

## MONETARY AND EXCHANGE RATE POLICY FOR 2011

Central Bank of the Republic of Turkey

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ANKARA

## I. THE GENERAL FRAMEWORK OF MONETARY POLICY

#### **Overview**

- 1. While the global economy continued to gradually recover in 2010, the recovery in advanced economies, which actually drove the crisis, presents a slow and vulnerable outlook. The ongoing balance-sheet repair process in advanced economies in financial institutions and companies as well as households restricts the support from private consumption and investments to the recovery in economic activity. Recovery in the labor market, which is more sluggish than the overall economic activity, is another factor that curbs private consumption.
- 2. It is observed that the recovery in emerging markets is faster and more stable. Actually, production in many emerging economies, including Turkey, has exceeded the pre-crisis levels in 2010 and the improvement in the labor markets of these countries has been more stable. In this respect, the decoupling between the pace of recovery in advanced and emerging economies has become more pronounced.
- 3. The divergence between advanced and emerging economies had implications on the monetary policy implementations of these countries as well. In this context, new economic problems facing advanced economies paved the way for monetary expansion in unprecedented magnitudes. The recent additional monetary measures introduced by leading central banks imply that the low level of policy rates and ample liquidity conditions in these economies would continue for an extended period. Meanwhile, the relatively fast recovery in economic activity in emerging economies urged many central banks to rescind measures they had introduced during the crisis.
- 4. Following the ease of the impact of the crisis on financial markets, the Central Bank of Turkey (Central Bank), in its press release of April 14, 2010, announced its exit strategy, which entailed removal of liquidity measures taken during the crisis and normalization of the operational framework of monetary policy. Acting upon favorable developments in the credit market and the recovery in economic activity, the Central Bank withdrew the temporary

liquidity measures it had introduced during the crisis and gradually mopped up excess liquidity provided for the market, and raised required reserve ratios.

- 5. Besides the monetary policy exit strategy, the Central Bank accelerated reserve accumulation with an aim to contributing to financial stability and in order to be able to adapt to the rapidly changing structure of capital flows, adopted a more flexible method for foreign exchange buying auctions from October 2010 onwards. Moreover, with the aim of ensuring more effective use of alternative instruments towards curbing risks pertaining to financial stability, the Central Bank terminated the remuneration of Turkish lira required reserves and changed the operational structure of liquidity management. In addition to these measures, the Central Bank introduced further measures in the last 2 months to direct the capital inflows driven by global monetary expansion to investment instruments with longer maturities.
- 6. It is observed that the monetary transmission mechanism in Turkey functions more effectively in the post-crisis period. Actually, despite fluctuating risk perceptions in this period, the primary determinant of interest rates in money and credit markets has been the Central Bank's policy rates. The monetary policy, which was prudently implemented during the crisis, has played an important role in this achievement being an important milestone in the normalization process of the Turkish economy.
- 7. The low level of interest rates worldwide, coupled with the Central Bank's announcement that it would keep policy rates low, has helped market rates to drop to historic lows in 2010 and remain there during the year. This trend was observed across all maturities and the decline in long-term interest rates became even more significant owing to the improvement in risk perceptions pertaining to Turkey. The credit rating institutions' upgrading of Turkey's ratings in 2010 substantiates that the improvement in perceptions regarding Turkey's riskiness is permanent. Actually, Turkey is one of those countries whose risk premium indicators dropped by the largest margin compared to the pre-crisis period.

#### **Central Bank Policies in the New Global Conjuncture**

- 8. Under current conditions, the decoupling between the growth rates of domestic and foreign demand and the rapid credit expansion in Turkey fuels the current account deficit. Moreover, recent developments and decisions in European economies and the USA have led to monetary expansion globally, and thus, brought onto the agenda the probability of the current account deficit exceeding the projections outlined in the Medium-Term Program (MTP) prepared for 2011-2013 period.
- 9. The primary objective of the Central Bank is to achieve and maintain price stability. Moreover, Central Bank Law stipulates that our Bank takes measures to establish stability in financial markets. Price stability and financial stability are two important complementary objectives. The Central Bank is one of the institutions in charge of financial stability in Turkey. Unlike other institutions in charge of supervision and regulation, the Central Bank approaches financial stability from a macro perspective.
- **10.** The current global conjuncture urges the Central Bank to implement a policy composition that entails the effective use of alternative instruments such as liquidity management and required reserves besides the short-term interest rates utilized as the key policy instrument,
- **11.** Since the peak of the crisis in September 2008, the Central Bank has implemented a policy composition of various instruments in line with its price stability objective and financial stability mandate. In the upcoming period, the Central Bank will use short-term interest rates and macro-prudential instruments simultaneously to achieve sustainable price stability and to maintain and safeguard financial stability with a macro perspective.
- 12. The policy implemented by the Central Bank should be considered as a whole. The monetary policy stance in the new economic climate is not only determined by the level of policy rates, but also by the combination of all policy instruments mentioned above and the net effect of all implemented measures are taken into account while assessing the inflation outlook.

