

## 4. Supply and Demand Developments

National accounts data for the third quarter of 2012 suggest that economic activity remained broadly consistent with the outlook presented in the October Inflation Report, following an almost flat course. Amid the ongoing contraction in private investments, domestic demand remained languish in this period; while net exports were the main driver of growth, thus contributing to the balancing of demand components.

Fourth-quarter data indicate that economic activity has started to recover. In fact, higher production and imports of consumption goods in October and November besides the marked improvement in consumer confidence point to a mild uptrend in private consumption demand. Moreover, the rise in the production as well as imports of investment goods coupled with the pick-up in survey-based indicators regarding the investment sentiment signal for a rebound in investment demand, which is a determinant of the recent poor course of the final domestic demand. The acceleration in credits seen in the fourth quarter is also another factor to bolster the brisk outlook in the final domestic demand. Similar to past quarters, net external demand is estimated to fuel growth in the fourth quarter as well.

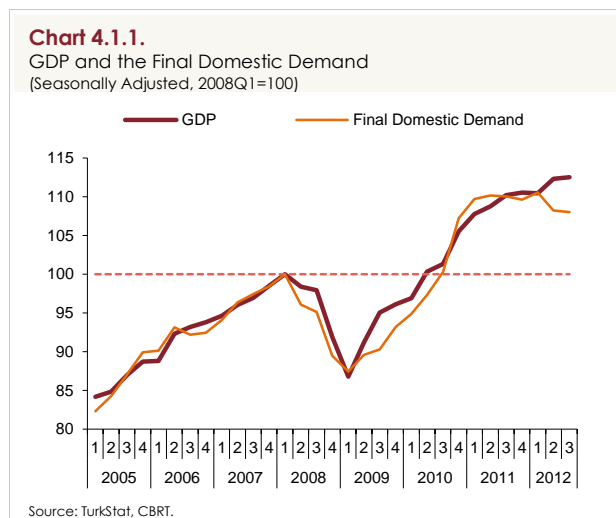
Recent indicators point that following the fourth quarter, the uptrend in economic activity will continue in the first quarter of 2013 with a robust course. Both consumer and commercial loans have recently accelerated. Additionally, worsening in consumer and investor confidence, which started in the second quarter, came to end in the last quarter, and confidence indices started to recover. Given these, the high course of future expectations for orders of the manufacturing industry firms supports the projection that the private sector demand will maintain the uptrend in the forthcoming period. Meanwhile, despite persisting uncertainties regarding the global economy, global economic indicators registered a slightly more favorable outlook compared to the past periods. Accordingly, exports are estimated to maintain further favorable performance in the forthcoming period thanks to product and market diversification as well as stabilizing policies. Thus, aggregate demand conditions are expected to support disinflation in the short term, while the current account deficit will follow a stable trend.

Income, financing and expectations channel that affect domestic demand are envisaged to support recovery; and so economic growth is expected to gradually gain pace in the upcoming period. It is anticipated that effects of the accommodative monetary policy will get more pronounced, and the improvement in the current account balance led by balancing of the economy will affect risk sentiment positively. In addition, rising employment is expected to support private sector demand. On the other hand, lingering global uncertainties, albeit being alleviated, pose downside risk on the investment demand, especially through the confidence channel.

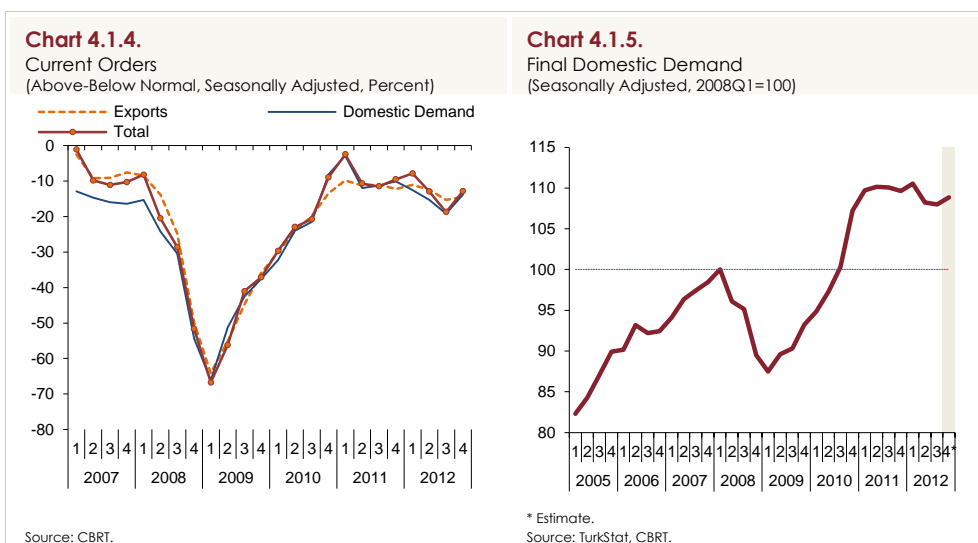
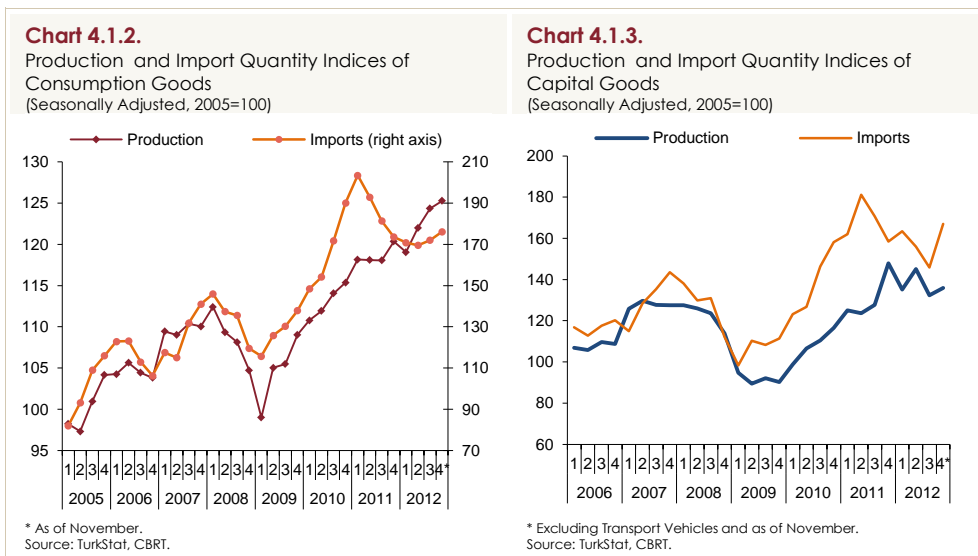
#### 4.1. Gross Domestic Product Developments and Domestic Demand

National income data released by the TurkStat indicate that GDP posted a year-on-year increase by 1.6 percent in the third quarter of 2012. The fall in aggregate final domestic demand and the rise in exports suggest that the economy was balanced further in this period. Thus, net exports remained as the driver of annual growth.

