4. Supply and Demand Developments

In the third quarter, economic activity remained strong in line with the projections in the October Inflation Report. The main drivers of quarterly growth were private consumption and machinery and equipment investments. The upturn that came after a long period of sluggish investments in machinery and equipment is likely to increase the stability of economic growth. On the other hand, public consumption and construction investments weighed on quarterly growth in this period. Exports remained robust also owing to the rebound in tourism, providing more boost to annual growth amid base effects. Meanwhile, the restored domestic demand and the historically high imports of gold pushed imports upward in quarterly terms, which, with the additional contribution from base effects, caused imports to post a sharp year-on-year increase. As a result, net exports dampened quarterly growth as in the second quarter. The third quarter was marked by substantial annual growth owing to base effects, the increase in the number of working days due to moving holidays and the robust course of economic activity. Net exports made only a limited contribution while domestic demand provided the primary impetus for annual growth.

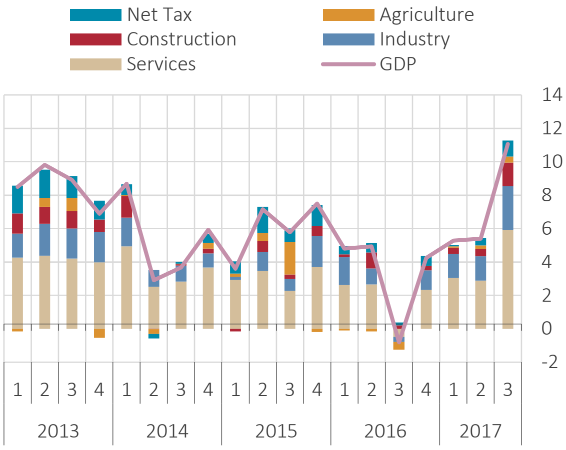
Leading indicators suggest that economic activity remained strong in the fourth quarter. Industrial production data for the October-November period and the fourth-quarter's survey indicators have signaled continued industrial growth, albeit at a slightly lower rate than in the third quarter. The weakening industrial production can be attributed to the expired tax incentives for furniture and white goods. Similarly, survey indicators for services and trade hint at a more moderate economic growth. On the expenditures side, following the brought-forward demand triggered by the incentives for durable goods, private consumption might see some slowdown in the fourth quarter whereas machinery and equipment investments will continue to post quarter-on-quarter growth. In comparison to the third quarter, exports remain strong while imports are decelerating due both to the slight slowdown in the economy as well as the developments in the exchange rate and the weaker gold imports. Hence, in contrast to the likely increased support from net exports, domestic demand is expected to make a lower contribution to quarterly growth in the fourth quarter. However, domestic demand will remain the key driver of annual growth.

Leading indicators for the fourth quarter are in line with the projections that the growth-inducing impact of CGF-backed loans and macroprudential incentives would subside gradually after peaking in the third quarter. The fourth quarter of 2017 is expected to reflect the transition to 2018 when growth will return to a normalized path and converge to its potential. The gradually lower effect of CGF-backed loans, the expired tax incentives for durable goods, the public saving measures announced in the MTP and the waning favorable base effects from 2017 are among the driving forces behind the pending normalization in 2018. On the other hand, exports are expected to lift growth further in 2018 amid the cumulative depreciation of the real exchange rate and the strengthening global growth, while CGF-backed loans will continue to prop up domestic demand, albeit at a weaker pace. Under current circumstances, the monetary policy uncertainty across major central banks, the direction of capital flows and geopolitical tensions remain a downside risk to growth.

4.1 Supply Developments

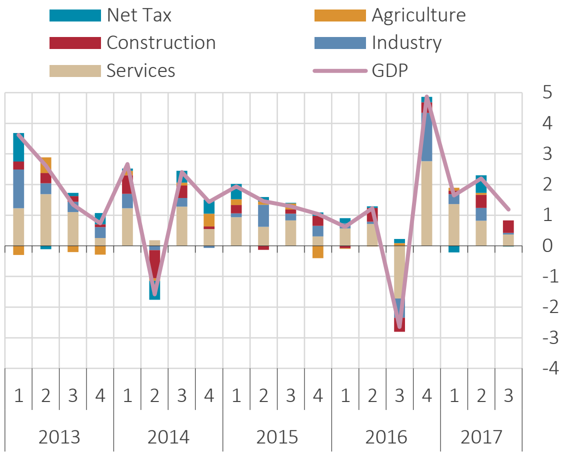
In the third quarter of 2017, GDP grew by 11.1 percent year-on-year and by 1.2 percent quarter-on-quarter in seasonal and calendar-adjusted terms. On the production side, annual growth was spurred by all major sectors in the third quarter (Chart 4.1.1). Quarterly growth, on the other hand, was driven by all sectors excluding agriculture (Chart 4.1.2).

Chart 4.1.1: Contributions to Annual GDP Growth from the Production Side (% Point)



Source: CBRT, TURKSTAT.

Chart 4.1.2: Contributions to Quarterly GDP Growth from the Production Side (Seasonally Adjusted, % Point)

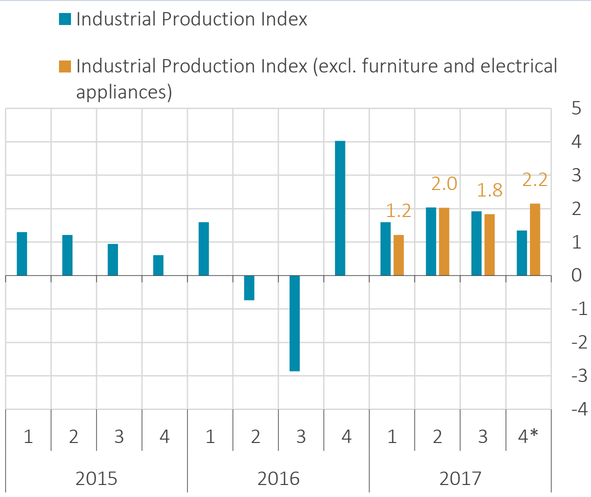


Source: CBRT, TURKSTAT.

Industrial production data for October and November 2017 indicate that economic activity remained buoyant, albeit slightly down from the third quarter (Chart 4.1.3). This slowdown can be attributed to sectors eligible for tax reductions throughout the year, and excluding furniture and electrical equipment production, industrial production recorded a much larger quarterly growth than in the third quarter. In year-on-year terms, industrial production saw a sizeable growth of 8 percent in the October-November period (Chart 4.1.4).

Across subcategories of industrial production, capital goods excluding vehicles were up from the third quarter, durable goods posted a decline, particularly in furniture, due to expiration of tax incentives, and intermediate goods continued to recover. Moreover, in line with the recovering labor market, non-durable goods remained on an uptrend after the flat course in the first half.

