CENTRAL BANK OF
THE REPUBLIC OF TURKEY

inflation report
2008-III

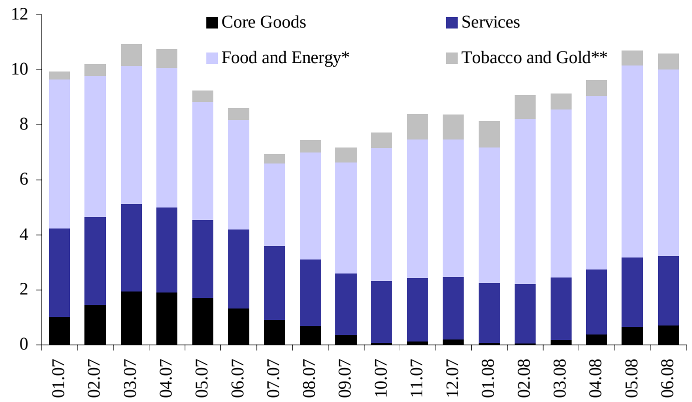
CONTENTS

1. Overview

1.1. Inflation Developments

Prolonged increases in food, energy and other commodity prices have continued to exert significant upward pressures on headline inflation in the second quarter of 2008. As a consequence, 6.8 percentage points of the 10.61 percent annual CPI inflation in June resulted from the direct impact of the food and energy items (Graph 1.1.1).

Graph 1.1.1. Contribution to Annual CPI Inflation



* Food and Energy: Food, non-alcoholic beverages and energy.
** Tobacco and Gold: Alcoholic beverages, tobacco products and gold.
Source: TURKSTAT, CBRT.

Elevated food inflation was the main factor impeding the disinflation process. Although domestic weather conditions turned more favorable in the first half of 2008, lagged effects of last year's poor harvest and continued elevation in agricultural commodity prices continued to keep processed food inflation at high levels. As a consequence, processed food inflation displayed a cumulative increase of 14.2 percent in the first half of the year.

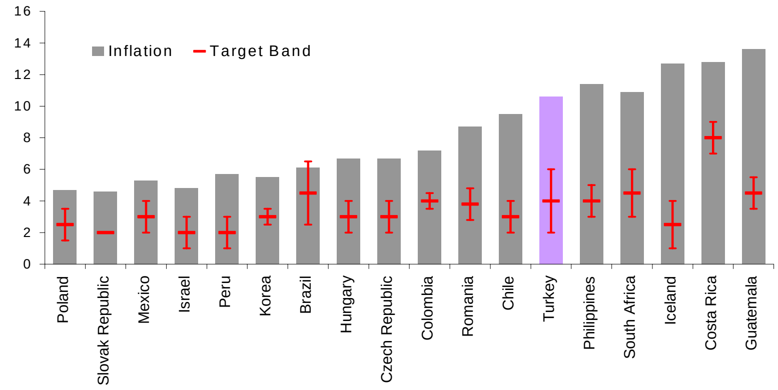
Developments in energy prices have been the other major factor driving inflation in the second quarter. Soaring oil prices continued to lead to significant hikes in the prices of domestic fuel products, also putting pressure on housing utilities such as electricity and natural gas.

The developments in economic activity has evolved in line with the outlook presented in the previous Inflation Report. Difficulties in international credit markets has continued to restrain the domestic demand, while external demand has displayed a relatively strong course. Although first quarter private consumption growth appears quite strong compared to the same period of the previous year, the seasonally adjusted quarterly figures point to an ongoing moderation in economic activity. Accordingly, inflation in rents and other services has continued to decline. Yet, food and energy prices continued to exert upward pressures on the prices of catering and transport services, leading to a limited rise in the overall services inflation.

Core inflation indicators have also increased in the second quarter of 2008. This should be viewed as a temporary movement arising from the exchange rate pass-through, rather than deterioration in the general price setting behavior. Ongoing difficulties in global credit markets coupled with domestic uncertainties have led to a depreciation of Turkish Lira vis-à-vis major currencies in the first four months of the year. As a consequence, first round effects of exchange rate pass-through have been significant on the headline inflation as well as on core inflation figures during the March-May period. Yet, the recent rebound in Turkish lira and weakening domestic demand have limited the overall pass-through and consequently core inflation showed signs of easing in June. Currently, annual rate of increase in CPI excluding food, energy, tobacco and gold items stands at 6.4 percent, confirming that the breach of the inflation targets can be mostly attributed to factors beyond the control of the monetary policy.

Elevated commodity prices have continued to exert inflationary pressures all over the world. As depicted in Graph 1.1.2, almost all emerging economies under inflation targeting have faced significant breaches in their inflation targets.

Graph 1.1.2. Inflation and Target Bands in Emerging Economies
(as of May 2008)



Source: Web sites of central banks, IFS, TURKSTAT, CBRT.

1.2. Inflation Outlook and Monetary Policy

In the second quarter, inflation expectations continued to deteriorate due to factors such as increasing food and energy prices, ongoing stress in global financial markets, and prevailing domestic uncertainties. Consequently, medium term inflation expectations edged up significantly.

In order to contain the deterioration in inflation expectations and to prevent the materialization of the second round effects of supply-side shocks, the MPC tightened monetary policy in the past three months, increasing the policy rates by a cumulative of 150 basis points. The monetary tightening was successful in controlling expectations, bringing the deterioration in inflation expectations to a halt in July.

Recent readings on economic activity suggest an ongoing moderation in consumption and investment demand. The cautious monetary policy stance and the tightening in global credit conditions are likely to restrain domestic demand in the period ahead. Therefore, the underlying inflation is expected to decelerate in the medium term.

Current stance of the monetary policy supports disinflation. Longer-term interest rates have increased even more than the policy rates in the second quarter due to rising risk premium and inflation expectations. Although higher interest rates contain the domestic demand and hence support disinflation, the impact of the heightened risk premium on the overall pricing behavior should be closely monitored.

The recent rebound in the Turkish lira has limited the pass-through impact of the significant weakening in the first four months of 2008. In the April Inflation Report, the first round impact of the recent depreciation was estimated to be close to 2-percentage points for the end-2008 headline inflation. The recent rebound in currency has led to a downward revision in the estimated pass-through. We now anticipate a cumulative exchange pass-through of around 1.2 percent points for 2008, most of which has already been materialized between March-May period.

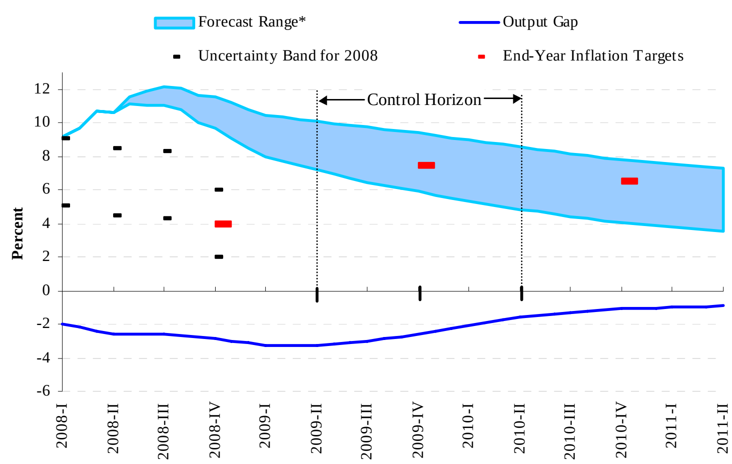
Baseline assumptions in the April Inflation Report envisaged a constant path for oil prices around 105 USD per barrel over the forecast horizon. However, oil prices continued to rise on the back of increasing international commodity prices, necessitating an upward revision. Taking the average futures prices in the first three weeks of July as a benchmark, our baseline scenario for oil prices has been revised to USD 140 per barrel. This revision has increased the end-2008 inflation forecast by 1.8 percentage points, and also added to the end-2009 forecasts 0.6 percentage points.

Our revised forecasts envisage slightly higher food inflation in 2008 and 2009 compared to the April Inflation Report. Although unprocessed food prices followed a relatively favorable course, processed food inflation is likely to stay at high levels for while, given the elevated course of agricultural commodity prices. Against this backdrop, we have raised the assumptions for food inflation from 13 percent to 14 percent for the year 2008, and from 8 percent to 9 percent for the year 2009. These changes have led to an upward revision in our inflation forecasts by about 30 basis points, both for 2008 and 2009. The projections envisage gradually moderating food inflation throughout the forecast horizon. In this context, assumption for 2010 food inflation is 7 percent.

Accordingly, we now forecast inflation to be around 10.6 percent at the end of 2008. Under the assumption of a limited tightening towards the end of 2008, our medium term forecasts suggest that, with 70 percent probability, inflation will be between 5.9 and 9.3 percent (mid-point 7.6) at the end of 2009, and between 4 percent and 7.8 per cent (mid-point 5.9) at the end of 2010

(Graph 1.2.1). Our inflation forecast for mid-2011 is 5.4 percent. We expect non-food inflation to be lower than these figures.

Graph 1.2.1. Inflation Forecasts*



*The shaded region indicates the 70 percent confidence interval for the forecast.

As depicted in Graph 1.2.1, we expect inflation to remain at elevated levels in the short term before gradually moderating towards the targets. The forecast suggests that inflation targets of 7.5 percent, 6.5 percent, and 5.5 percent set for the next three years are attainable, even under quite conservative assumptions on food and energy prices. Adverse impacts of the supply side shocks on the economy will be more limited should all the economic agents take these targets as a benchmark in forming their expectations.

To sum up, although economic activity in the past quarter have evolved in line with our expectations, the significant increases in oil and processed food prices have led to an upward revision in our forecasts. The main message of the forecast is that preventing the materialization of potential second round effects and ensuring a steady decline in inflation towards the medium term targets, requires the monetary policy to maintain a cautious stance for a while.

It should be emphasized that any new data or information regarding the inflation outlook may lead to a change in our policy stance. Therefore, the path for the policy rates indicated above should not be perceived as a commitment on behalf of the CBRT.

1.3. Risks

Our baseline scenario is based on quite conservative assumptions for food and energy prices, implying that downside risks on these factors are as significant as upside risks. In order to enhance the predictability of the monetary policy against these risks, the last section of the Report presents inflation projections and the relevant policy response under alternative scenarios for food and energy prices.

In our pessimistic scenario, we assume that food price inflation materializes at 16, 12, and 10 percent throughout 2008-2010 period, whereas oil prices rise to 180 USD at the end of 2008, staying constant thereafter. Assuming a gradual monetary tightening in the rest of the year, our forecasts under this scenario suggest that inflation will be 9.1 percent at the end of 2009 and around 7 percent at the end of 2010.

In our optimistic scenario, we assume that food price inflation materializes at 12, 6, and 4 percent throughout 2008-2010 period, whereas oil prices ease to 100 USD at the end of 2008, staying constant thereafter. Assuming that policy rate stays constant for a while and gradually eases thereafter, our forecasts under this scenario suggest that inflation will be 6.1 percent at the end of 2009 and around 4.9 percent at the end of 2010.

In sum, monetary policy will be conducted so as to minimize upside deviations from the targets should the upside risks materialize. Downward surprises in food and energy prices, on the other hand, will be perceived as an opportunity to bring inflation back to target in a shorter period than envisaged in our baseline scenario.

Despite the expected decline in inflation in the medium term, uncertainties exist regarding the degree of inflation persistence. Long-lasting supply shocks have been keeping headline inflation at elevated levels and thus increasing the risk of rising backward-looking schemes in the wage and price setting behavior. Although the widening output gap should contain the second round effects of the supply shocks, the exact pace of disinflation would still depend on the extent new inflation targets serve as a strong reference for economic agents. Having this in mind, the CBRT will continue to focus on enhancing the credibility of the new inflation targets. In this context, developments in the general pricing behavior and the underlying inflation trends will be monitored closely.

International financial markets remain fragile and the credit conditions continue to tighten up. The eventual impact of the financial turmoil on the global economic activity is yet to be seen. Moreover, rising commodity prices continue to be a threat for price stability. These uncertainties have been dampening the risk appetite and thus slowing down the capital flows to emerging markets, leaving these economies susceptible to shifts in the market sentiment. Domestic uncertainties have exacerbated these effects, as manifested by the significant rise in the sovereign credit risk of Turkey in the first half of the year, compared to the average risk premium of emerging economies. The CBRT will not display a sharp reaction to temporary fluctuations in the financial markets, unless there is a long lasting deterioration in expectations and a significant worsening in the general pricing behavior.

Finally, our medium-term projections assume that government expenditures will evolve in line with the official projections and that there will be no further increases in indirect taxes or administered price adjustments, except those required by the automatic pricing mechanisms. Any deviation from this framework may lead to a revision of the outlook for inflation and monetary policy.

Prudent monetary policy is a necessary but not a sufficient condition for attaining price stability. The support from fiscal policy and structural reforms are also critical in this respect. Sound fiscal policy has been one of the main factors in driving inflation down to single digits. The role of fiscal policy will continue to be critical in the road to price stability. Preserving the resilience of the economy, especially under current conditions, requires the continuation of fiscal discipline and structural reforms. In this respect, the European Union accession process and the implementation of structural reforms envisaged in the economic program remain to be of utmost importance. In particular, advances in structural reforms, which would improve the quality of fiscal discipline and enhance the productivity, are monitored closely by the CBRT with regard to their implications on macroeconomic and price stability.

2. International Economic Developments

2.1. Economic Performance and Monetary Policy

After having expanded by 2.2 percent in 2007, the US economy grew by 2.5 percent in the first quarter of 2008 compared with a year earlier. Growth in consumption expenditures slowed dramatically during the first quarter of 2008, but tax rebates are expected to provide a notable, albeit temporary, boost to consumer spending in the remainder of the year. On the other hand, risks such as financial fragility, tight credit conditions, soaring prices of energy and other commodities, the deepening housing contraction and deteriorating labor market conditions are likely to put further pressure on the US economy. As a matter of fact, while the growth forecast of 2008 for the US economy 2008 was 2.0 percent in our January 2008 Inflation Report, it was dropped to around 1.3 percent in April and has been revised up to 1.5 percent as of July. In addition, the US economy is expected to register a growth rate of 1.5 percent in 2009 and is forecast to grow at an annual rate of 1.7, 0.8 and 0.9 percent, respectively, in the second, third and fourth quarters of 2008. Growth rates are expected to be higher than 2 percent only in the aftermath of the fourth quarter of 2009 (Table 2.1.1).

