

7. Medium-Term Projections

This Chapter gives information about the CBRT's recent monetary policy strategy and the related policy decisions. Furthermore, it summarizes the underlying forecast assumptions and presents the medium-term inflation and output gap estimates as well as the monetary policy outlook over the upcoming three-year horizon.

7.1. Recent Monetary Policy Decisions

The CBRT, with the main objective of maintaining price stability in addition to the duty to observe financial stability, adopted a policy mix in November 2010 and continued to implement the policy mix of low policy rate, wide interest rate corridor and high reserve requirement ratios in the first quarter of 2011. Accordingly, 1-week repo rate, the policy rate, was reduced to 6.25 percent in January with a 25 basis point decline and the weighted average of the required reserve ratios was raised in order to control rapid credit growth. The rapid surge in oil and commodity prices in the subsequent period increased the upside risks to inflation, necessitating an additional tightening in order to limit the second round effects. Assessing that required reserve ratios rather than policy rates would be more effective for containing macro financial risks driven by the divergence between domestic and external demand, the additional tightening was implemented through a substantial increase in the weighted average of the required reserve ratios. Accordingly, the TL required reserve ratios were raised significantly for demand deposits, short-term time deposits/participation funds and other liabilities.

In order to balance domestic and external demand, and thus limit macro financial risks, TL and FX required reserve ratios were raised slightly on April 21, 2011 by consequently driving the weighted average of the TL required reserve ratios up to 13.5 percent (Table 7.1.1). With the last decision to be effective as of May 13, 2011 in addition to prior adjustments to required reserve ratios since October 2010, a total of TL 40 billion will have been withdrawn from the market.

Table 7.1.1.Decisions TL Required Reserve Ratios
(Percent)

Decision Date	Demand Deposits	<1-month	<3-month	<6-month	<1-year	≥1-year	Cumulative	Other**,**	Weighted Average
Oct. 16, 2009	5	5	5	5	5	5	5	5	5
Sept. 23, 2010	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nov. 12, 2010	6	6	6	6	6	6	6	6	6
Dec. 17, 2010	8	8	7	7	6	5	5	8	7.4
Jan. 24, 2011	12	10	9	7	6	5	5	9	9.4
Mar. 23, 2011	15	15	13	9	6	5	5	13	13.2
Apr. 21, 2011	16	16	13	9	6	5	5	13	13.5

* Excluding deposits and participation funds.

**As of December 17, 2010, all repo transactions excluding transactions with the CBRT and Interbank transactions have been subject to reserve requirement.

Source: CBRT.

Meanwhile, as part of the measures to contain macro financial risks, FX required reserve ratios were differentiated by maturity and raised slightly for short-term deposits on April 21, 2011 (Table 7.1.2). A total of USD 1.4 billion will be withdrawn from the market with this decision to be effective as of May 13, 2011.

Table 7.1.2Decisions on FX Required Reserve Ratios
(Percent)

Decision Date	Demand Deposits	<1-year	≥1-year	Cumulative	<1-year*	<3-year*	≥3-year*	Weighted Average
Sept. 23, 2010	11	11	11	11	11	11	11	11
Apr. 21, 2011	12	12	11	11	12	11.5	11	12

* Other liabilities.

Source: CBRT.

In sum, the CBRT continued to implement the policy mix of low policy rate, wide interest rate corridor and high required reserve ratios in order to limit risks to price stability as well as financial stability. Furthermore, the CBRT stated that the effects of the tightening will be closely monitored, and additional measures would be adopted if deemed necessary.

7.2. Current State of the Economy, Short-Term Outlook and Assumptions

National accounts data for the fourth quarter of 2010 were consistent with the outlook presented in the October Inflation Report. The main driver of growth in the fourth quarter was domestic demand with private demand displaying a faster-than-expected increase. Exports increased significantly, whereas imports grew sharply on robust domestic demand, and hence, net exports made a higher negative contribution to growth quarter-on-quarter. Domestic demand remained strong in the first quarter of 2011, while external demand continued to follow a relatively weak pace. Thus, the divergence between the post-crisis recovery of domestic and external demand became even more pronounced.

