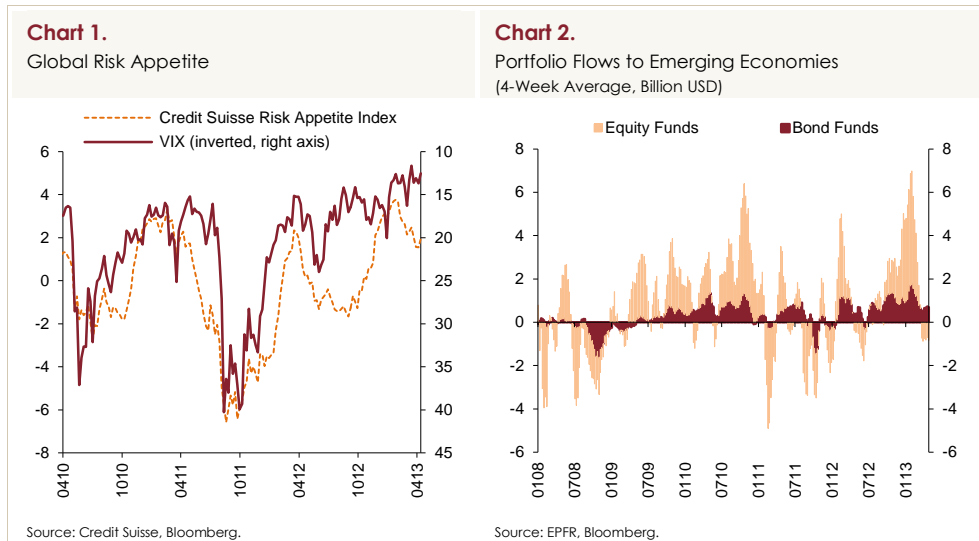


1. Overview

Global economic activity continued to be weak in the first quarter of the year. Meanwhile, risk appetite and capital flows displayed a volatile outlook amid persisting uncertainties regarding the global economy (Charts 1 and 2). Problems related to the Euro Area and uncertainties regarding the economic policies of advanced economies stood out as the leading factors behind the increase in the volatility of the risk appetite in this period. While the recent additional monetary easing by the BoJ stimulated the appetite for investment in risky assets, developments in the Southern Cyprus and Italy proved that fragilities in the global economy remained significant.

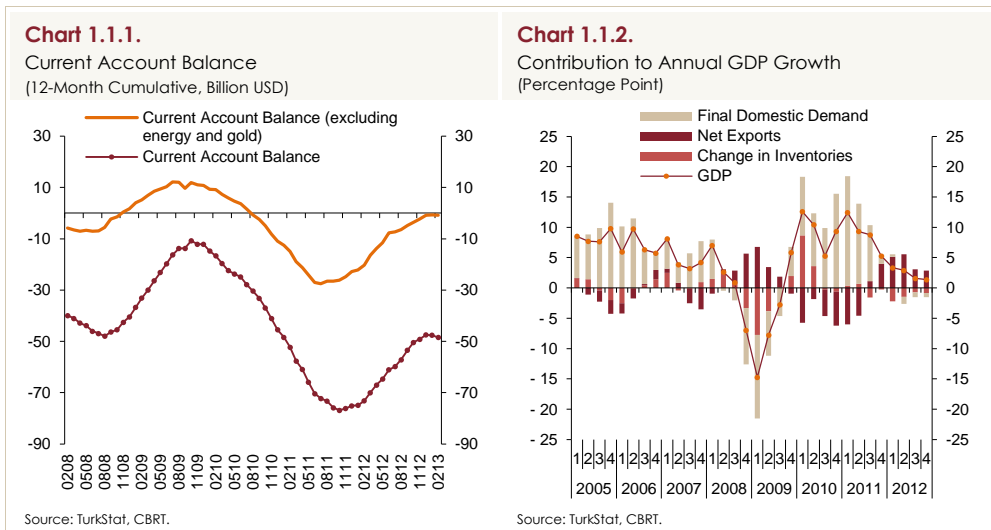


Sustained quantitative easing in advanced economies causes global rates to remain at historic lows, and fuels capital flows towards emerging economies. On the other hand, lingering fragilities in the global economy lead to an unstable risk appetite. This outlook for global liquidity and risk appetite bring about large and volatile portfolio flows towards emerging economies (Chart 2). This underlines the importance of maintaining a flexible policy framework with multiple instruments.

1.1. Monetary Policy and Monetary Conditions

The CBRT has designed and implemented a new policy framework that takes into account macro financial risks since the end of 2010. Policies implemented in this period aimed at managing macro financial risks without prejudice to price stability in the medium term. To this end, additional policy instruments were developed. Under the new strategy, monetary policy put special emphasis on containing the potential excessive volatility in domestic credit and exchange rates caused by capital flows. In this respect, while credit growth and its volatility have been brought down, exchange rate has been aligned closer with economic fundamentals.