- 13. The primary step to be taken for the maintenance of financial stability is to extend the liabilities of the banking sector. The banking sector in Turkey has a relatively sounder balance sheet structure compared to many countries. Nevertheless, the average maturities of domestic and external funds borrowed by banks are relatively shorter than those of assets. In this context, the measures to extend the maturities of liabilities in the banking system have been given priority. The current and contemplated measures aim to extend the maturities of both deposits and foreign capital inflows. Recent implementations such as the differentiation of the required reserve ratios according to maturities and the inclusion of some liability items within the scope of the required reserves should be considered in this context.
- **14.** A separate study will be carried out next year on the extension of maturities of TL-denominated non-deposit liabilities, which are considered compatible. On the other hand, the differentiation of required reserve ratios applied to foreign currency liabilities according to maturity brackets may be considered in the upcoming period to encourage the maturity extension of foreign exchange deposit accounts and other foreign currency liabilities. Moreover, required reserve ratios, especially those set for liabilities with shorter maturities, may continue to be increased gradually depending on domestic and external developments. The measures that were taken and declared to be taken by the Central Bank are necessary but not sufficient to safeguard financial stability in the current economic climate. It is of great importance for all institutions in charge of regulation, supervision and counterbalancing to act in a coordinated manner. The support of other related institutions, particularly the precautions taken to tighten the credit supply and extend maturities in the financial system expands the room for maneuver regarding the monetary policy of the Central Bank and enhances the effectiveness and flexibility of these policies.
- 15. Increasing government savings -and therefore maintaining fiscal discipline- is also essential with a view to containing the risks regarding the current account deficit. The Medium Term Program (MTP) is a major step in this context. The deterioration in debt dynamics, especially that of peripheral countries in Europe being among the main risks recently, has led the importance of public debt indicators to increase gradually. A major part of the additional public

revenue is driven by the high growth rates of Turkey, and it is crucial for the maintenance of both price stability and financial stability.

- **16.** In this scope, some of the significant measures that have been taken by the Council of Ministers and Banking Regulation and Supervision Agency (BRSA) so far are as follows:
  - Declaring a Medium-Term Program that underlines fiscal discipline by the Council of Ministers,
  - Restricting the extension of FX-indexed loans to real persons in Turkey,
  - iii) Increasing Resource Utilization Support Fund rates imposed on some consumer loans,
  - iv) Launching a study to encourage long terms in foreign bond issues of our banks,
  - v) Enforcing a 12-percent target for the capital adequacy ratios of banks, which was previously 8 percent,
  - vi) Allowing banks to issue TL bonds within Turkey,
  - vii) Setting an upper limit of 75 percent for the loan/value ratio in mortgages, and of 50 percent for commercial real estate loans,
  - viii) Increasing the minimum payment ratios for credit cards.
- **17.** The measures that have been taken so far and those declared to be taken in the future by the Central Bank and other public institutions and organizations are envisaged to harmonize the macroeconomic outlook for 2011 with the current account deficit forecasts in the MTP. The effects of current and future measures on price stability and financial stability will be closely monitored and additional measures may be implemented when deemed necessary.

### The Operational Framework of Monetary Policy

- **18.** In line with its primary objective of achieving and maintaining price stability, the Central Bank carries out monetary policy implementations within the framework of the inflation-targeting regime. Besides, the Central Bank, as stipulated in its law, fulfills its duty to take measures to achieve stability in the financial system.
- 19. The Central Bank's main policy instrument to achieve price stability is the repo auction rate with one-week maturity. Besides, when deemed necessary, required reserve ratios and liquidity management can be used as supplementary instruments to enhance the efficiency of monetary policy and to contain macro financial risks.

#### **Inflation Targets**

- **20.** The main factors for setting high inflation rate targets in the short and medium term compared to advanced economies were elaborated in the Annex of the Monetary and Exchange Rate Policy published last year (on 10 December 2009). As stated in the said policy document, factors, such as the recent structural reform process in Turkey, rigidities formed by the high inflation period in the past, measurement biases stemming from quality growth, and the convergence process to the European Union, currently make it more accommodative for Turkey to set a higher inflation rate target compared to that of advanced economies.<sup>1</sup>
- **21.**Within this framework, the medium-term inflation target will be kept at 5 percent. The target variable is year-end inflation rates calculated by the annual percentage change of the Consumer Price Index (CPI) and inflation targets are set jointly with the Government as "point target". Accordingly, the inflation targets set for 2011 and 2012 had already been announced as 5.5 percent and 5 percent, respectively. The end-2013 inflation target was again set jointly with the Government as 5 percent during the preparation of the MTP. It is essential for economic units to take this target into account in their contracts

<sup>1</sup> Studies carried out in the Central Bank suggest that the difficulties in extrapolating the quality growth of CPI items on the index itself might lead to overestimating the inflation rate particularly in developing countries (Arslan, Y. and E. Ceritoğlu, "Quality Growth and Inflation: Turkish Case" CBT Economic Notes No: 10/17).

and plans, so that the rigidity of inflation would reduce and social welfare would improve. In the longer term, when the structural transformation, convergence and reform processes are completed, the targeting of lower inflation rates will be possible.

