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inflation report 2012-IV

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1. Overview

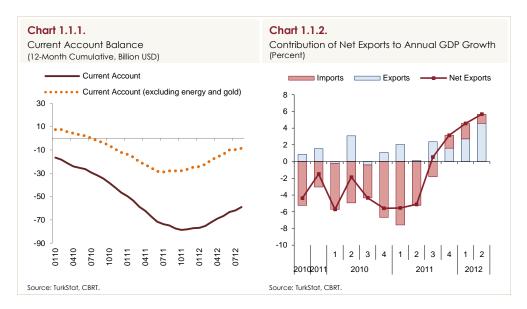
Although uncertainties regarding the global economy have eased slightly in the third quarter of 2012, they still remain critical. Meanwhile, global growth has continued to lose momentum. In this period, measures taken have alleviated the risk of further deepening of the problems in the Euro Area; yet growth outlook for both advanced and emerging economies was revised downwards. Data released in the US pertaining to employment, housing and production suggested that the recovery was weaker than envisaged. The unfavorable outlook for the Euro Area persisted, and the economic activity in emerging economies including China continued to decelerate. In this context, central banks of advanced economies announced quantitative easing packages to bolster economic activity and reduce macro financial risks, while expectations regarding emerging market policy rates were revised downwards.

The persistent weakness in global economic outlook reduces inflationary risks, yet keeps concerns over financial stability and growth on the agenda. Uncertainties regarding the Euro Area, concerns over the US and Chinese economies and geopolitical risks remain significant. Notwithstanding the recent measures, ongoing fragilities and imbalances in the global economy continue to keep the volatility of risk appetite at relatively high levels. Taken together with extraordinarily ample and low-cost liquidity injected to the market by advanced economies, this leads to high volatility in short-term capital flows and confirms the importance of building a flexible policy framework.

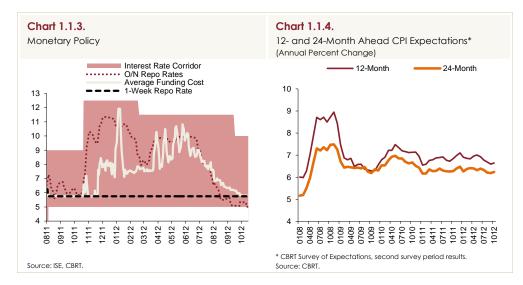
1.1. Monetary Policy and Monetary Conditions

Since the end of 2010, the Central Bank of the Republic of Turkey (CBRT) has designed and implemented a new policy framework, which takes into account macro financial risks. In this respect, the general framework of the inflation targeting regime was modified and additional policy instruments were developed to support the adoption of financial stability as a complementary objective. Policies implemented in this period aimed at managing macro financial risks without prejudice to the price stability objective. To this end, credit growth was brought under control and exchange rate was aligned closer with economic fundamentals.

Recent data releases suggest that policies were largely successful in delivering the intended results. The composition of growth has displayed a healthier outlook, while the rebalancing process became more significant. In fact, during this period, current account has continued to improve (Chart 1.1.1) and the contribution of net exports to growth has increased markedly (Chart 1.1.2).



Having started to achieve the intended results in terms of reducing macro financial risks, monetary policy shifted the emphasis to price stability as of October 2011. In this respect, the CBRT implemented a strong monetary tightening by widening the interest rate corridor upwards and using liquidity operations effectively. Due to the volatility in risk appetite and upside risks regarding inflation outlook, the CBRT implemented additional monetary tightening occasionally until mid-2012. During this period, the upper bound of the interest rate corridor was kept high to preserve the tightening flexibility (Chart 1.1.3) These policies, in turn, have prevented a possible deterioration in medium-term inflation expectations, amid a period of intensified supply-side pressures and double digit inflation (Chart 1.1.4).

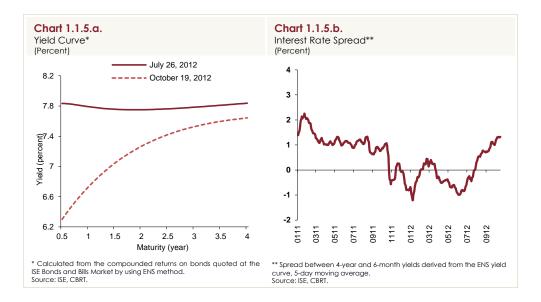


Monetary policy assumed a more accommodative stance since mid-2012. Improving global risk appetite, along with clearer signs of a more robust rebalancing process evidenced by recent data on the current account and the composition of growth, had favorable impact on risk perceptions towards Turkish economy. Moreover, the disinflationary impact of domestic demand has become more significant. Against this backdrop, the CBRT increased the liquidity injected to the market since early June, and decreased its average funding rate gradually. Meanwhile, the O/N market rates have fallen to low levels (Chart 1.1.3). Since September, considering the decreasing tail risks regarding the global financial system and also to support credit conditions, the CBRT has cut the upper bound of the interest corridor gradually and further eased liquidity conditions.

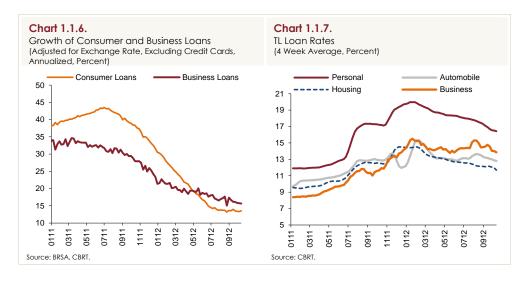
Despite the more accommodative liquidity policies, the CBRT has adopted a cautious stance in general. In this respect, the Monetary Policy Committee (the Committee), highlighting the risks related to pricing behavior due to administered price hikes and rise in energy prices, stated that cautious stance will be preserved. Moreover, the Committee has stated that it would be appropriate to preserve the flexibility in monetary policy on both sides amid the prevailing uncertainties regarding the global economy. Accordingly, it was reiterated that the impact of the measures undertaken on credit, domestic demand, and inflation expectations will be closely monitored and the funding amount will be adjusted in either direction, as needed.

The short-term interest rates declined significantly in the third quarter due to liquidity policies pursued by the CBRT. Long-term rates, on the other hand,

displayed a limited fall mainly owing to lower risk premium. As a consequence, the yields have shifted down across all maturities while the slope of the yield curve turned positive (Chart 1.1.5).



Annual growth rate of credits continued to slow down during the third quarter (Chart 1.1.6). Both supply and demand conditions are likely to be more supportive for the credit growth in the final quarter of the year. In fact, consumer loan rates have been trending downwards along with the falling market rates (Chart 1.1.7). Business loan rates are also expected to decline with the cuts in the upper bound of the interest rate corridor. Accordingly, as predicted, annual rate of growth in total credits is expected to materialize around 14 percent at the end of the year.

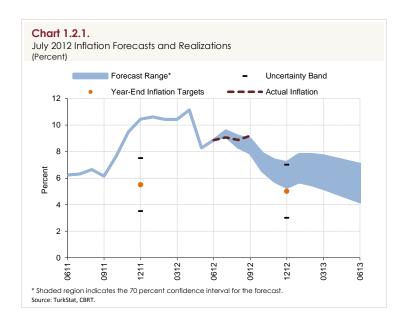


Another noticeable development regarding financial stability issues during the third quarter is the steps the CBRT has taken regarding the Reserve Option Mechanism (ROM). ROM is a tool allowing banks to hold a certain fraction of their Turkish lira reserve requirements in FX or gold. This mechanism aims at increasing the resilience of the economy against external financial shocks (Box 5.1). This system is expected to smooth the imbalances between FX supply and demand due to shifts in capital flow movements. The mechanism is targeted to operate as an automatic stabilizer, once the construction process is completed.

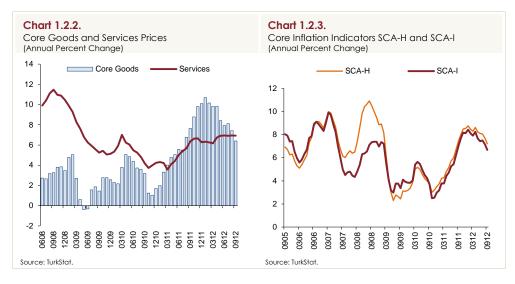
1.2. Macroeconomic Developments and Assumptions

Inflation

Inflation displayed a slight increase in the third quarter of 2012 and stood at 9.2 percent in September, overshooting the projections presented in the July Inflation Report (Chart 1.2.1). This higher-than-expected inflation rate is attributed to recent hikes in oil and unprocessed food prices as well as adjustments in administered prices and tax hikes.

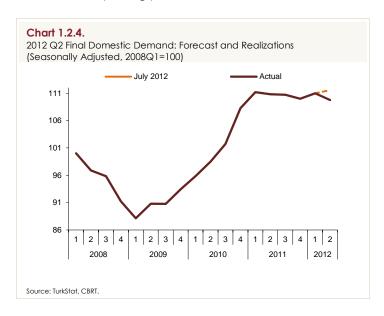


Annual inflation in core good prices continues to fall as the cumulative effects of last year's exchange rate and import price movements gradually fade and the slowdown in domestic demand continues. Meanwhile, services inflation remain moderate (Chart 1.2.2). Against this background, core inflation indicators maintain a downward trend (Chart 1.2.3).



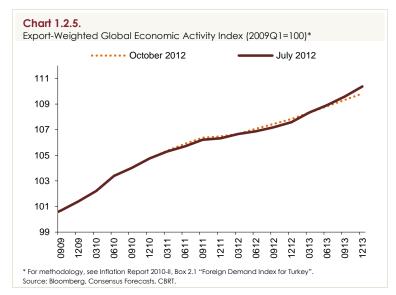
Supply and Demand

National accounts data for the second quarter of 2012 indicate that owing to investment, domestic demand conditions were weaker than the outlook presented in the July Inflation Report (Chart 1.2.4). Meanwhile, recent data releases signal that the deceleration in final domestic demand continues in the third quarter. Accordingly, short-term forecasts for output gap are revised downwards in the inter-reporting period.



Leading indicators indicate a mild recovery trend in consumption demand in the last quarter of the year. Given the recent developments in the credit market and lagged effects of accommodative monetary policy implemented since the midst of the year, consumption demand is expected to rise in the forthcoming period. As for the investment, the recovery is expected to be more delayed.

In the third quarter of the year, external demand also continued to decelerate like domestic demand. External demand outlook has followed a weaker-than-expected course since the publication of the July Inflation Report. In fact, downward revisions in global growth forecasts in the third quarter point to lower levels for the export-weighted global economic activity index (Chart 1.2.5). The sustained poor outlook for growth, especially in the Euro Area, restricts the external demand. Nevertheless, thanks to market and product diversification, exports are estimated to maintain a relatively favorable course in the forthcoming period.



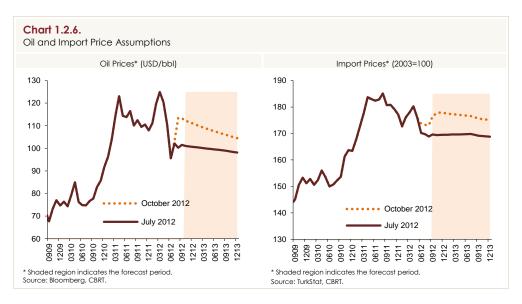
In sum, forecasts are based on the assumption that aggregate demand conditions will provide a higher contribution to disinflation compared to the previous reporting period. The effect of this development on end-2012 inflation forecast is 0.1 percentage point on the downside.

Energy, Imports and Food Prices

Owing to supply-side factors, oil prices remained above projections in the inter-reporting period (Chart 1.2.6). Accordingly, average oil price assumption

for 2012, which was set as USD 110 in the July Inflation Report, was revised upwards to USD 112. Although the revision for the entire year seems limited, it implies a notably higher average oil price assumption for the second half of the year. Accordingly, assumptions for 2013 were revised upwards from USD 100 to USD 107.

Likewise, import prices also remained above projections. In line with the actual data and futures prices, assumptions for import prices were revised upwards compared to the previous period (Chart 1.2.6). The revisions in oil and import prices combined with the developments in the exchange rate pushed the inflation forecast for end-2012 upwards by 0.40 percentage points in total.



The volatility in unprocessed food prices continues to pose uncertainty regarding the short-term forecasts. As we reach the last quarter of the year, unprocessed food prices exhibit a significantly better course compared to historical averages. However, following a cautious approach, the assumption for the annual rate of increase in food prices was preserved at 7 percent.

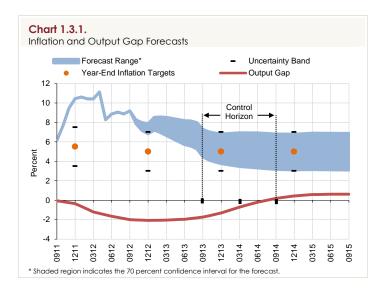
Fiscal Policy and Tax Adjustments

Recent tax increases and adjustments to energy prices were the main development calling for a revision in short-term inflation forecasts compared to the July Inflation Report. These developments pushed the year-end inflation forecast upwards by 0.9 percentage points. Medium-term forecasts are based on the projection that tobacco prices will increase in early 2013 in accordance with the rates implied by the tax adjustments announced in October 2011. On the other hand, other tax adjustments and administered prices are assumed to be consistent with inflation targets and automatic pricing mechanisms.

Regarding the fiscal outlook, medium-term inflation forecasts take the revised projections of the Medium Term Program (MTP) as given. Accordingly, it is assumed that fiscal discipline will be preserved and the structural budget balance will not display a notable change in the forthcoming period.

1.3. Inflation and Monetary Policy Outlook

Forecasts are based on the assumption that monetary policy will maintain its cautious and flexible stance, and annual loan growth rate will hover around 14 percent. Accordingly, inflation is expected to be, with 70 percent probability, between 6.9 and 7.9 percent (with a mid-point of 7.4 percent) at the end of 2012, and between 3.8 and 6.8 percent (with a mid-point of 5.3 percent) at the end of 2013. Inflation is expected to stabilize around 5 percent in the medium term (Chart 1.3.1).



In short, owing mainly to the adjustments in energy prices, inflation forecast for end-2012 was revised upwards by 1.2 percentage points to 7.4 percent. Table 1.3.1 gives a summary account of this revision.

Table 1.3.1.Sources of Revision to 2012 Year-end	Inflation Forecast
Oil and Import Prices	+0.4 percentage points
Tax and Administered Price Adjustments	+0.9 percentage points
Output Gap	-0.1 percentage points
Total	+1.2 percentage points

Revised forecasts suggest that inflation will display a noticeable decline in the last quarter despite the recent adjustments in taxes and administered prices. In the forthcoming period, mild domestic demand conditions will contain the second-round effects of the rise in energy prices and core inflation indicators will continue with their gradual decline. Accordingly, inflation is expected to near the target of 5 percent by end-2013.

It should be emphasized that any new data or information regarding the inflation outlook may lead to a change in the monetary policy stance. Therefore, assumptions regarding the monetary policy outlook underlying the inflation forecast should not be perceived as a commitment on behalf of the CBRT.

1.4. Risks and the Monetary Policy

The expectation that inflation will overshoot the target for an extended period coupled with the recent hikes in energy prices necessitate a close monitoring of the pricing behavior. The baseline scenario in the Report assumes that second-round effects will be limited. On the other hand, it should be noted that necessary measures will be taken should a different outlook unfold.

Ongoing uncertainty regarding the global economy and the ensuing volatility in capital flows requires preserving the flexibility of monetary policy in either direction. Uncertainties still persist regarding deleveraging of public, household, and banking sector balance sheets. The protracted nature of the global recovery has been prompting the extension of quantitative easing packages across advanced economies. Despite the steps taken for the resolution of problems in the Euro Area, risk appetite remains highly sensitive to any new developments due to ongoing fragilities in the financial system, elevated levels of borrowing costs across peripheral economies and the weakening growth outlook. Therefore, it is highly likely that short-term capital inflows will continue to be volatile in the forthcoming period.

Measures taken by advanced economies during the third quarter have eased the tail risks and alleviated the fluctuations in the global financial system. However, uncertainties regarding the implementation of the policy measures remain critical. The CBRT possesses adequate tools at its disposal to resort to under this uncertain environment.

A prolonged weakness in global economic growth may prompt major central banks to sustain their monetary easing packages. Extension of the duration of new packages would feed into macro financial risks in emerging economies like Turkey. In such a case, a resurge in short-term capital inflows may slow down the rebalancing process through rapid credit growth and appreciation pressures on the domestic currency. Should such a risk materialize, the CBRT may keep short-term rates at low levels, while implementing tightening through macroprudential tools such as reserve requirements. Moreover, the automatic stabilizing nature of the Reserve Option Mechanism will support financial stability.

Quantitative easing policies at a global scale also pose risks to commodity prices. However, upside risks on inflation could be contained in such a case, as periods of quantitative easing typically coincide with a weakening in the global economy. However, the CBRT will take the necessary tightening measures, should the increase in commodity prices prove persistent and consequently lead to a deterioration in the pricing behavior.

On the other hand, aggregate demand and commodity prices may increase faster than expected, should the measures taken towards the solution of problems regarding the global economy be completed sooner and more decisively than envisaged. Materialization of such a risk would possibly require a tightening using all policy instruments, as it would mean increased pressures on the medium-term inflation outlook.

Unprocessed food price developments may lead to a more-thanpredicted favorable inflation outlook at the end of 2012. Despite the favorable course of leading indicators, a rather cautious approach was adopted, assuming that the rate of increase in unprocessed food prices will be close to the past years' average. Year-end inflation may be lower than projected in the baseline scenario, should unprocessed food prices display a more favorable course than envisaged.

The CBRT monitors fiscal policy developments closely while formulating its monetary policy strategy. Forecasts presented in the baseline scenario take the framework outlined in the MTP as given. In this respect, it is assumed that fiscal discipline will be sustained and there will be no unanticipated hikes to administered prices. A revision in the monetary policy stance may be considered, should the fiscal stance deviate significantly from this framework and consequently have an adverse effect on the medium-term inflation outlook.

Prudent fiscal policy is crucial for preserving the resilience of our economy against existing global uncertainties. Strengthening the structural reform agenda that would ensure the sustainability of the fiscal discipline and reduce the savings deficit would support the relative improvement of Turkey's sovereign risk, and thus facilitate price stability and financial stability in the medium term. This will also provide more flexibility for monetary policy and contribute to social welfare by keeping interest rates of long-term government securities at low levels. In this respect, steps towards implementation of the structural reforms envisaged by the Medium Term Program remain to be of utmost importance.

2. International Economic Developments

After the publication of the July Inflation Report, economic activity in the Euro Area continued to decelerate. Sovereign debt and banking problems worsened and growth rates fell in the US and emerging economies. Against this background, decisions taken by the Fed and the ECB stood out as noteworthy developments, which will determine the global economic outlook in the forthcoming period.

In spite of the adopted fiscal measures in the Euro Area, borrowing rates followed a high course and the perception of improper functioning of markets prevailed in Spain and Italy during the last quarter, thus causing the ECB to adopt a policy that facilitates struggling countries to purchase unlimited bonds in the secondary market. However, certain conditions were imposed on bond purchases, bringing about concerns over the extent of the effectiveness of the policy decision.

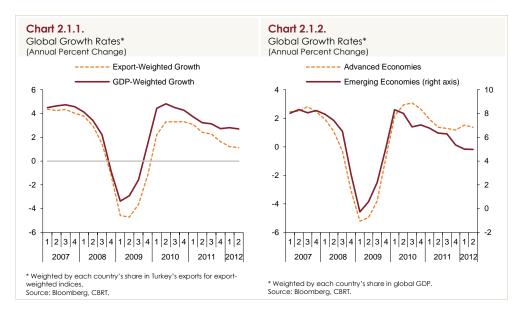
Notwithstanding the positive growth rates in the US economy, unemployment rates have been elevated for a long time. What is more, the likelihood of these rates to cause a permanent deterioration in the labor market should they remain high for an extended period, led the Fed to announce the third quantitative easing package. Unlike the previous packages, Fed announced that should inflation stay below distressing levels, mortgage-backed asset purchases would be sustained without any notice of certain duration and quantity until the unemployment rate falls satisfactorily.

Owing to the rebound in the global risk appetite upon the mentioned policies, capital inflows towards emerging economies gained momentum. Monetary policies to be implemented by advanced economies are thought to largely determine capital flows towards emerging economies in the forthcoming period as well. Commodity prices trended upwards in the last quarter due to supply-side problems both in energy and the agricultural sectors besides implemented expansionary monetary policies. Increasing commodity prices led declining inflation rates in emerging economies to follow a flat course in the last quarter, while causing stable inflation rates in advanced economies to increase. However, the slow course of global economic activity in addition to lingering uncertainties depress commodity prices.

In the second quarter of the year, growth rates went down both in advanced and emerging economies. Moreover, the third-quarter data do not signal for a recovery in global economic activity. In view of these developments, monetary policies in both country groups will remain loose in the forthcoming period in order to give a boost to the economy.

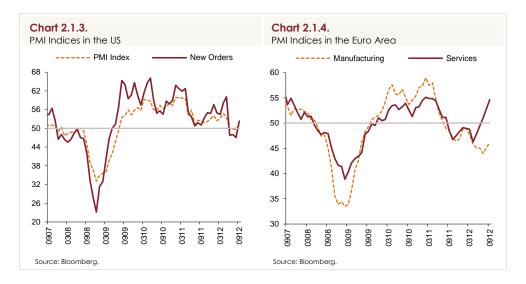
2.1. Global Growth

The optimistic atmosphere in the first quarter of the year was reversed in the second quarter upon the aggravation of the Euro Area debt crisis due to the financing requirement of the banking sector in Spain. As a result, global growth rate, which edged up in the first quarter of the year, lost pace in the second quarter, while the world trade maintained its limited rate of increase (Chart 2.1.1).

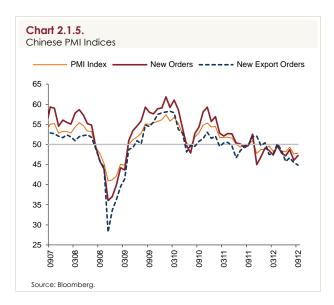


Aggregated indices show that the growth rate of economic activity lost pace not only in advanced but also in emerging economies in the second quarter of 2012 (Chart 2.1.2). Sluggish domestic demand primarily in Asian and Latin American countries in addition to the Europe-originated external demand, which is yet to recover, had a restrictive effect on economic activity. As for advanced economies, the Euro Area and the UK continued to create an adverse impact on the growth rate of major economies in the second quarter. On the US and Japanese front, the positive contribution to growth rates of advanced economies continued, while US provided a lower support comparative to the first quarter of the year.

The US economy slowed down in the second quarter of the year, growing by a quarter-on-quarter 1.3 percent in annualized terms. Third-quarter PMI data in the US suggest that both the headline index and the new orders index were elevated in September following the decline in July and August (Chart 2.1.3). As for the Euro Area, which contracted further in the second quarter, PMI figures of the services sector went beyond the neutral level of 50 at the end of the third quarter. Nevertheless, it is projected that the contraction in the manufacturing sector will continue, and therefore, growth will remain limited in the third quarter as well (Chart 2.1.4)



China, which was the largest contributor to growth in emerging economies during the recovery process following the global crisis, has been experiencing a slowdown in growth rate for the last 1.5 years that also continued into the third quarter of 2012, resulting in an annual GDP growth of 7.4 percent. Meanwhile, PMI indicators for the forthcoming period suggest that growth will remain limited (Chart 2.1.5).



Third-quarter PMI figures point to a contraction in global economic activity both in manufacturing and services sectors, while edging up in September (Chart 2.1.6). The expectation that advanced economies will announce additional package of measures to bolster economic activity due to the deteriorating growth outlook in the third quarter is considered to play a role on this upward movement. Nevertheless, despite adopted measures and the loose course of the global monetary policy, factors to pose downward risks to global growth, primarily the aggravating Euro Area debt crisis, have accumulated compared to the previous period. In fact, Consensus Forecasts and the World Economic Outlook suggest that end-year growth forecasts for both 2012 and 2013 have deteriorated in the inter-reporting period (Table 2.1.1). In line with the outlook presented above, GDP and export-weighted global production indices revised by Consensus Forecasts in October also confirm that an evident recovery is not expected in external economies in the forthcoming period, and global uncertainties will continue to exert pressure on external demand (Chart 2.1.7).