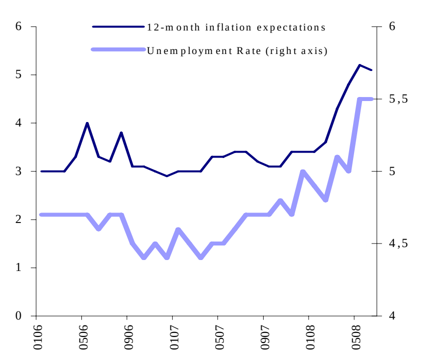
Table 2.1.1. Growth Rates
(Annual Percentage Change)

				2008				2009			
	2007	2008*	2009*	I	II*	III*	IV*	I*	II*	III*	IV*
*World***	4.9	3.7	3.8	-	-	-	-	-	-		
*USA****	2.2	1.5	1.5	2.5	1.7	0.8	0.9	1.1	1.6	1.9	2.5
*EU****	2.7	1.6	1.2	2.2	1.9	1.5	1.5	1.0	1.3	1.5	1.7
*UK****	3.0	1.5	1.0	2.5	1.8	1.3	0.9	0.8	1.1	1.3	1.7
*Japan****	2.0	1.4	1.3	1.1	1.6	1.5	1.2	0.9	1.3	1.6	1.8
*China*****	11.9	9.3	9.5	10.6	-	-	-	-	-	-	-
*Germany****	2.5	2.2	1.2	2.6	2.2	1.7	1.7	0.6	1.2	1.6	1.8
*France****	1.9	1.6	1.3	2.2	1.9	1.5	1.5	1.3	1.4	1.6	1.8
*Italy****	1.6*	0.4	0.8	0.3	0.3	0.2	0.8	0.6	0.8	1.0	1.0

*Forecast.
Source: **IMF World Economic Outlook, ***Consensus Forecasts, ****Economic Intelligence Unit.

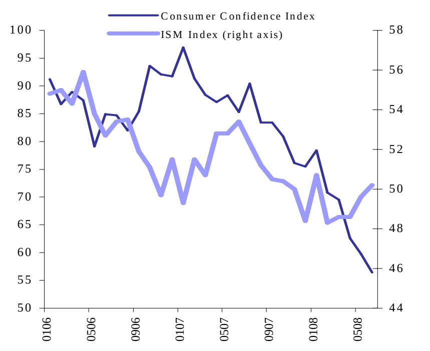
Inflation expectations and the unemployment rate picked up sharply, while the manufacturing ISM Index and the University of Michigan Consumer Confidence Index continued to display its poor performance (Graph 2.1.1 and Graph 2.1.2).

Graph 2.1.1. US Unemployment Rate and Inflation Expectations
(Percent)



Source: Bloomberg, Institute for Supply Management..

Graph 2.1.2. University of Michigan Consumer Confidence Index and ISM Index



Source: Bureau of Labor Statistics, University of Michigan.

Recent readings of US inflation rate indicate that headline inflation rose further, largely owing to skyrocketing global commodity prices. The rise in headline inflation, however, had only a limited impact on core inflation, thanks to the weakening domestic demand. Yet, the continued sizable increases in energy and food prices adds to the upward pressure on inflation and inflation expectations.

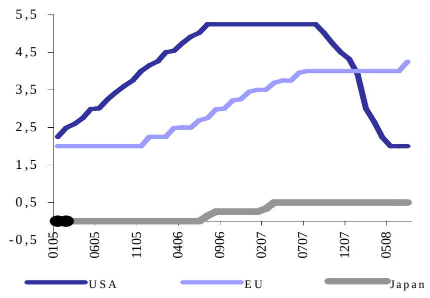
G-10 central banks, particularly the Federal Reserve (Fed), the European Central Bank (ECB), the Bank of Canada (BoC) and the Bank of Japan (BoJ) pumped large amounts of funds into overnight markets, as part of a joint response to the liquidity crisis that began in August 2007. Another liquidity facility introduced by the Federal Reserve in December 2007 to bolster market liquidity has been the Term Auction Facility (TAF).

In March 2008, the Fed, through a joint decision taken together with the US Treasury Department and the US Securities and Exchange Commission (SEC), provided special funding to allow JP Morgan Chase & Co. to buy out the Bear Stearns Co. to stave off any negative impacts in financial markets that could have been triggered by a probable Bear Stearns' bankruptcy, and within this framework, the Fed established the Primary Dealer Credit Facility (PDCF) to provide funding to market makers. In addition, the Fed introduced a new Term Securities Lending Facility (TSLF) program to relieve the financial markets. Furthermore, in this period, the Fed also expanded its existing currency swap lines with the ECB and the Swiss National Bank (SNB) and decided to raise the amount of liquidity provided through TAF.

In spite of all measures taken, in view of continuing strains in financial markets, in May 2008, the Fed decided to expand the liquidity provided by the Term Auction Facility and the Term Securities Lending Facility, and extended the swap lines established with the ECB and the SNB. On the other hand, financial distress continued in the face of recent worries about the financial conditions of Fannie Mae and Freddie Mac, two government-supported mortgage companies. The Fed thus announced that it would lend to the two institutions if necessary.

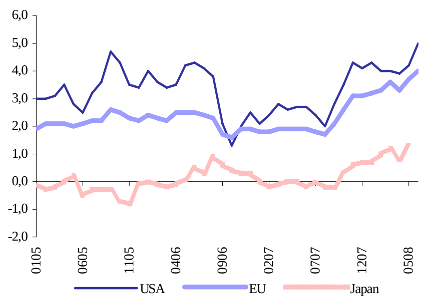
Moreover, the Fed has lowered interest rates by a cumulative 325 basis points to 2 percent since September 2007 in view of heightened concerns about the implications of worsened financial market conditions, housing meltdown and credit crunch on financial stability and economic growth. In this period, furthermore, rediscount window have become a more active instrument of Fed's monetary policy and the rediscount rate has been reduced by the Fed as rediscount rate is used primarily for loans under the Primary Dealer Credit Facility (Graph 2.1.3 and Graph 2.1.4).

Graph 2.1.3. Federal Funds Rate*
(Percent, Monthly Average)



Source: Bloomberg.

Graph 2.1.4. Inflation Rate
(CPI, Annual Percentage Change)



Source: Bloomberg.

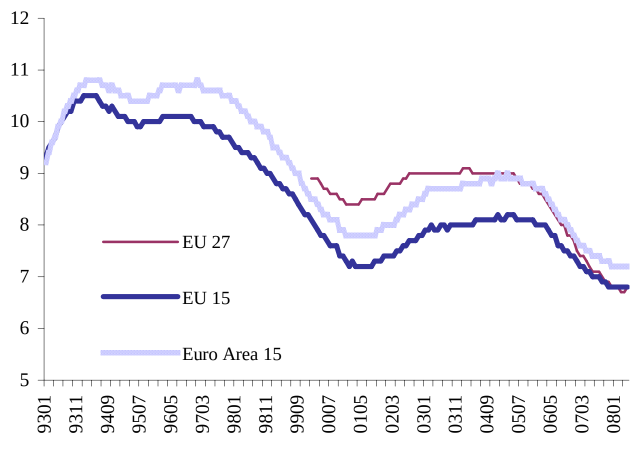
The substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, is expected to help promoting growth over the upcoming period. In addition, downside risks to growth have diminished somewhat, but upside risks to inflation and inflation expectations have increased substantially.

The strength of US exports has partially insulated the economy from the effects of weakening domestic demand, and provided a boost to growth and helped reducing the current account deficit. However, this effect is likely to fade over time, as the global economic activity might slow down in the coming period.

Euro area GDP grew by an annual rate of 2.2 percent in the first quarter of 2008, largely on the back of increased domestic demand. Likewise, the contribution of investments to euro area growth turned positive. Higher capacity utilization and rising profits of non-financial corporations suggest that investments will continue to promote growth in the euro area in coming months. In addition, the demand from emerging economies gave a strong boost to euro area exports and is expected to provide further stimulus in the upcoming period. However, as the brisk domestic demand bolstered imports, net exports made only a slight contribution to growth (Table 2.1.1).

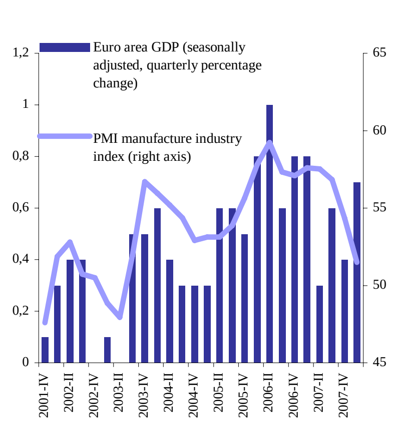
The unemployment rate in the euro area declined to a 25-year low in 2008 (Graph 2.1.5). Yet, the rise in employment is unlikely to fully offset the downward pressure of oil and food inflation on real income, and the rate of growth of consumer spending is expected to slow. Besides, the euro area manufacturing industry confidence index (PMI) slipped below 50 in June, indicating that growth prospects have changed from positive to negative. In addition, the euro area industrial confidence index (ISM) fell during the first half of 2008, confirming the weak outlook for growth (Graph 2.1.6 and Graph 2.1.7).

Graph 2.1.5. EU and Euro Area Unemployment
(Seasonally Adjusted)



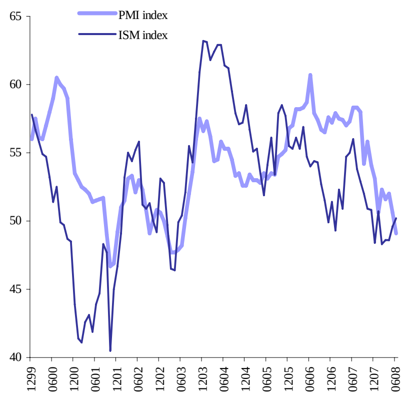
Source: Eurostat..

Graph 2.1.6. Euro Area GDP and PMI Index



Source: Bloomberg, Eurostat.

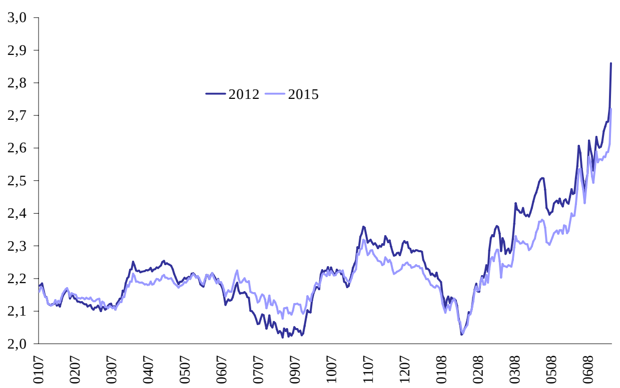
Graph 2.1.7. ISM and PMI Index



Source: Bloomberg.

The euro area Harmonized Index of Consumer Prices (HICP) inflation soared to a historic high of 4.0 percent in June 2008[1] mainly on the sizable increase in food and energy prices. The fact that a continued rise in food and energy prices in coming months may harm inflation expectations and the price and wage-setting behavior adds to inflationary pressures. Many expect HICP inflation to exceed the 2-percent target in 2008, but to edge gradually lower in 2009. Moreover, the spread between yields on French government bonds and euro area inflation-linked government bonds with the same maturities, which serves as an indicator of euro area inflation expectations, is still increasing, pointing to a deterioration in short to medium term inflation expectations (Graph 2.1.4 and Graph 2.1.8).

Graph 2.1.8. Euro Area Inflation Forecast*
(Percent)



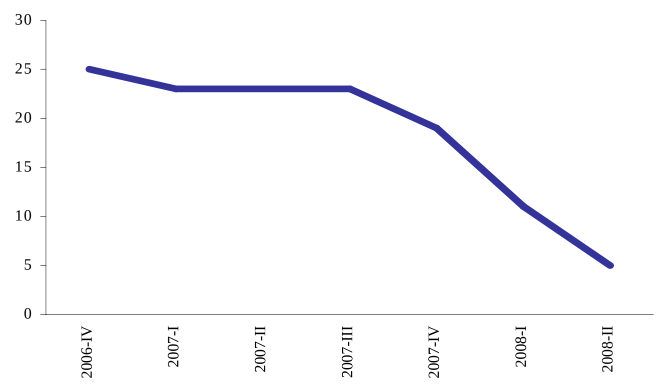
* Measured by the spread between yields on French government bonds and euro area inflation-linked government bonds.
Source: Agence France Trésor.

[1] Temporary.

At its meeting on July 3, the ECB Governing Council raised key interest rates by 25 basis points to 4.25 percent to offset the second-round effects from the HICP inflation that hit 3.7 percent in May and to counteract the increasing upside risks to price stability over the medium term. The Governing Council emphasized that HICP inflation was well above the level consistent with price stability (Graph 2.1.3).

Investment expectations of Japanese enterprises continued to moderate in the second quarter of 2008. As reported by the Tankan Survey, a quarterly survey of business sentiment conducted by the BoJ, confidence among large manufacturing firms has shifted towards negative. According to the survey, elevated oil prices will reduce investments by pushing up costs at companies in 2008 and 2009 and continue to dampen growth prospects for Japan. In addition, the appreciation of the yen against the US dollar is expected to contribute to this outlook and the sluggish growth over the last three quarters will drop to as low as 1.0 percent throughout 2008 (Graph 2.1.9 and Table 2.1.1).

Graph 2.1.9. Tankan Survey, Diffusion Index



Source: BoJ.

Although Japan’s annual CPI inflation hit a 10-year high of 1.5 percent in May 2008, the decline in prices excluding energy and food indicate that supply-side inflationary pressures are well contained. Moreover, the slowdown in the economy is expected to help reduce cost-push inflationary pressures, bringing inflation down to 1.1 percent by the end of 2008 (Graph 2.1.4).

After altering its monetary bias from tight to neutral in April 2008, the BoJ left the overnight call rate unchanged at 0.5 percent at its meeting in June (Graph 2.1.3).

In a surprise move, the Chinese government decided to cut subsidies on fuel and raised the price of gasoline and diesel, by as much as 18 percent, and increased retail electricity prices by an average of 4.7 percent in the second quarter of 2008. This measure is expected to raise gasoline prices by 16 to 25 percent; but as gasoline has a lower weight in the CPI basket, the increase in gasoline prices will put less pressure on annual inflation. Cost-push inflationary pressures will also be eased to an extent as crude oil accounts for only 12 percent of the energy used in production. However, the said price adjustments are likely to weigh on corporate profits and domestic demand and curb economic growth.

China's economy grew by 10.6 percent year-on-year in real terms in the first quarter of 2008. The continued tight monetary stance of the People's Bank of China is likely to restrain the growth of domestic demand and the fall in net exports owing to a global slowdown is expected to cut growth forecasts to 9.8 and 9.0 percent for 2008 and 2009, respectively.

After having increased by 8.8 percent year-on-year in February 2008, China's inflation rate continued to decelerate in May, bringing price hikes down to around 7.7 percent. With the impending correction in food prices, many expect inflation to go further down over the second half of the year and decline to 6.5 and 4.3 percent by the end of 2008 and 2009, respectively.