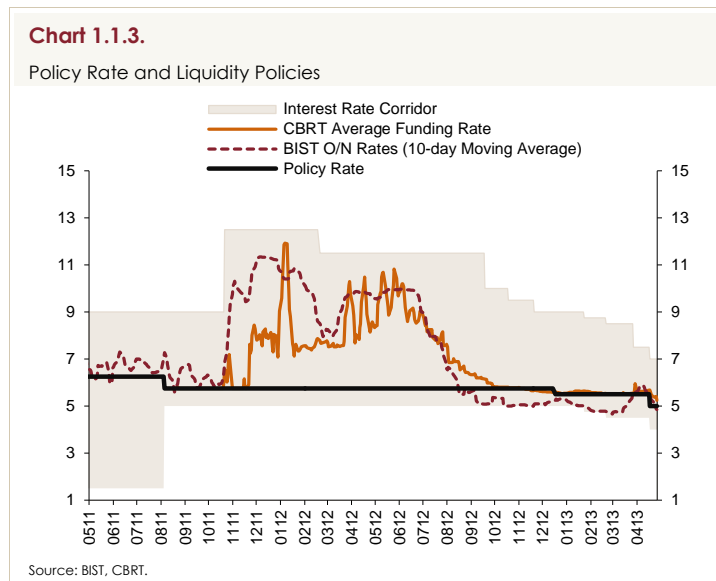
Owing to these policies, 2012 was marked as a year of re-balancing. The composition of growth displayed a healthier outlook, while the current account continued to improve (Chart 1.1.1). The contribution of net exports to growth has increased markedly (Chart 1.1.2).



In the second half of 2012, credits decelerated further, domestic demand remained subdued and inflation followed a downward trend. Accordingly, the CBRT adopted a more accommodative monetary policy stance by gradually increasing the liquidity injected to the market. On the other hand, as of late 2012, accelerated capital inflows, revived credit growth and the appreciation pressure on the Turkish lira led the CBRT to re-focus on macro financial risks. The MPC stated that in such an environment, the proper policy would be to keep interest rates low while preserving macro prudential measures. Accordingly,

short-term interest rates were lowered in the first quarter of the year, while a moderate tightening was sustained through required reserves (Chart 1.1.3).

The winding down of risks regarding the Euro Area owing to the support of the ECB as well as the more effective use of the ROM alleviated the need for a wide interest rate corridor as of end-2012. Therefore, the CBRT gradually narrowed the interest rate corridor by lowering the overnight lending rate (Chart 1.1.3).

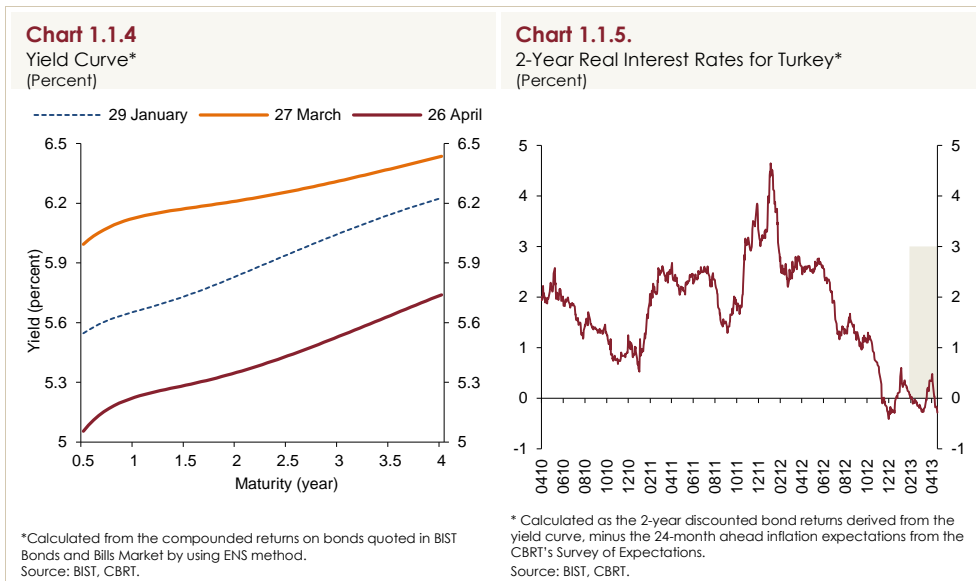


In order to slow down the credit growth rate, which remained well above the reference value of 15 percent, the CBRT normalized its liquidity stance in late February. In fact, overnight market rates have lately started hovering around the policy rate (Chart 1.1.3). Moreover, a moderate tightening was sustained through required reserves so as to contain the excessively expansionary effects of capital inflows on credit growth. Strong capital inflows in this period necessitated further increases in ROC's, ensuring a more effective use of ROM.

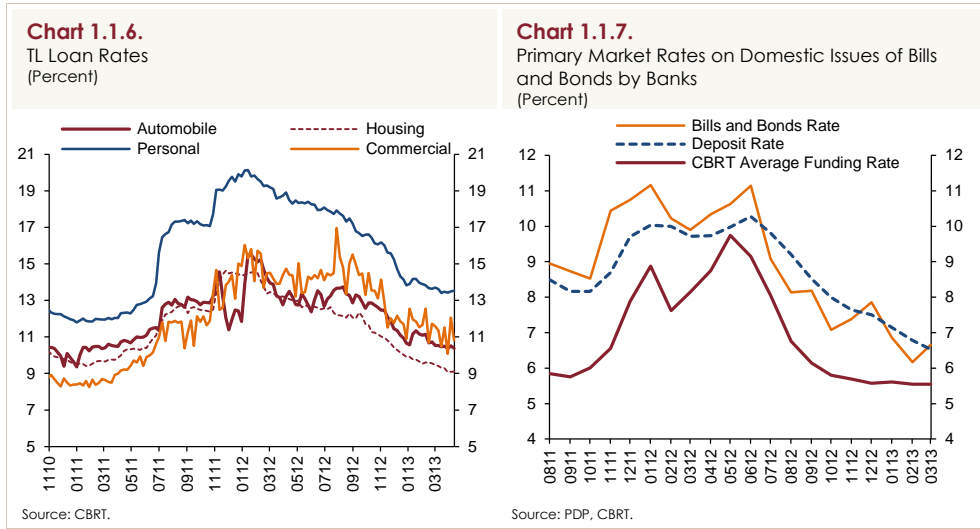
In the first quarter of the year, the MPC emphasized ongoing uncertainties regarding the global economy as well as the volatility in capital flows, and maintained its stance that monetary policy should be kept flexible in both directions. In this context, it was re-iterated that the impact of the measures undertaken on credit, domestic demand, and inflation expectations will be

monitored closely and the funding amount will be adjusted in either direction, as needed.