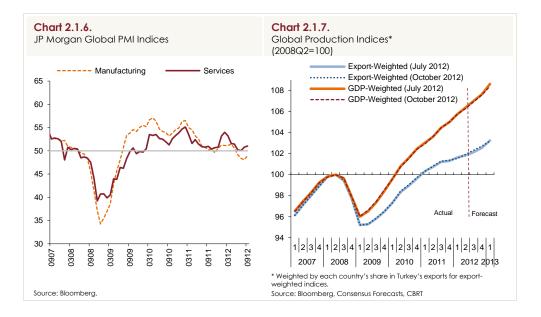


Table 2.1.1.

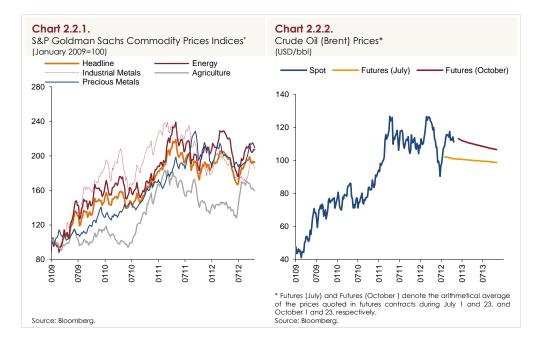
Growth Forecasts for end-2012 and end-2013

Growin Forecasis for end-2012 and	end-2013							
	(#	Consensus Forecasts World Economic Outlook (Annual Percent Change) (Annual Percent Change)						
	2	2012 2013		2012		2013		
	July	October	July	October	July	October	July	October
World	2.5	2.5	2.9	2.8	3.5	3.3	3.9	3.6
Advanced Economies	-	-	-	-	1.4	1.3	1.8	1.5
USA	2.1	2.1	2.3	2.0	2.1	2.2	2.2	2.1
Euro Area	-0.5	-0.5	0.5	0.2	-0.3	-0.4	0.7	0.2
Germany	0.9	0.8	1.3	0.9	0.9	0.9	1.4	0.9
France	0.2	0.1	0.7	0.3	0.3	0.1	0.9	0.4
Italy	-2.0	-2.4	-0.3	-0.7	-1.9	-2.3	-0.3	-0.7
Spain	-1.7	-1.6	-0.9	-1.6	-1.4	-1.5	-0.6	-1.3
Greece	-6.8	-6.7	-2.6	-3.6	-	-	-	-
Japan	2.5	2.3	1.4	1.3	2.4	2.2	1.5	1.2
UK	0.1	-0.2	1.6	1.2	0.2	-0.4	1.4	1.1
Emerging Economies	-	-	-	-	5.6	5.3	5.8	5.6
Asia-Pacific*	6.4	6.1	6.9	6.6	7.1	6.7	7.5	7.2
China	8.1	7.7	8.4	8.1	8.0	7.8	8.4	8.2
India	6.3	5.8	7.2	6.8	6.2	4.9	6.6	6.0
Latin America*	3.3	2.9	4.0	3.8	3.4	3.2	4.2	3.9
Brazil	1.9	1.6	4.0	3.9	2.5	1.5	4.7	4.0
Eastern Europe	2.7	2.8	3.4	3.3	1.9	2.0	2.8	2.6

* Countries making up the region differ between Consensus Forecasts and World Economic Outlook. Source: Consensus Forecasts, World Economic Outlook.

2.2. Commodity Prices

The headline commodity index went up in the third quarter of the year upon the upward movement of all sub-indices. Supply conditions in the energy market accompanied by demand conditions owed to new monetary easing packages announced by the Fed and the ECB posed an upward pressure on energy prices. Meanwhile, lingering uncertainties in the global economy alleviate this pressure. An analysis of sub-indices suggests that prices of agricultural products surged from the end of the second quarter to end-July due to supply-side problems, while having followed a flat course afterwards. Industrial metal prices remained unchanged during the third quarter, but have recently trended upwards on the back of monetary easing packages. Similarly, precious metal prices also displayed an upward movement in this period (Charts 2.2.1 and 2.2.2).



However much appreciated were the monetary easing packages for the US and the Euro Area, persisting concerns over global economic growth prevent an evident upward pressure on the demand side to be imposed on oil prices. On the other hand, supply-side developments continued to be influential on oil prices in the previous quarter. The embargo decision taken by Europe in January upon the nuclear crisis with Iran was enforced on July 1, 2012. This decision prohibited countries to avail themselves of insurance services in oil exports from Iran to the European countries and crude oil exports from Iran to other countries. Against these developments, crude oil production in Iran hit the lowest level of the last twenty years and the access of the international market to Iran's crude oil got restricted. On the other hand, oil production stations in the North Sea went under a maintenance period in September as contemplated; but this period was unexpectedly protracted, further depressing the supply in the market. Moreover, the Storm Isaac that hit the US also proved to be one of the developments to bring about an interruption in crude oil production in this period. In addition, the spread between WTI and Brent crude oil prices has recently seen the ever high level of the last year. This is attributed to the crude oil production that still remains at high levels owing to the presence of US crude oil inventories and the use of unconventional methods in production albeit a limited decline (Charts 2.2.3 and 2.2.4).



Drought in the US following the Latin America and Russia caused supplyside problems in agricultural products to become more pronounced. Forecasts for the production of cereal products were revised considerably downwards amid the extremely hot weather conditions in the US, thus generating an upward pressure on the prices of agricultural products (Table 2.2.1). However, cereal exporter countries remained reluctant to impose quota, thereby resulting in a favorable market outlook. Against this background, prices of agricultural products exhibited an upsurge until the end of July, and followed a flat course afterwards.

As a result, notwithstanding the additional measures enforced by major central banks, persisting uncertainties regarding global growth alleviate the upward pressure on commodity prices. On the other hand, gradually worsening geopolitical problems in the Middle East, especially in Syria, keep upward risks on oil prices brisk in the short and medium term. Moreover, supply-side setbacks in agricultural products stand out as another risk factor on commodity prices.

Table 2.2.1.

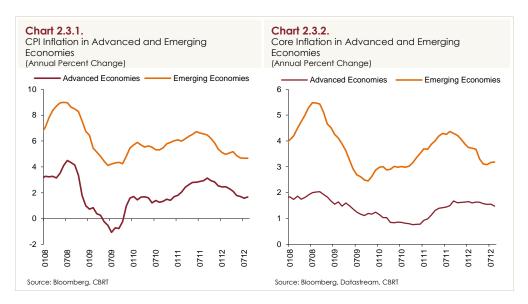
Production, Consumption and Inventory Forecasts for Aaricultural Commodities*

	2010/2011	2010/2011 2011/2012		2012/2013		
			July Forecasts	October Forecast		
WHEAT (million tons)						
Initial Inventory	200.7	197.9	197.2	198.2		
Production	652.0	695.7	665.3	653.1		
Consumption	654.7	695.5	680.1	678.2		
Period-end Inventory	197.9	198.2	182.4	173.0		
CORN (million tons)						
Initial Inventory	145.3	127.1	129.4	131.5		
Production	830.3	877.8	905.2	839.0		
Consumption	848.4	873.4	900.5	853.3		
Period-end Inventory	127.1	131.5	134.1	117.3		
COTTON (million bales)						
Initial Inventory	46.8	48.6	66.7	69.6		
Production	116.4	124.1	113.8	116.3		
Consumption	114.1	103.2	109.0	106.9		
Period-end Inventory	48.6	69.6	72.4	79.1		
SOYA BEAN (million tons)						
Initial Inventory	61.2	70.6	52.5	54.8		
Production	264.7	238.1	267.2	264.3		
Consumption	251.4	254.2	263.2	258.8		
Period-end Inventory	70.6	54.8	55.7	57.6		

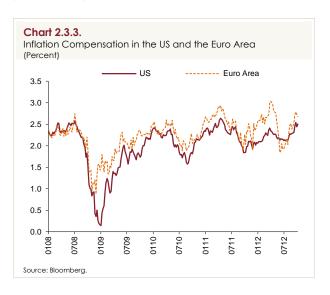
 Figures may be inconsistent due to discrepancies among countries in terms of exports and imports data, as well as the loss and damage in the marketing network.
 Source: US Department of Agriculture.

2.3. Global Inflation

In the third quarter of 2012, annual consumer inflation rates edged up in advanced economies, while remaining unchanged in the emerging economies (Chart 2.3.1). In this period, the receding trend in inflation rates was interrupted by commodity prices that went up due to supply-side problems. Meanwhile, annual core inflation rates remained flat in emerging economies, while falling further in advanced economies (Chart 2.3.2).



Notwithstanding the persisting negative economic conditions in the Euro Area, the new bond purchasing program announced by the ECB was reflected on inflation expectations in the previous quarter, thus adding considerably to inflation compensation. Similarly, the US, which announced a new monetary easing package in the previous quarter, also saw an increase in inflation compensation (Chart 2.3.3).

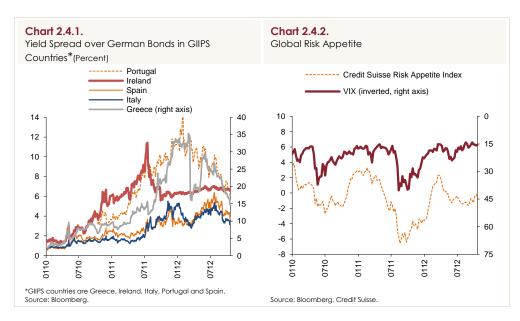


Global inflation forecasts for year-ends of 2012 and 2013 edged up in the inter-reporting period (Table 2.3.1). Despite having been interrupted in the previous quarter, high-rated increases in agricultural prices across the year were one of the factors that pulled global inflation expectations. Moreover, expansionary policies by the ECB are also considered to be another risk factor to impose upward pressure on inflation rates in the Euro Area.

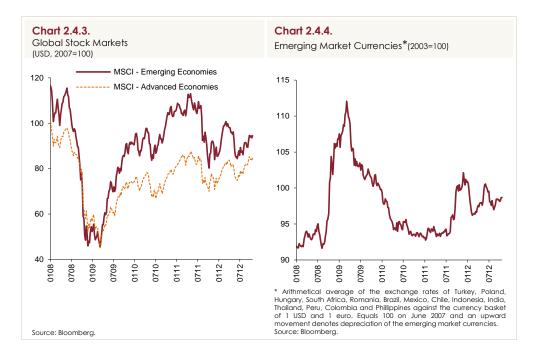
(Annual Percent Change)	1			
	2012 2013		013	
	July	October	July	October
World	2.9	3.0	2.8	2.9
Advanced Economies				
USA	2.0	2.1	1.9	2.0
Euro Area	2.3	2.4	1.7	1.9
Germany	2.0	2.0	1.8	1.9
France	2.0	2.1	1.6	1.7
Italy	3.0	3.2	2.0	2.3
Spain	1.8	2.4	1.5	2.4
Greece	0.6	1.3	1.9	2.3
Japan	0.1	0.0	0.0	-0.1
UK	2.7	2.7	2.0	2.2
Emerging Economies				
Asia-Pacific	3.8	2.6	4.0	2.7
China	3.0	2.8	3.5	3.4
India*	8.4	9.1	7.6	7.5
Latin America	5.9	5.9	6.4	6.4
Brazil	4.9	5.3	5.4	5.3
East Europe	6.4	6.4	5.3	5.4

2.4. Financial Conditions and Risk Indicators

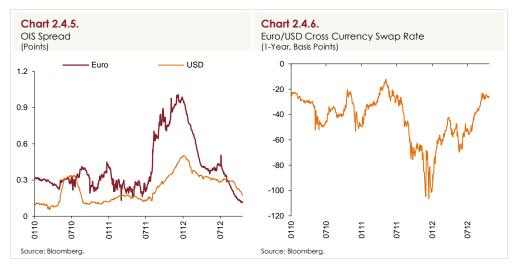
Global risk appetite, which started to recover in the previous quarter upon the partial removal of concerns over the Spanish banking sector, continued to recover further on the back of statements by major central banks as well as the adopted policy measures. The declaration by the ECB Governor Draghi in late July that euro would be saved at all costs played a significant role in the alleviation of concerns over the crisis. Bond purchasing scheme via outright monetary transactions (OMT) announced in the September meeting also reinforced this outlook, bringing about a decline in bond returns in debtridden countries (Chart 2.4.1). On the other hand, the monetary easing package signaled by the Fed Governor Bernanke at the Jackson Hole speech was announced in September meeting, which stood out as another factor to bolster risk appetite (Chart 2.4.2). Despite these developments, especially the concerns over global growth that are still brisk coupled with Spain, which is yet to apply for an rescue package, occupy the agenda as factors that may bear an adverse impact on the risk appetite in the forthcoming period.



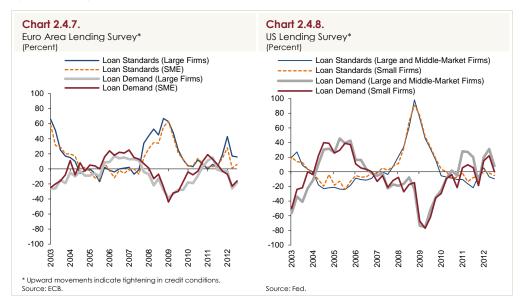
Stock markets performed well in the inter-reporting period. It is worth noting that the uptrend in stock markets got more pronounced subsequent to the declarations by the ECB and Fed governors. Exchange rates in emerging economies appreciated slightly in the said period (Charts 2.4.3 and 2.4.4).



Being evident via the decline in OIS spread, counter-party risk in both USD and euro markets declined further in the last quarter (Chart 2.4.5). On the other hand, the euro – USD cross currency swap rates continued to contract during the last three months (Chart 2.4.6).

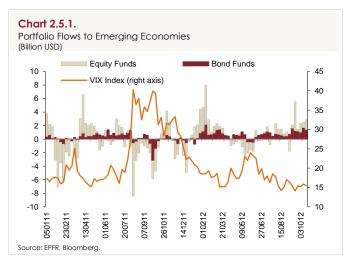


The Euro Area problems continue to have an adverse impact on the loans extended to the real sector. The latest lending survey published by the ECB points that tightening in lending conditions continues, especially for large firms. Similarly, the contraction in loan demand continues, albeit at a slower pace (Chart 2.4.7). In the meantime, the last lending survey published by the Fed puts forward that the US diverged from the Euro Area in terms of credit dynamics. Banking sector in the US continues to ease lending conditions and loan demand from large and medium-sized firms display an increase, albeit at a diminishing pace. As for the small-sized firms, loan demand remains unchanged (Chart 2.4.8).



2.5. Capital Flows

Owing to the improvement in the global risk appetite in the third quarter of 2012, capital inflows towards emerging economies gained momentum (Chart 2.5.1). In regional terms, the Latin America displayed the best performance, leaving behind emerging Asian countries, which used to be mostly favored by investors. Emerging European economies, on the other hand, experienced a rise in their shares from emerging country funds compared to the first half of the year.



As for portfolio investments, a stable fund flow occurred in bond funds in this period, which were much preferred in the post-crisis period as opposed to the pre-crisis period (Box 2.1). Equity fund outflows in the second quarter of the year were largely compensated in the third quarter (Table 2.5.1).

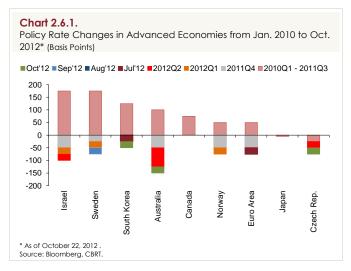
Table 2.5.1. Fund Flows to (Billion USD)	Emerging Ec	conomies in 20	012
	Total	Equity Funds	Bond Funds
Quarter 1	32.9	22.7	10.2
Quarter 2	-4.7	-8.7	4.0
Quarter 3	18.2	7.2	11.0
Source: EPFR.			

Latest easing measures taken by major central banks to bolster economy are thought to be the leading elements to determine capital flows towards emerging economies in the forthcoming period.

2.6. Global Monetary Policy Developments

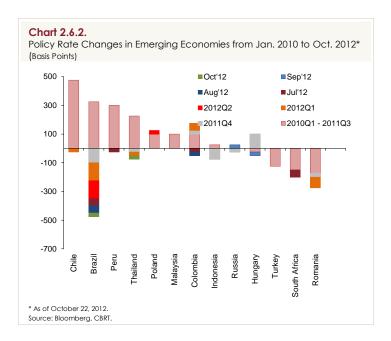
Due to global growth, which exhibited a negative outlook following the worsening in the second quarter of 2012, monetary policy maintained a loose course, not only in advanced but also in emerging economies.

Two most notable developments regarding the monetary policies of advanced economies have been the third monetary easing package announced by the Fed and the bond purchasing scheme enforced by the ECB in the inter-reporting period. In this period, Sveriges Riksbank, Bank of Korea, the Czech National Bank and the Reserve Bank of Australia also opted for loosening their monetary policies by a 25-basis point reduction in their policy rates (Chart 2.6.1).



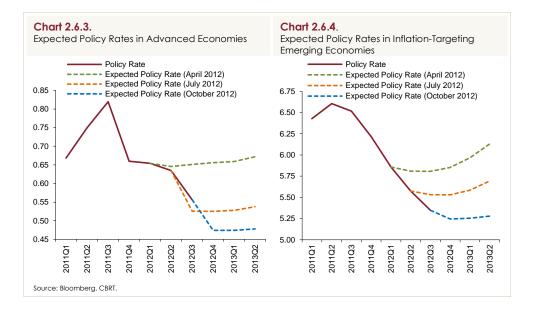
The third monetary easing package announced by the Fed in the previous quarter envisions mortgage-backed asset purchases of USD 40 billion on a monthly basis. In addition, the swap operation between long-term and short-term bonds (Operation Twist), which was announced to continue, will result in bond purchases of USD 85 billion until end-2012. The comparison of the third easing package with previous ones suggests that there are no time limitations in bond purchases, and purchases will continue until a satisfactory level of recovery in growth and employment is accomplished. In addition to the easing package, the Fed supported the loose monetary policy implementation by announcing to the public that policy rates would stay at low levels until midst 2015. This loosening in monetary policy was mainly attributed to the possibility of the extension of the negative course of employment to render permanently high unemployment rates by giving way to structural problems. As for the ECB, it was declared that the purchasing scheme announced for short-term bonds of debt-ridden countries was a precaution against the excessively high bond yields in these countries. It is noteworthy that this scheme puts no upper limit for the amount to be purchased.

In the third quarter, central banks of emerging economies loosened their monetary policies by delivering sizeable policy rate cuts. Along with the reduction in October, Banco de Brasil reduced the policy rate by a total of 125 percent; while Peru, Colombia and South Africa reduced their policy rates by a total of 25, 50 and 50 basis points, respectively in the third quarter of the year. Policy rate cuts were generally associated with the unfavorable global growth outlook and the weak demand, which is non-inflationary. However, Russia raised its policy rate by 25 basis points in the same period on account of the increase in medium-term inflation expectations and diverged from other emerging economies (Chart 2.6.2).



Owing to the uncertainties in the global economy, policy rate expectations for both advanced and emerging economies have been revised downwards since the first quarter of the year. In line with the projections laid down in the July Inflation Report, the expectation for a decline in global policy rates for the third quarter of the year was realized to a large extent. Nevertheless, the ECB did not opt for the expected policy reduction, which led the average policy rate of advanced economies to remain 3 basis points beyond the July expectation by the end of September. However, the expectation that the ECB will introduce the said reduction in the next quarter led the policy rate expectations of advanced economies to be revised downwards for the year end. On the emerging economies front, policy rates in the third quarter decreased more than envisioned in the previous reporting period, and year-end expectations were revised downwards (Charts 2.6.3 and 2.6.4).

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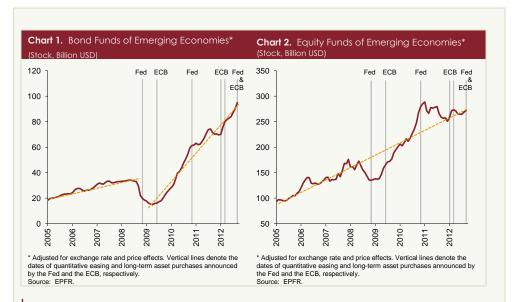


Box 2.1 Determinants of Recent Portfolio Flows

Monetary easing policies implemented by major central banks during and after the global financial crisis led to excess liquidity at a global scale, and stimulated particularly short-term capital flows towards emerging economies, rendering them more volatile. This poses a significant threat against financial stability in these countries. Against this background, this Box analyzes how monetary policies implemented by advanced economies have influenced capital flows towards emerging economies with regard to portfolio preferences, and examines the determinants of portfolio flows.

Following the global financial crisis, determining portfolio preferences has been increasingly challenging. Investors preferred channeling their funds to relatively safer heavens on the one hand, and searched for alternative investment tools with higher yields against extraordinarily receding interest rates in advanced economies on the other. In addition, being ignited by debt issues in peripheral countries, hurdles in the Euro Area gradually deepened, resulting in more pronounced downside risks on the global growth outlook and more volatile risk appetite by fuelling uncertainties.

However less the global crisis hampered economic activities of emerging economies compared to advanced ones, the worsening global growth outlook coupled with escalated uncertainties led investors to avoid investing more than usual in the stock markets of emerging economies in this period. Therefore, flows towards growth-oriented equity funds of emerging economies, which have a higher volume than bond funds and are highly preferred in long-term investments, remained considerably unchanged from their pre-crisis levels. Meanwhile, soaring spread between advanced and emerging economies led investors to favor bond funds of emerging economies, with higher yields and shorter maturities as an alternative. In fact, Charts 1 and 2 clearly show that bond funds trended considerably upwards upon the enforcement of accommodative measures, while equity markets did not exhibit a structural break alike.



In order to scrutinize this decoupling in investors' recent portfolio preferences, simple equations are estimated for bond and equity fund flows. The relevant literature analyzes the main determinants of capital flows under two headings as push and pull factors. Global excess liquidity and investor risk appetite are indicated as the main push factors, while country-specific factors like growth, yield spread and inflation are qualified as pull factors. In order to capture the structural break in portfolio flows driven by the excess global liquidity that occurred since November 2008 - the announcement of the first easing package in advanced economies - a dummy variable is used in equations. VIX is treated as a global risk appetite indicator. Pull factors are represented by growth rate of industrial production, policy rate and inflation rate. These variables are GDP-weighted and aggregated for 23 emerging economies in emerging Asia, Europe, Latin America, Middle East and Africa.¹ Estimated equations, starting from 2005, are presented in Table 1.

¹Brazil, Mexico, Colombia, Peru, Chile, Venezuela, China, Indonesia, Malaysia, Philippines, Thailand, South Korea, India, Taiwan, Russia, Turkey, Poland, Hungary, Kazakhstan, South Africa, Israel, Lebanon and Egypt are included in the analysis. In 2012, these countries make up 95 and 89 percent of bond and equity fund flows in emerging economies, respectively.

Table 1. Determinants of Portfolio Flows †					
	Bond Flows	Equity Flows			
Constant	7.543***	2.992			
Constant	(2.996)	(1.311)			
D(VIX index)	-0.419***	-0.361***			
	(-5.369)	(-5.098)			
Growth rate	0.455***	0.193*			
Glowin fale	(3.728)	(1.750)			
D(Policy rate)	10.874**	-7.042			
D(Folicy fale)	(2.276)	(-1.626)			
Inflation rate	-1.964***	-0.630**			
Innation rate	(-5.611)	(-1.986)			
Dummy variable	3.397***	-0.084			
Duffinity variable	(4.355)	(-0.118)			
Number of Observations	92	92			
Adjusted R ²	0.617	0.294			

 † Values in parentheses denote t- statistics. * , ** and *** denote statistical significance at confidence levels of 10 , 5 and 1 percent, respectively.