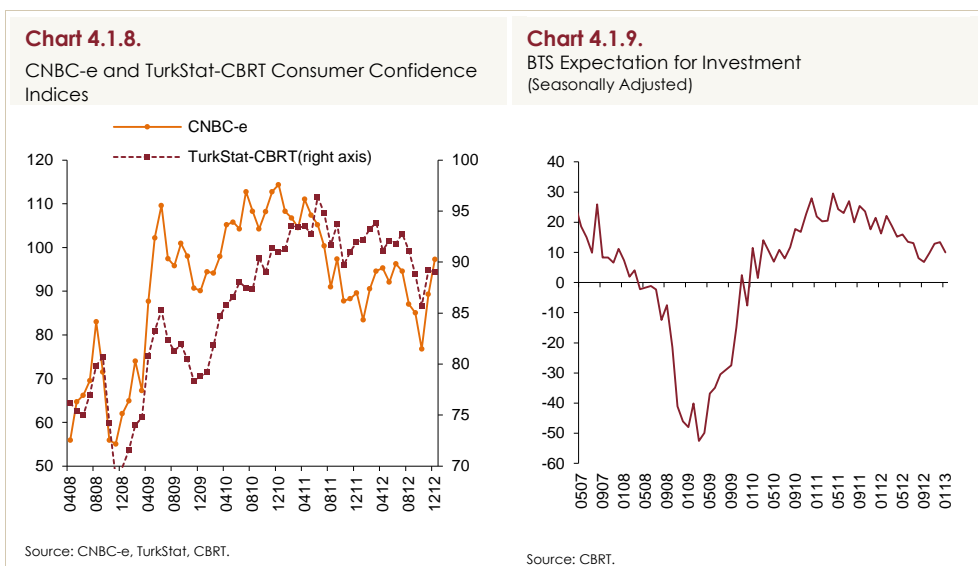
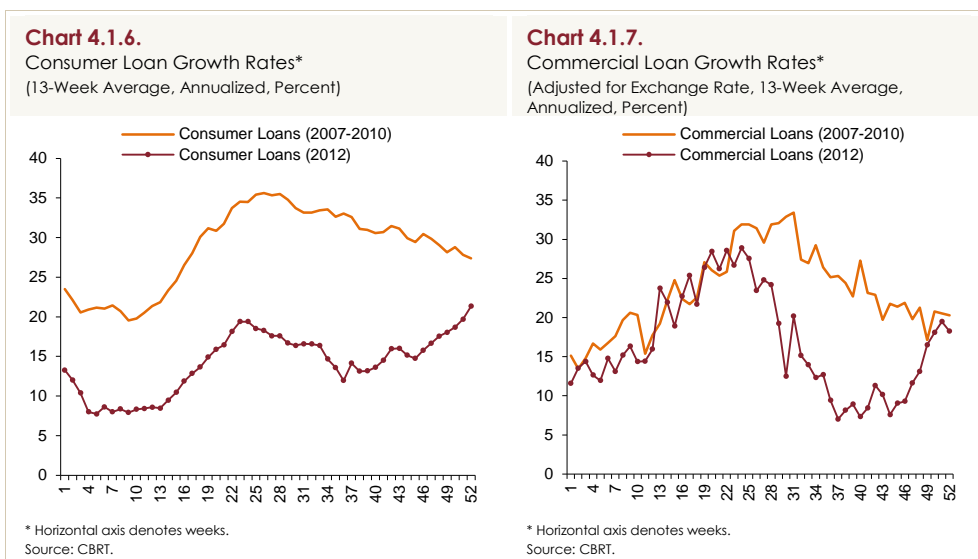
Seasonally adjusted data suggest that GDP posted a quarterly increase by 0.2 percent in the third quarter. Net exports continued to add on growth in the third quarter. Private consumption and public investments contributed positively to growth in this period. Meanwhile, private sector investments continued to decline in the third quarter, thereby causing the domestic demand to edge down (Chart 4.1.1).



Recent data releases point to a modest rise in the final domestic demand. In fact, the production and imports of consumption and investment goods, which are among demand indicators, increased in the October-November compared to the third quarter (Charts 4.1.2 and 4.1.3). The question regarding the level of registered orders compared to normal levels in the BTS indicators also imply an uptick in domestic demand (Chart 4.1.4). In sum, the final domestic demand is expected to register a mild increase in the last quarter (Chart 4.1.5). Meanwhile, given the leading import data pertaining to December, it should be noted that there are downside risks on the recovery forecast in the last quarter.

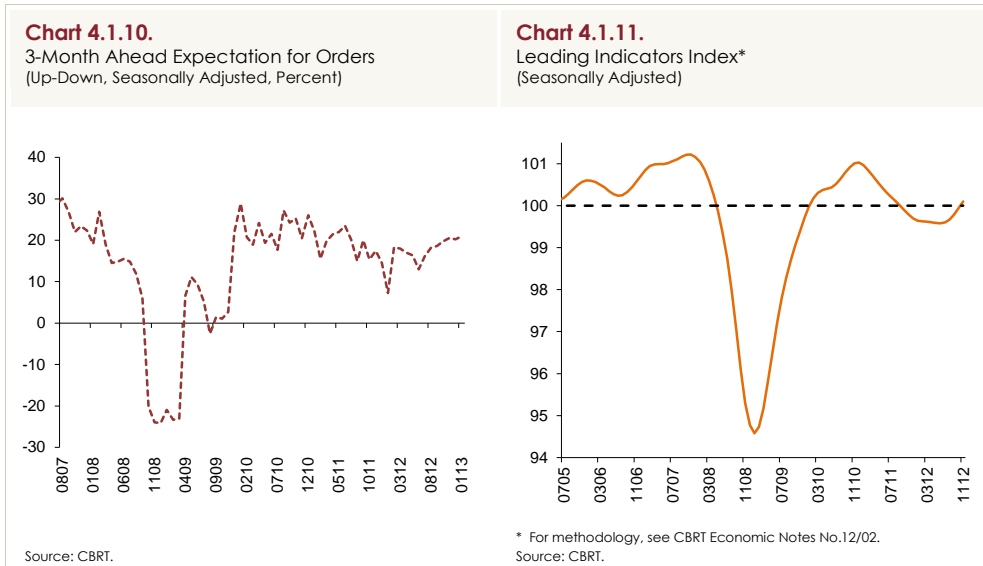


The recent rebound in domestic demand is expected to continue in the forthcoming period along with the more pronounced lagged effects of the accommodative monetary policy. In fact, growth rates of both consumer and commercial loans registered increases in the recent period (Charts 4.1.6 and 4.1.7). On the other hand, persisting global economic uncertainties, albeit at a slower pace, remain crucial for their potential to curtail recovery. In fact, even if the deterioration in consumer and investor confidence was interrupted in the May-June period, confidence indices are still languish (Charts 4.1.8 and 4.1.9).



Although 3-month ahead expectations for orders of the manufacturing industry firms have recently been flat, they are still at high levels (Chart 4.1.10).