Meanwhile, employment conditions continued to improve, yet unemployment remained elevated above pre-crisis levels.

Annual CPI inflation declined to the historic low of 3.99 percent in the first quarter of 2011. The fall in inflation was mainly attributed to the waning base effects of the tax adjustments in January 2010 in addition to the favorable developments in unprocessed food prices than envisaged. Core inflation indicators, albeit rising year-on-year, remained on track with medium-term targets.

Food prices remained lower than the envisaged path in the January Inflation Report, mainly owing to the correction in unprocessed food prices. While processed food prices increased amid increases in international food prices, fresh fruit and vegetable prices as well as meat prices continued to fall, driving food inflation down.

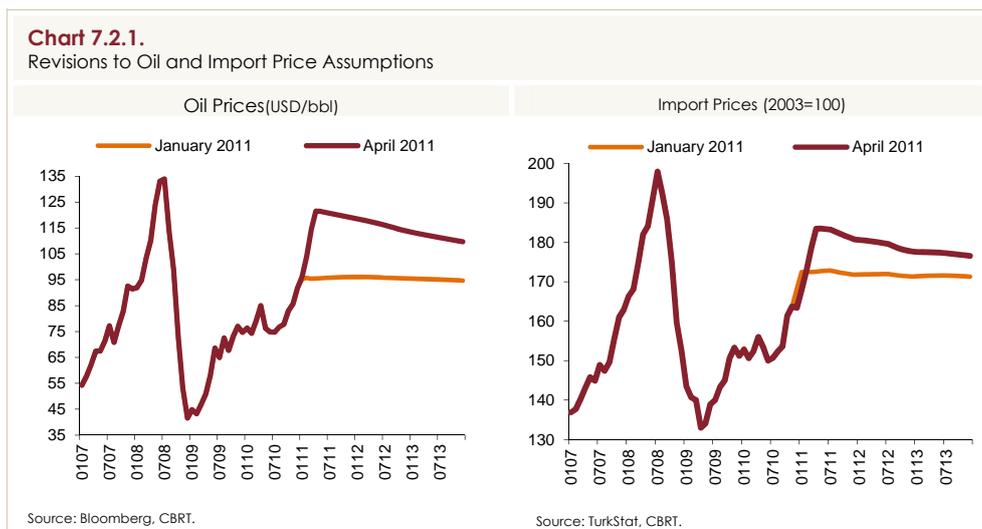
The sharp rises in international commodity prices and the depreciation of the Turkish lira had a major impact on the prices of core goods. In seasonally adjusted terms, prices of core goods increased sharply. Producer prices also rose sharply as a result of heightened unit costs amid developments in commodity prices and the exchange rate.

Table 7.2.1.
Revisions to 2011 Assumptions

	January 2011	April 2011
Food Price Inflation		
(Annual Percent Change)	7.5	7.5
Processed Food	6.0	7.0
Unprocessed Food	9.0	8.0
Import Prices		
(Annual Percent Change)	10.9	16.2
Oil Prices		
(Average, USD)	95	115
Export-Weighted Global Production Index		
(Annual Percent Change)	2.60	2.60

Despite the lower-than-expected decline in unprocessed food prices, given the high volatility in unprocessed food inflation and the surge in agricultural commodity prices, our assumption for food inflation was maintained at 7.5 percent. International food prices affect domestic prices mainly through processed prices. Therefore, the composition of food inflation has been varied. Accordingly, unprocessed food inflation has been revised down to 8 percent while processed food inflation has been raised to 7 percent (Table 7.2.1).