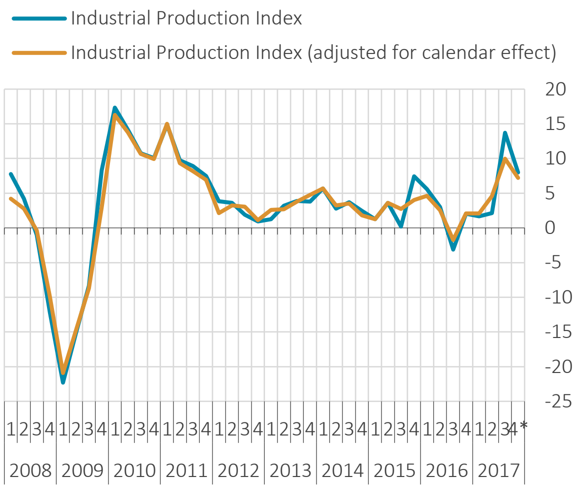
Chart 4.1.3: Industrial Production Index (Seasonally Adjusted, Q-o-Q Change, %)



Source: TURKSTAT.

* As of November.

Chart 4.1.4: Industrial Production Index (Y-o-Y Change, %)

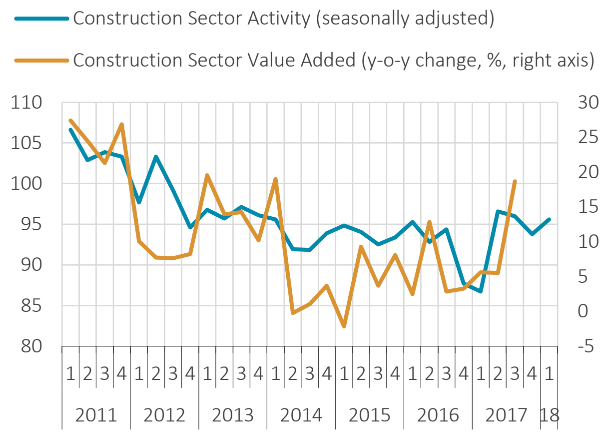


Source: TURKSTAT.

* As of November.

The construction sector, which supported annual growth in the first three quarters of the year, will likely fuel growth in the fourth quarter, though at a slower pace, on the back of the rise in ongoing infrastructure investments (Chart 4.1.5). This can be confirmed by the outlook in sectors supplying construction inputs, particularly the production of non-metallic minerals.

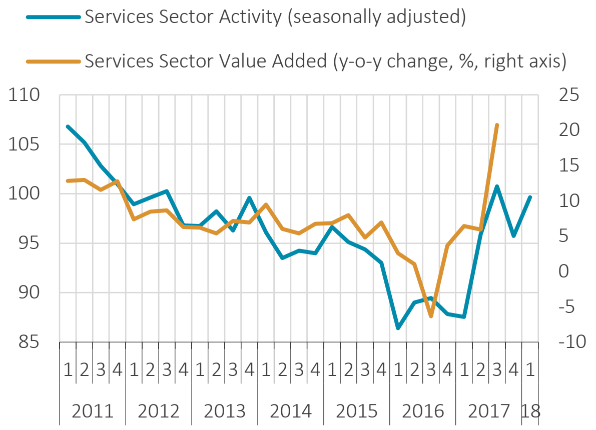
Chart 4.1.5: Construction Sector Activity and Value Added*



Source: TURKSTAT.

* Construction sector activity is measured by the question on construction sector activity in the last 3 months under sectoral confidence indices. As of January.

Chart 4.1.6: Services Sector Activity and Value Added*

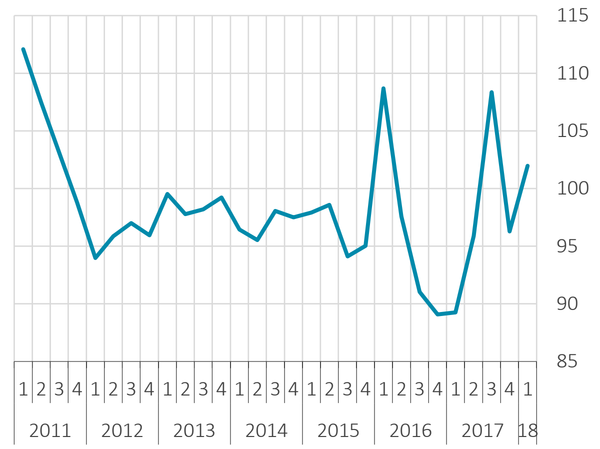


Source: TURKSTAT.

* Services sector activity is measured by the question on services sector activity in the last 3 months under sectoral confidence indices. As of January.

Indicators for services show some deceleration in the value added for the fourth quarter (Chart 4.1.6). Activity in retail trade, a major component of services that is closely associated with consumption demand, is expected to slow in the fourth quarter (Chart 4.1.7). Moreover, having accelerated on the back of CGF loans in the second quarter, financial sector activity might weaken in the fourth quarter for the second quarter in a row (Chart 4.1.8).

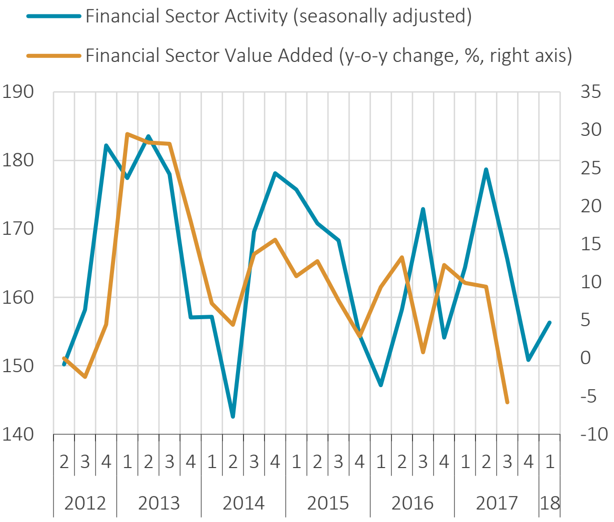
Chart 4.1.7: Retail Trade Activity* (Seasonally Adjusted)



Source: TURKSTAT.

* Retail trade activity is measured by the question on volume of sales in retail trade in the last 3 months under sectoral confidence indices. As of January.

Chart 4.1.8: Financial Sector Activity and Value Added*



Source: CBRT, TURKSTAT.

* Financial sector activity is measured by the question on financial sector activity in the last 3 months under sectoral confidence indices. As of January.

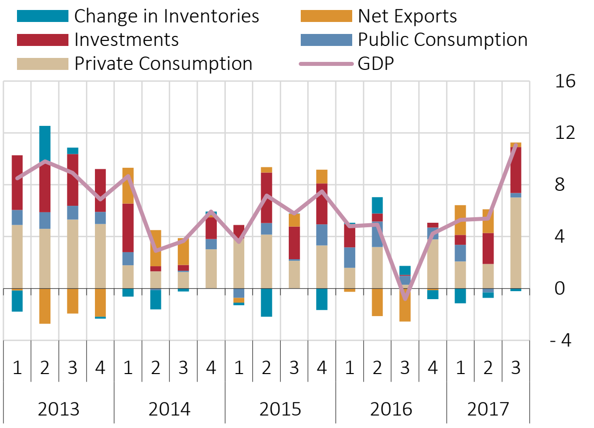
Overall, current indicators hint at a slightly decelerating economic activity for the fourth quarter of 2017. These developments are consistent with the expectations that economic activity would gradually revert to its underlying trend amid the fading support from factors specific to 2017, and the pace of growth would normalize in 2018.