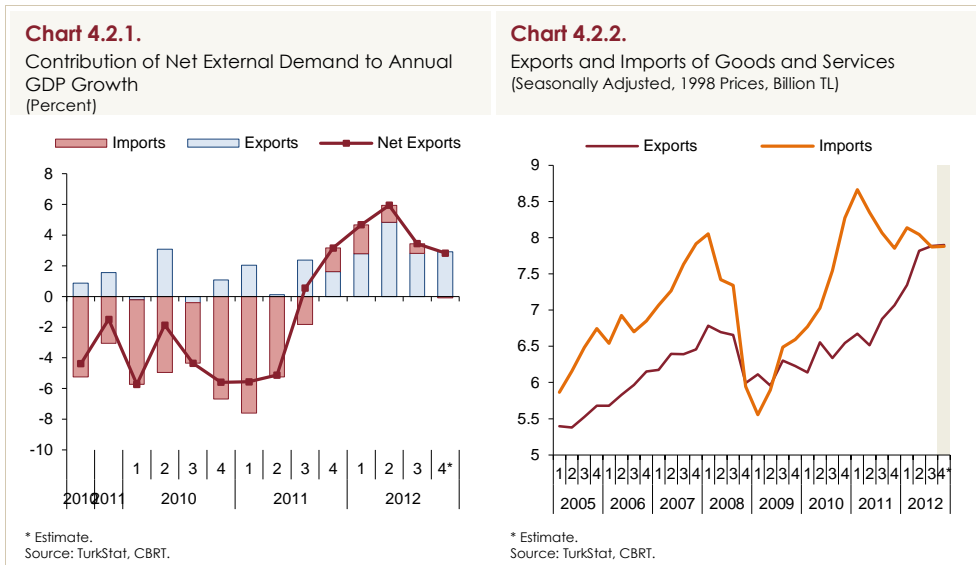
Leading indicators index continued to increase and went beyond 100, which entails positive signals with regard to the future production activities (Chart 4.1.11).



In short, in the recent period, loans increased relatively robustly; loan rates declined; investment and expectations for orders of firms recovered; and leading indicators index has increased. As a result, supported also by the lagged effects of the accommodative monetary policy, domestic demand is estimated to remain on an improving track and provide further support growth in the upcoming period. On the other hand, persisting problems regarding the global economy continues to pose downside risk on the domestic demand through the confidence channel. However, given that final domestic demand in the third quarter of 2012 stays below the figures of the first quarter of 2011, it is believed that there are also upside risks on the recovery.

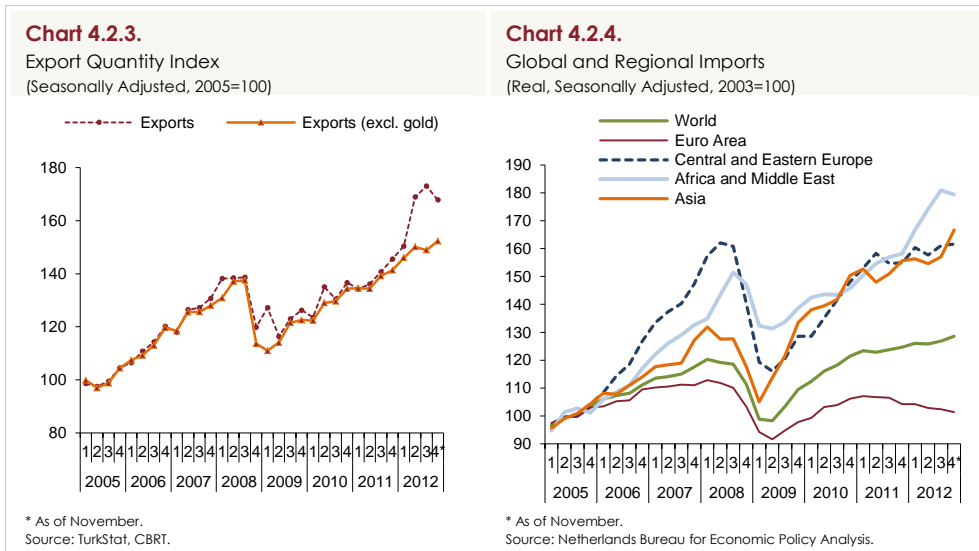
## 4.2. External Demand

National income data for the third quarter of 2012 suggest that the balancing in demand components continues as envisaged. Exports of goods and services posted an annual increase by 11.9 percent, while imports of goods and services went down by 2.4 percent. Thus, net exports proved to be the largest contributor to annual growth in this quarter as well as in the preceding three quarters (Chart 4.2.1). Quarterly analysis shows that in seasonally adjusted terms, export growth plummeted in the third quarter compared to past quarters, while imports of goods and services continued to decline (Chart 4.2.2).

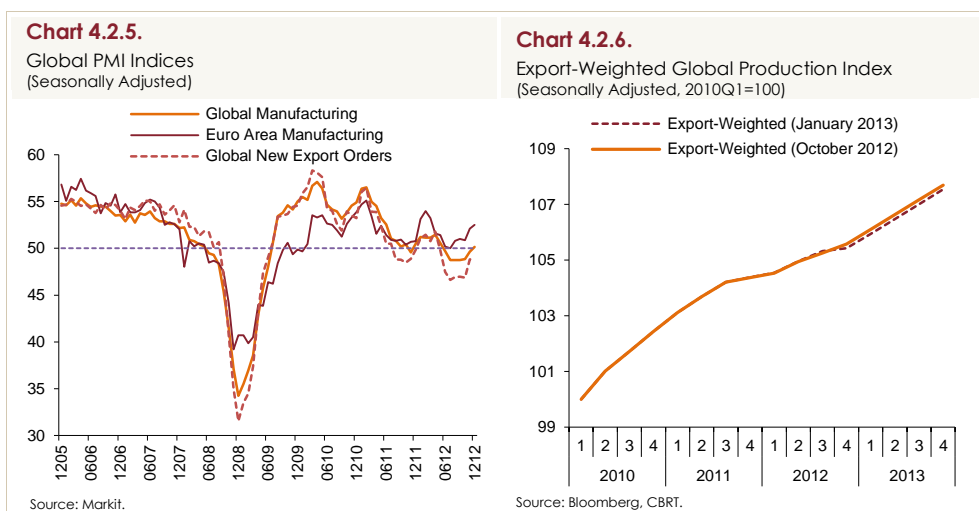


Analysis of the data pertaining to the last quarter of 2012 suggests that the recent surge in export quantity index was replaced by a decline in the October-November period. This decline is driven by a slowdown in gold exports. In fact, the core index constructed by excluding gold exports registered an increase contrary to the overall index (Chart 4.2.3). This shows that the underlying trend of exports has trended upwards again in the last quarter.

Global trends indicate a mild increase in the overall world import demand in the October-November period compared to the previous quarter. This increase was driven by the rising import demand of Asia. Moreover, an increase in the import demand of the Central and Eastern Europe is evident, albeit being limited. On the other hand, the robust trend of increase in the import demand of the African and the Middle Eastern countries, which have a gradually rising share in our exports, has paused. Moreover, the import demand of the Euro Area, our major trading partner with a great share in exports, follows a weak course, constituting a notable risk factor on our exports (Chart 4.2.4, Box 4.1). Given these developments, it should be underlined that there has been no further deterioration in external demand conditions. Also, the analysis of the course of export quantity indices suggests that exports are estimated to have followed an almost flat course in the last quarter of the year (Chart 4.2.2).

