

BRIEFING ON 2021-1 INFLATION REPORT

Naci Ağbal
Governor

28 January 2021
Ankara



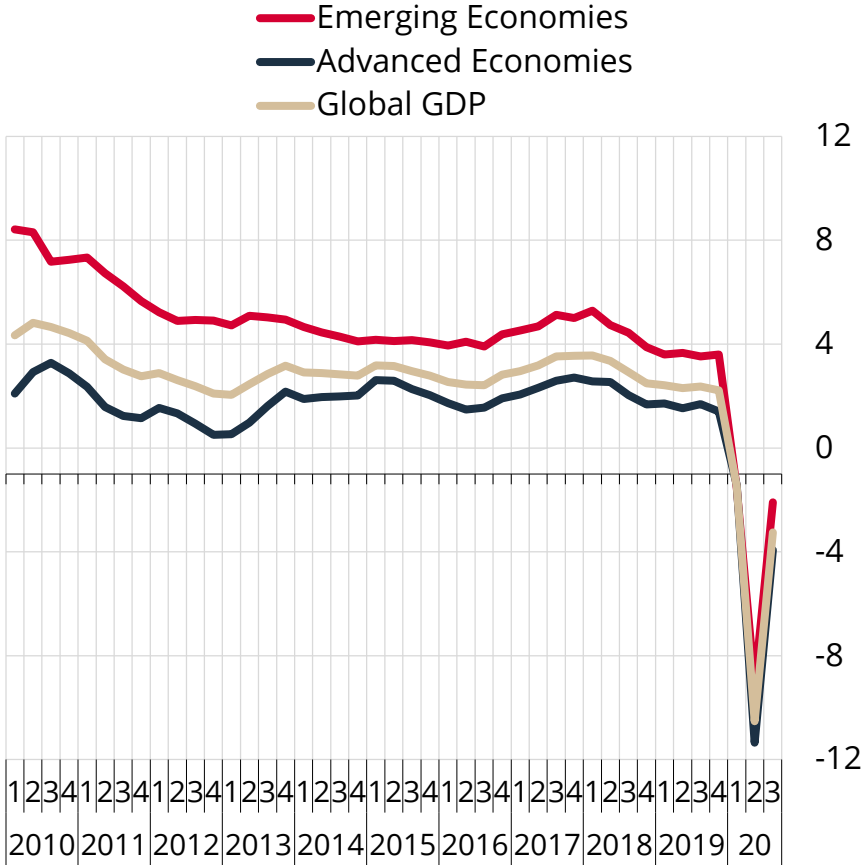
Outline

- Macroeconomic Outlook
- The Determinants of Inflation
- Medium Term Projections and Risks
- Monetary Policy Strategy

MACROECONOMIC OUTLOOK

Global Growth

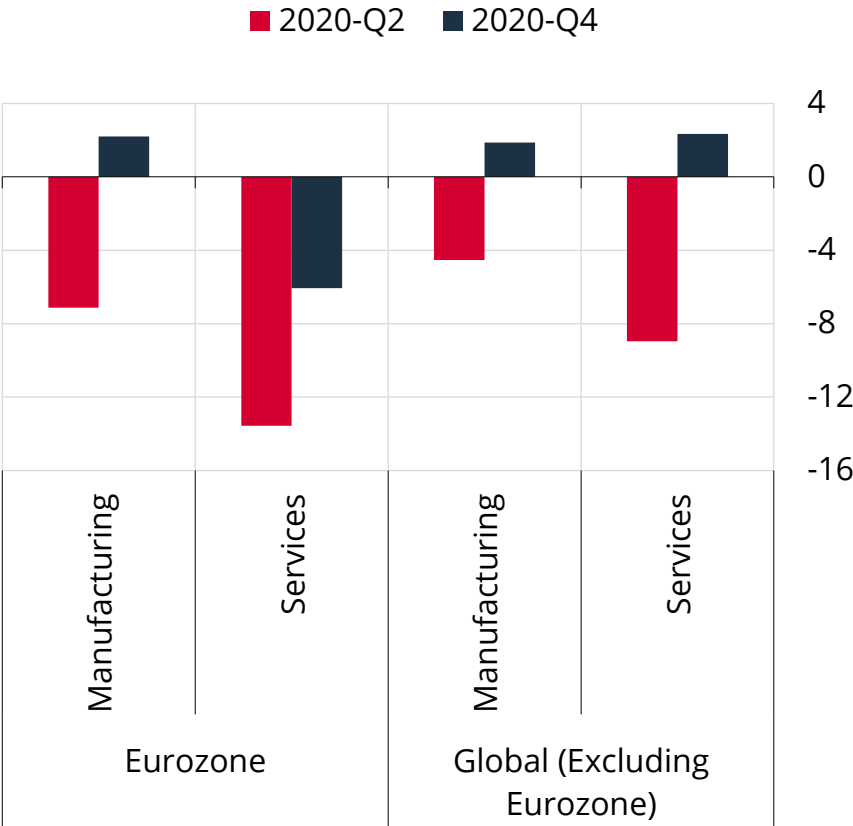
Growth Rates* (Annual, %)



Sources: Bloomberg, CBRT

Last Observation: 2020 Q3

PMI (Seasonally Adjusted, Quarterly Change, Point)

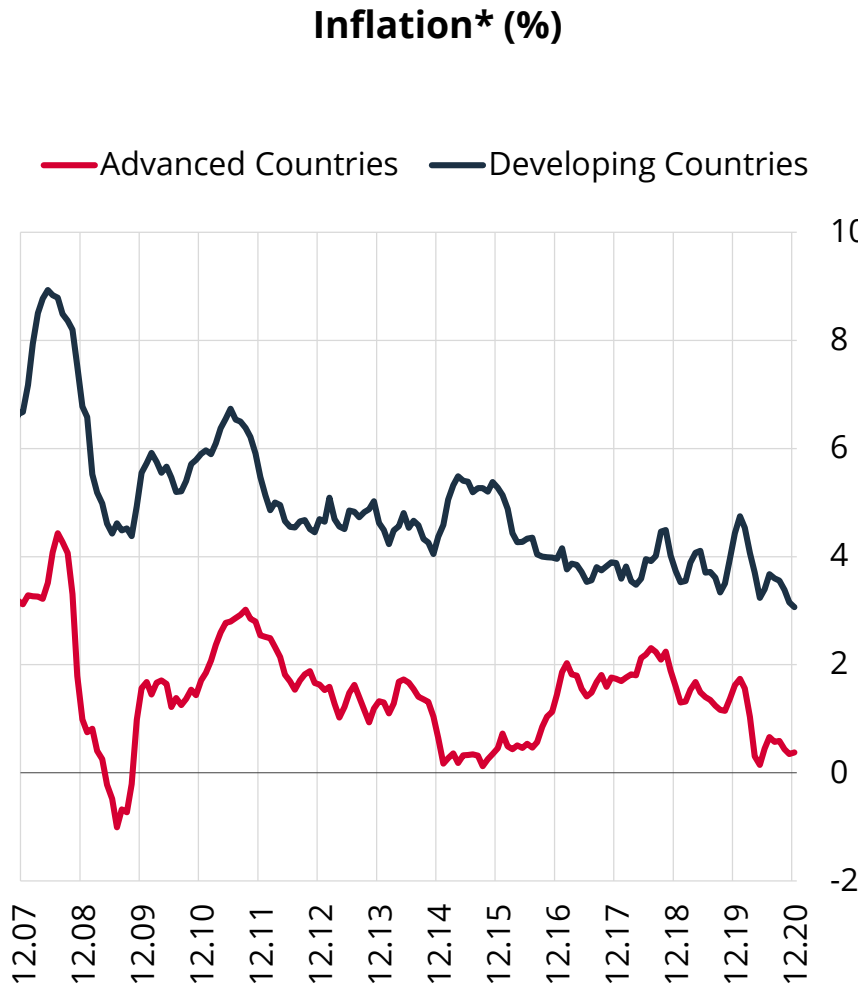


Source: IHS Markit

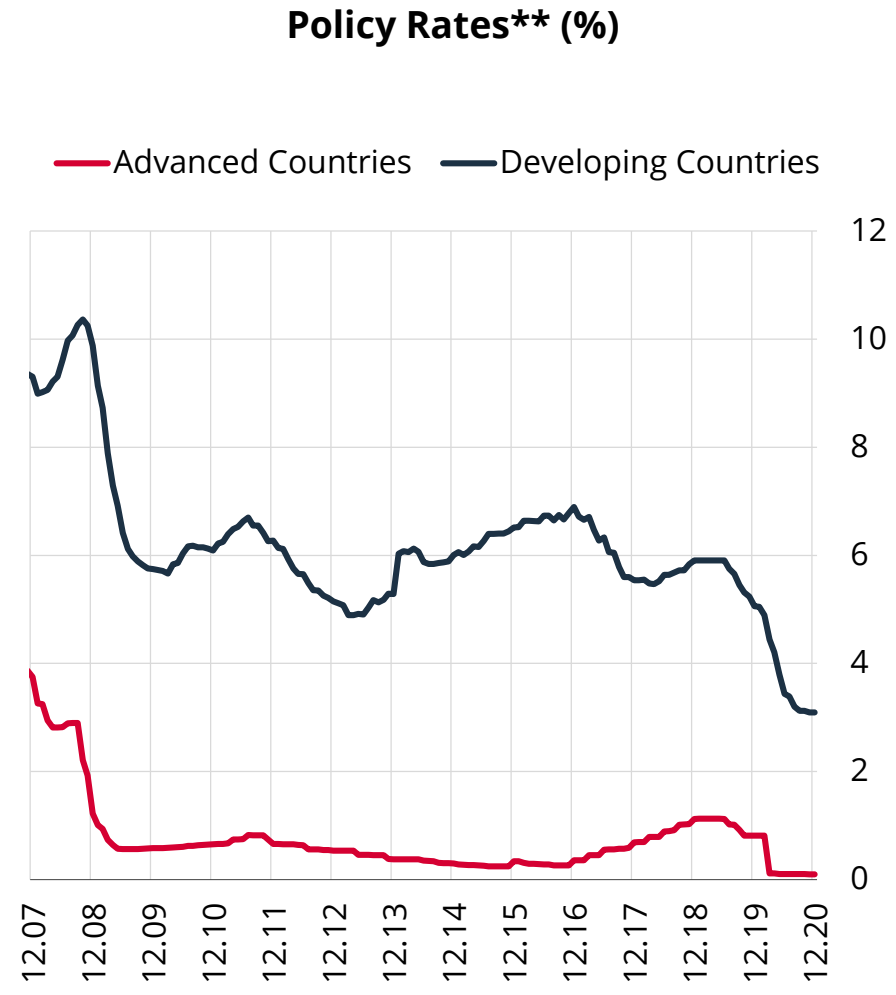
Last Observation: December 2020

* Advanced Economies: USA, Euro Area, Japan, UK, Canada, South Korea, Sweden, Switzerland, Norway, Denmark, Israel.
 Developing Economies: China, Brazil, India, Mexico, Russia, Turkey, Poland, Indonesia, South Africa, Argentina, Thailand, Malaysia, Czechia, Colombia, Hungary, Romania, Philippines, Ukraine, Chile, Peru, Morocco.

Global Inflation and Policy Rates



Source: Bloomberg, CBRT Last Observation: December 2020



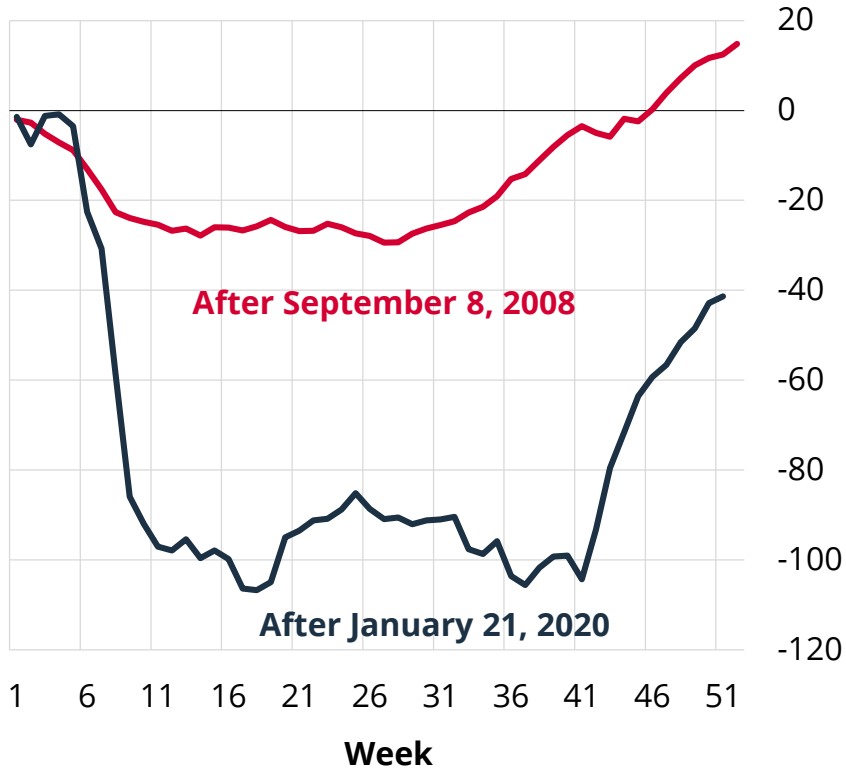
Source: Bloomberg, CBRT Last Observation: December 2020

*Advanced Countries: USA, Euro Area, Japan, UK, Canada, South Korea, Switzerland, Sweden, Norway, Denmark, Israel. Developing Countries: China, Brazil, India, Mexico, Russia, Turkey, Poland, Indonesia, South Africa, Argentina, Thailand, Czechia, Colombia, Hungary, Romania, Philippines, Ukraine, Vietnam, Chile, Peru, Egypt, Morocco.

**Advanced Countries: USA, Euro Area, Japan, UK, Canada, South Korea, Australia, Switzerland, Sweden, Norway, Denmark, Hong Kong, Israel, New Zealand. Developing Countries: Brazil, Mexico, Turkey, Poland, Indonesia, South Africa, Thailand, Czechia, Colombia, Hungary, Romania, Philippines.

Portfolio Flows

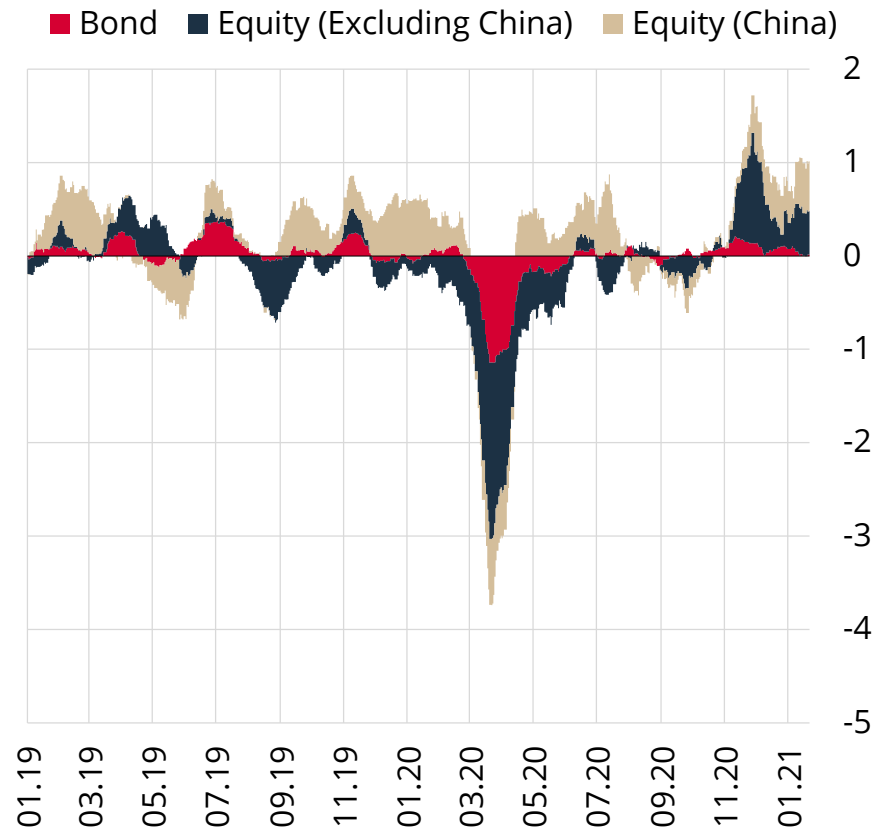
Portfolio Flows to Emerging Economies
(Cumulative, Daily, Billion USD)



Source: IIF

Last Observation: January 22, 2021

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

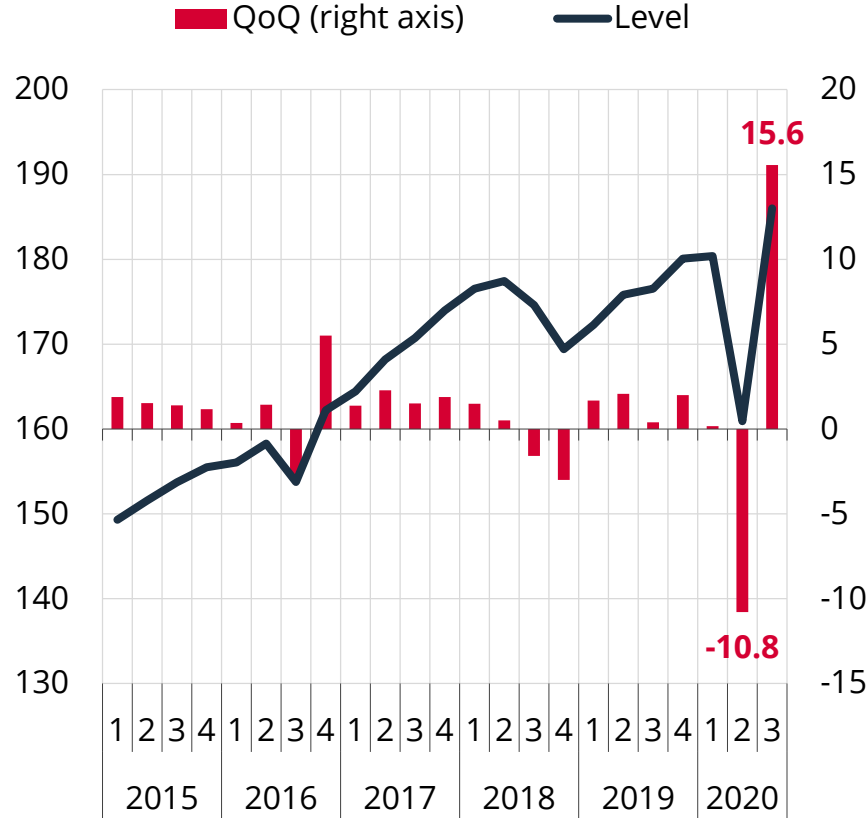


Source: IIF

Last Observation: January 22, 2021

Economic Activity

GDP (Seasonally and Calendar Adjusted, Chain-Linked Volume Index, 2009=100)

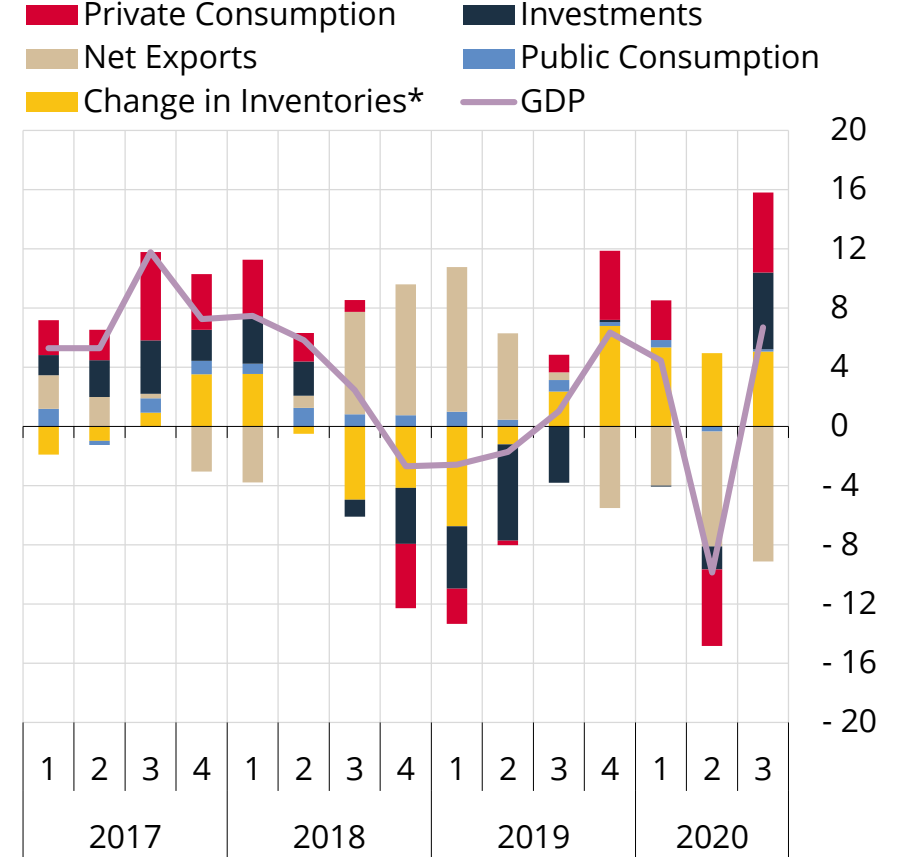


Source: TURKSTAT

Last Observation: 2020 Q3

* Includes stock and chain index-driven statistical deviation.