#### Accountability

- 22. Article 42 of CBT Law says "The Bank shall submit information to the Government in writing and inform the public disclosing the reasons of incapability to achieve the determined targets in due time as published or the occurrence of the possibility of not achieving them and the measures to be taken thereof". The Central Bank sets an uncertainty band around the point target as an easily observable and concrete criterion with the aim of enforcing the accountability and transparency mechanisms within the framework of the inflation-targeting regime. If inflation breaches this band, the accountability mechanism is enforced.
- **23.** The "uncertainty band" has been maintained at 2-percentage points in both directions since the adoption of the inflation targeting regime. Unpredictable fluctuations in the prices of items that are beyond the control of the Central Bank, such as unprocessed food and tobacco, are the main reasons underlying the maintenance of a relatively larger uncertainty band for Turkey. Excessive volatilities, particularly in unprocessed food prices lead inflation to follow a volatile trend on a monthly basis. Studies carried out within the Central Bank suggest that the extent of volatility of unprocessed food prices in Turkey is markedly higher than those in EU member states.<sup>2</sup> Moreover, the fact that this situation is mainly attributable to structural factors reveals that the volatility in unprocessed food prices will persist in the short term.<sup>3</sup> In this framework, the uncertainty band will be maintained at 2-percentage points in both directions in the forthcoming period as well. In other words, if the absolute

<sup>&</sup>lt;sup>2</sup> Öğünç F. "Volatility of Unprocessed Food Inflation in Turkey: Assessment", CBT Economic Notes, No: 10/05.

<sup>&</sup>lt;sup>3</sup> For further details, please refer to: Öğünç F., C. Orman, Ş. Saygılı and G. Yılmaz. "Volatility of Unprocessed Food Inflation and Structural Factors", CBT Economic Notes, No: 10/16.

Atuk, O. and O. Sevinç, "Variable and Fixed Weight Approaches in CPI: An Application on Fresh Fruit and Vegetable Prices in Turkey" CBT Economic Notes, No: 10/15.

value of the difference between the actual inflation rate and the target rate surpasses 2 percentage points, the accountability mechanism will be enforced.

- 24. There will be no change in the enforcement of the accountability mechanism in 2011. As inflation targets are set for year-end, as per its accountability responsibility, the Central Bank will submit a detailed open letter to the Government only if the target is missed by a significant margin at the end of the year. Furthermore, Inflation Reports will continue to act as a tool to reinforce the accountability mechanism. Against this background, if quarterly inflation rates deviate from the end-year target by more than 2 percentage points, the reasons of the deviation and the measures that have already been taken, and the measures that will be taken to achieve the target rate will be explained via quarterly Inflation Reports.
- **25.** At this point, it would be useful to reiterate the difference between the target and the forecast. While "target" contains information pertaining to the point that inflation will head towards in the medium run, "forecast" denotes the course that inflation is envisaged to follow while heading towards the target. Therefore, it is advisable for economic units to consider the inflation target for medium-terms and the Central Bank's inflation forecasts for shorter terms.

## **Communication Tools and the Decision-Making Process**

- **26.** The main communication tools of the monetary policy are the Inflation Report and Monetary Policy Committee (MPC) announcements. The MPC meets once a month in accordance with the schedule announced in advance. The decision and its brief rationale are announced on the Central Bank website by a press release soon after the meeting. The time for the announcement of the monetary policy decision has been set as 14:00 for 2011. The English translation of the press release will be put on the website the same day. The summary of the MPC Meeting will be released on the website of the Central Bank within five working days, along with its English translation.<sup>4</sup>
- **27.** The Inflation Report will be published quarterly. As usual, the Report will be introduced to the public at a press conference. Announcements related to the

<sup>&</sup>lt;sup>4</sup> Schedule for meetings in 2011 and the schedule for the release of reports are given at the Annex.

outlines of monetary and exchange rate policy shared with the public, biannual presentations made by the Governor before the Council of Ministers and the Planning and Budget Commission of the Grand National Assembly of Turkey, the "Monthly Price Developments" reports issued on the next business day following the release of the inflation figures; the biannual "Financial Stability Report", presentations and speeches made by the Central Bank authorities in Turkey and abroad and other press releases will play an important role in informing the public on the economic outlook and policies implemented /to be implemented. Working papers, booklets, Economic Notes and conferences and workshops held by the Central Bank will also continue to be used as effective tools of the communication policy.

#### **II. EXCHANGE RATE POLICY AND LIQUIDITY MANAGEMENT**

#### **Exchange Rate Policy**

- **28.** Along with inflation targeting, the Central Bank will continue to implement the floating exchange rate regime in 2011. Under the current exchange rate regime, the foreign exchange rate is not used as a policy tool and the Central Bank of Turkey does not have a nominal or real exchange rate target.
- **29.** As stated in the annual monetary and exchange rate policy announcements, which have been published since 2002, the foreign exchange rate is determined by supply and demand conditions in the market. The main factors affecting foreign exchange supply and demand are the monetary and fiscal policies implemented, economic fundamentals, international developments and expectations.
- **30.** Even if they implement a floating exchange rate regime, a strong foreign exchange reserve position is very important for emerging economies like Turkey to curb the unfavorable effects of potential internal and external shocks and to boost confidence in the country. Therefore, the Central Bank holds

foreign exchange buying auctions to build up reserves at times where foreign exchange supply increases relative to foreign exchange demand.

**31.** Being meticulous to keep the impact on supply and demand conditions in the foreign exchange market at minimum level, the Central Bank has been buying foreign exchange via transparent foreign exchange buying auctions with preannounced terms and conditions. Although the aim is to conduct auctions according to the pre-announced program, auction programs may be changed with prior notice in the event of unexpected significant developments related to the foreign exchange supply beyond forecasts.