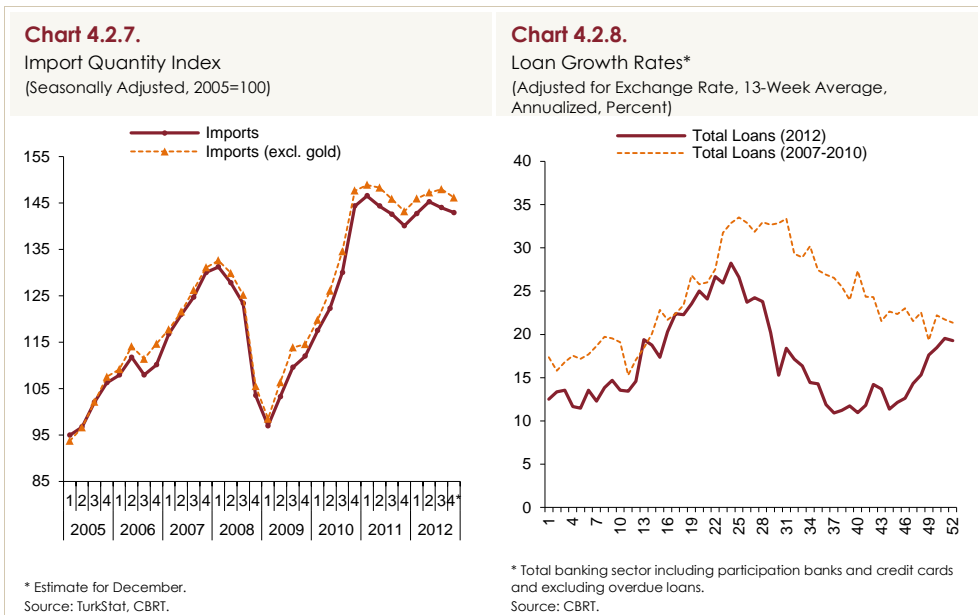


PMI indicators signal for recovery in the economic activity at a global scale. In fact, global PMI manufacturing index surpassed the critical level of 50 in December, after a 6-month period. Furthermore, services index continued with a rising trend across the last quarter, pointing to acceleration in the production of services. Although the global new exports orders index increased quarter-on-quarter, it remained below 50 (Chart 4.2.5). Despite the slight fall in export-weighted global production index, one of the medium-term indicators, external market growth is expected to gain pace in 2013 (Chart 4.2.6).



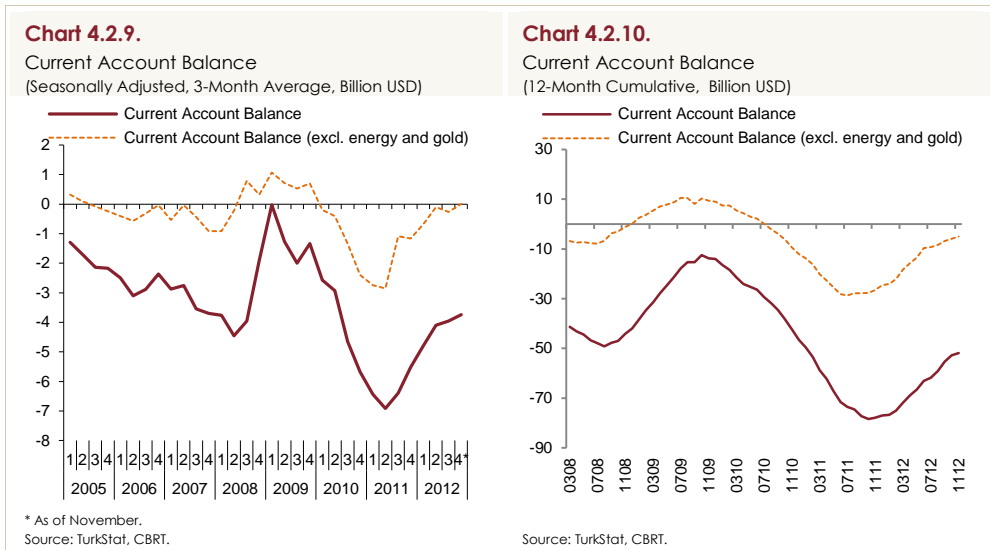
The import quantity index recorded a slight quarter-on-quarter increase in the October-November period. However, recent indicators point that import quantity index registered a decline in December. Accordingly, imports of goods are estimated to have followed a weak course throughout the last quarter.

Similarly, imports excluding gold, one of the indicators on the underlying trend of imports, posted a quarterly decline (Chart 4.2.7). Accordingly, imports of goods and services are estimated to have followed an almost flat course in the last quarter (Chart 4.2.2). On the other hand, the accommodative liquidity policy implemented by the CBRT as of the mid-year as well as the relative improvement in the risk appetite have recently led to notable increases in confidence indices and loan growth. In fact, total loans, which displayed a slow course of growth in 2012, accelerated in the last weeks of the year, mainly on the back of commercial loans, and converged to 2007-2010 averages (Chart 4.2.8). Given these developments, it is expected that domestic demand will have greater contribution to growth in the upcoming period, thereby leading to a recovery in the import demand.



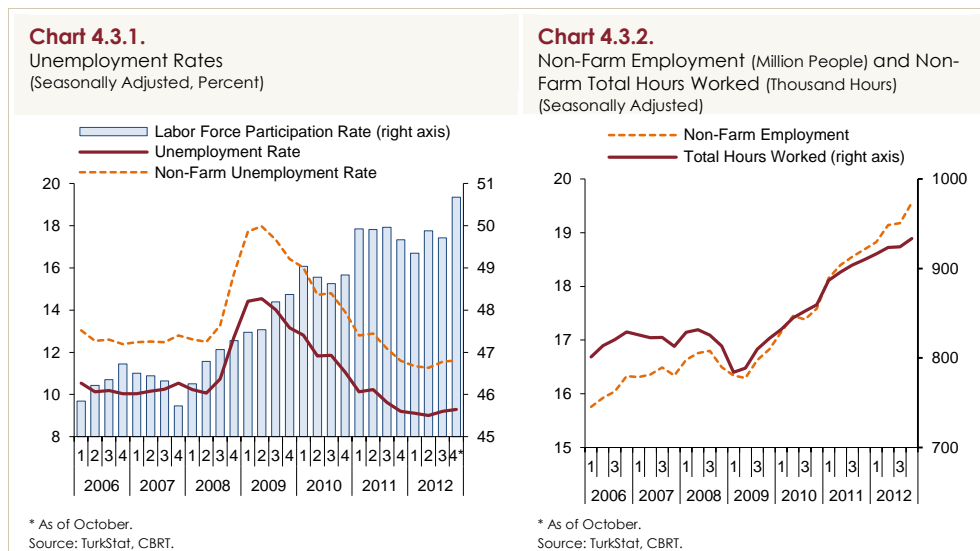
Lastly, the current account deficit still continues to decline, albeit at a slower pace (Chart 4.2.9). Accordingly, 12-month cumulative current account balance excluding energy and gold that is monitored both for the current account deficit and the underlying trend continues to improve in November (Chart 4.2.10 and Box 4.2). In order for the current account deficit to settle at favored levels, growth in loans and domestic demand should be monitored closely.