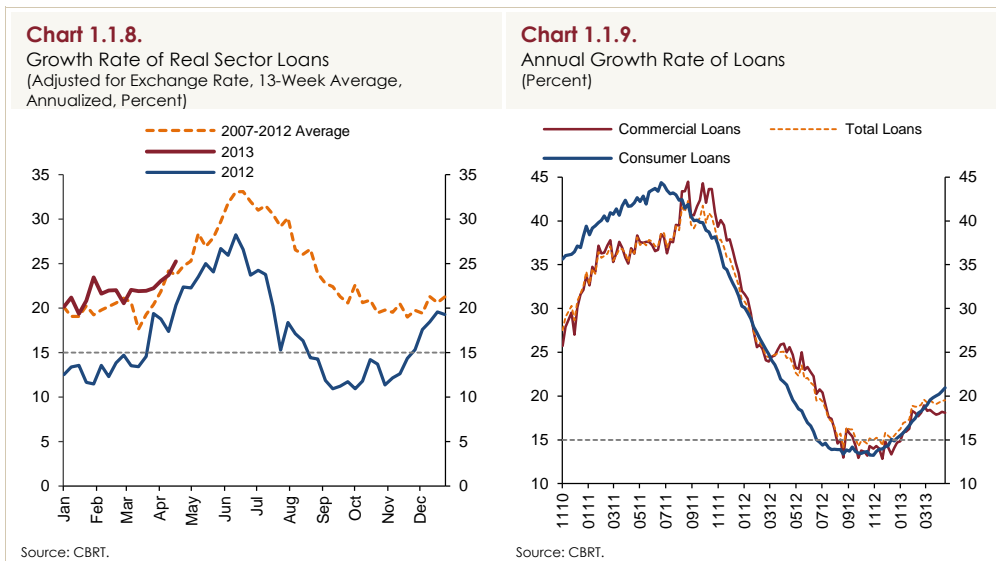
Parallel to the volatility in the risk appetite, market rates also followed a volatile course in the first quarter of the year. Following the publication of the January Inflation Report, uncertainties in the Euro Area shifted the yield curve upwards. More recently, capital inflows re-accelerated owing to the quantitative easing package announced by the BoJ. Furthermore, the CBRT's policy rate cut in April as well as the favorable risk perceptions regarding Turkey also supported the downward movement of interest rates. Due to these developments, the yield curve shifted downwards for each maturity compared to the previous reporting period (Chart 1.1.4). Real interest rates also displayed a similar movement and continued to hover around historically-low levels (Chart 1.1.5).



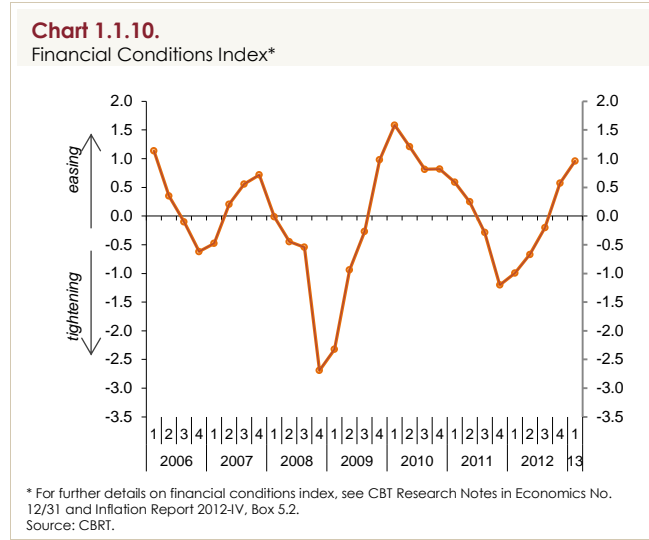
On account of easing external financing conditions and the CBRT's monetary policy decisions, credit rates remained on a downward track in recent months. Consumer loan rates declined further in line with the fall in long-term market rates, while commercial loan rates declined more markedly with the lowering of the upper bound of the interest rate corridor (Chart 1.1.6). Moreover, deposit rates and the bill and bond rates issued by banks also trended downwards in the first quarter of the year, following the fall in the CBRT's average funding rate (Chart 1.1.7).



Credits have re-accelerated as of late 2012. Total credit growth has recently converged to past years' average (Chart 1.1.8). Against this background, annual credit growth rates have been hovering above the reference value (Chart 1.1.9).