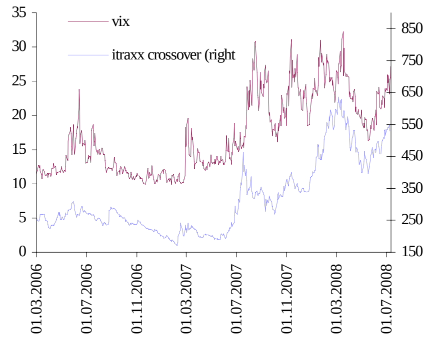
2.2. International Markets

2.2.1. Financial Markets

Spillover effects of the US mortgage crisis into global financial markets have become stronger recently, which is broadly evident in the sub-prime contagion that has spread to less risky loans and in resulting credit losses at financial institutions. With heightened fears of a sub-prime mortgage meltdown in the US, losses of financial institutions that are highly involved in the secondary market for mortgage-backed securities mounted in July. Fannie Mae and Freddie Mac, two government-sponsored mortgage companies that serve as the US's backstop for the housing economy and are the largest buyers of the whole mortgages in the US, reported major impairments in their financial structure in line with the declining housing prices. This, in particular, recently raised concerns over global financial stability. However, statements from the Federal Reserve and the US Treasury that their priority is to maintain a welloperating financial system and they would stand ready to shore up the finances of the two mortgage companies have reduced tensions in the global financial markets.

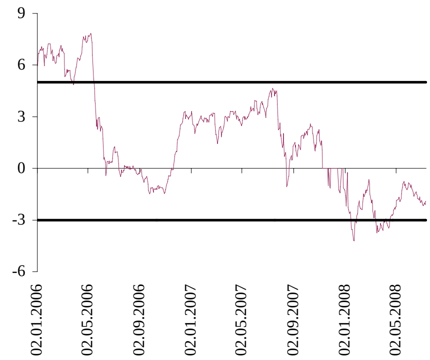
JPMorgan’s acquisition of Bear Stearns Co., one of the world’s largest investment banks, helped ease the market volatility and immediately boosted risk appetite. However, with the recently announced losses at commercial banks and investment banks, including the said two companies, and mounting worries about the severity of the impending US recession made investors more susceptible to panic. On balance, the declining investors’ risk appetite triggered a rise in volatility in emerging financial markets.

Graph 2.2.1. VIX and iTraxx Crossover Indexes*



*The VIX volatility index is based on S&P500 options, whereas the iTraxx Crossover index is composed of 45 sub-investment grade credits.
Source: Bloomberg.

Graph 2.2.2. Credit Suisse Global Risk Appetite Index



Source: Credit Suisse.

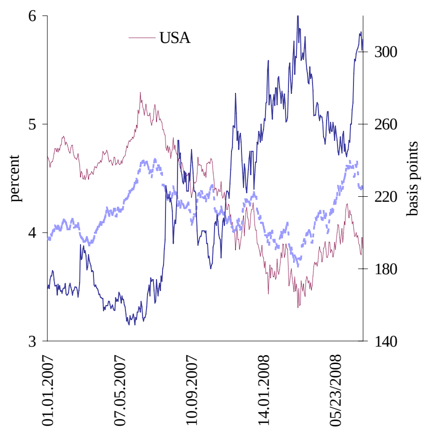
Indicating a sharp dip in risk appetite, the Credit Suisse Global Risk Appetite index (CSRA) has been hovering around the panic zone in recent period.[2] VIX and iTraxx Crossover indexes, on the other hand, were on the decline over the second quarter of 2008 after having remained on an upward track throughout 2007; yet, they resumed their climb in June 2008 and remained above their long-term averages[3] (Graph 2.2.1 and Graph 2.2.2).

As regards bond markets in developed economies, the long-term US and euro area bond yields have been falling since the end of June after a strong second quarter. Declining industrial production in Germany, the main driver of euro area growth, declined year-on-year for the second month in a row and the

[2] Values below “-3” correspond to the panic zone while values above “5” correspond to the euphoria zone.
[3] iTraxx Crossover index is a key indicator of investor risk sentiment towards emerging markets as the companies involved have similar investment-grade ratings with those from emerging economies, including Turkey.

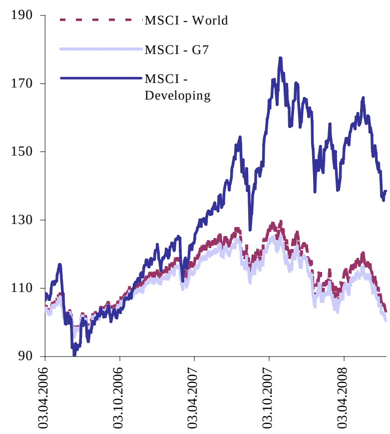
economic slowdown in Spain and Italy causes investors to seek safe havens. On the emerging markets front, the EMBI+ index dropped in the second quarter of 2008, but rebounded sharply by the end of June on the back of a reduced global risk appetite and mounting uncertainties (Graph 2.2.3).

Graph 2.2.3. Government Bond Markets



Source: Bloomberg.

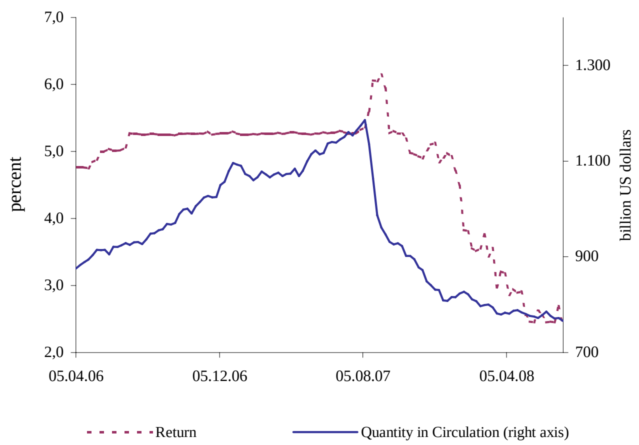
Graph 2.2.4. Equity Markets



Source: Bloomberg.

The upward trend in stock markets reversed in the fourth quarter of 2007. On July 14, 2008, the Morgan Stanley (MSCI) G7 index was down 15.1 percent from end-2007. Similarly, the MSCI Emerging Markets Index (EMI) was down 16.3 percent in dollar terms. The plunge in G7 stock markets was triggered, in large part, by the sizable drop in shares of financial companies (Graph 2.2.4).

Graph 2.2.5. Developments in the US Asset-Backed Commercial Paper Market



Source: Bloomberg, Fed.

The Asset-Backed Commercial Paper (ABCP) Market, a valuable source of liquidity for investment banks, has significantly shrunk due to the subprime-crisis-driven uncertainty surrounding the market price of these assets, which led to a considerable reduction in the issuance of commercial papers in the second half of 2007. Therefore, companies shifted their interest towards money markets, prompting wild swings in interbank rates. After reaching 0.83 trillion US dollars at end-2007, the amount of ABCP outstanding dropped to 0.78 trillion US dollars during the first week of July 2008 (Graph 2.2.5).

As suggested by the data on spot and futures trading in industrialized countries, US dollar and euro interest rates are expected to rise by the first quarter of 2009. After ECB’s latest rate hike, many believe that the bank will not raise its benchmark interest rate in the remainder of the year, whereas the Fed is expected to increase its federal funds rate by a cumulative 50 basis points by the second quarter of 2009 (Table 2.2.1).

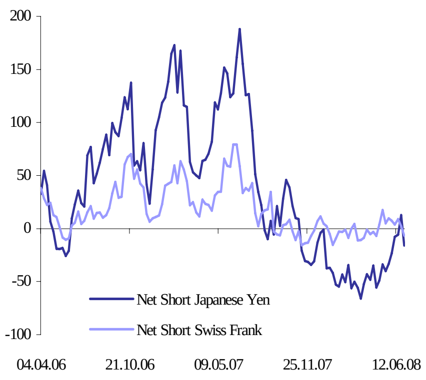
Table 2.2.1. Changes in Interest Rates of Industrialized Countries* (3-month)

	2008				
		Futures			
	Spot	**September**	**December**	**March**	**June**
US dollar	3.00	2.93	3.16	3.29	3.50
Euro	4.96	5.07	5.21	5.23	5.20

* 3-month futures contracts as of July 4. US dollar contracts based on Eurodollar spot rates and CME Eurodollar futures rates. Euro contracts based on Euribor spot rates and LIFFE futures rates.
Source. Bloomberg.

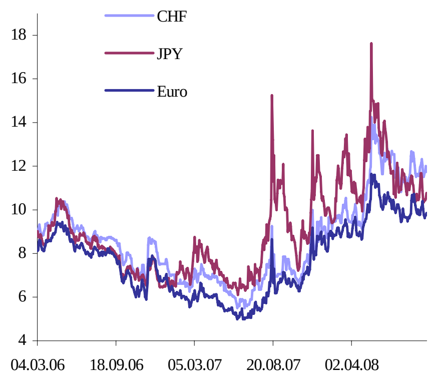
Available data point to a reduction in carry-trade activity, currently an important source of liquidity for investors. Speculators switched from short to neutral Japanese yen positions on July 1, 2008 and remained neutral in Swiss franc positions over the previous month (Graph 2.2.6). The upward trend in implied volatilities for options on the euro, the Japanese yen and the Swiss franc that started in mid-2007 went into reverse in the second quarter of 2008 while options have remained above their long-term averages (Graph 2.2.7), which suggests that carry-trade investing is still, but relatively less, risky.

Graph 2.2.6. Net Short Positions in Japanese Yen and Swiss Franc
(Non-Commercial Investors, Chicago Board of Trade)



Source: Bloomberg.

Graph 2.2.7. Implied Volatility for Yen/Swiss Franc/Euro vs. US Dollar Options

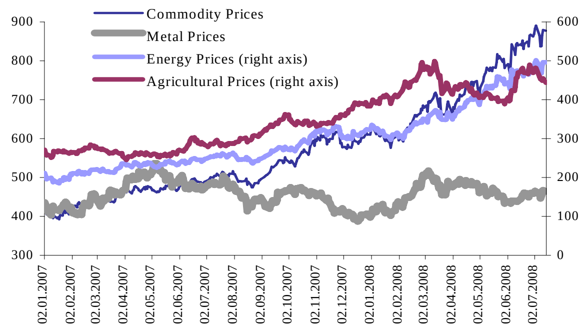


Source: Bloomberg.

2.2.2. Commodity Markets

The S&P Goldman Sachs (GS) Commodity Index continued to climb in the second quarter of 2008, up 76.4 and 29 percent, respectively, from a year and a quarter earlier. The sharp rise in the commodity price index was largely driven by the steep increase in the GS Energy and Agriculture indexes, which were up about 95.6 and 65.4 percent year-on-year, respectively. The GS Metals index, on the other hand, declined by 2.8 percent year-on-year (Graph 2.2.8).

Graph 2.2.8. S&P Goldman Sachs Commodity Indexes



Source: Goldman Sachs.

On the metal price front, the London Metal Exchange (LME) prices for aluminum and copper, two base metals with a significant weight in the GSCI Industrial Metals index, increased by an annual rate of 14.3 and 12.6 percent, respectively, in the second quarter of 2008, outpacing their quarterly growth rates (Table 2.2.2).

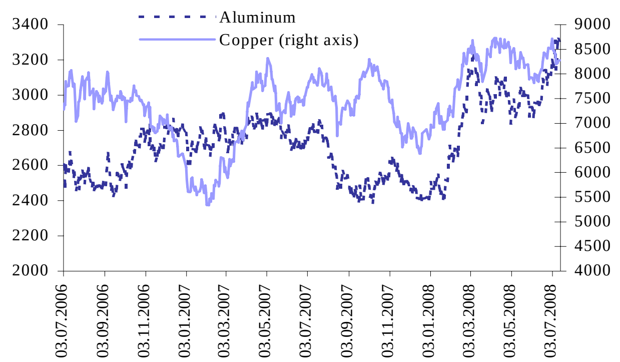
Table 2.2.2. London Metal Exchange (LME)*

US Dollar / MT	Value				Change (Percent)		
	2007-II	2008-I	2008-II	2008-III**	2008-II/2008-I	2008-II/2007-II	2008-III**/2008-II
Aluminum	2,725	2,990	3,114	3,306	*4.1*	*14.3*	*6.2*
Copper	7,560	8,390	8,510	8,280	*1.4*	*12.6*	*-2.7*

* End-of-period values.
** As of July 14, 2008.
Source: Bloomberg.

The brisk demand from developing countries drove aluminum and copper prices higher, but power shortages in the world's top aluminum and copper producing countries curtailed production and caused an unexpected jump in prices. China is expected to cut production further, paving the way for further hikes in aluminum prices (Graph 2.2.9).

Graph 2.2.9. Copper and Aluminum Prices



Source: Bloomberg.

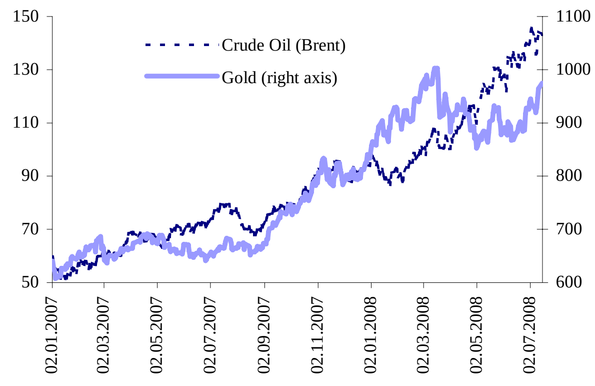
The renewed climb in international crude oil prices continued into the second quarter of 2008, hitting a new record at 143.5 US dollar per barrel on July 15 (Graph 2.2.10), up 80.7 percent from the same day in 2007. Civil unrest in Nigeria and heightened political tensions in the Middle East, a looming refinery strike in Scotland, and the weakening of the US dollar have been the key drivers behind the rise in crude oil prices. However, the reduced domestic subsidies on petroleum products in emerging Asia and the production boost from Saudi Arabia prevented oil prices from rising any further.

Main indicators for crude oil suggest that demand remains strong. The rise in demand from non-OECD countries was greater than the fall in demand from OECD members, and the fact that non-OECD countries account for the bulk of subsidies marks the importance of subsidy reduction measures taken by non-OECD governments. Particularly China's fuel price hike after eight months of up to 18 percent helped curb Chinese demand for oil. In view of these developments, the International Energy Agency (IEA) expects the demand for oil to come down from 1.1 mbbl/d in 2007 to 0.8 mbbl/d in 2008.