4.2 Demand Developments

On the expenditures side, the third-quarter data on GDP indicate that annual growth was mostly fueled by domestic demand, while net exports made a minor contribution to annual growth (Chart 4.2.1). In this period, private consumption and investments were the main drivers of annual growth. Exports provided a much larger boost to annual growth than in the first half thanks to base effects, whereas the contribution from net exports narrowed markedly compared to the first two quarters as total imports accelerated amid recovering domestic demand and higher gold imports.

On a seasonally adjusted basis, GDP remained robust in the third quarter of 2017, albeit slightly down from the second quarter. After the second quarter, domestic demand continued to be the main driver of quarterly growth in the third quarter. The pickup in domestic demand was led by private consumption and machinery-equipment investments. Net exports provided a negative contribution to quarterly growth, largely because of imports (Chart 4.2.2). Private consumption expenditures provided a strong impetus for quarterly growth in the third quarter, while public consumption expenditures declined (Chart 4.2.3). On the investment front, construction investments were down quarter-on-quarter, whereas machinery and equipment investments jumped (Chart 4.2.4).

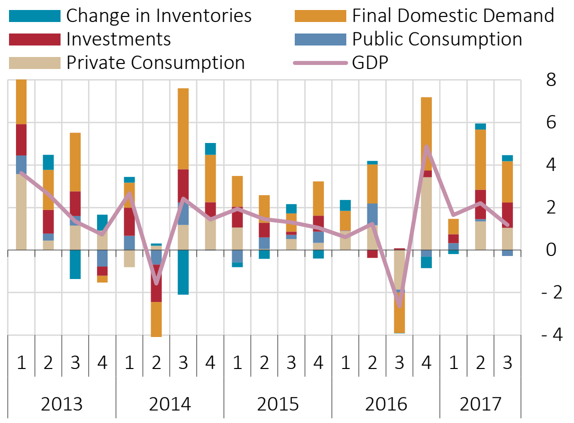
Chart 4.2.1: Contributions to Annual GDP Growth from the Expenditures Side* (% Point)



Source: CBRT, TURKSTAT.

* Change in inventories denote inventories and statistical discrepancy due to the use of chain-linked index.

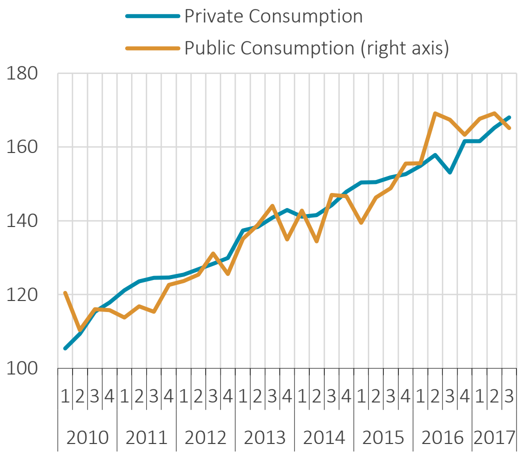
Chart 4.2.2: Contributions to Quarterly GDP Growth from the Expenditures Side* (% Point)



Source: CBRT, TURKSTAT.

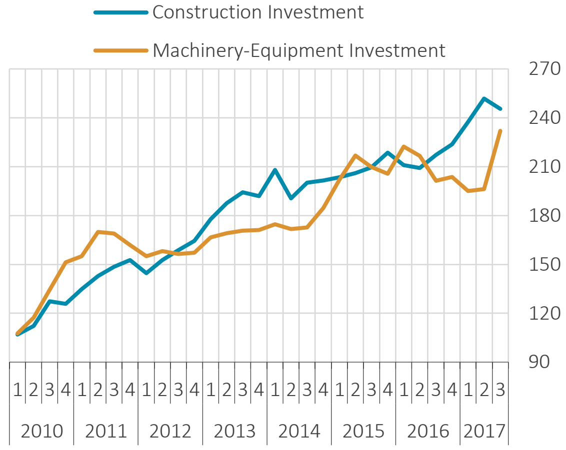
* Change in inventories denote inventories and statistical discrepancy due to the use of chain-linked index.

Chart 4.2.3: Private and Public Consumption (Seasonally Adjusted, 2009=100)



Source: TURKSTAT.

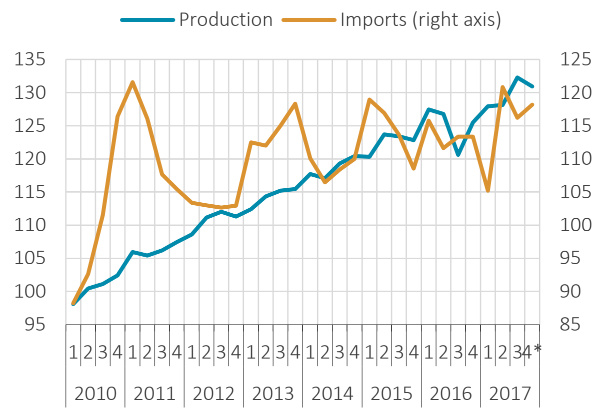
Chart 4.2.4: Construction and Machinery-Equipment Investment (Seasonally Adjusted, 2009=100)



Source: TURKSTAT.

Private consumption demand appears to have waned in the fourth quarter due to the expiration of tax incentives for durable goods. In fact, in the October-November period, the production of consumption goods was down from the third quarter, while the imports thereof remained flat (Chart 4.2.5). Automobile sales recorded a quarter-on-quarter upturn in the fourth quarter but sales of white goods plunged in the October-November period as tax incentives expired (Chart 4.2.6). According to fourth-quarter production and sales data, private consumption is expected to decelerate in the final quarter on a year-on-year basis (Chart 4.2.7). In addition, the fourth quarter's deteriorating consumer confidence hints at a somewhat weaker consumer demand, yet October data imply no permanent deterioration for consumption (Chart 4.2.8).

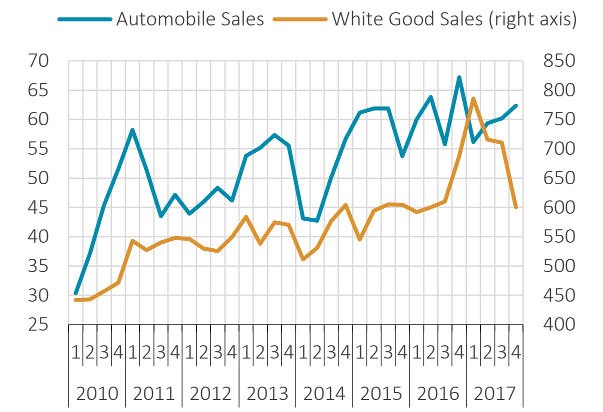
Chart 4.2.5: Production and Imports of Consumption Goods (Seasonally Adjusted, 2010=100)



Source: CBRT, TURKSTAT.

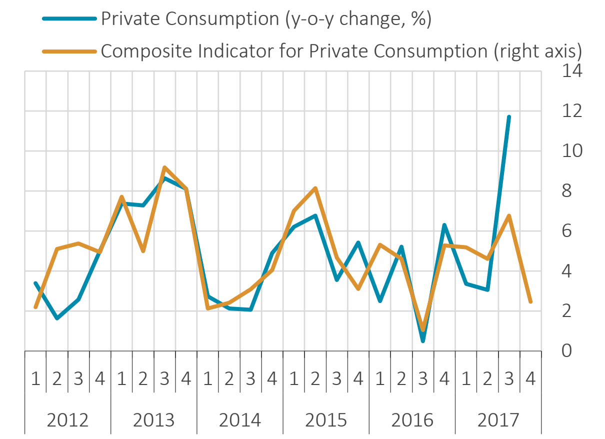
* As of November.