In the January Inflation Report, oil prices were assumed to be 95 USD/bbl for 2011 and onwards. Moreover, in reference to futures prices for commodities, import prices were assumed to increase by an average 10.9 percent year-on-year in 2011. However, commodity prices have displayed a higher-than-expected rise in the first quarter of 2011. In particular, production cuts and mounting uncertainty due to political tension in the MENA region led to sharp rises in oil prices. Accordingly, in the first quarter of 2011, oil prices posted a higher increase than envisaged in the January Inflation Report (Chart 7.2.1). In this context, in view of the futures prices as of the first half of the April, the oil price assumption for 2011 and onwards is revised to 115 USD/bbl. Furthermore, again considering the futures prices, import prices are assumed to increase by about 16.2 percent year-on-year in 2011 (Chart 7.2.1). These changes in assumptions led to an upward revision by 50 basis points in inflation forecasts for 2011.

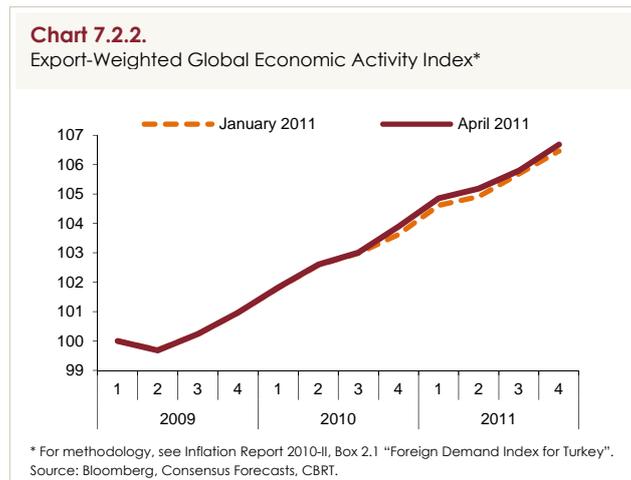


The raise in tariffs on fabrics and apparels had a major impact on inflation forecast for 2011. The decision by the Council of Ministers on February 4, 2011 to raise tariffs on fabrics and apparels at various rates across country groups will be effective in the second half of the year. Given the high share of fabrics and apparels in the CPI basket, these measures are expected to drive 2011 year-end inflation up by 50 basis points (Box 3.1).

External demand remains weak against the strong pace of domestic demand. Leading indicators for the euro area indicate an ongoing mild recovery in the first quarter of 2011. However, the uncertainties regarding the

restructuring of debt across some euro area countries with sovereign debt problems are likely to pose risks to euro area growth and global risk appetite. The favorable growth and employment performance in the U.S. economy since the last quarter of 2010 as well the recently announced leading indicators signal a stronger economic growth. However, export-weighted global production index continued to hover below pre-crisis levels in the last quarter of 2010 due to weak pace of growth in the euro area. Assuming that the recovery in Turkey's major export destinations is maintained, export-weighted global production index is expected to reach pre-crisis levels in the second quarter of 2011.

In sum, the first quarter forecasts envisage no significant changes for the global economic outlook. Indeed, export-weighted global economic activity index constructed by the CBRT remains largely unchanged (Chart 7.2.2). Hence, our medium-term forecasts are based on the assumption that external demand will continue to recover gradually and slowly.



Despite the weak pace of external demand, given the stronger-than-expected growth in the domestic demand, our forecasts are based on an outlook where aggregate demand conditions would provide no more support to disinflation. Accordingly, our output gap forecasts, the starting point for our medium-term forecasts, are revised upward. However, taking into account the stronger-than-expected effects of the monetary tightening implemented in the first quarter, the output gap is expected to close at a slower pace compared to the previous period (Chart 7.3.2).