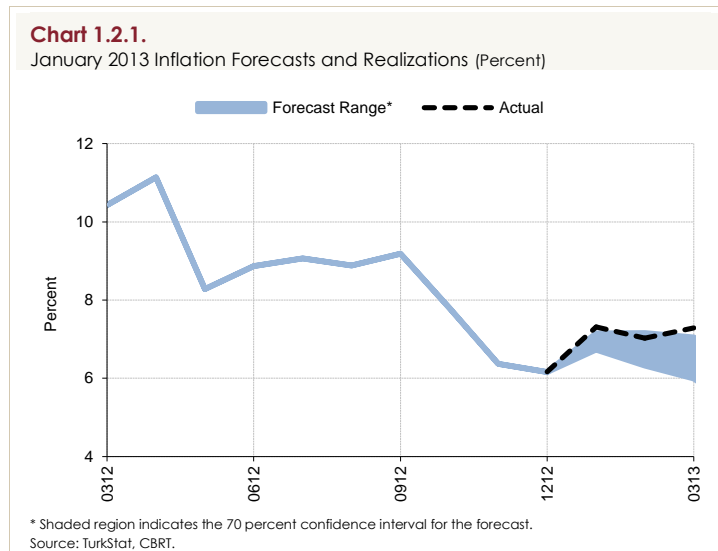
In sum, strong capital flows and falling interest rates led the FCI to improve in the first quarter of the year (Chart 1.1.10).



1.2. Macroeconomic Developments and Main Assumptions

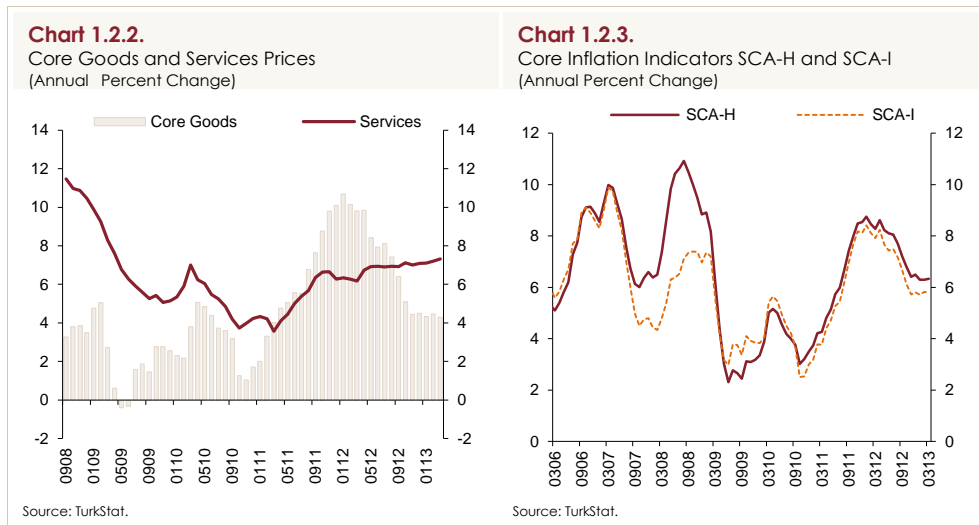
Inflation

Inflation overshoot the forecasts in the first quarter of 2013, and climbed to 7.3 percent (Chart 1.2.1). The higher-than-envisaged increase in inflation was mainly driven by unprocessed food prices, which were mentioned in the January Inflation Report as an upside risk. Meanwhile, core inflation indicators also remained slightly above expectations.



The contribution of exchange rate developments to disinflation declined in this period. This, coupled with a partial recovery in domestic demand, slowed

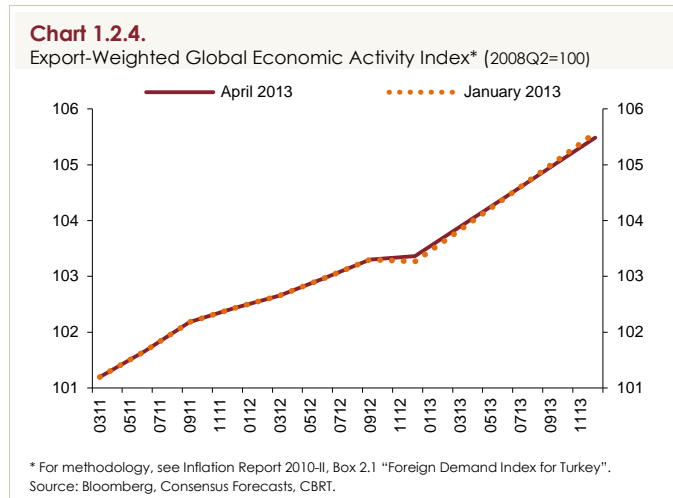
down the decline in the inflation rate of core goods prices. On the other hand, the underlying trend of services prices slightly picked-up (Chart 1.2.2). Accordingly, core inflation indicators remained flat in the first quarter (Chart 1.2.3). As core inflation indicators stood above expectations, the initial point of inflation forecasts was slightly revised upwards. This revision added around 0.2 percentage points to the year-end inflation forecast.



Supply and Demand

National income data regarding the last quarter of 2012 point to a decline in domestic demand due to private investment demand. Demand conditions in this period followed a slightly weaker course compared to the projections of the January Inflation Report. Meanwhile, the first quarter data indicated a mild pick-up in the consumption demand and a notable rebound in investment. Recently, sustained support of financial conditions, improvement in confidence indices and the upward trend in credits signal that the recovery will continue in the second quarter. Thus, forecasts were based on an outlook entailing a slightly weaker aggregate demand in 2012 compared to the previous reporting period, while keeping projections for 2013 broadly unchanged.