#### **32.** In this framework;

- It was stated in the annual monetary and exchange rate policy announcement for 2010 that the CBT will continue to hold foreign exchange buying auctions at a maximum daily amount of USD 60 million, with USD 30 million of auction amount and USD 30 million of optional selling amount.
- ii. However, as the capital flows to Turkey have grown more stable, the CBT, in order to accelerate the foreign exchange reserve accumulation, decided to increase the maximum daily amount to be purchased in auctions to USD 80 million, with USD 40 million of auction amount and USD 40 million of optional selling amount, starting from 3 August 2010.
- iii. Later on, taking into consideration that there may be abrupt changes in the outlook of global financial markets and the risk appetite, which may in turn cause significant fluctuations in capital flows towards emerging countries, including Turkey, the CBT started to implement a more flexible method in foreign exchange buying auctions. With this change, it is aimed to benefit from capital inflows more effectively with a view to strengthening foreign exchange reserves and to enhancing resilience against volatile capital flows.

- **33.** In 2011, the Central Bank will continue to accumulate foreign exchange reserves through the flexible foreign exchange buying auction method, which was announced in its press release of 1 October 2010. However, taking into consideration that this new method provides sufficient flexibility to build up reserves at times when foreign exchange supply increases relative to foreign exchange demand, the banks will not have the right to sell an optional amount in the regular foreign exchange buying auctions starting from 3 January 2011. On the other hand, in order to prevent a significant slowdown in the Central Banks' foreign exchange purchases as a result of the ending of option usage, the daily amount to be purchased in auctions will increase from USD 40 million to USD 50 million. The guidelines for this method are explained below:
  - i. Starting from the beginning of 2011, USD 50 million will be purchased through daily foreign exchange buying auctions as long as the amount set is kept unchanged.
  - ii. However, in case capital inflows strengthen on the back of developments in global financial markets the CBT may raise the daily amount to be purchased through auctions in order to accelerate foreign exchange purchases. If the CBT decides to accelerate foreign exchange purchases, the maximum additional amount that may be purchased in any week will be posted on Reuters page CBTQ, at 11.00 on the first working day of the respective week.
  - iii. The portion of preannounced additional amount that will be bought within the day will be posted on Reuters page CBTQ at 13.30.
  - iv. Only the regular foreign exchange auction will be held on the days when no additional purchase will be made. In other words, in the auction, USD 50 million will be purchased. However, developments pertaining to foreign exchange supply and demand will be closely monitored in the upcoming period and in

the event of unforeseen developments, the regular auction amount may be changed in either direction with prior notice.

- v. Besides, if significant changes occur in foreign exchange liquidity conditions, foreign exchange buying auctions may be suspended for a short or long period.
- **34.** After the adoption of a more flexible foreign exchange buying auction method with an aim to accelerate foreign reserve accumulation, foreign exchange purchases accelerated and the total amount of foreign exchange purchased via foreign exchange buying auctions in 2010 reached USD 14.1 billion by 15 December 2010. The CBT did not carry out any selling transactions in the foreign exchange market in 2010. The total amounts of foreign exchange that have been purchased and sold by the Central Bank since 2002 are shown in Table 1 on an annual basis:

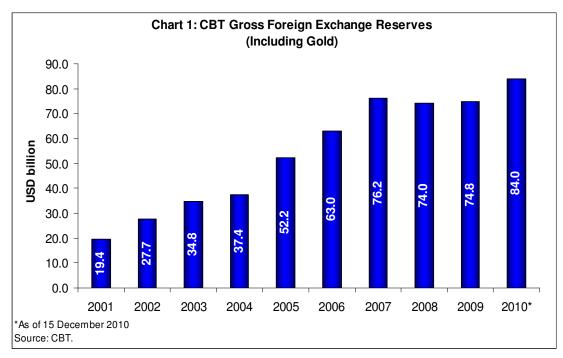
Year	Buying Auctions	Selling Auctions	Buying Interventions	Selling Interventons	Net Buyings of CBRT
2002	795	0	16	12	799
2003	5,652	0	4,229	0	9,881
2004	4,104	0	1,283	9	5,378
2005	7,442	0	14,565	0	22,007
2006	4,296	1,000	5,441	2,105	6,632
2007	9,906	0	0	0	9,906
2008	7,584	100	0	0	7,484
2009	4,316	900	0	0	3,416
2010*	14,116	0	0	0	14,116
Total	58,211	2,000	25,534	2,126	79,619

# Table 1: The Central Bank's Foreign Exchange Purchases and Sales\* (2002-2010, million USD)

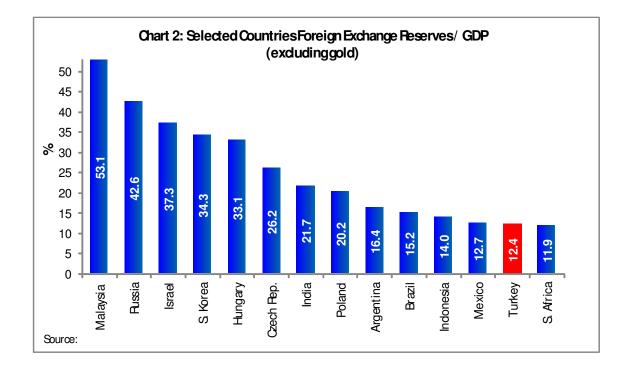
\* As of 15 December 2010

Source: CBT.