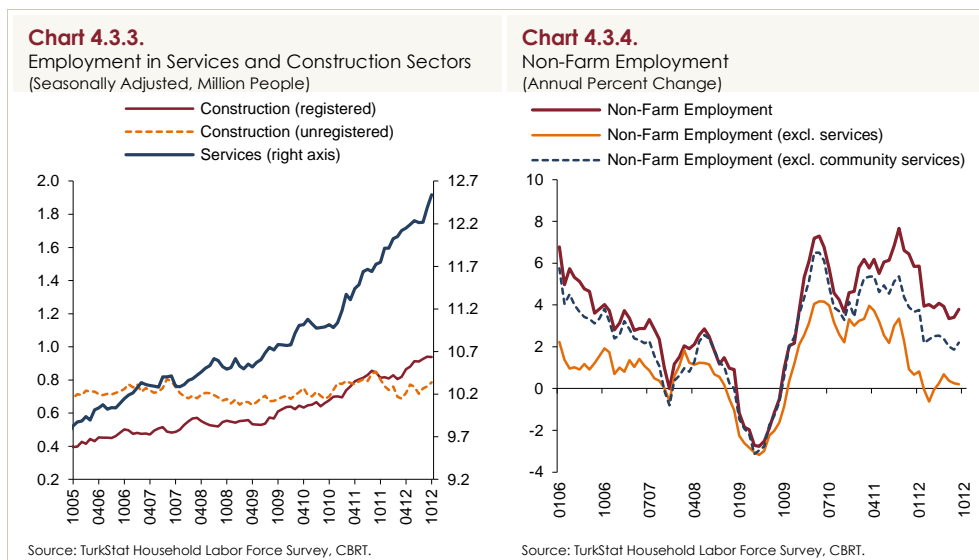


### 4.3. Labor Market

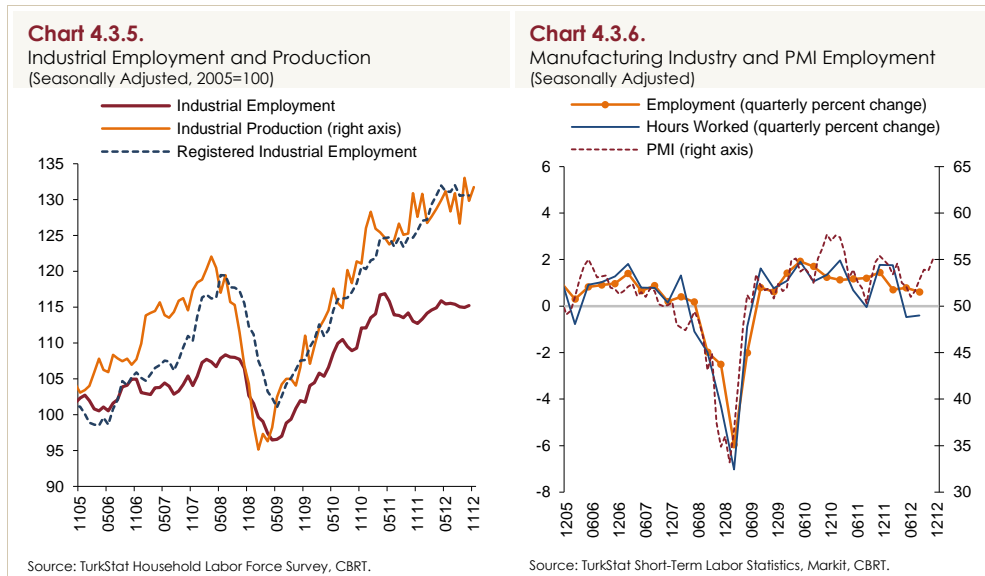
In the third quarter of 2012, unemployment rates increased amid the slowdown in non-farm employment. In the September-October period, unemployment rates edged up amid the surge in labor supply despite the notable rise in employment (Charts 4.3.1 and 4.3.2). On the other hand, in the first ten months of 2012, the growth of non-farm employment continued to decelerate upon the slowdown in economic activity. However, labor demand proved to be weaker than implied by the rise in non-farm employment due to the decline in average working hours. In fact, non-farm employment increased by 4.8 percent in October from the last quarter of 2011, while total hours worked rose by 2.6 percent (Chart 4.3.2).



In the third quarter of 2012 and in the September-October period, the rise in the non-farm employment was mainly driven by the services sector. The largest contribution to the services sector was delivered by social services that make up nearly 35 percent of this sector. Social services entailing public administration, education and healthcare services have provided remarkable contributions to the rise in non-farm employment since 2011. Non-farm employment has posted an annual increase by 5.6 percent in October. Excluding community services and the services sector, this rate goes down to 3.6 percent and 1.1 percent, respectively (Charts 4.3.4 and 4.3.4).

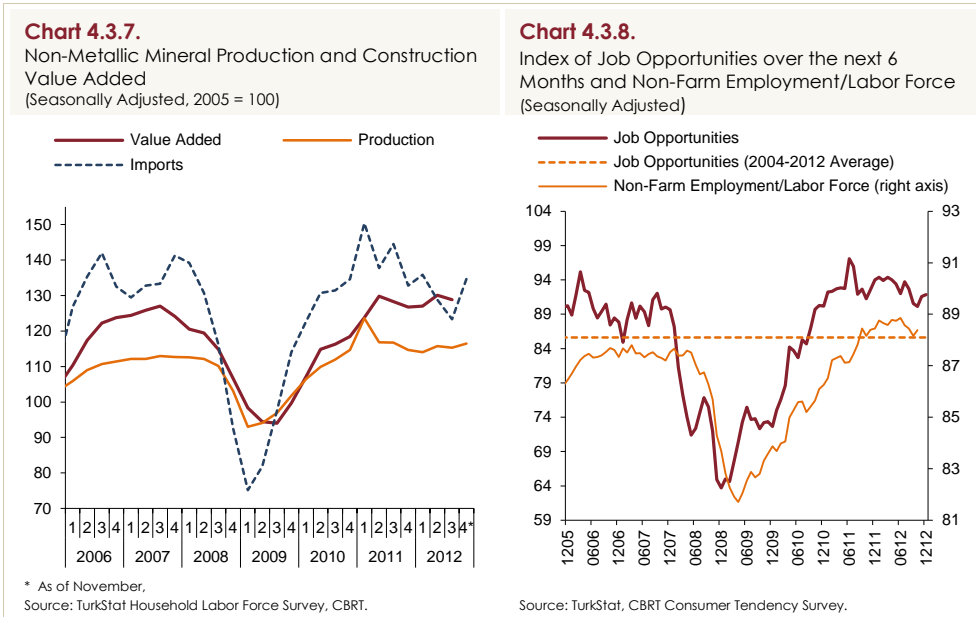


The revival in the construction sector, which started in the second quarter of 2012, still continues (Chart 4.3.3). However, industrial employment has been stagnant since the first quarter of 2012 (Chart 4.3.5). Registered industrial employment increased compared to 2011 amid production developments. Nevertheless, in line with the simultaneous decline in the unregistered employment, in October 2012, total industrial employment has stood close to the first quarter levels of 2011 (Chart 4.3.5).

