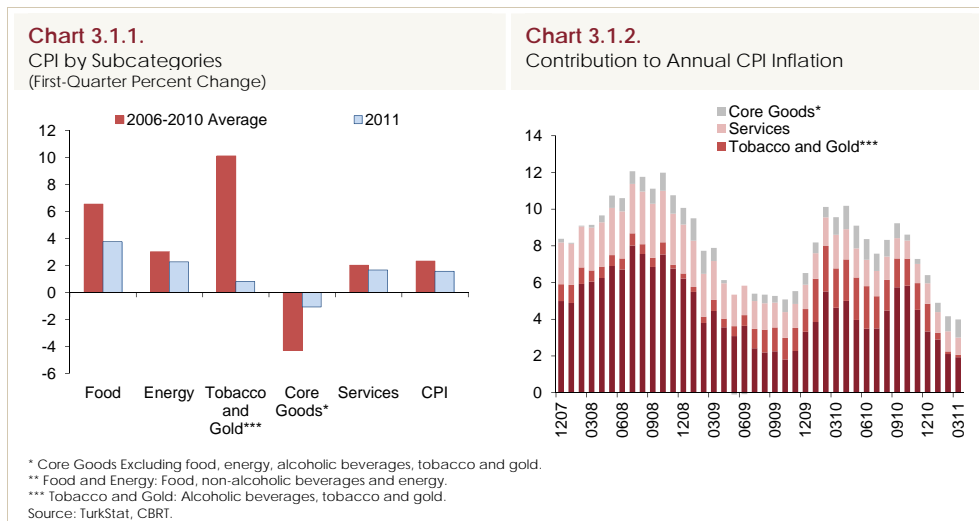


3. Inflation Developments

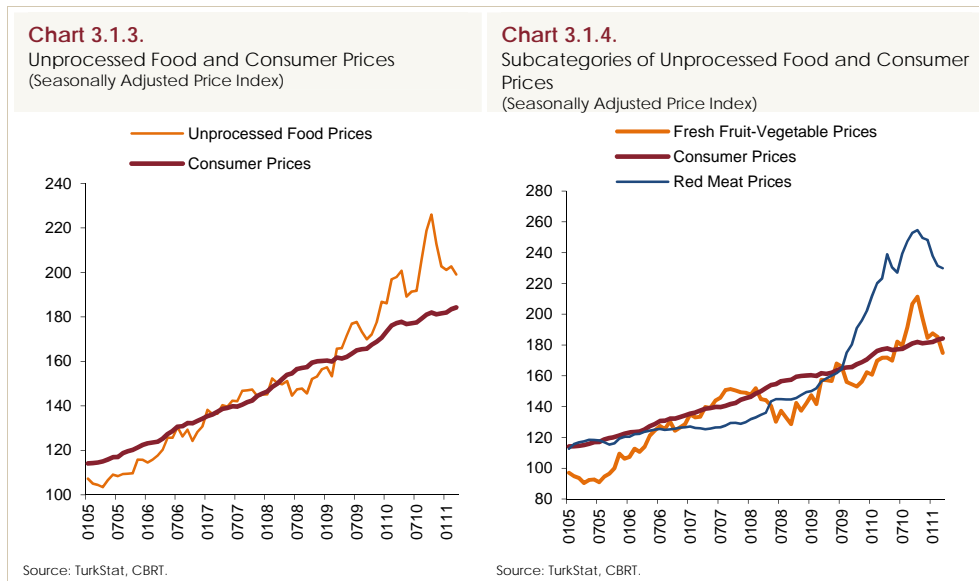
3.1. Inflation

Consumer prices were up 1.57 percent during the first quarter of 2011, while annual inflation decreased to a historic low of 3.99 percent. The steep decline in annual inflation largely reflects the weakening of base effects from the January 2010 tax adjustments on fuels, alcoholic beverages and tobacco as well as the changes in unprocessed food prices. While producer prices exerted more pressure, aggregate demand conditions provided less support for disinflation than in the previous period. Annual inflation in core inflation indicators increased, but remained at low levels.