The obtained results are in favor of the above-mentioned discussions, and suggest that excess global liquidity driven by monetary easing packages have led to a significant structural break in bond flows, while the same conclusion does not apply to equity flows. Moreover, variables such as risk appetite, growth, interest rate and inflation are significant for bond fund flows in the expected direction, while the most significant pull factor is the change in interest rates. Conversely, these variables do not suffice in accounting for the equity fund flows.

In conclusion, not only the excess global liquidity driven by expansionary policies of major central banks following the global financial crisis, but also the investors' search for short-term instruments with high yields due to the stagnant growth outlook and the atmosphere of uncertainty has recently led to a sizeable increase in bond flows to emerging economies. Parallel to this, the latest easing measures announced by the Fed and the ECB in September 2012 brought about the risk of a new capital wave towards emerging economies. Therefore, it is assessed that, particularly fund flows will continue to steadily be geared towards emerging economies in the upcoming period.

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Central Bank of the Republic of Turkey

Inflation Report 2012-IV

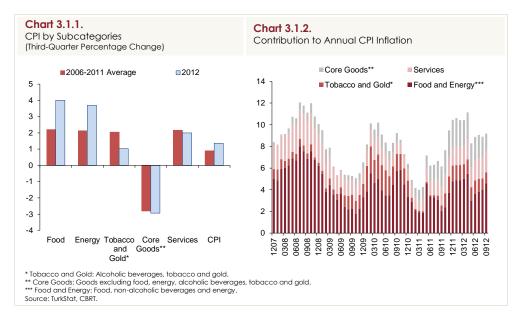
3. Inflation Developments

3.1. Inflation

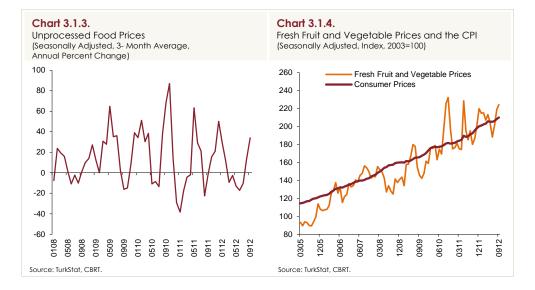
On account of the surge in unprocessed food prices beyond seasonal averages as well as the higher-than-envisaged increase in international oil prices, annual consumer inflation increased by 0.32 percentage points to 9.19 percent in the third quarter of 2012. In this period, core inflation continued to decelerate in annualized terms, while services inflation remained unchanged. Sluggish economic activity favorably affected the inflation outlook in this period, while cost-side pressures fuelled by manufacturing industry prices were alleviated, thus causing core inflation indicators to trend downwards. On 22 September 2012, the SCT imposed on fuel oil, automobile and alcoholic beverages was raised as per the additional fiscal measures adopted due to budget developments. Adverse effects of the said decisions on inflation were reflected on third-quarter figures, albeit partially (Box 3.1). Thus, by the end of the third quarter, inflation went above the projections laid down in the July Inflation Report mainly on price increases in unprocessed food and energy besides adjustments to administered prices.

Across subcategories, the rate of price increases in unprocessed food and energy exceeded previous year averages in the third quarter of 2012 (Chart 3.1.1). Accordingly, the contribution of the food prices to inflation rose by a quarter-on-quarter 0.75 percentage points. Meanwhile, the contribution of energy prices went up by 0.24 percentage points upon SCT rate adjustments (Chart 3.1.2). Contribution of the core goods prices declined by 0.48 percentage points in tandem with the sluggish economic outlook, while the contribution of the services prices remained virtually unchanged.

In sum, the course of inflation in the third quarter was mainly determined by developments in unprocessed food and energy prices. It was stated in the July Inflation Report that unprocessed food prices had followed a mild course during the first half of the year, but forecasts were based upon a cautious approach assuming that this favorable outlook would be reversed in the second half. In fact, the price realizations in unprocessed food confirmed this assumption. On the other hand, energy prices hovered above projections. Owing to tax rate hikes and adjustments to administered energy prices, energy inflation is estimated to maintain a negative outlook in the rest of the year. On the other hand, core inflation is expected to decline further, while annual inflation in food as well as alcoholic beverages and tobacco is envisioned to fall markedly in the last quarter.

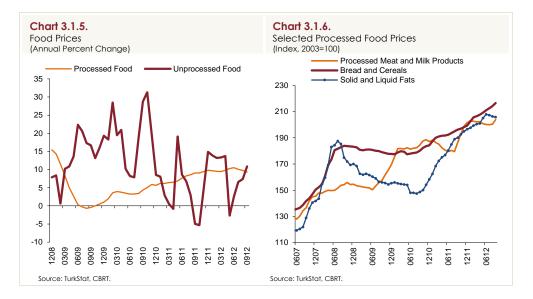


The downtrend in unprocessed food prices in the first half of the year was reversed as of July (Chart 3.1.3). The upward course of seasonally adjusted unprocessed food prices in this period was driven by the increases in fresh fruit and vegetable prices, which exceeded the headline inflation (Chart 3.1.4). Accordingly, annual inflation in unprocessed food prices reached 10.85 percent at the end of the third quarter, thus overshooting the July Inflation Report forecasts (Chart 3.1.5). However, increases in the third quarter were offset by falling prices in the first half, which overall led unprocessed food prices to follow a more favorable course in the current year compared to past years. Similarly, unprocessed food products other than fresh fruit and vegetables also recorded a relatively mild upward trend compared to past years. Accordingly, the annual rate of increase in unprocessed food prices is projected to plummet in the last quarter.



Prices of processed food posted a lower increase than historical averages in the third quarter by 1.92 percent, thus causing processed food inflation to slightly lose pace in annualized terms (Table 3.1.1 and Chart 3.1.5). Meanwhile, the prices of bread and cereals continued to trend upward in this quarter (Chart 3.1.6). In particular, on account of the arrangements on weight laid down in the Communique of Bread and Varieties of the Turkish Food Codex, bread prices increased by 11.5 percent across the year. Furthermore, wheat prices have also trended upwards as of June and domestic wheat prices rose by 10.1 percent in the last four months. Despite the pause in soaring of international wheat prices, the already-reached high level of prices keeps upside risks on processed food prices brisk for the forthcoming period. Despite the accelerated rate of increase in processed food prices in September, annual inflation is expected to continue to fall, albeit slightly, on account of the high base effect.

As a result, annual food inflation rose approximately by 3 percentage points to 10.39 percent in this quarter on price developments in unprocessed food, and stood slightly above the projections presented in the July Inflation Report.



Energy prices rose by 3.70 percent in the third quarter (Table 3.1.1), which was marked by the surge in fuel oil prices by 10.68 percent amid the quarter-onquarter rise in international oil prices (Chart 3.1.7). Similarly, bottled gas prices also soared in this period, while water prices went down. In sum, annual energy inflation registered a quarterly increase by 1.5 percentage points and hit 12.71 percent. Tax arrangements and administered price adjustments were effective on the course of energy prices towards the end of the quarter. In fact, SCT rates on fuel oil were increased as of September 22, and electricity and natural gas tariffs were raised by nearly 10 percent starting from October 1. These price adjustments are estimated to contribute approximately by 0.8 percentage points to annual inflation, which reached 1.89 percentage points in the third quarter, will rise further in the last quarter. Moreover, sharp increases in energy prices will add to cost-side pressures on firms, thus causing upside risks on consumer prices through secondary effects.

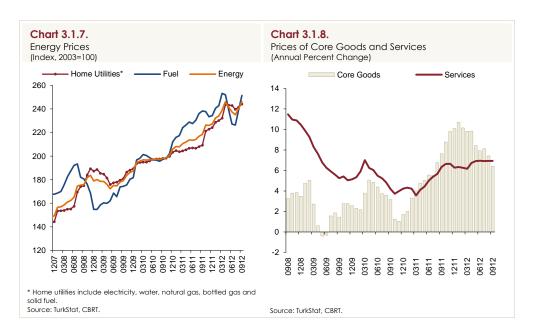
Table 3.1.1.

Prices of Goods and Services

(Quarterly and Annual Percent Change)

	2011			2012				
	I	П	III	IV	Annu al	I	Ш	III
CPI	1.57	1.83	1.07	5.66	10.45	1.55	0.39	1.36
1. Goods	1.53	2.05	0.73	7.29	11.97	1.54	-0.19	1.12
Energy	2.27	1.37	2.34	4.03	10.36	5.08	-0.57	3.70
Food and Non-Alcoholic Beverages	3.77	-2.46	1.18	9.57	12.21	2.89	-5.85	4.01
Unprocessed Food	5.08	-5.79	-1.00	17.23	14.89	3.66	-14.76	0.74
Processed Food	2.61	0.57	3.03	3.30	9.82	2.25	1.55	1.92
Goods (excl. energy and food)	-0.68	6.32	-0.36	6.93	12.51	-1.14	4.78	-2.24
Core Goods	-1.08	7.73	-1.55	4.92	10.09	-1.32	5.88	-2.93
Durable Goods (excl. gold)	4.26	1.85	3.69	1.90	12.19	1.41	-0.05	-0.69
Alcoholic Beverages, Tobacco and Gold	0.81	1.05	4.38	14.46	21.70	-0.33	-0.17	1.03
2. Services	1.67	1.22	2.02	1.22	6.27	1.57	1.96	2.00
Rent	1.08	0.99	1.35	1.21	4.71	0.89	1.27	1.59
Restaurants and Hotels	1.65	1.80	2.37	2.14	8.20	1.99	2.62	2.66
Transport	2.28	2.10	3.07	1.73	9.49	2.12	1.79	3.21
Communication	1.96	-1.71	0.35	0.47	1.04	0.06	2.07	1.79
Other Services*	1.61	2.14	2.56	0.65	7.12	2.24	2.00	1.27

Source: TurkStat, CBRT.



On account of the relatively mild course of TL-denominated import prices coupled with the slowdown in the economic activity, annual core inflation continued to trend downwards and went down to 6.41 percent as of the end of the third quarter (Chart 3.1.8). Given this outlook, seasonally adjusted core goods prices posted a relatively limited rise in the third quarter, thus maintaining a low pace of growth (Chart 3.1.9). Across subcategories, the annual inflation in durable goods recorded the most notable slowdown and dropped to 2.58 percent by the end of the quarter (Chart 3.1.10). The fall in durable goods inflation was spread across all subcategories (Table 3.1.2). Annual inflation in clothing edged up in this quarter, while core inflation excluding clothing and durable goods lost pace (Table 3.1.2). In accordance with the fiscal measures adopted in September, the relative SCT rate for automobiles with engine volume up to 1600 cc was raised form 37 percent to 40 percent. Under the assumption that this tax rate hike will completely be reflected on consumer prices, automobile prices are expected to increase approximately by 1.94 percent, thus causing core inflation to go up by around 0.5 percentage points (Box 3.1). In this respect, the adopted fiscal measures bear the potential to adversely affect the core inflation indicators in the last quarter.

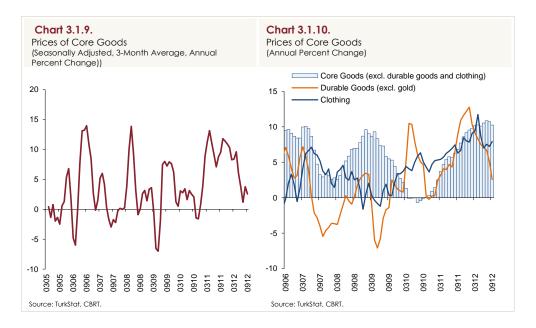
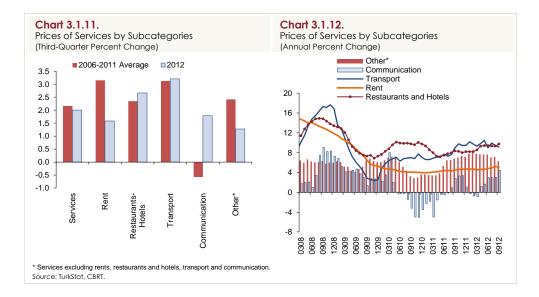


Table 3.1.2.

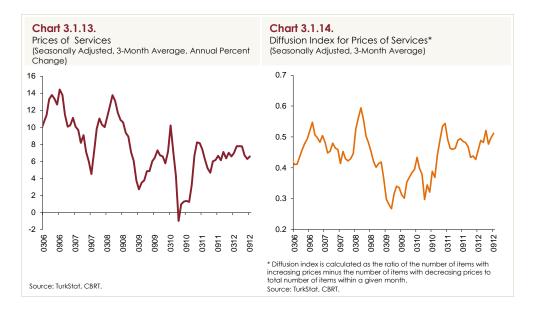
	2011				2012			
	I	П	Ш	IV	Annu al	I	П	Ш
Core Goods	-1.08	7.73	-1.55	4.92	10.09	-1.32	5.88	-2,93
Clothing and Shoes	-12.04	25.08	-12.13	11.72	8.01	-10.90	22.34	-11,37
Durable Goods (excl. gold)	4.26	1.85	3.69	1.90	12.19	1.41	-0.05	-0,69
Furniture	0.75	5.04	2.88	4.01	13.25	3.19	1.76	-0,58
Electrical and Non-Electrical Appliances	2.87	-1.26	0.34	3.29	5.27	0.94	-2.75	-0,65
Automobile	6.31	2.29	5.68	0.52	15.52	1.09	0.42	-0,82
Other Durable Goods	2.15	2.71	1.85	3.00	10.06	1.22	3.13	0,69
Other	1.82	2.09	1.54	3.44	9.18	2.76	2.42	1,28

Having remained unchanged on a quarterly basis, annual services inflation stood at 6.93 percent (Chart 3.1.8). Price increases in services were in tandem with the historical averages in this period and the decline in the prices of education services was influential on the course of services inflation

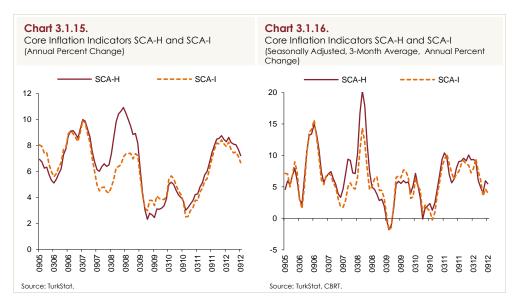
(Chart 3.1.11). Prices of education services, which saw seasonal increases in September, plummeted following the arrangements introduced to public university fees as per the Decision of the Board of Ministers that was published in the Official Gazette on August 29, 2012. Annual inflation in education services went down by 3.16 percentage points in September, curtailing the price increase in services in the third quarter. On account of the cumulative effects of the previous increases in fuel oil prices, inflation in transport services went up. Rent inflation continued to increase modestly, partly on the back of the recent rises in annual consumer inflation rate, and stood at the mild 5.05 percent at the end of the third quarter (Chart 3.1.12). Lastly, annual inflation in communication services went up in this quarter owing to the rise in communication fees in mobile phones. Meanwhile, inflation in entertainment services declined due to the base effect in package tour prices.



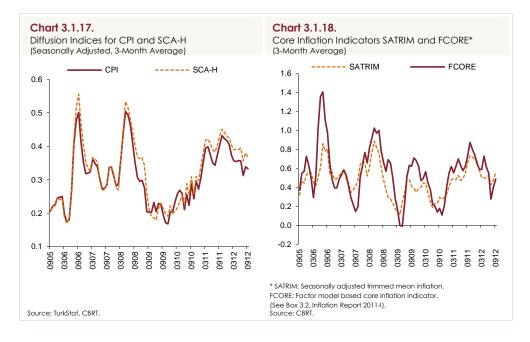
In brief, despite the high course of consumer inflation, services inflation followed a flat course maintaining its mild outlook. In this period, seasonally adjusted data indicated that the underlying trend of both services inflation and inflation in services excluding education remained unchanged (Chart 3.1.13). Meanwhile, the upward course of the services prices spread more heavily across the group relative to previous quarters (Chart 3.1.14).



Annual inflation in core inflation indicators SCA-H and SCA-I went down to 7.2 and 6.68 percent, respectively in the third quarter (Chart 3.1.15). Amid the slowdown in core inflation, annual services inflation followed a flat course in this quarter. Seasonally adjusted data also indicate that the underlying trend has lost pace (Chart 3.1.16). Upon the change in weight scheme in clothing prices, the seasonal structure saw shifts, thus hampering the evaluation of seasonally adjusted trends within this year. Accordingly, an analysis of core inflation indicators excluding clothing prices reveals that the underlying trend implied by seasonally adjusted indicators followed a flat course during the quarter, albeit at lower figures.



Diffusion indices regarding CPI and SCA-H and SCA-I posted a quarter-onquarter decline in the third quarter (Chart 3.1.17). However, diffusion indices still remain above historical averages. On the other hand, alternative core inflation indicators monitored by the CBRT point to a limited rise in the underlying trend of inflation (Chart 3.1.18). In sum, the joint analysis of core inflation indicators, diffusion indices and alternative core indicators shows that the underlying trend of inflation maintains its mild outlook.



Producer prices went up by 0.97 percentage points in the third quarter, and annual inflation went down to 4.03 percent owing to manufacturing industry prices (Table 3.1.3). Agricultural prices, which were below historical averages in this period, registered increases owing to the prices of crops besides fresh fruit and vegetables (Chart 3.1.19). Parallel to international developments, particularly domestic wheat prices saw hikes in this quarter, giving way to costside pressures on the prices of bread and cereals. Furthermore, sunflower prices soared in the third quarter without affecting the consumer prices. Meanwhile, the prices of livestock and animal products declined further in this quarter, putting a cap on the rise in agricultural prices.

Table 3.1.3.

PPI and Subcategories

Electricity, Gas and Water

Source: TurkStat, CBRT.

			2011				2012
	1	11	III	IV	Annual	1	Ш
PPI	5.40	0.77	3.31	3.28	13.33	0.65	-0.89
Agriculture	5.84	-1.73	-6.03	13.09	10.53	1.65	-3.36
Crops, Fruits and Vegetables	6.81	-2.67	-9.84	17.18	9.83	0.76	-3.75
Livestock and Animal Products	-1.26	-0.39	2.68	5.51	6.56	-0.28	-2.44
Industry	5.31	1.30	5.24	1.48	13.92	0.45	-0.37
Mining	9.70	1.08	4.94	2.93	19.76	0.90	2.24
Manufacturing	6.27	1.98	4.98	0.72	14.59	1.06	-0.83
Manufacturing (excl. oil)	5.55	1.95	4.67	0.70	13.42	0.79	-0.36
Manufacturing (excl. oil and base							
metals)	4.85	1.53	4.12	1.39	12.38	0.93	-0.09

-4.73

7.89

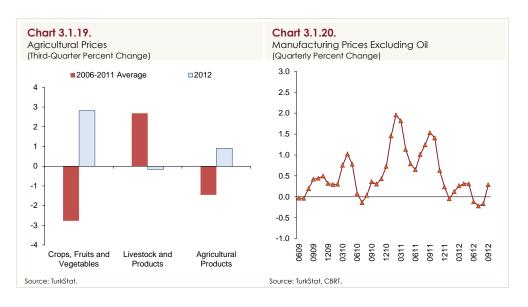
7.91

6.38

-4.64

2.57

-4.08

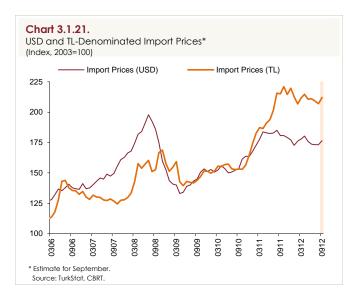


Having tumbled in the second quarter, commodity prices soared on the rise in agricultural and energy prices in the third quarter. The Turkish lira, which followed a robust course in the previous quarter, remained modest in the third quarter. Thus, import prices, which went down in the second quarter, rose slightly in the third quarter, affecting both manufacturing and manufacturing prices excluding oil (Charts 3.1.20 and 3.1.21). In this quarter, manufacturing prices excluding oil rose by 0.87 percent, while in cumulative terms, manufacturing prices excluding oil increased by a mere 1.29 percent since the beginning of the year. Across subcategories, manufacturing industry prices, especially the prices of furniture, jewelry, food and textile went up in this quarter due to increases in producer prices of durable and non-durable goods. In sum, agricultural prices adversely affected food prices in the third quarter. On the other hand, manufacturing industry prices were alleviated.

III
0.97
0.91
2.82
-0.16
0.98
2.13
1.22
0.87

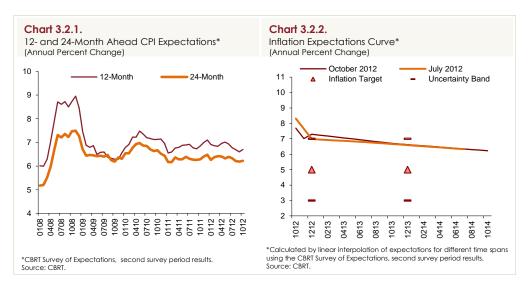
1.15

-1.41

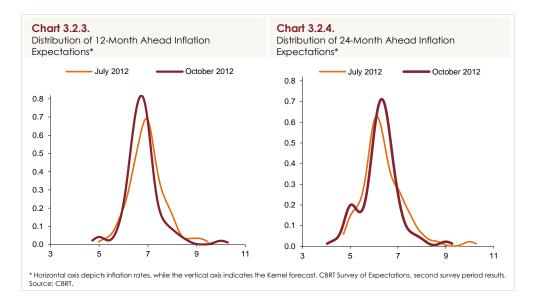


3.2. Expectations

Medium-term inflation expectations, which remained flat in the second quarter of 2012, went down in line with the favorable course of core inflation indicators in the third quarter. On account of the effects of the adopted fiscal measures, year-end inflation expectations went up to 7.3 percent according to the second survey data in October, while medium-term expectations remained unchanged in this period, thus suggesting that hikes to taxes and energy prices were perceived to have a temporary effect on inflation expectations up to end-2012 and for the first half of 2013 were revised downwards and upwards, respectively, while having remained unchanged for the long term (Chart 3.2.2). Currently, inflation expectations continue to hover above the inflation target of 5 percent, set for year-ends of 2013 and 2014.



The distribution of survey respondents for both 12-month and 24-month ahead inflation expectations converged further in this period (Charts 3.2.3 and 3.2.4).



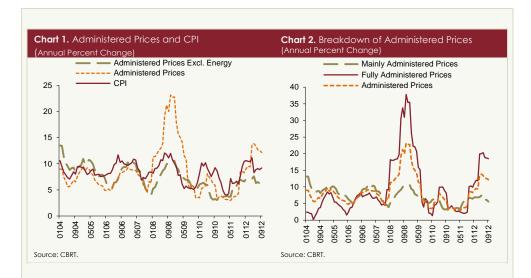
Box Effects of Administered Prices and Indirect Tax Adjustments on the CPI 3.1 Inflation

Administered prices cover the prices of goods and services either fully set or mainly influenced by the government.¹ Although the scope thereof varies among countries, administered prices are usually items such as local transport services, hospital services, postal services and medicines. Administered prices, which are divided into two as *fully* (directly determined by the government) or *mainly administered set* (influenced by the decisions taken by the central government, local government or regulatory institutions), can contribute significantly to inflation from time to time. This Box examines the contribution of administered prices and changes in tax rates in the CPI inflation, and accordingly presents an analysis regarding the effect of the measures taken in September.²

In the January 2004-September 2012 period, annual rate of increase of both consumer and administered prices stood at 8.5 percent on average (Chart 1). In line with the hikes in energy prices, administered prices accelerated considerably in the first nine months of 2008. Similarly, administered prices proved to be a factor to push up consumer prices in the second and third quarter of 2012. In both periods, the increase in administered prices was attributed to fully *administered* prices (Chart 2). Nevertheless, it should be highlighted that a great part of administered prices is made up of energy prices (electricity, natural gas, etc.). In this respect, exclusion of energy prices, which are mostly determined by international prices, suggests that in the 2004-2012 period, the annual rate of increase in administered prices mostly lagged behind the consumer inflation, standing at 7.4 percent on average (Chart 1).

