

4. Supply and Demand Developments

The GDP data of the first quarter of 2014 suggest that economic activity remained consistent with the outlook presented in the April Inflation Report and expanded by an annual 4.3 percent. Final domestic demand was flat in the first quarter of 2014 as the weak course of private demand was compensated by public sector demand. Exports of goods and services registered a robust growth with the support of gold exports, while imports of goods and services posted a quarter-on-quarter decrease. Thus, demand components continued to balance.

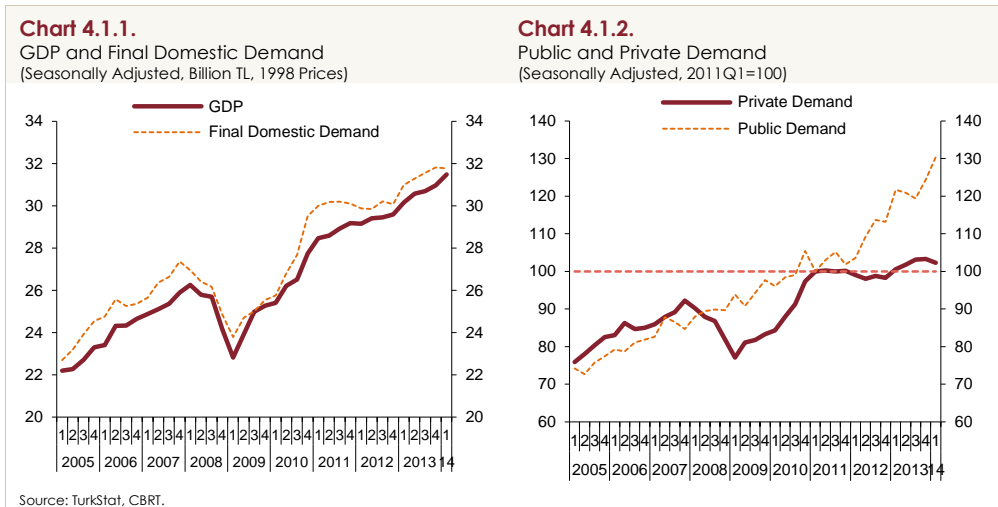
Data pertaining to the second quarter of 2014 point to no acceleration in economic activity. On the production side, the industrial production index displayed a similar pattern to the previous quarter's average in the April-May period. On the expenditures side, the slowdown in private demand stopped, especially on the consumption side, due to recovering financial conditions and confidence indices. Thus, domestic demand is envisaged to follow a weak course in the first half of the year.

External demand indicators show that the upward underlying trend in exports continued into the second quarter, thereby supporting growth. The first-quarter fall in import demand slowed in the second quarter amid the pause in declining domestic demand. Thus, it is projected that the balancing among demand components will continue in the second quarter and the current account deficit will record a slight decline on a quarterly basis. However, the geopolitical tensions in Iraq pose a downside risk to the ability of exports to contribute to growth and to the contraction of the current account deficit.

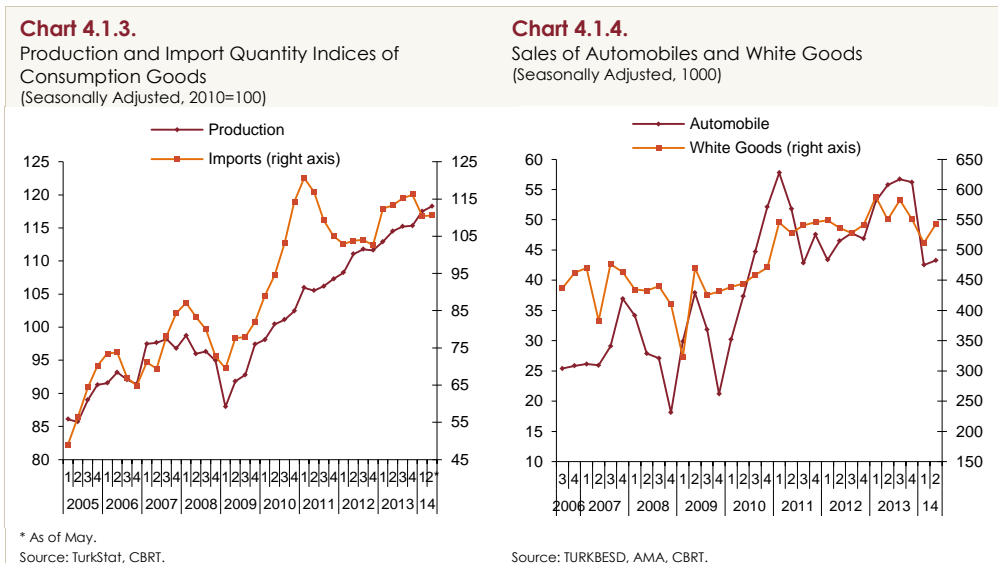
In sum, after displaying a sluggish course in the first half of the year due to domestic uncertainty and tight financial conditions, domestic demand is envisioned to recover gradually and modestly amid less tight financial conditions in the second half. Moreover, exports are expected to contribute further to growth in the upcoming period on the back of the lagged effects of the real exchange rate depreciation and the global economic recovery suggested by survey indicators. Yet, the ongoing uncertainties over the strength of global economic recovery, global monetary policies and geopolitical tensions pose a downside risk to growth.

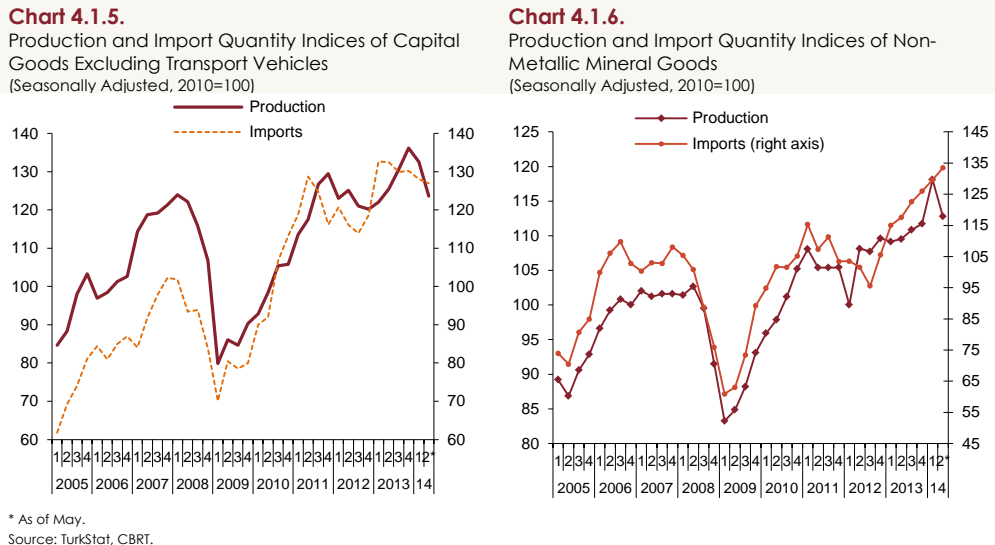
4.1. Gross Domestic Product Developments and Domestic Demand

