MACROECONOMIC OUTLOOK AND MONETARY POLICY IN TURKEY

October 7, 2021
Recovery in the global economy continues, albeit at a somewhat decelerated pace.

Deceleration is more evident in the services sector.
The worldwide speeding up of vaccination rollout supports the global economic recovery.

### Ratio of First-Dose and Second-Dose Vaccines to the Total Population (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>First Dose (As of June 1)</th>
<th>First Dose (Recent)</th>
<th>Second Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>39.4</td>
<td>80.7</td>
<td>78.4</td>
</tr>
<tr>
<td>Italy</td>
<td>40.0</td>
<td>74.9</td>
<td>67.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>58.0</td>
<td>71.7</td>
<td>65.9</td>
</tr>
<tr>
<td>France</td>
<td>39.4</td>
<td>74.4</td>
<td>65.7</td>
</tr>
<tr>
<td>Israel</td>
<td>62.0</td>
<td>69.7</td>
<td>64.3</td>
</tr>
<tr>
<td>Germany</td>
<td>43.6</td>
<td>67.5</td>
<td>64.0</td>
</tr>
<tr>
<td>Japan</td>
<td>10.6</td>
<td>70.7</td>
<td>60.0</td>
</tr>
<tr>
<td>USA</td>
<td>50.1</td>
<td>63.9</td>
<td>55.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>19.7</td>
<td>63.5</td>
<td>52.8</td>
</tr>
<tr>
<td>Poland</td>
<td>36.8</td>
<td>52.5</td>
<td>51.6</td>
</tr>
<tr>
<td>Brazil</td>
<td>21.5</td>
<td>70.6</td>
<td>42.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>17.0</td>
<td>49.1</td>
<td>35.2</td>
</tr>
<tr>
<td>Russia</td>
<td>11.5</td>
<td>33.3</td>
<td>29.1</td>
</tr>
<tr>
<td>Romania</td>
<td>22.7</td>
<td>29.8</td>
<td>28.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>6.0</td>
<td>33.7</td>
<td>20.0</td>
</tr>
<tr>
<td>India</td>
<td>12.2</td>
<td>47.1</td>
<td>17.5</td>
</tr>
<tr>
<td>South Africa</td>
<td>2.0</td>
<td>21.0</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Source: Our World in Data

Last Observation: October 2, 2021
Course of the Pandemic

New virus variants lead to an increase in number of cases, resulting in ongoing uncertainty regarding the course of the pandemic.

Source: Our World in Data

Last Observation: October 1, 2021
Economic Activity

Because of the bridge days effect, industrial production decreased sharply in July.

However, the main trend is still strong when temporary effects taken into account.
Demand Composition-2021 Q2

While domestic demand slowed down with the tightening in financial conditions and with the effect of pandemic measures, the contribution of net exports to growth increased with the recovery in exports and decrease in imports.
Demand Composition- 2021 Q3

While domestic orders weaken in the durable goods sector, they strengthen in the non-durable goods sector with the effect of reopening and recovery in tourism activity.

Export orders are relatively stronger across the main sectors.

Source: CBRT

* The dashed line shows the 2011-2019 average.
Demand for durable goods weaken in the third quarter.

The slowdown in demand for durable goods also reflected in import volume indices.

* As of July for import indices, average of July and August for white goods.
Opening-Up and Economic Normalization

The acceleration of domestic vaccination rollout facilitates the recovery in services and tourism sectors, which have been adversely affected by the pandemic, and leads to a more balanced composition in economic activity.

* Includes car rental, airlines, accommodation and travel agency expenditures.

Source: CBRT
Last Observation: August 2021

Source: CBRT, TURKSTAT
Last Observation: September 2021
Employment and Investment Tendencies

Investment tendency and employment expectations continue to improve.

The improvement in the investment tendency of firms continues across sectors in the third quarter.
External Trade

After the increase in exports and imports in the post-holiday period in August, provisional foreign trade data for September point to a partial correction in exports, still remaining at relatively high levels. Imports also did not maintain the upward trend in September.

