

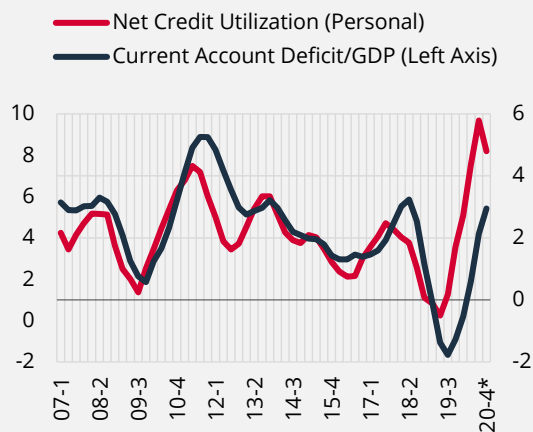
Box 2.3

The Role of Bank Lending in the Current Account Deficit

Falling tourism revenues due to the pandemic, rapid recovery led by domestic demand and increasing gold imports alongside dollarization were the causes of the deterioration in the current account balance in 2020. In this context, direct and indirect effects of the strong credit impulse played a significant role in the recovery in import demand (Chart 1). The direction of these forces will shape the evaluations on the dynamics of the current account balance in 2021. This box analyzes the impact of the expansion in credits on imports in 2020.

Credits affect imports through personal loans and imported inputs for production purposes (Chart 2). In recent years, in tandem with the depreciation in the real exchange rate, imports of intermediate goods have displayed lower growth compared to industrial production. However, it is seen that this trend reversed or stalled in 2017 and 2020, when the credit impulse strengthened. In periods of eased financial conditions (such as reduced interest rates and extended maturities), demand for imported goods increased, despite a depreciation in the real exchange rate.

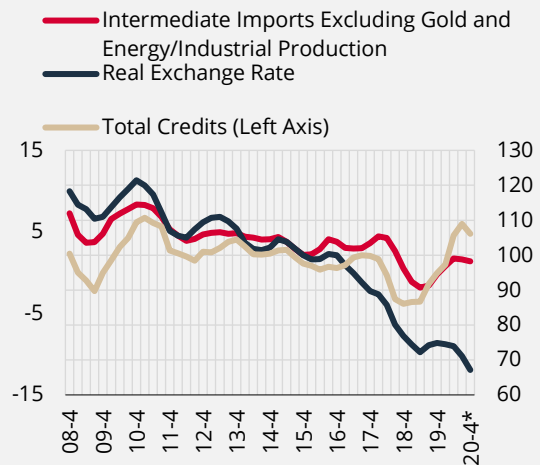
Chart 1: Net Credit Utilization ¹ (Personal), **Current Account Deficit/GDP** (12-Month, Cumulative, %)



Sources: CBRT, TURKSTAT, BRSA.

* 2020 Q4 value for the Current Account Deficit/GDP is forecast.

Chart 2: Intermediate Inputs Utilization, Real Exchange Rate and Total Credits ²



Sources: CBRT, TURKSTAT, BRSA.

* Values for imports and industrial production are October-November averages.

In the short term, the import demand depends on credit developments as well as relative prices and the current income, represented by variables such as GDP and industrial production. In those periods of loose financial conditions, domestic demand strengthens due to extended maturities and increased debt service capacity. In such periods, the import demand is higher than that implied by the GDP growth (income) and relative price (real exchange rate) channels, and standard demand equations underestimate imports. As a matter of fact, credit developments are mostly consistent with deviations from the long-term relationship of imports estimated by income and relative prices (Charts 3 and 4).³

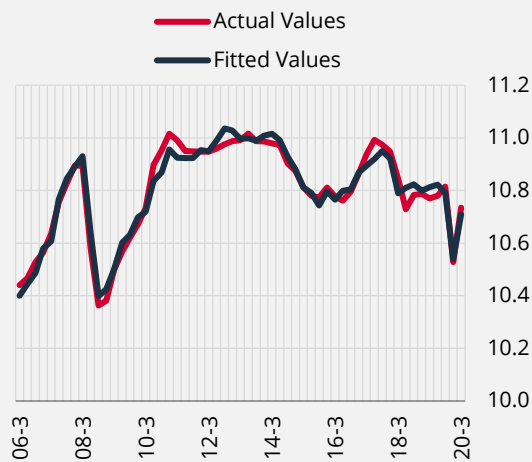
¹ $Net\ Credit\ Utilization = 100 * \{[Nominal\ Credit_t - Nominal\ Credit_{t-4}] / [\sum_{i=4}^t Nominal\ GDP]\}$

² In the chart, intermediate input utilization is seasonally adjusted, 4-week moving average and 2015=100; real effective exchange rate is CPI-based, 4-week moving average and 2015=100; total credits are adjusted for the exchange rate effect, 4-week moving average and quarterly percentage change.

³ In the model, imports excluding gold in USD is the dependent variable, real GDP, CPI-based real effective exchange rate and import prices are independent variables. The model is estimated by using the variables in logarithmic form for the 2005Q1-2020Q3 period.

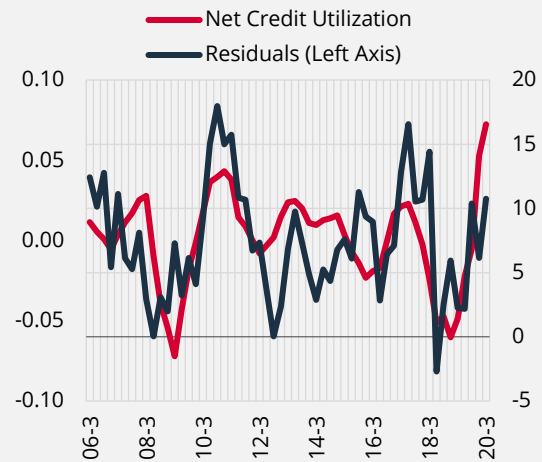
In addition to financing shocks, income shocks may also cause the relationship between imports and income to diverge. Consumer loans stand out as a tool to finance expenditures when employment opportunities weaken and household income falls. Therefore, access to credit creates a compensation mechanism that enables consumption to be kept at the desired level against fluctuations in the current income. Thus, in the absence of credit constraints, the relationship between consumption demand and the current period income exhibits a change.