On the production front, OPEC decided to leave output quotas unchanged in March until its next scheduled meeting in September 2008. Following the latest price changes, Saudi Arabia decided to boost production, but the supply outages in Nigeria put significant pressure on OPEC. A major problem was the oil production in non-OPEC countries. The decline in oil output, particularly in Russia and Mexico, caused some investment companies to revise their non-OPEC output forecast for 2008 down to 2007 levels, which added to pressure on prices amid fears of accompanying supply shortages.

Future crude oil prices will largely depend on the easing of geopolitical concerns, particularly Iran-Israel tensions and Nigeria attacks, and to some extent, on the easing of the coal shortage-driven power crisis in China and on the reaction of consumers from emerging Asia to rising prices. Non-OPEC countries are expected to increase production towards the end of the year, which is obviously crucial before winter. Yet, ongoing geopolitical tensions and production cuts caused by hurricanes similar to those that struck before might lead to a sharp surge in oil prices in the face of increased supply uncertainty.

Graph 2.2.10. Crude Oil (Brent) and Gold Prices
(US dollar/bbl, US dollar/oz)

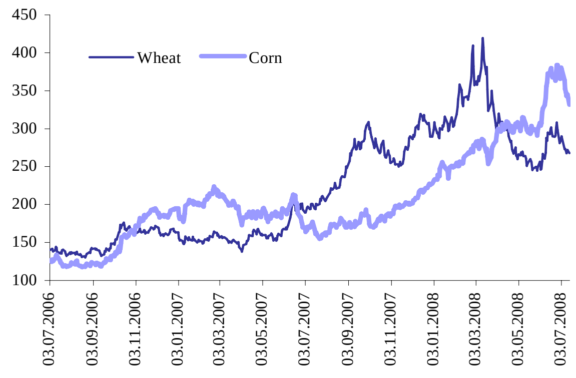


Source: Bloomberg.

The ongoing turbulence in developed markets, the upward trend in global inflation and the strong gold demand in developing countries drove gold prices to a historic high of USD 1003 per troy ounce on March 14, 2008. However, the IMF gold sale announcement, coupled with rumors that the Fed has similar plans for its gold reserves, pulled gold prices down as of March 14. Gold prices ended July 15 at USD 974.8 per troy ounce, up 46.6 percent from the same day in 2007 (Graph 2.2.10).

The steep increase in international food prices played a major role in boosting inflation around the world over the past one year. With a 6.8 percent share, corn and wheat are major components of the S&P Goldman Sachs Agricultural Raw Materials Index that accounts for 11 percent of the total index. By July 14, 2008, the S&P Goldman Sachs wheat and corn indexes were up at an annual rate of 33.6 and 87.1 percent, respectively. Drought-related crop losses and ethanol production pushed corn and wheat prices up. Expectations of better harvest in the second half of 2008 drove wheat prices down by 11.9 percent as of July 14 compared with the first quarter, whereas the fall in corn stockpiles pushed corn prices up by 17 percent. The use of corn for ethanol production in the US and the rapid growth in ethanol production might cause a permanent upward shift in corn prices. Wheat prices, however, are less likely to rise further in the face of better harvest (Graph 2.2.11).

Graph 2.2.11. S&P Goldman Sachs Wheat and Corn Indexes
(January 2005=100)

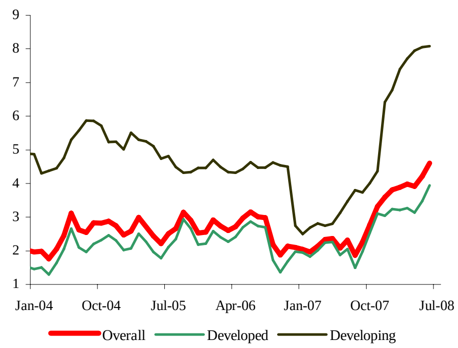


Source: Bloomberg.

BOX 2.1. RECENT DEVELOPMENTS IN GLOBAL INFLATION AND MONETARY POLICY MEASURES

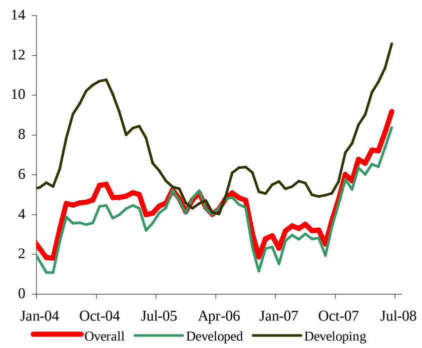
The dramatic increase in energy and food prices since 2006 put pressure on disinflation in Turkey. As suggested by international data, the higher-than-expected rise in energy and food prices poses a threat to price stability, not only in Turkey but also in the world as a whole (Graph 1 and Graph 2).[1] Besides, core inflation rates in developing economies are on the rise (Graph 3). In this box, we will discuss how central banks deal with rising inflation rates.

Graph 1. Global CPI Inflation



Source: Bloomberg, CBRT.

Graph 2. Global PPI Inflation

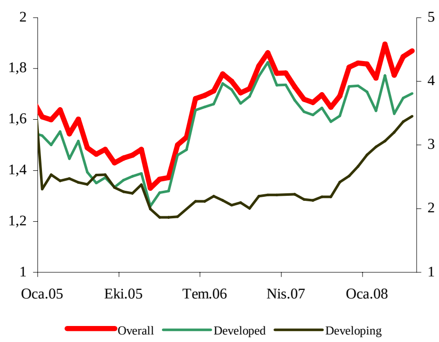


Source: Bloomberg, CBRT.

The US mortgage crisis that emerged in 2007 soon spilled over into the global economy, heightening concerns over the sustainability of global growth. Meanwhile, developing economies, particularly China and India, spurred global demand for raw materials, which caused consumer and producer prices to hit all-time highs. In developing countries, both CPI and core inflation have been rising since the third quarter of 2007.

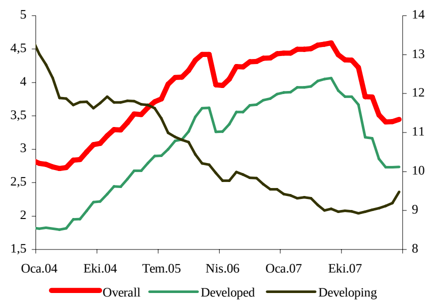
With regard to policy decisions all over the world, the policy rate index composed of central banks from *developed* countries was trending downward until March and remained unchanged until end-June, while that of central banks from *developing* countries was up a cumulative 55 basis points from December 2007. In other words, central banks from developed economies eased their monetary policy substantially as compared to 2007 when the crisis began, whereas those from developing economies tightened their monetary policy (Graph 3). A more detailed analysis reveals that 9 out of 19 developing countries involved in the index raised their policy rates by 25 to 50 basis points in June.[2]

Graph 3. Global Core Inflation[1]



Source: Bloomberg, CBRT.

Graph 4. Global Policy Rates



Source: Central Banks, IFS.

[1] Classified according to IMF, country groupings involve 14 developed economies (USA, Japan, UK, Canada, South Korea, Australia, Switzerland, Sweden, Norway, Denmark, Hong Kong, Israel, Singapore, New Zealand, the euro area) and 19 developing economies (China, Brazil, India, Mexico, Russia, Turkey, Poland, Indonesia, South Africa, Argentina, Malaysia, Thailand, Czech Republic, Colombia, Hungary, Romania, Philippines, Ukraine, Vietnam). As of 2006, the said countries account for 93.2 percent of the world's GDP. With the exclusion of Africa (except South Africa) and Middle East, developing economies account for 22.0 percent of the world's GDP, but in this study, they account for only 16.4 percent. Compound indexes based on weights obtained by GDP data in US dollar and euro terms from a period between 2000 and 2006.

[2] Brazil, Turkey and South Africa raised policy rates by 50 basis points, while Mexico, Russia, Poland, Indonesia, Romania and Philippines increased policy rates by 25 basis points.

Inflation remained markedly above the target in most countries with inflation targeting regimes. As of June 2008, 25 countries, 18 of them developing, use inflation targeting as a monetary policy framework. 11 of them have a target for inflation expressed in terms of an interval, while the remaining 14 countries have a point target with a tolerance interval. As of June 2008, inflation rates in 23 countries, 6 of them developed, run above the target ranges. In two countries (Brazil and Norway), inflation rates, which have long remained in the target range, have been sharply higher than the levels in 2006 and 2007 and are likely to fall outside the higher end of the target amid ongoing global economic uncertainty (Table 1).

Table 1. Target and Actual Annual Inflation Rates in Countries with an Inflation Targeting Regime

	Adopted the regime in:	Target (2008)	2006	2007(1)	2008(1)
		Emerging Markets			
Israel	1997-II	1-3	-0.1	**3.4**	**4.8**
Czech Republic	1998-I	3 (+/-1)	1.7	**5.4**	**6.7**
Poland	1998-IV	2.5 (+/-1)	1.4	**4.0**	**4.6**
Brazil	1999-II	4.5 (+/-2)	3.1	4.5	6.1
Chile	1999-III	2-4	2.6	**7.8**	**9.5**
Colombia	1999-III	3.5-4.5	4.5	**5.7**	**7.2**
South Africa(4)	2000-I	3-6	5.0	**8.6**	**10.9(2)**
Ghana	2007-II	6-8	10.9	12.7	**18.4**
Thailand(4)	2000-II	0-3.5	1.5 (3.5)	1.2 (3.2)	**3.6 (8.9)**
Korea	2001-I	3 (+/-0.5)	2.2	**3.6**	**5.5**
Mexico	2001-I	3 (+/-1)	4.1	3.8	**5.3**
Hungary	2001-II	3 (+/-1)	6.5	**7.4**	**6.7**
Peru	2002-I	2 (+/-1)	1.1	**3.9**	**5.7**
Philippines	2002-I	5-6	4.3	**3.9**	**11.4**
Slovakia	2005-I	0-2	3.7	2.4	**4.1**
Indonesia	2005-III	5 (+/-1)	6.6	**6.6**	**11.0**
Romania	2005-III	4 (+/-1)	4.9	**6.6**	**8.5(2)**
Turkey	2006-I	4 (+/-2)	9.7	**8.4**	**10.6**
		Industrialized Countries			
New Zealand	1990-I	1-3	2.6	**3.2**	**4.0**
Canada	1991-I	1-3	1.7	2.4	**3.1**
UK	1992-IV	2(+/-1)	3	2.1	**3.8**
Sweden	1993-I	2 (+/-1)	1.6	**3.5**	**4.3**
Australia	1993-II	2-3	3.3	3.0	**4.2(3)**
Iceland	2001-I	2.5(+/-1.5)	7	5.9	**12.7**
Norway	2001-I	2.5(+/-1)	2.2	2.8	3.4

(1) Rates that deviated from the target as of 2007 and June 2008 are in bold.
(2) May
(3) March
(4) South Africa and Thailand target core inflation. To highlight the effects of rising energy and food prices on inflation, Thailand's overall CPI inflation rates are put into parentheses. South Africa's core inflation excludes interest rates on mortgage bonds.
Source: Bracke, T., M. Franta and J. Strasky (2008), "Monetary Policy Strategies and Exchange Rate Regimes in Mediterranean Counties," ECB, unpublished manuscript. Central bank websites of the above countries.

In view of the above developments, the rise in inflation rates is not just a Turkey theme, but a global one. Inflation rates, which have particularly increased in developing countries, pose a significant threat to the macroeconomic outlook for developed markets as well. Although central banks of the developed world have eased monetary policies following the outbreak of the financial crisis, these countries have seen stable policy interest rates since March with rising inflation, suggesting that rate-cutting has come to an end in most developed countries, particularly in the US. Moreover, the fact that inflation rates in countries with inflation targeting regimes have substantially exceeded the targets fuels the expectation that these countries will continue with monetary tightening in the upcoming period.

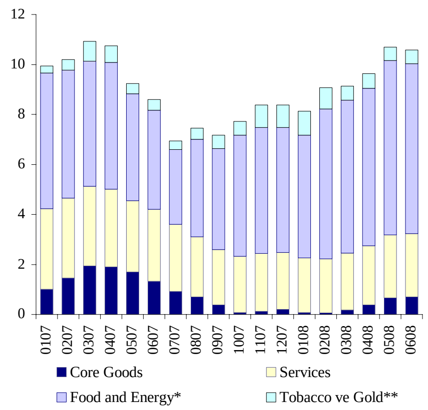
3. Inflation Developments

3.1. Inflation

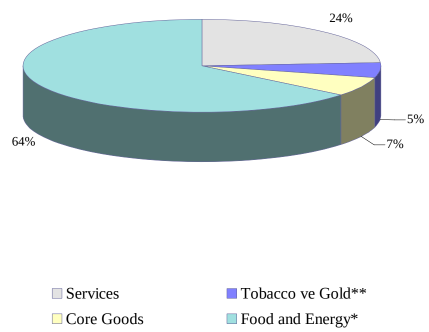
Annual inflation climbed to 10.61 percent in the second quarter of 2008. The rise in the first half hit a 5-year high of 6 percent. The sizable increase in food and energy prices that had both a direct impact and a second-round effect on services prices was the main driver of annual inflation. Besides, lagged effects of the depreciation of the new Turkish lira during the first four months of the year also account for the second-quarter rise in inflation.

Food, energy, tobacco and gold prices continued to contribute heavily to annual inflation in the second quarter. In addition, prices for services and core goods made an increased contribution, largely due to the base effect (Graph 3.1.1). Soaring food and energy prices made up 64 percent of annual inflation in June (Graph 3.1.2).

