

## Durmuş Yılmaz: Turkey's monetary and exchange rate policy for 2009

Speech by Mr Durmuş Yılmaz, Governor of the Central Bank of the Republic of Turkey, at the Central Bank of the Republic of Turkey, Ankara, 16 December 2008.

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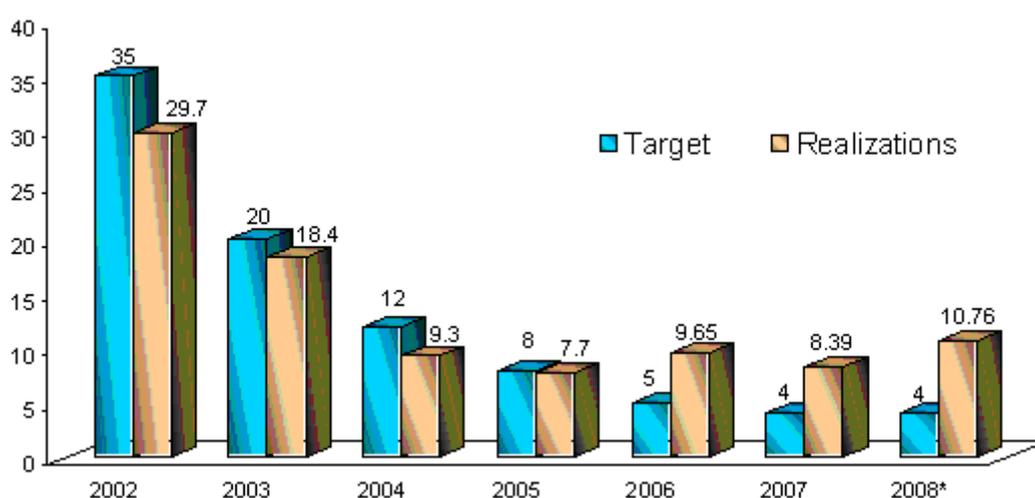
### General framework of the monetary policy

#### Overview

Assessing the monetary policy decisions of CBT in relation to the developments in the last three years, it is of importance to fully comprehend the strategy to be implemented in the upcoming period. Therefore, before covering the operational framework of the monetary and exchange rate policy for 2009, it is better to provide a general evaluation of the inflation-targeting regime, which has been implemented for the last seven years since 2001.

Between 2002-2005, the Central Bank implemented an implicit inflation-targeting regime under which short-term interest rates were used as the main policy tool. Following the achievements in the fight against inflation, decision-making processes gradually became more transparent and foreseeable, thus, finally in 2006, the transition to an explicit inflation-targeting regime was announced. The adoption of the explicit inflation-targeting regime coincided with a period when the global conjuncture was undergoing rapid changes, as a consequence of which; the Turkish economy faced a series of shocks. As a matter of fact, when we look at the 2006-2008 period, it is evident that factors hindering the decline in inflation mostly stem from the developments beyond the domain of monetary policy. These shocks, of which some have prolonged impacts, caused inflation to exceed the targets during this period (Chart 1).

Chart 1. Inflation developments in Turkey between 2002-2008



(\*) November inflation rate was used for 2008.

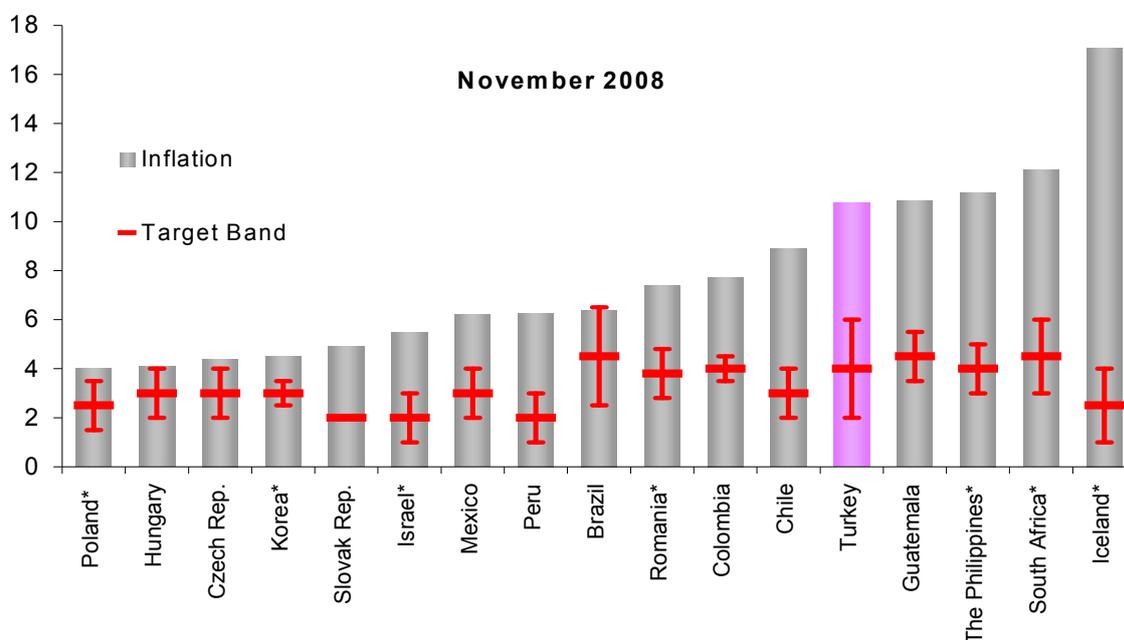
Source: TURKSTAT and CBT.