According to the national accounts data released by the TurkStat, the GDP posted a year-on-year increase by 4.3 percent in the first quarter of 2014. The TurkStat made some changes, effective as of the first quarter of 2014, to the seasonal adjustment method. The seasonally adjusted GDP that was formerly obtained by using direct adjustment will be estimated using indirect adjustment as of 2014 (Box 4.1). Thus, the quarter-on-quarter increase in the seasonally adjusted GDP based on indirect adjustment is 1.7 percent (Chart 4.1.1). Meanwhile, despite the upsurge in public demand, final domestic demand was flat in this quarter due to slowing private demand (Chart 4.1.2). Across subcategories of private demand, construction investments and the demand for nondurable goods were up quarter-on-quarter in the first quarter of 2014 while private machinery and equipment investments and the demand for durable goods, which are more sensitive to exchange rate and financing conditions, decreased, as envisaged in the April Inflation Report.

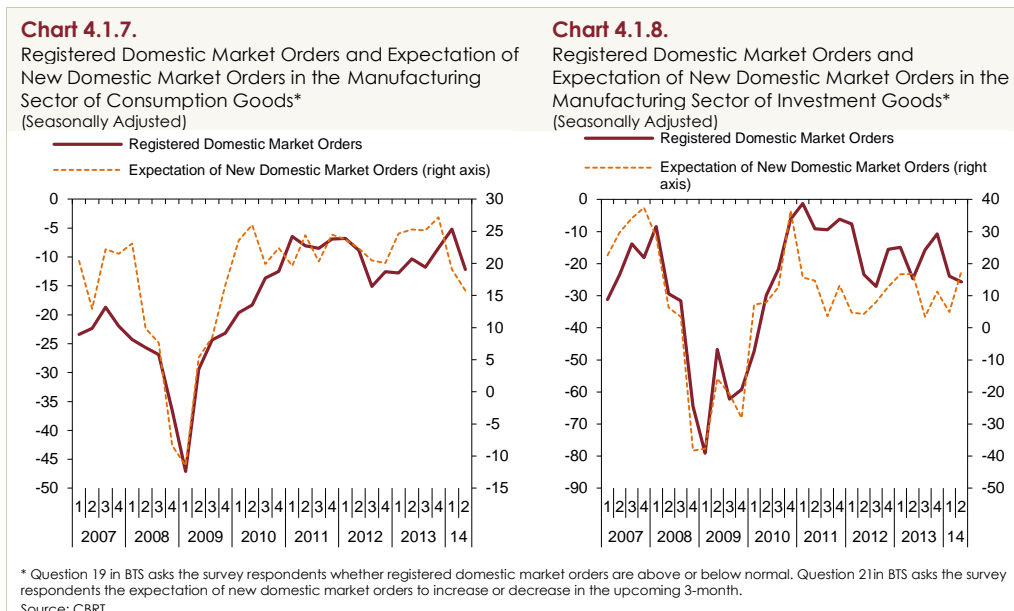


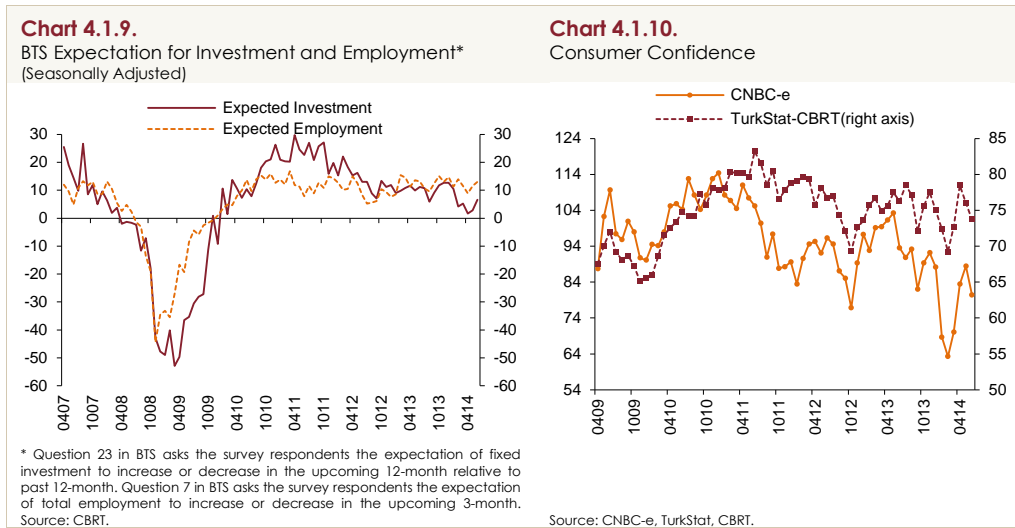
The second-quarter data indicate that private final demand was moderate in the second quarter. In the April-May period, the production of consumption goods continued to increase, while that of imports flattened after falling markedly in the first quarter (Chart 4.1.3). Across subcategories of consumption goods, production was up in both durable goods and nondurable goods. The effects of the Turkish lira appreciation, the improved financial conditions and the increased consumer confidence of the second quarter were evident in the demand for durable goods. In fact, imports of durable goods and domestic sales of automobiles and home appliances, both indicators of the demand for durable goods, were on the rise (Chart 4.1.4). As for machinery and equipment investments, the production and imports of investment goods excluding transport vehicles recorded a decline (Chart 4.1.5). On the construction front, data on investments indicate that the production of mineral products dropped whereas imports thereof continued to rise (Chart 4.1.6). In sum, the second-quarter data suggest that final domestic demand posted a modest quarter-on-quarter growth, largely on the back of consumer demand.





BTS indicators point to no acceleration in domestic demand for the third quarter of 2014. In fact, registered domestic market orders and 3-month-ahead order expectations in the manufacturing sector of consumption goods decreased (Chart 4.1.7). Similarly, registered domestic market orders in the manufacturing sector of investment goods were on the decline. However, expectation of new orders in the manufacturing sector of investment goods increased remarkably (Chart 4.1.8). Meanwhile, expectations of investment and employment, which reflect the relatively longer-term decisions of firms, displayed a mild rebound, yet remained weak in the second quarter (Chart 4.1.9). On the other hand, the consumer confidence recorded a quarterly increase in the second quarter (Chart 4.1.10).