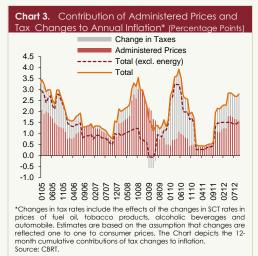
¹ EUROSTAT (2010).

² Administered price index is derived from four-digit index level for the EU. The index is updated every January as some items were privatized or some prices were started to be determined by the state. The price index for Turkey was calculated by using the most detailed price indices on a sub-item basis in order to construct a more reliable index. As also stated in the European Central Bank (2007), each sub-item is not clearly separated into categories as "administered" or "set in the market". In this paper, if the items determined by the state have a weight above 50 percent within any sub-item, the respective sub-item is included in the administered price index. The index was derived by taking account of all items that included in/excluded from the index within five digits since 2003 and was updated every January. As the construction of the administered index is based on the EUROSTAT definition, the index does not include alcoholic beverages, tobacco products and fuel oil items.



I he public sector affects inflation not only through administered prices but also through changes in indirect taxes. Indirect taxes imposed on certain products, chiefly fuel oil, tobacco products and alcoholic beverages occupy an undeniable place within tax revenues. In this box, the contribution of tax changes in CPI inflation is calculated by taking account of the Special Consumption Tax (SCT) rates in fuel oil, tobacco products, alcoholic beverages and automobile items.

Accordingly, in the 2005-2012 period, the public sector added to annual CPI inflation by 2 percentage points on average through administered prices and tax adjustments (Chart 3). Excluding the effect of energy items gives out a decline in contribution to 1.3 percentage points on average, 0.7 percentage points of which is made up of tax adjustments. Particularly, in March 2011, when inflation hit a historically low level with 4 percent, the contribution of



administered prices remained far behind the averages of past years, while that of changes in SCT rates proved zero. Affected by the latest decisions, the direct contribution to inflation of public sector excluding administered energy items are estimated to be 1.2 percentage points by the end of October. Once energy is included, contribution of public sector is projected to be approximately 2.3 percentage points.

Effects of the Measures Taken in September 2012

A detailed elaboration of the measures taken in September will prove helpful to present a reliable assessment of the recent inflation developments. SCT rates on fuel oil, automobile and alcoholic beverages were raised as per the arrangement regarding the change in tax rates in certain products subject to the SCT Law, which was published on the Official Gazette of September 22, 2012. This period also saw increases in electricity and natural gas prices to be effective as of October 1, 2012. These arrangements are estimated to *directly* affect the annual CPI inflation by 1.16 percentage points, should SCT rate increases are completely imposed on prices (Table 1). However, given the preliminary developments in October, the said effect is estimated to be around 1.10 percentage points. Considering that 0.22 percentage points of this effect has already reflected on September inflation, a large part of the effect of the decisions of the public sector on inflation (around 0.88 percentage points) is expected to be apparent in October.

Table 1. Contribution	of SCT Increases and	d Energy Price Ad	djustments to Inflation
	Total Change (Percent)	Total Contribution (Estimated*)	Total Contribution (Estimate as of October**)
SCT Hikes			
Fuel Oil	10.43	0.50	0.50
Automobile	1.94	0.12	0.06
Alcoholic Beverages	9.89	0.03	0.04
Sum		0.66	0.60
Administered Energy			
Electricity	9.8	0.34	0.34
Natural Gas	9.8	0.16	0.16
Total		0.50	0.50
Sum		1.16	1.10

* Estimated by assuming that increases in tax rates will completely be reflected on prices. ** Estimated in view of realizations in October.

As a result, decisions of the public sector influence inflation through two channels. The first one is the price adjustments in items, the prices of which are fully or mainly administered by the state. The second one is the changes introduced to indirect taxes. Direct contribution of the public sector to inflation through the said channels has recorded an increase since the last quarter of 2011.

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Inflation Report 2012-IV

4. Supply and Demand Developments

National accounts data for the second quarter of 2012 suggest that economic activity remained broadly consistent with the outlook presented in the July Inflation Report. Even though national income displayed a remarkable quarterly increase in the second quarter, this is attributed to the compensation of temporary factors like weather conditions in the first quarter, and therefore, the underlying trend of economic activity is considered to be mild. Domestic demand remained sluggish in this period, while net exports were the main driver of growth, thus adding to the balancing of demand components.

Third-quarter data indicate that economic activity has decelerated. Having increased for four consecutive months between the February-May period, industrial production has recently exhibited a fluctuating course, and production displayed a decline in the July-August period on a quarterly basis. On the other hand, recent data releases suggest that consumption demand recovered modestly, while investment demand remains sluggish on the elevated levels of demand uncertainty.

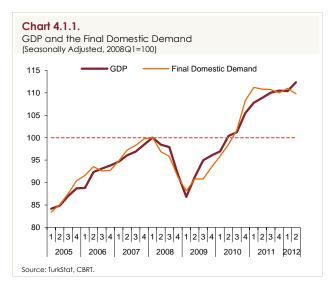
Latest indicators signal for recovery in the last quarter. In fact, following the unfavorable outlook in August, leading indicators for production and sales point to a rebound in September. Recent improvements in firms' expectations for orders also signal for recovery in the last quarter. Although global growth forecasts are revised downwards in line with the lingering problems regarding global economy, exports are expected to perform well in the forthcoming period on the back of the product and market diversification as well as implemented stabilizing policies. Accordingly, while aggregate demand conditions support the disinflation process, the current account deficit continues to taper off.

The mild economic growth is expected to continue in the forthcoming period. Factors such as the gradual materialization of the effects of the monetary policy, the upturn in the current account balance (which is led by the economic balancing process) to improve risk perceptions, unemployment rates that hover even below the pre-crisis levels are anticipated to bolster the demand for consumption. On the other hand, persisting global uncertainties pose downside risks to investment demand, particularly through the confidence channel. In fact, indicators on the propensity to invest, which reflect perceptions for relatively longer terms, have continued to remain weak in the inter-reporting period.

4.1. Gross Domestic Product Developments and Domestic Demand

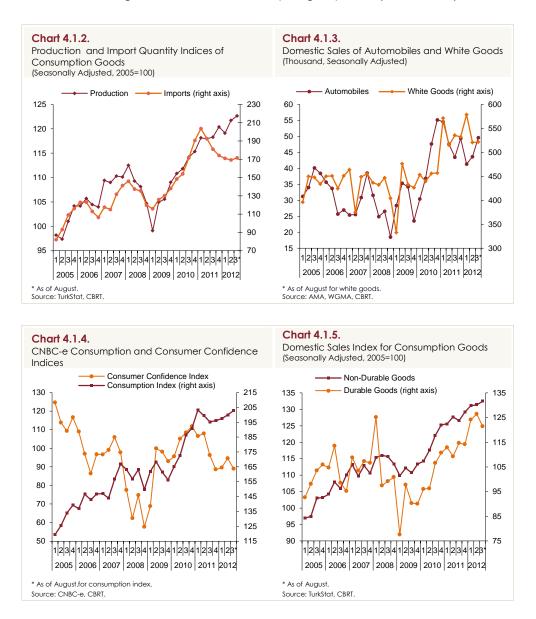
National income data released by TurkStat indicate that GDP posted a year-on-year increase by 2.9 percent in the second quarter of 2012. Demand components were balanced further at a stronger pace in this period. The analysis of contributions to annual growth suggests that net external demand had a notably boosting effect, while private demand for consumption and investment as well as inventories had negative contributions.

Seasonally adjusted data reveal that GDP registered a 1.8 percent quarter-on-quarter growth in the second quarter. This robust increase in economic activity is largely attributed to the compensation of the first quarter as also stated in the July Inflation Report. Thus, the underlying trend of the economic activity is considered to be a mild growth. Private and public consumption offered limited contributions to quarterly growth in this period, while domestic demand posted a decline upon the slump in investments (Chart 4.1.1).

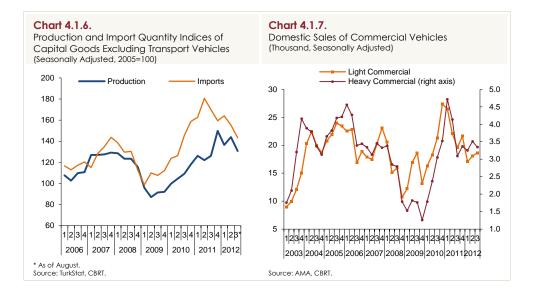


Third-quarter data point to a modest rise in final domestic demand. In fact, the production of consumption goods, which are among the indicators of private consumption demand, went up in this period, while the rise in imports remained comparatively limited (Chart 4.1.2). On the other hand, domestic

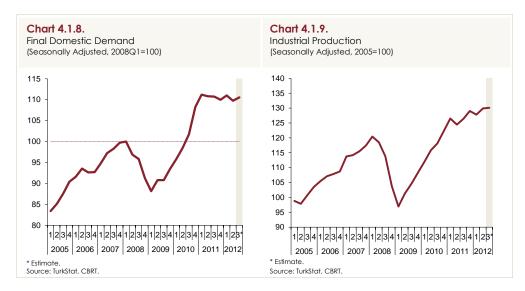
sales of automobiles surged in the third quarter, while sales of white goods were unchanged (Chart 4.1.3). Furthermore, the consumer confidence index decreased, while the consumption index stayed on an upward track (Chart 4.1.4). Domestic sales of non-durable goods increased, while domestic sales of durable goods declined in the July-August period (Chart 4.1.5).



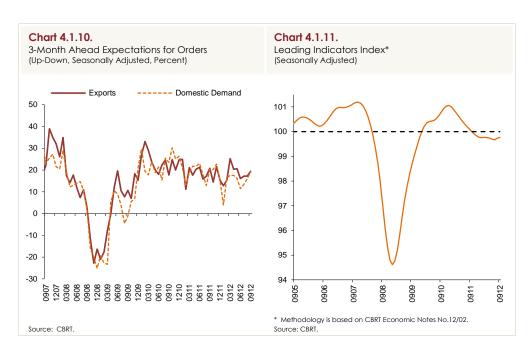
Recent indicators suggest that the investment demand contracted further in the third quarter. Production and imports of capital goods saw a decline in the July-August period (Chart 4.1.6). Domestic sales of light commercial vehicles went up, while domestic sales of heavy commercial vehicles went down in the third quarter (Chart 4.1.7).



In sum, third-quarter indicators suggest that domestic demand will increase mildly on the back of consumption expenditures (Chart 4.1.8). The analysis of economic activity on the production side reveals that July-August average of seasonally adjusted industrial production posted a quarter-onquarter decline. The production plunge in August is attributed to the Ramadan holiday besides the Victory Day (on August 30) and the extra days-off taken in between. Production indicators point to a weak production activity in the third quarter (Chart 4.1.9).



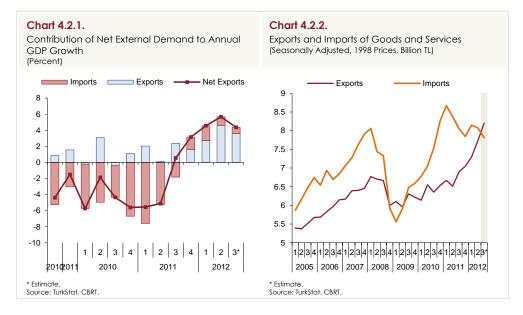
Meanwhile, recently released indicators suggest that economic activity will go up in the last quarter. The slight recovery in the 3-month ahead expectations for orders on domestic and external market released by the BTS in



September, as well as the leading indicators index support this outlook (Charts 4.1.10 and 4.1.11).

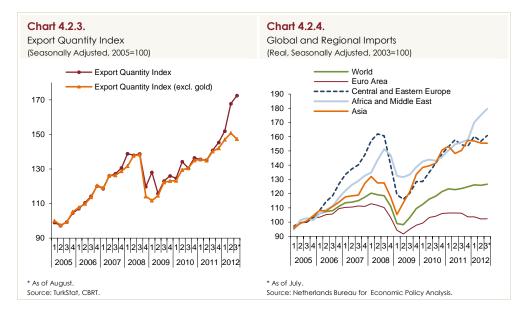
4.2. External Demand

National income data for the second quarter of 2012 suggest that the balancing in demand components continues as envisaged in the previous reporting period. Exports of goods and services posted an annual increase by 19.8 percent, while imports of goods and services went down to 3.6 percent. Thus, net exports provided the largest contribution to annual growth in this quarter, similar to the preceding two quarters (Chart 4.2.1). With respect to this large contribution of net exports to annual growth, the influence of net gold exports should be noted (Box 4.3). Quarterly analysis shows that exports of goods and services surged in seasonally adjusted terms, while imports followed a weak course in the second quarter (Chart 4.2.2).

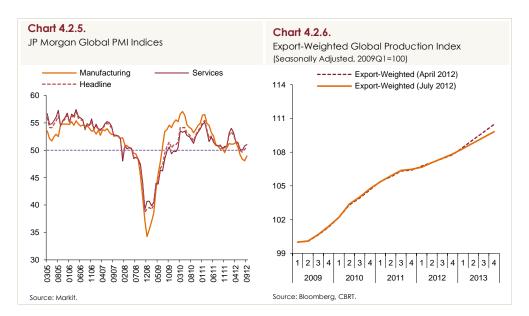


Having followed an upward track in the July-August period, the export quantity index displayed an increase for five consecutive quarters. Gold exports have remained high since the first quarter of 2012, thus providing a significant support to the robust course of overall exports. On account of the quarterly increase in external gold demand which is thought to be only temporary, export quantity index excluding gold is monitored in order to assess the underlying trend of exports. The core index constructed in this context indicated a quarteron-quarter decline in the July-August period, contrary to the overall index (Chart 4.2.3). Although pointing to a weakening course in the underlying trend of exports, TEA figures show that exports excluding gold improved slightly in September.

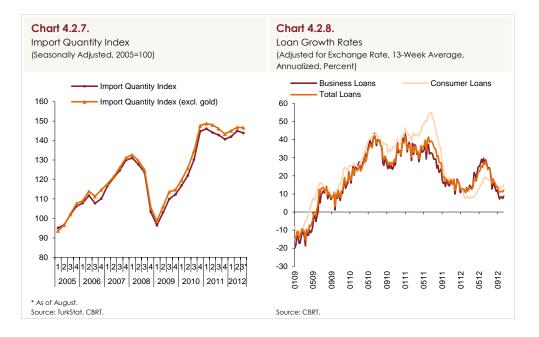
Global trends indicate that import demand across the world recorded a quarter-on-quarter increase in July, albeit limited. Nevertheless, the import demand of the Euro Area, one of our major trading partners, continues to remain weak. In addition to the Euro Area, emerging Asian economies also put a cap on the global import demand. On the other hand, the import demand of the African and Middle Eastern countries, which have a growing share in our exports, continues to rise (Chart 4.2.4). Moreover, the Central and Eastern Europe is another group of countries contributing positively to the global import demand. Against this background, it should be highlighted that external demand conditions did not exhibit any additional deterioration. Thus, exports of goods and services are estimated to have preserved the upward trend in the third quarter of the year (Chart 4.2.2).



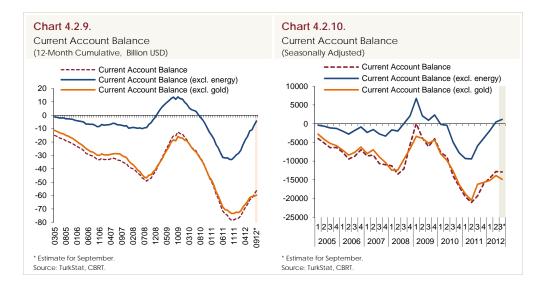
Sluggish global economic activity accompanied by persisting problems in financial markets continue to pose downside risk on external demand. In fact, global PMI manufacturing index remained weak also in September and stayed below 50 for four consecutive months. On the other hand, the overall index was close to the neutral level due to the mild rebound in the services sector (Chart 4.2.5). Slight downward revision of the export-weighted global production index in the inter-reporting period confirms that risks remain brisk (Chart 4.2.6).



Import quantity index posted a quarter-on-quarter decline in the July-August period. Meanwhile, import quantity index excluding gold, which is an indicator for the underlying trend of imports, followed a flat course (Chart 4.2.7). Credit channel continues to give decreasing support to imports. In fact, both business and consumer loans remain on a declining track (Chart 4.2.8). Moreover, final domestic demand remained mild in the third quarter of 2012 and the relative price effect continues to restrict import demand. In this context, imports of goods and services are expected to fall in the third quarter (Chart 4.2.2).

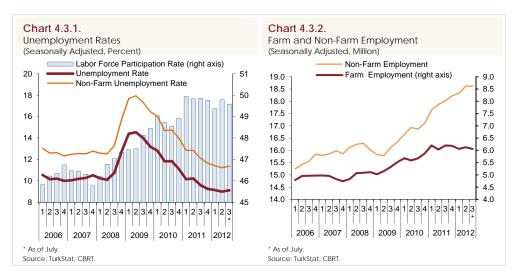


In sum, recently released indicators suggest that the balancing process continues in the third quarter. Accordingly, 12-month cumulative data show that both the current account deficit and the current account deficit excluding energy taper off. On the other hand, the improvement in the current account balance is more limited when excluding gold (Charts 4.2.9 and 4.3). Seasonally adjusted data indicate that current account balance and current account balance excluding gold posted a limited deterioration, while current account deficit excluding energy continues to improve, albeit at a slow pace (Chart 4.2.10). Sustaining structural reforms to bring down savings deficit will contribute to the current account deficit to reach desired levels in the medium term.

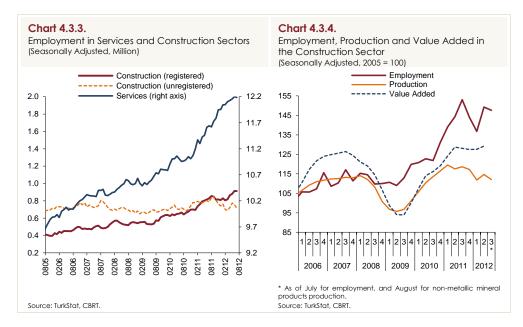


4.3. Labor Market

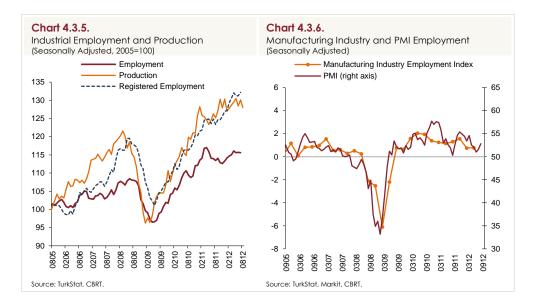
In the second quarter of 2012, unemployment rates continued with a downward course in tandem with increases in non-farm employment. Non-farm labor participation rate posted a quarterly increase in the second quarter of the year. Nevertheless, the weak course of non-farm labor participation rate since 2010, which was particularly owed to the strong pace of women participation rate that started in 2008 to decelerate as of 2010, had a curbing effect on unemployment rates. Accordingly, seasonally adjusted total and non-farm unemployment rates recorded a quarterly decline by 0.2 and 0.3 percentage points to 8.9 percent and 11.1 percent, respectively. However, total and non-farm unemployment rates posted a quarter-on-quarter increase by 0.2 percentage points in July to 9.1 and 11.4 percent, respectively (Charts 4.3.1 and 4.3.2).



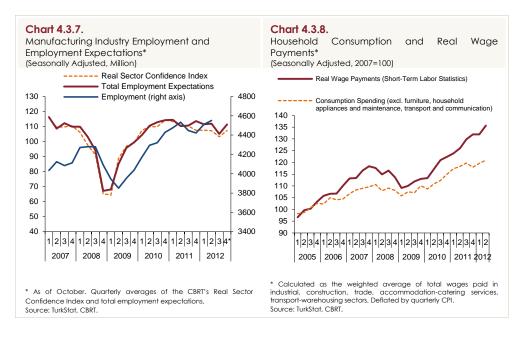
Unemployment rates soared in July amid falling non-farm employment. In this period, although farm employment remained unchanged, non-farm employment fell by 0.3 percent on a quarterly basis. The decline in the non-farm employment was driven by the fall in construction and services sectors, while industrial employment remained unchanged. The uptrend in the construction employment since March was reversed in July (Chart 4.3.3). The decline in the construction employment in this period was mostly seen in unregistered employment. The upward course of services employment lost pace in July, recording a quarter-on-quarter decline (Chart 4.3.3). In this period, employment in the social services sector continued to increase, while employment in the commercial sector plummeted. Moreover, manufacturing of non-metallic mineral products, which are inputs for the construction sector with informative value for the construction sector activity decreased in the third quarter of 2012, bearing a depressive effect on expectations regarding construction employment in the respective period (Chart 4.3.4).



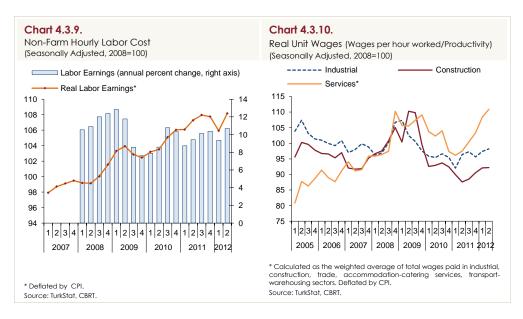
Industrial production posted a quarter-on-quarter increase in the second quarter of 2012. Amid elevated production, registered industrial employment recorded a quarterly increase, while unregistered employment posted a decline in the second quarter (Chart 4.3.5). Meanwhile, industrial production has maintained a continuous and mild growth despite the month-on-month decline in August. Accordingly, industrial production is expected to rebound in September, and converge to the second quarter figures in the third quarter of the year. Leading indicators suggest that PMI employment declined further in the third quarter, without pointing to an unfavorable outlook (Chart 4.3.6). Total Employment Expectation from the CBRT's Business Tendency Survey, which reflects 3-month ahead expectations for orders of the manufacturing industry firms, displayed a quarter-on-quarter decline, yet remained above 100 denoting an optimistic outlook (Chart 4.3.7). Moreover, Total Employment Expectation recorded a notable increase in October. Against this background, industrial employment is expected to creep up further in the third quarter, while adverse developments and uncertainties regarding the global economic outlook are believed to curb the improvement in employment conditions.



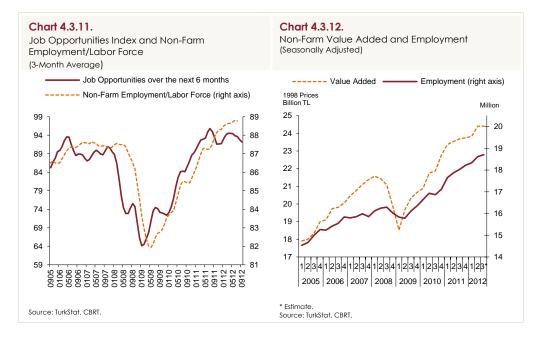
Analysis of labor market developments as per domestic demand reveals that there is a long-term and stable relationship between reel wage and household expenditures on semi-durable and non-durable consumption goods as well as services; yet consumption expenditures increase at a slower pace compared to real wages (Chart 4.3.8). Real wage payments, which remained flat in the first quarter of 2012, recorded hikes in the second quarter and continued to boost household expenditures.