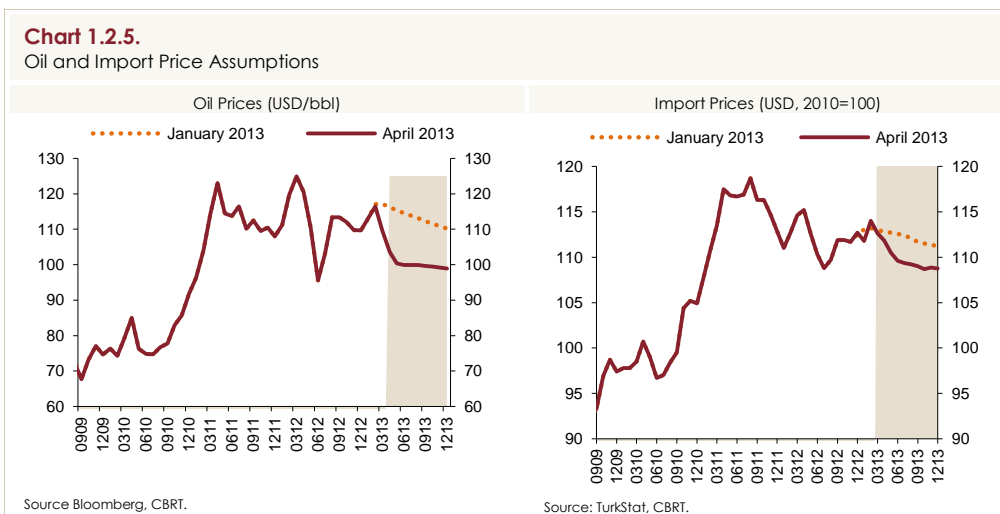
External demand remained subdued in the first quarter of 2013. Despite the slowdown in the Euro Area economic activity, global growth as well as export-weighted global growth index remained almost unchanged (Chart 1.2.4).



In sum, domestic and external demand developments do not suggest any notable change in the impact of demand conditions on inflation forecasts compared to the previous reporting period.

Energy, Import and Food Prices

Import prices remained below the projections of the January Inflation Report (Chart 1.2.5). In particular, commodity prices have recently displayed a higher-than-envisaged decline. In this respect, the assumption for the average oil price in 2013, which was USD 108 in the January Inflation Report, was revised downwards to USD 103 in line with the average of the futures prices in the first three weeks of April (Chart 1.2.5). The effect of this revision on the inflation forecast for end-2013 was around 0.2 percentage points on the downside. On the other hand, the projection for the annual rate of increase of food prices was kept unchanged at 7 percent as in the previous reporting period.



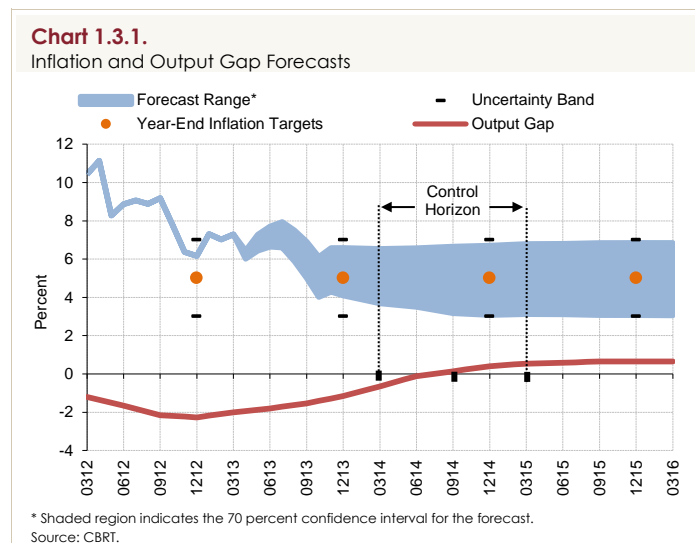
Fiscal Policy and Tax Adjustments

Medium-term projections are based on the assumption that no additional tax adjustments will be introduced to tobacco and energy products in the rest of the year. 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 policy stance, medium-term inflation forecasts take MTP projections 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. Thus, there has been no change in end-2013 inflation forecast stemming from the fiscal policy.

1.3. Inflation and Monetary Policy Outlook

Medium-term forecasts envisage an outlook where macro financial risks arising from the recent surge in capital inflows are contained. In other words, the policy stance behind the forecast is one in which interest rates are kept low, while macro prudential measures are sustained. In this respect, it is assumed that annual loan growth rate will hover around 15 percent. Accordingly, inflation is expected to be, with 70 percent probability, between 4.1 percent and 6.5 percent (with a mid-point of 5.3 percent) at end-2013; and between 3.1 percent and 6.7 percent (with a mid-point of 4.9 percent) at end-2014. Inflation is expected to stabilize around 5 percent in the medium-term (Chart 1.3.1).



In sum, given the assumptions underlying the inflation forecasts and external conditions, the upward revision of inflation at the initial point has been compensated by the downward revision in commodity prices. Accordingly, inflation forecast for end-2013 was kept unchanged in the inter-reporting period and year-end inflation forecast was kept at 5.3 percent.

Inflation is expected to fluctuate in the short term due to the base effect in energy prices. Accordingly, annual inflation is estimated to decrease significantly in April, and increase gradually in the May-July period. The downward trend in inflation is expected to resume after July, bringing inflation down to 5.3 percent at the year-end (Chart 1.3.1). Meanwhile, core inflation indicators are projected to remain on a mild track.

Although the year-end forecast was kept unchanged, inflation path was revised upwards in the short term mainly because of the recently soaring unprocessed food prices. Inflation is projected to converge to the path presented in the January Inflation Report by the year-end (Chart 1.3.2).