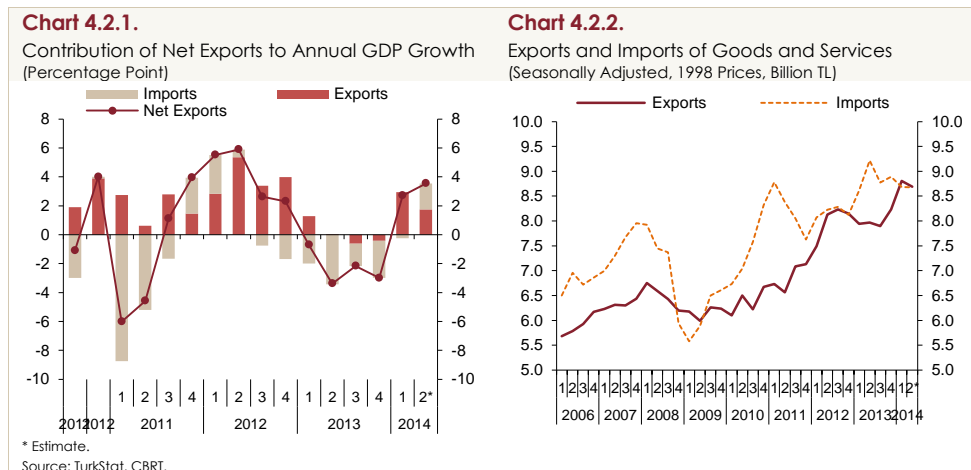




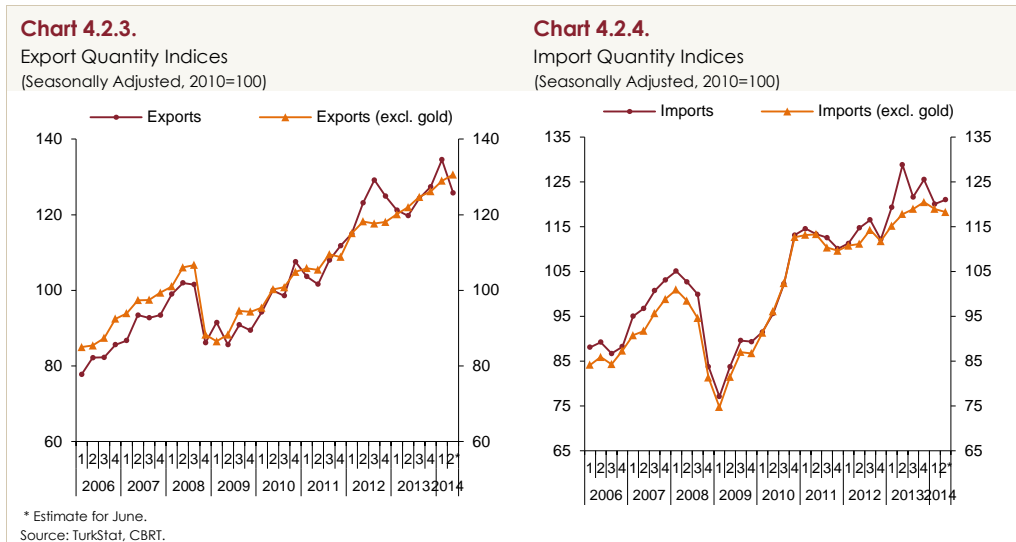
To sum up, final domestic demand was flat in the first quarter of 2014 due to the slowing private demand despite the robust increase in public demand. Second-quarter readings suggest that private demand expanded moderately quarter-on-quarter, mostly on the back of consumer demand. Looking at the data on survey indicators, the appreciation and decreased volatility of the Turkish lira, the improved financial conditions, the increased consumer confidence and the favorable global economic outlook together reveals that the second-half rise in final domestic demand will be a gradual and modest one. On the other hand, it should be noted that the geopolitical unrest in Iraq puts downside pressure on domestic demand through the confidence channel. Under these circumstances, domestic demand developments are expected to put no upward pressure on inflation and continue to contribute positively to the current account deficit and the balancing process.

4.2. External Demand

National accounts data of the first quarter of 2014 indicate that exports of goods and services grew by 11.4 percent, while imports thereof rose by 0.8 percent in annualized terms. Thus, net exports contributed 2.7 points to annual growth, as envisaged in the April Inflation Report, and the balancing among external demand components continued in this quarter (Chart 4.2.1). In seasonally adjusted terms, exports recorded an increase, while imports declined in the first quarter (Chart 4.2.2).

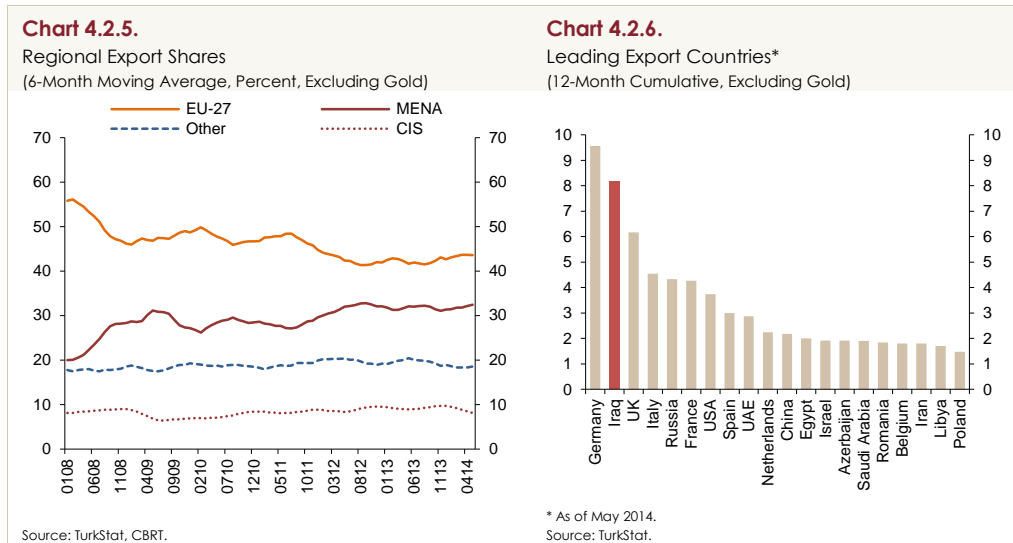


Data regarding the second quarter of 2014 reveal that the export quantity index trended downwards in the April-May period. The core index excluding gold exports continued with its steady course and posted a quarter-on-quarter increase in this period (Chart 4.2.3). Recent indicators on PMI point to a sustained recovery on a global scale. Yet, the export-weighted global growth, a medium-term indicator, maintained a positive outlook (Chart 2.1.1). Therefore, exports excluding gold are believed to have continued to increase and support growth in the second quarter as well (Chart 4.2.1).