Contribution to Annual GDP Growth From Expenditure Side (% Point)

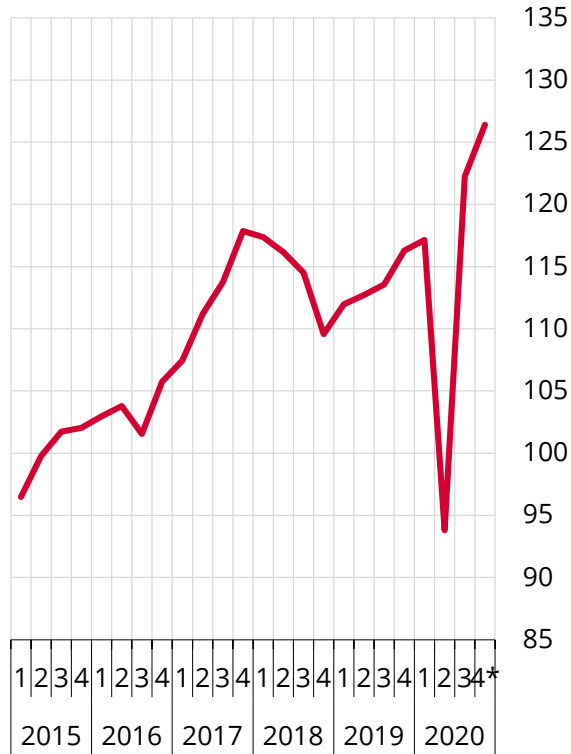


Source: CBRT, TURKSTAT

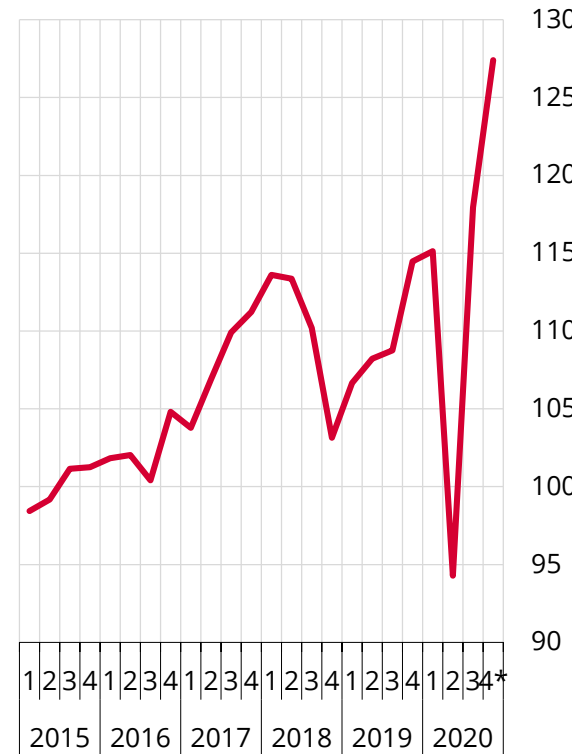
Last Observation: 2020 Q3

Economic Activity

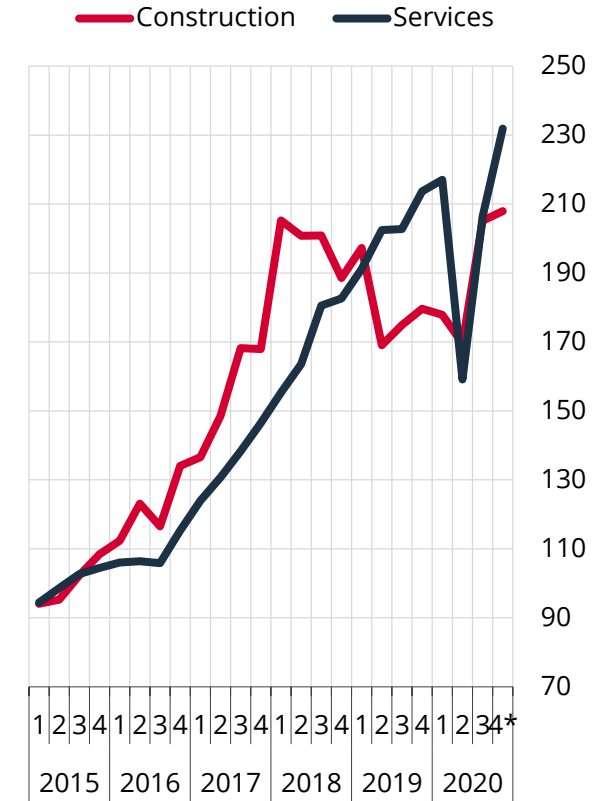
**Industrial Production Index
(Seasonally and Calendar Adjusted, 2015=100)**



**Retail Sales Volume Index
(Seasonally and Calendar Adjusted, 2015=100)**



**Sectoral Turnover Indices
(Seasonally and Calendar Adjusted, 2015=100)**



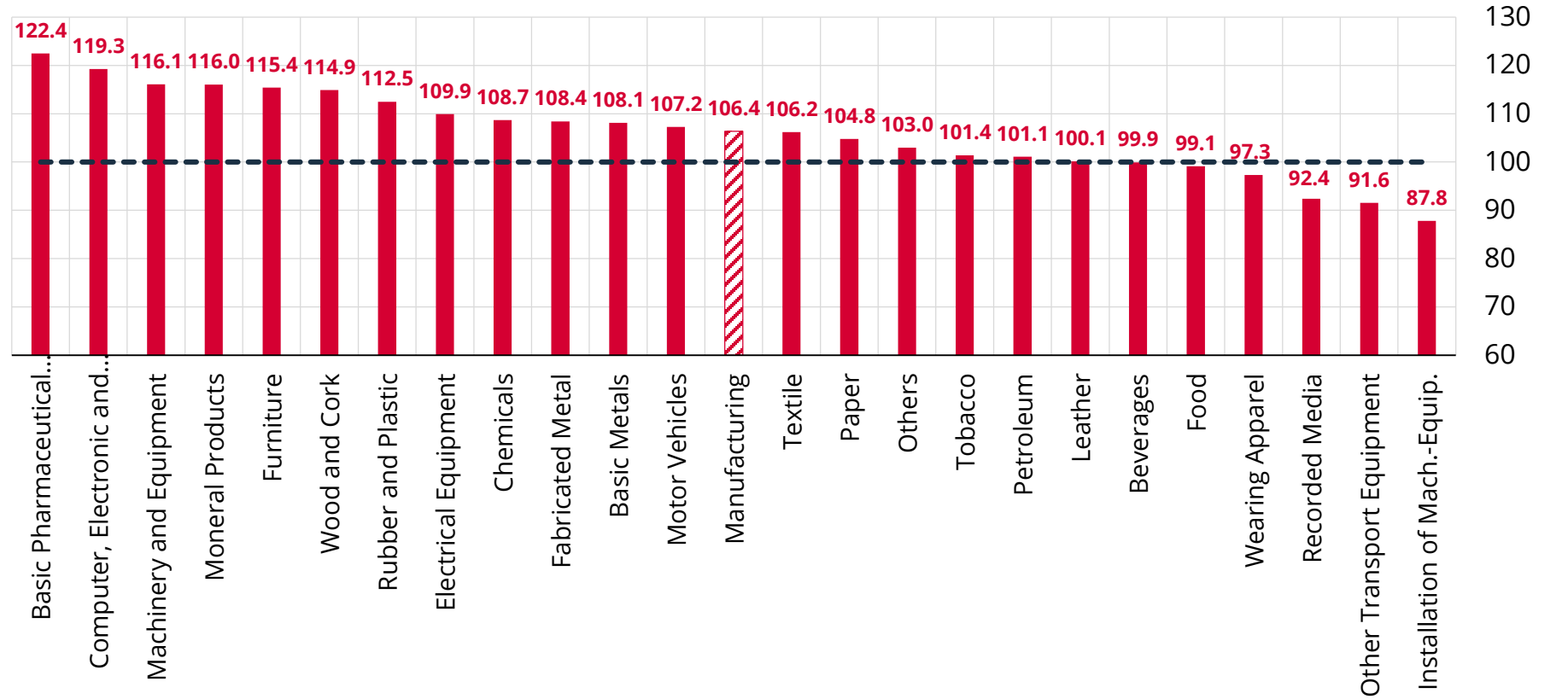
Source: TURKSTAT

Last observation: November 2020

* As of November 2020.

Economic Activity

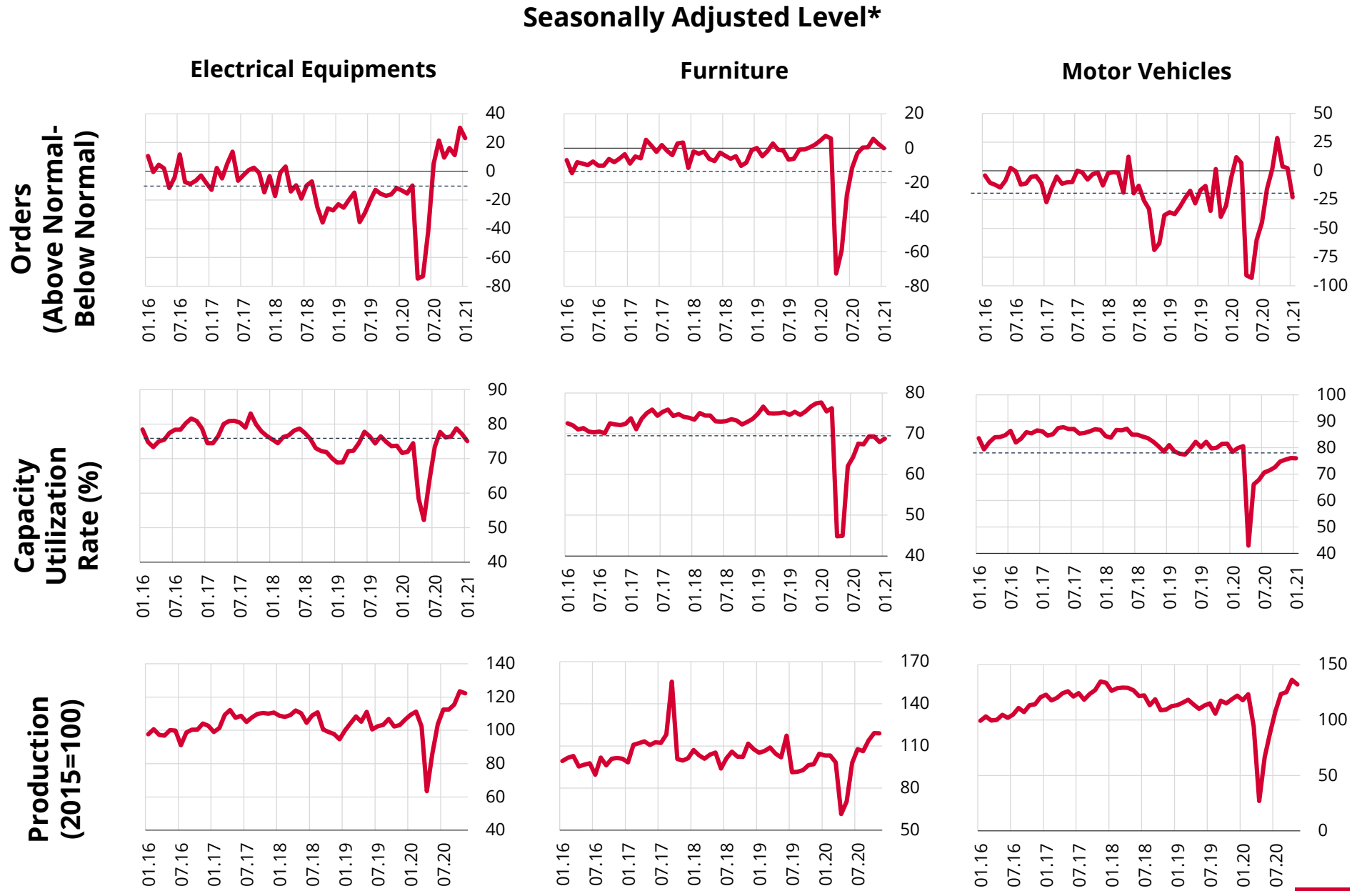
Industrial Production Index by Sectors
(February 2020 = 100, Seasonally and Calendar Adjusted)



Source: TURKSTAT

Last Observation: November 2020

Durable Goods Sectors



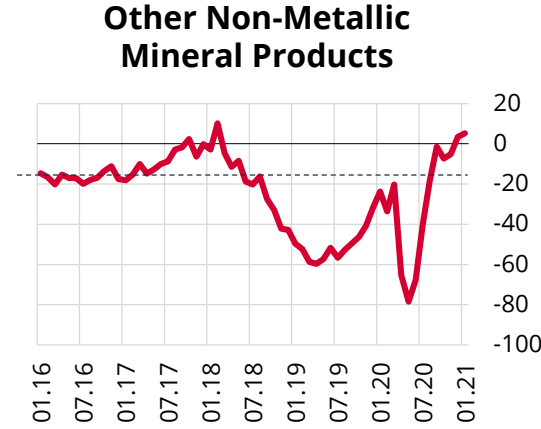
Source: CBRT, TURKSTAT

Last Observation: November 2020 for production, January 2021 for others.

* The dashed lines show historical averages.

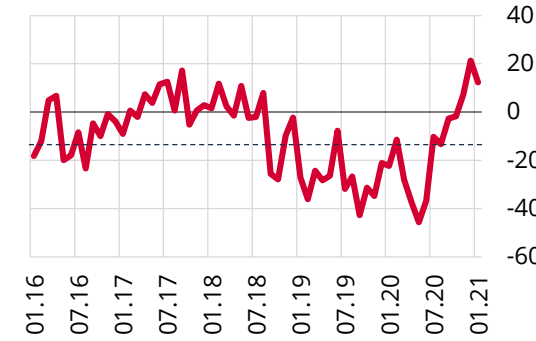
Construction Related Intermediate Goods Sectors

Orders
(Above Normal-
Below Normal)

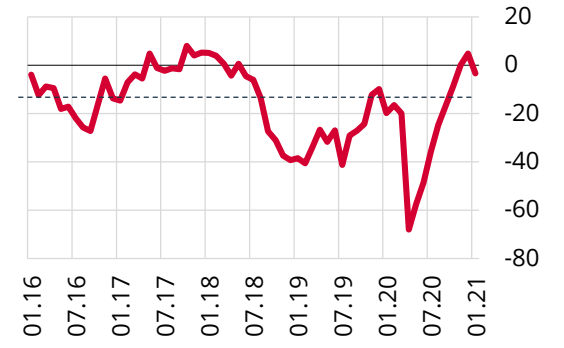


Seasonally Adjusted Level*

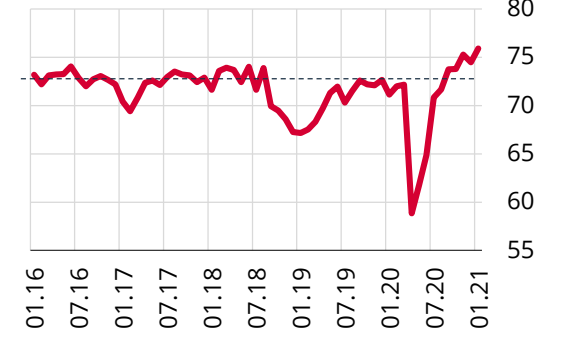
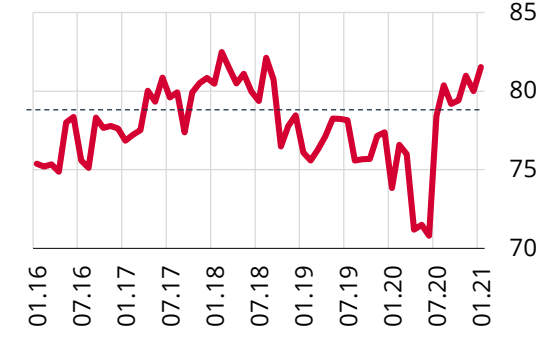
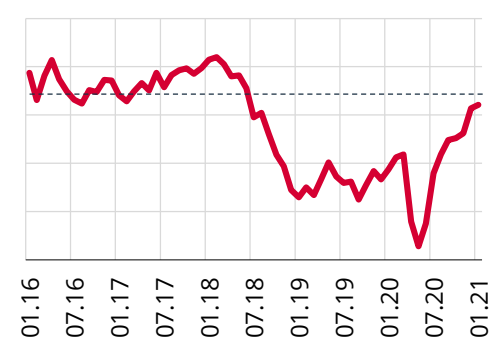
Base Metals



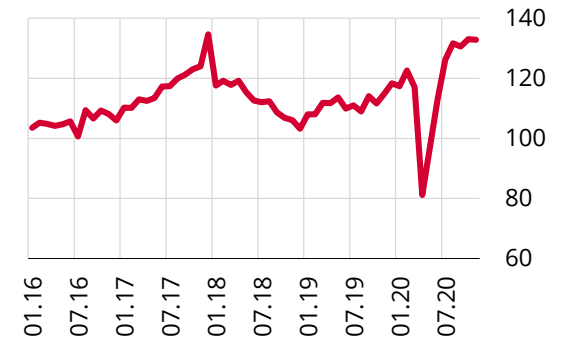
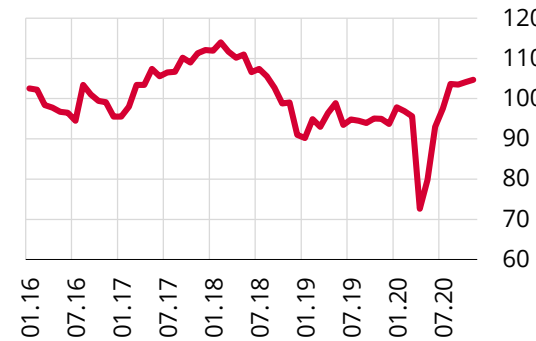
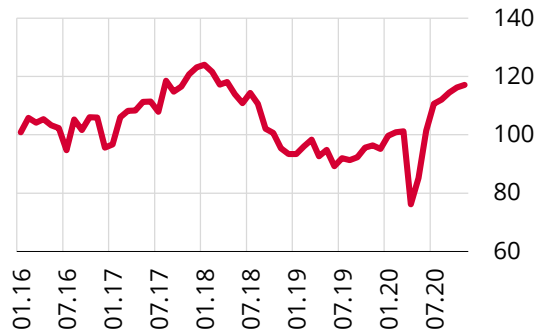
Fabricated Metals