The first serious shock to the inflation-targeting regime in Turkey arose upon a time when international capital conditions changed to the disadvantage of developing countries and capital outflow was experienced in many countries including Turkey, from May 2006 onwards. In this period, depreciation of the New Turkish Lira (TRY) around 30 percent and the lack of confidence created by financial turbulence combined with sharp increases in food prices due to drought led inflation rates increase and inflation expectations exceed the targets considerably. In order to avoid any permanent effect on pricing behaviors, the Central Bank tightened monetary policy significantly and took a series of additional policy measures. These measures varied from suspending foreign exchange buying auctions to several arrangements regarding TRY and foreign exchange liquidity. Even though the gap between inflation expectations and inflation targets widened following fluctuations, inflation and inflation expectations were to a great extent brought under control, owing to the measures taken.

In the period covering 2007 and onwards, the main factors impeding the disinflation process were sharp increases in oil and other commodity prices in the international markets along with adjustments in administered/directed prices. The significant weight of food prices within the Consumer Price Index (CPI) in Turkey – as is the case in many developing countries – increased the volatility of inflation.

In 2007 and onwards, rapidly increasing food and energy prices in the international markets caused inflation to display an upward trend on a global scale. As a matter of fact, by November 2008, inflation rates in all developing countries – apart from Brazil – implementing inflation-targeting regimes exceeded inflation targets by a significant margin (Chart 2). This observation confirms the fact that the relatively high inflation figures of 2007 and 2008 in our country should be assessed mostly as a reflection of global factors.

**Chart 2. Inflation targets and realizations in the developing countries**



\* As of October 2008

Source: Central Banks, IFS, TURKSTAT, and CBT.

As inflation remained significantly above targets for a protracted period, it entailed the Central Bank to pursue an efficient communication strategy. In this context since 2007, when

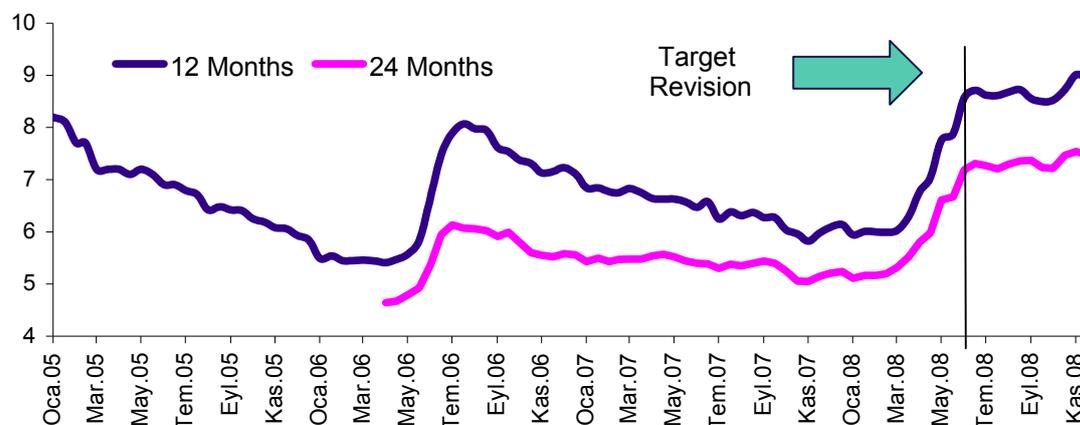
supply shocks became more apparent, the Central Bank has highlighted core inflation indicators excluding energy and food prices and has frequently referred to them. It was emphasized in this period that, despite the upward trend of inflation, there was no pressure on core inflation indicators and that prices, which were not directly affected by supply shocks, did not display high increases. Under the assumption that the hike in energy and food prices is temporary, and thus inflation shall resume its downward trend, the aim was to direct the focus of economic agents to the medium-term in order to avoid undesired fluctuations in economic activity. At first, this approach was successful in containing inflation expectations. However, the fact that shocks were more persistent than expected caused the rise in food and energy prices to influence prices in general and an increase was observed in core inflation indicators. In early 2008, when turbulence in the global markets that started in summer 2007 was combined with domestic political uncertainties, significant depreciation was observed in the Turkish Lira and it became considerably difficult to push inflation expectations down to levels consistent with the previously set inflation target of 4 percent.

Although not attaining inflation targets stems from factors beyond the domain of monetary policy, overshooting of inflation target for two consecutive years and also the expectation of overshooting 2008 target have undermined the role of inflation targets as an anchor for inflation expectations. In fact, studies within our Bank indicate that gradually more weight is attached to past inflation in forming expectations and as of mid-2006 inflation expectations have become more susceptible to variables like exchange rate and risk premium. According to the Central Bank, if this situation becomes permanent, the cost of fighting inflation will increase. Therefore, in an open letter to the Government in June 2008 the Central Bank proposed setting new targets for the medium term in order to control inflation expectations and to re-establish the reputation of the implemented regime. The Government accepted this proposal and the inflation targets for 2009 to 2011 were revised as 7.5, 6.5, and 5.5 percent, respectively. Hence, the inflation targets to be used as a reference by economic agents to form their expectations were set with the objective of containing inflation expectations and reducing the cost of the fight against inflation.