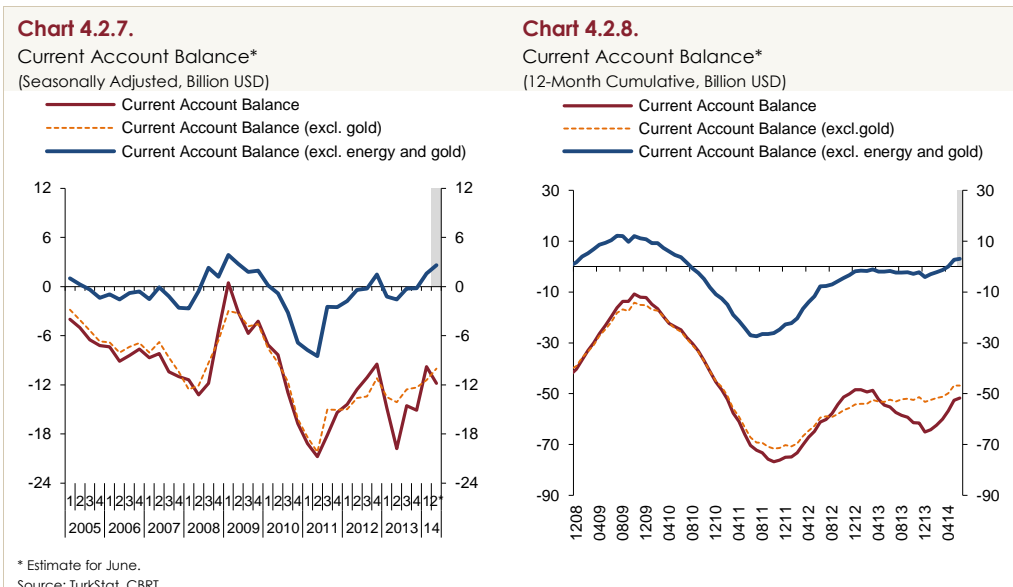


The import quantity index posted an increase in the second quarter after slumping in the first quarter. However, excluding gold, the index performed weakly and recorded a modest increase. Recent domestic demand indicators point to a moderate consumer demand for the second quarter. The production and imports of durable goods hovered above their first-quarter average during April-May. Additionally, domestic sales of automobiles and home appliances posted a gradual quarter-on-quarter rebound. Reviewing these developments in quarterly terms, it is expected that imports excluding gold will be almost flat amid a recovering domestic demand (Chart 4.2.4). Accordingly, imports of goods and services are also expected to near their first-quarter level (Chart 4.2.2).

The geopolitical tensions in Iraq might pose a downside risk to the ability of exports to contribute to growth for the recent period. The Middle East and Africa have been major export destinations in recent years and Iraq has ranked second in Turkey's export destinations (Charts 4.2.5 and 4.2.6). In this context, if the uncertainty in Iraq persists, the improvement in external balance might slow via oil prices and exports destined to both Iraq and other countries in the region. Current indicators suggest that the impact will mostly come through exports. In fact, according to Turkish Exporters Assembly data, exports to Iraq fell by 21.3 percent in June, while exports to the Near and Middle East countries excluding Iraq continued to increase.



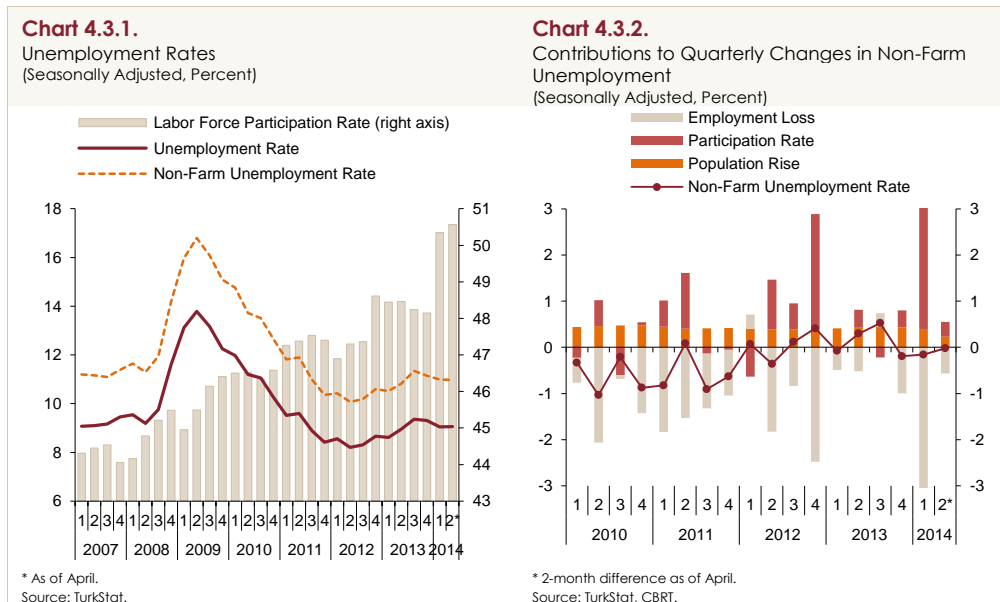
In the second quarter of 2014, final domestic demand is expected to moderate, while exports are estimated to maintain their steady rise and contribute positively to growth. It is projected that net exports' positive contribution to growth and the balancing process will continue in this period (Chart 4.2.1). Thus, the recovery in both the seasonally adjusted and 12-month cumulative current account balance is anticipated to be more pronounced in the second quarter. Meanwhile, the current account balance excluding energy and gold appears to have produced a surplus in this period (Charts 4.2.7 and 4.2.8). This improvement is expected to continue into the remainder of 2014. However, the recent geopolitical unrest poses a downside risk to the improving current account balance and the contribution of net external demand for the second half of the year.