Capacity
Utilization
Rate (%)



Production
(2015=100)

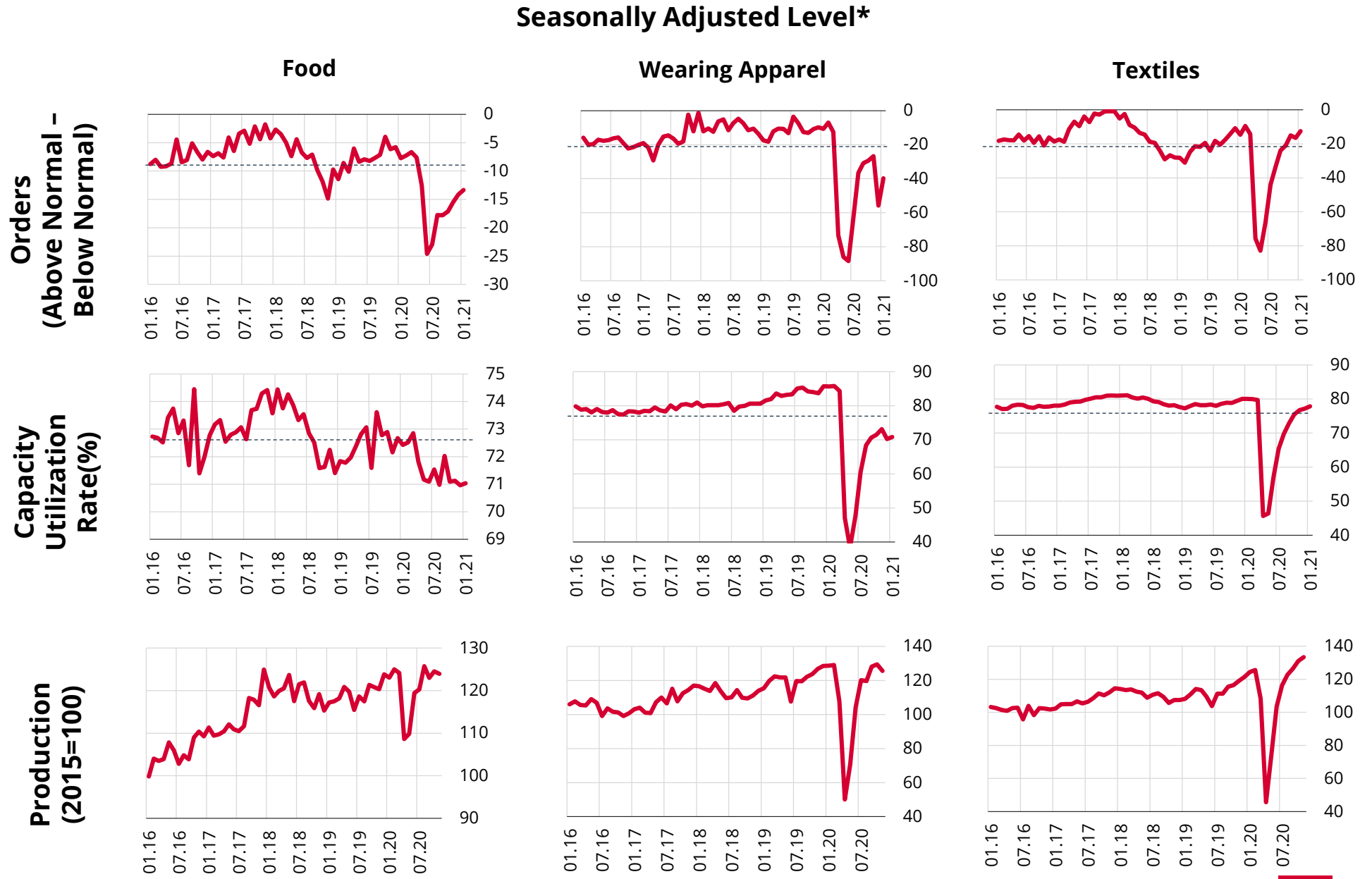


Source: CBRT, TURKSTAT

Last Observation: November 2020 for production, January 2021 for others.

* The dashed lines show historical averages.

Tourism Related Sectors



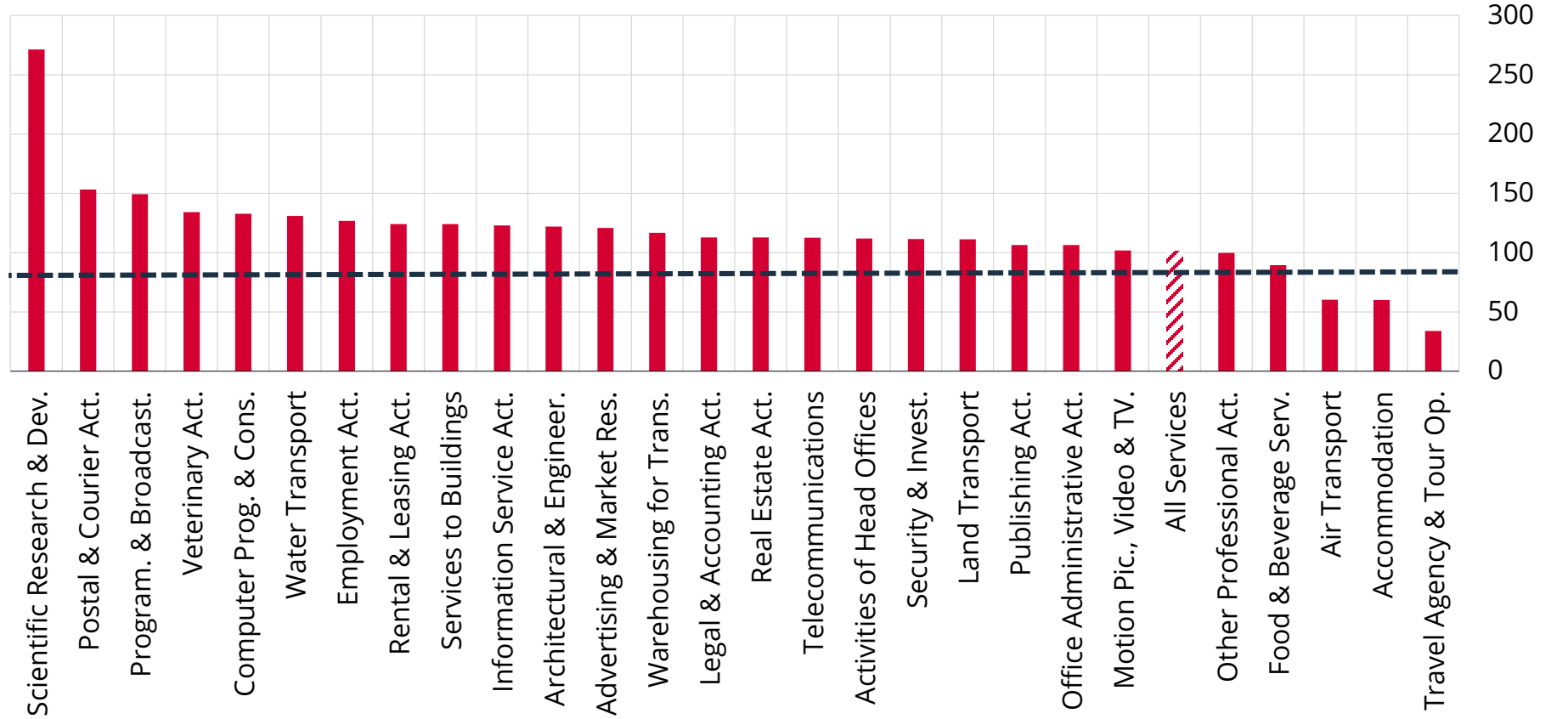
Source: CBRT, TURKSTAT

Last Observation: November 2020 for production, January 2021 for others.

* The dashed lines show historical average.

Services

Services Sector Turnover Indices
(Seasonally and Calendar Adjusted, February 2020 = 100)

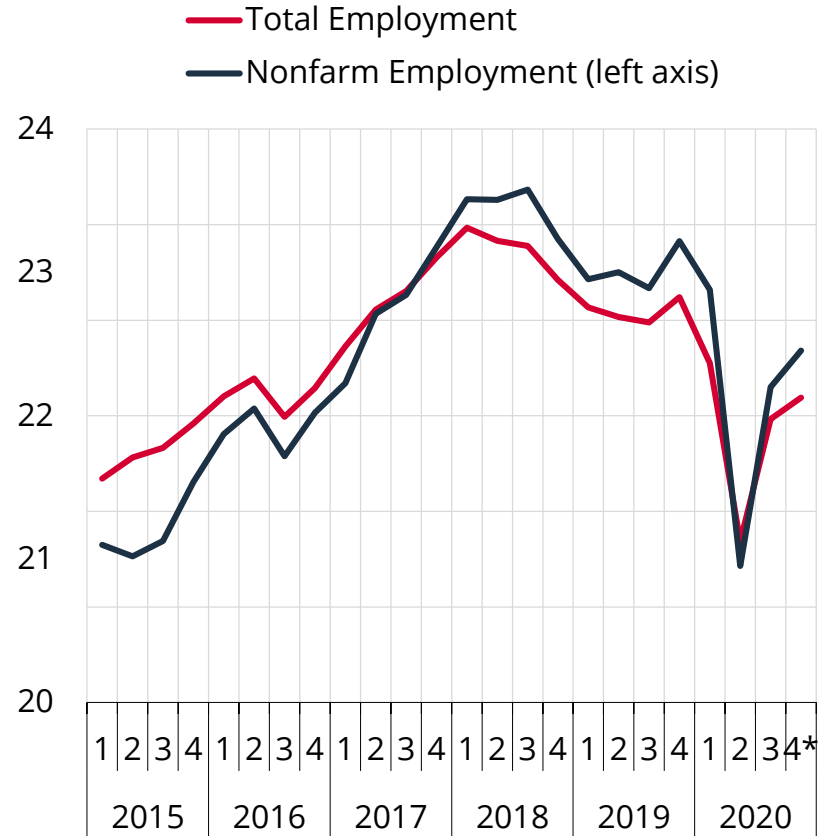


Source: TURKSTAT

Last Observation: November 2020

Labor Market

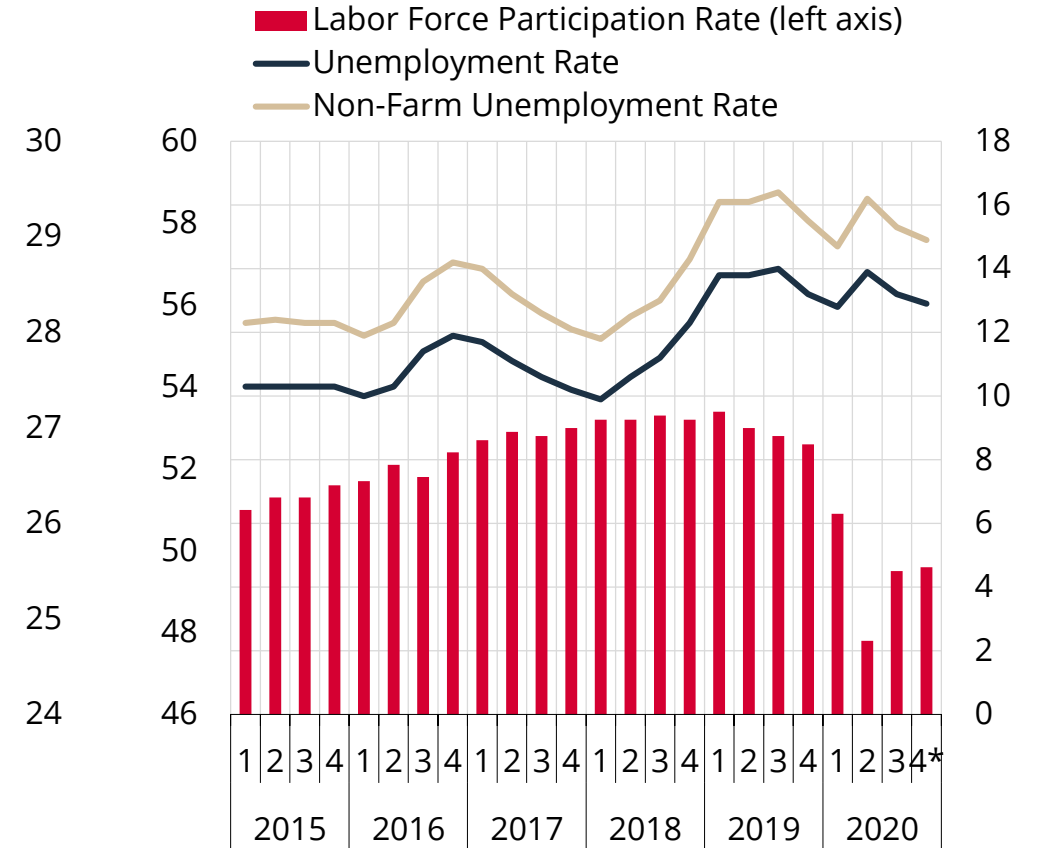
Total and Non-Farm Employment (Seasonally Adjusted, Million)



Source: TURKSTAT

* As of October period.

Unemployment Rates and Labor Force Participation Rate (Seasonally Adjusted, %)



Source: TURKSTAT

Last Observation: October 2020 Period

Economic Activity

Weekly Economic Conditions Index* (4-Week Moving Average)

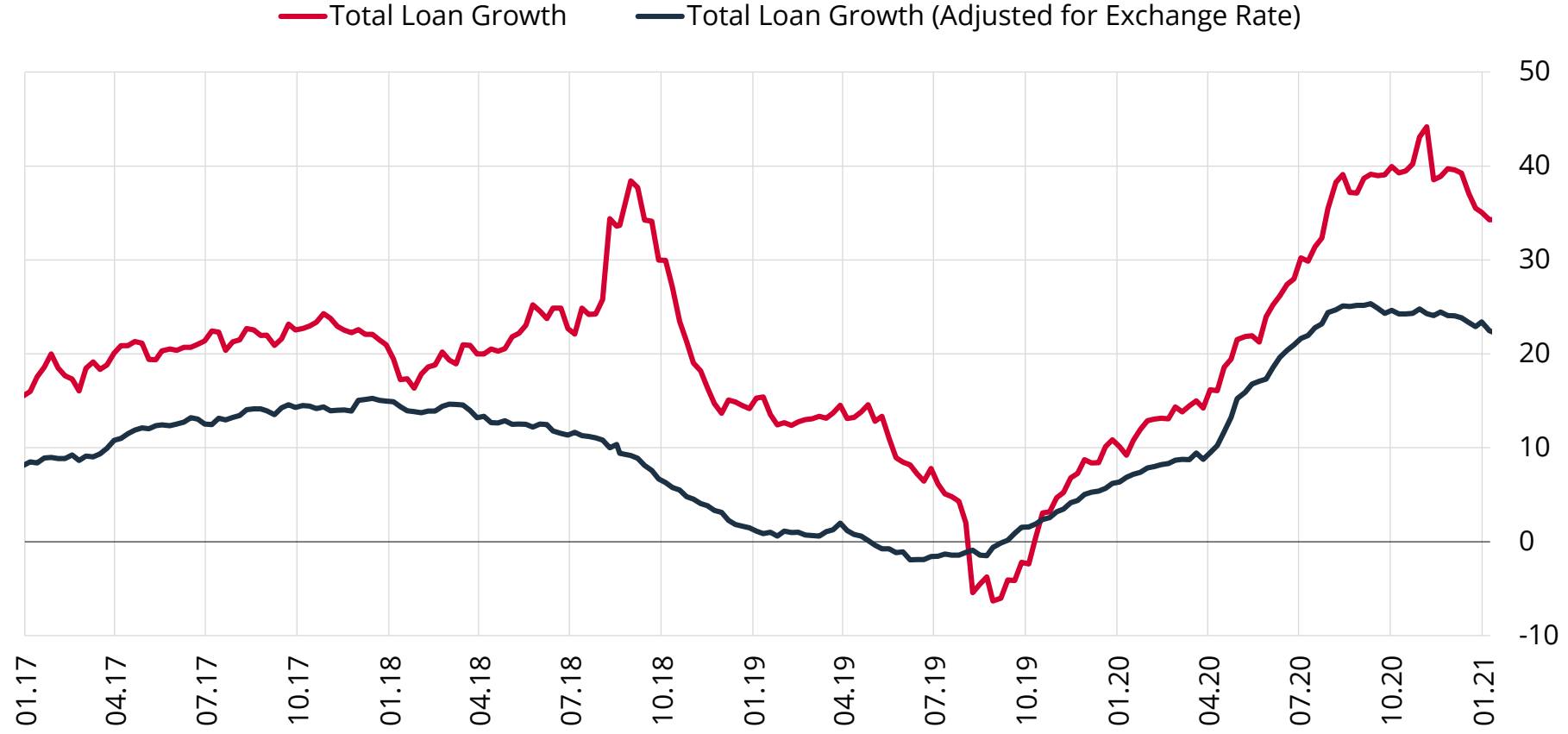


Source: CBRT

Last Observation: January 15, 2021

Credit Developments

Loan Growth (Annual, %)

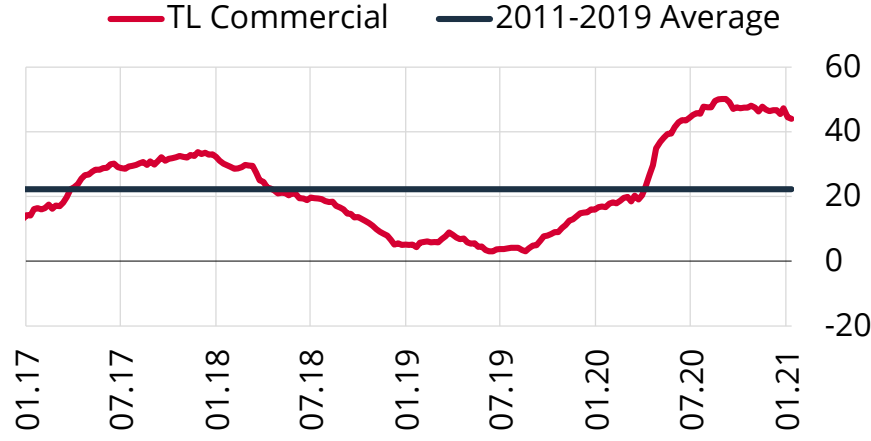


Source: CBRT

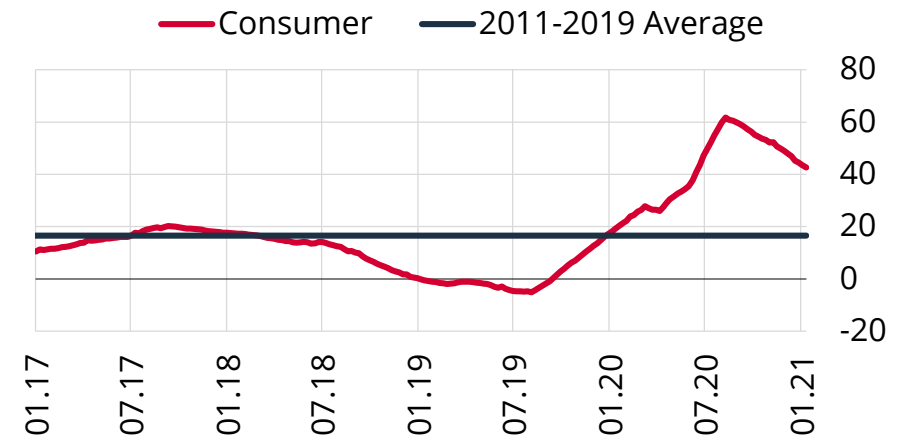
Observation Date: January 15, 2021

Credit Developments

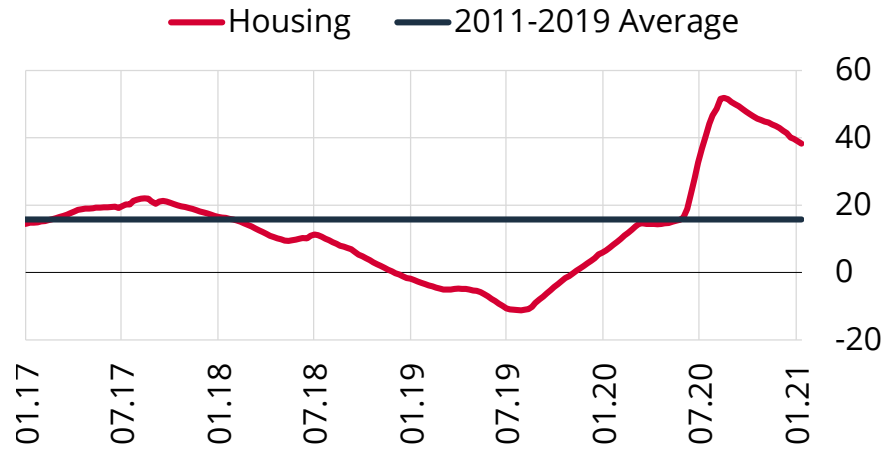
TL Commercial Loans (Nominal, Annual Growth, %)