Bearing in mind that altering inflation targets might lead to the deterioration in the inflation expectations in the short run, the Central Bank implemented the target revision along with monetary tightening. Thereby, the negative impact that might be created by the upward revision of targets has been contained. As a matter of fact, during the period of target revision, a slight deterioration was observed in the medium-term inflation expectations but with diminishing political uncertainties and monetary tightening, inflation expectations have been contained (Chart 3).

In the last quarter of 2008, the aggravated lack of confidence in the global financial markets had unfavorable effects on the global liquidity flow and created an extraordinary demand especially for US dollar liquidity. This led to significant depreciation of the TRY, as was the case for currencies of other developing countries. Despite these developments in the exchange rate, slowdown in total demand and the decline in commodity and food prices affected inflation outlook positively, which provided room to maneuver for monetary policy. Against this backdrop, the Central Bank has taken several measures to support the liquidity of the financial system and to ensure the efficient functioning of the credit markets.

**Chart 3. Inflation expectations for the next 12 and 24 months**



Source: CBT.

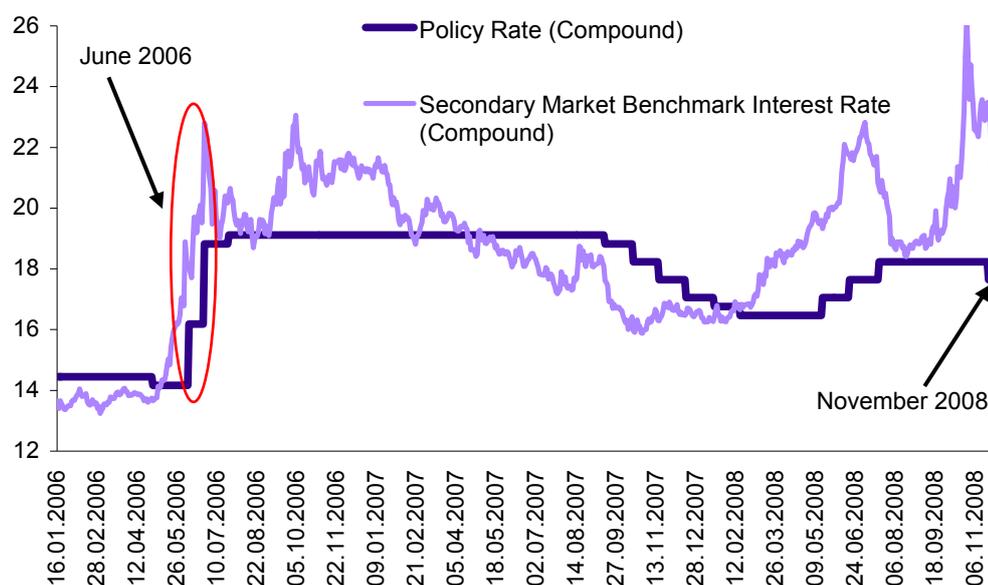
Since the Central Bank can directly control New Turkish Lira liquidity, it can support smooth functioning of financial and credit markets by providing the required liquidity. As for foreign exchange liquidity developments however, external conditions are more influential. In fact, in a period when uncertainties surrounding the global economy are at high levels, the Central Bank adopted the strategy to use foreign exchange reserves to primarily support the foreign exchange liquidity of our banking system. Within this framework, the Central Bank resumed its activities as an intermediary in the Foreign Exchange Deposit Market; lending rates of this market was reduced and maturities were extended. Besides, during periods of ailing price movements, foreign exchange liquidity was injected via foreign exchange selling auctions. Moreover, it has been declared to the public that if deemed necessary, additional measures might be taken to ensure that the financial markets function efficiently.

All these measures have helped contain the effects of the global financial turmoil on the domestic economy. The Central Bank will continue to take the necessary measures, provided that they do not conflict with the price stability objective.

In the last quarter of 2008, global financial conditions have been tighter than required by the stance of monetary policy, owing mainly to the intensification of the global financial crisis. Turkey has also been undergoing a similar process. In this context, the Central Bank recently made a measured cut in short-term interest rates, in order to offset the extra tightening in monetary conditions.

In order to be able to comprehend the monetary policy decisions of the Central Bank, the nature of the shocks to the economy should be analyzed properly at the outset. For instance, while an unexpected and strong monetary tightening was implemented in the face of capital outflows in the May-June 2006 period, an expansionary monetary policy was adopted following capital outflows in the last quarter of 2008 (Chart 4). The contradiction between these two responses can be explained mainly by the significant differences between the said two periods in terms of both economic conjuncture and the sources of the shocks. As both domestic demand and external demand were strong in 2006, the exchange rate movements triggered by capital outflows had the potential to rapidly damage disinflation and inflation expectations. However, in 2008, it is observed that the downward pressure of the global recession and weak domestic demand conditions on the inflation has come to the forefront.

**Chart 4. Policy rates and market interest rates in the 2006-2008 period**



Source: CBT and ISE.

In sum, it is seen that the inflation-targeting regime has provided a significant amount of flexibility to take the necessary measures in the face of high-level shocks. When the course of medium-term inflation expectations is analyzed, it is observed that the expected inflation continues to remain well below the actual inflation figures although inflation had clearly remained above the target level for quite some time. When considering the period of high inflation levels experienced by Turkey in recent years, one of the most significant achievements of the inflation-targeting regime has been its success in managing expectations in a time of extraordinary shocks.