**35.** As illustrated in Table 1, the Central Bank has purchased net USD 79.6 billion worth of foreign exchange since 2002. In the said period, total FX reserves of the Central Bank increased by USD 64.6 billion, from USD 19.4 billion to USD 84 billion. (Chart 1)



**36.** With the help of the strengthened foreign exchange reserves within the framework of the Central bank's long-term reserve accumulation policy, the measures aimed at minimizing the potential foreign exchange liquidity problems of the financial system were immediately taken and the importance of having a strong foreign exchange reserve position for a country was once again understood. The Central Bank's gross international reserves are relatively lower than those of other emerging market economies. In this context, it is considered that using strong capital inflows to accelerate reserve accumulation is a rational option (Chart 2).



- **37.** Besides, significant liability items such as the workers' remittances continue to be among the sources of the Central Bank's reserves. Workers' remittances are USD 11.5 billion as of 15 December 2010. Considering the relatively low reserve level and the plan to gradually decrease workers' remittances, the Central Bank, aims to accelerate the accumulation of foreign exchange reserves in the upcoming period.
- **38.** Meanwhile, as it declared in its Monetary Policy Exit Strategy announcement on 14 April 2010, with the beginning of the normalization period, the Central Bank has withdrawn the measures provided, starting from the October 2008 period with the aim of protecting financial stability from the adverse effects of developments in the global economy, and in an orderly manner, resumed practices as they were in the pre-crisis period. In this context:
  - i. The FX required reserves ratio, which was 9 percent, was gradually increased to 11 percent in the year 2010.
  - Starting from 15 December 2010, the intermediary function of the Central Bank in the foreign exchange deposit market was abolished.

- iii. Even if the intermediary function of the Central Bank in foreign exchange deposit market was abolished, banks will still be able to borrow foreign exchange deposits from the CBT within the predetermined borrowing limits. However, the maturity of the said transactions has been decreased from 3 months to 1 week.
- **39.** The Central Bank will continue to take the necessary measures within its means and act prudently in order to ensure the smooth functioning of the FX market and to support FX liquidity. Within this framework, in case of unhealthy price formations due to a decrease in the depth of the foreign exchange market, foreign exchange selling auctions may be resumed under the basic principles of the floating exchange deposit market may be resumed and FX required reserve ratios might be further reduced to a limited extent. In addition to this, in the upcoming period, taking into consideration the macroeconomic risks and financial stability, FX required reserve ratios might continue to be used actively. The coverage of the liabilities subject to reserve requirement ratios may be expanded and the reserve requirement ratios may be differentiated according to the nature and maturity of liabilities. In this context, the off balance sheet liabilities of the banking system will be monitored closely.
- **40.** In addition, the Central Bank will continue to closely monitor exchange rate developments as usual and will directly intervene in the market through purchase or sale, in case of any unhealthy price formations in exchange rates due to speculative behavior stemming from a decrease in market depth.
- **41.** Moreover, the purchase/sale transactions of "foreign exchange against foreign exchange", "foreign exchange against foreign banknotes" and "foreign banknotes against foreign banknotes" conducted between the Central Bank and institutions authorized to operate in the Foreign Exchange and Banknotes Markets will continue in 2011.
- **42.** In view of the fact that financial stability is one of the prerequisites for price stability, the Central Bank has always taken the necessary measures in order

to ensure the efficient functioning of Turkey's foreign exchange market and will continue to do so. Nevertheless, bearing in mind that economic agents operate in an environment of exchange rate risk under the current exchange rate regime, they should establish and employ mechanisms that will ensure efficient risk management.

#### Liquidity Management

- **43.** The main policy instrument of the Central Bank is the one-week repo auction rate. Therefore, the Committee determines the monetary policy stance by setting the level of the one-week repo rate. However, in order to enhance the efficiency and flexibility of the monetary policy, the reserve requirement policy and liquidity management strategy shall be used actively by the CBT as supplementary tools. As a matter of fact, the CBT has used reserve requirement regulations and the liquidity management operational framework actively from the beginning of the global crisis onwards, as tools supplementary to the monetary policy.
- 44. While determining the framework of liquidity management the CBT targets the following: i) maintaining the level of short term interest rates at or around the level determined by the Committee ii) ensuring the efficient and stable operation of money markets by preventing excessive volatilities in the short term money markets in accordance with the liquidity management strategy iii) ensuring the smooth functioning of payments systems, iv) ensuring that the tools used support the efficiency of the monetary policy, v) having an operational structure with sufficient flexibility against unexpected developments in the markets. In order to attain these objectives and enhance the efficiency of the monetary policy, the liquidity level in the market and the distribution of liquidity in the banking system are also taken into consideration.
- **45.** The liquidity level in the market determines the types and maturities of liquidity management tools to be used. So long as the liquidity surplus or liquidity shortage in the market remains at reasonable levels, it is appropriate to manage liquidity via open market operations with overnight or one-week maturities. However, if the liquidity surplus or shortage becomes excessive,

monetary policy may become looser or tighter than the policy rate determined by the Committee implies. If the liquidity surplus reaches excessive levels, the banking system may loosen the credit conditions and extend credits at a rapid pace. However, if the liquidity shortage reaches excessive levels, as the liquidity providing operations highly concentrate on short-term maturities, the banking system may begin to operate under extreme caution and tighten credit conditions, therefore mitigating the effectiveness of the monetary policy. Accordingly, the diversification of tools besides their maturities depending on the level of liquidity enhances the efficiency of liquidity management.