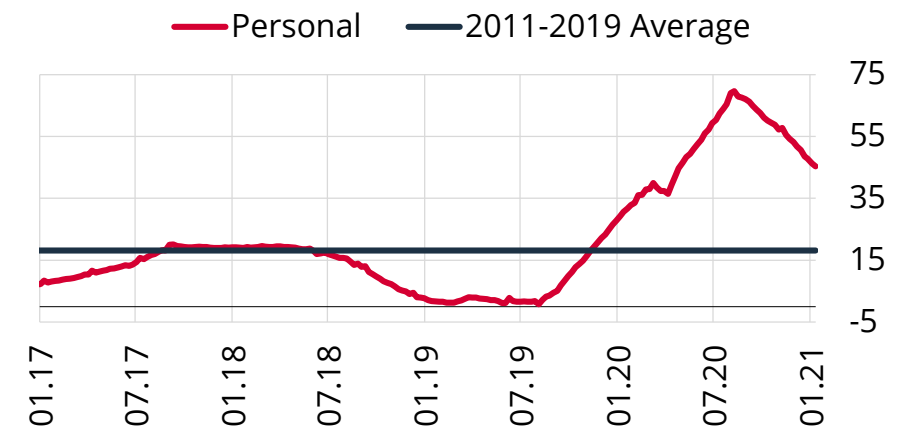
Consumer Loans (Nominal, Annual Growth, %)



Housing Loans (Nominal, Annual Growth, %)



Personal Loans (Nominal, Annual Growth, %)

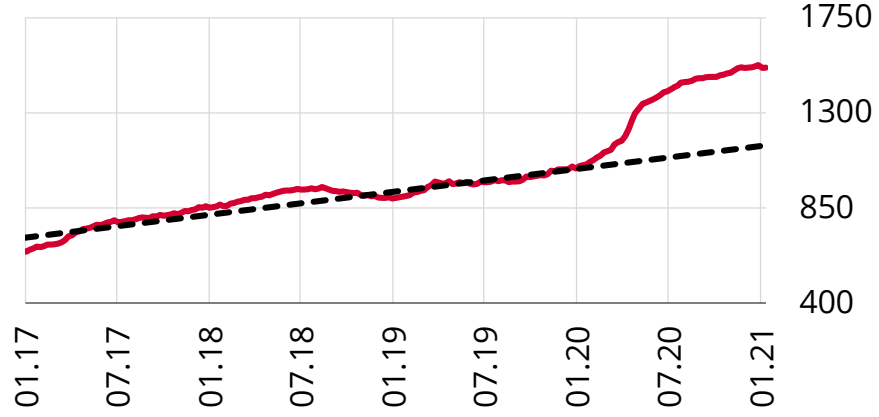


Source: CBRT

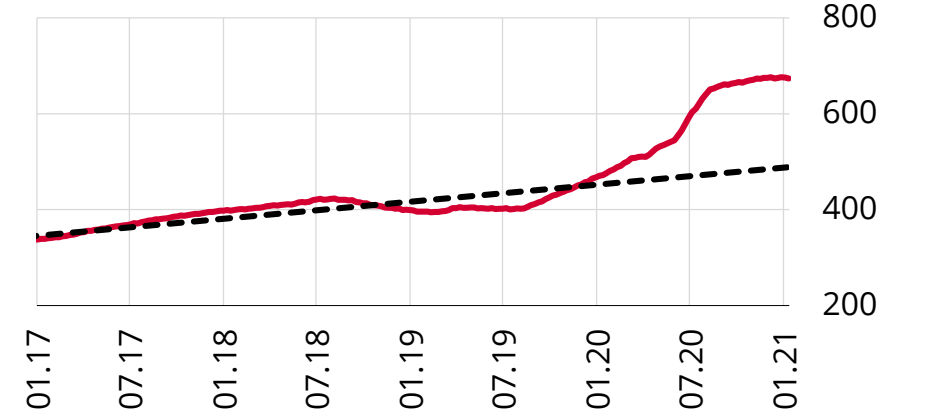
Observation Date: January 15, 2021

Credit Developments

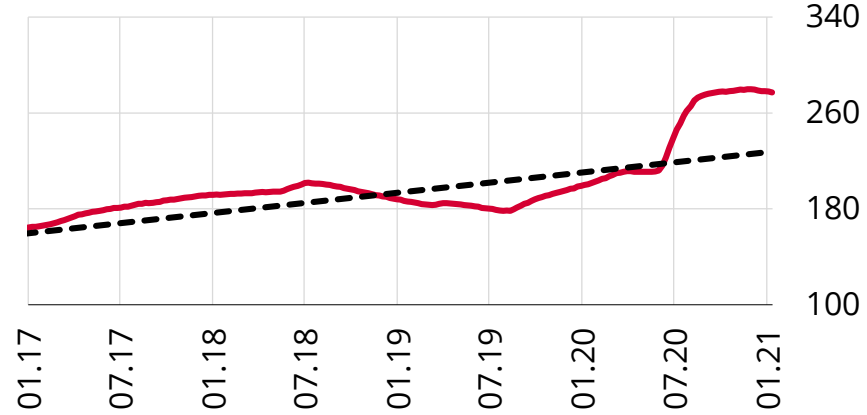
TL Commercial Loans*
(Nominal, Billion TL)



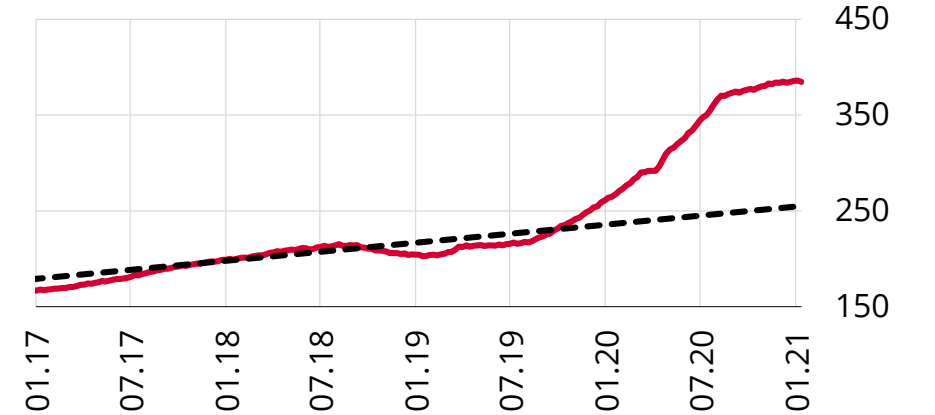
Consumer Loans*
(Nominal, Billion TL)



Housing Loans*
(Nominal, Billion TL)



Personal Loans*
(Nominal, Billion TL)



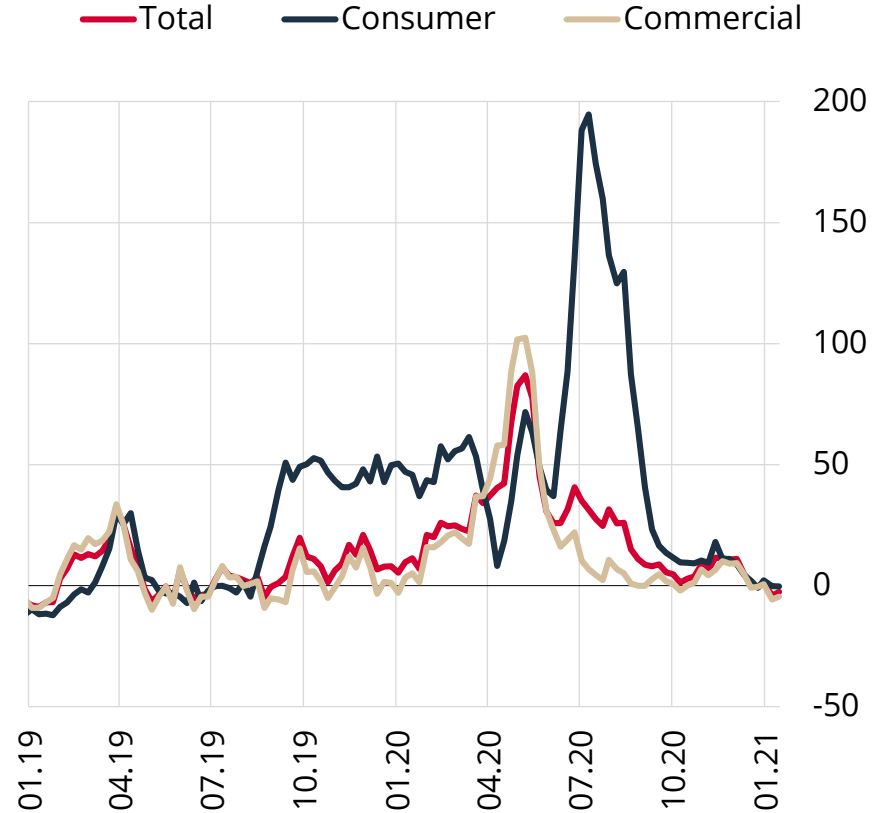
Source: CBRT

Observation Date: January 15, 2021

* Dashed lines show linear trend of credit stock in 2012-2020-Q1 period.

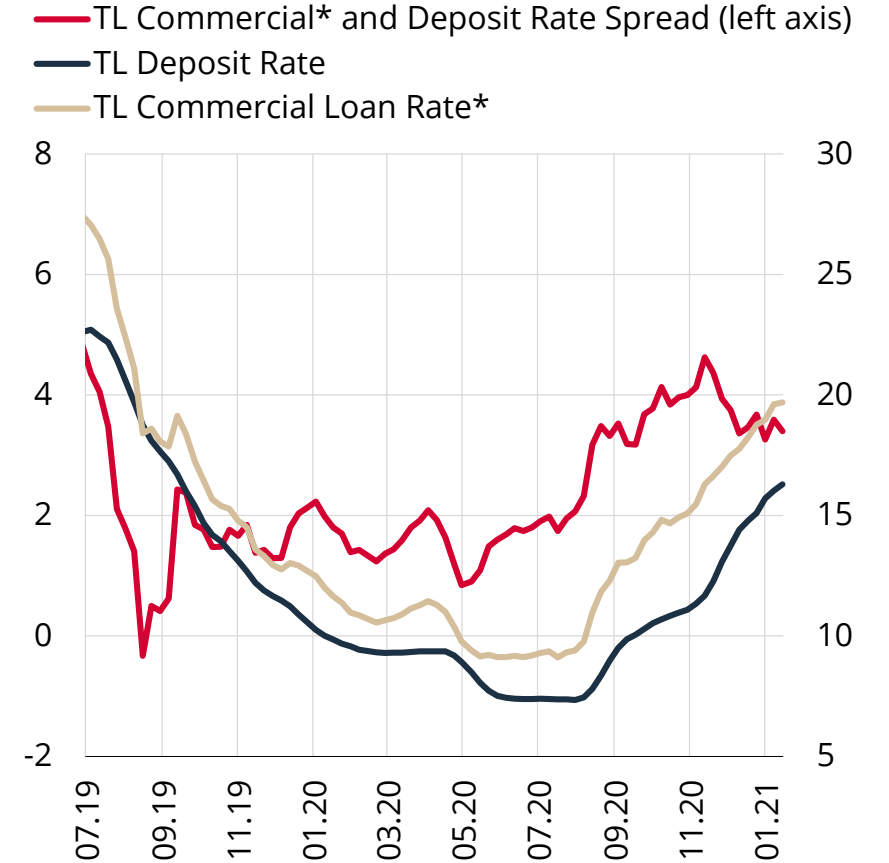
Credit Developments

Loan Growth (Annualized 4-Week Average Growth. Adjusted for Exchange Rate. %)



Source: CBRT

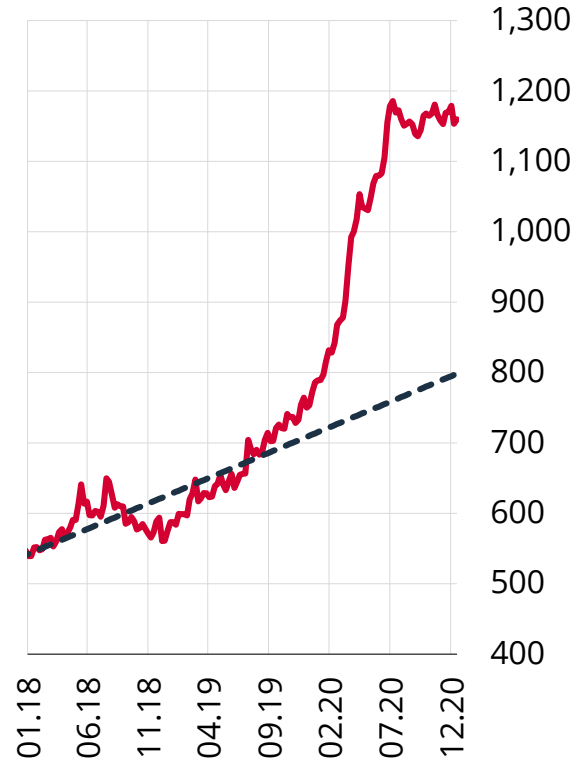
Loan and Deposit Rates (Flow, Annual, 4-Week Moving Average. %)



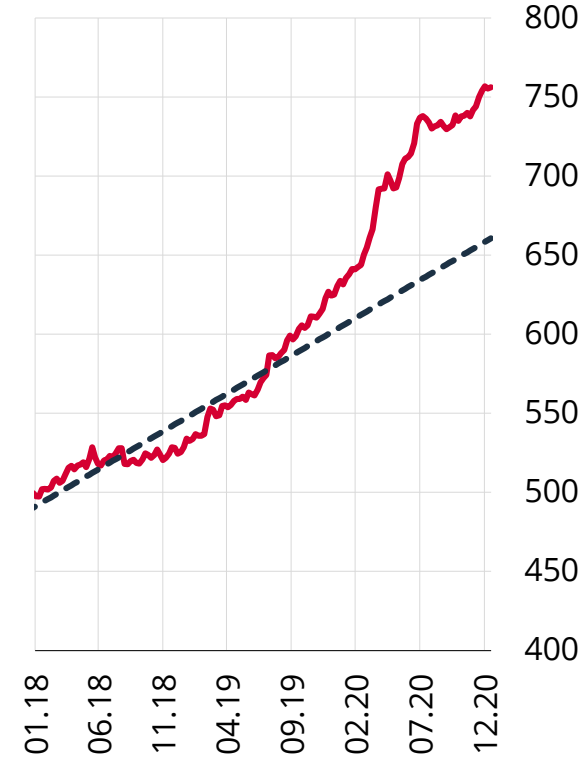
Observation Date: January 15, 2021

Monetary Aggregates

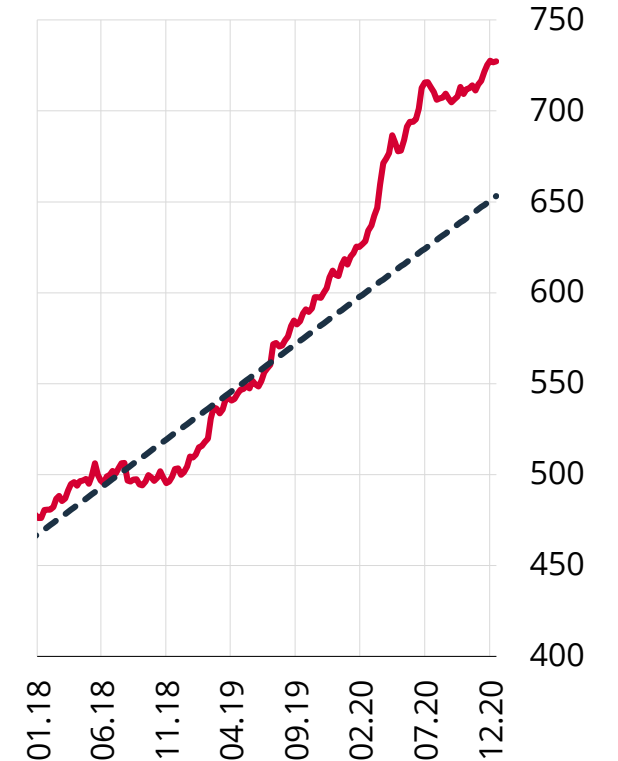
M1*
(Adjusted for Exchange Rate,
30.12.2005=100)



M2*
(Adjusted for Exchange Rate,
30.12.2005=100)



M3*
(Adjusted for Exchange Rate,
30.12.2005=100)



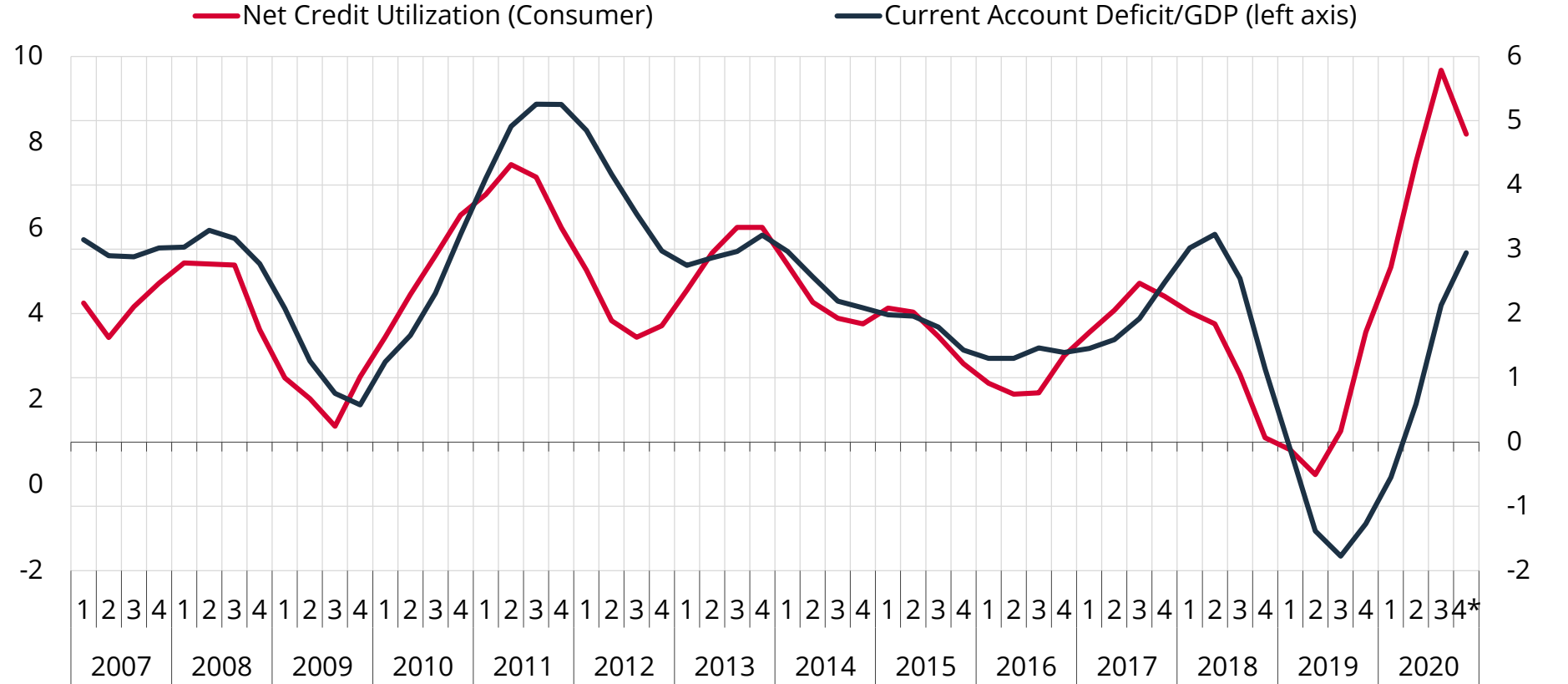
Source: CBRT

Observation Date: January 15, 2021

* Dashed lines show trend.