* September data is provisional.
Turkey has started to have a surplus in its trade with Europe, but has a foreign trade deficit with the Asian region.

### Foreign Trade Balance by Region (Billion US Dollars)

<table>
<thead>
<tr>
<th>Region</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021*</th>
<th>FTV*</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 27</td>
<td>-14.7</td>
<td>0.0</td>
<td>8.3</td>
<td>-3.7</td>
<td>-0.5</td>
<td>168.9</td>
</tr>
<tr>
<td>Other Europe</td>
<td>-0.4</td>
<td>5.7</td>
<td>6.5</td>
<td>1.7</td>
<td>4.5</td>
<td>35.6</td>
</tr>
<tr>
<td>CIS</td>
<td>-15.6</td>
<td>-17.2</td>
<td>-15.6</td>
<td>-9.2</td>
<td>-11.6</td>
<td>46.7</td>
</tr>
<tr>
<td>Asia</td>
<td>-45.7</td>
<td>-40.6</td>
<td>-33.9</td>
<td>-36.3</td>
<td>-41.7</td>
<td>74.2</td>
</tr>
<tr>
<td>Middle East and Africa</td>
<td>23.4</td>
<td>21.7</td>
<td>30.5</td>
<td>19.8</td>
<td>27.3</td>
<td>81.5</td>
</tr>
<tr>
<td>North America</td>
<td>-4.2</td>
<td>-4.6</td>
<td>-3.5</td>
<td>-1.4</td>
<td>1.9</td>
<td>26.8</td>
</tr>
</tbody>
</table>

Source: TURKSTAT

* 12-month cumulative values as of August 2021. FTV refers to Foreign Trade Volume.
External Balance

The ratio of exports to imports has been relatively high in recent years.

As the negative impact of the pandemic on tourism and other service exports decreases, the improvement trend in the current account balance becomes more evident.

* September data is provisional.
Gold Imports

Gold imports have been hovering below historical averages since March.

Source: Ministry of Trade

* 2010-2020 weekly average.
Commodity prices remain high.
The rebalancing in foreign trade is more clearly observed in real terms.

Developments in the terms of trade limits the reflection of the balancing on the basis of quantity to the current account balance.

* Third quarter constitutes July data.
Thanks to favorable external demand conditions and tight monetary policy, current account has improved in seasonally adjusted terms.
External Financing Needs

Expected improvement in the current account balance will reduce the external financing needs.

* The difference between the current account balance and the total of direct investment, portfolio and other investment flows.
External debt rollover ratio for banking sector slightly increased to around 94% as of August 2021. Non-bank rollover stands at 126% as of July 2021.

The volatility in external financial conditions poses risks to the portfolio flows to emerging markets.
In September, annual headline inflation increased by 0.33 points to 19.58%, mainly on the back of services and energy prices.

In this period, the core indicators B and C recorded annual inflations of 18.63% and 16.98%, respectively.
Underlying Inflation

Underlying trend indicators B and C decreased in this period while maintaining high levels.

Underlying trend of services increased slightly while that of processed food and core goods decreased.

Source: CBRT, TURKSTAT

* B and C indices adjusted for tax effect.
** Core goods trend adjusted for tax effect.
Underlying Inflation

Alternative indicators of pricing behavior and underlying inflation lost pace somewhat in this period.

CPI Diffusion Index*
(Seasonally Adjusted, MA-3, %)

Median and SATRIM**
(Seasonally Adjusted, MA-3, %)

* Diffusion index is the ratio of the spread between the number of items displaying price increases and those displaying price decreases within a month to the total number of items.

** SATRIM is calculated by trimming off 19.5 percent (39 percent in total) from the lower and upper parts of the seasonally adjusted monthly variation rates distribution of inflation subgroups.

Source: CBRT, TURKSTAT

Last Observation: September 2021
Food Inflation

In September, while processed food inflation was around its historical averages, unprocessed food prices have decreased.