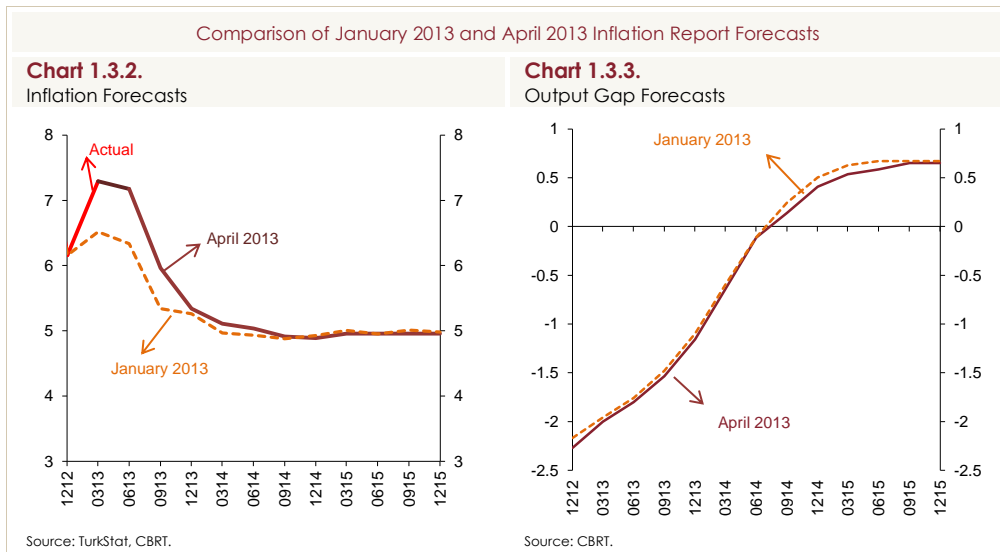
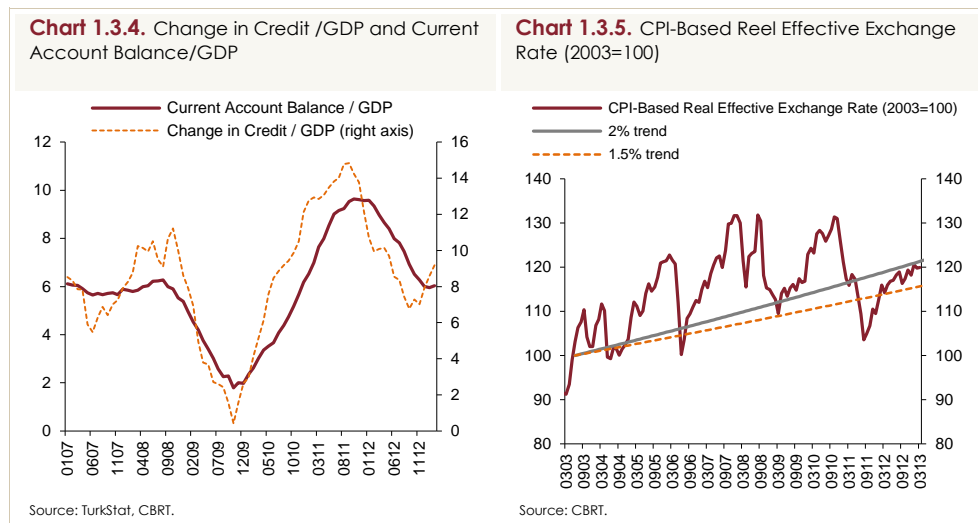


Chart 1.3.3 presents the revision in output gap forecasts. Due to weaker-than-expected economic activity in the last quarter of 2012, the initial point of the output gap forecasts was slightly revised downwards compared to the previous Report. Nevertheless, in line with the expected recovery in domestic demand, it was assumed that output gap would stay close to the path envisaged in January over the course of the year.

It should be underlined once again that inflation forecasts and the policy stance are formulated in consideration of macro financial risks. Forecasts are based on an approach which not only aims at bringing inflation close to the target of 5 percent, but also warrants stable economic growth. In the forthcoming period, bringing inflation close to the target without a deterioration in external balance requires that credit should be growing at a reasonable rate, while domestic currency should not be appreciating excessively. Therefore, it is assessed that accommodating the global low interest rate environment while continuing with a stance to increase reserves is the optimal policy mix.



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 Monetary Policy

Developments in the first quarter of the year highlight the ongoing fragility in the global economy. During this period, data regarding global economy did not display a stable outlook, whereas economic policy uncertainty in advanced economies has continued. The policy framework designed by the CBRT and the instruments developed in this respect provide a flexible framework to contain the adverse impact of the global shocks on the domestic economy.

Capital inflows have re-accelerated in the recent period. Improved perceptions regarding Turkish economy and the monetary expansion package announced by the Bank of Japan suggest that portfolio flows may continue to exhibit a strong pattern in the forthcoming period. The possibility of further inflows of capital as well as weak global demand has the potential to increase macro financial risks through a deterioration in external balance. Should this scenario materialize, the CBRT will continue to keep short term interest rates at low levels, while tightening through reserve requirements and ROM.

On the other hand, the ongoing uncertainty regarding Euro Area suggests that risk appetite may continue to be volatile. Given the quantitative easing packages implemented by advanced economies, the impact of the fluctuations in the risk appetite on capital flows may even increase in the forthcoming period. Although the ROM plays a stabilizing role against possible shocks, ongoing uncertainties regarding the global economy and the volatility in capital flows necessitate the monetary policy to remain flexible in both directions. Therefore, the impact of the recent measures undertaken on credit, domestic demand, and inflation expectations will be monitored closely, and the funding amount will be adjusted in either direction as needed.