The measures adopted by the CBRT since November are expected to be materialized on loans and domestic demand as of the second quarter of the

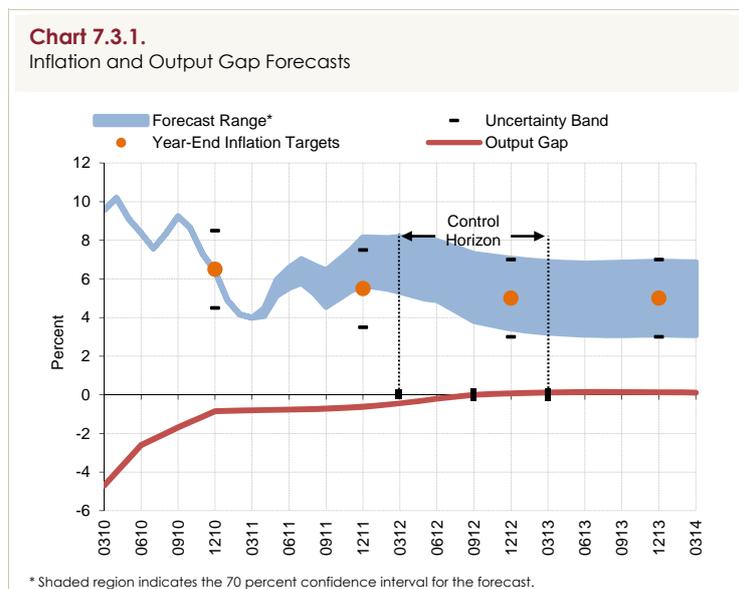
year. Indeed, the recently changing banking sector balance sheet structure as well as the soaring deposit and loan rates support this view.

In building medium-term inflation forecasts within the inflation targeting framework, the CBRT uses not only policy rates, but also the required reserve ratios and other liquidity management tools. Our medium-term forecasts are based on an outlook where the net impact of the policy mix on monetary conditions would be restrictive.

Lastly, given the MTP targets for 2011-2013, a limited fiscal tightening is assumed for the upcoming period. In this regard, our medium-term forecasts are based on outlook where public expenditures are assumed to make a gradually declining contribution to domestic demand. In other words, the public sector is unlikely to put inflationary pressure on aggregate demand. Moreover, tax adjustments are expected to be consistent with inflation targets and automatic pricing mechanisms.

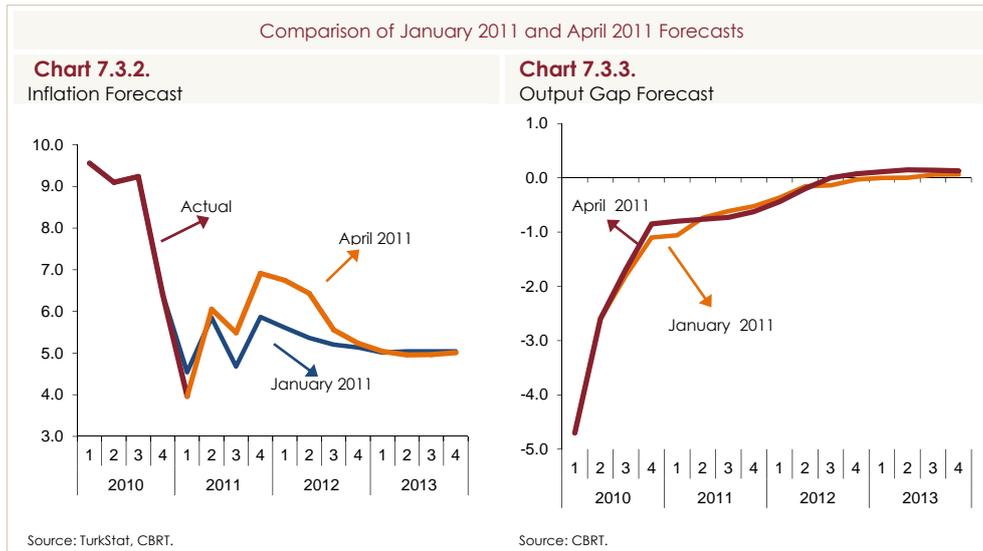
7.3. Medium-Term Outlook

Against this background and assuming that credit growth rate declines to 20-25 percent with a limited additional tightening in the second half of 2011, inflation will be, with 70 percent probability, between 5.6 and 8.2 percent with a mid-point of 6.9 percent at the end of 2011, and between 3.4 and 7.0 percent with a mid-point of 5.2 percent at the end of 2012. Inflation is expected to stabilize around 5 percent in the medium term (Chart 7.3.1).