4.3. Labor Market

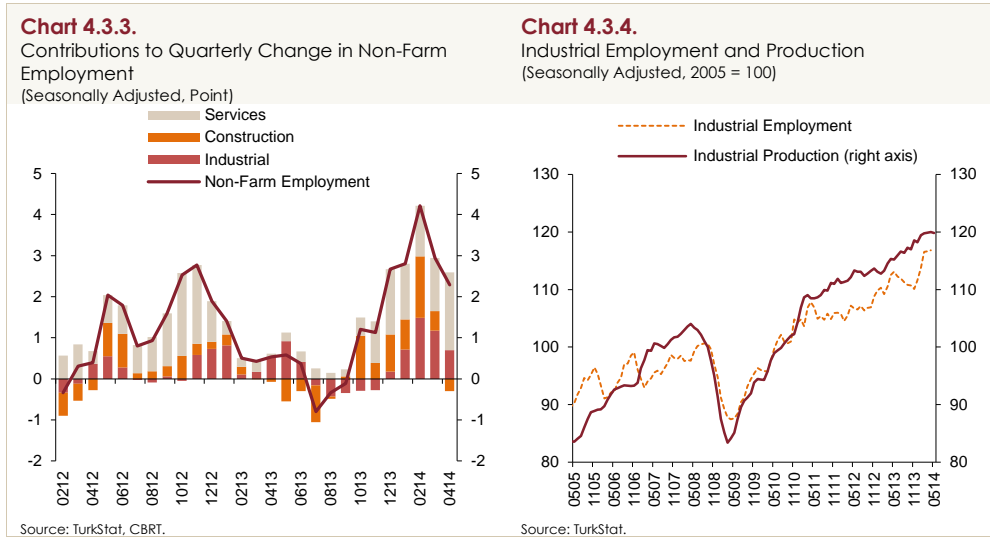
In February 2014, the structure of the Household Labor Force Survey saw major changes to comply with EU statistics. The frequency in conducting the survey was increased; the sampling design was changed; the criteria of unemployment were modified; and population projections used in generalizing survey results were changed. The duration of job search used in the unemployed classification was lowered to the last four weeks from the last three months in line with EU standards. Accordingly, both the level and the seasonality of the statistics used in monitoring the labor market were changed. Some selected series reflecting only the overall outlook from the old survey were dated back as far as January 2005 by the TurkStat using a model. However, series related to subcategories cannot be calculated retrospectively due to the modified structure of the survey. The assessments for this part are made based on the backdated survey series released by TurkStat, which reflect the overall outlook for the labor market.

The unemployment rate has fallen slightly since the last quarter of 2013 thanks to the recovery in non-farm employment (Chart 4.3.1). Yet, the simultaneous increase in labor force participation restrained the fall in unemployment (Chart 4.3.2). There is a strong positive correlation between the changes in employment and the labor force in Turkey. The larger the share of temporary jobs in employment growth, the stronger the correlation, hence restricting the effect of employment growth on unemployment. This was also valid for the fourth quarter of 2013 and the first months of 2014. During March-April, employment growth lost momentum, leaving the unemployment rate unchanged (Charts 4.3.1 and 4.3.2).



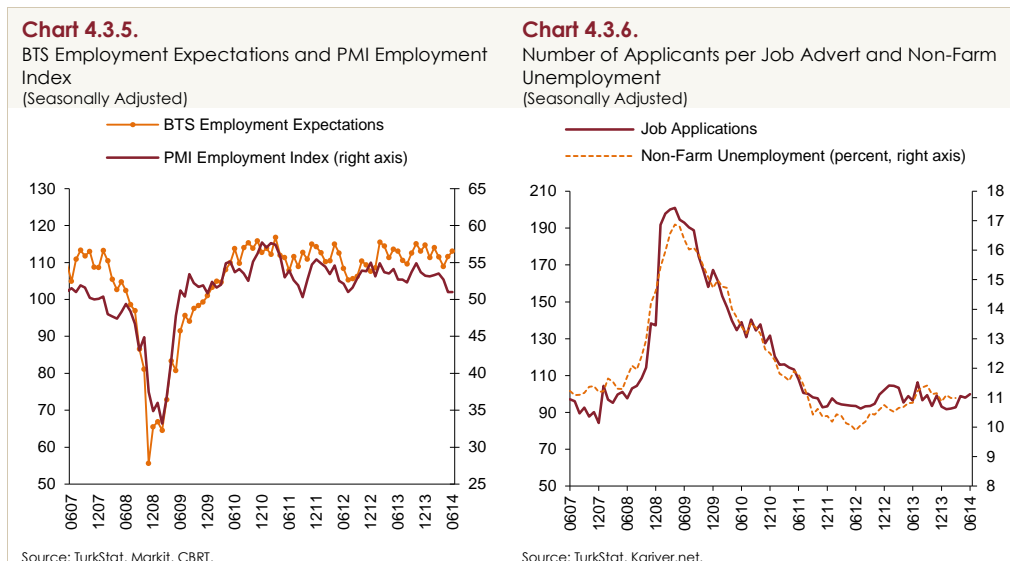
Non-farm employment was weak throughout 2013 and it was not until the last quarter of 2013 that employment began to recover on the back of the construction and services sectors. Meanwhile, industrial employment picked up in the first quarter of 2014 (Chart 4.3.3). Following the robust employment growth of the first quarter, construction employment declined during March-April while industrial employment flattened (Charts 4.3.3 and 4.3.4). Indicators of economic activity point to a

sluggish outlook for the second quarter. Mineral production, which provides information on construction activity, posted a quarter-on-quarter decrease in the second quarter (Chart 4.1.6). Likewise, industrial production stopped growing in the second quarter (Chart 4.3.4).



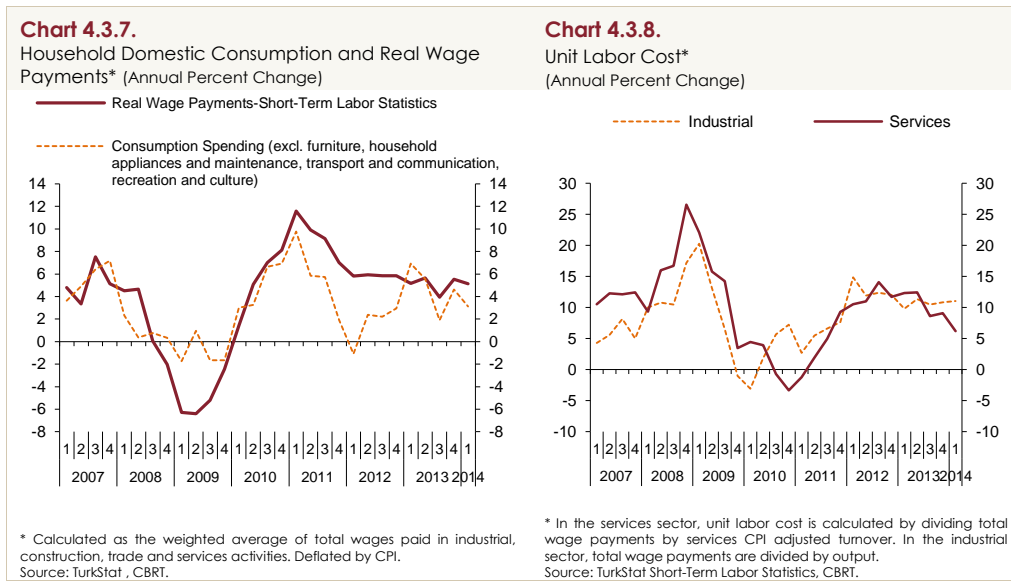
Similar to indicators of economic activity, survey results directly related to manufacturing industry employment point to a slight quarter-on-quarter deterioration in the employment outlook for the second quarter. In the second quarter, the BTS indicator on expectation of employment decreased only marginally, while the PMI employment indicator declined notably. Although both indices still signal an employment growth by hovering above the neutral mark, the PMI employment indicator warns of downside risks for industrial employment in the second quarter (Chart 4.3.5).