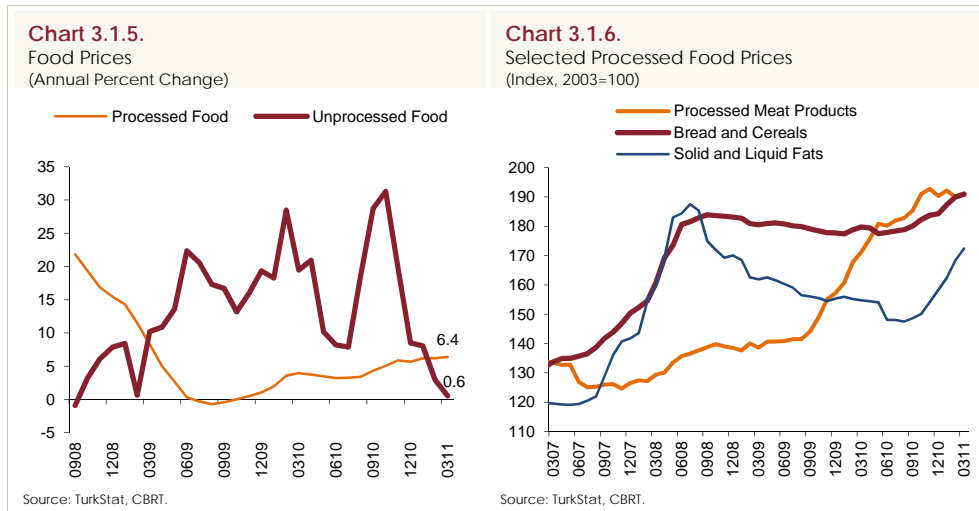
By subcategories, the quarterly rate of change in prices of items other than core goods was down from the average of previous years (Chart 3.1.1). After the sharp correction in unprocessed food prices during the fourth quarter of 2010, food inflation slowed down, increasing slightly in the first quarter. Although energy prices rose in the first quarter amid higher international energy prices and exchange rate developments, the rate of increase was below historical averages. Soaring international commodity prices and the weak Turkish lira had a major impact on domestic prices, particularly on prices of core goods. Annual inflation in core goods increased due to these effects, contributing about 1 percentage point to consumer inflation (Chart 3.1.2). Despite heightened cost pressures, annual services inflation recorded a modest decline signaling that demand conditions have yet to put upward pressure on inflation.



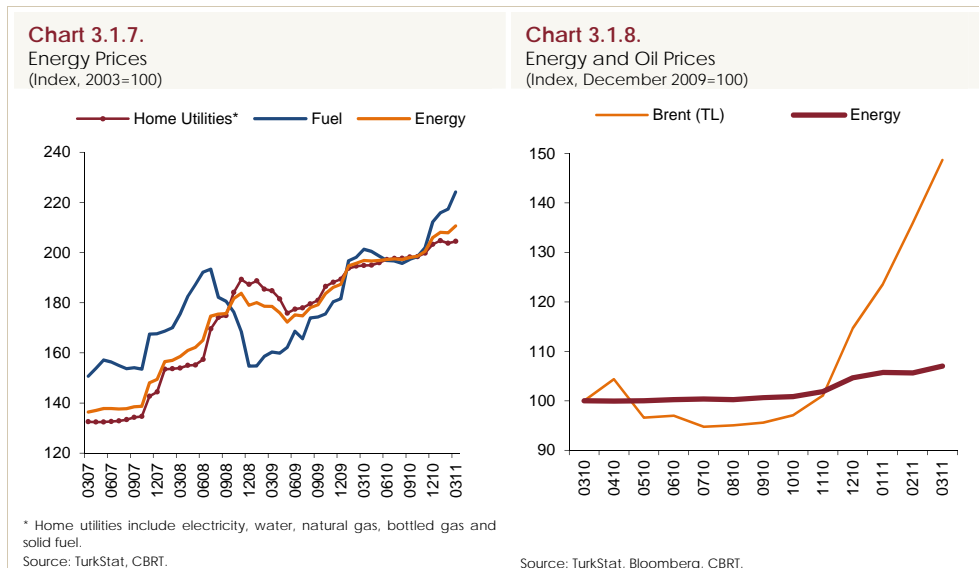
The annual rate of increase in food prices dropped by a remarkable 3.55 percentage points to 3.47 percent in the first quarter. Thus, food prices remained lower than the envisaged path in the January Inflation Report, largely due to ongoing corrections in unprocessed food prices (Chart 3.1.3). Fresh fruit and vegetable prices continued to fall, returning to the year-ago level (Chart 3.1.4). In addition, red meat prices continued to trend downward, reflecting the ongoing effect of import measures (Chart 3.1.4).