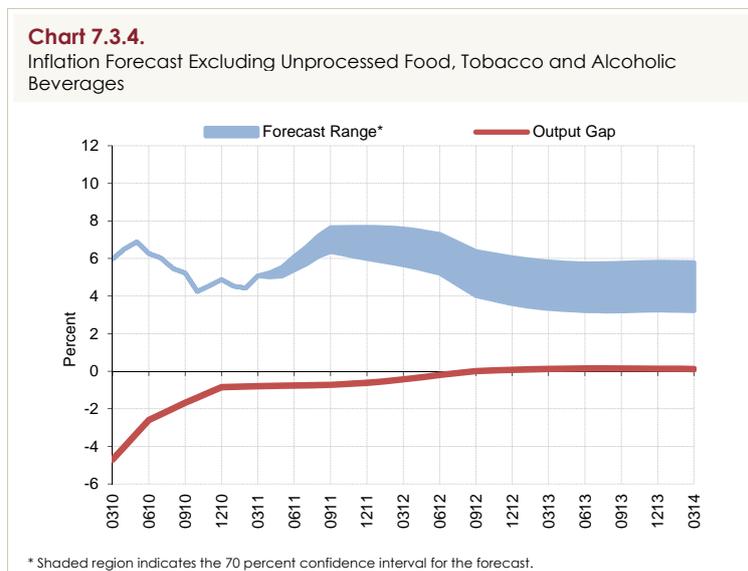
The revised forecasts suggest that keeping inflation in line with targets over the medium term requires a measured and vigorous credit growth. To this end, a numerical range for the annual rate of credit growth is provided in addition to inflation forecasts, in order to give a better perspective. It should be emphasized that these numbers for the credit growth rates are not strict targets of the CBRT. The nominal credit growth consistent with the medium-term inflation target may vary from year to year depending on the course of inflation, economic growth and the composition of aggregate demand.

Even though underlying inflation is expected to follow a stable trend in line with the medium-term targets, base effects are likely to have a substantial impact on inflation over the next three quarters. The correct understanding of these effects will help public to better interpret inflation developments, and thus, improve expectations management. Inflation is expected to be driven mainly by base effects due to food prices in 2011, and thus, annual inflation is expected to rise in the second quarter and decline in the third quarter. Lagged effects of the surge in oil prices and tariff adjustments on fabrics and apparels are expected to drive inflation up as of the second half of 2011. Starting from mid-2012, inflation is expected to reach the medium-term target of 5 percent as the base effects from tariff adjustments and higher commodity prices taper off (Chart 7.3.2).



The unforeseen fluctuations in items that are beyond the monetary policy control, such as unprocessed food and tobacco, are among major factors causing deviations in inflation forecasts. Hence, the details of inflation forecasts,

also including unprocessed food and tobacco, are publicly available. The forecasts are based on the assumption that annual unprocessed food inflation will be 8 percent, while the annual rate of increase in tobacco and alcoholic beverages will remain in line with inflation targets. In this context, our inflation forecasts excluding unprocessed food, tobacco and alcoholic beverages are shown in Chart 7.3.4. Accordingly, inflation is expected to rise gradually until the last quarter of 2011, return to a downward path thereafter and stabilize around 4.6 percent in the medium term (Chart 7.3.4).



The main reason for inflation forecast to overshoot the end-2011 target of 5.5 percent is the sharp rise in import prices as mentioned above. The impact of the cumulative increases in commodity prices since October 2010 on 2011 inflation is estimated to reach around 90 basis points (40 basis points of this impact is reflected in the October Inflation Report forecasts while the remaining 50 basis point is reflected in the current Report). In addition, tariff adjustments are assumed to bring 2011 inflation up by about 50 basis points. Therefore, the reason for end-2011 forecast to exceed the inflation target can be attributed to developments completely beyond the control of the monetary policy. Accordingly, the statement following the April meeting of the MPC indicated that the Committee would not respond to the first round effects of rising oil and other commodity prices, but emphasized that second round effects will be closely monitored and a deterioration in the pricing behavior will not be tolerated.