Chart 4.2.6: Automobile and White Good Sales (Seasonally Adjusted, Average, Thousand)



Source: AMA, WGMA, CBRT.

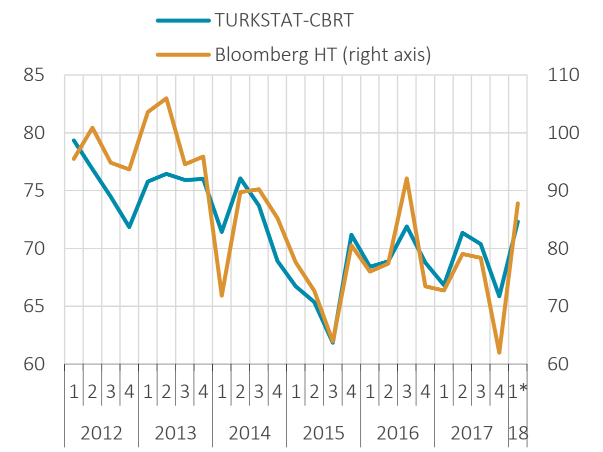
Chart 4.2.7: Private Consumption and Composite Indicator for Private Consumption*



Source: AMA, WGMA, CBRT, TURKSTAT.

* The composite indicator for private consumption is the weighted average of domestic automobile sales, domestic white good sales and retail sales volume index, where weights are obtained from a linear regression.

Chart 4.2.8: Consumer Confidence



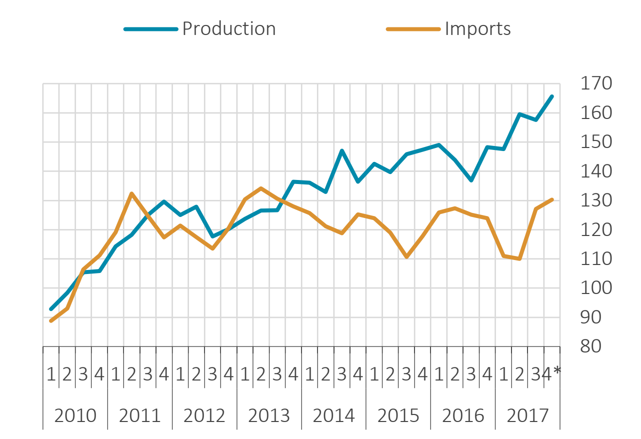
Source: Bloomberg HT, TURKSTAT.

* As of January.

Recent indicators suggest that the third-quarter rebound in machinery and equipment investments continued into the fourth quarter. The data on production and imports of capital goods excluding vehicles indicate that machinery and equipment investments remained on the rise in the final quarter (Chart 4.2.9). The composite indicator for investment expenditures suggests that investment spending will repeat its third-quarter upsurge in the fourth quarter, though losing some momentum (Chart 4.2.10).

The improving investment prospects of exporters and firms across other sectors bode well for investment expenditures (Chart 4.2.11). However, indicators reveal a slight fall in construction investments for the fourth quarter (Chart 4.2.12).

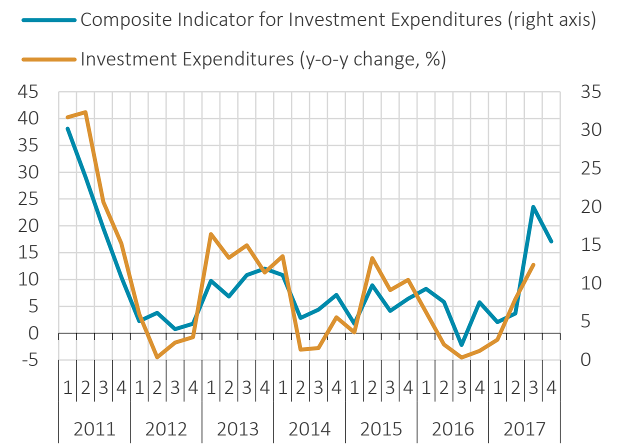
Chart 4.2.9: Production and Imports of Capital Goods Excluding Vehicles (Seasonally Adjusted, 2010=100)



Source: CBRT.

* As of November.

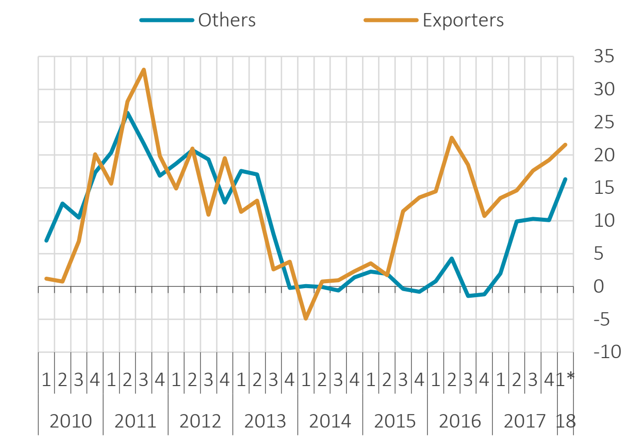
Chart 4.2.10: Investment Expenditures and Composite Indicator for Investment Expenditures*



Source: CBRT, TURKSTAT.

* The composite indicator for investment expenditures is the annual percentage change in the weighted average of production of machinery and equipment, domestic sales of capital goods, imports of capital goods and production of mineral goods, where weights are obtained from a linear regression.

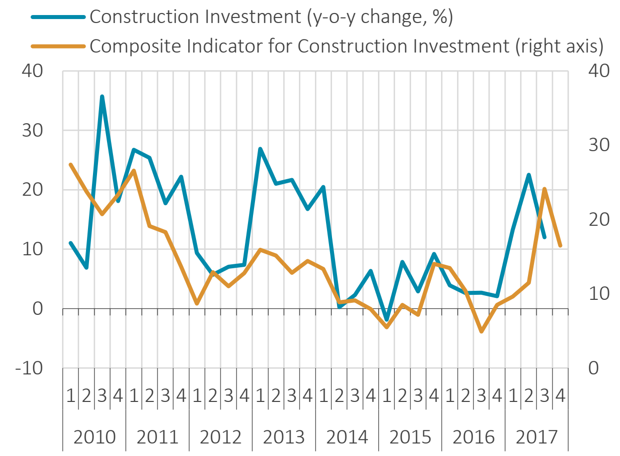
Chart 4.2.11: BTS Fixed Capital Investment Tendency (Seasonally Adjusted, Up-Down, 12-Month-Ahead)



Source: CBRT.

* As of January.

Chart 4.2.12: Construction Investment and Composite Indicator for Construction Investment*



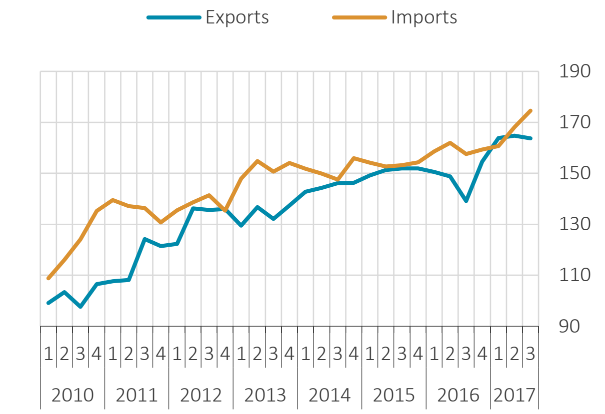
Source: CBRT, TURKSTAT.