Unprocessed food prices are mainly affected by domestic agricultural developments, while changes in international food prices affect domestic prices mostly through processed food prices. Therefore, processed food prices increased in line with international food prices (Chart 3.1.5). Moreover, the recent depreciation of the Turkish lira also put upward pressure on prices. Specifically, prices of oils and fats that are highly sensitive to import prices continued to rise at a faster pace (Chart 3.1.6). International wheat prices continued to affect food prices through prices of bread and cereals. However, the temporary lifting of tariffs on wheat imports until May put a cap on price hikes in this subcategory. Meanwhile, prices of processed meat remained relatively flat amid slowing unprocessed red meat prices in the first quarter.



Energy prices increased by 2.27 percent in the first quarter (Table 3.1.1), mainly on the back of higher international oil prices and rising fuel prices due to weak Turkish lira (Chart 3.1.7). Among home utilities, solid fuel prices continued to surge at a more rapid rate, while the rate of increase in water supply tariffs and bottled gas prices slowed down. Thus, annual energy inflation ended March at 7.02 percent. Although oil prices in Turkish lira rose dramatically over the last two quarters, natural gas and electricity prices have yet to increase, keeping upside risks to 2011 energy prices vigorous (Chart 3.1.8).



Having increased by 26.60 percent in the first quarter of 2010 due to tax hikes, prices of alcoholic beverages and tobacco remained stable in the first

quarter of 2011, contributing about 1.4 percentage points less to annual consumer inflation (Chart 3.1.2).

Table 3.1.1.
Prices of Goods and Services
(Quarterly and Annual Percent Change)

	2010				2011	
	I	II	III	IV	Annual	I
CPI	3.93	-0.32	1.15	1.55	6.40	1.57
1. Goods	4.50	-0.38	1.29	1.64	7.18	1.53
Energy	5.08	0.21	0.43	3.98	9.96	2.27
Food and Non-Alcoholic Beverages	7.33	-6.66	7.02	-0.18	7.02	3.77
Unprocessed Food	13.40	-12.76	13.16	-3.05	8.52	5.08
Processed Food	1.93	-0.62	1.69	2.59	5.68	2.61
Goods(excl. energy and food)	1.81	5.07	-2.96	2.21	6.09	-0.68
Core Goods	-3.27	6.16	-3.45	2.59	1.70	-1.08
Durable Goods (excl. gold)	1.32	0.36	-0.34	-1.06	0.26	4.26
Alcoholic Beverages, Tobacco and						
Gold	23.22	1.48	-1.27	0.93	24.61	0.81
2. Services	2.32	-0.17	0.73	1.31	4.24	1.67
Rents	0.96	0.65	1.30	0.98	3.96	1.08
Restaurants and Hotels	3.30	2.28	1.56	2.30	9.76	1.65
Transport	2.44	1.32	1.83	1.28	7.04	2.28
Communication	3.53	-6.11	-2.90	2.23	-3.51	1.96
Other*	1.76	0.27	1.19	0.30	3.57	1.61

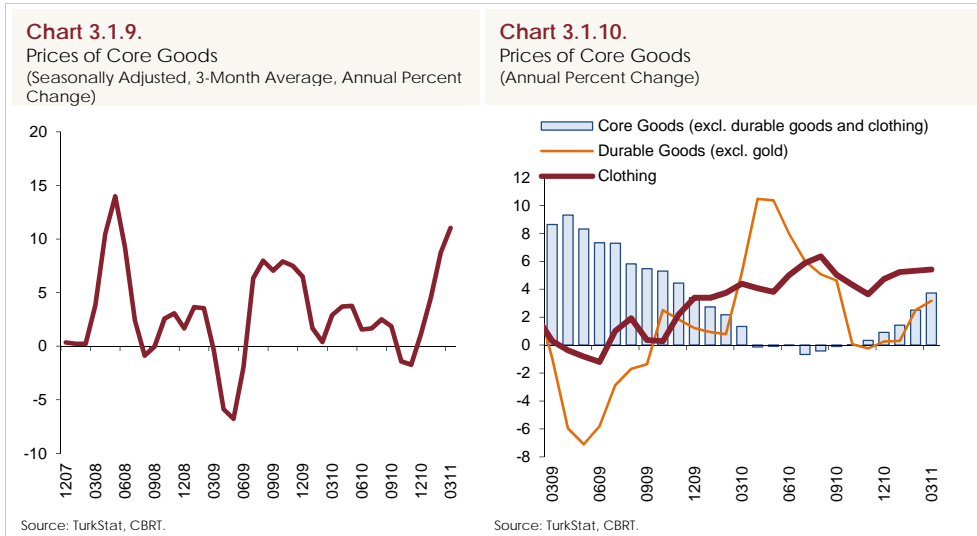
*Excluding rents, restaurants and hotels, transport and communication.
Source: TurkStat, CBRT.