External Balance

Net Credit Utilization** (Consumer) ve Current Account Deficit/GDP (12-Month Cumulative, %)



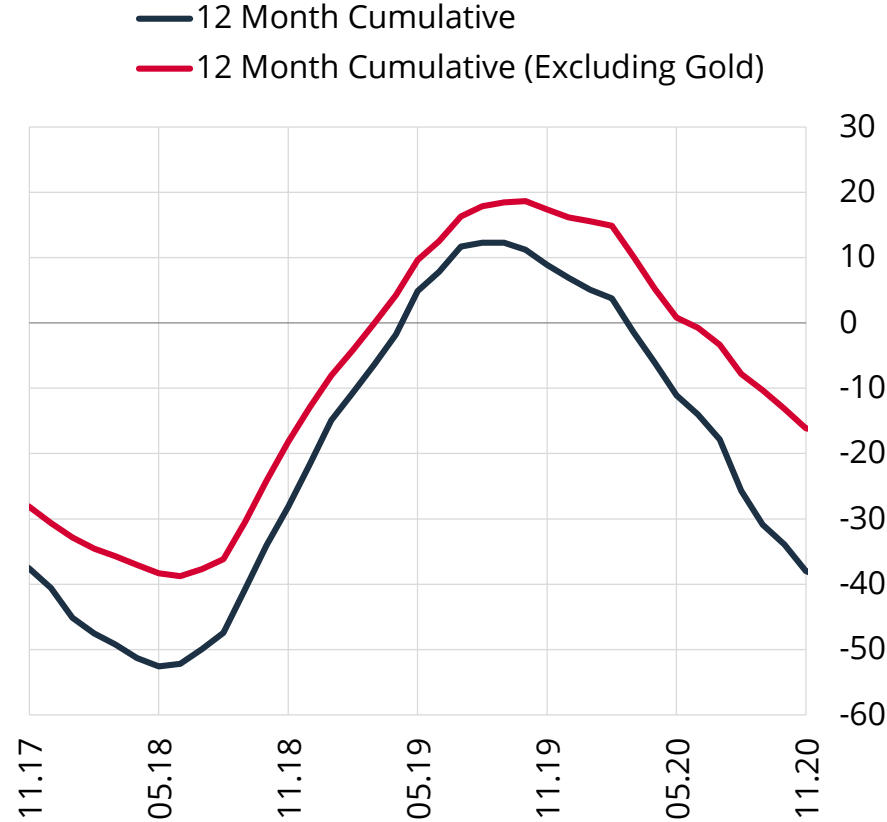
Source: CBRT, TURKSTAT, BRSA

Last Observation: November 2020

- * 2020 Q4 value for the Current Account Deficit/GDP is forecast.
- ** Net credit utilization is calculated as the ratio of the annual change in the nominal credit stock to the annual GDP 4 quarters before.

External Balance

Current Account Balance* (Billion USD)

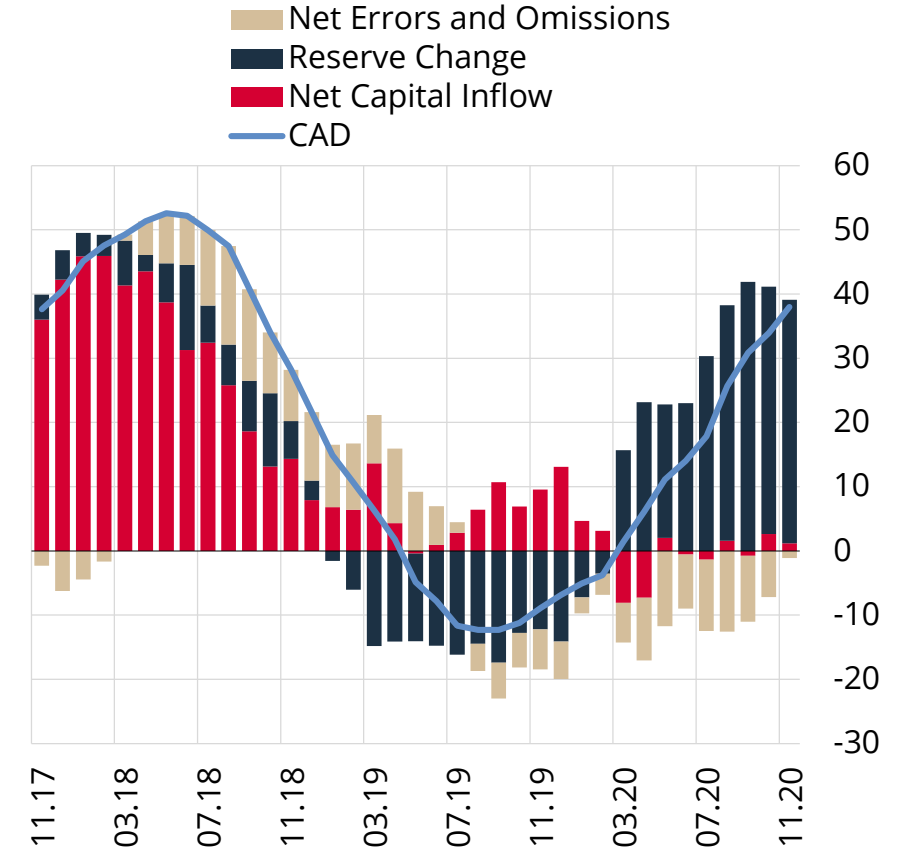


Source: CBRT

Last Observation: November 2020

* Reserve change is BoP System defined.

Financing of Current Account Deficit* (12-Month Cumulative, Billion USD)



Source: CBRT

Last Observation: November 2020

Financial Indicators

Turkey CDS Premium (Basis Points)



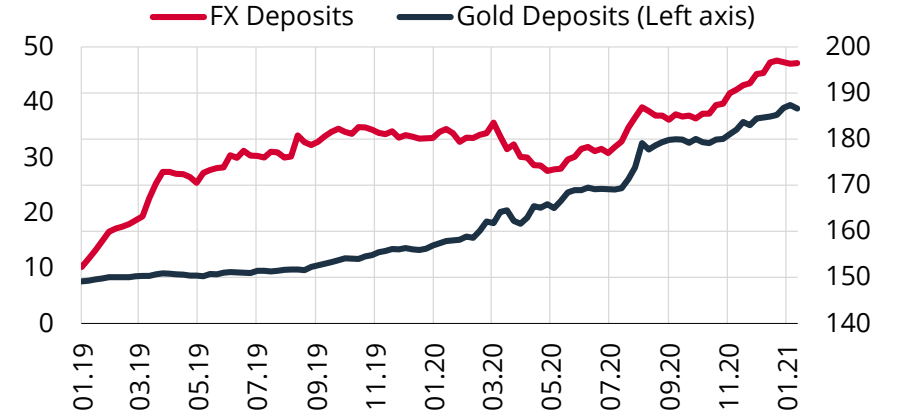
USD/TL Implied Volatility (12-Month, %)



Turkey 2 Year Treasury Bond Yield (%)



Residents' Foreign Currency Deposits (Billion USD)

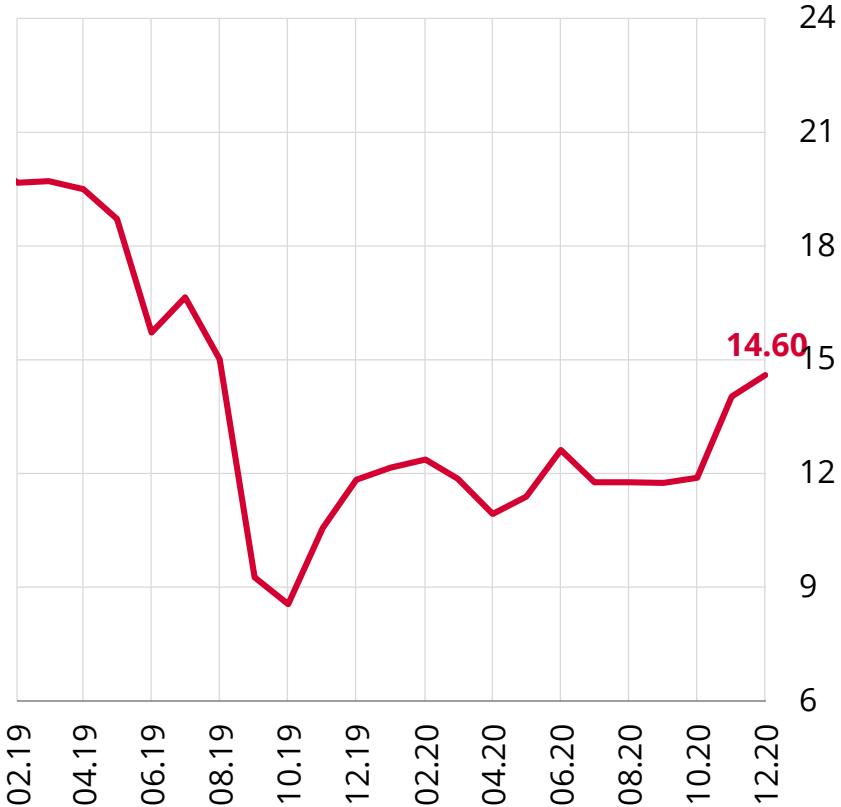


Source: Bloomberg, CBRT

Last Observation: January,22 2021

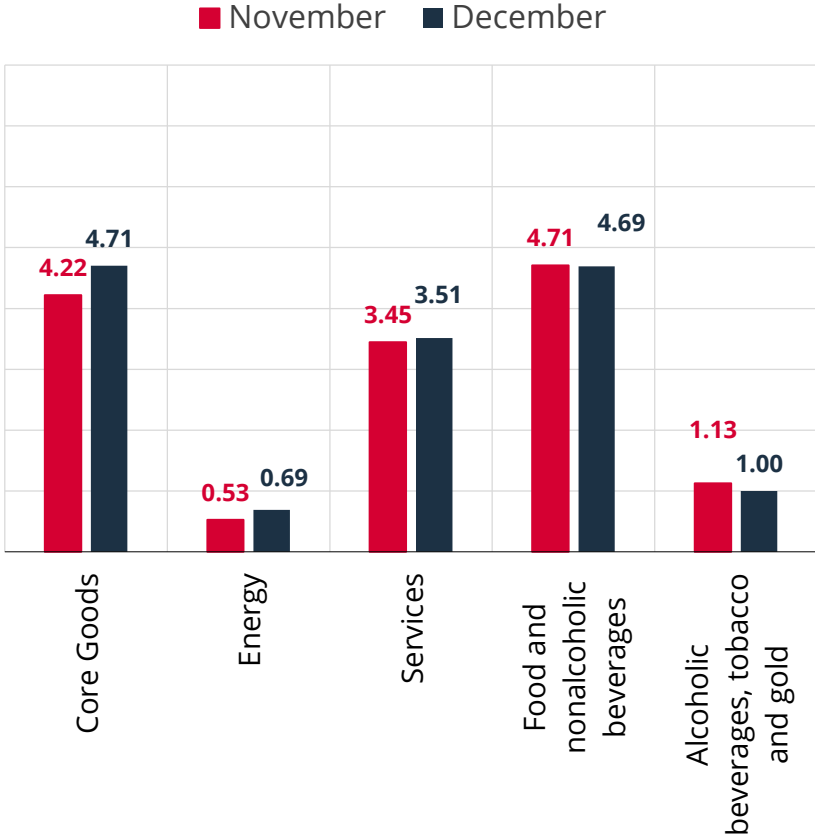
Consumer Inflation

**CPI
(Annual % Change)**



Source: CBRT, TURKSTAT

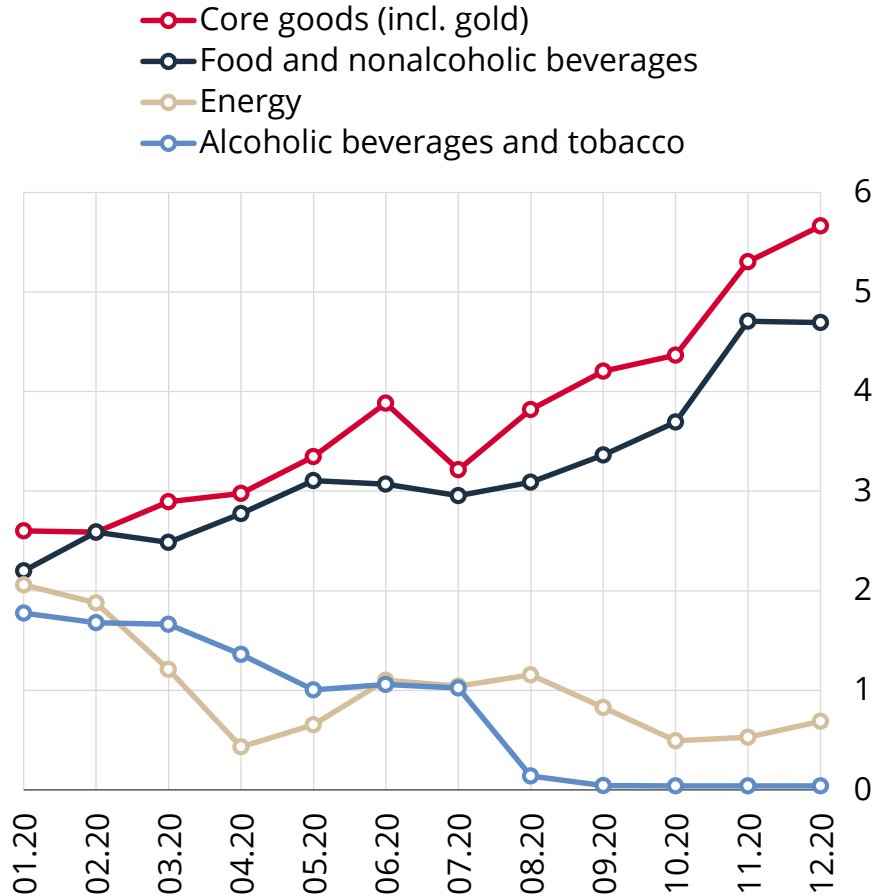
**Contributions of Subgroups to CPI
(% Points)**



Last Observation: December 2020

Consumer Inflation

Contribution to CPI (% Points)



Source: CBRT, TURKSTAT

Last Observation: December 2020

Inflation Rates in 2020 (YoY, %)

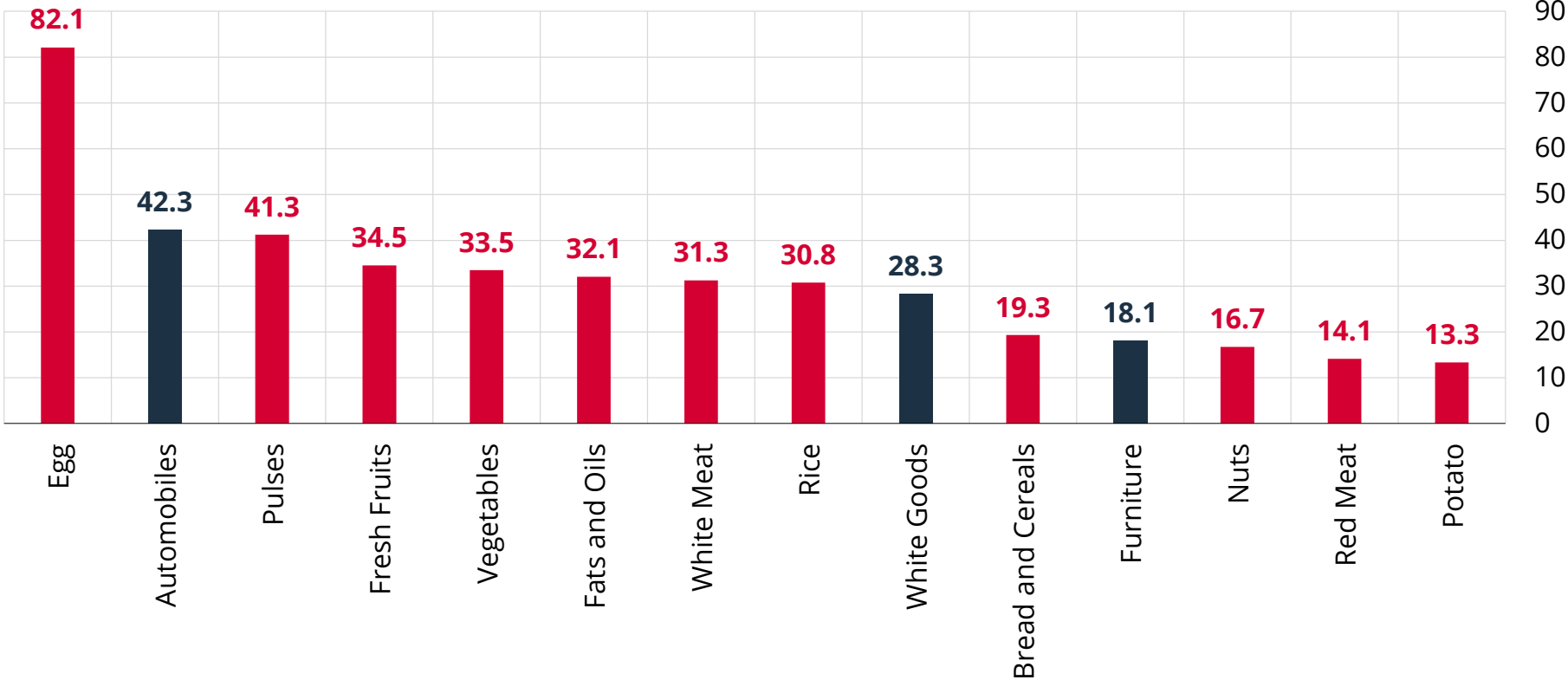
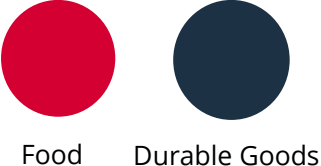
	Jan.20	Apr.20	Jul.20	Oct.20	Nov.20	Dec.20
CPI	12.2	10.9	11.8	11.9	14.0	14.6
Food and nonalcoholic beverages	9.0	11.3	12.7	16.5	21.1	20.6
Core goods (incl. gold)	8.4	9.9	10.8	15.0	18.2	19.6
Clothing and footwear	5.8	4.7	10.3	2.0	0.8	-0.6
Durable goods (incl. gold)	11.4	15.5	14.3	25.2	31.6	34.0
Other core goods	5.8	5.6	6.4	9.4	11.5	13.1
Alcoholic beverages and tobacco	42.2	31.3	21.8	0.7	0.7	0.7
Energy	17.1	3.3	8.6	4.0	4.3	5.6
Services	12.2	11.8	11.8	10.9	11.4	11.7

Source: CBRT, TURKSTAT

Last Observation: December 2020

Consumer Inflation

Annual Inflation of Selected Food and Durable Subgroups (%)