According to data obtained from Kariyer.net, a human resources firm, the number of applications per job post increased in the second quarter. Computed by dividing the total number of job applications by job openings and closely linked with non-farm unemployment, this set of data hints at no improvement in the unemployment rate for the second quarter (Chart 4.3.6).



As of the first quarter of 2014, employment and wage developments seem to support domestic demand. In this period, total wage payments continued to rise year-on-year in real terms (Chart 4.3.7). However, the higher-than-expected consumer price inflation may put a cap on real wage growth in the rest of 2014.

On the cost front, the impact of wage hikes on prices is likely to have increased in this period. As of the first quarter of 2014, the average rise in hourly wages was higher than the minimum wage hike for 2014. With this increase in hourly wages, unit wages surged at a rate close to inflation, by an annual 8 percent, as of the first quarter of 2014 (Chart 4.3.8).



In sum, the growth in non-farm employment observed since the final quarter of 2013 lost pace in the March-April period. After recording a remarkable increase in the first quarter, construction employment declined during March-April. Leading indicators for the second quarter suggest that employment growth will slow and the unemployment rate will edge up. Given the modest growth outlook, the 2014 unemployment rate might be up a little from 2013.

Box
4.1

Seasonal Adjustment of GDP: Direct vs. Indirect Approach

Temporary yet recurring movements such as seasonal and calendar effects make it difficult to understand the underlying trend in a series. On the other hand, data adjusted for such movements do not contain ordinary effects and offer new information in the series, thereby allowing for an assessment of the current state and guiding forecasts. The GDP series has both seasonal and calendar effects. Therefore, it is necessary to use seasonally adjusted data when analyzing the quarterly changes in economic activity. There are two main approaches to seasonal adjustment of the GDP, which is obtained by aggregating sub-series: direct and indirect. In the direct approach, the aggregated series are seasonally adjusted. In the indirect approach, the seasonally adjusted GDP is obtained by the weighted sum of the seasonally adjusted sub-items of the GDP. The TurkStat has been producing seasonally adjusted GDP data by using the indirect rather than the direct approach since the first quarter of 2014.¹ This box compares the direct and indirect seasonal and calendar adjustments of the GDP data and discusses the outlook that both methods offer for economic activity.

There is no theoretical or empirical evidence in the literature showing that the direct approach is superior to the indirect approach or vice versa.² Broadly speaking, if the sub-series share a similar seasonal structure; i.e. they peak and bottom at almost the same time, one can suggest choosing the direct approach in seasonal adjustment. However, if the sub-series have different seasonal characters and/or the weight of each sub-series in the aggregated series changes dramatically by periods, the indirect approach is recommended.³ The results of direct and indirect adjustments of a series are not always the same. Therefore, the magnitude and direction of the quarterly changes these approaches imply may vary.⁴ In this case, the quality of the seasonally adjusted data determines the approach to be used. Basically, the seasonally adjusted series and its residuals should contain no seasonality and the revision to an already adjusted series after adding new data should be small. Moreover, smoothness can also be considered when comparing the data adjusted with both approaches.

Chart 1 shows the direct and indirect seasonal adjustments of the GDP series with base year 1998. Accordingly, both series display a similar pattern at the index level. However, the quarterly changes of the series show that there are occasional gaps between both approaches, which may be as wide as 0.9 percentage points (Chart 2 and Table 1).⁵ On the other hand, during 1998Q1-2014Q1, these gaps are almost zero on average and are found to be statistically insignificant. Furthermore, the quarterly changes calculated using both approaches have the same sign for 95 percent of the analyzed period.⁶ In 56 percent of the number of observations, the indirect approach produces larger quarterly changes than the

¹ For further information, see www.tuik.gov.tr/HbGetir.do?id=16192&tb_id=17.

² Eurostat (2009).

³ Ladiray and Mazzi (2002).

⁴ Koçak, et al. (2010) and ECB (2012) present divergence in industrial production for the Euro Area.

⁵ For example, in 2014Q1, the growth in economic activity was up 0.3 points to 0.8 percent as per the direct approach, and up 0.8 points to 1.7 percent as per the indirect approach. Thus, the direct approach points to a more moderate economic growth for the first quarter compared to the indirect approach.

⁶ In other words, these quarterly changes have different signs in 3 of the 64 observations (1998Q3, 1999Q2 and 2006Q1).

direct approach and the gap between both approaches in these observations is measured to be 0.32 percent on average. When the quarterly changes obtained by the direct approach are larger, the gap appears to be 0.38 percent on average. Lastly, the variance of the quarterly changes obtained by the indirect approach is found to be slightly less than the variance of the quarterly changes obtained by the direct approach. However, the difference between these two variances is rejected at any conventional significance level. In sum, during 1998Q1-2014Q1, the average value and volatility of the quarterly GDP changes computed by direct and indirect seasonal adjustments hardly differ from each other.

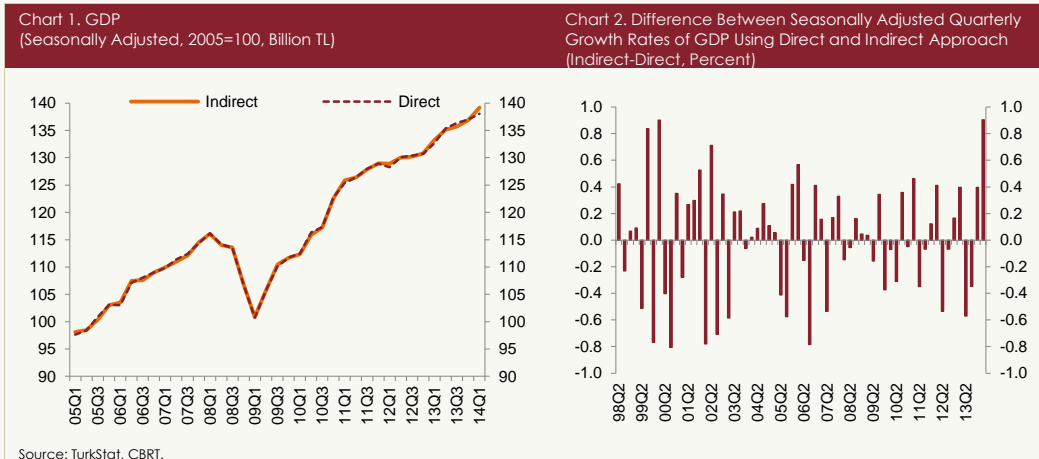


Table 1. Descriptive Statistics on the Difference Between Seasonally Adjusted Quarterly Growth Rates of GDP Using Direct and Indirect Approach (Indirect-Direct, 1998Q1-2014Q1)

Average difference	0.02
Minimum difference	-0.81
Maximum difference	0.90
Concordance rate (%)	95.31
Indirect>Direct (%)	56.25
Average difference (Indirect>Direct)	0.32
Average difference (Indirect<Direct)	-0.38
Variance (Indirect/Direct)	0.95

Source: TurkStat, CBRT.