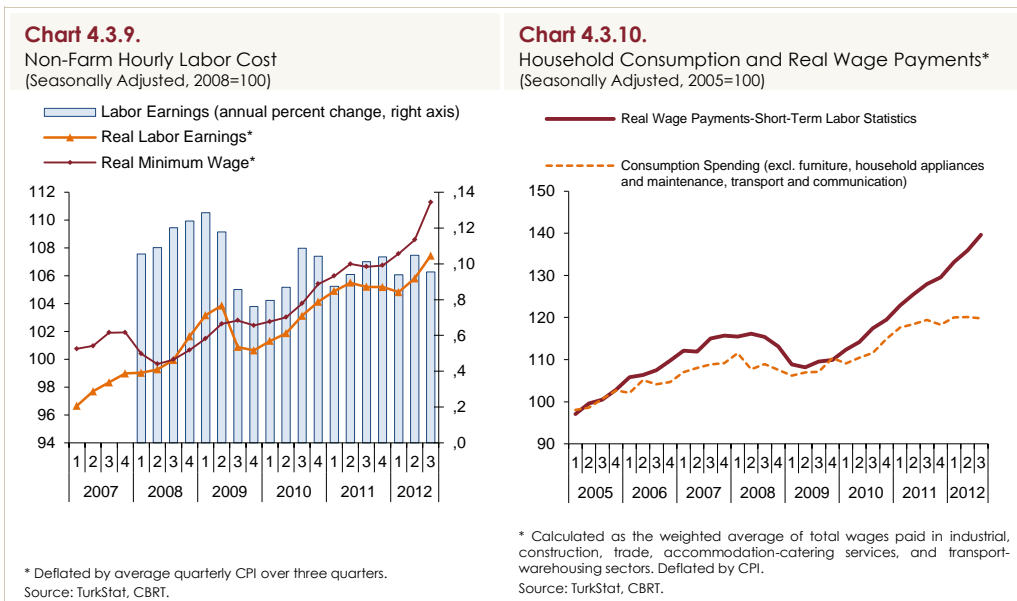


Final-quarter indicators signal for more favorable employment conditions compared to the third quarter. Industrial production has followed a fluctuating course since the second quarter of the year, thus exhibiting no obvious trend. However, industrial production is estimated to record a mild increase in the last quarter. Moreover, PMI employment, a benchmark for the manufacturing industry employment, posted a quarterly increase in the last quarter (Chart 4.3.6). Similarly, production and import realizations in the non-metallic mineral products sector, which provides the construction sector with intermediate goods, points to a recovery in construction activities in the last quarter. Production of mineral products crept up in the last quarter, while imports thereof increased notably.

The PMI indicator on employment, which reflects firms' expectations as well as production developments in the industrial and construction sectors, points to a recovery in the last quarter. On the other hand, the job opportunities index under the TurkStat-CBRT's Consumer Tendency Survey, which reflects employment prospects for households, registered a slight decline in the last quarter compared to the preceding quarters (Chart 4.3.8). Nevertheless, the downtrend in this indicator was reversed in the November-December period. Besides, the index has been above long-term averages, thus feeding into expectations for recovery in future employment conditions.

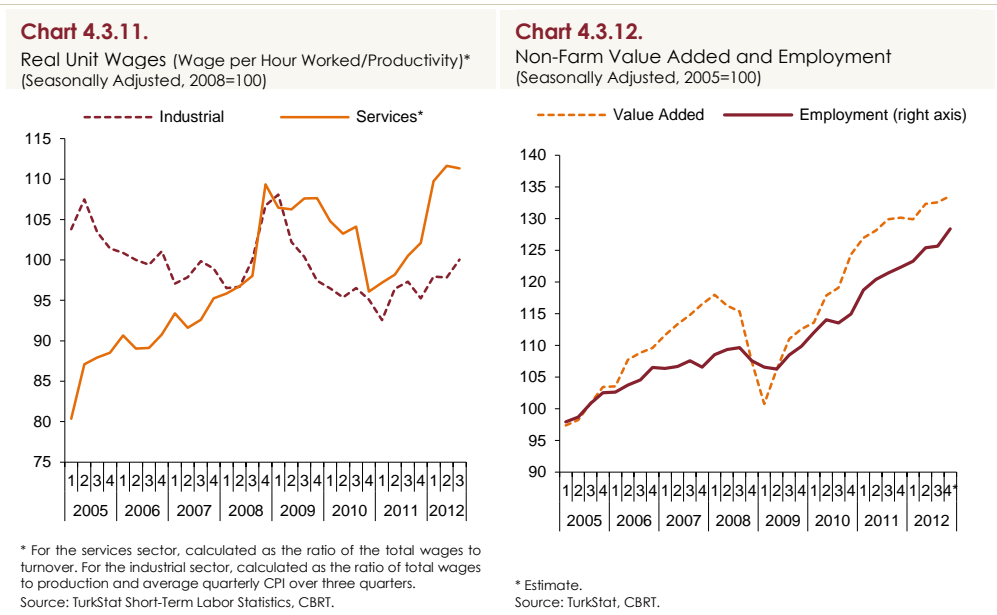


Analysis of labor market developments as per domestic demand reveals that by the third quarter of 2012, the deceleration in the rate of increase in the hours worked put a cap on private consumption expenditures, contrary to the rise in hourly earnings that supported these expenditures (Charts 4.3.2 and 4.3.9). Parallel to the rise in minimum wages, non-farm hourly real earnings index released under the Labor Cost Indices continued to rise in real terms in the third quarter of 2012 (Chart 4.3.9). In this respect, while real wage payments went up, private consumption expenditures exhibited no noticeable increase throughout 2012 and in the third quarter (Chart 4.3.10).



An analysis of wage developments as a cost factor suggests that hourly earnings went up; while productivity remained flat or receded; and accordingly real unit wages increased in industrial and services sectors on an annual basis in the third quarter of 2012 (Chart 4.3.11). Meanwhile, the uptrend in real unit wages in the services sector since 2011 was interrupted in the third quarter amid the rise in turnover (Chart 4.3.11). In 2012, the rise in real unit wages in the industrial sector was mainly driven by the increase in hourly earnings. In the services sector, in addition to increases in wages, decreases in turnover stemming from the deceleration in economic activity were influential. Increase in real unit wages implies that wage pressure on prices in these sectors is evident. However, the fact that real unit wage increases are partially led by the slowdown in economic activity curtails the possibility of rising labor costs to reflect on prices.

Recently determined minimum wages to be effective throughout 2013 point to an increase in wages in real terms given the expected inflation rate. As per the new arrangements, gross monthly minimum wage for those above 16 was determined to be TL 978.6 for the first half, and TL 1021.5 for the second half of 2013. These correspond to annual average increases in nominal and real terms by 9.5 percent 3.3 percent, respectively.