46. Liquidity in the market is mainly determined by the following factors:

i) Changes in money base,

a. Changes in the volume of currency issued,

b. Changes in banks' free deposits (almost all of these accounts consist of required reserves).

ii) The Central Bank's transactions against TL in the market,

a. Net foreign exchange purchase/sales transactions against TL,

b. Interests paid/earned, current expenditures,

c. Export rediscount credits (extended in TL, collected in foreign exchange),

d. Government securities purchase/sales transactions in the market.

iii) The Treasury's transactions against TL,

a. The difference between the redemption and issue of net TL government bonds, excluding redemptions to the Central Bank,

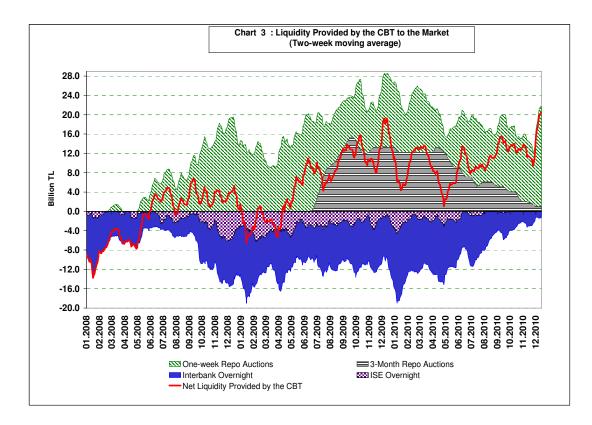
b. Primary surplus/deficit inflows/outflows,

c. Privatization and Savings Deposit Insurance Fund (SDIF)-related TL transfers and other public transactions.

On the other hand, as they determine the TL-denominated borrowing requirement, the Treasury's net FX-denominated collections or payments

including domestic and external borrowing, the Treasury's redemption to the CBT and the CBT's profit transfers indirectly affect liquidity in the market.

- **47.** Excess liquidity conditions, which were created by government bond purchases of the Central Bank in 2001 from public banks and banks within the SDIF, and large amounts of FX purchases during subsequent years, prevailed in the market until May 2008. Although the Central Bank withdrew excess liquidity from time to time via TL deposit transactions and via liquidity bills during the period prior to May 2008, the excess liquidity was mainly withdrawn via TL deposit transactions in the Interbank Money Market within the CBT and reverse repo transactions with overnight maturity in the Repo and Reverse Repo Market of the Istanbul Stock Exchange (ISE). Thus, the Central Bank's overnight borrowing rate announced in the post-2001 crisis period characterized with a liquidity surplus, became a benchmark interest rate for the monetary policy.
- **48.** The liquidity shortage that emerged in May 2008 continued with an increasing trend in the following period and the Central Bank started to inject liquidity into the market via repo auctions with one-week maturity. Since October 2008, on account of increased fluctuations in the international financial markets and in order to mitigate the adverse effects of fluctuations on Turkish markets, and to dissipate concerns that may arise in money markets, the Central Bank has provided the market with liquidity of an amount significantly above the net liquidity need via one-week repo auctions; and continued to withdraw the excess liquidity through overnight transactions at the end of the day. Hence, the volatility in overnight interest rates was contained while keeping the Central Bank's overnight borrowing rate as the policy interest rate. On the other hand, during the global crisis, the weakening of capital flows all around the world slowed down capital inflows to our country and caused an increase in liquidity shortage. Thus, starting from 19 June 2009, (in addition to the 1week repo auctions which is the basic funding instrument of the CBT) 3-month repo auctions were introduced (Chart 3).



- **49.** In the first stage of the "Monetary Policy Exit Strategy" that was announced on 14 April 2010, the amount of liquidity that has been provided as a part of the "overfunding policy", which was used effectively during the crisis period, has gradually been reduced. During this period, the Central Bank set the amount of funding via repo auctions in such a fashion that a lower amount of excess liquidity would be left in the market at the end of the day. Consequently, the Central Bank reduced the amount withdrawn in the Repo and Reverse Repo Market of ISE and the Interbank Money Market within the Central Bank.
- **50.** As a result of the cutback in the excess funding amount, the interest rate of 1 week repo auctions started to increase; thereupon, the second stage of the exit strategy was put into force and the first step of the technical interest rate adjustment process was taken as per the Committee's decision dated 18 May 2010. From this date, one-week repo auctions started to be conducted via the "quantity" auction method with fixed interest rate and the one-week repo rate became the new policy rate.

**51.** Besides, as mentioned in the exit strategy, starting especially from September 2010, the Central Bank started to use the reserve requirement policy and the spread between the borrowing and lending interest rates announced for overnight transactions as supplementary monetary policy tools. Accordingly;

i) In order to more actively use the required reserve ratios as one of the policy tools to mitigate the macroeconomic and financial risks, the remuneration of Turkish lira required reserves was terminated.

ii) Due to a substantial setback in liquidity shortage and an improvement in credit conditions, the Turkish lira required reserve ratio was increased twice, each by 0.5 percentage point, from 5 percent to 6 percent in total, as of October 1 and November 12 respectively, so the banking system liquidity was reduced by TL 4.2 billion. Moreover, decided on 17 December 2010, to be in effect from January 2011, reserve requirements were differentiated according to maturity, such that the required reserve ratios for short-term maturities were increased while ratios for accounts with 1-year and longer maturities were decreased. Additionally, the required reserve base is expanded to include funds received by banks through repo transactions except for those funds received from transactions with the Central Bank and those from bank to bank transactions. Therefore, according to Current data, market liquidity will be reduced by an additional amount of TL 7.6 billion.

iii) With a view to ensuring efficiency in the Turkish lira market and promoting the extension of maturities of transactions, through indicating that overnight interest rates are allowed to deviate, as required by the conjuncture, from policy rates in both directions by a fraction, overnight borrowing interest rates were cut by 500 basis points in total and thus the spread between borrowing and lending rates, which had been 250 basis points when the exit strategy was announced, was increased to 750 basis points.