Annual inflation in core goods increased by 2.31 percentage points quarter-on-quarter to 4.01 percent (Table 3.1.2). Seasonally adjusted prices of core goods soared significantly due to changes in import prices and the Turkish lira (Chart 3.1.9). The annual rate of increase in clothing prices rose moderately, while prices of other core goods increased at a marked pace (Chart 3.1.10). In particular, the import-intensive durable goods were significantly affected by developments in import prices and exchange rates. Coupled with strong demand, the impact of exchange rates was particularly more pronounced in automobile and white goods sectors. The most significant risk to prices of core goods over the upcoming period will be the impact of the Council of Ministers' decision to raise tariffs on fabrics and apparels on clothing inflation (Box 3.1).

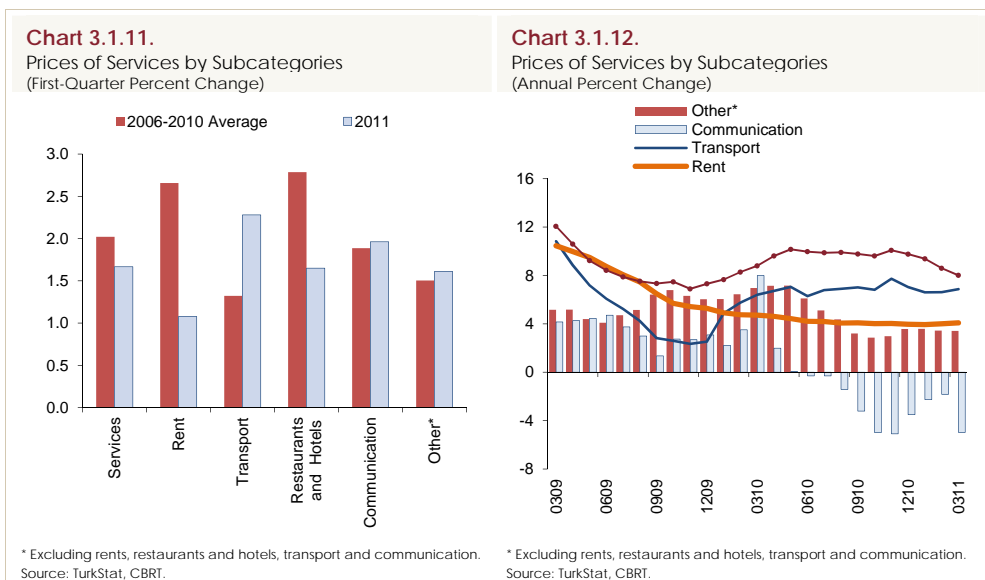
Table 3.1.2.
Prices of Core Goods
(Quarterly and Annual Percent Change)

	2010				2011	
	I	II	III	IV	Annual	I
Core Goods	-3.27	6.16	-3.45	2.59	1.70	-1.08
Clothing and Footwear	-12.62	23.73	-11.90	9.94	4.72	-12.04
Durable Goods (excl. gold)	1.32	0.36	-0.34	-1.06	0.26	4.26
Furniture	1.41	3.76	1.77	-1.06	5.94	0.75
Electrical and Non-Electrical Appliances	-0.16	-1.01	-0.85	-0.23	-2.23	2.87
Automobiles	2.17	-0.11	-0.61	-1.67	-0.26	6.31
Other Durable Goods	0.56	2.17	-1.81	0.90	1.79	2.15
Other	-0.95	0.11	0.58	1.18	0.91	1.82

Source: TurkStat, CBRT.

