasts*

Uncertainties Regarding Financial Markets and the Global Macroeconomic Outlook

- Global inflation continues to rise sharply, while monetary policy communications of major central banks diverge.
- Major central banks still maintain their accommodative monetary stances and continue with their asset purchase programs, albeit at a reduced pace.
- Having hovered above historical averages on the back of lower real and nominal interest rates in the first quarter, loan growth is expected to return a moderate course in the first guarter and is therefore expected to contribute to disinflation.
- The CBRT considers that the growth rate of loans, including long-term Turkish lira investment loans, and the targeted use of accessed funds for real economic activity are important for financial stability.
- In this sense, the macroprudential policy toolkit will be strengthened with deeper analysis of recent credit developments.

- The course of demand and growth components
- Developments in loan and deposit rates
- Credit conditions (Bank Loans Tendency Surveys)
- Financing of the balance of payments
- Portfolio flows to stock and bond markets
- Bond yields and monetary policy stances of advanced economies
- Risk premium indicators
- Exchange rate markets
- Dollarization indicators
- Global inflation indicators and expectations
- The course of global monetary policies
- Demand and supply indicators for FX-protected deposits

Geopolitical Risks, the Pandemic and Economic Activity

- Geopolitical tensions and rising commodity prices, especially for energy, add to the downside risks to global and regional economic activity expectations for 2022.
- There are more downside risks to external demand than in the previous reporting period, which indicates that regional divergences may become more evident.
- Although the Russia-Ukraine conflict poses risks to travel and transportation revenues, factors such as the dynamic capacity and market diversification flexibility of the tourism sector can partially compensate for these risks.
- Geopolitical risks, new COVID variants and waves, and their effects on domestic and international demand conditions are closely monitored.
- There remain upside risks to the current account balance due to soaring energy prices amid the Russia-Ukraine conflict.
- A permanently balanced current account and at sustainable levels is crucial for price stability.

- Geopolitical developments
- The course of the pandemic and vaccination in Türkiye and abroad
- Exports, imports and the current account balance
- Developments in tourism and transport
- Demand and inflation indicators by sectors and subsectors
- Wage and labor cost indices

Table 3.3.1: Key Risks to Inflation Forecasts*

Pricing Behavior and High Inflation Expectations

- Recent data releases indicate that the deteriorated pricing behavior adds to upside risks to inflation.
- One of the main reasons that cause inflation to accelerate is the increased frequency of price updates and, thus, the decline in the average period for prices to remain unchanged.
- Survey-based indicators show that inflation expectations continue to rise, while the distribution of expectations points to inflation uncertainty.
- The heightened inflation poses an upside risk to pricing behavior through expectations for the upcoming period.
- Survey and market-based expectations for inflation and exchange rates
- Indicators for backward indexation
- Indicators for inflation uncertainty
- Financial volatility indicators

Monetary, Fiscal and Financial Coordination

• The disinflation process may be delayed, should the path of administered price and tax adjustments exceed the path envisaged in this Report.

- Adjustments to administered prices and taxes
- Developments in tax revenues and public spending
- Government wage policies
- Indicators for government budget and public debt stock
- Fiscal stance (structural budget balance)

^{*} Each risk row on the table presents evaluations of the channel through which inflation forecasts may change. Indicators tracked are listed in the column on the right.

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www.tcmb.gov.tr ISSN 1306-8199