An analysis of wage developments as a cost factor suggests that nonfarm hourly real earnings index released under Labor Cost Indices posted a quarter-on-quarter increase in the second quarter of 2012 (Chart 4.3.9). Real unit wages that also include productivity improvements posted quarterly increases in industrial and services sectors, and remained unchanged in the construction sector in the second quarter of 2012 (Chart 4.3.10). Despite increasing non-farm production, real unit wages went up on the back of soaring total wage payments. Moreover, real wages per hours worked increased across all non-farm sectors in this period. Real unit wage increases in the service sector continue to be a risk factor on the prices of services (Box 4.4).



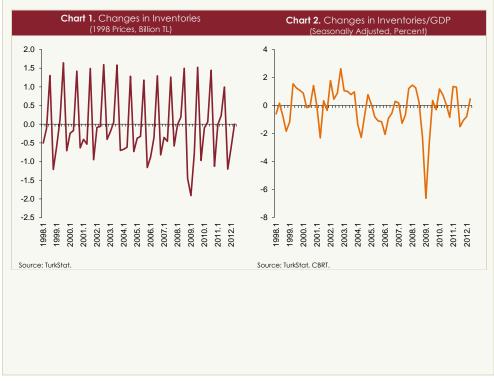
In sum, all non-farm sectors, in particular the construction, contributed to soaring employment in the second quarter of 2012. Leading indicators point that the rise in industrial employment will slow down in the third quarter. The job opportunities index under the TurkStat-CBRT's Consumer Tendency Survey, which reflects employment prospects for households, registered a slight decline in the third quarter compared to the previous periods (Chart 4.3.11). Nevertheless, job opportunities index still hovers above long-term averages. Accordingly, non-farm employment is estimated to increase mildly in the third quarter (Chart 4.3.12). However, leading indicators suggest that should unfavorable developments and uncertainties in the global economy persist, rises in employment may decelerate further in the forthcoming periods.



Box 4 1 Recent Movements in Inventories

National income data are published by TurkStat from the production and spending side. National income data from the spending side, which contain information regarding private and public sector demand, net exports and inventory changes, are crucial in terms of monitoring effects of the implemented policies on the economy. For example, analysis of the abovementioned figures indicates that final domestic demand has been flat, while the contribution of net exports to growth has soared recently. However, inventory changes may occasionally contribute significantly to growth. Hence, analyzing solely the final domestic demand and net exports in certain periods may hamper understanding the sources of growth. Accordingly, this Box examines movements in inventory changes, a component of demand other than these two main items.

Inventories may lessen fluctuations arising from divergences in supply and demand resulting from various reasons.¹ For example, seasonally unadjusted inventories rise in the third quarter during harvest time (Chart 1). Thus, demand may be met through inventories throughout the year, even though supply may be concentrated in certain periods.

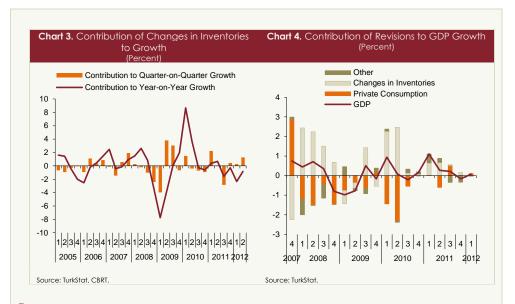


¹ Demand for consumption, investment and exports are met via imports and production. The gap between supply and final

In addition to these seasonally observed inventory movements, firms may accumulate inventories or resort to destocking depending on their expectations regarding demand conditions in the economy. For example, in cases of optimistic expectations regarding demand, firms may accumulate inventories. Conversely, during periods of heightened uncertainty about demand conditions, firms may prefer to meet demand via accumulated inventories, and be unwilling to accumulate inventories later on. Hence, changes in inventories can be better interpreted in seasonally adjusted terms. In fact, in seasonally adjusted terms, firms have accumulated inventories in the post-2001 crisis, while inventories were significantly reduced in the first quarter of 2009 when the global crisis was markedly felt, which later on was followed by absence of a stable inventory accumulation (Chart 2).

At this point, it should be emphasized that changes in inventories published within national accounts data do not contain information on total inventories, but are only indicative of the inventory changes for the relevant period. This points that even in periods of destocking, changes in inventories may contribute positively to GDP growth. This is because the contribution of the change in inventories to growth may be calculated by dividing the difference between the change in inventories at period t and the change in inventories at period t-k to the GDP at period t-k. Hence, even if the change in inventories at period t is negative, it may still support growth if it is less negative than the change in inventories at t-k. For example, the seasonally adjusted changes in inventories in Chart 2 show that even though the change in inventories in the first quarter of 2012 is negative, it is less negative compared to the last quarter of 2011. Hence, changes in inventories contribute positively to quarterly growth (Chart 3). Meanwhile, for some periods, changes in inventories have been revised significantly when compared to preliminary data releases on annual GDP growth (Chart 4). Hence, recent data on changes in inventories need to be cautiously evaluated due to revisions in sub-items of the national income.²

² For further details on revisions to GDP, see Günay (2011).



Besides challenges in estimating inventories, the inclusion of statistical error in changes in inventories also necessitates data on inventories to be cautiously handled. Hence, analyzing alternative information sources on inventories will be useful. In this framework, surveys constitute a major source. For example, BTS, PMI and TEPAV Retail Confidence Indicator (TEPE) ask questions on inventories.

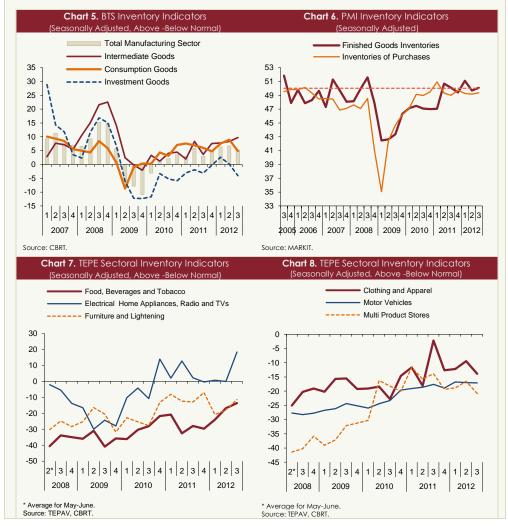
BTS asks firms about the level of their finished goods inventories compared to the normal. Accordingly, inventory indicators are close to pre-crisis levels in consumption and intermediate goods manufacturing sectors, while inventories are weak in manufacturing sectors for investment goods (Chart 5). This points out to differences in inventory accumulation behavior across sectors. However, firms' perception regarding the level of "normal" may also change over time, thus warranting a cautious approach in analyzing this indicator.

Another survey indicator on inventories is finished goods inventories published within PMI (Chart 6). BTS asks firms about their level of inventories compared to normal, while PMI asks firms about changes in their inventories. Hence, joint evaluation of BTS and PMI is useful. Meanwhile, PMI also contains information regarding inventories of purchases. The PMI indicator on inventories of purchases started to decline below the neutral level of 50 in the second quarter of 2006 and following the first quarter of 2011, when the economy has started to slow down. In the meantime, PMI indicators point that inventories of purchases reacted more swiftly and aggressively than finished goods inventories during the crisis period. The same observation also holds true for the EU data.³

³ ECB (2012) includes an analysis on this issue.

BTS and PMI are surveys for manufacturing industry firms, while TEPE inquires about inventories in the retail sector. Despite having a limited number of observations since the survey was launched in May 2008, the survey indicator still points that inventories differ across sectors for retail firms as well (Charts 7 and 8).

In sum, besides the closely monitored aggregate demand items such as final domestic demand and net exports, changes in inventories also have the potential to entail significant information regarding economic activity. This is because, in some periods such as the second quarter of 2012, final domestic demand and net exports fail to fully account for the quarterly GDP growth. National accounts data as well as survey indicators point out that inventory accumulation has not started yet in the post-crisis period. A better analysis of the inventory accumulate in the period ahead.



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ECB, 2012, Stockbuilding-Theoretical Considerations and Recent Developments, ECB Monthly Bulletin, May 2012.

Box 4.2 Estimating Turkey's Gold Stocks

Physical gold, which is treated as a traditional saving instrument by Turkish households, is also a jewelry item and a store of value. Soaring gold prices in the aftermath of the global crisis have once again raised the issue of bringing in the gold stored under the mattresses to the economy. Accordingly, the CBRT brought new regulations enabling to hold a percentage of TL required reserves as unprocessed standard gold. Upon this regulation, the share of CBRT's gold holdings increased sharply in net international reserves. Given the easy convertibility of gold assets to FX in international markets, gold stocks should be taken into account considering the net FX position of Turkey. Hence, estimating the size of gold stocks in Turkey is crucial.

Estimating Turkey's gold stocks is challenging due to lack of historical data, whereas gold has been accumulated over the centuries. However, by measuring intertemporal flow data, stock data for gold can be calculated for the relevant period. Accordingly, by using imports, exports and production figures for 1984-August 2012 period, flow data for gold is estimated annually. Consequently, by aggregating the flow data, cumulative gold stocks since 1984 are measured.

he methodology for calculating flow data (FG) since 1984 is shown in equation 1:

FG(t) = Imports(t) + Production(t) - Exports(t)

(1)

Aggregating the flow data FG(t) since 1984, gold stocks for 2012 (GS2012) are estimated as below:

$$GS_{2012} = \sum_{t=1984}^{2012} (FG_{(t)})$$

Gold imports and exports used in the calculation include unprocessed and processed gold. Data on unprocessed gold for non-monetary gold exports are derived from CBRT's balance of payments statistics for 1984-2012. Data on exports and imports of processed gold are based on TurkStat's foreign trade statistics.⁴ Data on unprocessed gold trade for non-monetary gold are released nominally in USD denomination instead of quantity. In order to estimate data on non-monetary gold trade in quantity, annual values of gold exports and imports are divided by the benchmark gold prices for the relevant year. The same methodology was also applied to processed gold exports and imports.

⁴ Derived from the jewelry and jeweler's good items with code numbers 711319 and 711419 in Customs Tariff Statistical Positions released by TurkStat.

	Total Exports	ey's Gold Stocks Total Imports	Production	Stock	Stock (Billion
	(Tons)	(Tons)	(Tons)	(Tons)	USD)
1984	0.0	0.0	0.0	0.0	0.0
1985	0.0	26.4	0.0	26.4	0.3
1986	0.0	8.1	0.0	34.5	0.4
1987	0.0	8.5	0.0	43.0	0.6
1988	0.0	2.3	0.0	45.2	0.6
1989	0.0	85.2	0.0	130.4	1.6
1990	0.2	124.3	0.0	254.4	3.1
1991	0.5	99.1	0.0	353.0	4.1
1992	1.1	125.7	0.0	477.6	5.4
1993	2.0	158.1	0.0	633.7	7.5
1994	3.6	38.8	0.0	668.9	8.3
1995	4.9	107.0	0.0	771.0	9.5
1996	8.9	135.1	0.0	897.3	11.2
1997	15.3	178.3	0.0	1060.4	11.3
1998	22.3	191.4	0.0	1229.5	11.6
1999	32.2	123.7	0.0	1320.9	11.8
2000	85.7	219.8	0.0	1455.0	13.0
2001	69.0	121.7	1.1	1508.8	13.1
2002	85.2	150.6	4.3	1578.4	15.8
2003	93.6	241.0	5.4	1731.3	19.9
2004	111.4	283.0	5.0	1907.9	25.1
2005	119.3	291.0	5.0	2084.6	29.9
2006	118.0	228.3	8.0	2202.8	43.1
2007	139.8	260.6	10.0	2333.6	52.4
2008	213.9	200.3	11.2	2331.2	65.3
2009	201.5	62.2	14.3	2206.2	69.2
2010	108.4	75.0	16.4	2189.2	86.1
2011	84.7	134.6	24.0	2263.1	114.0
2012 (August)	218.8	126.6	15.6	2189.1	115.5

Source: TurkStat, Istanbul Gold Market and CBRT calculations.

Table 1 presents Turkey's exports, imports and production of gold since 1984. Accordingly, Turkey's gold stocks are estimated to have risen by 2189 tons during 1984-August 2012 period. In other words, taking the beginning of 1984 as zero, Turkey's gold stocks are estimated to be 2189 tons as of August 2012. This amount corresponds to nearly USD 115.5 billion. It should be underlined that this amount of gold stock is the lowest that can be estimated by the available data under our assumptions. In view of the fact that gold has been saved and used as a jewelry item for centuries, Turkey's gold stocks are expected to be much higher than our estimations.

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Aktaş Z., A. Altan, F. Aydın, İ. Bozok and İ.B. Kanlı, 2012, Türkiye'de Altın: Dış Ticaret, Cari İşlemler Dengesi ve Büyüme Üzerine Etkisi (in Turkish), CBRT Economic Notes No.12/29.

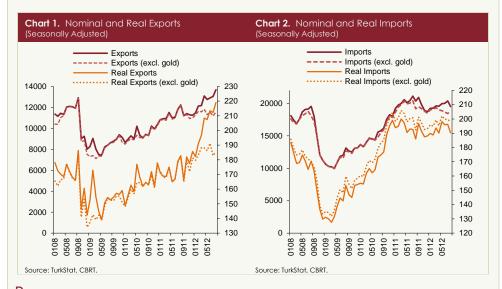
Box 4.3

The Effect of Gold on Current Account Balance and Growth

Gold exports to Iran surged dramatically in 2012. Consequently, gold imports also rose. This Box analyzes effects of soaring gold exports and imports on foreign trade, current account balance and growth.⁵

The Effect on Current Account Balance

The analysis of both nominal and real export figures shows that exports excluding gold have been almost flat since the onset of 2012, while total exports have accelerated (Chart 1). In nominal terms, growth of imports has recently been mild, while imports excluding gold have fallen. Meanwhile, total imports and imports excluding gold have diverged notably in real terms (Chart 2).



Both the volatile course of net gold imports and the upward course of gold prices have significantly affected the current account balance. Hence, analyzing current account balance excluding gold is crucial. Table 1 presents current account balance figures with both the inclusion and exclusion of gold.

Table 1. Effect of Gold Trade on Current Account Balance (Billion USD)						
	2009	2010	2011	2012*		
1. Total	-13.99	-46.64	-77.14	-59.01		
2. Excluding Gold	-17.00	-46.19	-72.36	-60.39		
* As of August, annualized.						

⁵ For further details, see Aktaş et al. (2012).

While current account deficit declined to USD 14 billion, gold exports rose dramatically in 2009, especially in the first quarter of the year, and Turkey has been a net exporter of gold throughout the year. Excluding for gold, the current account deficit was USD 17 billion. The increase in foreign trade deficit was influential on the widening of the current account deficit in 2010. Foreign trade deficit continued to soar in 2011 and the current account deficit hit USD 77 billion. However, excluding the USD 5 billion net gold imports in 2011, the current account deficit was USD 72 billion. In 2011, net gold imports accounted for 16 percent of the USD 30 billion worsening of the current account deficit .

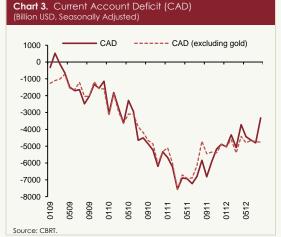
High level of gold exports were largely met by imports in the first 8 months of 2012 and net gold exports totaled USD 3 billion. As of August 2012, the current account deficit amounting to USD 59 billion in annualized terms is USD 60.4 billion with the exclusion of gold. In other words, 20 percent of the USD 15 billion improvement in the current account deficit was driven by net gold exports.

In seasonally adjusted terms, the abovementioned course of foreign trade was

also observed in the current account balance. Current account balance excluding gold has recovered mildly since the beginning of 2012, while total current account deficit narrowed significantly (Chart 3).

Effect on Growth

In order for net gold exports to affect GDP, a portion of exports has to be produced or processed

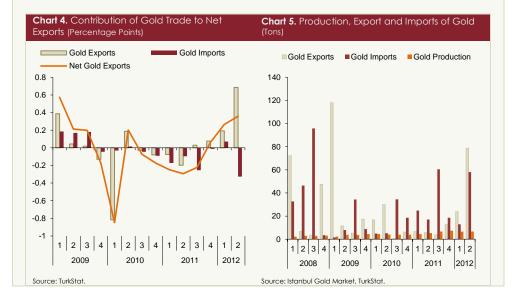


domestically. Even though gold exports do not have any value added, they may still change the composition of GDP on the spending side. Accordingly, the effect of gold exports on GDP growth and demand composition has been analyzed in terms of sources of gold exports. Gold exports in a period can be met by gold imports or domestic gold production in the same period or gold inventories accumulated by previous domestic production or gold imports. Meanwhile, a portion of gold exports can also be met by smuggled gold in the current or previous periods. Effects of gold exports on GDP and demand composition are presented in Table 2.

Gold Source		t-k	t (Export Period)			
Export of Gold Produced at Period t			Export (+) Import (0)	Inventories (0) GDP (+)		
Export of Gold Imported at Period t			Export (+) Import (-)	Inventories (0) GDP (0)		
Export of Gold Imported at Period t-k	Export (0) Import (-)	Inventories (+)** GDP (0)	Export (+) Import (0)	Inventories (-) GDP (0)		
Export of Gold Produced at Period t-k	Export (0) Import (0)	Inventories (+)** GDP (+)	Export (+) Import (0)	Inventories (-) GDP (0)		
Export of Smuggled Gold			Export (+) Import (0)	Inventories (-) GDP (0)		

** Table is based on the assumption that previously produced or imported gold is not consumed or used as an input to production Source: TurkStat.

Against this background, estimations show that gold export contributed 0.69 percentage points to GDP in the second quarter of 2012, while gold imports provided a negative 0.33 points (Chart 4). Net gold exports will affect growth only if the portion of gold exports which are not met by imports are produced domestically. Otherwise, net gold exports will only affect the composition of growth.



As presented in Chart 5, only a marginal portion of the gap between exports and imports of gold is met via production. In fact, in the second quarter of 2012, net external demand for gold increased by 32 tons annually, while gold production raised by 1.4 tons in the same period. This indicates that the share of domestic production in meeting net external demand for gold, and hence, the recent movements in the gold trade have a rather limited contribution to annual GDP growth.

REFERENCES

Aktaş Z., A. Altan, F. Aydın, İ. Bozok, İ.B. Kanlı, 2012, Türkiye'de Altın: Dış Ticaret, Cari İşlemler Dengesi ve Büyüme Üzerine Etkisi (in Turkish), CBRT Economic Notes No.12/29.

Box Real Unit Wage in Trade-Services Sector 4.4

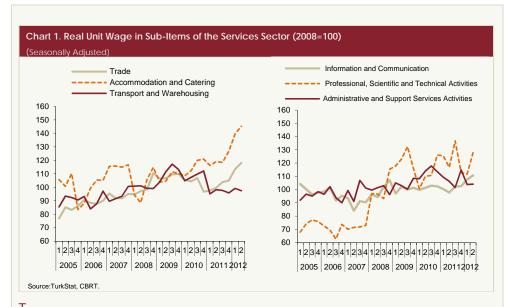
Real unit wage in trade-services sector is obtained by dividing gross salary wages (total wage payments) published under TurkStat's quarterly trade-service index by the turnover index. Due to absence of production data for this sector, turnover data are used in estimations. When computed by using production data, real unit wages show unit labor cost, whereas when computed by the turnover data, real unit wages display the share of wages in the turnover. A ceteris paribus higher share of wages indicates a lower profit margin. Assuming that this observation on macro data is valid at the micro level for an average firm, an increase in real unit wage can be interpreted as a higher probability for a firm seeking constant profit margin to reflect soaring costs on prices.

 ${\sf R}$ eal unit wages, which have been on an upward course since end-2010, have recently increased by 16 percent. During this period where the average hourly wage has soared by 6 percent in real terms, the increase in real unit wage has mainly been driven by the weak course of average productivity (Table 1).

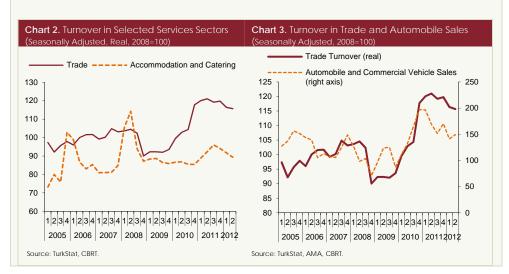
Table 1: 2010Q4: 2012Q2 Real Unit Wage in Trade-Services in 2010Q4:2012Q2* (Logarithmic Difference, Seasonally Adjusted)									
	Trade-Services	Trade	Accommodation- Catering	Transport- Warehousing	Information- Communication	Professional Scientific and Technical Activities	Administrative and Support Services Activities		
Real Unit Wage (1)=(2)-(3)	0.16	0.20	0.18	-0.14	0.08	0.01	-0.09		
Hourly Real Wage (2)	0.06	0.04	0.09	0.02	0.04	0.05	0.18		
Productivity (Real Turnover/Hours Worked) (3)=(4)-(5)	-0.10	-0.16	-0.10	0.16	-0.04	0.03	0.27		
Turnover (Real) (4)	0.00	-0.02	0.04	0.35	-0.05	0.06	0.07		
Hours Worked (5)	0.10	0.14	0.14	0.19	-0.01	0.03	-0.20		
Share of Turnover (2009)	100	78.1	9.9	2.7	3.6	3.4	2.4		

Average unit wage for trade-services sector is obtained by dividing total wage payments by turnover. In case of dividing the numerator and the denominator of this rotio by the price and hours worked indices, respectively, unit wage can be expressed as the ratio of hourly real wage to the average real turnover per hours worked, in other words average productivity. Service prices excluding rent are used in calculations as the price index. Source:TurkStat, CBRT.

 ${\sf M}$ inimum wage was up 5 percent in real terms during the same period. The average increase in services prices excluding accommodation and catering in addition to administrative and support services activities lagged behind the increase in minimum wage (Table 1). The hourly real wage in administrative and support services activities was supported by the improvement in productivity. Meanwhile, on contrary to wage developments, productivity declined in accommodation and catering services.



The analysis of the sub-items of trade-services according to NACE.Rev2⁶ classification shows that the uptrend in real unit wages does not reflect the overall outlook, but is only specific to trade and accommodation-catering services as well as information and communication sectors (Table 1 and Chart 1). According to annual Industrial and Services Statistics for 2009, trade and accommodation-catering services account for 80 and 10 percent, respectively of the overall trade-services sector (Table 1). Hence, the overall trend in trade-services sector mainly reflects the developments in the trade sector. The increase in real unit wage in the trade sector is largely fuelled by the decline in partial productivity, while real unit wage in the accommodation and catering services soared on the back of both rising wage and declining productivity (Table 1).



⁶ Updated statistical classification of economic activities in EU.

In addition to developments in hours worked, the decline in turnover was also influential on the productivity decline in trade and accommodation-catering services (Chart 2). A closer scrutiny at the trade sector, which has a major share in trade-services, reveals that developments in wholesale and retail trade of motor vehicles and motorcycles with a 7 percent share in overall trade were also effective on the declining turnover (Chart 3).

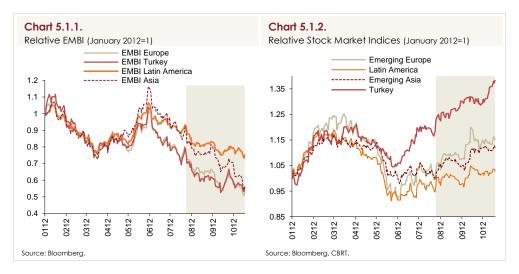
In sum, the continuing increase in real unit wage in some services sectors implies an increased pressure on wages from prices. However, the increase in real unit wages was partially driven by the decline in turnover amid slowdown in the economic activity, which thus limited the potential pass-through from higher labor cost to prices. Central Bank of the Republic of Turkey

5. Financial Markets and Financial Intermediation

5.1. Financial Markets

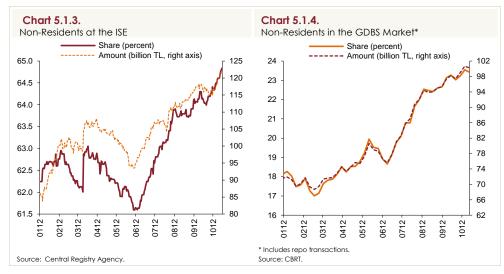
Global Risk Perceptions

In the third quarter of the year, the slowdown in global growth led many countries, especially the advanced economies, to adopt expansionary monetary policies. Moreover, concrete measures taken to solve financial problems in the Euro Area have pushed up the risk appetite since June. In tandem with the rising global risk appetite, risk premiums also decreased in emerging economies (Chart 5.1.1). The recent announcement of new monetary policy packages in advanced economies brought about a reacceleration of capital flows towards emerging economies. In this period, stock market indices of emerging economies trended upwards in line with the global risk appetite (Chart 5.1.2). Data on macroeconomic indicators, particularly the current account deficit, proved better than expected in October, which led the ISE to positively diverge from other emerging economies.