Graph 3.1.1. Contribution to Annual CPI Inflation

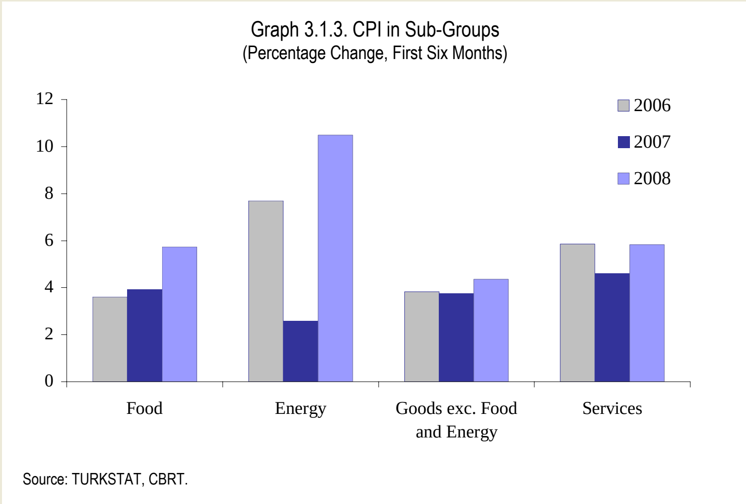


Graph 3.1.2. Contribution to Annual CPI Inflation
(Percent, June 2008)



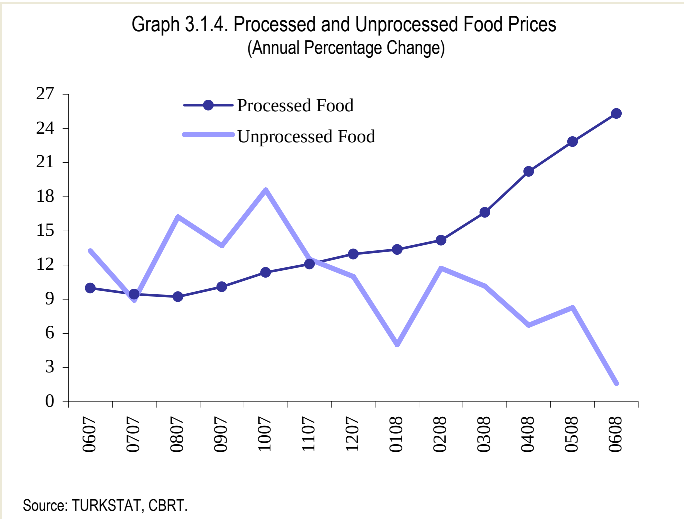
* Food and Energy: Food, non-alcoholic beverages and energy.
** Tobacco and Gold: Alcoholic beverages, tobacco products and gold.
Source: TURKSTAT, CBRT.

The surge in food prices was higher during the first half of 2008 compared with previous years (Graph 3.1.3). Although the rally in unprocessed food prices tapered off, domestic supply shortages and record-high world food prices put further upward pressure on processed food prices, which rose by 14 percent in the first half of the year. Similarly, energy prices climbed at a faster pace over the past few years and became another important driver of CPI inflation.



Prices of goods excluding food and energy increased by a 2-year high of 4.4 percent in the first half (Graph 3.1.3), which was particularly driven by the steep rise in prices of durable goods. Meanwhile, services prices advanced at a more rapid pace than a year earlier. Prices for catering and transport services rose sharply on elevated food and energy prices, while prices for rest of the services items continued to rise at a slower pace.

On balance, the first-half climb in inflation was largely driven by soaring food and energy prices, which together accounted for 6.8 percentage point of annual inflation in June.



Recently, the year-on-year rate of increase in unprocessed food prices has decelerated remarkably (Graph 3.1.4), mainly on falling fruit and vegetable prices. In contrast, prices of other unprocessed food products (such as pulses and rice) have been on the rise (Table 3.1.1). Recent CBRT studies revealed that the key factors behind the downward trend in fruit and vegetable prices were production, foreign demand, demand for food manufacturing and fuel prices. Despite the upward pressure of rising fuel prices, higher production and reduced exports of fruits and vegetables paved the way for a decline in their prices. Particularly with the contraction in exports to Russia, fresh fruit and vegetables prices fell faster than the seasonal norm in June.

Table 3.1.1. Food Prices

	Quarterly Percentage Change				Annual Percentage Change	
	2007-I	2007-II	2008-I	2008-II	2008-I	2008-II
Unprocessed Food	**11.74**	**-5.93**	**10.90**	**-13.25**	**10.16**	**1.60**
1. Fruits and Vegetables	20.61	-15.06	16.81	-34.28	13.04	-12.53
Fresh Fruits	28.53	15.90	14.75	-13.34	20.19	-10.13
Vegetables	15.64	-36.68	18.26	-48.66	7.88	-12.53
2. Other	4.78	2.30	6.14	5.40	7.89	11.16
Processed Food	2.28	0.58	5.61	8.06	16.63	25.30
1. Bread and Cereals	4.20	1.45	6.84	12.42	20.14	33.14
2. Other	1.10	0.03	4.88	5.38	14.48	20.61
Vegetable Oil	0.98	-0.53	15.60	19.67	40.27	68.76

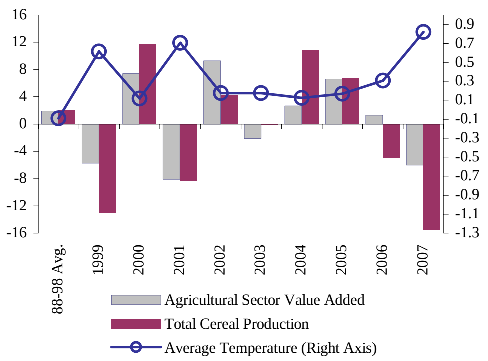
Source: TURKSTAT, CBRT.

The run-up in processed food prices over the past one year intensified in the second quarter (Table 3.1.1), pushing the group’s annual inflation up to 25.30 percent by mid-2008 on skyrocketing prices of bread, cereals and other processed food (Table 3.1.1). Other major factors that spurred hikes in processed food prices were adverse weather conditions and higher import prices of food products. In addition, the continued increase in fuel prices steepened the upward shift in processed food prices.

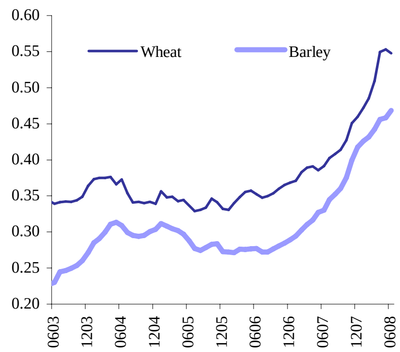
The first-half jump in prices of processed food other than bread and cereals was largely due to vegetable oil prices that surged by 38.3 percent in that period (Table 3.1.1). The vegetable oil industry depends on imported raw material and the domestic supply deficit is largely met by imports. Therefore the rise in import prices has an adverse effect on the group’s prices.

The increase in prices for bread and cereals is, to a great extent, fueled by the sharp rise in wheat prices. In Turkey, agricultural production and weather conditions are closely interrelated (Graph 3.1.5). In times of temperatures markedly above long-term averages, agricultural production, especially of cereals, drops dramatically. Cereal production declined by 5 and 15.5 percent, respectively, in 2006 and 2007. This, and higher international prices, resulted in a major hike in prices of cereals, particularly wheat and barley (Graph 3.1.6), and put an upward pressure on prices for bread and cereals as a whole. With less pressure from crop losses, processed food prices are expected to increase at a more moderate rate in the second half of the year. Assumptions underlying forecasts of future food prices are briefly discussed in Box 3.1.

Graph 3.1.5. Agricultural Production and Average Temperatures*
(Annual Percentage Change)



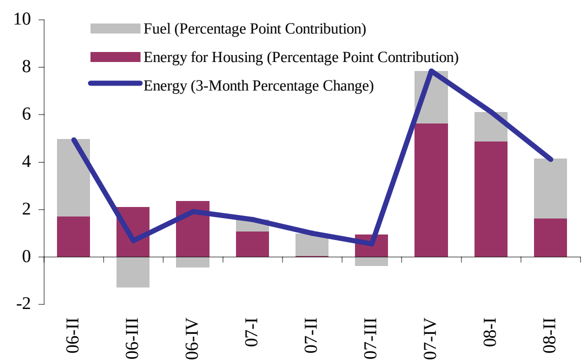
Graph 3.1.6. Domestic Wheat and Barley Prices
(TRY/Kg)



*Temperatures in the graph are normalized to the values for the past 30 years. Zero means within the range of long-term averages, whereas 1 means shifting by one standard deviation from long-term averages (Source: Başkaya, Gürgür and Öğünç, "Factors Affecting Food Prices, Chapter 1: Processed Food Prices" (CBRT 2008, Draft Study)).
Source: TURKSTAT, CBRT.

After having increased in the first quarter due to fuel prices and price adjustment in electricity tariffs, energy prices rose by 4.12 percent in the second quarter (Graph 3.1.7), mainly on account of record-high world oil prices. Given the upward revision in electricity tariffs effective July 1, prices in the group are likely to rise further in the third quarter.

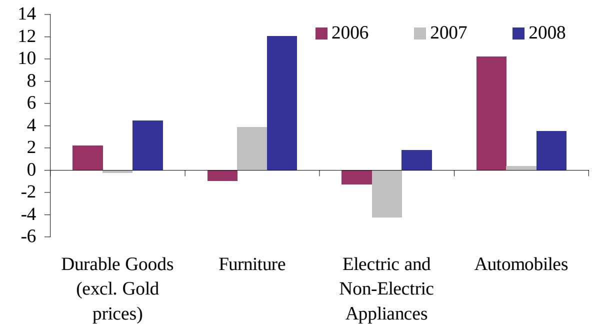
Graph 3.1.7. Energy Prices
(Quarterly Percentage Change, Percentage Point Contribution)



Source: TURKSTAT, CBRT.

Annual inflation in goods excluding energy and food ended the second quarter at 4.18 percent, up 1.77 percentage points from the first quarter, largely due to higher prices of durable goods. Clothing prices, on the other hand, kept its favorable course.

Graph 3.1.8. Durable Goods
(Percentage Change, First Six Months)



Source: TURKSTAT, CBRT.

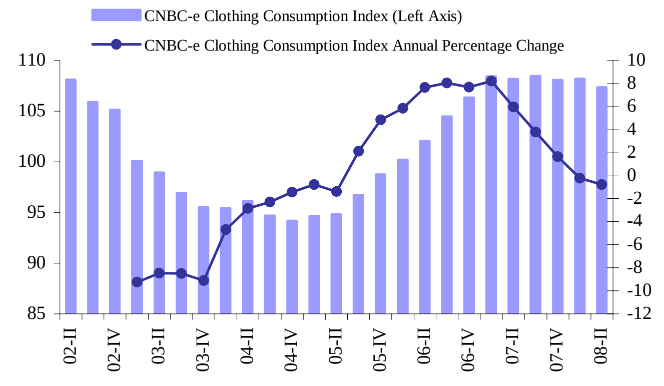
Prices of durable goods (excluding gold) rose by 2.81 percent in the second quarter of 2008, up 0.30 percent year-on-year in June (Table 3.1.2), largely due to furniture prices that went up by a cumulative 12.04 percent in the first six months, significantly higher than in previous years (Graph 3.1.8). The first-half cumulative inflation in prices of electric and non-electric household appliances and automobiles, which have been more responsive to exchange rate shifts, was well above its level a year ago (Graph 3.1.8).

Table 3.1.2. Prices for Durable Goods
(Quarterly and Annual Percentage Change)

	2007				2008	
	II	III	IV	Annual	I	II
Durable Goods (excl. gold)	**-1.36**	**-1.60**	**-2.41**	**-4.21**	**1.58**	**2.81**
Furniture	4.50	-6.34	0.94	-1.80	4.13	7.60
Electric and Non-Electric Appliances	-3.75	-1.80	-1.80	-2.35	1.16	0.68
Automobiles	-2.74	0.71	-4.42	-3.37	1.04	2.44
Other	1.09	-0.52	0.32	1.71	0.04	0.89

Source: TURKSTAT, CBRT.

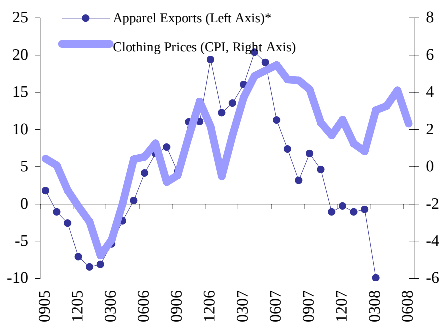
Graph 3.1.9. CNBC-e Clothing Consumption Index
(Seasonally Adjusted, 3-Month Average and Annual Percentage Change)



Source: CNBC-e.

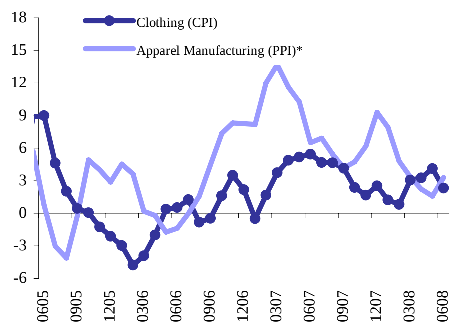
Annual inflation in clothing and footwear prices fell around one percentage point from a quarter ago to 2.86 percent in the second quarter. The clothing component of the CNBC-e Consumption Index posted a decline in domestic sales in seasonally adjusted terms (Graph 3.1.9). Similarly, apparel exports have recently grown at a much slower rate year-on-year (Graph 3.1.10). Apparel manufacturing prices continued to decrease in the second quarter (Graph 3.1.11). In view of these developments, aggregate demand and cost factors appear to have added to the downward trend in clothing price inflation. The current outlook suggests that clothing prices will go further down year-on-year in the remainder of the year.

Graph 3.1.10. Clothing Prices and Apparel Exports
(Annual Percentage Change)



* Annual growth in clothing and apparel exports, 3-month moving average.
Source: TURKSTAT.

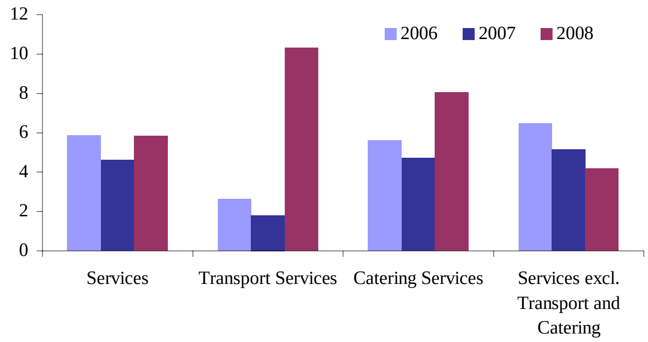
Graph 3.1.11. Clothing and Apparel Manufacturing Prices
(Annual Percentage Change)



* Annual inflation in apparel manufacturing, 2-month moving average.
Source: TURKSTAT.

Recent trends in services prices provide invaluable information with respect to their second-round effects on CPI inflation, particularly food and energy prices. The first-half rise in prices of transport and catering services reflects the effects of the sharp increase in fuel and food prices over the past one year, and is substantially higher than a year ago (Graph 3.1.12). Yet, given the steady downward slope in prices of services other than catering and transport, the first-half trend in overall services inflation was largely the same as in previous years.

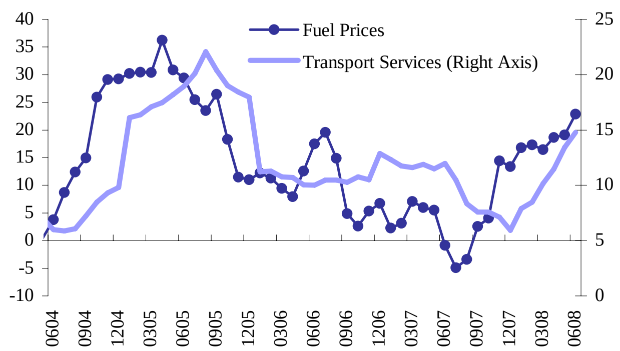
Graph 3.1.12. Prices for Services
(Percentage Change, First Six Months)



Source: CNBC-e.