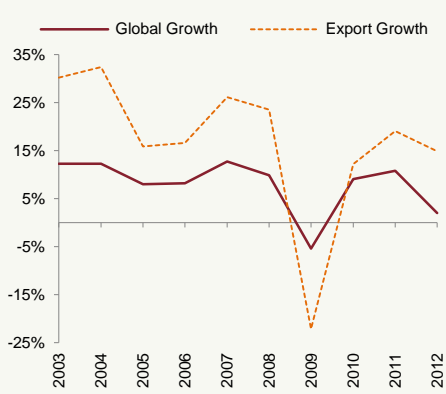
In short, non-farm sectors saw poor growth in employment during the third quarter of the year. Given the information provided by the leading indicators and September-October realizations in the labor market, non-farm employment

is expected to record a stronger increase in the last quarter compared to the third quarter (Chart 4.3.12). However, adverse developments and uncertainties regarding the global economic outlook may possibly hinder recovery in employment conditions, especially in the industrial sector. Moreover, given the projection of a mild increase in the industrial and construction sectors, a fall in the exceptional contribution provided by social services compared to the preceding years is considered as an upside risk factor on the unemployment rate.

**Box 4.1 Global Output and the Market Share Component of the Export Growth in Turkey**

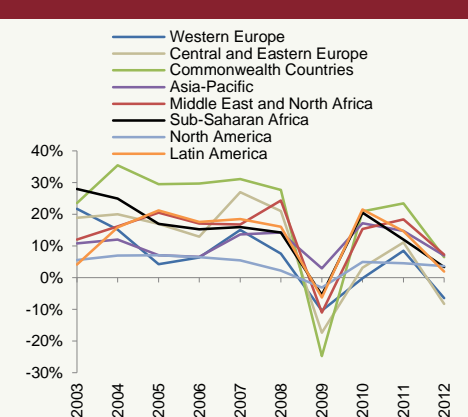
Turkey's exports expanded rapidly in the post-2003 period and continued to grow until the global crisis in 2008 (Chart 1). The figures show that during 2003-2008, exports in Turkey on average increased by 13 percentage points higher than global growth, thus implying that Turkey's market share increased roughly by 13 percent in this period. However, this conclusion may be misleading, especially in such a period which countries diverged substantially in terms of growth (Chart 2). Therefore, in order for a better analysis of our export performance, export-weighted global growth rates, which reflect the country composition of Turkey's exports should be used, rather than global growth. Against this background, this Box calculates and evaluates global output and market share components of the export growth in Turkey during 2003-2012.

**Chart 1. Global Growth and Export Growth in Turkey**  
(Percent Change, Current Prices, Billion USD)



Source: TurkStat, IMF-WEO, CBRT.

**Chart 2. Regional Growth Rates**  
(Percent Change, Current Prices, Billion USD)



Source: IMF-WEO, CBRT.

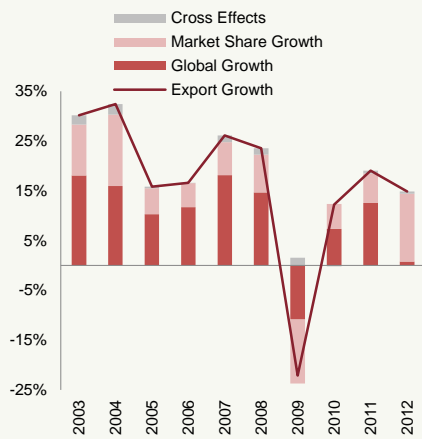
Turkey's global market share is equal to the ratio of its exports to global GDP (GGDP) if the size of global market for exports is measured by global output. In that case, export growth in Turkey is composed of GGDP growth and the growth of Turkey's global market share.<sup>1</sup> On individual country basis, the size of export market for a country is denoted by that country's GDP, while market share is expressed as a ratio of exports to that country to its GDP. Accordingly, GDP

<sup>1</sup> GGDP and Turkey's global market share can be denoted by Y and S, respectively. Consequently, Turkey's exports can be expressed as X=SY. Accordingly, export growth in Turkey can be stated as  $g_x = g_r + g_s + g_r g_s$ , where  $g_r$ ,  $g_s$  and  $g_r g_s$  show GGDP growth, global market share growth and cross effect, respectively.

growth as well as the growth of market share can be calculated for each country during 2003-2012 period. Subsequently, these rates are aggregated using each country's share in Turkey's exports, thus yielding growth rates for global output and market share. Cross effects of these growth rates are also taken into account for calculations. Thus, Turkey's export growth is measured as the sum of its exports weighted by global output growth, market share growth and cross effect.

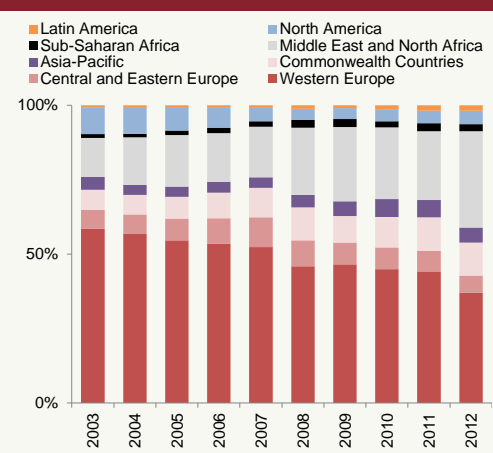
Data on exports and GDP for the 2003-2012 period are compiled using TurkStat and IMF-WEO database. All data are annual and at current prices denominated in USD.

**Chart 3. Export Growth in Turkey and Export-Weighted Components**  
(Percent Change, Current Prices, Billion USD)



Source: TurkStat, IMF-WEO, CBRT.

**Chart 4. Export Growth in Turkey by Regions**  
(Percent, Current Prices, Billion USD)



Source: IMF-WEO, CBRT.

The calculations show that global output growth provided the largest contribution to export growth during 2003-2008 (Chart 3). In this period, export-weighted global growth was 15 percent annually, while growth of the global market share was 8 percent. The higher rate of growth in export-weighted global output than the global growth reveals the significance of the country composition effect in this period. During 2003-2012, export-weighted global output and market share increased by about 10 percent and 6 percent, respectively in annual terms. High rate of growth in market share during 2012 is attributed to great level of gold exports to Iran and United Arab Emirates in this period, which is considered to be temporary.



It is notable that country shares in Turkey's exports changed in favor of countries with relatively high growth rates (Chart 4). In this period, the shares of European and North American countries declined continuously, while the share of other countries increased. This indicates that Turkey's exports are regionally diversified and less-heavily dominated by Europe. Turkey's exports are expected to be more resistant to external shocks as a result of regional diversification.

In sum, during 2003-2012 period, Turkey's exports registered an annual growth rate of 17 percent on average. About 10 percent of the export growth is attributed to global growth, while 6 percent is owed to growth in market share.<sup>2</sup> In view of the weak global economic outlook over the coming years, it is crucial for Turkey to sustain growth in the market share. Moreover, the declining share of the European countries as well as the regional diversification in Turkey's exports is welcome during this period.