**52.** On the other hand, three-month repo auctions were terminated as of 15 October 2010, with the consideration that the liquidity shortage will diminish and the need for longer term funding will decrease due to the continuation of the CBT's foreign exchange purchases.

53. The net liquidity shortage in the market was around TL 18.9 billion at the end of 2009. The CBT provided liquidity to the market, of which TL 21.0 billion was via one week, TL 12.2 billion via 3-month repo auctions and at the end of the day the CBT withdrew the liquidity surplus of TL 14.3 billion through overnight transactions. As the net liquidity shortage in the market was TL 21.2 billion as of 15 December 2010, the CBT funded the market with TL 21.1 billion in one week repo, TL 1.0 billion in 3-month repo transactions; amounting to TL 22.1 billion At the end of the day, 0.9 billion TL in excess liquidity was withdrawn by the CBT (Table 2).

Table 2: Changes in Liquidity and Central Bank Funding (Billion TL)

	31.12.2009	15.12.2010	Change
Liquidity Shortage in the Market	18.9	21,2	2,3
Funding via 1-Week Repo Auctions	21,0	21,1	0,1
Funding via 3-Month Repo Auctions	12,2	1,0	-11,2
Withdrawal in IMM and ISE at Overnight Maturity	-14,3	-0,9	13,4

The main items that affected liquidity in 2010 are given with the preliminary data in Table 3.

	31.12.09	15.12.10	Impact
Money Base	64.5	77.3	-12.8
Currency Issued	38.3	48.5	-10.1
Free Deposits	26.2	28.9	-2.7
CBT Operations Affecting Liquidity			30.9
Net FX Purchase against TL			21.1
CBT Interest Payments and Other Payments			0.8
CBT Government Bond Purchases			7.3
Export Rediscount Credits			1.7
Public Operations (excl. Redemptions to CBT)			-20.3
Redemption of Net TL-Denominated			
Government Bonds (Redemption-Issue)			-5.2
Primary Surplus Inflow			-12.6
TL-denominated privatizations and other			
operations			-2.5

#### Table 3: Factors Affecting Liquidity

(Billion TL)

Thus, between 4 January and 15 December 2010, while the foreign exchange and government security purchases of the CBT, interest rate and other payments and export rediscount credits increased liquidity by TL 30.9 billion, Treasury transactions reduced liquidity by TL 20.3 billion. Also, the TL 12.8 billion increase in the monetary base had contributed to reducing the liquidity.

**54.** The most important factors which will be effective on liquidity conditions in 2011 are; the rise in monetary base, the TL redemption-issue difference of the Treasury and the amount of foreign exchange against the TL buying/selling transactions of the CBT, which will be held with the market. Rapid changes in the risk appetite and the appearance of global markets may lead to significant volatility in capital flows towards emerging countries including Turkey. For this reason, the uncertainty about the amount of CBT's TL against foreign exchange buying/selling transactions makes it hard to form an accurate

forecast pertaining to liquidity conditions in 2011. It is foreseen that the liquidity shortage in the market will continue at reasonable levels if the CBT continues to purchase foreign exchange within the framework of the scheduled auction program. However, if supplementary foreign exchange purchases continue and there is no significant increase in TL reserve requirements, it may be possible to observe a reduction in liquidity shortage, and even to have a liquidity surplus.

55. As of 10 December 2010, all government securities purchased after the February 2001 crisis within the framework of the operation aimed at reducing the overnight borrowing requirement of public and SDIF banks has been redeemed and the effects of the 2001 crisis on the Central Bank's balance sheet have been erased. However, considering all probabilities related to liquidity, the Central Bank has to keep government securities in its open market operations portfolio on technical grounds in order to control interest rates in the Repo and Reverse Repo Market of the ISE and to maintain the diversity of tools, as well as operational flexibility in liquidity management. In this context, the Central Bank announced the government securities purchase program in "Monetary and Exchange Rate Policy for 2010" report on 10 December 2009. Within the framework of this government securities purchase program, as foreseen, the total nominal amount of government securities purchased will have reached TL 8 billion as of 22 December 2010. Securities amounting to TL 0.8 billion in the Central Bank's open market operations portfolio will mature on 11 May 2011, TL 0.7 billion will mature on 3 August 2011 and TL 1.0 billion on 16 November 2011, respectively - with the total of TL 2.5 billion in 2011. For the government securities to mature, it is foreseen that:

i. TL 0.8 billion in May, TL 0.8 billion in August, TL 0.7 billion in October and TL 0.2 billion in November of the matured securities will be renewed. The auction details will be announced on Reuters "CBTL" page at 10:00 a.m. on the first working day of each month; whereas the securities to be purchased at each auction shall be announced at 10:00 a.m. on the auction day.

ii. Auctions will be held on Wednesdays and Fridays with value dates as the subsequent working days.

iii. Each auction amount will be nominal TL 100 million.

iv. Other issues related to the auctions are subject to current regulations.

v. No additional purchases of government securities will be made; yet keeping reserved the right to make extra purchases in case of extreme liquidity shortage conditions.