When a certain GDP series is directly adjusted for seasonal and calendar effects, it signals only one quarterly change regardless of its composition. However, if the same series is indirectly adjusted for seasonal and calendar effects, it may imply a different outlook based on the dispersion of each sub-series it consists. For example, Table 2 shows actual production levels for 2014Q1 as well as two different growth composition scenarios for the same period. Accordingly, the GDP grew by 4.3 percent year-on-year across all growth compositions in the first quarter. With direct adjustment, the quarterly growth is 0.8 percent for all three cases, and thus, only one inference can be drawn for economic activity. However, with the indirect approach, under different growth compositions, the same, as in actual levels and scenario 1, or different, as in actual levels and scenario 2, quarterly growth figures can be obtained. Therefore, when interpreting the quarterly outlook for economic activity with the new approach, it would be more suitable to evaluate how the GDP components, besides the GDP itself, move and examine the extent of the contribution of these components to growth.

Table 2. Seasonally Adjusted GDP Using Indirect Approach (2014Q1, Percentage Change)

		Agriculture	Manufacturing	Construction	Services	GDP
Actual	Year-on-Year	3.9	5.0	5.2	3.9	4.3
	Quarter-on-Quarter	5.0	1.7	1.0	1.3	1.7
Scenario 1	Year-on-Year	2.8	2.4	3.5	5.3	4.3
	Quarter-on-Quarter	3.8	-0.7	-0.5	2.8	1.7
Scenario 2	Year-on-Year	-10.0	2.5	4.0	6.3	4.3
	Quarter-on-Quarter	-9.1	-0.6	-0.1	3.7	1.0

Source: TurkStat, CBRT calculations.

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ECB, 2012, The New Approach to Seasonal Adjustment of European Aggregates in Short-Term Statistics, Box 5, April 2012 Monthly Bulletin.

Koçak, A., G. Mazzi and F. Moaura, 2010, How Seasonal Adjustment can Affect the Message Delivered to Policy Makers: a Simulation Approach Based on the Euro Area Industrial Production, Paper presented at the 6th Eurostat Meeting on Business Cycle Analysis.

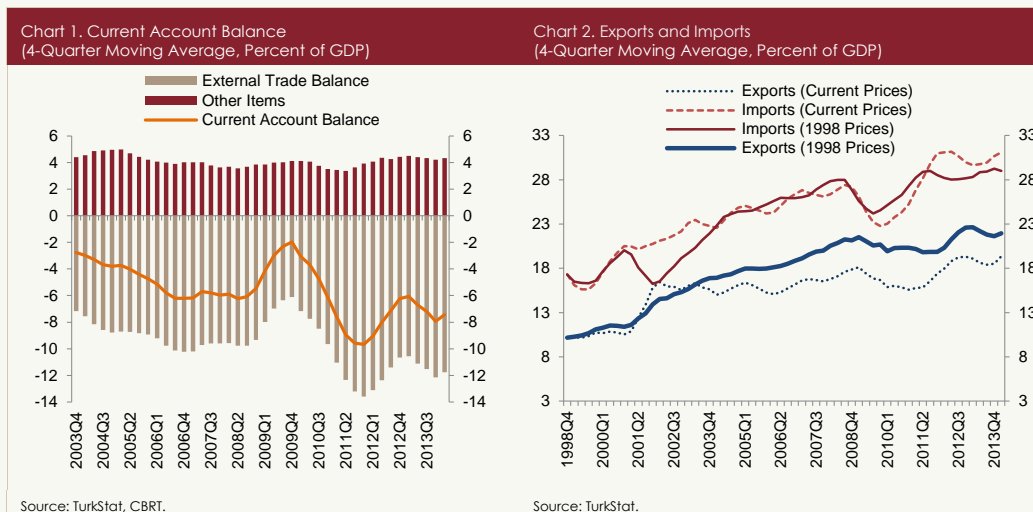
Ladiray, D. and G. Mazzi, 2002, Seasonal Adjustment of European Aggregates: Direct versus Indirect Approach, Paper presented at the ECB's Seasonal Adjustment Seminar.

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Box
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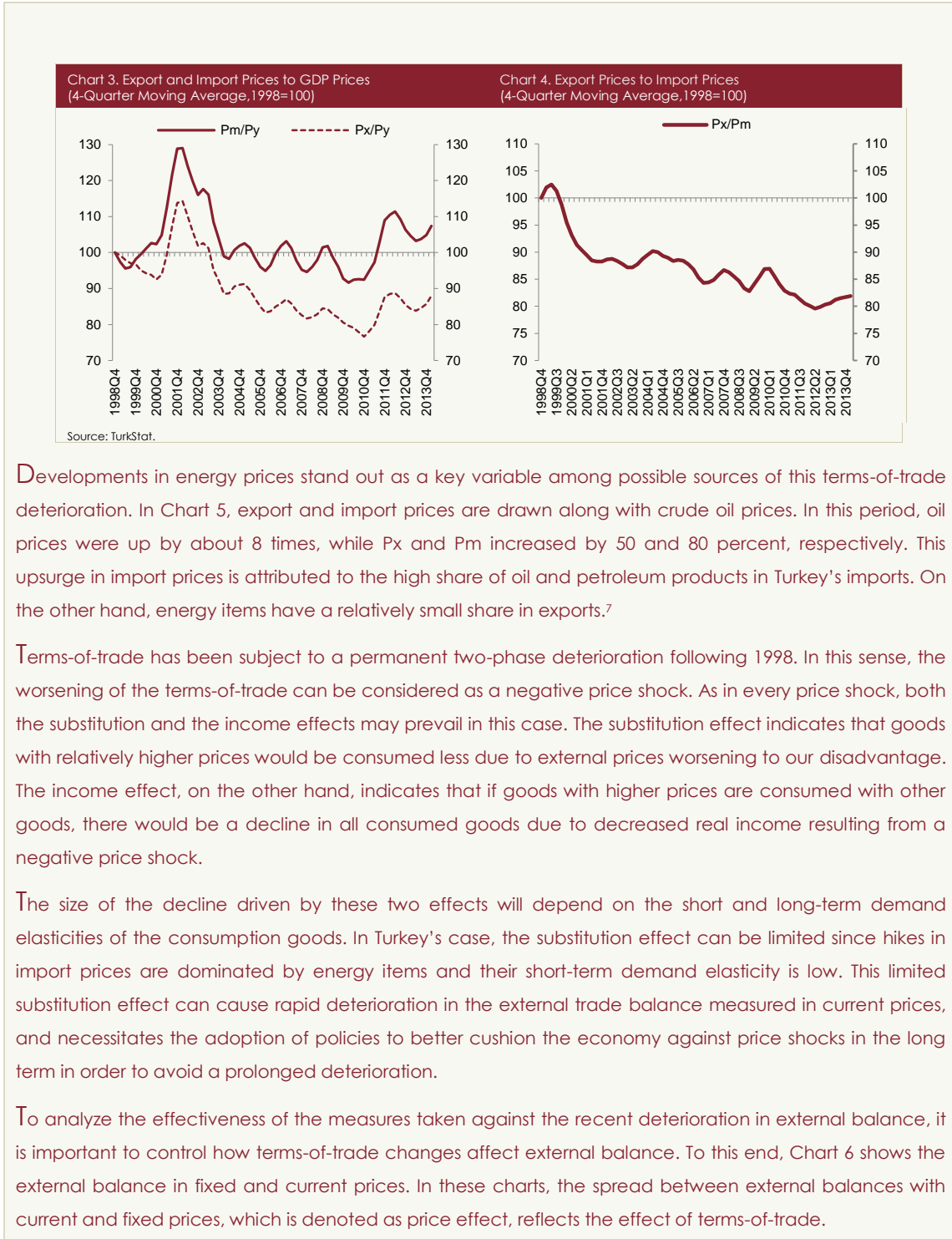
Real and Nominal Balancing of Turkey's External Trade