Chart 3: Imports Excluding Gold: Actual and Fitted Values (Log)



Sources: BRSA, CBRT, TURKSTAT.

Chart 4: Residuals and Net Credit Utilization (%)

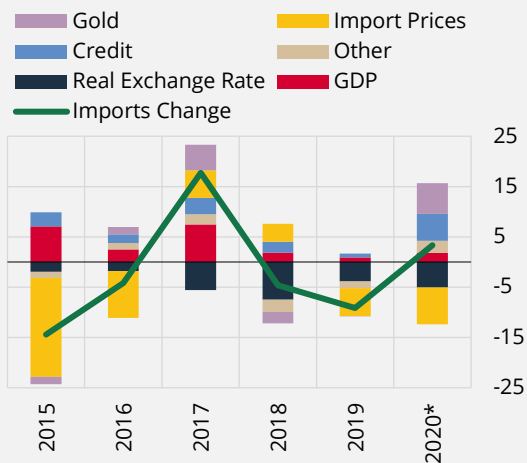


Sources: BRSA, CBRT, TURKSTAT.

Two methods are employed in quantifying the impact of credit developments on imports. Firstly, numerical accounting of macro determinants of import growth is made by using the method in Çelgin et al. (2019) (Chart 5).⁴ The decomposition exercise indicates that credits contributed by 5.3 points to import growth in 2020. Accordingly, it is calculated that strong credit growth had an effect of adding approximately USD 10.2 billion to imports in 2020. Moreover, it is seen that the demand for gold, which was quite high compared to previous years, played an important role in the increase in imports.⁵ It is estimated that import prices and real exchange rates restricted the import demand.

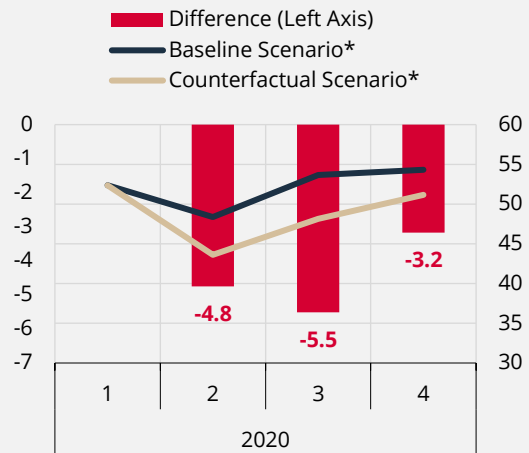
⁴ The method is based on an error correction model, in which nominal imports excluding gold is the dependent variable and real GDP, real effective exchange rate, import prices and real credit adjusted for exchange rate are independent variables. In case of decomposition of the effect of any independent variable on the dependent variable, other independent variables are assumed to be constant until the end of the sample period.

⁵ According to Special Trade System the average annual nominal gold imports were approximately USD 13 billion between 2017 and 2019. In 2020, it is estimated to be around USD 23.6 billion.

Chart 5: Imports Accounting (Contribution Points)


Source: Authors' calculations.

* The value for the 2020 Q4 of GDP is an estimate, as is the value for import prices for December 2020.

Chart 6: Imports Excluding Gold Under Alternative Growth and Credit Scenarios (USD Billion)


Source: Authors' calculations.

* Scenario details are given in footnote 7.

As a second method to measure the direct and indirect effects of the expansion in credit on imports a multi-equation framework, taking into account dynamic relations is used rather than a demand equation in reduced form.⁶ Through this model, an answer is sought to the question of how imports would be in a counterfactual scenario in which credits move close to their pre-shock trend. While the baseline scenario is based on realizations of credits and GDP, the alternative scenario is built around a weaker bank lending, following the pre-pandemic trend, and a GDP growth consistent with that.⁷ The difference between the conditional forecasts of imports for the 2020Q2-2020Q4 period under two scenarios reflects the effect of additional credit growth. Accordingly, a gap of USD 13.4 billion appears between the base scenario and counterfactual scenario as of 2020Q2 (Chart 6).

In conclusion, considering the “additional” imports excluding gold due to rapid credit expansion in 2020 and high gold imports with dollarization tendency, there is a significant room for improvement in the current account balance in the range of USD 20-25 billion that can be controlled by macro policies. A tight stance focusing on price stability in monetary policy will positively affect the external balance and macrofinancial stability through both demand and expectation channels.

References

Çelgin A., Gökcü M., Özel Ö. (2019). Decomposition of Income and Relative Prices in Exports and Imports. CBRT Research Notes in Economics, No:19/05.

⁶Estimations are based on 6-variable Bayesian Vector Auto-Regression (BVAR) model using global growth (exogenous), real effective exchange rate, real interest, credit adjusted for exchange rate, GDP and import volume index excluding gold. In the VAR framework variables are ordered as listed above and Cholesky method is used to identify individual shocks.

⁷ In the baseline scenario (counterfactual scenario), annual GDP growth is 6.7% (-0.3%) as of the 3rd quarter of 2020, and the annual credit growth adjusted for exchange rate is 22.9% (11%) as of the end of 2020.