* The indicator for construction investment is the annual percentage change in the weighted average of production of base metal products, fabricated metal, mineral goods, plastic-rubber and the imports of base metal and plastic-rubber, where weights are obtained from a linear regression.

Exports of goods and services decreased on a quarterly basis in the third quarter of 2017 whereas imports thereof increased on the back of buoyant domestic demand and gold trade (Chart 4.2.13). Thus, net exports contributed negatively to quarterly growth. Offering a more reliable outlook for the underlying trend of external trade, quantity indices excluding gold portray a slowdown in imports of goods for the fourth quarter and further growth in exports thereof. The upswing in the global economy, especially in the EU, the course of the real exchange rate and the flexibility in market diversification all stimulate exports of goods. Moreover, the tourism rebound also lifts exports of services (Chart 4.2.14). All in all, net exports might add to quarterly growth in the fourth quarter amid slowing imports and rising exports. Yet, due to a relatively stronger base effect, imports may record a much faster growth than exports, causing net exports to put a lid on annual growth.

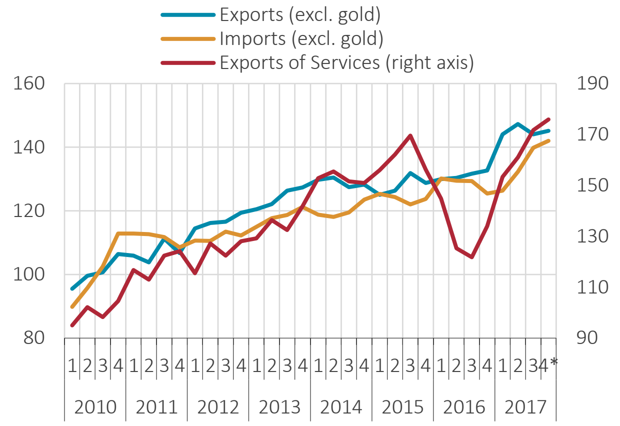
In conclusion, economic activity remained robust in the third quarter of 2017. Indicators for the fourth quarter signal sustained brisk, though slightly slowing growth for the economy. In this period, domestic demand is likely to contribute less to quarterly growth while net exports will provide added support.

Chart 4.2.13: Exports and Imports of Goods and Services (Seasonally Adjusted, 2009=100)



Source: TURKSTAT.

Chart 4.2.14: Quantity Indices for Exports, Imports and Exports of Services (Seasonally Adjusted, 2010=100)



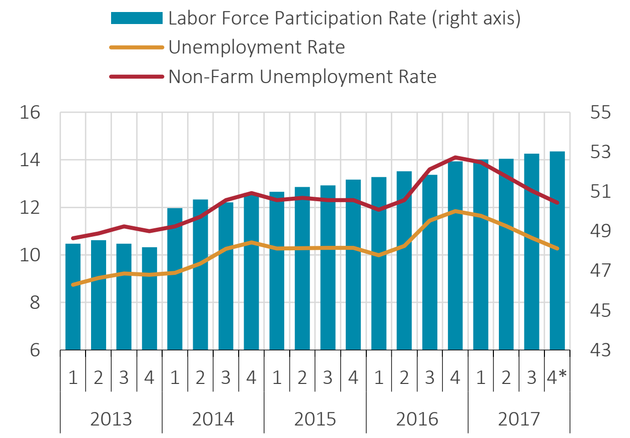
Source: CBRT, TURKSTAT.

* Forecast for December.

4.3 Labor Market

Unemployment rates were on a downward track through the first ten months of 2017 amid robust economic activity (Chart 4.3.1). In the third quarter, the seasonally adjusted total unemployment rate dropped by 0.5 points quarter-on-quarter to 10.7 percent, largely on the back of growing non-farm employment. However, the rising labor force participation rate curbed the fall in unemployment (Chart 4.3.2). In the October period, the seasonally adjusted total and non-farm unemployment rates fell by 0.4 and 0.5 points compared to the third quarter to 10.3 and 12.2 percent, respectively. Accordingly, having resumed a downward trend after peaking in December 2016 on a seasonally adjusted basis, total and non-farm unemployment recorded a cumulative decline of 1.7 and 2.0 points, respectively.

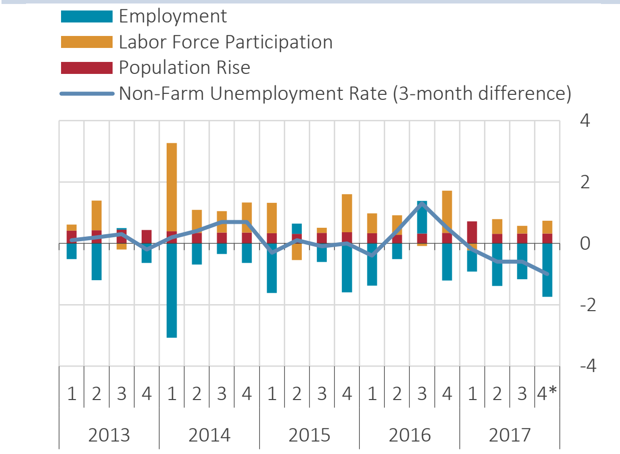
Chart 4.3.1: Unemployment and Labor Force Participation Rates (Seasonally Adjusted, %)



Source: TURKSTAT.

* As of October period.

Chart 4.3.2: Contributions to Quarterly Changes in Non-Farm Unemployment (Seasonally Adjusted, % Point)

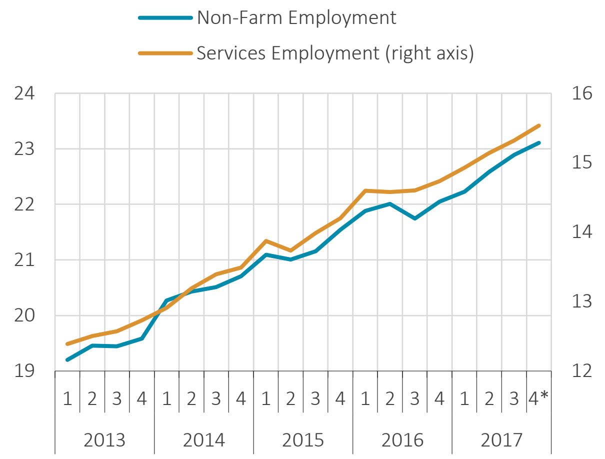


Source: TURKSTAT.

* As of October period.