It should be emphasized that any new data or information 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.

Comparison of CBRT Forecasts with Inflation Expectations

It is critical that economic agents, with the awareness of the temporary factors, should focus on the medium-term inflation trend, and therefore, take the inflation target as a benchmark for their pricing plans and contracts. In this respect, to serve as a reference guide, CBRT's current inflation forecasts should be compared to inflation expectations of other economic agents. Survey of Expectations respondents' end-2011 and 12-month ahead inflation expectations are consistent with our baseline scenario forecasts. However, 24-month inflation expectations are about 1.3 percentage points above our revised inflation forecasts and the medium-term target (Table 7.3.1).

Table 7.3.1.
CBRT Inflation Forecasts and Expectations

	CBRT Forecast	CBRT Survey of Expectations*	Inflation Target**
2011 Year-end	6.9	6.9	5.5
12-Month Ahead	6.6	6.8	5.3
24-Month Ahead	5.0	6.3	5.0

* April 2011, second survey period results.

** Calculated by linear interpolation of year-end inflation targets for 2011-2013.

Source: CBRT.

7.4. Risks and Monetary Policy

The impact of the ongoing monetary tightening on credits and domestic demand is expected to be more significant starting from the second quarter. However, the extent and the timing of the impact may vary depending on the developments beyond the control of the monetary policy. The CBRT will closely monitor the lagged effects of the policy measures, and will take additional measures if deemed necessary.

In assessing risk factors and the related monetary policy measures under current circumstances, both price stability and financial stability are taken into account. Therefore, risk factors are not only assessed with respect to their impact on the level, but also on the composition of the aggregate demand (external versus domestic demand). This is because the level of the aggregate demand concerns price stability, whereas its composition relates directly to

financial stability. Hence, risk factors regarding global economy are also evaluated against this backdrop.

Downside risks regarding global economy remain critical, albeit having been alleviated compared to the previous quarter. Problems in credit, real estate and labor markets in many advanced economies are yet to be fully solved. Moreover, uncertainties regarding debt sustainability issues and the impact of a possible fiscal consolidation persist. Furthermore, rapid increases in oil prices carry the potential to slow down global economic growth. All these factors continue to feed downside risks regarding the pace of global growth. The possibility of a prolonged period of slow global growth not only creates downside risks regarding the external demand, but also keeps prospects for strong capital flows vigorous. Should such a scenario materialize, a policy mix of low policy rate, wide interest rate corridor and high reserve requirement ratios may be implemented for a long period of time. Moreover, an outcome whereby global economic problems intensify and contribute to a contraction of domestic economic activity may require an easing in all policy instruments.

Although downside risks to global economy remain notable, upside risks are also becoming more significant. Major uncertainties exist regarding the lagged impacts of the exceptionally loose monetary policies implemented by advanced economies on global economic activity and inflation. If the global economy faces a faster-than-expected recovery in the upcoming period, inflationary pressures may arise sooner than envisaged in the advanced economies. Materialization of such a scenario would mean a tightening by using policy rates as well as reserve requirements against higher global policy rates and demand-pull inflationary pressure.

The outlook for oil and other commodity prices remains uncertain. Should the increases in commodity prices persist and hamper the achievement of medium-term inflation targets, an additional tightening may be implemented sooner than envisaged by the baseline scenario. However, given that higher oil prices will also deteriorate the current account balance, macro financial risks will also be monitored through the policy reaction. Therefore, the content of the policy mix may vary depending on the outlook for other factors such as external demand, capital flows, and the credit growth.