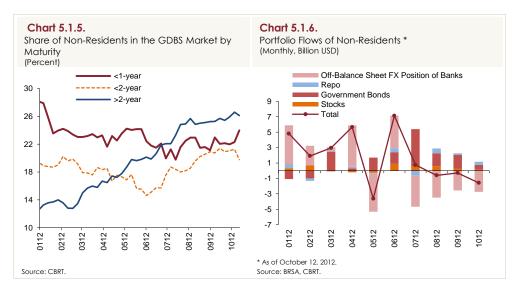
Portfolio Flows

In the third quarter, on account of the expansionary measures taken by major central banks, Turkey, similar to other emerging economies, experienced capital inflows towards public borrowing securities and stock markets. Accordingly, the share of non-residents in the ISE and GDBS markets has been



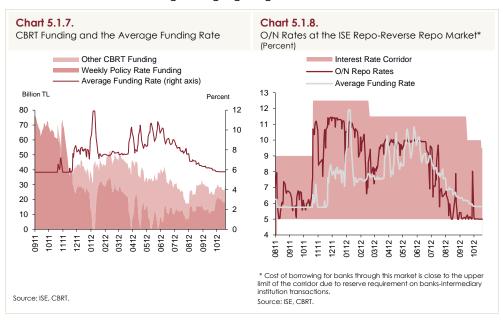
on an upward track since June (Charts 5.1.3 and 5.1.4). The rise in the amount of non-residents' investments in the ISE was also driven by price increases.

On account of positive expectations regarding Turkey's medium-term macroeconomic performance and the relatively low volatility of the long-term returns, investments by non-residents in the GDBS market have been concentrated in maturities longer than one year (Chart 5.1.5). Despite inflow of capital towards stock and GDBS markets, currency swap transactions posted decline. CBRT's stance towards bolstering short-term rates and liquidity conditions and the decline in banks' need for short-term liquidity amid the facilitation of the use of FX options have been effective on currency swap transactions (Chart 5.1.6). As a result, total portfolio flows by non-residents displayed a decline in the inter-reporting period.

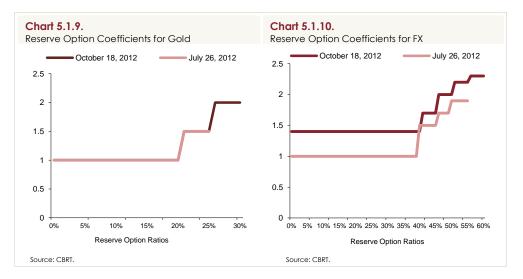


Monetary Policy Implementation

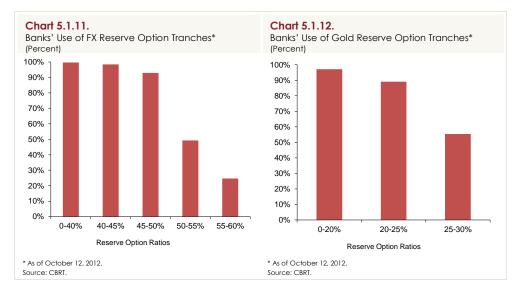
At the August meeting of the MPC, the CBRT shared with the public that inflation was estimated to be on a downward track in the forthcoming period; yet preserved its cautious stance in order to contain the risks to the pricing behavior that may be led by inflation, which would remain above the target for a while. On the other hand, considering the potential of additional monetary easing implemented by major central banks in September and October to accelerate capital flows, the interest rate corridor was narrowed by reducing O/N lending rate by 150 and 50 basis points, respectively. Nevertheless, persisting uncertainties in the global economy led the monetary policy to remain flexible. The mild recovery in final domestic demand in this period accompanied by the favorable data regarding other macroeconomic variables paved the way for the average funding rate to settle at low levels. Accordingly, the CBRT funded the market mostly through one-week repo auctions held under the quantity method besides monthly repo auctions held under the traditional method. Moreover, so as to ensure that money market rates settle at the O/N borrowing rate, which is the lower band of the CBRT's interest rate corridor, the financial system was overfunded and the excess liquidity was withdrawn at O/N maturity at the ISE money markets (Chart 5.1.7). In fact, due to the fall in average funding rate and the overfunding of the financial system, the O/N repo rates at the ISE rapidly declined to the lower bound of the corridor (Chart 5.1.8). Despite low O/N rates, the width of the corridor remained unchanged, highlighting the cautious stance of the CBRT.



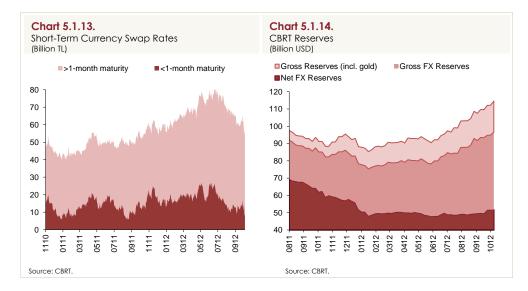
In the August meeting of the MPC, additional arrangements were introduced regarding the fulfillment of reserve requirement against TL liabilities in foreign exchange so as to reduce cost differentials between holding required reserves as TL or FX and also to enable banks to freely use the new facility in order to meet their liquidity needs. The flexibility of the facility was slightly increased from 55 percent to 60 percent. Moreover, the additional 5 percent tranche is to be multiplied by "2", the reserve option coefficient (ROC) and the resulting sum was facilitated to be held in USD and/or euro. Furthermore, to bolster financial stability, the coefficient corresponding to the first 40 percent tranche of the TL required reserves was decided to be increased to "1.1" percent. For the same purposes, the upper limit for the fraction of gold reserves that can be held to fulfill Turkish lira reserve requirements, which was previously 25 percent, was raised to 30 percent and the additional 5 percent tranche was multiplied by the ROC so as to enable the corresponding amount to be maintained as gold (Chart 5.1.9). In order to support financial stability given the new monetary easing policies adopted by major central banks, reserve option coefficients for each tranche were increased by "0.2" and "0.1" percentage points in September and October MPC Meetings, respectively (Chart 5.1.10). Reserve option mechanism partly reduces the need for an interest rate corridor as it contains the adverse effects of excessive volatility in capital flows on domestic markets. Meanwhile, it should be noted that the interest rate corridor has different functions with regard to the credit channel and the effective liquidity management. Therefore, the interest rate corridor will remain as an active policy tool to achieve price stability and financial stability.



The reserve option mechanism provided banks with the facility to build TL required reserves at lower costs. In fact, it should be noted that banks make use of these facilities extensively. However, in upper tranches with higher reserve option coefficients, some banks use almost all or a certain portion of the facility, while some banks do not use the facility at all (Charts 5.1.11 and 5.1.12). This stems from the varying costs in banks' acquisition of FX and gold funds (for details on ROC, see Box 5.1).



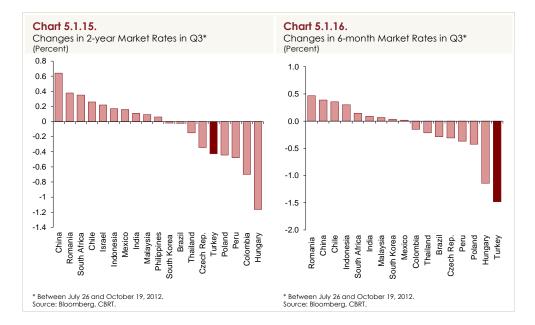
Active use of FX and gold reserve option facilities by banks has led to a decline in short-term currency swap transactions, particularly as of the third quarter of the year (Chart 5.1.13). This stems from the fall in short-term TL liquidity requirements of banks amid the facility. Moreover, owing to this facility, short-term capital flows obtained through currency swap transactions, which have high volatility, exhibit a waning outlook. Accordingly, this facility helps to keep FX volatility at low levels. On the other hand, owing to the reserve option mechanism, banks voluntarily accumulate FX reserves, while the CBRT's gross FX and gold reserves also continue to increase (Chart 5.1.14). However, gold and FX held under the scope of ROC belongs to banks, thus keeping CBRT's net FX reserves unchanged.

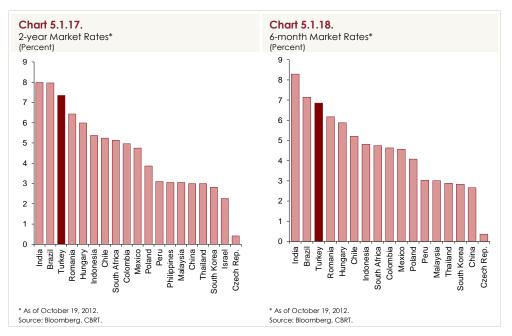


Moreover, in order to enhance liquidity management of banks and help them project their total funding costs, the CBRT continued to announce the funding amount on the days of quantity auctions besides the upper limit for the monthly repo auctions in the third quarter of the year. Under the scope of the TL liquidity projections, the lower limit for the July funding quoted at the policy rate was reduced to TL 0.5 billion and this amount was kept unchanged in August and September. The upper limit of funding was set as TL 6.5 billion in July, TL 7.5 billion in August and September, and TL 6.5 billion in October. The upper limit for the monthly repo auctions held under the traditional auction method was kept unchanged and the upper limit was reduced from TL 5 billion to TL 3 billion in September and increased to TL 4 billion in October.

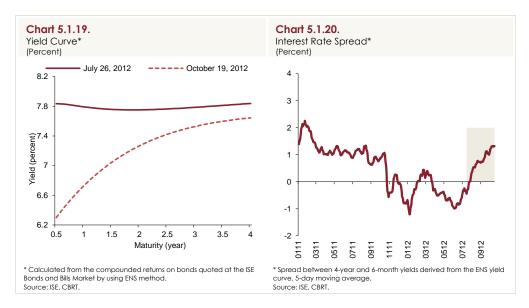
Market Rates

In the third quarter of the year, market rates in some emerging economies displayed a decline mostly upon the rise in the global risk appetite besides the policy rate reductions by major central banks that bolster economic growth (Charts 5.1.15 and 5.1.16). However, some emerging economies opted for policy rate hikes on concerns over inflation, which led market rates in these countries to increase. As for Turkey, market rates saw decreases mostly in short-term maturities, which were driven by the decline in average funding rate besides the narrowing of the interest rate corridor. Nevertheless, Turkey's nominal market rates still remain high compared to other emerging economies both in short and medium-term maturities (Chart 5.1.17 and 5.1.18).

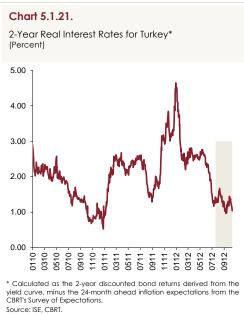


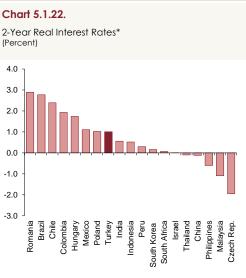


In the third quarter of the year, above-mentioned developments led the short and medium-term GDBS rates to fall and the slope of the yield curve to turn positive (Chart 5.1.19). Due to the plunge in short-term rates, the spread between long and short-term became positive (Chart 5.1.20).



In spite of the plunge in short-term market rates, medium-term rates edged down in the inter-reporting period and 2-year ahead inflation expectations were almost unchanged, thus keeping 2-year real interest rates unchanged quarter-on-quarter (Chart 5.1.21). Having ranked above other emerging economies with respect to nominal interest rate, Turkey's real interest rate remained at the middle compared to other emerging economies (Chart 5.1.22). The lagging of Turkey's real interest rate behind others stems from the divergence of inflation expectations among countries.

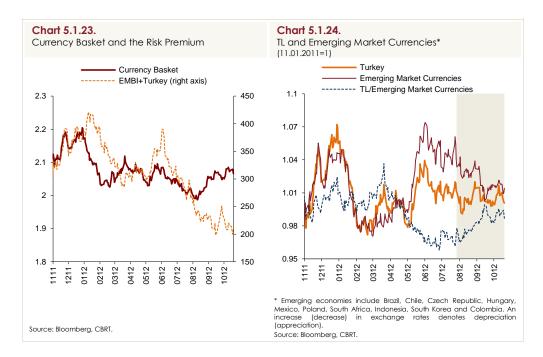




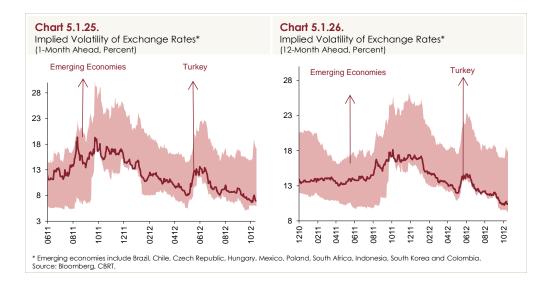
the * As of October 19, 2012. Calculated as the 2-year government bond returns of countries minus the 2-year ahead inflation expectations from the Consensus Forecasts. Source: Bloomberg, Consensus Forecasts, CBRT.

FX Markets

Concrete steps to solve problems in the Euro Area alleviated concerns over the future of the euro. Therefore, the euro rapidly appreciated both against the Turkish lira and other currencies. On account of this appreciation, the exchange rate basket trended upwards in the third quarter of the year (Chart 5.1.23). Due to the rise in global liquidity, currencies of other emerging economies appreciated. However, the decline in short and medium-term rates in Turkey coupled with the recently aggravating political unrest in the Middle East led to depreciation of the Turkish lira against currencies of other emerging economies in the third quarter of the year (Chart 5.1.24).

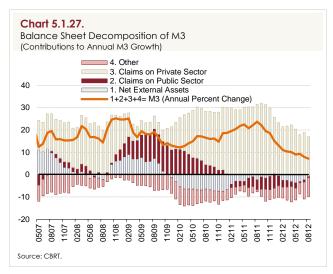


Owing to the fall in the risk premiums of emerging economies, exchange rate volatility declined in the third quarter. The recent favorable course of macroeconomic indicators, especially the current account deficit, as well as the CBRT's policies contributed to maintain the implied volatility of the Turkish lira at comparatively low levels among emerging economies (Charts 5.1.25 and 5.1.26).

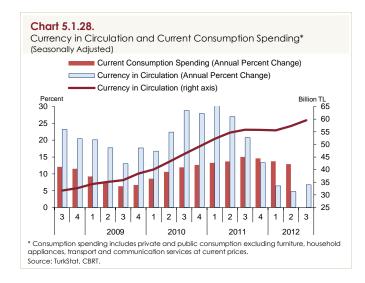


Monetary Indicators

Annual growth of M3, the broad measure of money supply, continued to decline amid the deceleration of the credit expansion to the private sector. On the other hand, Claims on the Public Sector sustained their negative contribution to M3 growth, albeit at a slower pace. The fall in the deceleration of Net External Assets is mainly attributed to the increase in the FX assets of the CBRT. Lastly, in tandem with the rising banking sector profits, the item Other continued to generate non-deposit resources to the banking sector (Chart 5.1.27).

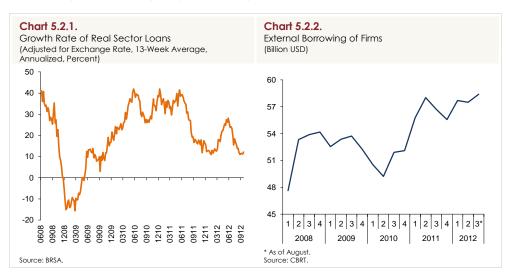


Although the growth of seasonally adjusted money in circulation edged up on a quarterly basis in the third quarter of 2012, it remained below the level implied by its robust course following 2009 (Chart 5.1.28). The weak course in the rebound of the money in circulation, which is mostly employed as a means of payment in cash operations, indicates that current consumption spending remains sluggish in the third quarter of the year.



5.2. Financial Intermediation and Loans

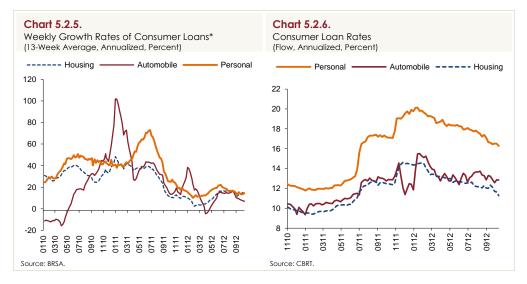
Growth rate of loans extended to the corporate sector by domestic banks trended downwards as of June due to seasonal trends and the deceleration in economic activity as well as the slight tightening in lending standards of banks in the second quarter (Chart 5.2.1). Against these developments, loans extended to the non-financial sector posted a year-onyear increase by 16.2 percent in the third quarter, growing by 11.4 percent in annualized terms (Chart 5.2.1). Meanwhile, external borrowing by the corporate sector edged up in August (Chart 5.2.2).



Although business loans grew far above consumer loans in the second quarter, this trend was reversed in the third quarter, and the growth of business loans lagged well behind consumer loans (Chart 5.2.3). The slowdown in investment expenditures recorded since the last guarter of 2011 proved more notable than consumption spending, bringing about a relatively faster deceleration in business loans. As the balancing between domestic demand and net exports became more pronounced in tandem with the rise in domestically manufactured products, firms' use of short-term business loans for working capital requirements increased considerably in the second quarter. However, uncertainties regarding global growth outlook and problems in the EU economy adversely affected domestic economic activity in the third quarter, thus weakening production and investment. Accordingly, business loans recorded a sizeable slowdown in the third quarter. As for consumer loans, the deceleration in the third quarter is largely attributed to seasonality, while the comparison of the deceleration trend with preceding years reveals a slightly increased divergence in the third quarter (Chart 5.2.4).



The rebound in growth rates of consumer loans, which became more evident in the second quarter also upon seasonal factors, was replaced by a limited slowdown in the third quarter parallel to the cyclical movements in past years. This trend is particularly apparent in personal loans, and partly in automobile loans (Chart 5.2.5). Cyclically adjusted growth rates of consumer loans followed a flat course in the third quarter of 2012. Subsequent to the monetary tightening, banks raised interest rates on housing, automobile and other consumer loans considerably at the end of 2011. Following this, the CBRT slightly narrowed the interest rate corridor from the upper bound in February, which led consumer loan rates to trend downwards. Furthermore, upon signals for a narrowing of the interest rate corridor in August, the decline in personal and housing loan rates partially accelerated (Chart 5.2.6). The upper bound of the interest rate corridor was pulled down in September and October and it was announced that the upper bound might be reduced further in the forthcoming periods. Following these developments, the fall in loan rates continued.



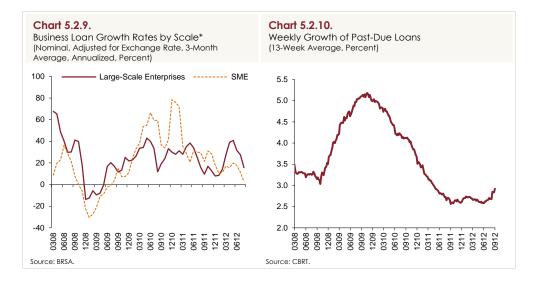
Loan Tendency Survey results for the April-June period suggest that housing and automobile loan standards were partially tightened, while personal loan standards were eased in the second quarter of 2012. Meanwhile, survey results regarding lending terms and conditions indicate that banks' profit margins in housing loans increased, while margins in personal loans remained virtually unchanged. Responses of banks to questions about retail loan show that loan demand recorded an uptick in the second quarter of 2012. Banks declared that developments in consumer confidence are the leading factors to boost loan demand. Accordingly, the Loan Tendency Survey released in July displayed that the loan demand of consumers would continue to increase in the third quarter; yet unfavorable developments in consumer confidence are estimated to influence loan demand in the third quarter.

Growth of business loans in the third quarter recorded a sharper deceleration than implied by seasonal trends in both TL and FX-denominated loans (Charts 5.2.7 and 5.2.8). Nevertheless, the sluggish trend in FX-denominated loans, which are estimated to be mostly used in financing investment expenditures in the third quarter, is also consistent with the

weakening in investment expenditures since the last quarter of 2011. Similarly, the growth trend of long-term business loans lagged well behind short-term business loans as of August. In fact, in the Loan Tendency Survey, banks stated that the demand of firms for long-term loans would follow a flat course in the third quarter of the year.



An analysis of business loans by scale reveals that growth rates of loans extended to large-scale enterprises and to SME diverged considerably, and growth in SME loans remained relatively weak (Chart 5.2.9). This stemmed from tighter lending conditions applied by banks for the SME, which have more fragile financial conditions than large-scale enterprises as of the last quarter of 2011, which was marked by aggravated concerns of banks on credit risk. Growth of loans extended both to SME and enterprises with larger scales have posted a notable slowdown since June. As per the implementation of Basel II, which was effected on 1 July 2012, SME loans proved more advantageous within the retail portfolios of banks. However, given the deteriorating expectations regarding economic activity coupled with capital adequacy constraints, banks opted for tightening lending standards particularly for SME as of the second quarter. Meanwhile, firms' non-performing loans against banks posted a mild increase in the June-August period and a sharp rise was seen in September due to the re-payment of a significant loan (Chart 5.2.10).



Following the increase in the upper bound of the interest rate corridor in October 2011, business loan rates surged, while a limited narrowing of the interest rate corridor from the upper bound in February was also reflected on loan rates (Chart 5.2.11). Business loan rates, which mostly remained flat in the February-September period, trended downwards upon the lowering of CBRT's O/N lending rate at the MPC meeting on September 18, 2012. Movements in the spread between loan-deposit rates have mostly been affected by changes in loan rates between early 2012 and May. Meanwhile, the rise in deposit rates in May and June besides the subsequent decline in deposit rates parallel to the gradual reduction of the average interest rates by about 300 basis points on funds provided from the CBRT were instrumental on the course of spread between loan-deposit rate (Chart 5.2.12).



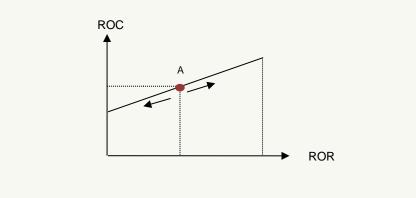
In the third quarter of the year, liquidity policies implemented by the CBRT as well as external financing conditions bolstered banks' credit supply. However, the slowdown in domestic demand, particularly investment expenditures, and economic activity curtailed the loan demand. The recent plunge in average rates in funds provided by the CBRT besides the reduction of the O/N lending rate are thought to bring about a decline in banks' loan rates and the spread between loan-deposit rates in the forthcoming period. In this respect, loans are projected to gain pace, but remain on a mildly increasing track in the last quarter and loan growth is estimated to hover around 14 percent at the end of the year.

Box 5.1 Reserve Option Mechanism

This Box introduces the Reserve Option Mechanism (ROM) designed by the CBRT to restrict the adverse effects of the excessive volatility of capital flows on macroeconomic and financial stability. ROM is a facility enabling banks to hold a certain percent of their TL-denominated required reserves in FX and gold. The extent of the use of this facility is determined by the reserve option ratio (ROR). Coefficients determining the FX or gold equivalence to be maintained per unit TL-denominated required reserve Option Coefficient (ROC).