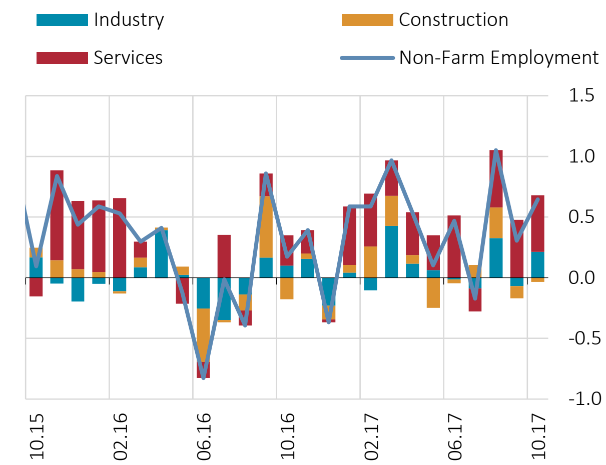
In the first quarter of 2017, economic growth had minor spillover effects on the labor market, but with stronger and more economy-wide growth, employment and unemployment rates began to recover in the second quarter. In the October period, non-farm employment was up about 1 percent compared to the third quarter, mostly on the back of services and industrial sectors (Charts 4.3.3 and 4.3.5). Meanwhile, construction employment receded in the same period (Charts 4.3.4 and 4.3.5).

Chart 4.3.3: Non-Farm and Services Employment (Seasonally Adjusted, Million People)



Source: TURKSTAT.
* As of October period.

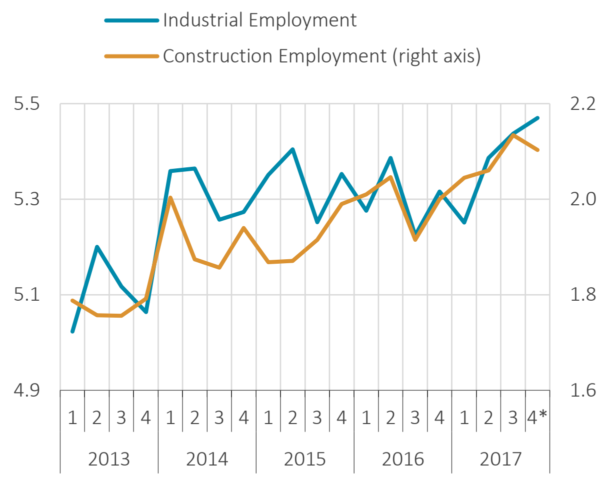
Chart 4.3.4: Contributions to Monthly Changes in Non-Farm Employment (Seasonally Adjusted, % Point)



Source: TURKSTAT.

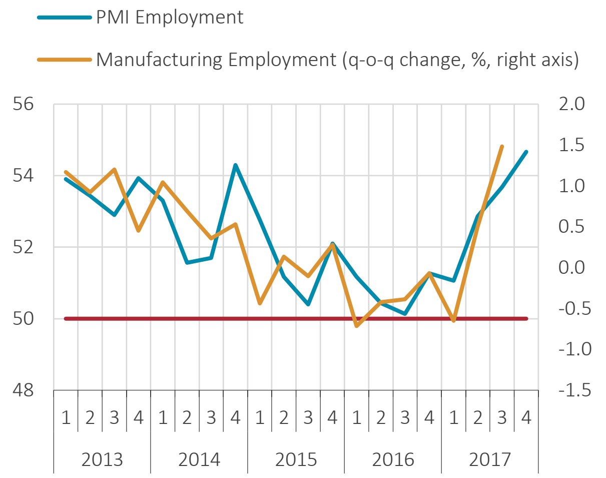
Despite rising industrial production and value added, industrial employment has been relatively weak in recent years, probably due to the weaker course of activity in SMEs compared to their larger scale counterparts. This can be supported by the fact that the capacity utilization rate in labor-intensive sectors has also been relatively low in recent years.

Chart 4.3.5: Industrial and Construction Employment (Seasonally Adjusted, Million People)



Source: TURKSTAT.
* As of October period.

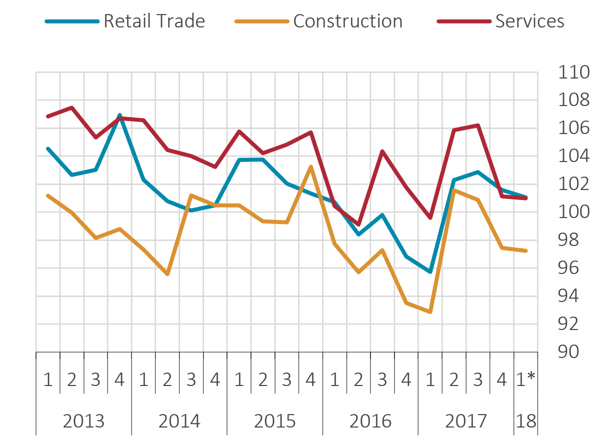
Chart 4.3.6: PMI and Manufacturing Employment (Seasonally Adjusted)



Source: IHS Markit, TURKSTAT.

Leading indicators suggest that employment growth will continue into the fourth quarter, and unemployment rates will remain on a downward track. The PMI employment index hints at continued growth for manufacturing employment (Chart 4.3.6). Employment expectation indices for the next 3 months signal a slowing pace of employment growth in services, retail trade and construction sectors (Chart 4.3.7). This slowdown confirms the predicted slack in economic growth for the fourth quarter. On the other hand, data from Kariyer.net indicate that the total number of job posts signifying new job opportunities remained strong in the fourth quarter while applications per job posts, which are highly correlated with the unemployment rate, continued to fall (Chart 4.3.8).

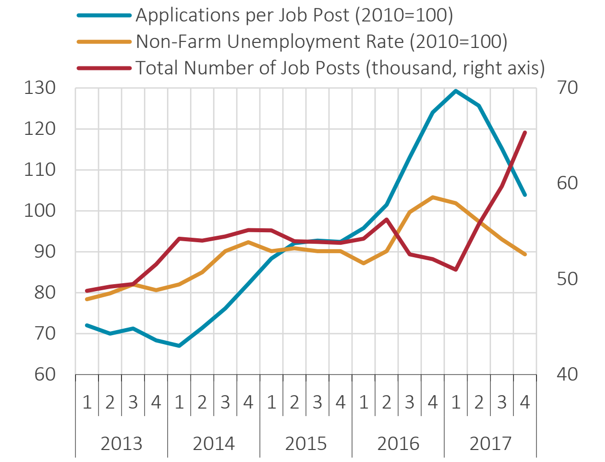
Chart 4.3.7: Employment Expectation Indices by Sectors for the Next 3 Months (Seasonally Adjusted)



Source: TURKSTAT.

*As of January.

Chart 4.3.8: Applications per Job Post, Non-Farm Unemployment Rate and Total Number of Job Posts* (Seasonally Adjusted)



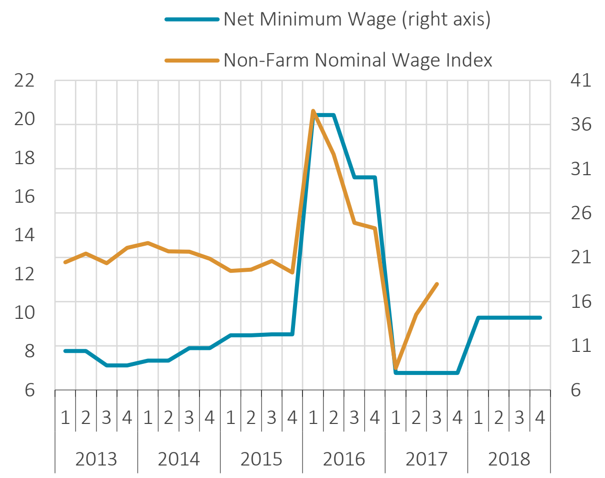
Source: Kariyer.net, CBRT.