The CBRT will continue to monitor fiscal policy developments closely while formulating monetary policy. Inflation forecasts in the baseline scenario assume that the ratio of fiscal expenditures to GDP will evolve in line with the MTP targets. 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 medium-term inflation outlook. Increasing public savings, and hence, sustaining fiscal discipline is essential under current circumstances in order to control risks fuelled by the widening current account deficit driven by the divergence between domestic and external demand. Saving the additional tax revenues provided by the stronger-than-expected economic activity than envisaged by the MTP would not only ease risks regarding both price stability and the financial stability, but also, enhance the efficiency of the new policy mix.

Monetary policy in the period ahead will continue to focus on building price stability on a permanent basis. To this end, the impact of the macroprudential measures taken by CBRT and other institutions on the inflation outlook will also be assessed carefully. Fulfilling the commitment to maintain fiscal discipline and strengthening the structural reform agenda in the medium term would contribute to the improvement of Turkey's sovereign risk, and thus, enhance macroeconomic stability and the price stability. Maintaining fiscal discipline will also provide more room for monetary policy maneuver and support the social welfare by keeping interest rates permanently at low levels. In this respect, timely implementation of the structural reforms envisaged by the MTP and the European Union accession process remains to be critical.

The developments in the aftermath of the global crisis displayed the fact that implementing a monetary policy strategy solely based on price stability, yet overlooking financial stability, hampers macroeconomic stability and price stability in the medium and long term. Hence, the need for central banks to observe financial stability from a macro perspective has been a widely accepted view. As of mid-2010, the CBRT, with this awareness, has increasingly focused on macro financial risks which erupted as a result of global imbalances, and underscored the need to jointly use alternative instruments in order to alleviate these risks.² This Box assesses the new policy mix which has been designed and adopted accordingly by the CBRT. First, the policy mix will be explained, and after that, the issue of how and for which purposes these instruments are employed will be tackled in addition to how these are communicated.³

The New Monetary Policy Approach and Its Implementation

The Turkish economy has displayed rapid recovery driven by domestic demand, while external demand followed a relatively weak course in the post-crisis period. By mid-2010, the high growth rates in emerging economies, including Turkey, as well as the expansionary monetary policies in the U.S. economy and the European economies led to massive capital inflows to emerging economies. The surge in capital provided easier access to credit, and thus, accelerated consumption spending and also led to the appreciation of the Turkish lira, thereby widening the imbalance between domestic and external demand. The rapid deterioration of the current account and the growing share of short-term capital inflows and portfolio investment in net capital inflows increased the economy's exposure to sudden changes in global risk appetite, thus, warranting an alternative policy approach against mounting concerns over macroeconomic and financial stability.

¹ Adapted from Baçı, E. and H. Kara, (2011), "Finansal İstikrar ve Para Politikası", İktisat İşletme ve Finans, 26(302), 9-25 (in Turkish).

² "Should the divergence in the growth rates between domestic and external demand continue in the forthcoming period, it would be necessary to utilize other policy instruments such as reserve requirement ratios and liquidity management facilities more effectively." (July 2010 Inflation Report).

³ For an extended analysis of the the new policy mix designed by the CBRT, please refer to Kara, H. (2011). "Monetary Policy under Global Imbalances: The Turkish Experience", http://www.tcmb.gov.tr/yeni/iletisimgm/H.Kara_BIS.pdf.

The CBRT, in order to contain the accumulated macro financial risks, adopted the objective of slowing down credit growth and reducing short-term capital inflows as intermediate targets. Accordingly, as of November 2010, the CBRT, without sacrificing price stability, has launched the new policy mix of interest rate corridor and required reserves ratios, in addition to policy rates, in order to observe financial stability.

In order to limit credit growth, required reserve ratios have been used within the new policy mix. In this context, the CBRT announced on its exit strategy in April 2010 that it would raise TL and FX required reserve ratios to pre-crisis levels, and delivered gradual hikes. Furthermore, interest payments on TL required reserves were terminated, the coverage of the liabilities subject to reserve requirement was extended, and both TL and FX required reserve ratios were differentiated by maturity, with higher ratios for shorter term maturities.⁴

Meanwhile, with the objective to limit short-term capital inflows, the CBRT's intermediate target, 1-week repo rate, the policy rate, was reduced by 75 basis points to 6.25 percent, and the O/N borrowing rate was reduced by 500 basis points to 1.5 percent. Again for the same objective, interest rate corridor was widened further, thus enabling an operational framework that allows to adjust short-term volatility in money markets to economic conjuncture.