On the other hand, monetary policy may normalize in advanced economies, 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 may require a tightening using all policy instruments, since it would lead to a faster than expected rise in aggregate demand and import prices.

The baseline forecasts in the Report suggest that keeping inflation close to the target without a deterioration in the external balance would require a mild increase in the domestic demand along with a reasonable growth rate of credit. However, it is likely that the domestic demand and credit may display a stronger course than envisaged. Recently, the gradual easing in financial conditions indicates upside risks regarding credit growth. The CBRT will closely monitor the developments in the domestic demand and credit, and take the necessary measures to prevent a deterioration in the pricing behavior using the instruments at its disposal.

The assumption regarding food prices was kept unchanged in the baseline scenario. However, the volatile course of unprocessed continues to pose risks regarding inflation outlook. The CBRT will not respond to volatility in unprocessed food prices, yet will deliver the necessary tightening should this lead to a persistent increase and a deterioration in the pricing behavior. On the other hand, the recent slowdown in global demand and developments regarding commodity prices offset the upside risks arising from food prices.

The CBRT monitors fiscal policy developments and tax adjustments closely, with regard to their effects on the inflation outlook. 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 and financial sector policies are crucial for preserving the resilience of our economy against existing global imbalances. Strengthening the structural reform agenda that would ensure the sustainability of the fiscal discipline and reduce the savings deficit would support macroeconomic stability in the medium term. This will also provide more flexibility for monetary policy and improve social welfare by keeping interest rates of long-term government securities persistently at low levels. In this respect, implementation of the structural reforms envisaged by the MTP remains to be of utmost importance.

Box
1.1

Credit Impulse and the Business Cycle

Credits gained importance in Turkey as a policy variable by the adoption of a policy approach that observes financial stability from a macro perspective at end-2010. Accordingly, credit growth has gradually been aligned with financial stability in the recent years owing to the implemented macroprudential and monetary policies. Although the observed slowdown in domestic demand is considered to a favored and healthy correction, the below-potential growth of the GDP in 2012 resulted in a highlighted relationship between credit policies and economic growth. Based on Kara and Tiryaki (2013), this Box introduces and calculates "credit impulse" in order to contribute to the evaluation of the relationship between credits and economic activity.

Credit Impulse

The initial recovery in final domestic demand without an increase in the credit stock is called "non-credit recovery" in the economic literature, and this is especially observed during recovery periods following financial crises. Biggs, Mayer and Pick (2009) provide a theoretical explanation to this observation through a simple model, and demonstrate that rather than credit stock, new credit utilization may occasionally be more influential on the relationship between credits and economic growth. The authors express the relationship between aggregate demand growth and credits as follows:

$$\frac{\Delta Y_t}{Y_{t-1}} = (1 - \delta) \frac{\Delta D_t - \Delta D_{t-1}}{Y_{t-1}} + (2\delta - r) \frac{\Delta D_t}{D_{t-1}} \frac{D_{t-1}}{Y_{t-1}}. \quad (1)$$

In this equation, Y_t denotes GDP, D_t denotes credit stock, ΔD_t denotes the change in credit stock (net credit utilization), δ denotes the depreciation of the capital stock, and r denotes the interest rate. The first term on the right-hand side of the equation shows the ratio of the change in credit utilization to the national income. As this term is defined as the change of the change in credits, i.e. the second-order derivative, it will be called "credit impulse". The second term in the equation gives the credit growth rate weighted by the ratio of credits to the national income. As also underlined in Kara, Küçük, Tiryaki and Yüksel (2013), this variable, which is directly related to financial stability, corresponds to "net credit utilization/GDP" ($\Delta D/Y$), and it is expected to follow a stable course for indebtedness ratios to be robust.

The above equation and these empirical findings are compatible with the general economic intuitions. Being a flow variable, aggregate spending are supposed to be more closely related to flow data like net credit utilization, as opposed to stock data on credits.¹ Therefore, the rate of change in aggregate spending (GDP growth) should be more closely related to the change in net credit utilization (credit impulse).

The Relationship Between Credit Impulse and Economic Growth

In order to examine the relationship between credits and GDP growth in Turkey, firstly, credit impulse and net credit utilization/GDP variables are constructed based on the above equation. Considering the difficulties in the seasonal adjustment of the GDP and credit series, the above equation was adjusted to show quarterly year-on-year changes. For example, credit impulse for 2011Q4 is defined as:

$$KI_{2011Q4} = \frac{(D_{2011Q4} - D_{2010Q4}) - (D_{2010Q4} - D_{2009Q4})}{Y_{2010Q4} + Y_{2010Q3} + Y_{2010Q2} + Y_{2010Q1}}, \quad (2)$$

while net credit utilization is constructed as following:

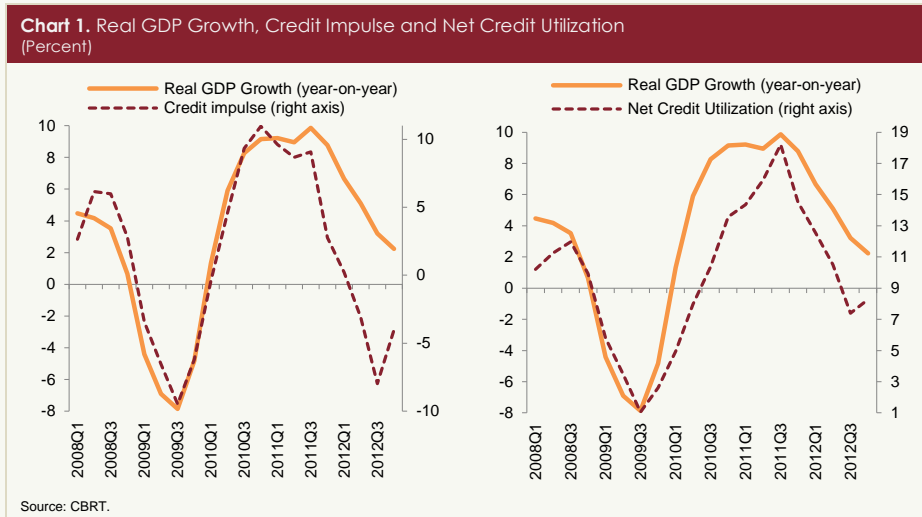
$$NKK_{2011Q4} = \frac{(D_{2011Q4} - D_{2010Q4})}{Y_{2010Q4} + Y_{2010Q3} + Y_{2010Q2} + Y_{2010Q1}}. \quad (3)$$