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<sup>2</sup> The remaining 1 percent is due to cross effects.

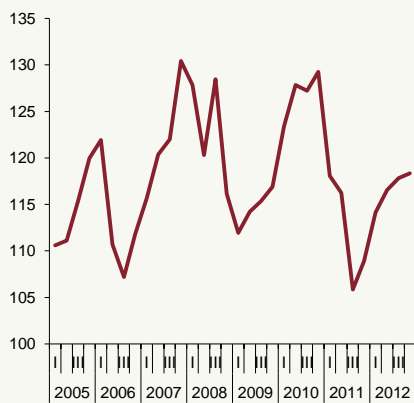
Box  
4.2

A Retrospective Analysis of the Current Account Balance in 2012

Current account balance contracted beyond expectations in 2012. According to the MTP, which was published in October 2011, current account deficit is envisioned to narrow by USD 6.3 billion in 2012, while December 2011 figures of the CBRT's Survey of Expectations predict a decline by USD 11 billion. Meanwhile, in November 2012, annualized current account deficit has decreased by USD 25.1 billion since the end of 2011. This Box evaluates the sources of this decline in view of the demand stabilizing policies implemented since 2010 and the foreign trade developments in 2012.

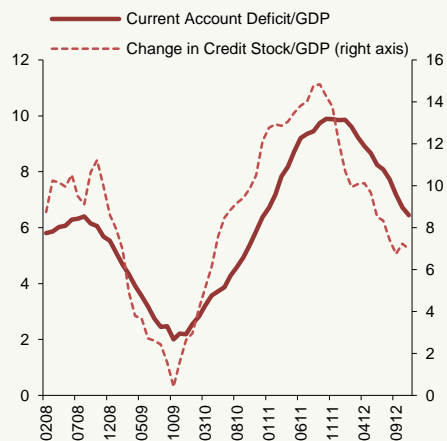
The changing growth composition in 2012, owing to the cumulative effects of policy implementations since 2010, played a major role on the narrowing of the current account deficit. The real exchange rate, which has followed a downward course since end-2010, continued to decline until the third quarter of 2012. Despite a mild recovery in 2012, the real exchange rate stayed well below the 2010 levels (Chart 1). Moreover, having reached sustainable levels as a result of the implemented policies, loan growth rate also contributed remarkably to the narrowing of the current account balance (Chart 2).

**Chart 1. CPI-Based Real Exchange Rate**  
(2003=100)



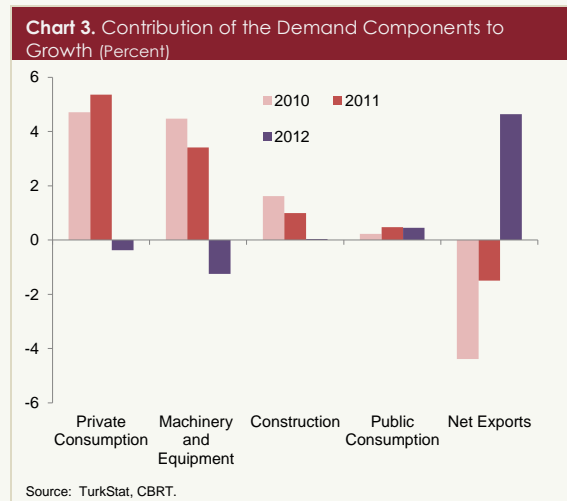
Source: CBRT.

**Chart 2. Current Account Deficit and Loan Growth**  
(Percent of GDP)



Source: CBRT.

The composition of growth may influence the course of imports due to varying import dependence across demand components. To be more specific, Bussiere et al. (2011) conducted a study on 18 OECD countries, analyzing the import dependence directly or through intermediate goods channel and found out that investment goods have the highest, while public consumption goods have the lowest import dependence. The outcome of the demand stabilizing policies has also been manifested on growth through the spending side. In fact, in the first nine months of 2012, private consumption spending contributed slightly negatively to growth (Chart 3). Furthermore, driven by machinery and equipment expenditures, investment spending also contributed negatively to growth. In view of the effects of the stabilizing policies in addition to the impact of the expenditure items on imports, net exports contributed positively to growth in 2012 after a protracted time.



Meanwhile, actual GDP growth in 2012 has been slightly below MTP projections, owing to weak external demand outlook, change in demand composition and the cumulative effects of the demand stabilizing policies. In this regard, MTP projected a 4 percent GDP growth in 2011, while actual GDP growth remained at 3.2 percent in the first nine months of the year and the year-end forecast was revised down to 3 percent. However, the gap between actual and expected imports cannot solely be explained by the lower-than-envisioned growth. Despite the growth in GDP in the first three quarters of the year, imports declined by USD 4.7 billion during the same period. Thus, contrary to expectations, imports decreased in 2012, and contracted by 1.6 percent in the first eleven months of the year.

External demand growth lagged behind forecasts in 2012 and import demand of the European countries, our most significant export market, has been remarkably weak. On the other hand, the negative impact of the weak external demand is restricted due to the fact that the revival in Africa and the Middle East market continued to support exports and the excessive appreciation of the exchange rate was offset by the cumulative effects of the stabilizing policies. Hence, the slowdown in the global growth weighed less heavily on exports. Therefore, exports excluding gold increased mildly by 5 percent in annualized terms during January-November 2012. The financial turmoil in the EU adversely affected the tourism revenues as well (Table 1). Meanwhile, exports excluding gold are expected to remain below MTP projections at the year-end.

Table 1. Foreign Trade Balance (Annualized, Billion USD)			
	2011	2012*	Difference
Current Account Balance	-76.9	-53.1	23.8
<i>Excl. Gold</i>	-72.2	-57.3	14.9
Foreign Trade Balance	-105.9	-84.9	21.0
<i>Excl. Gold</i>	-101.2	-90.3	10.8
Exports	134.9	152.5	17.6
<i>Excl. Gold</i>	133.4	139.4	6.0
Imports	240.8	237.3	-3.5
<i>Excl. Gold</i>	234.6	229.8	-4.8
Tourism Revenues	23	22.6	-0.4

\* As of November 2012.  
Source: CBRT.

Soaring gold exports played a major role on the more-than-envisioned rise of exports in 2012. In particular, as a result of exports to Iran, gold exports rose to USD 13 billion in annualized terms in November 2012. Turkey, which has USD 4.8 billion of net gold imports in 2011, has USD 5.4 billion of net gold exports during the first eleven months of 2012. Hence, USD 10 billion of reduction in the current account deficit was met via gold exports.

In sum, owing to the cumulative effects of financial stability oriented policies which have been implemented since 2010, current account balance improved roughly by USD 25 billion as of November 2012. Even though, the improvement amounting to USD 10 billion was met by the soaring of gold exports, current account balance improved mainly on the back of the changing composition as well the balancing of demand due to implemented stabilizing policies.

#### REFERENCES

Bussiere M., C. Giovanni, F. Ghironi, G. Sestieri, N. Yamano, 2011, Estimating Trade Elasticities: Demand Composition and the Trade Collapse of 2008-2009, NBER Working Paper No. 17712.