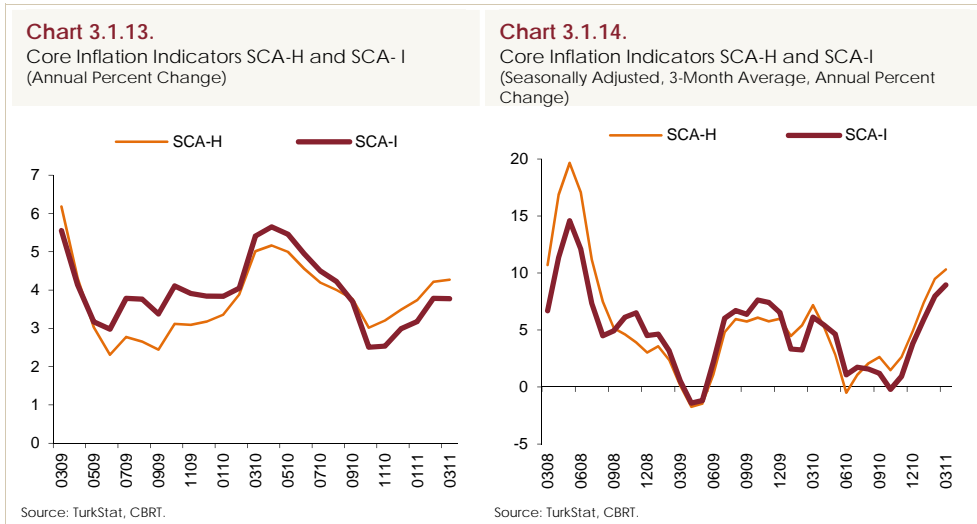


Prices of services increased by 1.67 percent in the first quarter, while annual services inflation fell 0.67 percentage points quarter-on-quarter to 3.57 percent (Chart 3.1.11). Thus, services inflation dropped to an all-time low. Falling across all other subcategories of services, annual inflation was slightly up in rents. Specifically, annual catering services inflation dropped markedly amid slowing food prices (Chart 3.1.12). Prices of transport services increased on rising domestic fuel prices (Chart 3.1.11). Annual services inflation is expected to rise in the second quarter due to base effects from communication services.

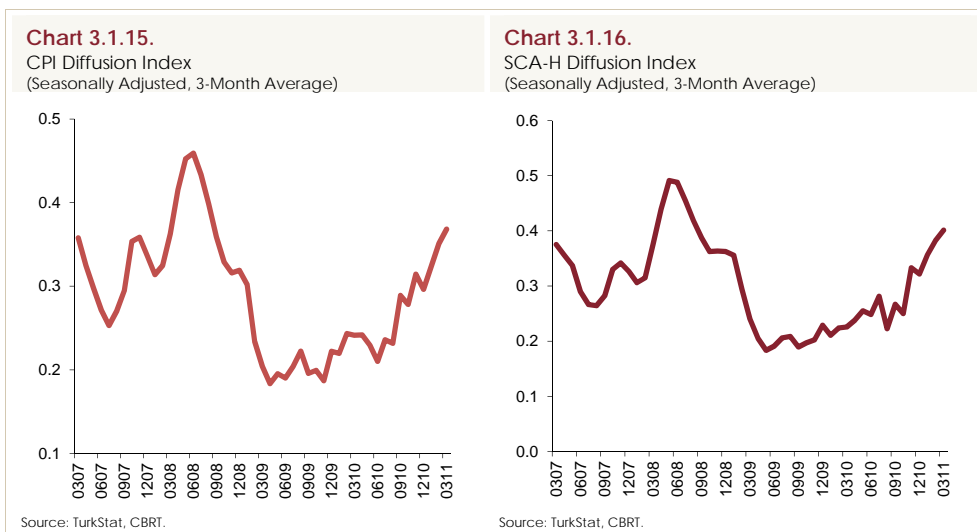


The annual rate of increase in core inflation indicators was up from end-2010 (Chart 3.1.13). This increase reflects the effects of the recent developments