### ***Operational framework for monetary policy***

#### ***Inflation targets***

Inflation targets have been set jointly with the Government as “point target” since 2006, over the end-year inflation rates calculated by the annual percentage change of the Consumer Price Index (CPI) for a target horizon of three years. As mentioned above, targets for the next three-year period were announced during the revision in June 2008. Within this framework, inflation targets for 2009, 2010 and 2011 are 7.5 percent, 6.5 percent and 5.5 percent, respectively.

#### ***Accountability***

In the first three-year period of the inflation-targeting regime, the Central Bank explained the reasons for deviations from inflation targets and policy measures taken with open letters sent to the Government, and hence meticulously applied the principle of accountability. Gradually, Inflation Reports also became a significant support to the accountability mechanism.

It is stipulated in Article 42 of the CBT Law that “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 published or the occurrence of the possibility of not achieving and the measures to be taken thereof”. Implementation details regarding the specification of the extent of the deviation from the target that require explanation are left to

the discretion of the Central Bank. In this respect, the Central Bank sets an uncertainty band around the target and enforces the accountability mechanism in case figures breach this band.

The uncertainty band for 2009 has been maintained at two percentage points around the target. In this context, a path consistent with the end-year target has been established for the end of each quarter. The figures to be used as a reference for accountability throughout 2009 can be found in Table 1.

**Table 1: 2009 Inflation path consistent with the end-year target and the uncertainty band**

	March	June	September	December
Uncertainty Band (Upper Limit)	11.70	10.80	10.50	9.50
<b>Path Consistent with the Target</b>	<b>9.70</b>	<b>8.80</b>	<b>8.50</b>	<b>7.50</b>
Uncertainty Band (Lower Limit)	7.70	6.80	6.50	5.50

In case end-of-quarter inflation figures breach the band specified in Table 1, the Central Bank will disclose the reasons for the deviation in the quarterly Inflation Report, together with the measures already taken as well as those to be taken to attain convergence to the target. Thus, the Inflation Report will also have an important role as the main tool of the accountability mechanism. In case the end-year inflation deviates more than two percentage points in either direction, the Central Bank will draft a detailed letter to the Government and share this letter with the public.

At this point, it should be emphasized once more that the Central Bank does not have any targets for quarterly basis and the official target announced is the *end-year* inflation target. Therefore, it should be underlined that the end-of-quarter figures specified above have been set only to facilitate the accountability mechanism and should not be perceived as interim targets.

#### *Inflation forecasts and monetary policy stance*

With the adoption of the inflation-targeting regime, medium-term inflation forecasts started to be included in Inflation Reports issued since 2006. In addition to these forecasts, reports also provide information regarding the envisaged course of monetary policy. Since 2007, inflation forecasts, which extended to eighteen-month periods at the outset, started to cover a two-year time-span.

In the face of the extraordinary supply-side shocks experienced since the last quarter of 2007 and with a view to improving the predictability of monetary policy, since April 2008, the Central Bank has added projections to the baseline scenario under alternative scenarios based on the food and energy prices. Moreover, the forecast horizon has been extended to three years for economic agents to have a clearer vision of the future and develop a longer-term perspective.

The main objective of sharing inflation forecasts and the likely policy stance with the public is to promote main principles of inflation targeting; i.e. transparency and foreseeability. Such an approach has helped strengthen the monetary transmission mechanism via expectations channel in recent years. However, the Central Bank preferred to avoid providing hints on the course of short-term interest rates in the recent period, as monetary policy now needs to be

relatively more flexible given the current conjuncture with exceptional uncertainties in the global economy. It should be underlined that this is a temporary situation and the predictability of monetary policy will increase in the upcoming period when the stability in the global economy is restored

#### *Decision-making process and the communication policy*

The Monetary Policy Committee (MPC) will continue to meet once a month in 2009 as well, in accordance with the schedule announced beforehand. Monetary policy decisions at these meetings and their rationale will be made public on the website of the Central Bank in a press release posted at 7:00 p.m. on the same day. As in the previous year, the summary of the MPC Meeting will be released on the website of the Central Bank within eight working days, along with its English translation.

As in previous years, the Inflation Report, which is the main communication tool of the monetary policy, will be published quarterly and introduced to the public at a press conference. The biannual presentations made by the Governor before the Council of Ministers and the Planning and Budget Commission of the Grand National Assembly of Turkey – to provide information about the activities and monetary policy implementations of the Bank –; monthly “Price Developments” reports issued on the next working day of the release of the inflation figures; “Financial Stability Report” issued biannually; press releases; and presentations and speeches made by the Central Bank authorities in Turkey and abroad will play important role in informing the public.<sup>1</sup> Working papers, booklets, technical notes published and conferences and workshops arranged by the Bank will also continue to be used as effective tools of the communication policy.

### **Exchange rate policy and liquidity management**

#### ***Exchange rate policy***

Along with inflation targeting, the Central Bank will continue to implement the floating exchange rate regime in 2009. As stated in the annual monetary and exchange rate policy announcements, which have been published since 2002, the foreign exchange rate is not a policy tool or target under this regime and it is determined by the supply and demand conditions in the market. Whereas the main factors affecting foreign exchange supply and demand are the monetary and fiscal policies implemented, international developments, economic fundamentals and expectations.

Although there is no exchange rate level to be maintained in a floating exchange rate regime, a strong foreign exchange reserve position is very important for emerging economies like Turkey to eliminate the unfavorable effects of potential internal and external shocks and to boost the 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 the foreign exchange demand.