As fuel is an essential input to transportation, changes in international oil prices largely account for the behavior of inflation in the transport industry. The annual rate of increase in prices of transport services has a lagged impact on the annual fuel inflation (Graph 3.1.13). The downward trend in fuel prices since mid-2005 reversed sharply in the second half of 2007, pushing annual transport services inflation steadily higher since the first quarter of 2008. Fuel prices rose further in the second quarter, which suggests that transport services will continue to experience dramatic price hikes in the third quarter.

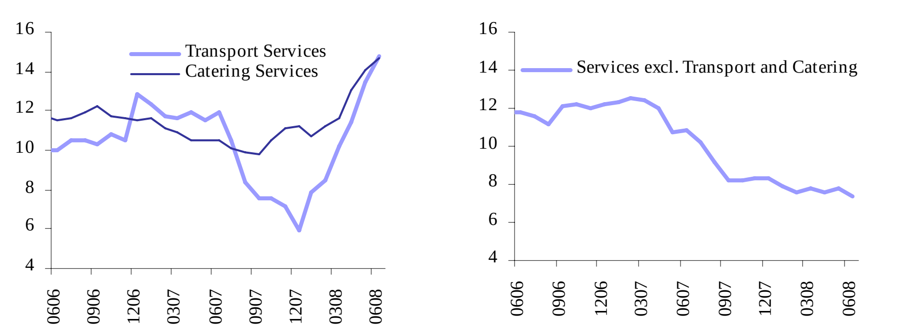
Graph 3.1.13. Fuel and Transport Services Prices
(Annual Percentage Change)



Source: CNBC-e.

Just as soaring prices of transport services have a direct impact on fuel prices, the steep rise in food prices causes catering prices to rally. Prices of transport and catering services were up 2.8 and 4.2 percentage points year-on-year, respectively, over the past one year, while the annual inflation in other services dropped by 3.5 percentage points (Graph 3.1.14).

Graph 3.1.14 Transport and Catering Services
(Annual Percentage Change)



Source: TURKSTAT, CBRT.

Table 3.1.3. Prices of Goods and Services
(Quarterly and Annual Percentage Change)

	2007				2008	
	II	III	IV	Annual	I	II
CPI	**1.47**	**0.31**	**4.02**	**8.39**	**3.09**	**2.82**
1. Goods	**1.18**	**-0.11**	**4.65**	**8.29**	**3.27**	**2.69**
Energy	1.00	0.55	7.85	11.25	6.11	4.12
Unprocessed Food	-5.93	2.23	3.30	10.99	10.90	-13.25
Processed Food	0.58	4.26	5.31	12.95	5.61	8.06
Goods excl. Food and Energy	3.90	0.88	-0.82	4.29	-2.35	6.87
Durable Goods	-1.73	-1.15	-1.71	-3.34	3.45	1.97
(excl. gold)	-1.36	-1.60	-2.41	-4.21	1.58	2.81
Semi-durable goods	7.43	-3.50	7.67	7.86	-1.23	9.20
Non-durable goods	-2.07	2.52	4.21	11.69	6.44	-1.43
2. Services	**2.28**	**1.50**	**2.32**	**8.64**	**2.55**	**3.20**
Rents	3.33	4.56	3.30	16.01	2.79	2.74
Restaurant and Hotels	1.94	2.27	3.64	10.87	3.13	4.58
Transport Services	1.70	2.10	1.91	5.93	4.10	5.98
Other Services	2.19	-0.36	1.27	5.29	1.68	1.80

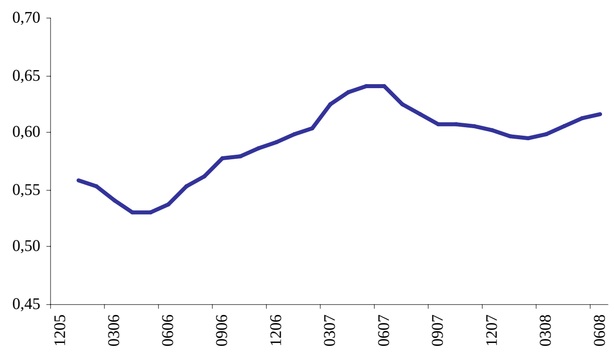
Source: TURKSTAT, CBRT.

Graph 3.1.15. Special CPI Aggregates
(Seasonally Adjusted Monthly Increases, 2-Month Average)

Source: TURKSTAT, CBRT.

Soaring food and energy prices have recently driven consumer prices to record highs, and have some secondary effects on special CPI aggregates (SCA), which increased at a higher rate month-on-month over a one-year period in seasonally adjusted terms. However, the May-June average of special CPI aggregates was lower than the March-April average. The seasonally adjusted monthly rise in SCA-H is higher than that in SCA-I due to the upsurge in processed food prices. Goods and services with rising prices in the SCA-I basket had a slightly increased weight in the second quarter (Graph 3.1.16).

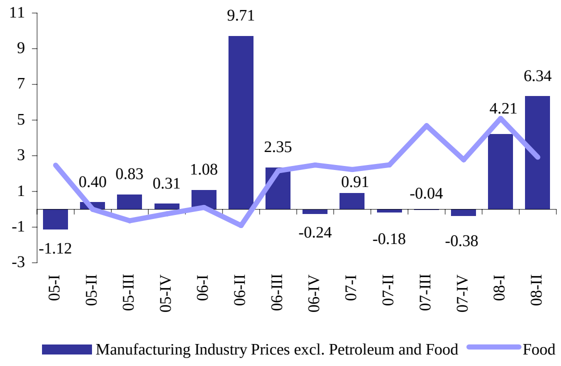
Graph 3.1.16. SCA-I, Weight of Items with Rising Prices*
(12-Month Average)



*Calculated using 7-digit prices. Shows the percentage of items with rising prices in overall items.
Source: TURKSTAT, CBRT.

Changes in producer prices have been of great importance as to the cost pressures on CPI inflation. After having flattened out during 2007 and made a downward contribution to inflation, manufacturing industry prices excluding petroleum products and food went up again at the start of 2008 and soared by 10.82 percent in the first half largely on account of rapidly increasing base metal prices. Accordingly, prices of intermediate and capital goods climbed at a remarkable clip. In sum, the rise in world commodity prices continued to put upward pressure on producer prices in the second quarter (Graph 3.1.17).

Graph 3.1.17. Manufacturing Industry Prices excl. Petroleum and Food
(Quarterly Percentage Change)



Source: TURKSTAT, CBRT.

Table 3.1.4. PPI Developments Based on MIGS Classification
(Quarterly and Annual Percentage Change)

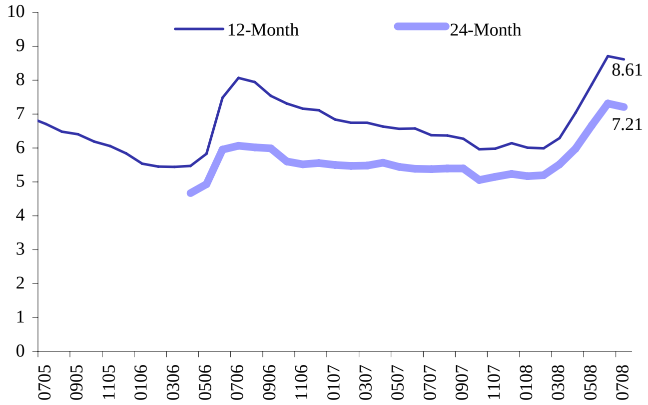
	2007					2008	
	I	II	III	IV	Annual	I	II
Manufacturing Industry excl. oil and food	**0.91**	**-0.18**	**-0.04**	**-0.38**	**0.30**	**4.21**	**6.34**
Prices of Intermediate Goods	1.29	0.58	0.15	-1.25	0.75	7.28	8.84
Prices of Capital Goods	0.03	-1.80	-0.06	-0.48	-2.32	4.56	6.60
Prices of Durable Goods	0.96	-0.51	-0.80	-3.06	-3.41	1.59	3.05
Prices of Non-Durable Goods	1.54	1.10	2.40	2.88	8.15	1.33	1.77
Energy Prices	2.64	0.19	4.22	2.65	10.02	16.89	16.65

Source: TURKSTAT, CBRT.

3.2. Expectations

The upward trend in inflation expectations since March continued into the April-June period, largely driven by soaring energy and food prices and higher inflation, coupled with the upward revision of inflation targets. With monetary tightening since May, however, the deterioration in inflation expectations came to a halt in July. As of the latest survey period, year-end and 12-month and 24-month ahead inflation expectations are at 10.76, 8.61 and 7.21 percent, respectively (Table 3.2.1).

Graph 3.2.1. 12- and 24-Month Ahead CPI Expectations*
(Annual Percentage Change)



* CBRT Expectations Survey results from the second survey period.
Source: CBRT.

The coefficient variation[1] that measures inflation uncertainty has recently remained nearly unchanged (Table 3.2.1).

Table 3.2.1. CPI Inflation Expectations

Current Period	Survey Period	Year-end Expectations*	12-Month Ahead		24-Month Ahead	
			Average Expectations*	Coefficient of Variation	Average Expectations*	Coefficient of Variation
July-07	2	7.49	6.38	0.09	5.38	0.11
August-07	2	7.16	6.37	0.12	5.40	0.12
September-07	2	7.18	6.27	0.10	5.40	0.13
October-07	2	6.94	5.96	0.12	5.06	0.11
November-07	2	7.90	5.98	0.09	5.15	0.09
December-07	2	8.64	6.14	0.13	5.24	0.15
January-08	2	6.47	6.01	0.13	5.17	0.14
February-08	2	6.54	5.99	0.10	5.20	0.13
March-08	2	7.27	6.29	0.15	5.52	0.17
April-08	2	8.44	7.04	0.14	5.98	0.16
May-08	2	9.64	7.88	0.14	6.67	0.19
June-08	2	10.63	8.71	0.13	7.31	0.16
July-08	2	10.76	8.61	0.12	7.21	0.16

* Average expectation figures presented in the table are specified through comparing the appropriate means designated based on the comparison of arithmetic mean, median, mode, alpha and trimmed mean and extreme value analysis.
Source: CBRT.

[1] The coefficient of variation, which indicates the deviation of participants' expectations, is the ratio of standard deviation to the mean in a data set with the appropriate mean.

BOX 3.1. MEDIUM-TERM FORECASTS FOR FOOD PRICES

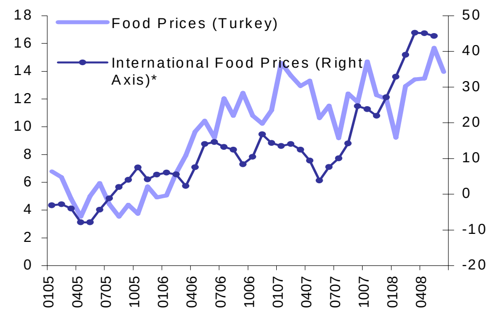
Food prices started to accelerate in the final quarter of 2005, and registered a marked rise in 2006 and 2007, which continued into the first half of 2008 (Graph 1). Domestic food prices increased at a similar pace to international food prices during the first half of 2008. Recent changes in domestic prices indicate that the upward trend in unprocessed food prices has tapered off, while processed food prices have accelerated further and become the main driver of food prices (Graph 2). In view of the current outlook, in this box, we will discuss our forecasts for the future course of food prices and the underlying assumptions. Before, we should give a brief account of the basic factors that drive prices up:

(i) Crop losses due to temperatures above seasonal norms and reduced precipitation: The dramatic decline in grain production (wheat) caused processed food prices, especially bread and grain products (such as bread, pasta, noodle, wheat flour) to increase rapidly.

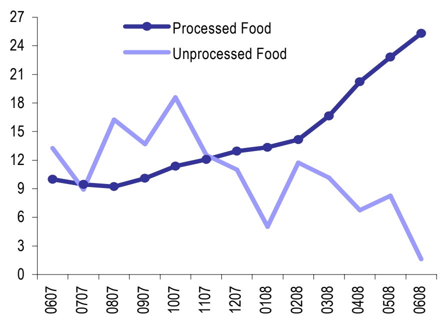
(ii) The spike in international food prices: Supply and demand pressures play a key role in pushing world food commodity prices up. Major short-term supply-related problems are: Adverse weather conditions, higher input costs of oil and oil products and export quotas recently introduced by some exporting countries to boost their domestic supply. Medium-term threats to supply include: Productivity gains in the agricultural sector that lagged behind earlier years and rapid urbanization and industrialization that shifted land-use trends in the world towards non-agricultural activities. On the demand front, key factors are: The rise in household incomes in many developing countries and the resulting sharp increase in demand for food, and the use of several agricultural crops for biofuel production. Besides, some attribute price increases to speculative moves.

(iii) The rise in costs of food manufacturing (rise in prices of diesel oil, a petroleum product, and fertilizers) and transportation, driven by soaring fuel and energy prices: As reported by the Union of Turkish Chambers of Agriculture, fertilizers and diesel oil account for 25 and 24 percent, respectively, of wheat costs.

Graph 1. Domestic and International Food Prices
(Annual Percentage Change)



Graph 2. Processed and Unprocessed Food Prices
(Annual Percentage Change)



* IMF-IFS food price index.
Source: TURKSTAT,IMF-IFS.

Medium-term forecasts

Due to their potentially different pricing dynamics, food items are categorized into two sub-groups: processed food and unprocessed food. Studies conducted in the Central Bank of Turkey reported that unprocessed food prices are largely affected by changes in fruit and vegetable prices that are attributable to factors such as production, foreign demand, demand for food manufacturing and fuel prices. In contrast, processed food prices are highly correlated with climatic conditions and international prices, in particular, and with exchange rate shifts, diesel oil prices, domestic wheat prices and demand conditions.[1] Our assumptions for the future course of these factors underlie our forecasts for unprocessed food and processed food prices.

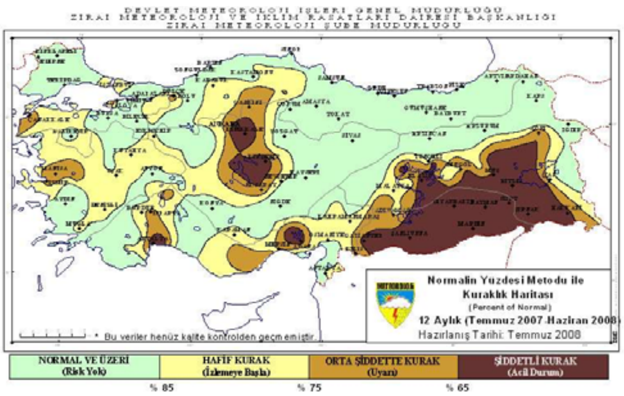
[1] Source: Başkaya, Gürgür and Öğünç, "Factors Affecting Food Prices, Chapter 1: Processed Food Prices" (CBRT 2008, Draft Study).