* As of October period for non-farm unemployment rate.

4.4 Wages and Productivity

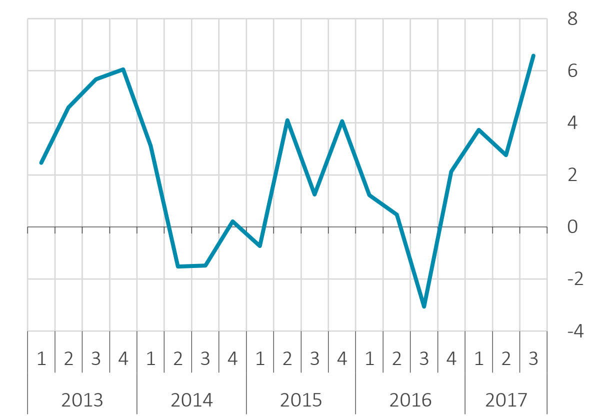
The steep minimum wage increase in the first quarter of 2016 sparked an acceleration in the annual growth rate of non-farm nominal wages (Chart 4.4.1). However, amid high base effects and a year-on-year drop in the first-quarter minimum wage increase in 2017, non-farm nominal wages posted weaker growth, up only 9.5 percent year-on-year in the first nine months of the year.

Chart 4.4.1: Non-Farm Nominal Wage Index and Net Minimum Wages (Y-o-Y Change, %)



Source: CBRT, TURKSTAT.

Chart 4.4.2: Partial Non-Farm Labor Productivity* (Y-o-Y Change, %)

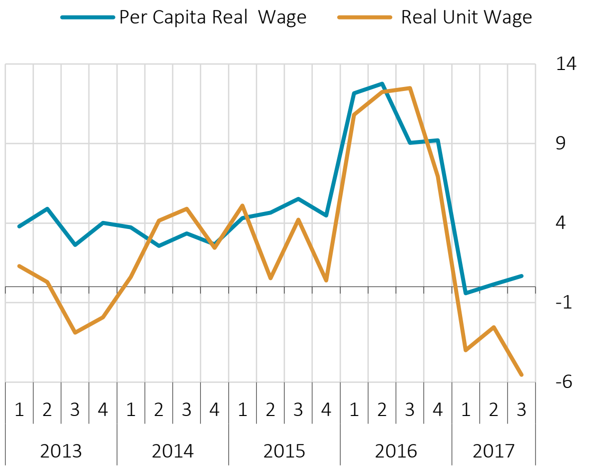


Source: CBRT, TURKSTAT.

* Non-farm value added/Non-farm employment.

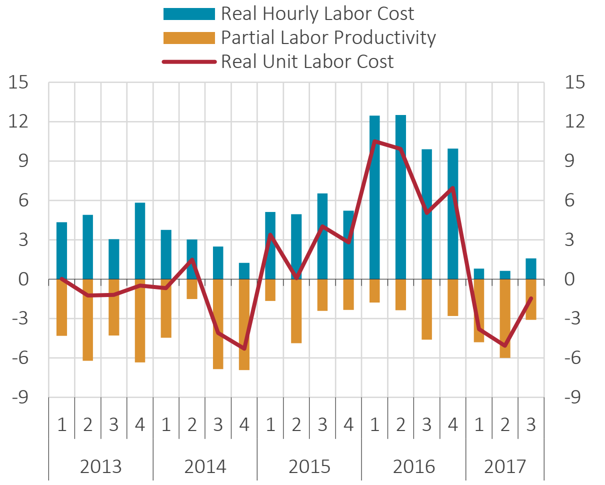
Changes in partial labor productivity contributed greatly to the fall in real unit labor costs in non-farm sectors in the first nine months of 2017. Partial labor productivity, which is value added as a ratio of employment, increased by 4.3 percent year-on-year (Chart 4.4.2). In this period, per capita real wages remained unchanged from the previous year. These developments caused real unit wages (per capita real wages/productivity) to post a dramatic fall (Charts 4.4.3 and 4.4.4). Despite having eased in the first three quarters of 2017 compared to the same period of the previous year, wage-driven cost pressures still exist due to the cumulative increase over the last two years.

Chart 4.4.3: Non-Farm Per Capita Real Wage and Real Unit Wage (Y-o-Y Change, %)



Source: CBRT, TURKSTAT.

Chart 4.4.4: Contributions to Annual Changes in Non-Farm Real Unit Labor Cost* (% Point)



Source: CBRT, TURKSTAT.

* Real hourly labor cost is obtained from TURKSTAT's Labor Cost and Earnings Index. Partial labor productivity is measured by the ratio of non-farm GDP to number of hours worked obtained from TURKSTAT's Household Labor Force Survey.

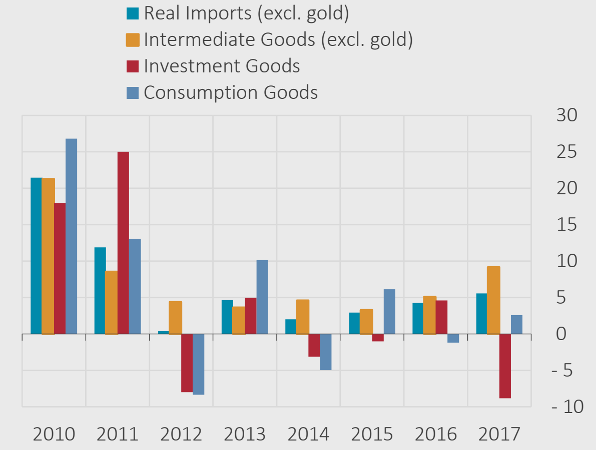
Currently, gross and net minimum wages total 2,029 TL and 1,603 TL, respectively, indicating a minimum wage hike of 14.2 percent for 2018 (Chart 4.4.1). Moreover, the government's ongoing minimum wage support for employers will ease cost pressures considerably. Aside from minimum wage changes, other key factors affecting wages include the buoyant economy, the unemployment rate and inflation developments. In 2018, economic activity will likely near its underlying trend, and the new employment incentives will help unemployment remain on the decline. In view of the economic outlook and the high level of inflation, nominal wages are expected to see higher economy-wide increases in 2018 compared to historical averages. Therefore, restraining unit labor cost pressures will require continued productivity gains.

Box 4.1

Import Dynamics in 2017: The Weak Course of Investment and Consumption Goods

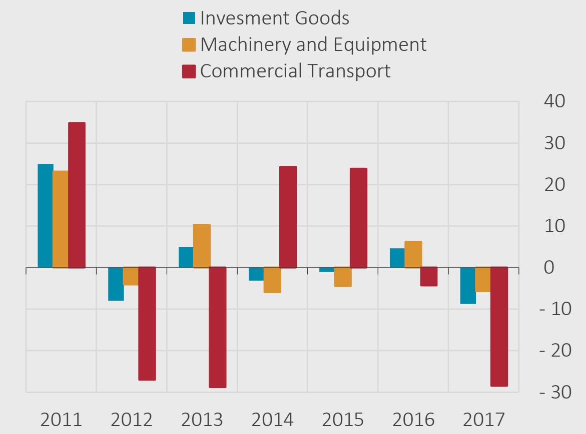
Despite the robust GDP growth, imports were rather weak in 2017. This box analyzes the subcategories that caused imports to moderate in 2017.