In equations 2 and 3, credit stock (D_t) is expressed by banking sector's total credit extended to the non-financial sector at the end of each period (nominal and unadjusted for the exchange rate effect); while the quarterly nominal GDP data is used to denote (Y_t) series.

Chart 1 shows GDP growth along with the credit impulse and net credit utilization estimated using equations 2 and 3. The presence of frequent changes in credit impulse in the sampling period produces a strong relationship between credit impulse and economic growth. The sharp decline in credit growth due to unrest caused by the global crisis in the 2008-2009 period spilled over into credit impulse and also to the GDP growth. In the succeeding period, owing to accelerated capital inflows led by the monetary easing policies implemented at a global scale, the credit volume posted an increase beyond normalization; and credit impulse peaked in the last quarter of 2010. As of that date, macroprudential policies implemented by the CBRT in coordination with other authorities brought about a notable fall in credit growth. Even though the fall in credit growth was not

¹ Due to absence of flow data in total credits, this study employs changes in stock data. Mutluer-Kurul (2012) displays that flow data on consumer loans are closely related to consumption demand and the comparison of flow data with the changes in stock data shows that two series follow quite similar path.

proportionately reflected to GDP growth due to higher contribution of net exports, the contribution of credit impulse to GDP growth still saw a sharp decline in 2011 and 2012. To exemplify, credit impulse in 2012Q3 stood close to levels registered in 2009, following the global crisis.



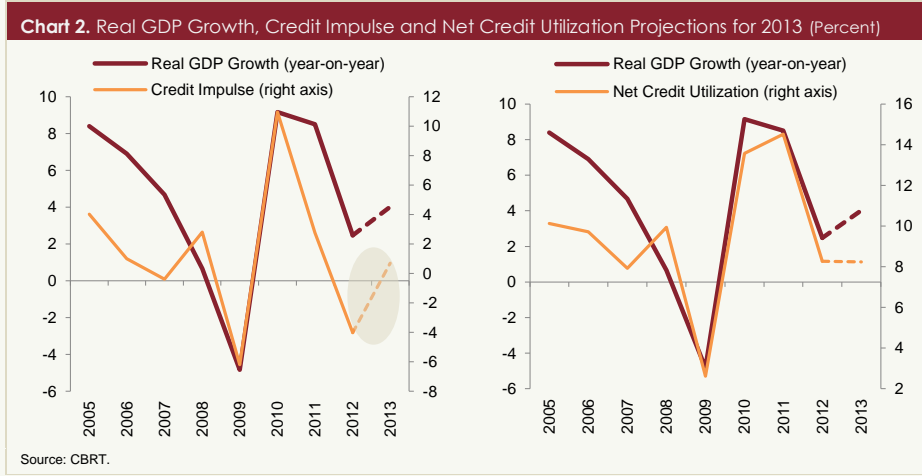
The CBRT stated that a 15-percent growth rate for credits in the medium term would be reasonable and healthy.² However, there is a frequent public debate on whether this rate is compatible with the economic recovery expected in 2013. This is mainly because the relationship between credits and the GDP growth is considered only from the credit growth rate perspective. However, as also illustrated above, evaluating the contribution of credits to growth by only focusing on credit growth rate may be misleading in certain periods. Credit impulse (change in net credit utilization) may have great informative value regarding economic growth, especially after periods of major changes in credit growth rate (like the 2011-2012 period).

In order to see the potential support that credit impulse can provide to economic growth in 2013, 15 percent was taken as the reference growth rate for credits, and credit impulse besides annual net credit utilization consistent with this ratio were depicted in Chart 2.³ As for the GDP growth in 2013, MTP projection was used. The net credit utilization series on the right-hand side panel points to a relatively flat course in 2013 when compared to the previous year. Thus, this indicator may lead to a misperception that a 15-percent rate of credit growth may cause domestic demand to remain weak in 2013. Such a conclusion (as

² See CBRT (2012).

³ As MTP projections are annual, charts are on annual basis.

illustrated on the left-hand side panel) will be incomplete without considering the year-on-year surge in credit impulse in 2013. In other words, even assuming that credit growth remains broadly unchanged from the previous year, the increase in the change in net credit utilization (credit impulse) will enhance support provided by credits to growth in 2013. This simple example clearly points the importance of also taking credit impulse variable into account for the evaluation of the consistency between credit projections and economic growth forecasts.



In sum, these findings point that credit growth rate of 15 percent, which is taken as reference in the medium term, corresponds to a notable increase in credit impulse for 2013, and therefore, is consistent with an accelerated aggregate demand growth. Accordingly, credit growth rates taken as reference by the CBRT are thought to be largely commensurate with the growth projections presented in the MTP.

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