Unprocessed Food Prices

The annual rate of increase in unprocessed food prices is forecast to slow substantially in 2008 compared with the past two years and maintain a mild growth trend afterwards (Table 1). We assume that improved weather conditions will continue to have a positive impact on fruit and vegetable production in the upcoming period, and that there will no further increase in foreign demand conditions that would put some pressure on aggregate supply. On the other hand, precipitation is yet to reach normal levels across the whole country (Graph 3). Drought is still extreme in Southeast Anatolia and in the Konya Plain, which causes shortages and resulting price hikes in several pulse crops like red lentils. In fact, prices of pulse crops (listed as “other unprocessed food”) went up dramatically during the first half of 2008, with an increase of 75 percent over the past twelve months. The ongoing drought in Southeast Anatolia, one of Turkey’s top pulse producing regions, indicate that other unprocessed food prices may further rise for some time, a probability that we have taken into account in our near-term forecasts for unprocessed food prices.

The run-up in fuel prices will continue to have some upward pressure on prices through the second half of 2008, but will contribute less in the following two years, as suggested by the fuel price assumptions set out in the last chapter. Similarly, in view of current demand conditions, the demand for fresh fruits and vegetables from the food manufacturing industry is assumed to remain favorable in the upcoming period. Under the above assumptions that underlie our medium-term forecasts, we expect unprocessed food price inflation to moderate gradually and reach 5.5 percent year-on-year at end-2008, up 3.9 percentage points from now, and 5.1 and 4.7 percent, respectively, in 2009 and 2010 (Table 1).

Graph 3. Drought Map, Past 12 Months
(Percent of Normal Methodology)*



Source: State Meteorological Service.

* Degree of severity is depicted by color chart ranging from green to brown, where dark brown shows the worst situation

Processed Food Prices

Studies conducted in the Central Bank of Turkey indicated that the recent pickup in processed food price inflation stemmed from severe drought in Turkey and skyrocketing world food prices.[2] First comments in the mass media suggest that, given the improved weather conditions, there will be a better crop harvest in 2008 compared with a year earlier (although Southeast and Central Anatolia will continue to suffer from crop losses). In fact, the value added in agriculture increased by 5.6 percent in the first quarter of 2008 from a year ago, which can be interpreted as a promising

[2] Başkaya, Gürgür and Öğünç (2008). Main sub-groups that caused processed food prices to escalate after 2005 were “bread and grains”, “solid and liquid oils” and “cheese and other dairy products”. By 2008, “cheese and other dairy products” has contributed less, while the other two sub-groups have made a more pronounced contribution. Bread and grain prices were largely boosted by wheat prices, whereas solid and liquid oil prices were affected by the spike in (import) prices of vegetable oil.

signal. This outlook is also supported by the rate of increase in domestic wheat prices that slowed in May and dropped in June after a sharp rise in the first four months.[3] In view of these developments, we have built our forecasts on the assumption of a reduced inflationary pressure from crop losses in the second half of 2008. Moreover, we assume that the normalization in weather conditions will continue in 2009 and 2010 (though some regions will fail to keep up).

Spillovers form soaring world food prices are largely reflected in processed food prices. The IMF's index of world food prices flattened out after March. Manufacturing import prices, which had been on the rise for a long time, dropped in May, albeit at a subdued pace (whereas import prices of intermediate goods in the food industry continued to climb). On balance, we assumed that the rate of increase in international food prices will decline to a great extent in the second half of 2008. In the medium term, we assumed that the global demand for food will remain robust,[4] and therefore international prices will continue to have an adverse impact, though less significant than in the past two years.

In developing our forecasts, we also assumed that the weakening of the new Turkish lira will exert no more pressure after 2008, and the contribution of diesel oil prices will be reduced in time based on the scenario for oil prices. In addition, we expect the aggregate demand conditions in the food industry to remain favorable.

In view of the above assumptions, we forecast processed food inflation to moderate in the second half of the year, from 25.3 percent year-on-year in June to a still-remarkable 21.7 percent year-on-year at end-2008 (Table 1). We expect processed food prices to edge further down in 2009 and 2010 to 12.5 and 9.1 percent year-on-year, respectively (Table 1). Obviously, we have adopted a more prudent approach to forecasting processed food prices, compared with unprocessed food prices, which is mainly due to the impact of drought and import prices on processed food prices.

Table 1. Medium-Term Forecasts for Food Prices

	June-2008 Realization	2008	2009*	2010*
Unprocessed food	1.60	5.5	5.1	4.7
Processed food	25.30	21.7	12.5	9.1
Food and nonalcoholic beverages (baseline scenario)	13.96	14	9	7
Food and nonalcoholic beverages (optimistic scenario)		12	6	4
Food and nonalcoholic beverages (pessimistic scenario)		16	12	10

* Forecasts are developed under the assumption that food consumption will remain stable in 2009 and 2010.

Our combined forecasts for processed and unprocessed food prices indicate that food price inflation will end 2008 at 14 percent, and edge down in 2009 and 2010 to 9 and 7 percent, respectively. Medium-term inflation forecasts set out in the final chapter are based on these assumptions. Food prices are more volatile than those of other sub-groups, which raises the degree of uncertainty in forecasts for food prices. Therefore, figures in Table 1 should not be viewed as a precise forecast, but an enhanced "prediction". In this context, the final chapter involves alternative scenarios for food prices. Our pessimistic scenario assumes food inflation to stay at about 16, 12 and 10 percent in 2008, 2009 and 2010, respectively, while our optimistic scenario expects food inflation to end 2008 at its year-ago level and drop to 6 and 4 percent in 2009 and 2010, respectively.

3 A similar slowdown is observed in international wheat prices. The US wheat prices have retreated from the peak in March.

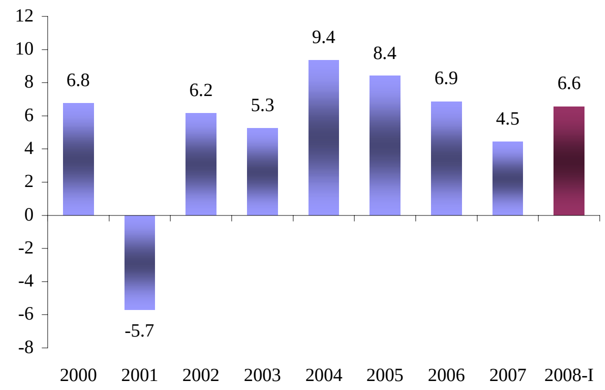
4 Yörükoğlu (2008), "Economic Convergence and Decoupling in Monetary Policy", presentation at the conference "Current Issues in Economic Governance", Bilkent, Ankara (http://www.tcmb.gov.tr/yeni/iletisimgm/YorukogluBilkent08.pdf).

4. Supply and Demand Developments

4.1. Supply-Demand Balance

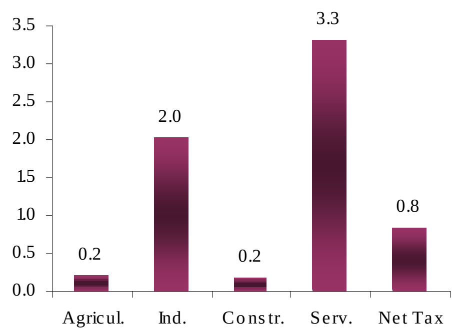
Gross Domestic Product (GDP) expanded by 6.6 percent year-on-year in the first quarter of 2008 (Graph 4.1.1). On the production side, the GDP growth was largely boosted by services and industrial sectors, while agricultural and construction sectors made a limited contribution (Graph 4.1.2). On the spending side, private consumption was the main driver of GDP growth. Besides, the contribution from net export was slightly less negative compared to the previous two quarters thanks to the rapid increase in exports (Graph 4.1.3).

Graph 4.1.1. Annual GDP Growth Rates
(Percent)



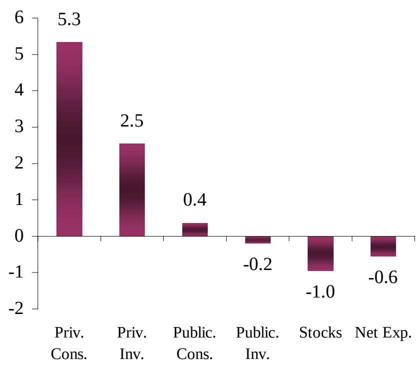
Source: TURKSTAT.

Graph 4.1.2. Contribution to GDP Growth by Sectors of Production
(Percentage Points)



Source: TURKSTAT.

Graph 4.1.3. Contribution to GDP Growth from Spending
(Percentage Points)



Source: TURKSTAT.

Total final domestic demand increased by 7.5 percent in the first quarter (Table 4.1.1). The low base effect from a year earlier had a siginificant impact on the growth rate. Therefore, to effectively measure changes in economic activity, the quarterly change in seasonally adjusted figures have to be used instead of above mentioned high growth rate. In fact, total final domestic demand grew rapidly in annual terms but slowed down on a quarterly basis.

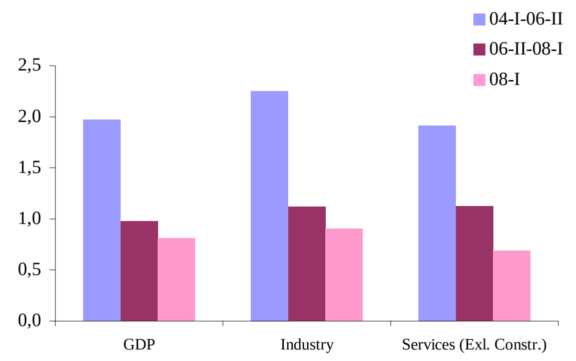
Table 4.1.1. GDP Developments by Expenditures
(Annual Increase, Percent)

	2006	2007					2008
	Annual	I	II	III	IV	Annual	I
1-Consumption expenditures	5.1	5.5	1.7	7.6	2.7	4.4	6.9
Public	8.4	4.7	2.1	3.3	1.6	2.8	4.2
Residential household expenditures	4.6	5.6	1.6	8.2	2.9	4.6	7.3
Domestic expenditures	4.6	5.6	1.2	6.3	1.9	3.8	7.1
Food, beverages and tobacco	3.9	7.0	3.7	3.6	0.2	3.5	5.8
Clothing and footwear	-3.9	-0.7	-10.8	-4.3	0.8	-3.9	7.7
Furniture, household appliances	5.3	7.3	-3.9	2.7	1.0	1.5	3.0
Transport-communication	7.4	3.1	-1.8	12.9	4.9	4.6	17.7
Restaurants and hotels	2.5	7.3	0.3	4.3	-6.6	1.8	5.2
2-Fixed capital investments	13.3	2.8	1.2	2.1	7.2	3.3	9.5
Public	2.6	4.3	8.4	15.9	2.2	7.6	-7.7
Private	15.0	2.6	0.2	0.0	8.1	2.7	11.3
Machinery-equipment	12.2	-3.2	-3.7	-1.6	11.9	0.7	15.6
Construction	20.3	12.9	8.2	2.8	2.2	6.3	4.8
3- Stock changes*	-0.1	1.9	1.8	0.0	3.2	1.7	-1.0
4-Exports of goods and services	6.6	12.5	9.3	4.2	2.5	6.7	12.2
5-Imports of goods services	6.9	8.6	5.6	14.4	15.7	11.1	11.9
Net exports*	-0.3	0.4	0.5	-2.6	-3.7	-1.5	-0.6
6-Total domestic demand	7.0	6.8	3.2	5.9	7.0	5.7	6.8
7-Total final domestic demand	7.0	4.8	1.6	6.3	3.8	4.1	7.5
8-GDP	6.9	7.6	4.0	3.4	3.4	4.5	6.6

*Contribution to GDP growth, percentage points.
Source: TURKSTAT.

In the April Inflation Report, we underlined that the rapid quarterly GDP growth in the last quarter of 2007 was not of a long-lasting nature and that leading indicators for the first quarter of 2008 signaled a slowdown in economic activity. In fact, in the first quarter, GDP grew by a quarterly 0.8 percent in seasonally adjusted terms (Box 4.1). After having expanded by a quarterly 2 percent on average between 2004Q1 and 2006Q2, GDP has grown by about 1 percent on average for the past two years due to the monetary tightening in June 2006 and problems in the global financial markets that prevailed in mid-2007. Therefore, we believe that the rapid quarterly growth in the first quarter of 2008 was largely boosted by the base effect and expect GDP to grow annually at a slower pace in the upcoming period. Main components of production are expected to follow a similar pattern (Graph 4.1.4).

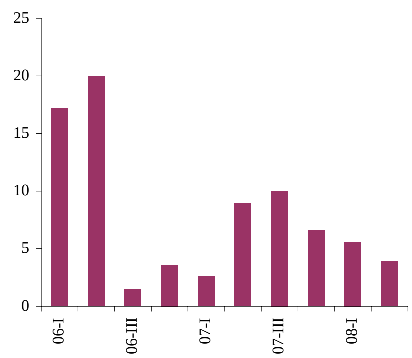
Graph 4.1.4. Average Quarterly Rate of Increase
(Percent)



Source: TURKSTAT, CBRT.

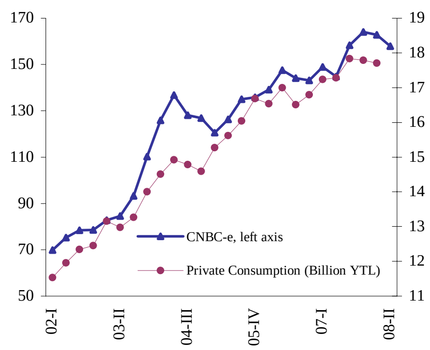
On the spending side, the continued downward trend in domestic demand is also reflected in indicators associated with private consumption expenditures. In seasonally adjusted figures, private consumption demand has been on the decline for the last two quarters. Although private construction investments have rebounded to some extent, the quarterly rate of increase is still lower compared to periods when construction activities had been robust. In contrast, private machinery-equipment investments have increased sharply for the last two quarters.

Graph 4.1.5. Consumer Loans
(Reel, Quarterly Percentage Change)



Source: CBRT.

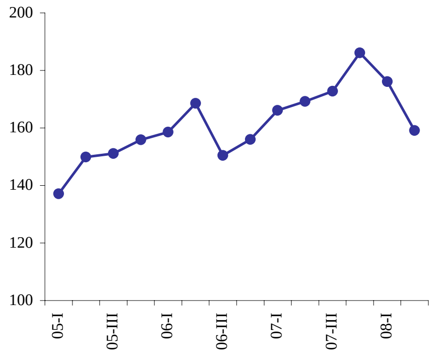
Graph 4.1.6. CNBC-e Consumption Index and Private Consumption Expenditures
(Seasonally Adjusted)



Source: CNBC-e, CBRT.