**56.** The Central Bank shall maintain the existing operational framework for liquidity management that was formed by the exit strategy. According to this framework:

i) The Central Bank will continue to announce overnight borrowing and lending rates between 10:00 a.m.– 12:00 p.m. and 1:00 p.m. – 4:00 p.m. on business days, between 10:00 a.m.– 12:00 p.m. on half business days, in the Interbank Money Market within the Central Bank. In case liquidity shortage arises during the day, banks will be able to borrow at the Central Bank's lending rate against collateral within their limits. In case of excess liquidity, banks will be able to lend Turkish lira to the Central Bank at the Central Bank's borrowing rate without any limit.

ii) The Late Liquidity Window Facility will continue as in the current situation: banks will be able to borrow from the Central Bank against collateral, and lend to the Central Bank without any limit between 4:00 p.m. – 5:00 p.m. on business days, between 12:00 p.m. – 12:30 p.m. on half business days and on the last working day of the required reserve maintenance period between 4:00 p.m. – 5:15 p.m. on business days, between 12:00 p.m. – 12:00 p.m. – 12:45 p.m. on half business days.

iii) The one-week repo auction interest rate will continue to be the policy rate and the Central Bank will continue to hold one-week repo auctions as long as the market is in need of liquidity. In case of a liquidity shortage, The Central Bank will announce the amount of repo auction on Reuters' "CBTF" page at 10:00 a.m. and will not announce an auction on days that there is no funding need.

iv) One-week maturity repo auctions will be held at 11:00 a.m. on business days, at 10:30 a.m. on half business days and the results will be announced on Reuters' "CBTG" page within 30 minutes. Institutions are required to notify

the securities against their repo operations until 12:00 p.m. on business days, until 11:30 a.m. on half business days and fulfill their liabilities regarding open market operations until 4:45 p.m. on business days, until 12:30 p.m. on half business days. Auctions will continue to be held at the interest rate set for one-week repo auctions by the Committee via the quantity auction method.

v) In case of unforeseen excessive liquidity shortage during the day, which may exert excessive pressure on money market interest rates, the Central Bank may announce one-week maturity "Intra-day Repo Auctions" via quantity auction method in addition to the regular ones announced at 11:00 a.m. Other auctions held by the Central Bank at open market operations will continue to be held in traditional auction method.

vi) The primary dealer banks will be able to conduct O/N repo transactions within the framework of open market operations, between 10:00 a.m.-12:00 p.m. and 1:00 p.m.- 4:00 p.m. on business days and between 10:00 a.m.- 12:00 p.m. on half business days.

vii) In case of excessive capital inflow, the decrease in liquidity shortage below reasonable levels due to foreign exchange purchases may ease credit conditions beyond the desired level. In this case, primarily, TL required reserve ratios will be increased, and also Central Bank liquidity bills with maturities up to 91 days shall be issued if necessary. Besides, to control liquidity, the outright sale of government securities bought from the market previously, and/or Turkish lira deposit buying auctions with 1, 2 and 4 weeks standard maturities may also be used.

viii) In the case of liquidity surplus, the Central Bank will hold reverse repo auctions and/or TL deposit buying auctions with a one-week maturity subject to the same conditions and with the interest rate announced for the one-week repo auctions; thereby the level of policy rate will be maintained.

ix) In the case the liquidity shortage increases and funding by the Central Bank repo auctions concentrates on short-term maturities, depending on the level of liquidity shortage and the needs that may arise regarding the efficient functioning of the credit mechanism, the Central Bank may reduce TL required reserve ratios and initiate long-term repo operations and additional government securities purchase transactions.

**57.** The Central Bank, with the primary goal of achieving and maintaining price stability, as entrusted to it by law, will continue to monitor macroeconomic risks and financial stability in 2011 as it has done so up to now. To this end, it will continue its practices to enhance the effectiveness of monetary policy and liquidity management. In the upcoming period, as before, The Central Bank, according to the emergence of needs, may change its liquidity management strategy and, when needed, actively use borrowing and lending rate margins alongside other tools such as reserve requirements in order to both contribute to the effectiveness of the one week repo auction rate, which is the main monetary policy tool, and to limit risks pertinent to financial stability. Accordingly, the coverage of liabilities subject to reserve requirements may be expanded and the required reserve ratios may be differentiated according to the quality and maturities of liabilities.

## ANNEX: CALENDAR FOR 2011 MONETARY POLICY COMMITTEE (MPC) MEETINGS, INFLATION REPORTS AND FINANCIAL STABILITY REPORTS

MPC Meetings	Summary of MPC Meeting	Inflation Report	Financial Stability Report
20 January, Thursday	27 January, Thursday	25 January, Tuesday	
15 February, Tuesday	22 February, Tuesday		
23 March, Wednesday	30 March, Wednesday		
21 April, Thursday	28 April, Thursday	28 April, Thursday	
25 May, Wednesday	1 June, Wednesday		30 May, Monday
23 June, Thursday	30 June, Thursday		
21 July, Thursday	28 July, Thursday	28 July, Thursday	
23 August, Tuesday	26 August, Friday		
20 September, Tuesday	27 September, Tuesday		
20 October, Thursday	27 October, Thursday	26 October, Wednesday	
23 November, Wednesday	30 November, Wednesday		29 November, Tuesday
22 December, Thursday	29 December, Thursday		

**Note:** Monetary and Exchange Rate Policy for 2012 will be published on 27 December 2011.