The current account balance faced a rapid and severe deterioration in the aftermath of the global crisis. As shown in Chart 1, the main reason behind the deteriorating current account balance was the increase in the external trade deficit. In terms of financial stability, this can heighten the country risk due to factors such as the worsening quality of funds and increased possibility of a sudden stop. In this period, the CBRT adopted a new policy framework observing financial stability, which, also in accordance with the measures taken by other policymakers, prompted a balancing of external deficit. A real and nominal analysis of this balancing is important in controlling the effect of terms-of-trade and evaluating the impact of the adopted measures.

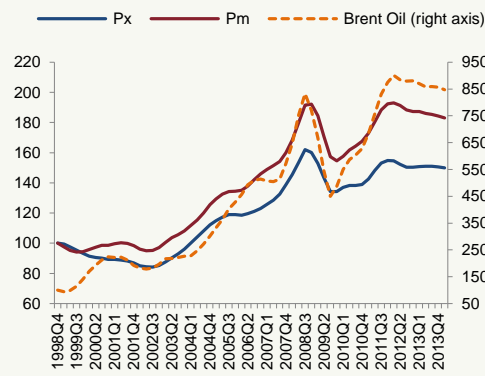


Turkey's external trade volume expanded substantially during 1998Q1-2014Q1 (Chart 2). In order to adjust for the effects of the terms-of-trade, both exports and imports are estimated by also using the average prices of 1998 in percent of GDP. Accordingly, after 2002, the real exports series diverged upwards from the current exports series and the spread widened broadly in time. In this period, the spread between these two series was 2.9 points on average. This indicates that the GDP price index (P_y) increased at a much faster rate than the exports price index (P_x) in the relevant period. As shown in Chart 3, the P_x/P_y ratio was mostly below the initial level and recorded a nearly 12 percent decrease by the end of the period. On the other hand, imports series in current and fixed prices moved very close, especially during 2004Q1-2010Q4. Yet, after 2010Q4, current imports posted outstanding increases and import prices (P_m) rose at a faster rate than the GDP price index (P_y). In the last quarter, the P_m/P_y ratio was 11 percent above the average level of 1998 (Chart 3).

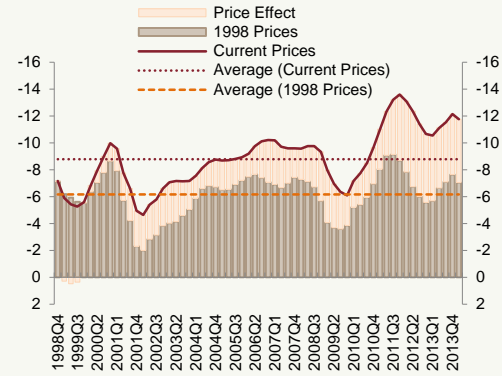
Due to the largely downward trend in relative export prices (P_x/P_y) and the post-2010 increase in relative import prices (P_m/P_y), the terms-of-trade (P_x/P_m) recorded a dramatic two-phase decline, one in the early 2000s and the other in the 2010s (Chart 4). As of the first quarter of 2014, the terms-of-trade fell by a total of 18 percent compared to 1998.



⁷ In the analyzed period, oil and petroleum products accounted for an average of 3 percent of Turkey's exports and an average of 19 percent of Turkey's imports.

Chart 5. Prices of Exports, Imports and Brent Oil
(4-Quarter Moving Average, 1998=100)

Source: TurkStat, Bloomberg.

Chart 6. External Trade Balance and the Price Effect
(4-Quarter Moving Average, Percent of GDP, Inverse Axis)

Source: TurkStat.

Analysis of the effects of the measures taken after 2010 on the external balance reveals that there are discrepancies in real and nominal developments due to terms-of-trade changes. Thanks to these measures, the real external deficit dropped to its lowest post-crisis level in 2012. This 2012 level of the real external deficit is, in fact, the average of the period; yet this improvement occurred without any decline in national income, contrary to the global crisis era, which shows that the policies adopted successfully helped to balance the economy to a great extent.

In the first quarter of 2014, the real external deficit was 7 percent, nearing the average of 6.2 percent for the post-1998 period. Current prices still remained elevated despite the improvement in the external deficit. Falling to 11.8 percent as of the first quarter of 2014, the current external deficit hovers considerably above the average of 8.8 percent for the post-1998 period. This divergence in the external trade deficit between current and real prices reveals that measures regarding business cycles delivered significant results in controlling the external trade deficit, but it is highly important to adopt medium to long-term policy measures to bring the external trade balance back to reasonable levels against permanent deteriorations in terms-of-trade.

Having anti-deficit policies that take terms-of-trade developments into account would be helpful in adopting efficient and effective measures. The sources of the two-phase terms-of-trade deterioration of the early 2000s and early 2010s appear to be driven by both export and import prices. In this period, export prices mostly declined, compared to national income and import prices (Charts 3 and 4). In other words, Turkey exports a basket of goods whose prices are falling relative to a basket of produced or imported goods. Thus, it is crucial to have policies that boost the pricing power of exported goods; expand the basket of items to include items with high prices; and support the transition towards goods with greater added value in exports.

The rise in energy prices in the same period is a major factor causing import prices to soar. The fact that the price elasticity of the demand for energy items is mostly low in the short term causes the changes in energy prices to pass rapidly to the current external trade deficit. Hence, it is vital to create energy policies that promote efficient energy use and increase domestic energy production without adding to external trade deficit.