Source: CBRT, TURKSTAT

Last Observation: September 2021
Food and Non-Alcoholic Beverages

High levels in international agricultural commodity and food prices, cumulative exchange rate effects and the effects of weather conditions, as well as supply constraints in certain products, continue to affect food inflation adversely.

Source: TURKSTAT

Last Observation: September 2021

Fresh Fruits-Vegetables and Other Food (Annual % Change)

<table>
<thead>
<tr>
<th></th>
<th>Fresh Fruits Vegetables</th>
<th>Foods Excluding Fresh Fruits Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.21</td>
<td>10.22</td>
<td>19.89</td>
</tr>
<tr>
<td>Feb.21</td>
<td>8.55</td>
<td>20.75</td>
</tr>
<tr>
<td>Mar.21</td>
<td>7.03</td>
<td>19.91</td>
</tr>
<tr>
<td>Apr.21</td>
<td>13.60</td>
<td>17.78</td>
</tr>
<tr>
<td>May.21</td>
<td>9.96</td>
<td>18.61</td>
</tr>
<tr>
<td>Jun.21</td>
<td>9.92</td>
<td>22.04</td>
</tr>
<tr>
<td>Jul.21</td>
<td>26.26</td>
<td>24.63</td>
</tr>
<tr>
<td>Agu.21</td>
<td>40.38</td>
<td>26.84</td>
</tr>
<tr>
<td>Sep.21</td>
<td>33.41</td>
<td>27.88</td>
</tr>
</tbody>
</table>
Import Costs and Inflation

Due to the high course of international food prices, the effect of external prices on annual food inflation remained high.

**International Food Prices (FAO, 2014-2016 = 100)**

10% increase in international prices → 1.2-1.5 per. points contribution to food inflation excluding fresh fruits and vegetables
32.9% increase in international prices → 3.9-4.9 per. points contribution to food inflation excluding fresh fruits and vegetables

**FAO International Food Prices**

<table>
<thead>
<tr>
<th></th>
<th>FAO Food</th>
<th>Meat</th>
<th>Dairy</th>
<th>Cereals</th>
<th>Oils</th>
<th>Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly % Change (August)</td>
<td>3.1</td>
<td>0.7</td>
<td>-0.6</td>
<td>3.4</td>
<td>6.7</td>
<td>9.6</td>
</tr>
<tr>
<td>Annual % Change</td>
<td>32.9</td>
<td>22.0</td>
<td>13.6</td>
<td>31.1</td>
<td>67.9</td>
<td>48.1</td>
</tr>
</tbody>
</table>

Source: FAO

Last Observation: August 2021
Determinants of Inflation: Exchange Rate Pass-Through

Cumulative effects of exchange rate on inflation are expected to dissipate in the forthcoming months.

Source: CBRT

Last Observation: September 2021

* Exchange rate basket (0.5 USD + 0.5 Euro) is assumed to remain constant at 9.27 as of September 2021.
Determinants of Inflation: Import Costs

While the sliding scale tax scheme eases the pressures on energy prices, food and core goods are affected by the rise in agriculture and metal prices.

* Import Unit Value Index is assumed to remain constant at 117.60 as of July 2021.
Supply Constraints

Historical dynamics, characterized by the exchange rate and international commodity prices, fall short of explaining the recent rise in producer inflation.

The rise in international transportation costs and longer delivery times put producer prices under pressure.

Source: Bloomberg
Last Observation: September 2021

Source: IHS Markit
Last Observation: September 2021

* It is derived from the weighted average of spot and contract freight costs by volume for transportation from Chinese container ports.

** It is obtained from the weighted average of the Capesize, Panamax and Supramax dry cargo freight forward contracts by volume-contract size.