As meticulous in minimizing the impact on supply and demand conditions in the foreign exchange market, the Central Bank has been buying foreign exchange via transparent foreign exchange buying auctions with pre-announced terms and conditions. Although the aim is to run auctions according to the pre-announced program, in case of unexpected significant developments pertaining to the foreign exchange supply, amendments to the auction programs can be made with prior notice.

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<sup>1</sup> Dates of Monetary Policy Committee Meetings and the schedule of the release of the Inflation Report and the Financial Stability Report can be found in the Annex.

Accordingly;

- (i) The maximum amount to be purchased in daily foreign exchange buying auctions was set as USD 90 million for 2008, with USD 30 million for the auction amount and USD 60 million for the optional selling amount.
- (ii) However, as a result of the increased exchange rate volatility in our foreign exchange market parallel to the increased expectations of a possible stagnation in developed economies, the maximum daily amount to be purchased was reduced to USD 45 million, with USD 15 million for the auction amount and USD 30 million for the optional selling amount, as of 10 March 2008.
- (iii) Meanwhile, the Central Bank has implemented a set of measures since October, with the aim of abating potential problems in the Turkish financial markets that may arise from global developments. Within this scope, foreign exchange buying auctions were suspended as of 16 October 2008 in order to keep the liquidity, which is permanently withdrawn from the foreign exchange market through foreign exchange buying auctions, in the system, and hence, to further enhance the liquidity conditions of the Turkish banks.

In addition to the suspension of the foreign exchange buying auctions, the Central Bank started to inject foreign exchange liquidity into the market through foreign exchange selling auctions as of 24 October 2008 as unhealthy price formations were witnessed due to a decrease in the depth of the foreign exchange market. The daily amount of the foreign exchange to be sold via auctions was set as USD 50 million, which could be raised on the days of the auction when deemed necessary. It was also announced to the public that depending on developments in the foreign exchange market, the daily auction amounts might be changed and the auctions might also be suspended, when deemed necessary. As a matter of fact, after the auctions held on two working days, the Central Bank suspended the foreign exchange selling auctions on 30 October 2008 as a result of easing concerns pertaining to the depth of the foreign exchange market, which was also facilitated by favorable developments in the global markets.

Hence, in 2008, while the total amount of foreign exchange purchased via buying auctions reached USD 7.584 million, USD 100 million was sold through two foreign exchange selling auctions. There has not been any direct intervention in the foreign exchange market. The total amounts of foreign exchange purchased and sold by the Central Bank from 2002 onwards are shown on a yearly basis in the table given below:

**Table 2: The Central Bank's foreign exchange purchases and sales  
(2002-2008; USD million)**

Year	FX Buying Auctions	FX Selling Auctions	FX Buying Interventions	FX Selling Interventions	Total Net FX Buying
2002	795	-	16	12	799
2003	5.652	-	4.229	-	9.881
2004	4.104	-	1.283	9	5.378
2005	7.442	-	14.565	-	22.007
2006	4.296	1.000	5.441	2.105	6.632
2007	9.906	-	-	-	9.906
2008*	7.584	100	-	-	7.484
<b>Total</b>	<b>39.779</b>	<b>1.100</b>	<b>25.534</b>	<b>2.126</b>	<b>62.087</b>

As of 15 December 2008

Problems in the international credit markets have heightened since the second half of September due to increased concerns over the credibility of the financial system, thus leading to liquidity problems in many countries. During this period, the Central Bank adopted the following regulations in order to ensure the efficient functioning of the foreign exchange market and to strengthen foreign exchange liquidity in the banking system in case of liquidity problems:

- (i) On 9 October 2008, the Central Bank resumed its intermediary activities in the foreign exchange deposit markets in Foreign Exchange and Banknotes Markets with a view to contributing to the enhancement of the mobilization of foreign exchange liquidity in the Interbank Foreign Exchange Market.
- (ii) Transaction limits for the banks in the Foreign Exchange and Banknotes Markets were revised on 14 October 2008 and limits were doubled for each bank on 24 October 2008 to reach a total of USD 10.8 billion.
- (iii) On 21 November 2008, the maturity of the FX deposit borrowed within predetermined borrowing limits by the Banks from the Foreign Exchange Deposit Markets in terms of USD and Euro was extended from one week to one month and the lending rate that had been previously set as 10 percent in the said market was reduced to 7 percent for USD and 9 percent for Euro.
- (iv) On 5 December 2008, the FX required reserves ratio dropped from 11 percent to 9 percent, providing the banking system with an additional foreign currency liquidity amounting to USD 2.5 billion.

In such a challenging environment, efficient utilization of foreign exchange reserves by developing countries assumes the utmost importance. Taking into consideration of this, the Central Bank, when deemed necessary, will always continue to take additional measures within its means prudently in order to ensure the smooth functioning of the FX market and to support FX liquidity. In this framework, in the event of further intensifying of the financial turmoil in global markets that might have negative impacts on the Turkish economy;

- (i) Under the basic principles of the floating exchange rate regime, if unhealthy fluctuations are witnessed in the foreign exchange market due to a decrease in the depth of the market foreign exchange selling auctions will be held

- (ii) Transaction limits for banks in the Foreign Exchange and Banknotes Markets will be raised,
- (iii) The FX required reserve ratio might be further reduced to a limited extent.

The Central Bank will continue to closely monitor exchange rate developments in 2009 and will directly intervene in the market in case of any unhealthy fluctuations in the exchange rates due to speculative behavior stemming from a decrease in the market depth.

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 2009.