ROC as a Monetary Policy Tool

A simple graphical presentation will help to understand the operation of ROM. Let us assume that ROC increases linearly with respect to ROR and banks use this facility at point A in any period of time. During a period of rapid capital inflows, banks are more likely to use this facility given their easier access to external funds and the low cost of FX funding. Therefore, a portion of FX inflow will be transferred by banks to their accounts at the CBRT to be used in order to meet their reserve requirement, and thus will be withdrawn from the market. Consequently, use of reserve option will rise to the right of point A. Accordingly, the appreciation pressure on TL will be dampened and the conversion of FX inflow to loans will also be curtailed. Thus, the volatility on TL, FX liquidity and loans, in particular the FX loans, that might be caused by capital inflows will be limited. Furthermore, banks will obtain TL liquidity with the higher use of the facility. In that sense, ROM has a similar effect to an unsterilized FX purchase auction, but unlike an FX auction, higher FX liquidity can be withdrawn from the market per unit TL (Alper, Kara and Yörükoğlu, 2012).



Meanwhile, in case of a full use of the facility, the CBRT, with the aim to withdraw more FX liquidity from the market, may raise the current coefficients or add a new tranche to ROM. Should a new tranche be added, more TL liquidity will be provided to the market, while TL liquidity will remain constant should the current coefficients be raised. In an event of a rapid capital outflow, due to increased cost of FX funding and difficulties in access to external funds, banks are less likely to use the facility and will reduce their reserves at the CBRT. Accordingly, FX liquidity will be provided to the market and use of facility will decline towards the left of point A. However, it should be underlined that banks will have a higher need for TL liquidity in that case. So, ROM acts like an unsterilized FX sale auction, but the mechanism provides more FX liquidity to the market per unit TL.

I his monetary policy tool will also help to limit credit expansion that may be driven by the surge of capital flows. In particular, loans in FX denomination will be restricted from the supply side. In cases of sudden capital outflows, banks will resort to their previously accumulated FX reserves. Thus, ROM is expected to lessen FX volatility. Moreover, ROM will also be used as a countercyclical monetary policy instrument that will both extend and contract loan growth. Thus, loans will have a lower sensitivity to capital flows.

Another significant factor that ROM will indirectly contribute is the lessening of volatility that may be caused by short-term capital flows through limiting banks' need for short-term cross currency swaps. Banks use short-term cross currency swaps in order to meet their TL liquidity need. On the other hand, the reserve option facility is expected to restrict banks' cross currency swaps, and thus highly volatile short-term capital inflows driven by cross currency swaps will decline.

Lastly, as a consequence of implementing ROM, CBRT's gross FX reserves will soar. As FX and gold maintained within the context of ROC are not purchased by the CBRT, but belong to banks, the facility does not affect the CBRT's net FX position, but only increases the CBRT's gross FX reserves. The increase of gross reserves in favor of the private sector provides a more efficient use of reserves, and thus enhances the resilience and the productivity of the overall financial system. ROM enables reserves to be accumulated by the private sector rather than by the CBRT and also allows for shock-specific optimal use, thus improving the efficiency of the system.

The Comparison of the Cost of ROC Facility to Other Funding Sources

Given the lower cost of borrowing in FX denomination and gold under current circumstances, banks are able to meet their reserve requirement at lower cost via this facility. Meanwhile, the lowering (raise) of ROC by the CBRT will enhance (reduce) this cost advantage.

Several funding opportunities are available for banks in order to meet their TL reserve requirements. Hence, the use of ROM by banks will depend on the difference of cost between ROM and other funds. Accordingly, the estimation of the threshold ROC that leaves banks indifferent between ROM and other funding sources is crucial.

Under the assumption that the threshold ROC is x, the required reserve ratio for FX liabilities is RR_{FX} and the spot exchange rate is S_0 , banks will need to borrow $x/(1 - RR_{FX})$ in FX for meeting their S_0 units of TL reserve requirement. Let us further assume that banks hold a forward FX contract in order to avoid exchange rate risk. In that case, the cost of the facility in TL denomination will be as follows:

$$Total \ Cost = \frac{x}{1 - RR_{FX}} \ (LIBOR + p)F_{0,t} \ \frac{t}{365}$$

In the above equation, x is the threshold ROC, p is the additional interest on *LIBOR* paid by banks for borrowing in FX, RR_{FX} is the required reserve ratio for FX liabilities, $F_{0,t}$ is the forward FX contract entered at time 0 that will expire at the end of the reserve maintenance period. TL-denominated interest rates for cross currency swaps with similar maturities are used for the calculation of the forward exchange rate. The reserve maintenance period t is 14 days.

Meanwhile, another significant funding source for banks for maintaining their TL reserve requirement is funds obtained via ISE Repo and Reverse Repo Market. Banks are obliged to maintain required reserves on funds obtained through non-bank financial institutions at this market. Accordingly, the cost of obtaining S_0 units of TL will be as follows:

$$Total \ Cost = \frac{S_0}{1 - RR_{TL}} \ r_{ISE} \frac{t}{365}$$

In the above equation, RR_{TL} is the TL required reserve ratio, S_0 is the spot exchange rate for USD/TL, r_{ISE} is the overnight interest rate at the ISE Repo and Reverse Repo Market. Equating the cost of funding for both sources will yield x(the threshold ROC) that leaves banks indifferent between borrowing from ISE or using ROM such that:

$$x = \frac{(1 - RR_{FX})(1 + LIBOR\frac{t}{365})r_{ISE}}{(1 - RR_{TL})(LIBOR + p)\left(1 + swap_{TL}\frac{t}{365}\right)}$$

The threshold ROC *x* depends on *LIBOR*, the additional borrowing interest *p* paid by banks, the cross currency swap rate $swap_{TL}$, the interest r_{ISE} at the ISE Repo and Reverse Repo Market and the TL required reserve ratio RR_{TL} . The threshold ROC can similarly be estimated for ROM and other funding sources (Küçüksaraç and Özel, 2012).

It should be underlined that the above estimation focuses on marginal cost. In other words, banks are assumed to use their obtained funding for TL reserve requirement. On the other hand, banks may also channel these funds to invest in other assets (extending loans, purchase of government bonds etc). In that case, the threshold ROC will differ from the above estimation.

Results and the Conclusion

Among similar other instruments, ROM stands out especially in dampening the adverse effects of capital inflows on exchange rate and FX-denominated loans by keeping TL interest rates marginally changed or even unchanged. Furthermore, ROM is also superior to discretionary tools like direct FX purchase or intervention such that the extent of the use of facility is determined by banks' optimization decisions, and thus, the risk of misperception regarding the level of the exchange rate and the monetary policy stance will be relatively limited.

The ROM has essentially been designed by the CBRT as an "automatic stabilizer". The enabling of optimization to banks via this facility also enhances efficiency of the financial system relative to the use of other tools. However, it should also be underlined that the parameters of the mechanism will be adjusted when deemed necessary. In other words, should the external and domestic cost factors change and a permanent or structural change occurs in the speed of capital flows, the coefficients may be reset.

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Box 5.2 Financial Conditions Index

Since the end of 2010, CBRT has implemented a new policy strategy and adopted financial stability as a supplementary objective besides price stability. This new framework, which jointly uses liquidity, credit and interest rate policies, has increased the need to develop and monitor a broad measure of "financial conditions" index that would complement the monetary policy analysis in assessing whether the overall set of policies are restrictive or accommodative. Accordingly, the study by Kara, Özlü and Ünalmış (2012) develop Financial Conditions Indices (FCI) for Turkey using a range of monetary and financial indicators. This Box discusses the findings of the above study and evaluates the recent course of financial conditions.

The weighted sum-approach, one of the most commonly used methodologies in the FCI literature, is adopted in constructing the index.¹ The weights of each monetary and financial indicator reflect the relative importance of that variable in explaining the future output growth and are derived by using the impulse responses from an unrestricted VAR. Specifically, the weight for each financial variable, denoted by ω_j is calculated as the 4-quarter cumulative responses of GDP growth to a 1-unit shock to each variable y_j . Then the FCI is calculated as a weighted average of all variables in standardized form, which is shown in equation (1), where $\overline{y_j}$ and σ_{y_j} are the mean and standardized deviation of $y_{j,t}$ respectively, over the sample period.

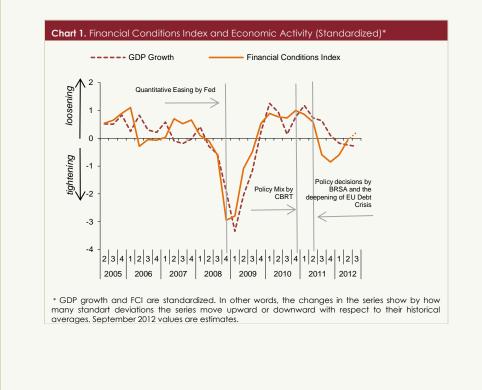
$$FCI_t = \sum_{j=1}^n w_j \frac{y_{j,t} - \overline{y_j}}{\sigma_{y_j}} \tag{1}$$

The variables used to explain the real annual GDP growth are the ratio of annual change in total credit stock to annual GDP, quarterly data for credit standards, the real effective exchange rate, real ex-ante benchmark rate, quarterly capital inflows, the spread between credit and deposit rates and the annual percentage change in real ISE-All equity return index.²

¹ Hatzius et al. (2010) provides a detailed survey of studies on financial conditions indices. Guichard and Turner (2008), Swinston (2008) as well as Osorio, Pongsaparn and Ünsal (2011) are recent studies adopting weighted sum approach in the context of a VAR.

² The starting date is constrained by the data availability on credit standards. Thus, the weights for each variable in the index are calculated using the data for 2005Q2-2012Q2.

Chart 1 presents the FCI estimated according to the methodology mentioned above. As depicted in the chart, an upward movement of the index implies more accommodative financial conditions, while a decline reflects tighter financial conditions. The index witnessed a trough during the global crisis, yet recovered since the last quarter of 2008 mostly driven by the policy rate cuts and quantitative easing implemented by the Fed. Even though the index remained flat amid the European debt crisis, financial conditions continued to stay loose until the end of 2010. The index shows that following the onset of the policy mix adopted by the CBRT, there is a marked tightening in financial conditions. The tightening becomes more significant with the restrictive credit policy measures taken by the BRSA by mid-2011 as well as the deeping of the EU debt crisis. However, the financial conditions have gradually eased as of the beginning of 2012. Rapid capital inflows and the rise in global risk appetite during this period were influential on the surge in the index. As of the third quarter of 2012, due to the accommodative policies adopted by the CBRT, the index is estimated to be slightly positive.



In sum, the active use of macroprudential tools in the aftermath of the global crisis necessitates to monitor broader measures of financial conditions. This preliminary attempt to construct a financial conditions indiex for Turkey provides a plausible view on the effect of the recent policy framework as well as the changing global environment on financial conditions. Hence, the index has the potential to provide important information on the overall stance of the financial sector policies.

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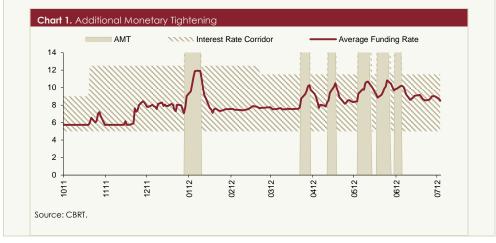
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Box 5.3 Effect of Additional Monetary Tightening on Exchange Rates

The global crisis in 2008-2009 proved the inefficiency of the monetary policies conducted without considering risks within the financial system and signified the need to observe financial stability along with price stability (Borio, 2011). To that extent, it was well understood that a policy rate that yields price stability may not necessarily provide financial stability, and therefore, short-term policy rate by itself fails to suffice maintaining price stability and financial stability simultaneously.

Accordingly, as of November 2010, the CBRT has started to implement its new policy mix. In this framework, required reserves and other macro prudential tools as well as weekly reportates, interest rate corridor and funding strategy are jointly used as complementary tools for credit, interest rate and liquidity policy, respectively. In utilizing these tools, expectations, credit growth and exchange rate are monitored as key indicators for price and financial stability (Başçı, 2012).

As part of the liquidity policy, a pillar of the new policy mix, O/N interest rates are adjusted according to the course of economic and financial developments without changing the weekly reportates, i.e. the policy rate (Başçı, 2011). Accordingly, the CBRT has occasionally delivered additional monetary tightening (AMT) in order to prevent temporary price movements from deteriorating the inflation outlook via expectations. On the days of AMT delivering, reduced or even no amount of funding is supplied via quantity auction method at the policy rate. Instead, market is funded via traditional auction method, and hence, O/N rates settle close to the upper bound of the interest rate corridor. AMT has been delivered 6 times so far, where the longest and the shortest duration were 8 and 3 days, respectively. In accordance with the policy design, AMT has been aimed to be strong, effective and temporary (Chart 1).



This Box analyzes the effect of the abovementioned policy by the CBRT on exchange rates through a GARCH model. The study uses the daily change in the currency basket, which is 0.5*(TL/Euro)+0.5*(TL/USD). The data set covers the period between 20.10.2011 and 19.07.2012.³

The below GARCH (1,1) models are used to estimate the effectiveness of AMT on exchange rate volatility.⁴ In both models, the change in the currency basket is the dependent variable in the level equations, while AMT is present as a dummy variable both in the level and the variance equations. The change in VIX which well captures the fluctuations in capital flows is the control variable in both models, while the second model includes a dummy for FX interventions.^{5,6}

Model1:

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 $h_t = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \alpha_2 h_{t-1} + \alpha_3 D_{AMT} + \alpha_5 CVIX_t + u_t$ (1.c)

Model2:

 $R_t = \beta_0 + \beta_1 D_{AMT} + \beta_2 D_{INT} + \beta_3 CVIX_t + \varepsilon_t$ (2.a)

 $\varepsilon_t \sim N(0, h_t)$ $h_t = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \alpha_2 h_{t-1} + \alpha_3 D_{AMT} + \alpha_4 D_{INT} + \alpha_5 CVIX_t + u_t$ (2.c)

(2.b)

³ At the MPC meeting on 20 October 2011, the upper bound of the interest rate corridor was raised, thus laying the ground for additional monetary tightening. At the MPC meeting on July 19, 2012, the disclosure on AMT was left out and no AMT was conducted starting from this date. Hence, these dates are selected as the starting and ending dates for the analysis. ⁴ GARCH(1,1) is selected over other GARCH specifications as it is the most frequently used model in describing volatility in the

⁵ During the period of AMT delivering from 29 December 2011 till 9 January 2012, FX interventions were also conducted between 30 December 2011 and 4 January 2012. Hence, the model has two versions where the alternative model includes a dummy for FX interventions in order to better capture the effectiveness of AMT.

⁶ VIX is included as a control variable in similar studies analyzing exchange rate volatility (Cairns et al., 2007; Chadwick et al., 2012). The significance of CVIX in model results show that not including this variable to the model may result in omitted variable bias. Even though other studies in the literature include interest rate spread between domestic and international rates, this study excludes this variable as the AMT directly affects interest rates, and so, including the interest rate spread may lead to multicollinearity problem.

Model variables are defined as below:

$$\begin{split} R_t &= \ln \left(\frac{p_t}{p_{t-1}} \right) * 100, \ p_{t^{\pm}} \text{ value of the currency basket} \\ D_{AMT} &= \begin{cases} 0, other \ days \\ 1, days \ of \ AMT \end{cases} \end{split}$$

 $D_{INT} = \begin{cases} 0, other days \\ 1, days of FX intervention \end{cases}$

$$\textit{CVIX}_t = \ln \left(\frac{\textit{VIX}_t}{\textit{VIX}_{t-1}} \right) * 100, \textit{VIX}_{t^=} \text{ value of the VIX}$$

Table 1 presents the model results. Accordingly, AMT is found statistically significant in lessening the volatility of the exchange rate. Furthermore, inclusion of the FX intervention dummy into the model does not change the result.

Level Equation		Variance Equation				
	Dependent Varic	ible: Rt	De	pendent Variab	ole: ht	
	Model 1	Model 2		Model 1	Model 2	
с	-0.046	-0.030	с	0.014	0.017	
	(0.000)	(0.006)		(0.000)	(0.000)	
Damt	-0.103	-0.074	Damt	-0.020	-0.024	
	(0.120)	(0.300)		(0.006)	(0.019)	
DINT		-0.410	DINT		0.045	
		(0.038)			(0.127)	
CVIX _t	0.021	0.022	CVIX _t	0.003	0.003	
	(0.000)	(0.000)	-	(0.049)	(0.108)	
			ε_{t-1}^2	-0.081	-0.091	
				(0.000)	(0.001)	
			h _{t-1}	1.019	1.019	
R ²	0.1020	0.1188		(0.000)	(0.000)	

In sum, this study finds that AMT is statistically significant in reducing the exchange rate volatility. Therefore, in addition to being an effective policy tool in preventing the temporary price movements from deteriorating the inflation outlook, AMT also helps to lessen exchange rate volatility fuelled by fluctuations in capital flows.

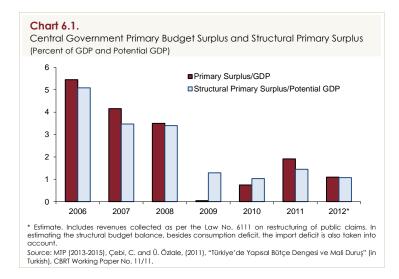
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6. Public Finance

In the first three quarters of 2012, budget performance has been sluggish due to the marked slowdown in tax revenues amid the balancing in the economic activity, the adverse base effect driven by the year-on-year decline in the tax revenues collected as per the Law No. 6111 on the restructuring of public claims, and soaring primary expenditures mainly fuelled by surging personnel expenditures. On the other hand, hikes to the SCT rates in motor vehicles and the lump-sum taxes in fuel and alcoholic beverages as well as title fees under the fiscal measures enforced in September in order to raise revenues are expected to bolster budget revenues in the last quarter of the year.

The MTP covering the 2013 - 2015 period was announced to the public in October. Accordingly, in 2012, central government primary surplus to GDP is estimated to decline by 0.8 points from 2011. Furthermore, cyclically adjusted structural primary surplus to potential GDP is expected to fall by 0.3 points in 2012 (Chart 6.1). Thus, the fiscal policy is expected to be expansionary in 2012 with respect to MTP forecasts.



The framework laid down in the MTP regarding the public finance envisages a slight year-on-year deterioration in the budget performance in 2012 given the slowdown in the economic activity. The envisioned deterioration is expected to taper off in the upcoming period (Table 6.1). According to the MTP, primary expenditures are expected to edge up in 2012 and 2013, and decline gradually as of 2014. In addition, the MTP targets to raise tax revenues by legal and administrative regulations and gradually reduce the public sector borrowing requirement as of 2013. Accordingly, the public sector debt stock to GDP, which has started to decline since 2010, is envisioned to decrease further in the medium term (Table 6.1).

Table 6.1. Central Government Budget Balance and (Percent of GDP)	d EU-Defined	d Debt Sto	ock				
	2009	2010	2011	2012*	2013**	2014**	2015**
Budget Revenues	22.5	23.1	22.8	22.9	23.6	23.1	22.6
Budget Expenditures	28.0	26.8	24.1	25.3	25.7	25.1	24.4
Budget Balance	-5.5	-3.6	-1.3	-2.3	-2.2	-2.0	-1.8
Budget Revenues (Program-Defined)	21.0	21.8	22.2	22.0	22.8	22.5	22.1
Primary Expenditures (Program-Defined)	22.5	22.2	20.9	21.9	22.3	21.9	21.4
Primary Balance (Program-Defined)	-1.5	-0.5	1.3	0.2	0.5	0.6	0.7
Public Sector General Balance	-5.1	-2.3	-0.1	-1.7	-1.5	-1.1	-0.9
EU-Defined Nominal Debt Stock	46.1	42.4	39.2	36.5	35.0	33.0	31.0
* Estimate. ** Target.							
Source: MTP(2013-2015).							

Following the deterioration in the public finance in 2012, the MTP targets point to a limited tightening in the fiscal policy and a sustained decline in public debt stock in the forthcoming period. However, it should be emphasized that strengthening the fiscal framework by institutional and structural improvements envisaged in the MTP remains to be of utmost importance with regard to maintaining fiscal discipline on a permanent basis in the medium term.

6.1. Budget Developments

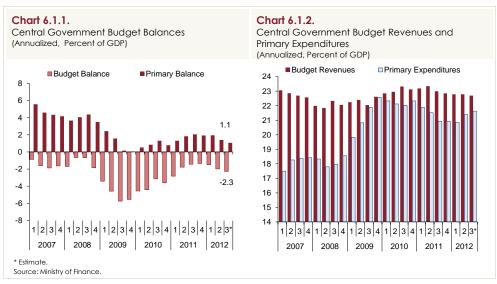
In the first three quarters of 2012, central government budget posted a deficit of TL 14.4 billion, whereas the primary balance registered a surplus of TL 25.2 billion (Table 6.1.1). The slowdown in domestic economic activity and the base effect led by the Law No. 6111 on restructuring of the public claims decelerated the increase in tax revenues, thus causing a year-on-year deterioration in the budget performance. Soaring primary expenditures were also influential on this deterioration.

Table 6.1.1.

Central Government Budget Aggregates

	January- September 2011	January- September 2012	Rate of Increase (Percent)	Actual/Target (Percent)
Central Government Budget Expenditures	220.9	258.0	16.8	73.5
Interest Expenditures	34.8	39.5	13.7	78.7
Primary Expenditures	186.1	218.5	17.4	72.7
Central Government Budget Revenues	221.1	243.7	10.2	73.9
I. Tax Revenues	188.4	201.9	7.2	72.7
II. Non-Tax Revenues	25.8	33.2	28.7	75.4
Budget Balance	0.2	-14.4	-	68.0
Primary Balance	35.0	25.2	-28.0	86.4
Source: Ministry of Finance.				

Amid falling tax revenues due to the balancing between domestic and external demand and surging primary expenditures, the central government budget deficit to GDP ratio, which reached 1.3 percent in end-2012, gained momentum as of the first quarter of 2012 and climbed to 2.3 percent by the third quarter of 2012 (Chart 6.1.1). The central government primary expenditures to GDP ratio, which surged due to the fiscal measures adopted to limit the adverse effects of the global crisis on Turkey in 2009, still hovers above pre-crisis levels notwithstanding the decline in subsequent years. Moreover, this ratio settled on an upward track in 2012. Having reached recent-highs in the second quarter of 2011, the central government budget revenues to GDP ratio trended downwards amid the slowdown in tax revenues, and remained unchanged in 2012. Despite the slowdown in tax revenues in 2012, budget revenues followed a relatively stable course on the back of hikes in non-tax revenues (Chart 6.1.2).



Central government primary expenditures posted a year-on-year increase by 17.4 percent in the January-September period of 2012. Current transfers and personnel expenditures, one of the major items in primary expenditures, soared by 21.4 and 18.8 percent, respectively; while purchases of goods and services fell by 0.9 percent. The decline in purchases of goods and services was mainly driven by the plunge in health expenditures. This was led by the coverage of green card holders under the general health insurance scheme, the expenditures of which are included in current transfers. Soaring current transfer expenditures were fuelled by the 25.6 percent increase in health, pension and social benefits. Financing of the budget deficit of SSI is accounted as an expenditure item under health, pension and social benefits. The SSI has showed a poor budget performance as of the onset of 2012 due to

reduced revenues collected as per the Law No. 6111 on restructuring of the premium liabilities as well as the transfer of health expenditures by green card holders to SSI. Accordingly, the financing of SSI by transfer from the central government budget increased by 55.2 percent in the first nine months of 2012. Soaring personnel expenditures in the first nine months of 2012 were mainly driven by rises in salaries and severance pay. Actual to target ratio in personnel expenditures reached 80.7 percent in September, pointing that the year-end target will be exceeded and personnel expenditures, which is a non-flexible expenditure item, should closely be monitored in the upcoming period as a risk item with respect to the central government budget (Table 6.1.2).