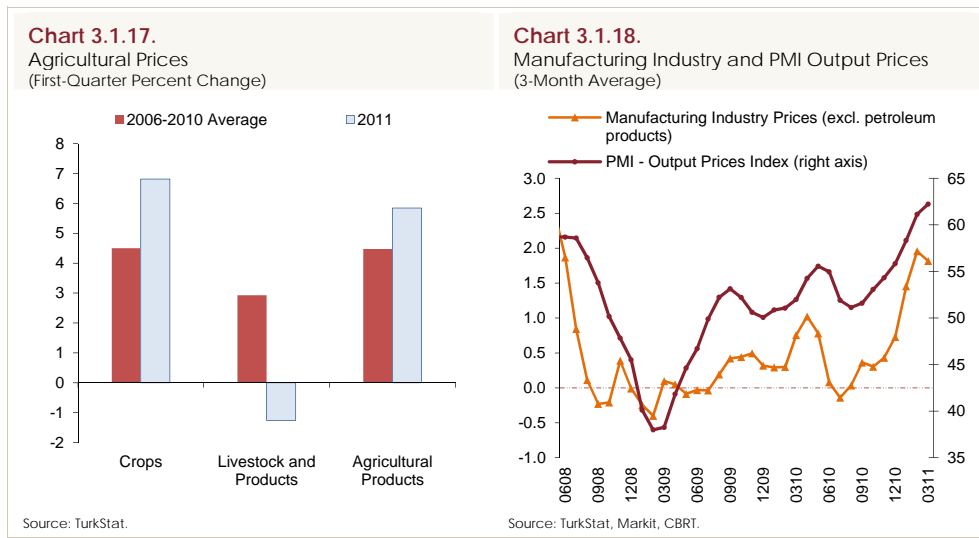
in import prices and the Turkish lira on prices of core goods. Moreover, the seasonally adjusted core inflation indicators increased significantly as well in the first quarter (Chart 3.1.14). This uptrend suggests that the annual core inflation would continue to increase in coming months.



The seasonally adjusted data obtained from diffusion indices remained on the rise during the first quarter in line with the economic recovery (Charts 3.1.15 and 3.1.16). However, this upward trend caused diffusion indices to exceed historical averages. Both the recent trends in core inflation indicators and the outlook for diffusion indices suggest that overall inflation would be on the rise over the upcoming period.



Producer prices rose at a more rapid rate (by 5.40 percent) in the first quarter compared to previous periods. Thus, the deviation between annual CPI and PPI inflation widened. Agricultural prices were up by 5.84 percent due to developments in fruit and vegetable prices as well as the ongoing rise in wheat and sunflower prices, both industrial crops (Table 3.1.3 and Chart 3.1.17). On the other hand, the previously soaring cotton prices and the producer prices for livestock and milk decreased, and the pass through of livestock and milk prices to unprocessed food prices was also observed on consumer prices.



Developments in international commodity prices and the depreciation of the Turkish lira put upward pressure on input costs in the first quarter, having a major impact on manufacturing industry prices (Chart 3.1.18). In particular, the sharp increases in oil and metal prices had a substantial effect on producer prices for petroleum products and base metals. Although cotton prices fell back to October 2010 levels in the first quarter, producer prices for textiles continued to rise, signaling an ongoing gradual pass through of rising costs to manufacturing industry prices. In addition, increases in agricultural input prices spread to producer prices for food. As a result, manufacturing industry prices accelerated significantly compared to previous periods, up 6.27 percent in the first quarter (Table 3.1.3 and Chart 3.1.18). Hence, first quarter was marked by strong cost-push inflationary pressures due to higher producer prices.