In case of a recovery in the liquidity conditions due to developments in the international markets;

- (i) The Central Bank may, with prior notice, resume foreign exchange buying auctions in line with the general strategy of strengthening foreign exchange reserves at times when foreign exchange supply increases compared to the foreign exchange demand.
- (ii) The Central Bank might cease to perform its intermediary function in the Foreign Exchange Deposit Market. However, even in such a case, banks will still be able to borrow foreign exchange deposits from the Foreign Exchange Deposit Markets within the predetermined borrowing limits.
- (iii) The FX required reserves ratio might be increased.

In view of the fact that financial stability is one of the prerequisites for price stability, the Central Bank took the necessary measures in order to ensure the efficient operation of Turkey’s foreign exchange market without facing any liquidity problems. The Central Bank also announced possible additional measures. Nevertheless, bearing in mind that under the current exchange rate regime economic agents operate in an environment of exchange rate risk, they should establish mechanisms that will ensure efficient risk management.

### **Liquidity management**

While drawing up the general framework of liquidity management, the Central Bank took into consideration following objectives;

(i) ensuring that short-term interest rates would remain at or revolve around the level set by the Committee, (ii) ensuring the efficient and stable operation of money markets by preventing excessive volatilities in short-term interest rates of the money market, (iii) ensuring smooth functioning of the payments system. (iv) providing the operational structure with sufficient flexibility against unexpected developments in the markets.

Another important factor that determines the general framework of the Central Bank’s liquidity management is the level of liquidity in the market.

The main factors that directly affect the liquidity in the market are as follows:

(i) Changes in monetary base, (ii) The Central Bank’s foreign currency purchase/sales transactions, (iii) Interests paid/collected by the Central Bank for open market operations and interests paid by the Central Bank for TRY reserve requirements, (iv) The Treasury’s primary surplus, (v) The spread between the Treasury’s redemption and issue of net TRY government bonds, excluding the Central Bank, (vi) Privatization and SDIF-related TRY transfers to the Treasury.

In addition, as Treasury determines the TRY-denominated borrowing requirement, the Treasury’s net FX-denominated collections or payments including domestic and external

borrowing, the Treasury's redemption to the CBRT and CBRT profit transfers can all indirectly affect TRY liquidity in the market.

Excess liquidity conditions, which were created by government bonds bought by the Central Bank in 2001 from public banks and banks within the SDIF, and later by large amounts of FX purchase, prevailed in the market until May 2008. The liquidity shortage that emerged in the market in May 2008 continued for the rest of the year. The Central Bank withdrew the excess liquidity in the market mainly via New Turkish Lira deposit transactions in the Interbank Money Market within the CBRT and reverse repo transactions in the Repo and Reverse Repo Market of the Istanbul Stock Exchange, on an overnight basis. Following the liquidity shortage of May 2008, the Central Bank started to meet liquidity requirements via regular one-week repo auctions. Meanwhile, due to the fact that some banks preferred to lend their excess liquidity to the Central Bank in the Interbank Money Market owing to factors such as transaction costs and tax differences as long as interest rates in the secondary market did not significantly exceed the Central Bank borrowing rate, the Central Bank injected liquidity to the market via one-week auctions on the one hand, and made overnight borrowings on the other hand. Hence, the Central Bank prevented overnight interest rates to significantly surpass the Central Bank's overnight borrowing rate, a reference rate for monetary policy, thus ensuring the efficient distribution of liquidity in the banking system. Thus, the borrowing rate of the Central Bank has continued to be the benchmark interest rate for markets.

At end-2007, the Central Bank withdrew total liquidity of TRY 3.9 billion including TRY 2.9 billion at overnight maturity and TRY 1.0 billion via liquidity bills. At the end of November 2008, the Central Bank injected TRY 19 billion worth of liquidity to the market via one-week repo auctions and withdrew TRY 8.6 billion at overnight maturity. Hence, the excess liquidity, which was TRY 3.9 billion at end-2007, turned into a liquidity shortage of TRY 10.4 billion at the end of November 2008. As a result, liquidity in the market dropped by TRY 14.3 billion (Table 3).

**Table 3: Changes in liquidity (Billion TRY)**

	<b>31.12.07</b>	<b>28.11.08</b>	<b>Change</b>
<b>Liquidity in the market</b>	<b>3.9</b>	<b>-10.4</b>	<b>-14.3</b>
Funded via 1-Week Repo Auctions	0.0	- 19.0	-19.0
Withdrawn in IMM and ISE at Overnight Maturity	2.9	8.6	5.7
Withdrawn via Liquidity Bills	1.0	0.0	1.0

The main items affecting liquidity in the market in 2008 are given in Table 4.

**Table 4: Factors affecting liquidity (Billion TRY)**

	31.12.07	28.11.08	Impact
<b>Monetary Base</b>	<b>46.3</b>	<b>56.8</b>	<b>-10.5</b>
Currency Issued	27.4	33.3	-5.9
Free Deposits	18.9	23.5	-4.6
<b>CBRT Operations Affecting Liquidity in the Market</b>			<b>11.0</b>
FX Purchase against TRY			9.1
CBRT Interest Payments			1.9
<b>Public Operations (excl. redemptions to CBRT)</b>			<b>-14.8</b>
Redemption of net TRY government bonds (redemption-issue)			18.9
Primary surplus inflow			-28.9
TRY denominated privatizations and other operations			-4.8

Accordingly, while the Central Bank's foreign exchange purchases and interest payments boosted liquidity by TRY 11 billion in 2008, the Treasury's operations amounting to TRY 14.8 billion and the TRY 10.5 billion increase in monetary base eroded liquidity by a total of TRY 25.3 billion.