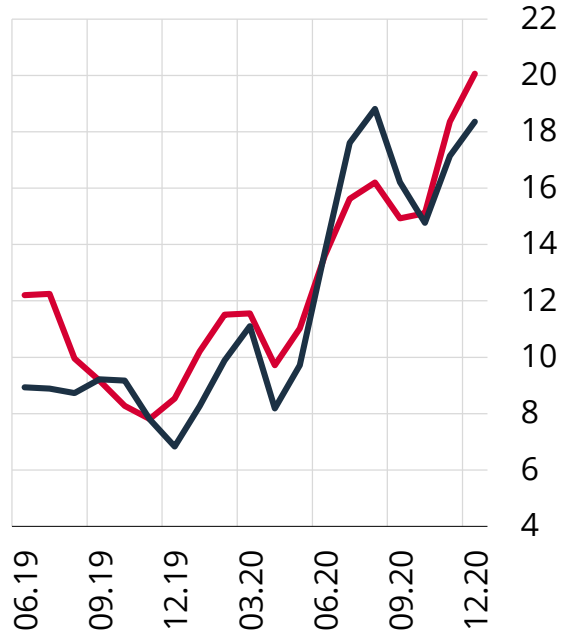
Source: CBRT, TURKSTAT

Last Observation: December 2020

Consumer Inflation

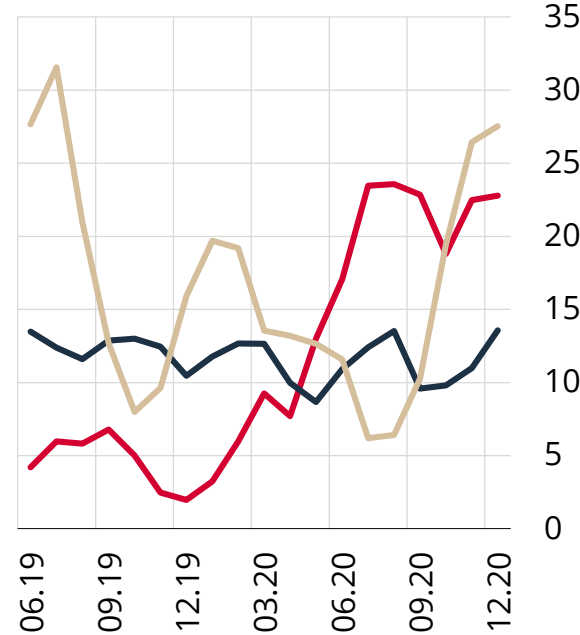
B and C Indices* (SA, Annualized 3-Month Average % Change)

— B (Adjusted for Tax Effect)
— C (Adjusted for Tax Effect)



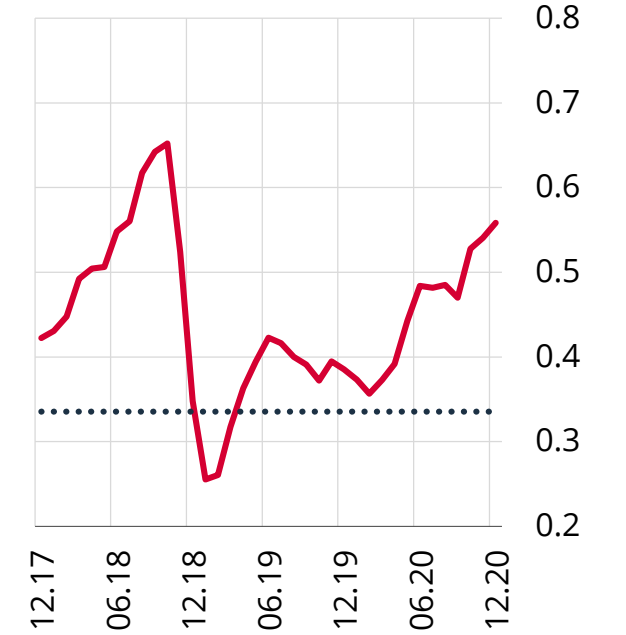
Main Consumption Groups Prices (SA, Annualized 3-Month Average % Change)

— Core Goods (Adjusted for Tax Effect)
— Services
— Processed Food



CPI Diffusion Index (SA, Annualized 3-Month Average % Change)

— CPI Diffusion Index
..... CPI Diffusion Index (Historical Average)



Source: CBRT, TURKSTAT

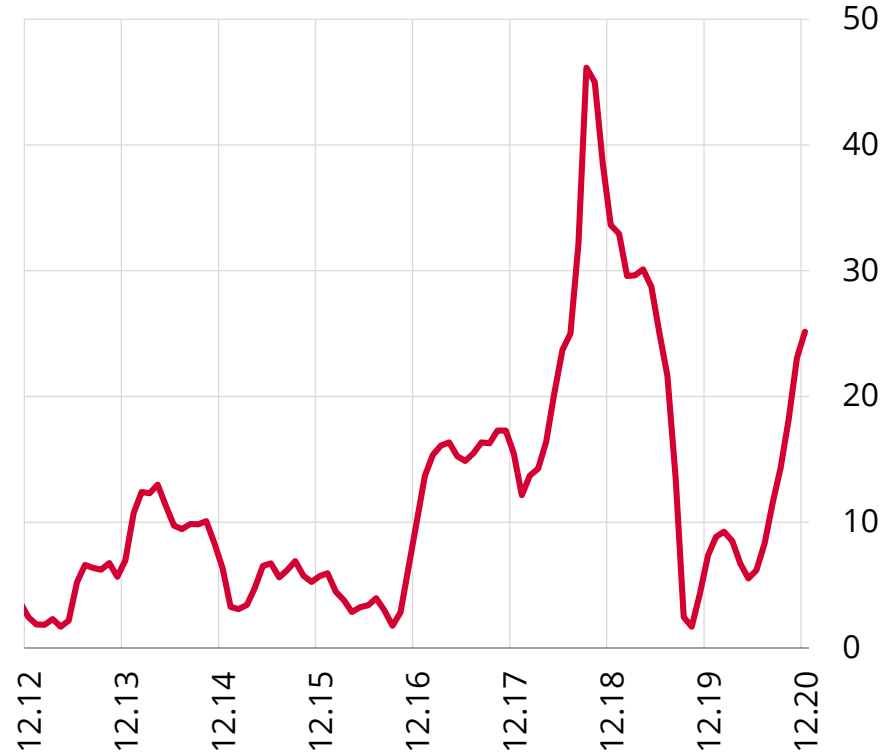
Last Observation: December 2020

* B Index: CPI excluding unprocessed food, alcoholic beverages, tobacco products and gold.

C Index: CPI excluding energy, food and non-alcoholic beverages, alcoholic beverages, tobacco and gold.

Producer Inflation

Domestic Producer Prices (Annual % Change)

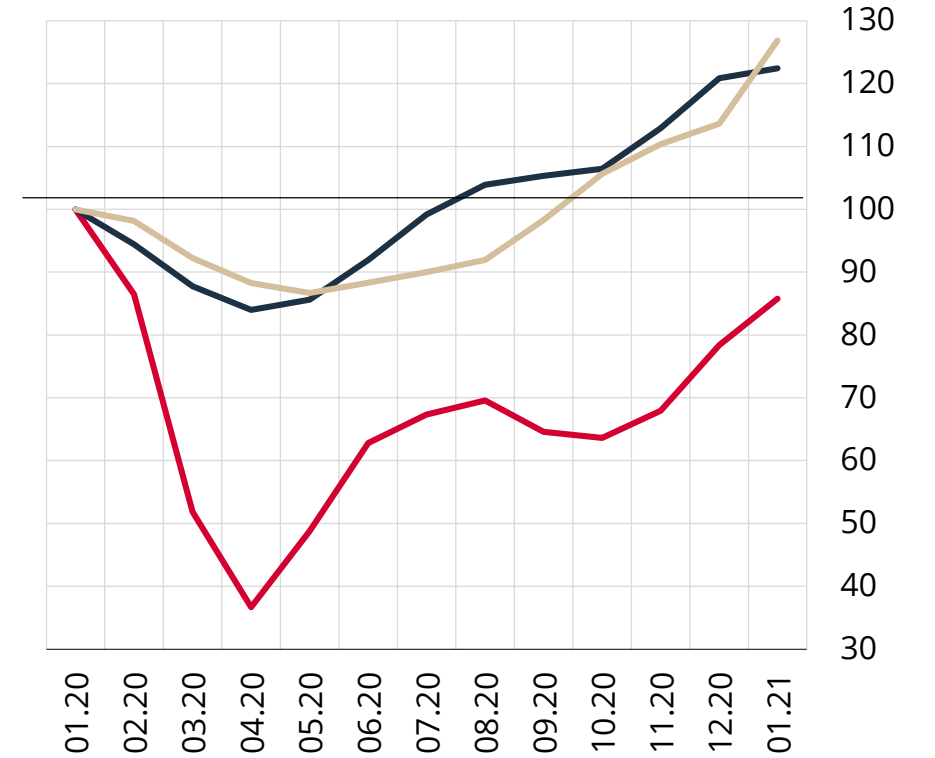


Source: TURKSTAT

Last Observation: December 2020

International Commodity Prices (January 2020 = 100)

— Brent Oil — Metal — Agriculture

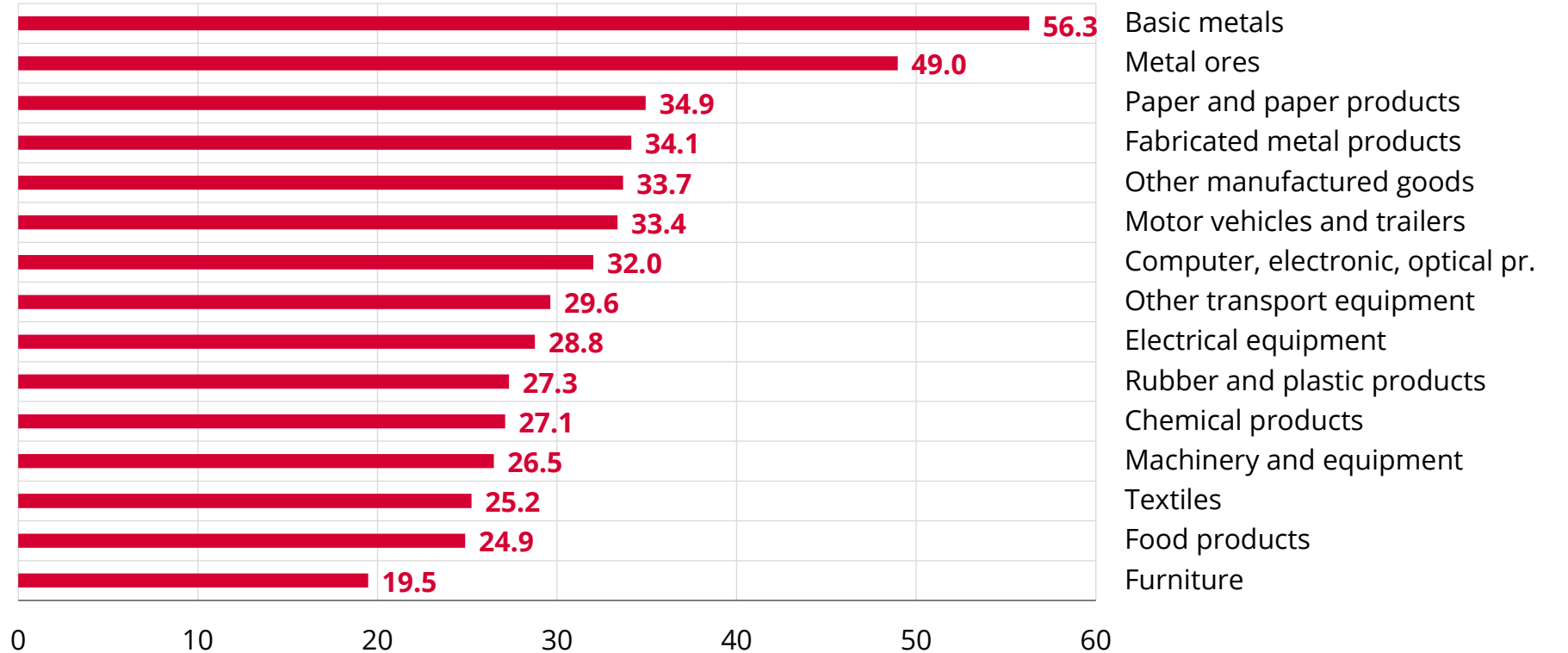


Source: Bloomberg, Goldman Sachs

Last Observation: January 22, 2021

Producer Inflation

Domestic Producer Price Index by Sectors (Annual % Change)



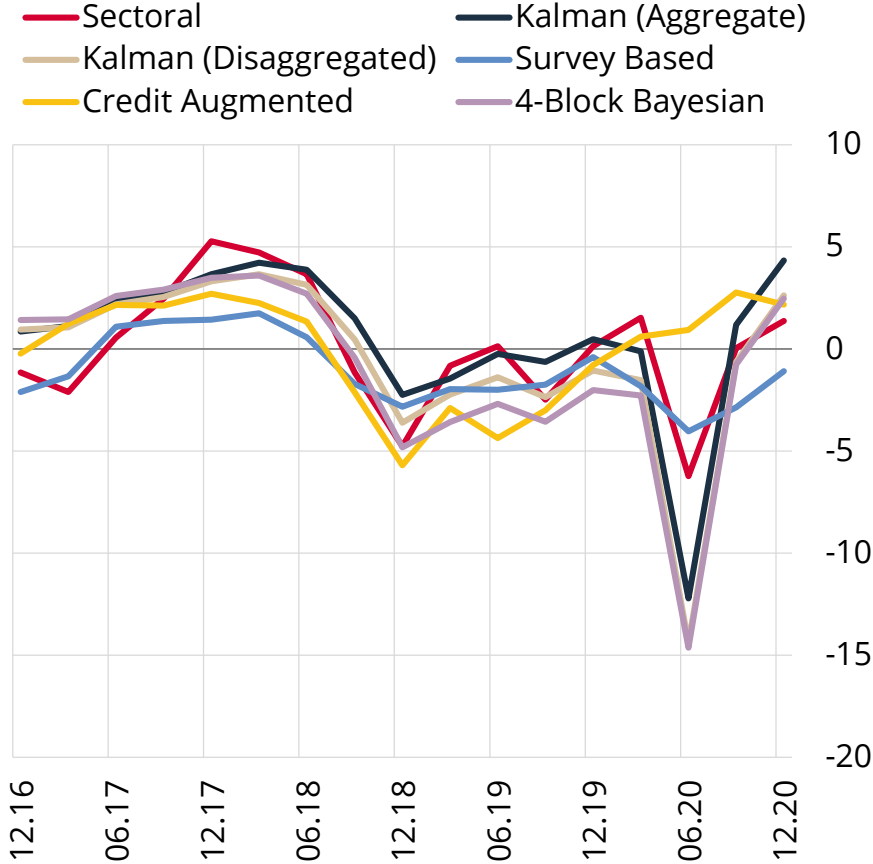
Source: TURKSTAT

Last Observation: December 2020

THE DETERMINANTS OF INFLATION

Output Gap

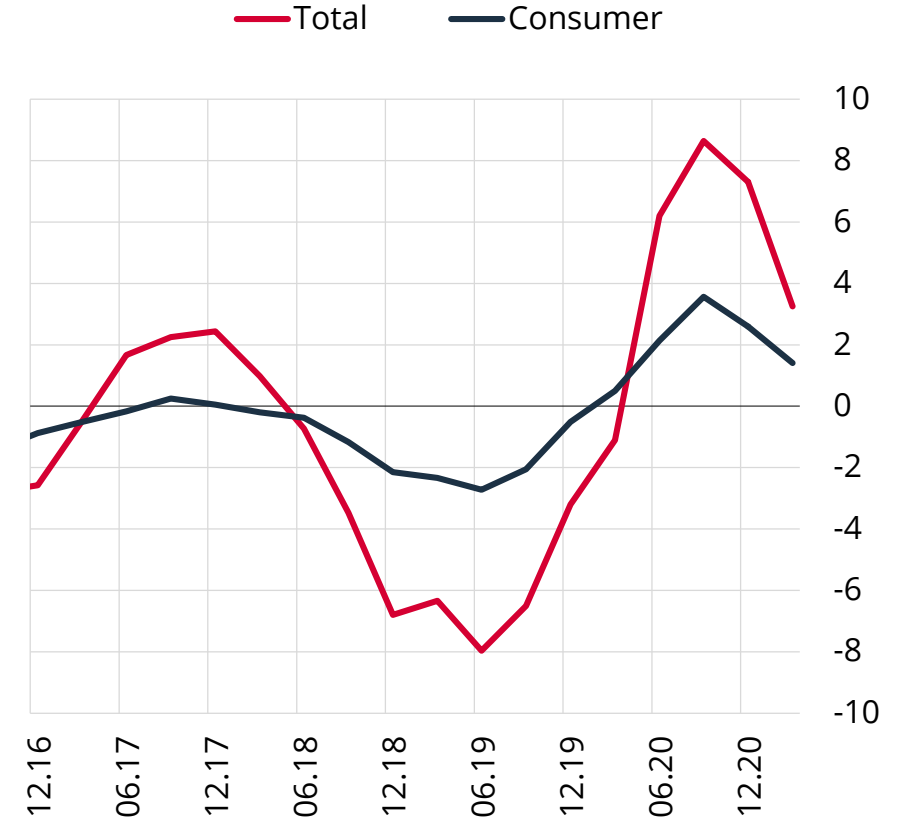
Output Gap Indicators



Source: CBRT

Last Observation: December 2020

Net Credit Utilization* (% Deviation From Historical Average)



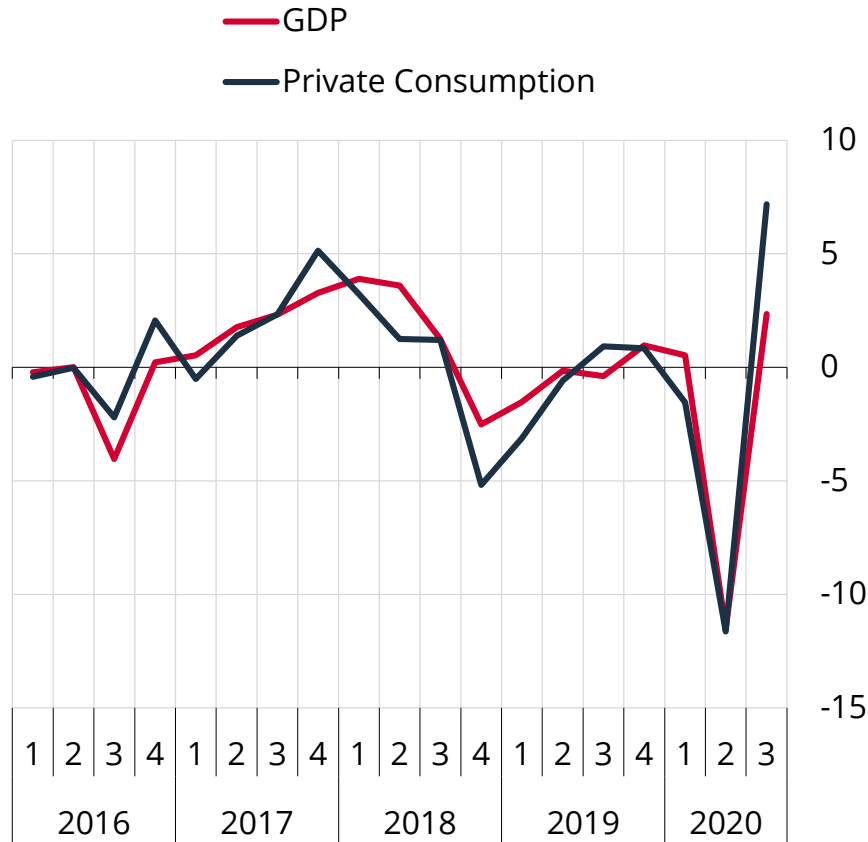
Source: CBRT

Last Observation: January 15, 2021.

* Net credit utilization is calculated as the ratio of the annual change in the nominal credit stock to the annual GDP 4 quarters before.