Communicating the Monetary Policy

Although it looks quite complicated at first sight, the newly adopted policy mix is not different in spirit from the conventional inflation targeting framework. The main difference from the previously implemented policy is observing financial stability in addition to the main objective of price stability, and thus, using required reserves and effective liquidity management as supportive tools, in addition to 1-week repo rate, the policy rate.

⁴See Tables 7.1.1 and 7.1.2.

Within the new policy mix framework, just like in the inflation targeting framework, the deviation of the inflation forecast from the target is the main criterion with the only exception that non-interest tools are also employed in order to observe macro financial imbalances. Accordingly, the monetary policy stance depends on short-term policy rates as well as monetary conditions such as market liquidity and required reserves. The issue of which policy instrument will be used how depends on factors affecting financial stability and price stability.

The increased emphasis of the CBRT on financial stability may lead to perceptions that price stability has been neglected. With this awareness, the CBRT established an effective communication and underscored the overriding objective of price stability through policy documents on all occasions. Moreover, the CBRT also reminded that overlooking macro financial imbalances under current circumstances would hamper price stability in the future. In order to prevent possible deterioration of expectations due to the change in the objective function, the CBRT adopted a cautious stance regarding inflation, and highlighted the need for monetary policy tightening.

The absence of a widely accepted theoretical foundation for the transmission channel of unorthodox tools like interest rate corridor and required reserves may also hamper communicating a monetary policy strategy where these tools are actively used. In order to prevent expectations to deteriorate due to uncertainties about transmission mechanism, the CBRT frequently highlighted through policy documents that the impacts of these measures would be carefully monitored, and additional measures would be adopted if deemed necessary.⁵

Within the inflation targeting framework, the CBRT publicly shares its inflation forecasts through Inflation Reports and announces the qualitative course of the future policy rates. By the adoption of the new policy strategy, the CBRT, instead of announcing the future course of policy rates, communicated the monetary policy strategy through policy mix and "monetary tightening". Accordingly, with a view to maintain the flexibility regarding the future course of instruments composing the policy mix, the CBRT, rather than providing the direction for each individual instrument, announces its forecasts on the net impact of the policy mix. In doing so, the CBRT also enhances the effectiveness of the required reserves through interest rate risk channel by reducing the forecastability of short-term policy rates, one of the components of the policy mix.

⁵Required reserve ratios were raised substantially in March 2011 in order to reinforce financial stability as well as to contain the second round effects of the surge in oil and other commodity prices.

The CBRT has followed an open communication strategy about the limits of the monetary policy. The CBRT, thus stated that, reserve requirement is one of the tools to limit credit growth and domestic demand, and supportive measures by other relevant institutions are vital for containing macro financial risks. It was further stated that direct measures for limiting credit growth would enhance the effectiveness of the CBRT's policies.⁶ In other words, for the effectiveness of the policy mix, the importance of fiscal discipline as well as supportive regulations by other relevant institutions were underscored.

The preliminary results of the policy mix indicates that the new approach is appropriate in terms of limiting macro financial risks imposed by short-term capital inflows (See Section 5-Financial Markets and Financial Intermediation). The CBRT will continue to jointly use short-term policy rates in addition to non-interest tools in order to build price stability on a permanent basis, while also observing financial stability from a macro perspective.

In sum, the newly adopted monetary policy by the CBRT is country-specific and tailored to current economic climate. The CBRT, by emphasizing financial stability, has focused on current account, the quality of financing and credit growth. In other words, the emphasis on financial stability encompasses a macro perspective and reflects a period-specific communication strategy. Therefore, in the upcoming period, macro financial risks may be highlighted through other variables.

⁶Summary of the March 2011 MPC meeting.