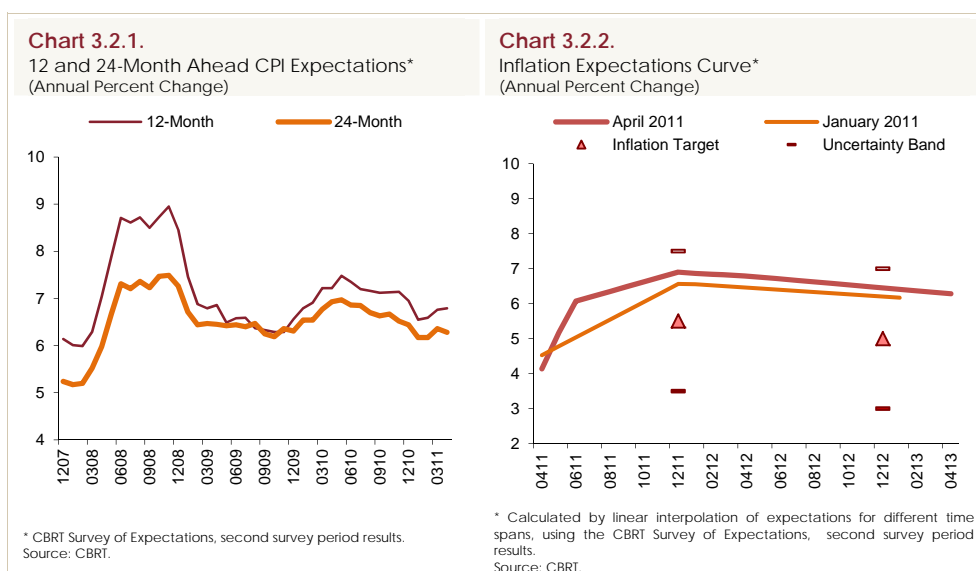
Table 3.1.3.
PPI and Subcategories
(Quarterly and Annual Percent Change)

	2010					2011
	I	II	III	IV	Annual	I
PPI	4.24	0.67	1.51	2.21	8.87	5.40
Agriculture	9.66	2.41	1.71	0.26	14.52	5.84
Crops, Fruits and Vegetables	7.55	2.03	2.78	-3.17	9.20	6.81
Livestock and Animal Products	12.63	0.29	6.23	8.21	29.85	-1.26
Industry	3.12	0.29	1.46	2.64	7.71	5.31
Mining	0.99	1.26	3.75	0.95	7.11	9.70
Manufacturing	2.54	0.10	0.99	2.86	6.62	6.27
Manufacturing (excl. petroleum)	2.28	0.24	1.09	2.20	5.92	5.55
Manufacturing (excl. petroleum and base metals)	1.16	0.14	0.72	1.90	3.98	4.85
Electricity, Gas and Water	9.67	1.66	5.07	1.32	18.68	-4.08

Source: TurkStat, CBRT.

3.2. Expectations

After falling rapidly due to the faster-than-expected decline in consumer inflation during the last quarter of 2010, medium-term inflation expectations increased slightly in the first quarter of 2011 (Chart 3.2.1). This was likely driven by the increase in cost pressures as well as the upward trend in core inflation indicators. Near-term inflation expectations were particularly higher quarter-on-quarter, while longer-term expectations increased only modestly (Chart 3.2.2). Currently, inflation expectations continue to hover slightly above the year-end targets of 5.5 and 5 percent for 2011 and 2012, respectively.



As of April, the dispersion of survey respondents' 12-month ahead inflation expectations remains largely unchanged from January, whereas the dispersion for 24-month ahead inflation expectations is significantly higher (Charts 3.2.3 and 3.2.4).

Chart 3.2.3.

Distribution of 12-Month Ahead Inflation Expectations*

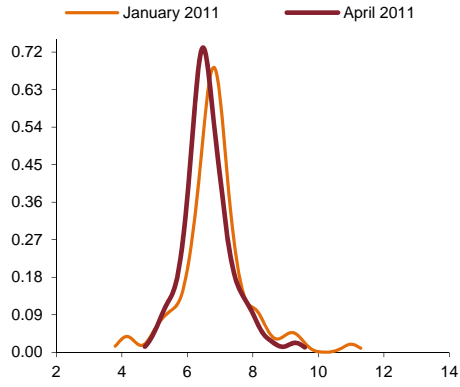
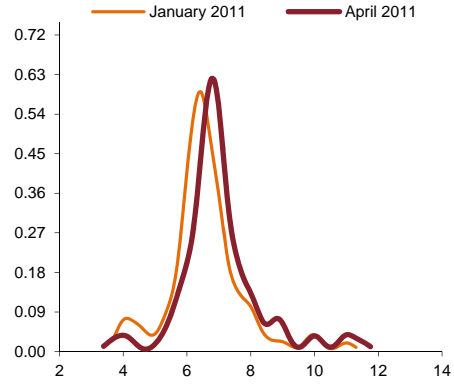


Chart 3.2.4.