Significant uncertainties exist regarding liquidity conditions in 2009. The reason is that the Central Bank's foreign currency purchase/sale operations against TRY and the Treasury's net foreign exchange collections or payments are not yet clear, and the realizations can also be different from the envisaged within the year. Under the assumptions that the Central Bank will not conduct foreign currency purchase/sale operations against TRY and that the Treasury will act as net foreign currency payer at a reasonable level, it is predicted that though the liquidity shortage in the market will be at moderate levels throughout the first quarter, it will be gradually permanent from the second quarter onwards. If the Central Bank sells foreign exchange against TRY, a permanent liquidity shortage might emerge earlier than expected. On the other hand, in case the re-commencement of FX buying by the Central Bank due to improved conditions in international markets or the utilization net FX inflows of the Treasury in terms of TRY might hinder occurrence of permanent liquidity shortage.

Rise in the liquidity shortage causes the interest rates of repo auctions to become reference rates for the markets. The permanency of such conditions leads to an involuntary tightening of monetary policy because of the realization of the said interest rates above the Central Bank's overnight borrowing rates. In order to avoid potential negative impacts of such a situation, interest rates of one-week repo auctions will be set as the reference rate for monetary policy operations, in the event of an increase in liquidity shortage and/or having high probability to become permanent. Furthermore, the Central Bank's overnight borrowing and lending rates will be revised downward with a view to eliminating any probable impact of this change in the operational structure on the monetary policy stance. In other words, this interest rate cut should not be perceived as loosening monetary policy, but merely as a technical adjustment resulting from the permanent change in liquidity conditions.

### *Operational framework for liquidity management*

If the technical interest cut mentioned above does not materialize, the 2009 liquidity management strategy will be as follows:

- (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. in the Interbank Money Market within the Central Bank. In case of a liquidity shortage during the day, banks will be able to borrow at the Central Bank’s lending rate against collateral within their limits. In the event of excess liquidity, banks will be able to lend New Turkish Lira to the Central Bank at the Central Bank’s borrowing rate without any limit.
- (ii) The current implementation of the Late Liquidity Window Facility will continue. Banks will 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. and on the last working day of the required reserve provision between 4:00 p.m. – 5:15 p.m.
- (iii) In case of a temporary or permanent liquidity shortage, the Central Bank will continue to execute its liquidity management mainly through one-week repo auctions. During the periods when the Central Bank does not apply a technical interest rate cut, the Central Bank will announce the amount of repo auction for the day of liquidity shortage on Reuters’ “CBTF” page at 10:00 a.m. As long as no extraordinary fluctuations are observed in the markets, the Central Bank, while determining the amount of the auctions, will endeavor to maintain the average auction interest rate as close as possible to the borrowing rate of the Central Bank announced for intraday transactions.
- (iv) Weekly repo auctions will be held at 11:00 a.m. and the results will be announced on Reuters’ CBTG page no later than at 11:30 a.m. as much as possible. The traditional method will be used in auctions; in other words, successful bidders will be evaluated with their own interest rates.
- (v) In case of unforeseen excessive liquidity shortage during the day, which would exert excessive pressure on money market interest rates, the CBRT may announce “Intra-day Repo Auctions” in addition to the regular ones announced at 11:00 a.m.
- (vi) The primary dealer banks will be able to conduct 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.

### *Technical interest rate cut and the new operational framework*

In cases where the liquidity shortage in the market increases and/or becomes pronounced to be permanent, the Central Bank will rearrange its operational framework of liquidity management and opt for a technical interest rate cut. Accordingly,

- (i) The Central Bank benchmark interest rate will be the interest rates of one-week maturity repo auctions to be held regularly, which are the basic funding instrument. . The repo auction interest rate will match the Central Bank borrowing interest rate applicable to intra-day transactions prior to the period of technical interest cut. For instance, if a decision was made to make a technical interest rate cut on 15 December 2008, the interest rate on repo auctions would be set as 16.25 percent, the rate applicable to intra-day borrowing transactions by the Central Bank.
- (iv) With respect to the technical interest rate cut;
  - a. Overnight Interest Rates: The CBT borrowing and lending interest rates will be set 1.25 points below and above the repo interest rate, respectively. For instance, if the repo interest rate is set as 16.25 percent, then the CBT borrowing rate will be 15.00 percent, while the CBT lending rate will be 17.50 percent.

