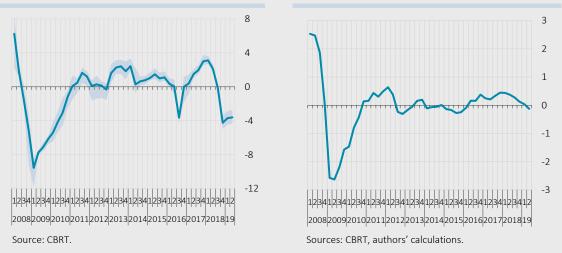
Box 4.2

Cyclically Adjusted Current Account Balance

Current account balance has shown a rapid improvement with the rebalancing process that started in the second half of 2018 and posted a yearly surplus in June 2019 for the first time in many years.¹ On the other hand, the mild recovery in economic activity which started in the first half of 2019 and the expectations that the recovery would continue gradually backed by increased support from domestic demand have caused debates regarding the course of the current account balance. In this framework, this box aims to calculate the current account balance adjusted for both domestic and foreign cycles for the 2003-2019 and to suggest a framework that will contribute to evaluating the components and sustainability of the improvement in the external balance.

Chart 1: Domestic Output Gap (%)

Chart 2: Export-Weighted Global Demand Gap (%)



The cyclically adjusted current account balance provides information about where the current account level would have been under a hypothetical situation in which the economic activity maintains its long-term trend. Therefore, the cyclical repercussions of domestic or global expansion/recession periods on the current account balance can be assessed quantitatively. Cyclical adjustment is done separately for the two major components of the current account balance, namely goods and services trade. For the adjustment procedure, the long-term stationary behavioral relationships between the import quantity and the domestic income, and the export quantity and the foreign (Turkey's export markets) income are used.² While estimating the long term relationships and adjusting the cyclical effects, unprocessed gold trade is ruled out due to its volatile feature. While an output gap series (Chart 1), which is derived from various indicators that are followed by the CBRT, is used in order to determine the domestic business cycles, the global output gap is obtained from the export-weighted global demand index by using the Fully Modified Hodrick-Prescott (FMHP) filter (Chart 2).³ According to these charts, the domestic GDP is positioned well below its long run trend in the second half of 2018 and in 2019. While the export-weighted global growth index moved above its trend in 2018, it converged to its trend in the first half of 2019.

¹ The current account balance posted an approximately USD 0.5 billion surplus annually for the last time in November 2002, and followed a path below the zero level until June 2019 when it posted a surplus of approximately USD 1.1 billion.

 $^{^{\}rm 2}$ For technical details regarding the methodology, see Eren and Tüzün (2019) paper.

³ Export-weighted global demand index covers 110 countries and has an export coverage ratio above 90% (Eren and Yavuz, 2019). The FMHP filter is introduced by Hanif et. al. (2014) and it is another version of the frequently referred to as Hodrick-Prescott (HP) filter for long term trend calculations such that at the FMHP filter the smoothing parameter is calculated endogenously and the end-point bias is resolved to a large extent.

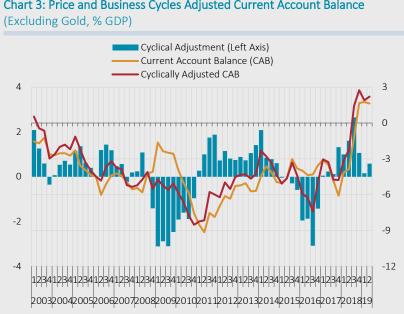


Chart 3: Price and Business Cycles Adjusted Current Account Balance

In addition to business cycles, the long-term trends of the price series of the goods and services trade are also calculated and adjusted nominal figures are obtained by using these series⁴. Cyclically adjusted current account balance series⁵ (as a ratio to GDP) is demonstrated at Chart 3. According to the chart, the overall cyclical adjustment that takes into account both price and business cycles has a considerable impact on the Turkish current account balance. During the analysis period, the magnitude of the cyclical adjustment varies between -3.1 and 2.7 with positive values indicating cyclical deteriorations in the current account balance and negative values being associated with cyclical improvements. There are only three periods when the current account balance (excluding gold) posted a surplus: the last quarter of 2018 and the first two quarters of 2019. The current account balance excluding gold has improved by around 5.5 points as a ratio to GDP since mid-2018. Adjusted for cyclical factors, this improvement becomes 4.5 points. This shows that although the cyclical effects have a significant role on the observed improvement in the current account balance, the bulk of the improvement comes from noncyclical developments with the real exchange rate adjustment being in the first place.

Sources: CBRT, TURKSTAT, authors' calculations.

⁴ Besides the (global and domestic) business cycles impact on export and import prices, the real exchange rate also exerts an influence, especially on the export prices. During the adjustment process of foreign trade prices, both impacts are taken into account.

⁵ Both business and price cycles adjusted current account balance is found by summing the cyclically adjusted foreign trade (excluding gold) plus services trade balance and unadjusted current transfers.

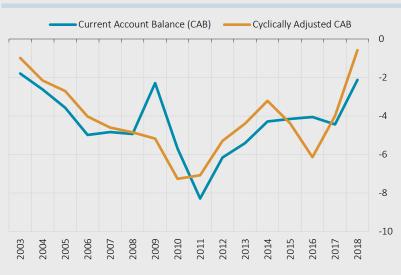


Chart 4: Price and Business Cycles Adjusted Current Account Balance (Excluding Gold, % GDP)

Source: CBRT, TURKSTAT, authors' calculations.

In order to depict the cyclical effects at a lower frequency, both the headline and the cyclically adjusted current account balances are drawn annually in Chart 4. It is evident from the figure that the cyclical adjustment reached its highest level in 2009 when the impact of the global financial crisis was experienced most severely. The cyclical improvement due to the prices being positioned below their long-term trend during the 2014-2017 period when the oil prices faced a downward trend, can be seen from the chart. Since business cycles affected the current account balance negatively in the first half and positively in the second half, the business cycle-driven adjustment remained limited in 2018, while the price cycle adjustment was significant and positive.

In conclusion, the fact that the current account balance, even adjusted for cyclical factors, has positioned above its historical average indicates that the recent improvement results from noncyclical developments, the adjustment in the real exchange rate in particular. Moreover, since the real exchange rate is expected to move in favor of the rebalancing in the upcoming period, it is anticipated that the expected recovery in domestic demand will not cause a rapid deterioration in the current account balance despite its partial stimulating impact on imports.

References

Eren, O. and Tüzün, G. (2019), "Cyclically Adjusted Current Account Balance of Turkey", CBRT Working Paper Series. (Under review).

Eren, O. and Yavuz, D. (2019), "Bölgeler İtibarıyla İhracat Ağırlıklı Büyüme Endeksleri (In Turkish)", CBRT Research Notes in Economics (Under review).

Hanif, M. N., Javed I., and Choudhary, M. A. (2017), "Fully Modified HP Filter," SBP Working Paper Series 88, State Bank of Pakistan, Research Department.