*** Freight cost of 40 ft container weighted by trade volume on 8 shipping routes.

**** The lower values of the series indicate a longer delivery time.
The recent increases in international oil prices and the depreciation of the Turkish lira put pressure on energy inflation through fuel prices. Sliding scale system continues to limit consumer inflation. Taking also into account the indirect effects of fuel prices, the system offsets a considerable inflationary pressure.

*The sliding scale system has been activated as of September 2020. The contributions reported in the slide show the direct impact of the sliding scale system on fuel prices, but do not reflect the indirect impact of fuel prices on other items.
Determinants of Inflation: Output Gap Indicators

With the effect of reopening and strong export performance economic activity remains strong, loan utilization slows down.

* Net loan utilization is calculated as the ratio of the annual change in the nominal loan stock to the annual GDP of 4 quarters before. The historical average covers the period 2006–2019.
Credit Developments: Credit Growth

FX adjusted commercial and consumer loan growths are below historical averages, being more evident in commercial loans.

Source: CBRT
Last Observation: September 28, 2021
Determinants of Inflation: Expectations

Inflation expectations are running above the interim targets.

* Calculated as the spread between same maturity nominal bond and TIPS yield.
At the MPC meeting in September, the policy rate has been reduced by 100 basis points.
**Deposit Developments: Deposit Amounts**

TL deposits have continued to increase strongly in 2021.

There have been a decline in FX saving deposits since the end of 2020.

Depositors decreased their FX deposits in the last week.

### Deposit Developments

<table>
<thead>
<tr>
<th>Deposits*</th>
<th>Deposit Amounts</th>
<th>Periodic Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL Deposits</strong></td>
<td>Billion TL</td>
<td>31 Dec (I)</td>
</tr>
<tr>
<td>USD</td>
<td></td>
<td>1,546</td>
</tr>
<tr>
<td>Savings</td>
<td>842</td>
<td>1,099</td>
</tr>
<tr>
<td>Commercial</td>
<td>485</td>
<td>534</td>
</tr>
<tr>
<td><strong>FX Deposits</strong></td>
<td><strong>USD</strong></td>
<td><strong>259</strong></td>
</tr>
<tr>
<td>Savings</td>
<td>168</td>
<td>164</td>
</tr>
<tr>
<td>Commercial</td>
<td>86</td>
<td>91</td>
</tr>
</tbody>
</table>

Source: CBRT

* TL and FX deposits include savings, commercial, official and other deposits.

** FX deposit amounts are nominal values, their changes are adjusted for parity and gold price effects.
Considering the structural demand for FX swaps by the banks, the CBRT will continue swap transactions in order to contribute to the TL and FX liquidity management of banks.
The CBRT reserves have recently gained stability and display a strong upward trend. For effective monetary policy and financial stability, FX reserves will be strengthened and relevant tools will be used to this end under appropriate conditions in a transparent way.
Overview

- Leading indicators show that domestic economic activity remains strong in the third quarter, with the help of robust external demand.

- The acceleration of domestic vaccination rollout facilitates the recovery in services, tourism and related sectors, which have been adversely affected by the pandemic, and leads to a more balanced composition in economic activity.

- Favorable external demand conditions and current tight monetary policy impact the current account balance positively. The current account is expected to post a surplus in the rest of the year due to the strong upward trend in exports, and the strong progress in the vaccination program stimulating tourism activities. The improvement in the current account balance is important for the price stability objective.

- Recent increase in inflation has been driven by supply side factors such as rise in food and import prices and supply constraints, increase in administered prices and demand developments due to the reopening.

- The MPC assessed that these effects are due to transitory factors. On the other hand, the decelerating impact of the monetary tightening on credit and domestic demand is being observed.

- The tightness in monetary stance has started to have a higher than envisaged contractionary effect on commercial loans. In addition, macroprudential policy framework has been strengthened to curb personal loan growth.

- The MPC evaluated the analyses to decompose the impact of demand factors that monetary policy can have an effect, core inflation developments and supply shocks.

- Accordingly, it is judged that a revision in monetary policy stance is needed and the policy rate was decided to be reduced by 100 basis points.