Chart 1: Imports and Subcategories (Real, Annual % Change)



Source: TURKSTAT, Authors' calculations.

Chart 2: Imports of Investment Goods and Subcategories (Real, Annual % Change)



Source: TURKSTAT, Authors' calculations.

As production in Turkey relies heavily on imported inputs, the main driver of imports is the imports of intermediate goods.[1] Given the positive correlation between economic activity and real imports, import growth is usually spurred by rising imports of intermediate goods.[2] On the other hand, in years when GDP growth is relatively higher, higher imports of investment and consumption goods give an additional boost to imports. For example, in 2010, 2011 and 2013, annual GDP growth was above 7 percent, and strong domestic demand pushed imports of intermediate goods up, prompting an uptick in imports of consumption and investment goods during these years (Chart 1). Yet, the year 2017 is slightly different. In particular, in 2017, economic activity is expected to perform nearly as strongly as in the mentioned years, but unlike imports of intermediate goods, imports of investment goods were muted, and imports of consumption goods increased only modestly.[3]

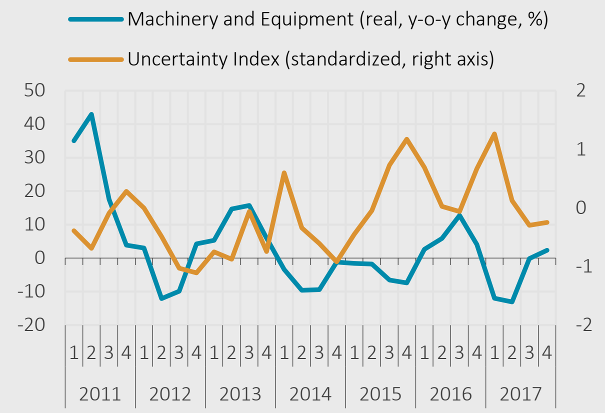
[1] According to the 2010-2017 average, intermediate goods account for 71 percent of total imports while imports of investment and consumption goods amount to 16 and 13 percent, respectively.

[2] Real imports represent the import quantity index, where the booming gold imports in 2017 are excluded from the analysis in order to get a more accurate picture of the link between import dynamics and economic activity.

[3] Although imports of intermediate goods appear to have increased sharply in 2017 in nominal (USD) terms, most of this upswing was driven by rising energy and industrial metal prices. In fact, real imports of intermediate goods rose at a slower pace. The rate of change across imports of investment and consumption goods appears fairly similar both in USD and quantity terms. In this context, it can be inferred that the deteriorated terms of trade in 2017 spilled mostly into intermediate goods.

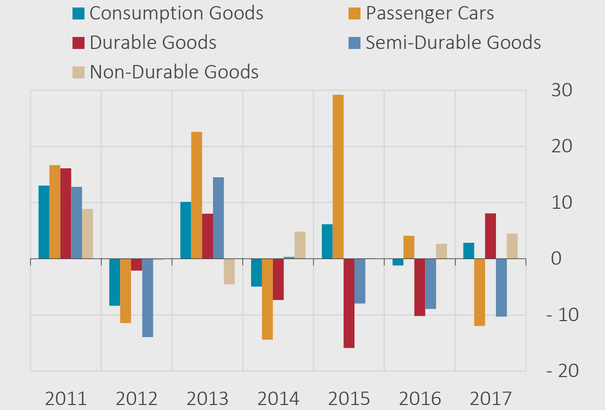
In order to have a better understanding of the weak course of imports in 2017, imports of investment and consumption goods are analyzed individually. Making up the majority of investment goods, imports of machinery and equipment slowed in 2017 amid weak investment appetite (Chart 2). Chart 3 displays that the mounting economic uncertainty in the first half of 2017 dampened machinery and equipment investments, leading to a decline in their imports (CBRT, 2017). However, with economic uncertainty waning and investments strengthening in the third quarter, imports of machinery and equipment recorded a mild upturn.

Chart 3: Uncertainty Index and Imports of Machinery and Equipment



Source: TURKSTAT, Authors' calculations.

Chart 4: Imports of Consumption Goods and Subcategories (Real, Annual % Change)



Source: TURKSTAT, Authors' calculations.

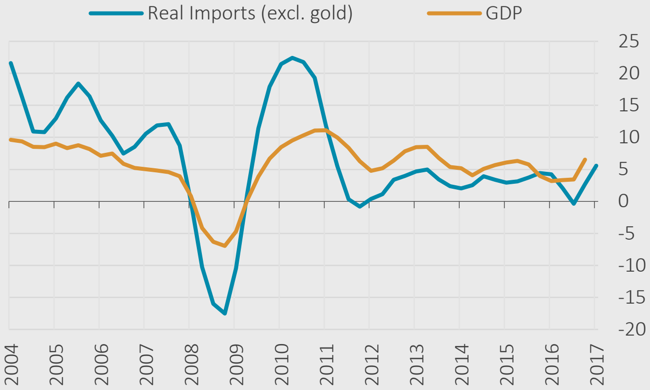
Among subcategories of consumption goods, passenger cars and semi-durable goods including clothing and garments were the key drivers of the subdued increase in imports of consumption goods in 2017 (Chart 4). The fall in imports of passenger cars can be attributed to the SCT adjustments in late 2016 and the pass-through of the TL depreciation into domestic prices.[4] On the clothing and garments side, the most outstanding was the decrease in imports from China and Bangladesh, Turkey's top two import destinations. However, this decline was not unique to 2017, as the sector's imports have been declining since 2012. Behind this decline were both the depreciating real exchange rate and the introduction of additional customs duties for non-EU countries in 2011.[5]

Another striking observation is the divergence of dynamics between economic activity and imports in the post-crisis period. According to GDP and import growth tendencies in Chart 5, import growth has shrunk per one unit of GDP growth over time. Having grown at a much faster pace before the global crisis, imports have lagged behind GDP growth after 2012. Put differently, the income elasticity of imports has lessened over time. The evidence provided by Çulha et al. (2018), the most recent study in this regard, suggests that the income elasticity of imports has declined both in total and across subcategories while their relative price elasticity increased.

[4] Passenger cars are mainly imported from the EU and the price effect has been more marked for consumers as the Turkish lira depreciated more heavily against the euro than the USD.

[5] The Council of Ministers' decree published in the Official Gazette of 15 September 2011 introduced additional customs duties varying from 3 to 20 percent for textiles and from 17 to 30 percent for garments.

Chart 5: Real Imports and GDP* (Cumulative Annual % Change)



Source: TURKSTAT, Authors' calculations.

* As of November for 2017.

In conclusion, despite the strong economic rebound in 2017, imports remained weak through the first half of the year before recovering in the second half and posting a moderate gain for the whole year. It was the imports of investment and consumption goods rather than intermediate goods that caused imports to grow at a slower pace than the GDP.

References

CBRT, 2017, Capacity Utilization Rate in Manufacturing and the Implications for Investment, Box 4.3 in Inflation Report 2017-IV.

O. Y. Çulha, O. Eren and F. Öğünç, 2018, Türkiye için İthalat Talep Fonksiyonu (in Turkish), CBRT Working Paper No. 18/03.