(Billion TL)				
	January- September 2011	January- September 2012	Rate of Increase (Percent)	Actual/Target (Percent)
Primary Expenditures	186.1	218.5	17.4	72.7
1. Personnel Expenditures	55.5	65.9	18.8	80.7
2. Government Premiums to SSI	9.4	10.9	15.4	76.3
3. Purchase of Goods and Services	20.5	20.4	-0.9	70.6
a) Defense and Security	6.0	6.8	13.3	64.6
b) Health Expenditures	4.0	0.4	-89.3	46.7
4. Current Transfers	80.0	97.2	21.4	74.6
a) Duty Losses	1.2	2.1	69.1	48.3
b) Health, Pension and Social Benefits	39.9	50.2	25.6	72.6
c) Agricultural Support	5.8	6.8	18.1	95.2
d) Shares Reserved from Revenues	22.8	25.1	10.2	74.2
5. Capital Expenditures	14.5	15.6	7.5	56.0
6. Capital Transfers	2.7	2.6	-3.2	60.8

In the first nine months of 2012, central government general budget revenues increased by 9.8 percent year-on-year. Tax revenues went up by 7.2 percent in the said period, while non-tax revenues expanded by 28.7 percent amid the high profit transfer by the CBRT (Table 6.1.3). The decline in the yearon-year tax collection under the Law No. 6111 on the restructuring of public claims put a cap on rising tax revenues. On the back of soaring firm profits in line with the high economic growth in 2011, corporate tax revenues boomed in the first five months of 2012. However, this boom was followed by a mild growth path in ensuing months resulting in a 6.3 percent increase in the first nine months of the year due to base effect driven by the restructuring. On account of the ongoing rise in registered employment, income tax revenues increased by 14.7 percent, thus partially compensating for the relatively low rate of increase in total tax revenues. Meanwhile, consumption-based tax revenues declined amid slowdown in the economic activity. In the first nine months of the year, SCT revenues rose by 7.5 percent, while domestic VAT revenues edged up by 2.7 percent. The decelerating rate of increase in SCT revenues was mainly attributed to the year-on-year decline in SCT collection on oil and natural gas products and motor vehicles. In the meantime, VAT on imports displayed a year-on-year decline amid the slowdown in imports.

	January- September 2011	January- September 2012	Rate of Increase (Percent)	Actual/Target (Percent)
General Budget Revenues	214.2	235.1	9.8	73.1
I-Tax Revenues	188.4	201.9	7.2	72.7
Income Tax	35.8	41.0	14.7	76.3
Corporate Tax	19.7	21.0	6.3	77.2
Domestic VAT	23.4	24.0	2.7	71.6
SCT	46.7	50.3	7.5	71.2
VAT on Imports	35.8	35.1	-1.9	65.1
II-Non-Tax Revenues	25.8	33.2	28.7	75.4
Enterprises and Property Revenues	7.5	12.4	65.7	134.1
Interests, Shares and Fines	14.7	16.2	10.2	74.1
Capital Revenues	2.4	1.9	-19.0	16.7

The rate of increase in real tax revenues, which trended downwards as of the third quarter of 2011, turned negative after a 10-quarter period due to the balancing between domestic and external demand as well as the base effect. Then, it dropped by 1.1 percent year-on-year in the third quarter following the 6.6 percent decline in the second quarter of 2012 (Chart 6.1.3). Consumptionbased tax revenues are the major tax items that are adversely affected from the balancing between domestic and external demand. Accordingly, in real terms, SCT revenues, which have a significant share in tax revenues, increased by 2.1 percent year-on-year in the third quarter of 2012, while domestic VAT revenues and VAT on imports fell by 3.8 and 13.7 percent, respectively (Chart 6.1.4).

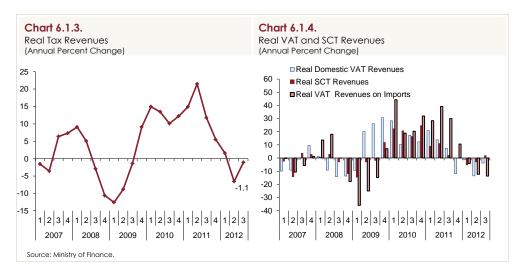
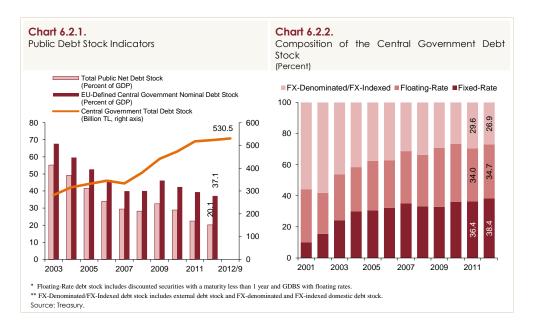


Table (1.2

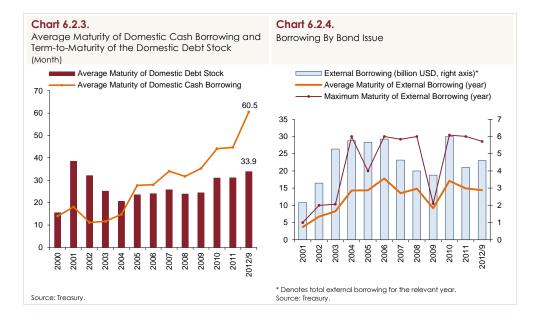
6.2. Public Debt Stock Indicators

Public debt stock indicators have been on an improving track since September 2012. Public debt ratios declined further; the real cost of borrowing stood at low levels; the average maturity of the debt stock was extended; the share of securities with sensitivity to interest and exchange rate was reduced; and domestic debt rollover ratio was lowered.

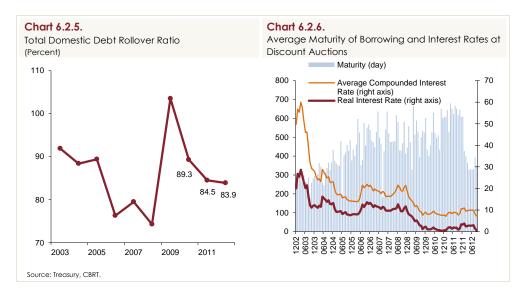
In the first half of 2012, both the ratio of total public net debt stock and EU-defined central government nominal debt stock to GDP were realized 2.3 percentage points lower than the year-end and reached 20.1 and 37.1 percent, respectively (Chart 6.2.1). Meanwhile, in September 2012, the central government debt stock remained unchanged from 2011 (Chart 6.2.1).



The Treasury has continued with its borrowing strategy to alleviate the sensitivity of the debt stock to liquidity, interest and exchange rate during September 2012 as well. Accordingly, the share of fixed-rate securities in the total debt stock picked up (Chart 6.2.2). The ratio of public deposits to average monthly debt service reached 293.7 percent. Term-to-maturity of the domestic debt stock hit 33.9 months amid the notable year-on-year increase in the average maturity of the domestic cash borrowing (Chart 6.2.3). External borrowing by bond issues amounted to USD 4.6 billion, with the average maturity remaining unchanged at 14.4 years since 2011 (Chart 6.2.4).



Domestic debt rollover ratio realized as 83.9 percent in the first eight months of 2012 (Chart 6.2.5). According to the Treasury's domestic borrowing strategy announced for October-December 2012 period, this ratio is envisioned to decline to 84.1 percent at year-end. The average real interest rate at discount auctions, which slumped between 2009 and 2011, follows a low course (Chart 6.2.6).



Central Bank of the Republic of Turkey

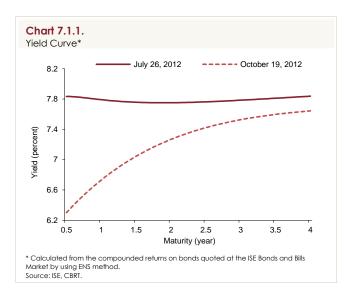
7. Medium-Term Projections

This Chapter summarizes the underlying forecast assumptions and presents the medium-term inflation and output gap forecasts as well as the monetary policy outlook over the upcoming 3-year horizon.

7.1. Current State, Short-Term Outlook and Assumptions

Monetary Conditions

Following the decline in the CBRT's average funding rate after the release of the July Inflation Report as well as the favorable course of global risk perceptions, short-term money market rates trended downwards and the slope of the yield curve turned positive (Chart 7.1.1). Recent hikes in administered prices led interest rates to display a slight increase.



Inflation

On soaring unprocessed food prices above seasonal averages besides higher-than-envisioned rise in international oil prices, annual CPI inflation went up to 9.2 percent in the third quarter of 2012, remaining above the projections presented in the July Inflation Report (Chart 1.2.1). This is mainly attributed to Decisions on additional fiscal measures taken on September 22, 2012 in consideration of the budget developments also affected the third-quarter, thus fuelling this increase (Box 3.1). In this period, annual inflation in core goods maintained a downward track, while services inflation remained unchanged. Influenced also by the stagnating economic activity, core inflation indicators exhibited a downward course.

In the third quarter, unprocessed food prices increased faster than historical averages and remained above July Inflation Report forecasts, while processed food inflation slightly slowed down. Hence, food price inflation increased in this quarter on account of the rise in unprocessed food inflation, and hovered slightly above the July Inflation Report forecasts. In the last quarter of the year, the annual inflation in unprocessed food prices is expected to plunge, while upside risks on processed food prices will prevail. Overall, food price inflation assumption for end-2012 is preserved at 7.0 percent with a cautious stance.

Revisions to 2012 Assumptions			
		October 2012	July 2012
	2012Q2	-1.65	-1.45
Output Gap	2012Q3	-2.00	-1.63
Food Price Inflation (Year-end Percent Change)	2012-2013	7.0	7.0
Import Prices	2012	-1.9	-3.9
(Average Annual Percent Change, USD)	2013	0.2	-1.8
Oil Prices	2012	112	110
(Annual Average, USD)	2013	107	100
Export-Weighted Global Production Index	2012	1.2	1.1
(Average Annual Percent Change)	2013	1.7	2.1

Demand Conditions

Table 7.1.1.

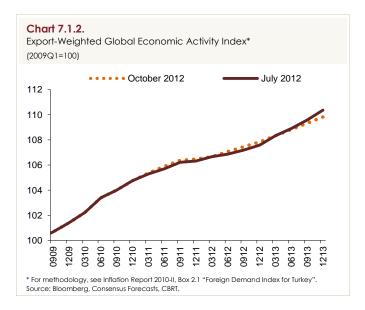
In the second quarter of 2012, economic activity followed a weaker course than envisaged in the July Inflation Report. Domestic demand lost pace due to investment, while net exports remained below projections on account of the developments in global growth outlook in this period.

Third-quarter data suggest that economic activity continues to slow down. Industrial production has recently been volatile, while production recorded a quarter-on-quarter decline. Nevertheless, in the last quarter, economic activity is estimated to improve quarter-on-quarter and the recent monetary policy decisions will bolster the growth outlook.

The sluggish course of global economic activity accompanied by the persisting problems in financial markets remain as a downward risk factor on

external demand. Due to the deteriorating global growth outlook since the release of the July Inflation Report, export-weighted global production index was slightly revised downwards (Chart 7.1.2). Hence, no apparent recovery is expected in external economies in the forthcoming period and global uncertainties are estimated to further curtail external demand. Meanwhile, exports are envisioned to maintain their relatively favorable course in the forthcoming period owing to the market and product diversification.

On account of these developments in domestic and external demand indicators, output gap forecasts were revised downwards in the inter-reporting period (Table 7.1.1).

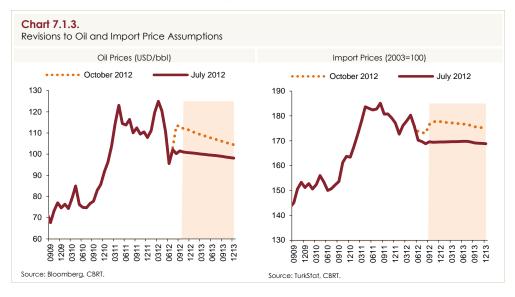


Import Prices

In the third quarter of 2012, oil prices hovered above the assumptions of the July Inflation Report mainly due to supply-side factors. Accordingly, the assumption for average oil price, which was USD 110 in the July Inflation Report, was revised upwards to USD 112 for 2012. Although this seems to be a limited revision for the entire year, average oil prices were remarkably raised for the second half of the year. Similarly, assumptions for 2013 was revised upwards in the inter-reporting period, and average oil price was assumed to be USD 107 in 2013 (Table 7.1.1 and Chart 7.1.3).

A similar negative course prevailed in overall import prices. In current projections based on futures prices, import prices for 2012 were revised upwards

in the inter-reporting period (Chart 7.1.3). Along with the exchange rate developments, these revisions in oil and import prices pushed the end-2012 inflation forecast by 0.40 percentage points in total.



Fiscal Policy and Tax Adjustments

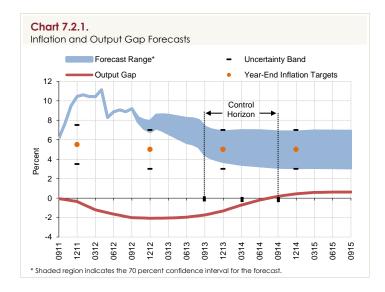
The most significant development that called for a revision in the shortterm inflation projections since the release of the July Inflation Report proved to be the recent tax increases and adjustments to energy prices. These arrangements added 0.9 percentage points to end-2012 inflation forecast.

Medium-term projections are based on the assumption that in early 2013, tobacco prices will increase at rates implied by the tax adjustments announced in October 2011. Furthermore, other tax adjustments and administered prices are assumed to be consistent with the inflation targets and the automatic pricing mechanisms.

Regarding the fiscal outlook, medium-term inflation forecasts take the revised projections of the MTP as given. Accordingly, the fiscal discipline is expected to be maintained and the structural budget balance is assumed to remain broadly unchanged in the forthcoming period.

7.2. Medium-Term Outlook

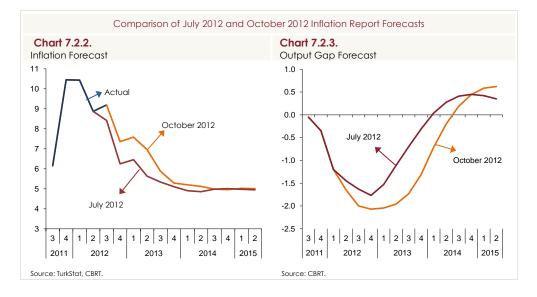
Forecasts are based on the assumption that monetary policy will maintain its cautious and flexible stance, and annual loan growth rate will be around 14 percent by the end of the year. Accordingly, inflation is expected to be, with 70 percent probability, between 6.9 and 7.9 percent (with a mid-point of 7.4 percent) at the end of 2012, and between 3.8 and 6.8 percent (with a mid-point of 5.3 percent) at the end of 2013. Inflation is expected to stabilize around 5 percent in the medium term (Chart 7.2.1).



In sum, the year-end inflation forecast for 2012 was revised upwards by 1.2 percentage points in the inter-reporting period (Chart 7.2.2). 0.4 percentage points of this increase reflected the upward revision to oil and import prices as well as exchange rate developments, while 0.9 percent was owed to public price hikes that were unforeseen in the previous reporting period. The increase by 0.1 percent due to import prices and public price hikes will be compensated by the downward revision to output gap (Table 7.1.2).

Table 7.2.1 Sources of Revision to 2012 Year-end Inf	lation Forecast
Oil and Import Prices	+0.4 percent
Tax and Administered Price Adjustments	+0.9 percent
Output Gap	-0.1 percent
Total	+1.2 percent

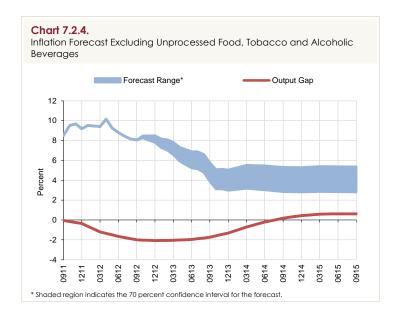
Due to price adjustments in energy and other administered products in September besides the upward revision to import price assumptions, inflation is envisioned to hover above the July Inflation Report forecasts during 2013 (Chart 7.2.2). Starting from October 2013, inflation is expected to plummet as



the base effects due to public price adjustments taper off and is envisioned to near the target of 5 percent at end-2013.

Output gap forecasts are revised downwards starting from the second quarter of 2012 due to weaker course of domestic demand and global economy than envisaged in the July Inflation Report as well as heightened uncertainy regarding global economy (Chart 7.2.3). The higher support provided by aggregate demand conditions to disinflation in the inter-reporting period is estimated to restrain secondary effects stemming from public price adjustments.

Unpredictable price fluctuations in items beyond the domain of the monetary policy, such as unprocessed food and tobacco are among major factors of deviations in inflation forecasts. Hence, inflation forecasts excluding unprocessed food and tobacco are publicly announced. Forecasts are based on the assumption that year-end unprocessed food inflation will be 4.5 percent. Accordingly, inflation forecasts excluding unprocessed food, tobacco and alcoholic beverages are presented in Chart 7.2.4. The inflation indicator, as measured above, is expected to maintain its downward path it has assumed since May 2012, but will slightly accelerate in the last quarter due to adjustments to energy and administered prices, stabilizing back again in the last quarter of 2013 slightly below 5 percent.



Comparison of the CBRT's Forecasts with Inflation Expectations

It is critical that economic agents, being aware of the temporary factors, should focus on the underlying medium-term inflation, and therefore, take the inflation target as a benchmark in their pricing plans and contracts. In this respect, to serve as a reference guide, the CBRT's current inflation forecasts should be compared to inflation expectations of other economic agents. Accordingly, year-end inflation expectations as well as 12-month and 24-month ahead inflation expectations of the Survey of Expectations' respondents are slightly above our baseline scenario forecasts(Table 7.2.1).

	recasts and Expecta	tions	
	CBRT Forecast	CBRT Survey of Expectations*	Inflation Target**
2012 Year-end	7.36	7.29	5.0
12-month ahead	5.58	6.70	5.0
24-month ahead	4.98	6.22	5.0

Source: CBRT.

7.3. Risks and Monetary Policy

The expectation that inflation will overshoot the target for an extended period coupled with the recent hikes in energy prices necessitate a close monitoring of the pricing behavior. The baseline scenario in the Report assumes that second-round effects will be limited. On the other hand, it should be noted that necessary measures will be taken should a different outlook unfold. Ongoing uncertainty regarding the global economy and the ensuing volatility in capital flows requires preserving the flexibility of monetary policy in either direction. Uncertainties still persist regarding deleveraging of public, household, and banking sector balance sheets. The protracted nature of the global recovery has been prompting the extension of quantitative easing packages across advanced economies. Despite the steps taken for the resolution of problems in the Euro Area, risk appetite remains highly sensitive to any new developments due to ongoing fragilities in the financial system, elevated levels of borrowing costs across peripheral economies and the weakening growth outlook. Therefore, it is highly likely that short-term capital inflows will continue to be volatile in the forthcoming period.

Measures taken by advanced economies during the third quarter have eased the tail risks and alleviated the fluctuations in the global financial system. However, uncertainties regarding the implementation of the policy measures remain critical. The CBRT possesses adequate tools at its disposal to resort to under this uncertain environment.

A prolonged weakness in global economic growth may prompt major central banks to sustain their monetary easing packages. Extension of the duration of new packages would feed into macro financial risks in emerging economies like Turkey. In such a case, a resurge in short-term capital inflows may slow down the rebalancing process through rapid credit growth and appreciation pressures on the domestic currency. Should such a risk materialize, the CBRT may keep short-term rates at low levels, while implementing tightening through macroprudential tools such as reserve requirements. Moreover, the automatic stabilizing nature of the Reserve Option Mechanism will support financial stability.

Quantitative easing policies at a global scale also pose risks to commodity prices. However, upside risks on inflation could be contained in such a case, as periods of quantitative easing typically coincide with a weakening in the global economy. However, the CBRT will take the necessary tightening measures, should the increase in commodity prices prove persistent and consequently lead to a deterioration in the pricing behavior.

On the other hand, aggregate demand and commodity prices may increase faster than expected, should the measures taken towards the solution of problems regarding the global economy be completed sooner and more decisively than envisaged. Materialization of such a risk would possibly require a tightening using all policy instruments, as it would mean increased pressures on the medium-term inflation outlook.

Unprocessed food price developments may lead to a more-thanpredicted favorable inflation outlook at the end of 2012. Despite the favorable course of leading indicators, a rather cautious approach was adopted, assuming that the rate of increase in unprocessed food prices will be close to the past years' average. Year-end inflation may be lower than projected in the baseline scenario, should unprocessed food prices display a more favorable course than envisaged.

The CBRT monitors fiscal policy developments closely while formulating its monetary policy strategy. Forecasts presented in the baseline scenario take the framework outlined in the MTP as given. In this respect, it is assumed that fiscal discipline will be sustained and there will be no unanticipated hikes to administered prices. A revision in the monetary policy stance may be considered, should the fiscal stance deviate significantly from this framework and consequently have an adverse effect on the medium-term inflation outlook.

Prudent fiscal policy is crucial for preserving the resilience of our economy against existing global uncertainties. Strengthening the structural reform agenda that would ensure the sustainability of the fiscal discipline and reduce the savings deficit would support the relative improvement of Turkey's sovereign risk, and thus facilitate price stability and financial stability in the medium term. This will also provide more flexibility for monetary policy and contribute to social welfare by keeping interest rates of long-term government securities at low levels. In this respect, steps towards implementation of the structural reforms envisaged by the Medium Term Program remain to be of utmost importance. Central Bank of the Republic of Turkey

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AMA	Automotive Manufacturers Association	
bbl	barrel	
BRSA	Banking Regulation and Supervision Agency	
CBRT	Central Bank of the Republic of Turkey	
CPI	Consumer Price Index	
ECB	European Central Bank	
EMBI	Emerging Markets Bond Index	
EPFR	Emerging Portfolio Fund Research	
EU	European Union	
Fed	Federal Reserve Bank	
FX	Foreign Exchange	
GDP	Gross Domestic Product	
MF	International Monetary Fund	
SE	Istanbul Stock Exchange	
MPC	Monetary Policy Committee	
MSCI	Morgan Stanley Capital International	
MTP	Medium-Term Program	
OECD	Organization for Economic Co-Operation and Development	
O/N	Overnight	
OPEC	Organization of the Petroleum Exporting Countries	
PMI	Purchasing Managers Index	
PPI	Producer Price Index	
SCA	Special CPI Aggregate	
SCT	Special Consumption Tax	
SME	Small and Medium-Sized Enterprises	
S&P	Standard and Poor's	
SSI	Social Security Institution	
TEA	Turkish Exporters' Assembly	
TEPAV	Economic Policy Research Foundation of Turkey	
TEPE	Retail Confidence Indicator	
rL .	Turkish Lira	
FurkStat	Turkish Statistical Institute	
UK	United Kingdom	
US	United States	
USA	United States of America	
USD	United States Dollar	
VAT	Value Added Tax	
VIX	Volatility Index	
WGMA	White Goods Manufacturers Association	

2012 Yılı Para Politikası Kurulu Toplantıları, Inflation Report ve Finansal İstikrar Raporu Takvimi		
PPK Toplantıları	Inflation Report	Finansal İstikrar Raporu
24 Ocak 2012 (Salı)	31 Ocak 2012 (Salı)	
21 Şubat 2012 (Salı)		
27 Mart 2012 (Salı)		
18 Nisan 2012 (Çarşamba)	26 Nisan 2012 (Perşembe)	
29 Mayıs 2012 (Salı)		31 Mayıs 2012 (Perşembe)
21 Haziran 2012 (Perşembe)		
19 Temmuz 2012 (Perşembe)	26 Temmuz 2012 (Perşembe)	
16 Ağustos 2012 (Perşembe)		
18 Eylül 2012 (Salı)		
18 Ekim 2012 (Perşembe)	24 Ekim 2012 (Çarşamba)	
20 Kasım 2012 (Salı)		29 Kasım 2012 (Perşembe)
18 Aralık 2012 (Salı)		