- b. Late Liquidity Window (LON) Interest Rates: Within the scope of the Late Liquidity Window, CBT overnight borrowing and lending rates will be 4 points below and above the interest rates on repo auctions, respectively. For instance, if the interest rate on repo auctions is set as 16.25 percent, then the CBT LON borrowing rate will be 12.25 percent, while CBT LON lending rate will be 20.25 percent.
  - c. The interest rates on overnight and one-week maturity borrowing facilities provided for primary dealer banks via repo transactions within the framework of open market transactions will be 0.75 points above the interest rates on repo auctions. For instance, if the interest rate on repo auctions is set as 16.25 percent, then the interest rate on borrowing facilities provided for primary dealer banks will be 17 percent.
- (iii) The method of one-week maturity repo auctions will be modified. Accordingly;
- a. One-week maturity repo auctions will not be held via the traditional method; but the quantity auction method. In other words, the interest rate on the repo auction will be set by the Committee. Additionally, banks and intermediaries will only quote quantities for the repo auctions with a one-week maturity. For instance, if the Committee decides the interest rate on one-week maturity repo auctions is to be 16.25 percent, then it will remain as 16.25 percent unless the Committee changes this.
  - b. In the case of liquidity shortage due to unpredicted reasons, thus leading to a decision for an intra-day repo auction, such auctions will be held at the interest rate set by the Committee via the quantity auction method.
  - c. Each bidder shall make an offer at most for the amount announced for that day and the funding amount to be raised via the auction will be distributed to participants according to the ratios of their bids to the auction amount..
  - d. Other guidelines governing the auctions and transactions shall remain unchanged.
- (iv) In the case of a temporary liquidity surplus, instead of one-week repo auctions, the Central Bank will hold reverse repo auctions with a one-week maturity subject to the same conditions and with the interest rate announced for the repo auctions.
- (v) Fixed rates will be applicable only to repo and reverse repo auctions with a one-week maturity. Repo and reverse repo auctions or other auctions with maturities longer than one-week that the Central Bank may hold within open market operations will continue to be held under the traditional method and the price/interest will be formed under market conditions.
- (vi) According to the new operational structure, overnight interest rates are mainly expected to fluctuate between the Central Bank borrowing interest rate and the interest rate of the liquidity facility submitted to primary dealer banks during the day. However, under normal conditions while determining the amounts of the auctions for repo and reverse repo auctions with a one-week maturity, the Central Bank, will endeavor to prevent both excessive fluctuation of the ISE Repo-Reverse Repo Market overnight interest rates, which is an indicator of secondary money market interest rates, and systematical formation of the said rates significantly below or above the repo auction interest rates.

Additionally, with a view to preventing fluctuations in overnight interest rates and enhancing the flexibility of the banks' liquidity management, the Central Bank may consider options like narrowing the interest rate band of the Late Liquidity Window on the due date of keeping required reserve ratios and allowing the banks to keep a certain amount of the required

reserves in the following period or rendering the excess amounts to be effective for the following period.

In cases where the liquidity shortage in the market increases and becomes permanent, the funding of the liquidity shortage only by repo auctions with a one-week maturity may have adverse effects on longer-term interest rates and the credit mechanism. In order to eliminate likely negative outcomes, the Central Bank will hold repo auctions with maturities up to 91 days and purchase government securities to prevent funding being concentrated on one-week maturities. Moreover, depending on the permanence of the liquidity shortage, the effectiveness of long-term repo and government securities purchasing transactions, the TRY-denominated required reserve ratios may be reduced to a limited extent.

In the case of an excessive increase in the liquidity surplus in the market due to favorable international market conditions, in order to enhance the effectiveness and flexibility of monetary policy and liquidity management strategy, primarily, Central Bank liquidity bills with maturities up to 91 days and sales of government securities previously purchased from the market will be actively utilized. When deemed necessary, New Turkish Lira deposit buying auctions with standard maturities of 1, 2 and 4 weeks and reverse repo auctions with maturities up to 91 days will also be used actively. Additionally, TRY-denominated required reserve ratios may also be increased.

Information on auctions of liquidity bills or government securities purchase/sales will be announced on Reuters' "CBTL" page at 10:00 a.m. one working day prior to the auction. These auctions will be held at 11:00 a.m. with the value date of the following working day, and the results will be announced no later than at 11:30 a.m. on Reuters' "CBTM" page. Information on New Turkish Lira deposit buying auctions will be announced on Reuters' "CBTY" page; while information on reverse repo auctions will be announced on "CBTF" page at 10:00 a.m. on the same day.

The Central Bank's current monetary policy instruments and the general framework of liquidity management are capable of effectively providing the liquidity that may be needed by any bank or the banking system as a whole as long as they have adequate collaterals, maintaining price stability in the money markets and ensuring that the payment system functions without interruptions even in extraordinary conditions. However, as per the subparagraph (c) of the paragraph (I) of Article 40 of the CBT Law, the Central Bank, as the lender of last resort, possesses one more lending instrument for emergencies. The mentioned article enables the Central Bank to extend credits to the banks that are the subject of uncertainty and lack of confidence in the event of acceleration of fund withdrawals and uncertainty and lack of confidence in the banking system. Taking into consideration the structure of the banking system and the effectiveness of the available instruments, the Central Bank does not predict that the use of the mentioned instrument will be needed; but in order to remain cautious of any possible unfavorable conditions and to clearly inform the public of all available facilities, the Central Bank will announce the credit utilization procedures as soon as possible.

The Central Bank, with the primary goal of achieving and maintaining price stability, as entrusted to it by law, will continue its practices to enhance the effectiveness of monetary policy and liquidity management, also in 2009. Accordingly, the Central Bank may change not only its liquidity management strategy, but also the borrowing and lending interest rate margins in cases of unpredictable changes in market conditions and emergence of needs that may arise.

**Annex: Calendar for 2009**

<b>MPC Meeting Dates</b>	<b>Inflation Report</b>	<b>Financial Stability Report</b>
15 January, Thursday	26 January, Monday	
19 February, Thursday		
19 March, Thursday		
16 April, Thursday	30 April, Thursday	
14 May, Thursday		28 May, Thursday
16 June, Tuesday		
16 July, Thursday	29 July, Wednesday	
18 August, Tuesday		
17 September, Thursday		
15 October, Thursday	27 October, Tuesday	
19 November, Thursday		24 November, Tuesday
17 December, Thursday		