Output Gap

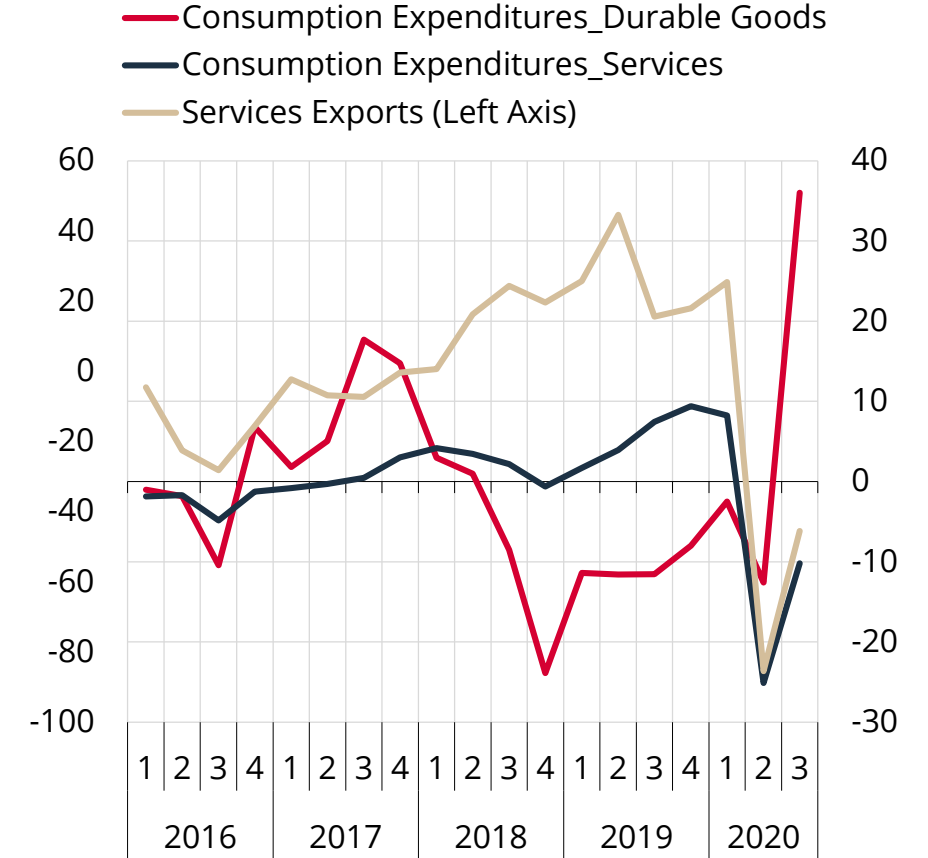
Deviation of GDP and Private Consumption From Trend* (%)



Source: TURKSTAT, CBRT

Last Observation: 2020 Q3.

Deviation of Consumption Expenditures and Services Exports From Trend** (%)



Source: TURKSTAT, CBRT

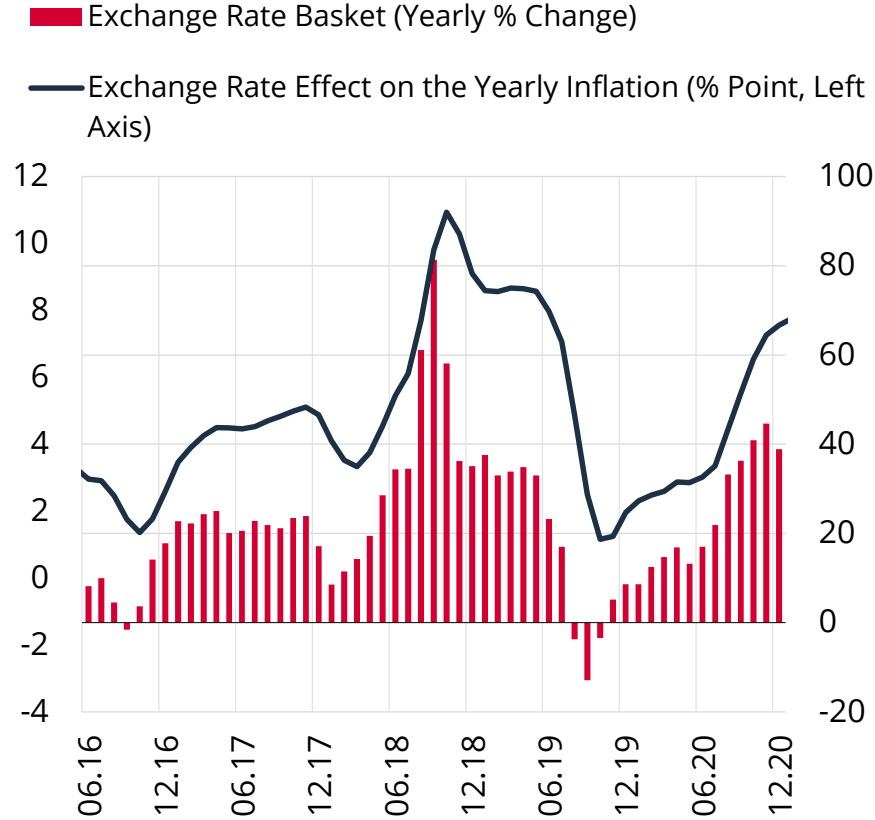
Last Observation: 2020 Q3.

* Trends of the series are calculated for the period 2005Q1-2020Q3 using the Hodrick-Prescott (HP) filter.

** Trends of consumption expenditures for durable goods and services are calculated for the period 2009Q1-2020Q3 using the HP filter, and trend of services exports for the period 2005Q1-2020Q3.

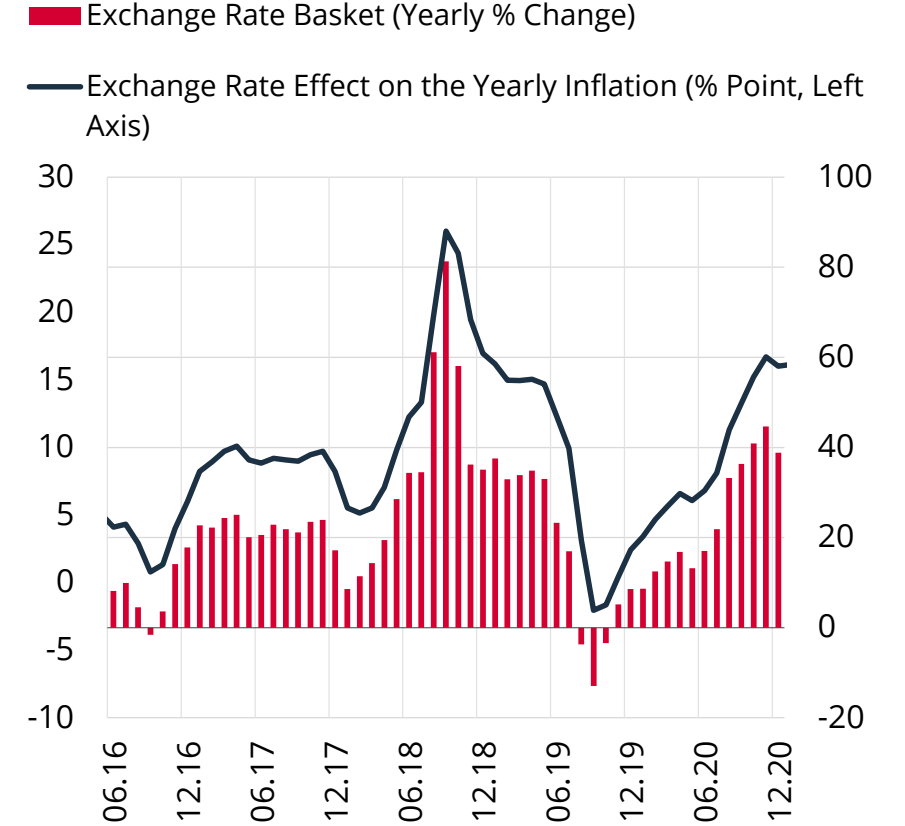
Exchange Rate Pass-Through

Contribution of Exchange Rate to CPI (% Point)



Source: CBRT

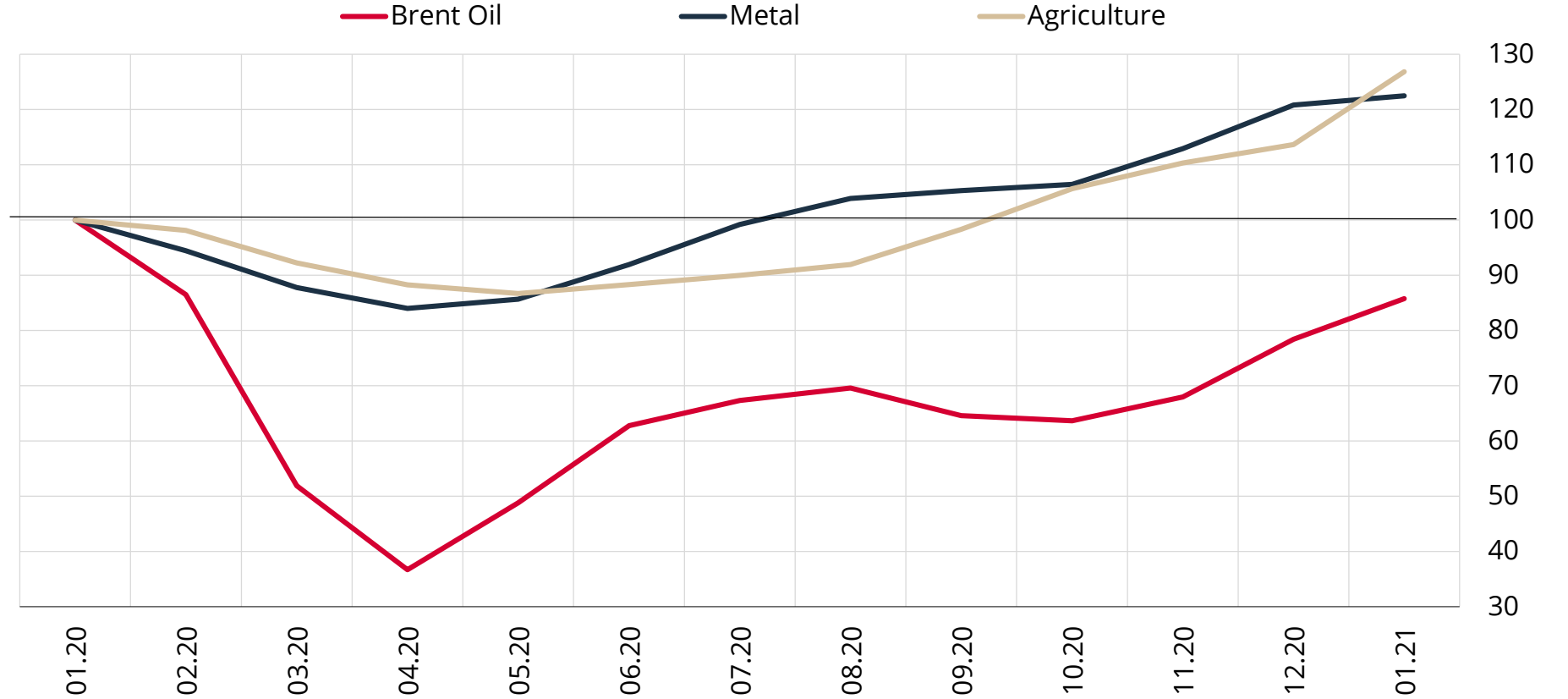
Contribution of Exchange Rate to PPI (% Point)



Last Observation: December 2020

International Commodity Prices

International Commodity Prices (January 2020=100)

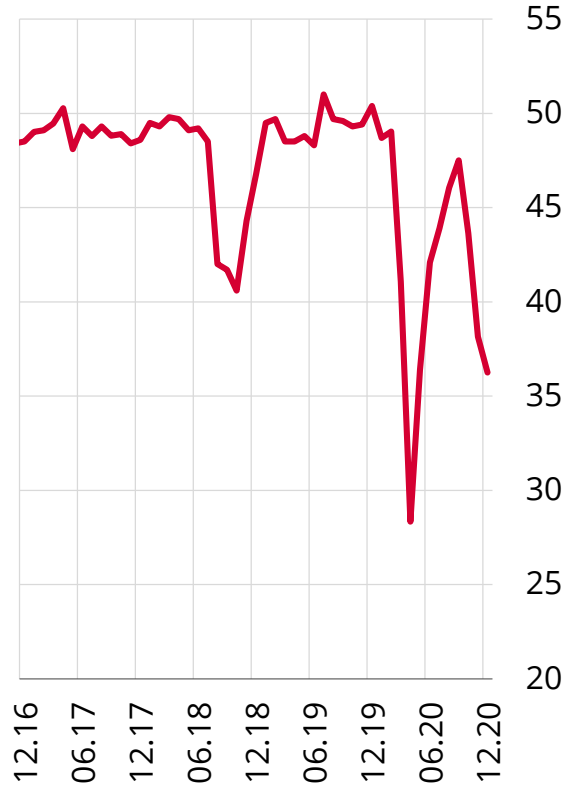


Source: Bloomberg, Goldman Sachs

Last Observation: January 22, 2021

Supply Constraints: Delivery Times

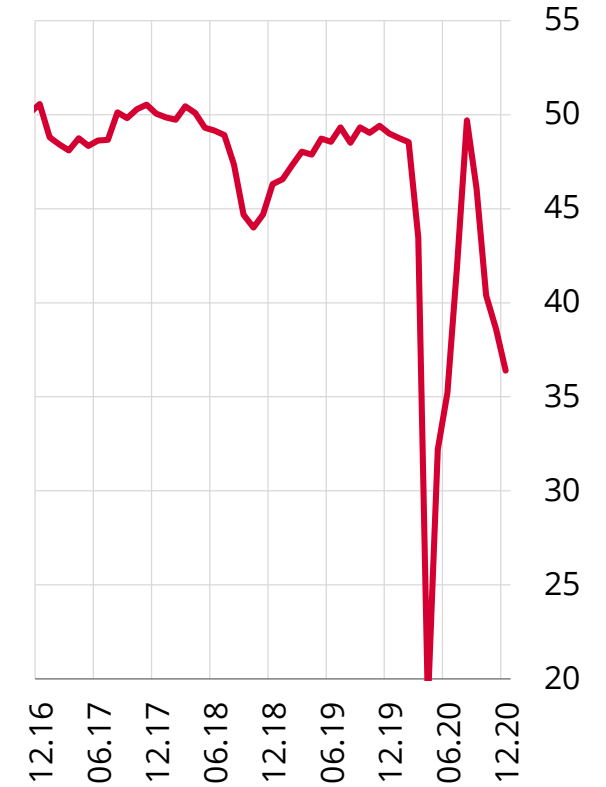
Manufacturing* (Seasonally Adjusted)



Manufacture of Paper Products* (Seasonally Adjusted)



Manufacture of Chemicals Products* (Seasonally Adjusted)



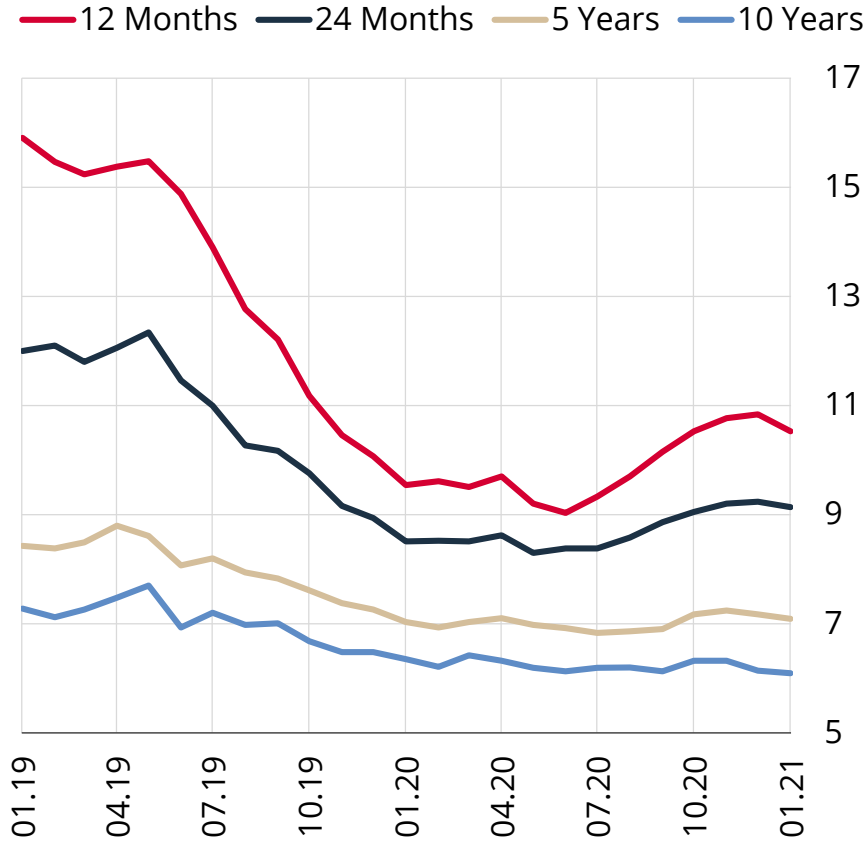
Source: IHS Markit

Last Observation: December 2020

*The lower values of the series indicate a longer delivery time.

Inflation Expectations

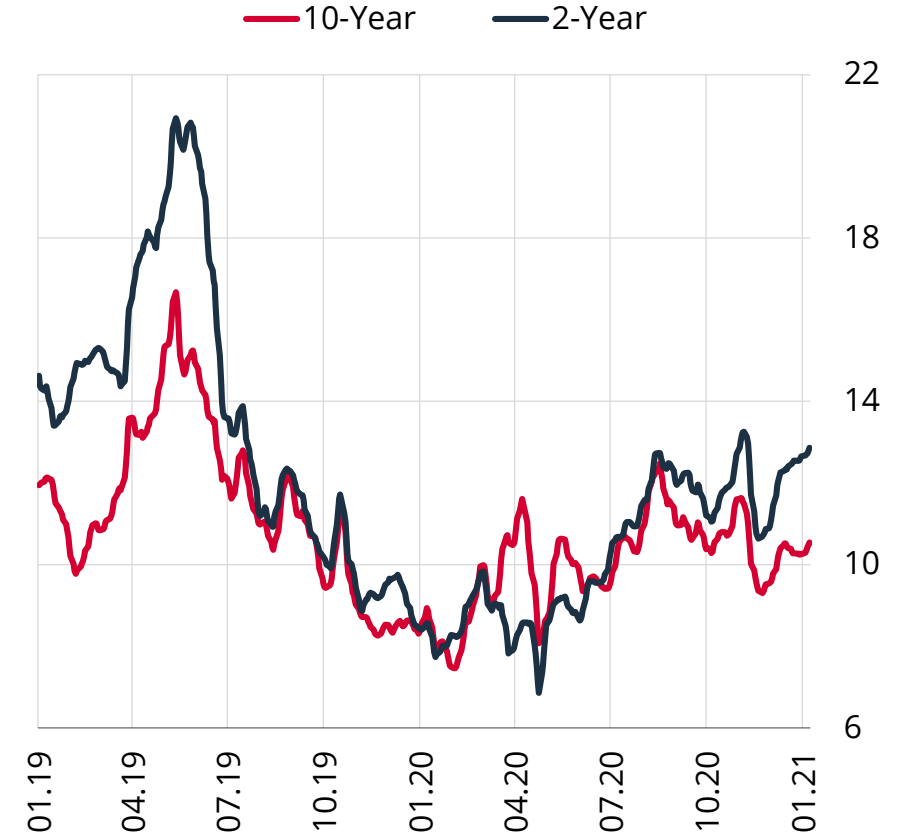
CPI Inflation Expectations* (%)



Source: CBRT

Last Observation: January 2021

Inflation Compensation** (% , 5 Day Moving Average)



Source: Bloomberg

Last Observation: January 22, 2021

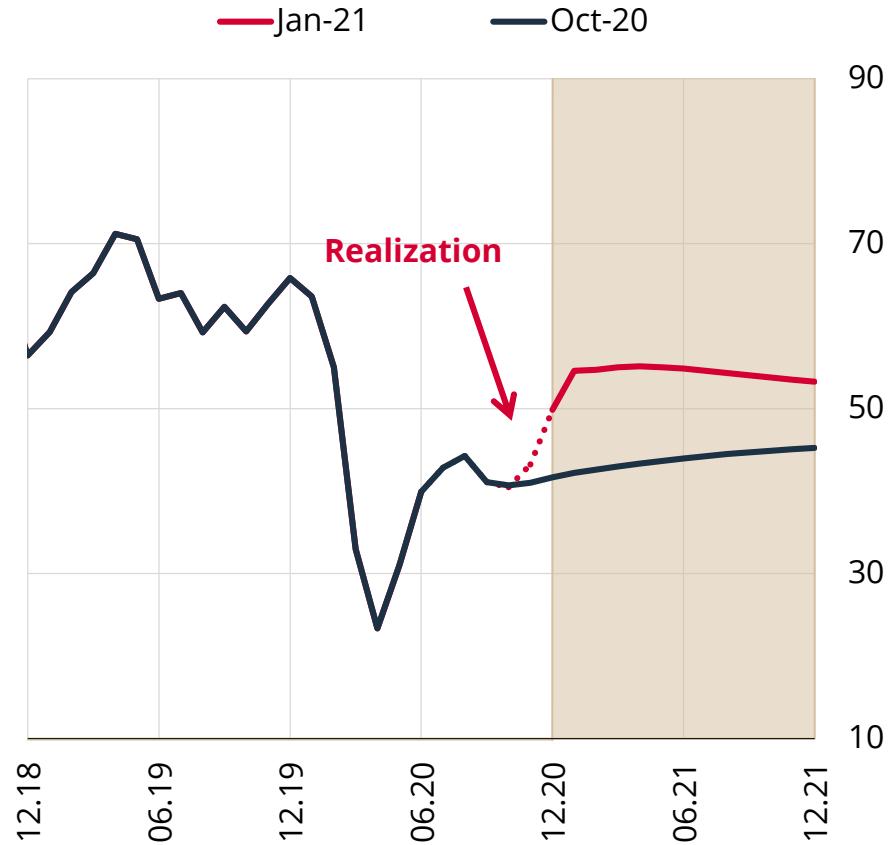
* Data from the CBRT Survey of Expectations responded by the representatives of the real and financial sectors., and professionals.