Distribution of 24-Month Ahead Inflation Expectations*



*Horizontal axis shows inflation rate, vertical axis indicates Kernel forecast. Expectation figures are from the CBRT Survey of Expectations, second survey period results.
Source: CBRT.

Box
3.1Additional Tariffs on Clothing Imports and Possible Impacts on
CPI

This Box estimates the possible impacts of the envisioned tariff adjustments on fabric and apparel imports on CPI inflation.

Brief Summary

Upon recourse by some producers, Undersecretariat of Foreign Trade has launched a study about the impacts of increased imports on domestic fabric and apparel production. Accordingly, tariff rates were raised by country groups by the Council of Ministers' decision on March 24, 2011 (Table 1).¹

Table 1. Additional Tariff Rates

	Fabrics	Apparels
Other Countries	20	30
Developing Countries	18	27
Least Developed Countries	11	17
Countries Subject to Special Incentives	11	17

Source: Council of Ministers' decision number 2011/147, dated March 24, 2011.

Possible Impact of the Tariff Adjustment on CPI Inflation

Fabrics and apparels compose a major share of the CPI basket.² Thus, estimating the impact of the tariff adjustment on the CPI inflation is critical. To this end, using an extensive data set, a study has been conducted at the CBRT. Assumptions underlying the calculations are finalized based on expert views from relevant institutions and firms.

First, for each good subject to tariff adjustment, average additional tariff is calculated by summing additional tariffs for each country weighted by the country's share in imports of the relevant good. In addition, for each good, a representative profit margin is calculated. These profit margins are constructed from an extensive data set and finalized based on experts' view. This Box simply takes profit margin as the ratio of marked price to import price. The tariff adjustment is assumed to bring no additional cost.

¹ The decision will be effective on the 120th day of its release after the completion of Undersecretariat of Foreign Trade's investigation on the issue.

² The weight of clothing and footwear item in the CPI basket is 7.22 percent with fabrics and apparels composing majority of this item.

Several factors, some of which will be discussed below, are present regarding how the increased import costs will be reflected by firms to their prices. In this context, a lower and upper bound for the possible impact can be determined such that firms may try to maintain their nominal profit by reflecting the increased cost as a fixed cost or firms may try to maintain their profit margin so without compromising their profit margin, they may raise their prices in a way to hold the profit margin fixed. In this framework, the first pricing behavior can be accepted as the lower bound whereas the second can be accepted as the upper bound for the possible impact. The pass through of additional tariffs to marked prices is calculated given the lower and the upper bounds. Consequently, the goods are matched with the relevant subcategory in the CPI basket and the degree of pass through to marked prices are weighted by the share of imports in the domestic consumption.³

Results and Concluding Remarks

The additional tariffs are expected to drive annual CPI inflation up by 0.2-0.8 percentage points according to the above method (Table 2). The impacts should be evaluated in the context of the above assumptions and it should be noted that the assumption about firms to reach an equilibrium after the tariff adjustment is inherent in these impacts. The impact will also vary depending on the extent of the sectoral structural change.

Table 2. Contribution of the Additional Tariff on CPI Inflation

	Pass Through of Costs	
	Fixed Nominal Profit (Lower Bound)	Fixed Profit Margin (Upper Bound)
Contribution to Annual CPI Inflation (Percentage Points)	0.24	0.78

Major uncertainties exist regarding the impact of the tariff adjustment on firms' pricing and production preferences. To give an example, in case of an increased competitiveness, firms will not be able to maintain their profit margin. In other words, the increased competitiveness may result in pass through of increased import costs to prices of luxury goods with relatively less weight in the CPI basket as opposed to pass through to prices of goods with relatively higher demand, lower price and more weight in the CPI basket, thus limiting the pass through to CPI. On the other hand, if domestic firms increase their prices due to higher import costs, the impact of the tariff adjustment on inflation may be even more sizeable.

³ Domestic firms are also assumed to slightly increase their prices. Based on experts' view, this increase is taken to be half of the increase in the import prices.

In sum, tariff adjustments are expected to drive annual CPI inflation up by 0.5 percentage points. Hence, the year-end inflation forecast is revised upwards. However, it should be underlined that major uncertainties exist regarding these calculations. The final impact on consumer prices will be determined by factors such as preferences for domestic vs. foreign firms, the competitiveness and pricing behavior of domestic firms.