** Calculated by the yield spread between nominal and inflation-indexed Treasury bonds with same maturities.

MEDIUM TERM PROJECTIONS AND RISKS

Assumptions for External Variables

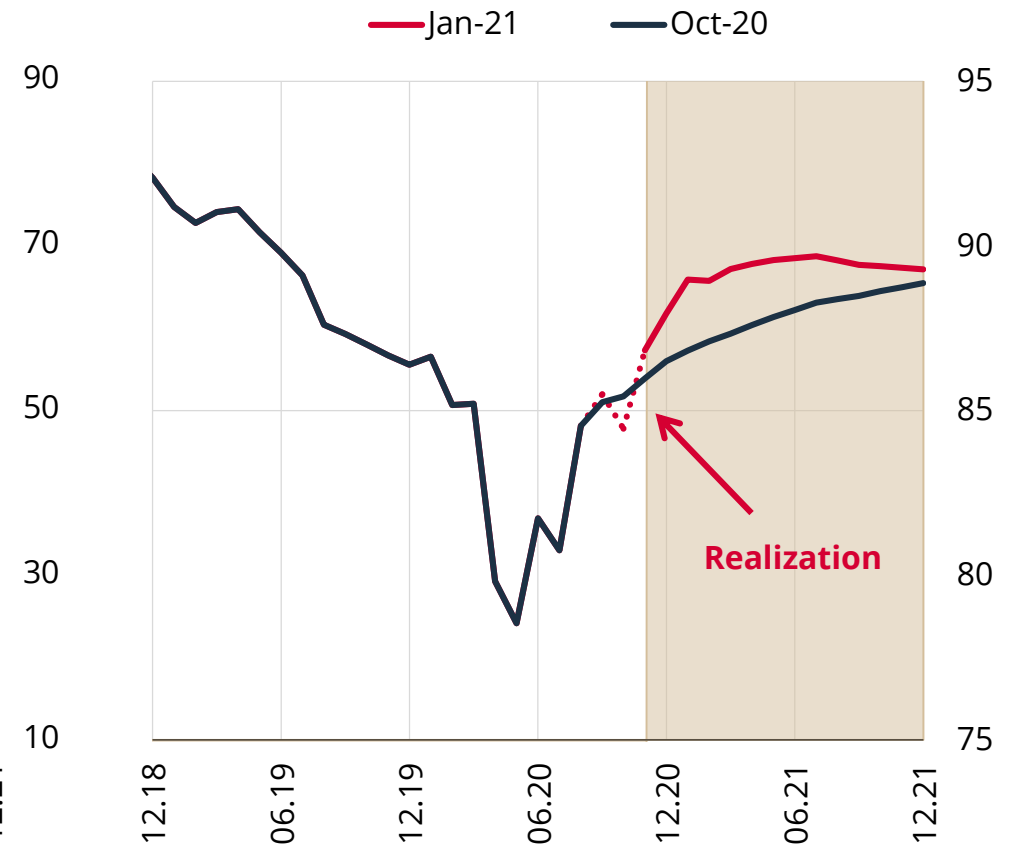
Revisions to Oil Price Assumptions* (USD/Barrel)



Source: Bloomberg, CBRT

* Shaded area shows the forecast period.

Revisions to Import Price Assumptions* (Index, 2010=100)



Source: CBRT, TURKSTAT

Revisions in Assumptions

		October IR	January IR
Output Gap (%)	2020 Q3	-1.8	2.0
	2020 Q4	-0.9	2.8
Export-Weighted Global Production Index (Average Annual % Change)	2021	5.1	4.7
	2022	-	4.3
Oil Prices (Average, USD)	2021	43.8	54.4
	2022	-	52.1
Import Prices (USD, Average Annual % Change)	2021	5.0	6.5
	2022	-	0.3
Food Prices (Year-end % Change)	2021	10.5	11.5
	2022	-	9.4

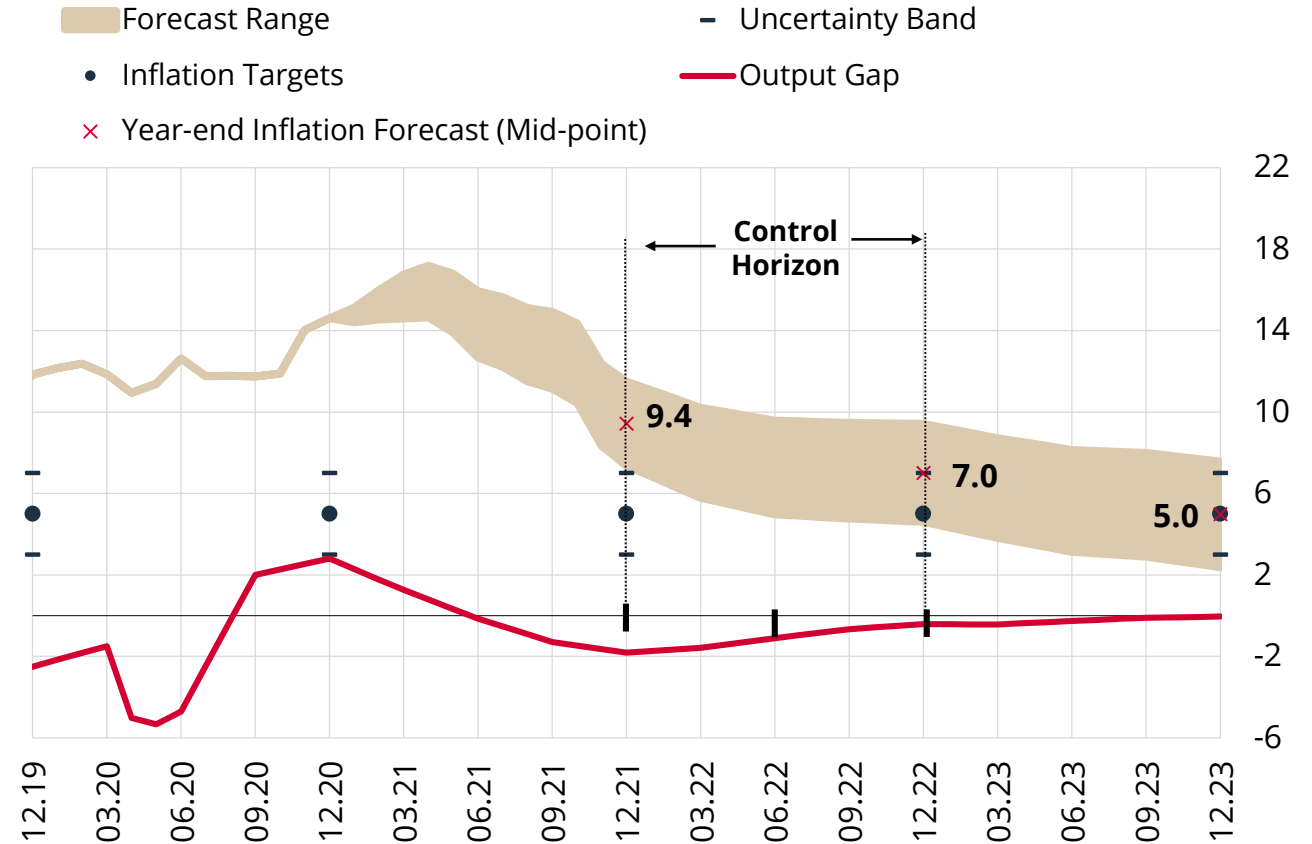
Inflation Outlook

Accordingly, inflation is expected to be

- Between 7.3% and 11.5% (with a mid-point of 9.4%) at end-2021
- Between 4.6% and 9.4% (with a mid-point of 7.0%) at end-2022

with 70% probability.

Inflation and Output Gap Forecasts* (%)



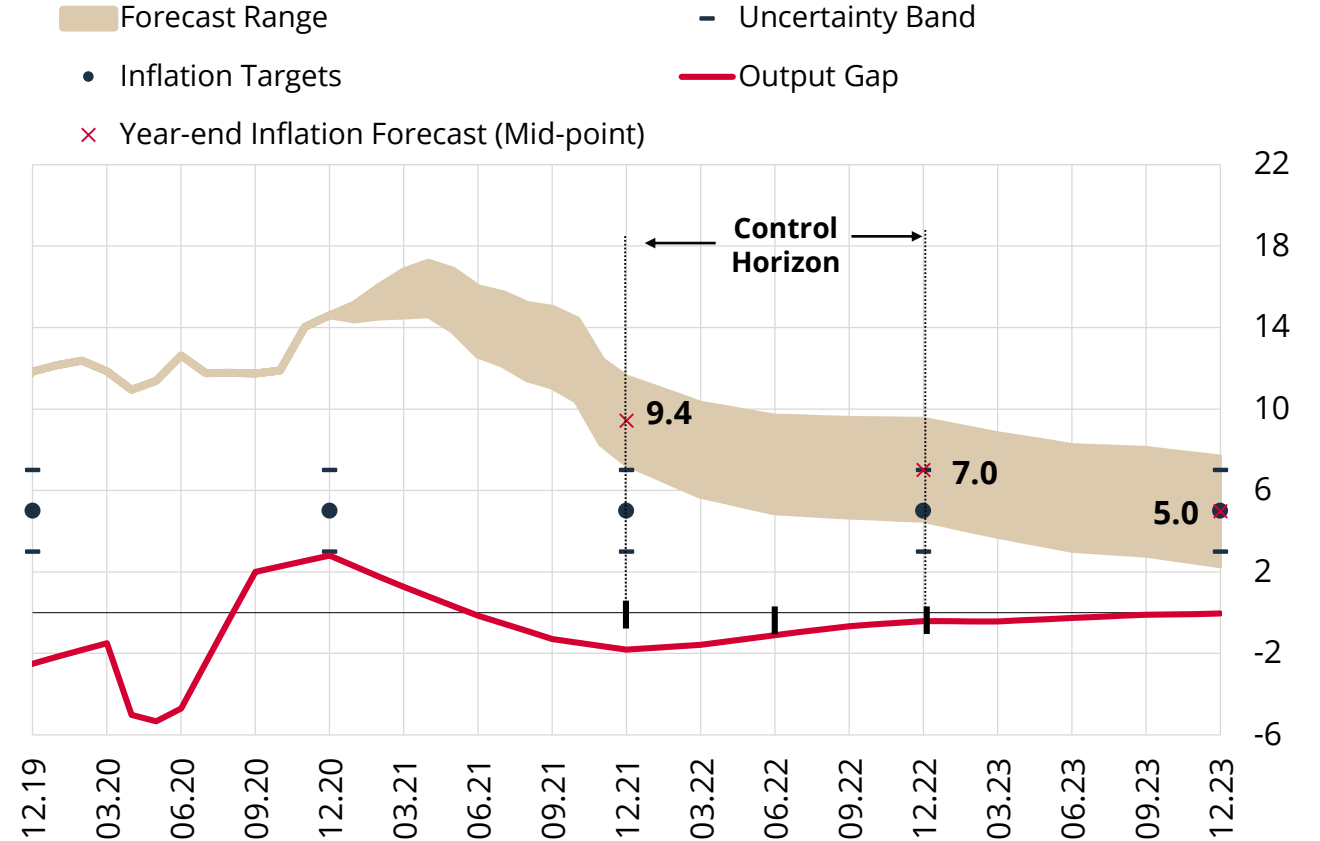
Source: CBRT, TURKSTAT

Inflation Outlook

Accounting of the revision in 2021 year-end inflation forecasts relative to previous Report:

- -0.4 points from TL denominated import price revision,
- +0.2 points from revision in food inflation,
- -0.3 points from administered prices,
- +1.0 points from the rise in unit labor costsend of inflation and the update in initial conditions.
- -0.5 points from the fall in inflation expectations.

Inflation and Output Gap Forecasts* (%)



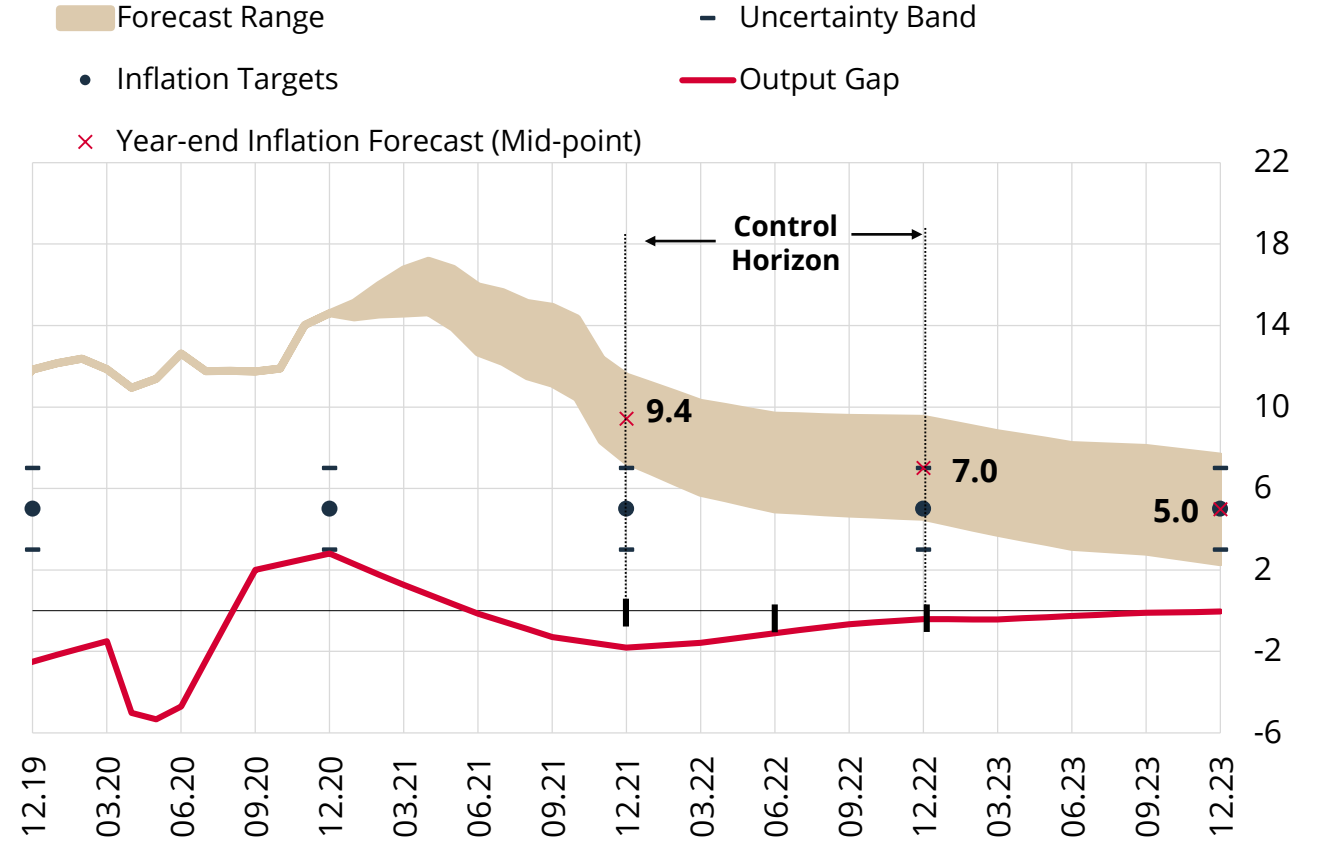
Source: CBRT, TURKSTAT

Inflation Outlook

At the end of 2022:

- Inflation forecast remained unchanged at 7 %.
- It is expected that the downward trend in inflation will be maintained with the tight monetary stance and the improvement in expectations.

Inflation and Output Gap Forecasts* (%)



Source: CBRT, TURKSTAT

MONETARY POLICY STRATEGY

9 November 2020

- Primary Objective: To achieve and maintain price stability
- Primary Principles: Transparency, accountability and predictability

19 November 2020 MPC Meeting

- A simple operational framework
- Main policy instrument is the one-week repo auction rate
- Transparent and strong monetary tightening
- Increase in the policy rate from 10.25 percent to 15 percent

16 December 2020 Monetary and FX Policy for 2021

- Decisive implementation of the IT-regime with all the elements
- Tight and decisive monetary policy stance with the priority and focus of price stability
- A simple operational framework
- Communication in line with the principles of transparency, predictability and accountability
- Main policy instrument is the one-week repo auction rate
- Floating exchange rate regime: No nominal or real exchange rate target
- No FX transactions to determine the level or direction of exchange rates
- Strengthening foreign exchange reserves: Using all available tools transparently in a planned manner when appropriate pre-set strategic conditions are satisfied
- Sustaining financial stability as well as price stability

24 December 2020 MPC Meeting

- Strong monetary tightening, taking into account the **2021 year-end forecast target**
- Increase in the policy rate from 15 percent to 17 percent
- Sustaining tightness of the monetary policy decisively until strong indicators point to price stability.

21 January 2021 MPC Meeting

- A clear **forward guidance** in the MPC Decision
- Maintaining the tight monetary policy stance decisively **for an extended period**
- Additional tightening if necessary

Transparency Steps:

- 4 January 2020: The release of data regarding the swap transactions conducted by CBRT on a daily basis.
- 28 January 2021: International Reserves and Foreign Currency Liquidity Table will be released on a weekly basis

Monetary Policy Strategy

- Full-fledged inflation targeting regime will be decisively implemented within a simple operational framework.
- The Monetary Policy Committee will use all its tools in a timely and effective manner.
- The tight and cautious stance in monetary policy will be decisively maintained for an extended period until 2023, when the 5 percent target will be reached.
- Besides the current information set, if any new information arrives pointing at the risk of inflation expectations and pricing behavior diverging from the medium-term target path, additional front-loaded tightening will be implemented.
- Until reaching the 5 percent target, the level between the actual / expected inflation rate path and the monetary policy interest rate path will be maintained by pursuing a strong disinflationary balance and this balance will be sustained continuously.



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