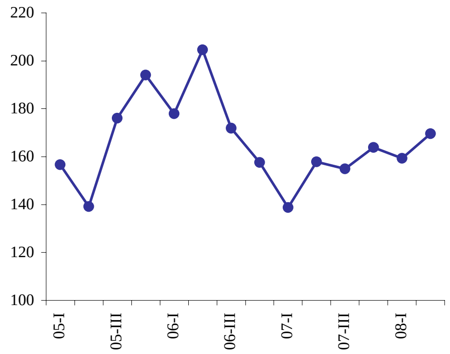
Most recent indicators point to a continued weakening in consumption demand in the second quarter of the year. Consumer confidence indices went down from the first quarter, and real consumer loans continued to trend downward (Graph 4.1.5). The seasonally adjusted CNBC-e consumption index declined further in the second quarter. The production of chemicals followed a similar pattern (Graph 4.1.6 and Graph 4.1.7). Although furniture production recovered to some extent in the second quarter, the level of production is substantially below the level in the periods when the demand for furniture had been strong (Graph 4.1.8). Domestic sales of automobiles dropped dramatically in the first half of the year. Meanwhile, the import quantity index of consumer goods also declined in the face of a steep contraction in the demand for automobiles, while the rate of increase in imports of semi-durable and non-durable goods fell at a moderate pace (Graph 4.1.9 and Graph 4.1.10).

Graph 4.1.7. Production of Chemicals*
(Seasonally Adjusted)



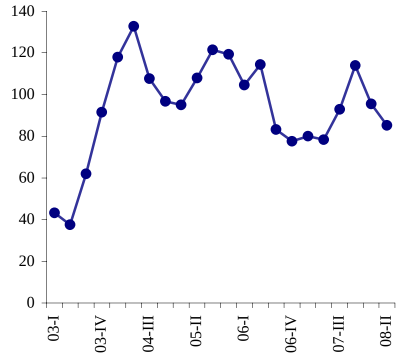
* Latest data cover the April-May period.
Source: TURKSTAT, CBRT.

Graph 4.1.8. Production of Furniture*
(Seasonally Adjusted)



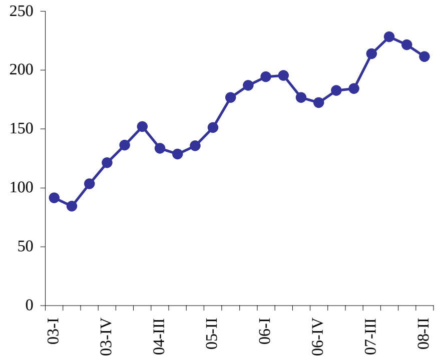
* Latest data cover the April-May period.
Source: TURKSTAT, CBRT.

Graph 4.1.9. Domestic Sales of Automobiles
(Seasonally Adjusted, Thousand)



Source: OSD, CBRT.

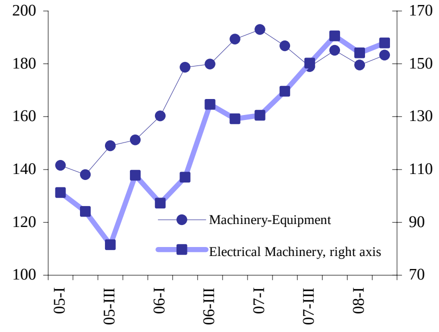
Graph 4.1.10. Import Quantity Index of Consumer Goods
(Seasonally Adjusted)



Source: TURKSTAT, CBRT.

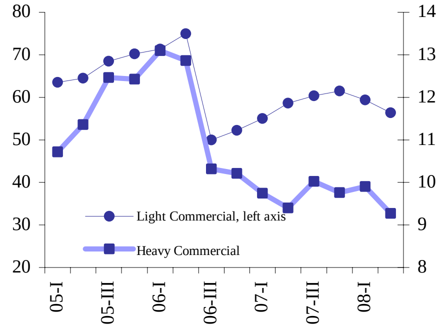
As indicators for investment demand, machinery-equipment and electrical machinery production remained virtually flat (Graph 4.1.11). Domestic sales of light and heavy commercial vehicles realized below their first-quarter levels (Graph 4.1.12). The import quantity index of capital goods declined, quarter-on-quarter, in the first two quarters, mainly due to the plunge in motor vehicles (Graph 4.1.13). Excluding motor vehicles, the import of investment goods continued to fall, though at a slower pace.

Graph 4.1.11. Production of Machinery-Equipment and Electric Machinery
(Seasonally Adjusted)



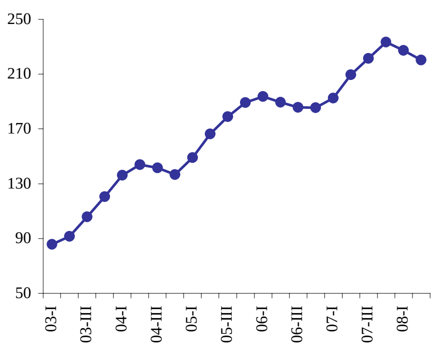
Source: TURKSTAT, CBRT.

Graph 4.1.12. Domestic Sales of Light and Heavy Commercial Vehicles
(Seasonally Adjusted, Thousand)



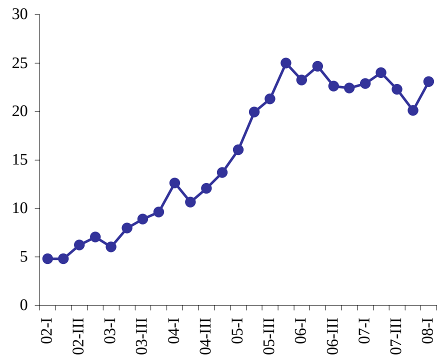
Source: AMA, CBRT.

Graph 4.1.13. Import Quantity Index of Capital Goods
(Seasonally Adjusted)



Source: TURKSTAT, CBRT.

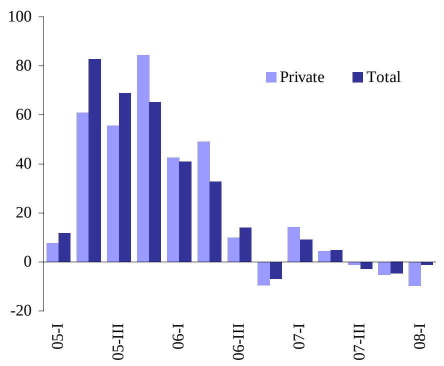
Graph 4.1.14. Construction Permits
(Seasonally Adjusted, Million sq. m)



Source: TURKSTAT, CBRT.

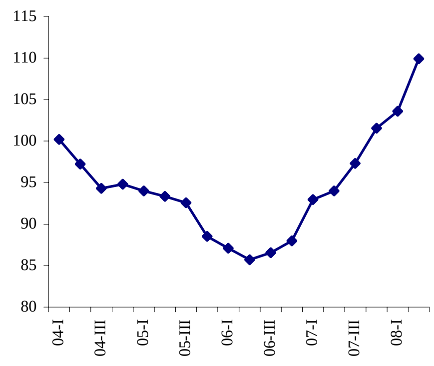
Except the modest recovery in the first quarter of 2008, construction permits have been flat in seasonally adjusted figures since early 2006 (Graph 4.1.14). In contrast, total construction permits fell by 1 percent annually in the first quarter. With the removal of the positive contribution from the public sector, the slowdown in private investments is more apparent (Graph 4.1.15). In the non-metallic minerals industry, the ratio of export quantity index to production index fell in the period of strong domestic demand, but started to increase steadily in the second half of 2006 and posted a sizable increase in the second quarter of 2008, pointing to a continued slowdown in construction activity (Graph 4.1.16).

Graph 4.1.15. Total Construction Permits
(Area, Annual Percentage Change)



Source: TURKSTAT, CBRT.

Graph 4.1.16. Export Quantity Index/Production Index of Non-Metallic Minerals
(Seasonally Adjusted)



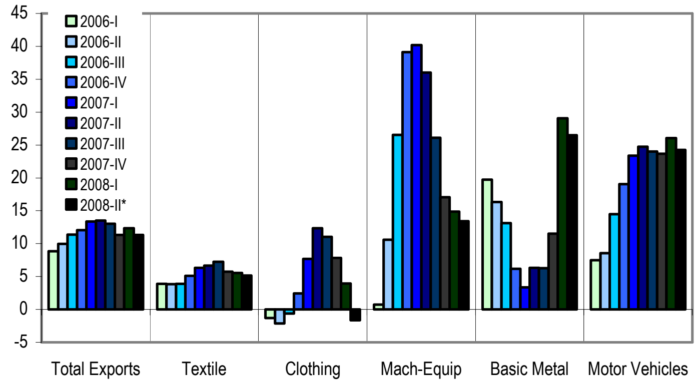
Source: TURKSTAT, CBRT.

4.2. Foreign Demand

The rise in domestic demand and the strengthening of the new Turkish lira gave a strong boost to imports in terms of quantity in the second half of 2007, resulting in a markedly increased negative contribution from net exports to GDP growth. However, as imports decelerated in volume during the first quarter of 2008, the strong performance of exports of goods and the recovery in tourism revenues helped reduce the negative contribution from net exports.

Export growth was largely fuelled by industries such as motor vehicles, basic metals and chemicals. Machinery-equipment exports advanced at a solid pace, but saw some deceleration in 2007 and in the first half of 2008. Exports of textiles grew at a steady pace, but lagged behind the overall export performance. Exports of clothing, however, were significantly down (Graph 4.2.1). Main drivers of the import quantity growth were industries such as basic metals and fabricated metal products, electrical machinery and appliances, and, motor vehicles since the last quarter of 2007. The increase in nominal imports, on the other hand, stemmed mainly from energy imports that account for the largest share of total imports. The steep first-quarter rise in oil and natural gas prices was the main factor that pushed up the energy imports bill.

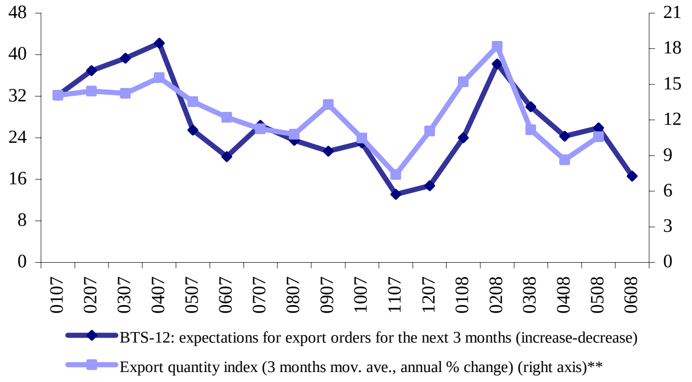
Graph 4.2.1. Export Quantity Index Growth Rates by Industries
(Annualized, Annual Percentage Change)



*As of April-May.
Source: TURKSTAT.

Recent data indicate that the marked growth in exports has continued in the second quarter of 2008. Yet, the "expectations for export orders for the next three months" from CBRT's Business Tendency Survey have declined to some extent in June (Graph 4.2.2). Imports, on the other hand, have decelerated significantly since March.

Graph 4.2.2. Expectations for Export Orders and Export Quantity Index
(For the quantity index: annualized, annual percentage change)*

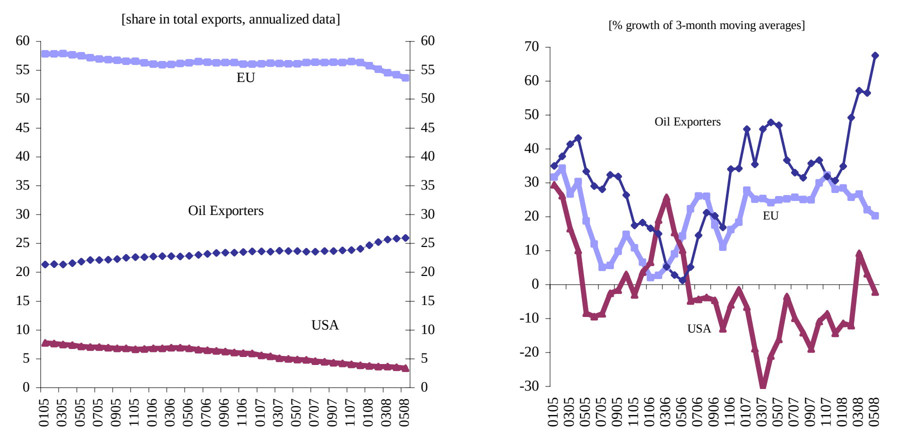


*The export quantity index figures lag by one month.
**Estimates for the quantity index of June is based on figures released by TEA.
Source: TURKSTAT, CBRT.

The slowdown in the economic activity in the world economy, particularly in developed economies, poses a major threat to Turkey's export performance. In fact, exports to EU member countries account for more than half of total exports, but their share in total export has plummeted due to the recent slowdown in exports to these countries. In contrast, the share of exports to oil-exporters and to countries other than the EU and the US has increased (Graph 4.2.3). The continued increase in exports to countries other than the EU and the US paves the way for alternative export market opportunities, and is therefore viewed as positive in terms of external demand.

Graph 4.2.3. Exports Developments by Country Groups*

(Percent)

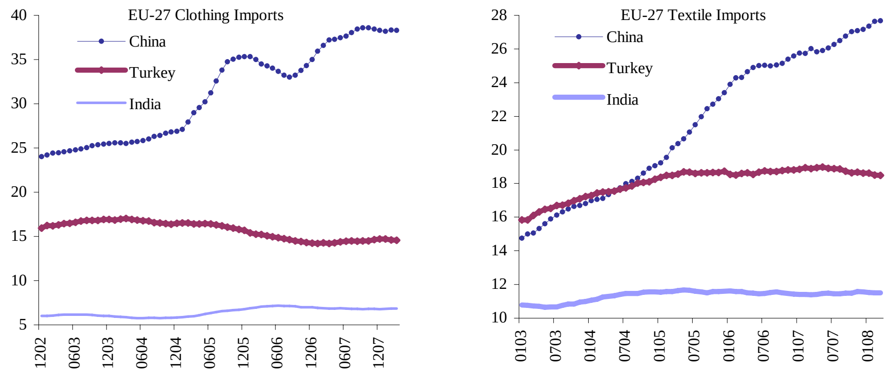


*Oil exporters include OPEC, Russia and Mexico.
Source: TURKSTAT.

New model launches in motor vehicles suggest that the robust export growth in the industry, which started in mid-2006, will continue into the upcoming period. Besides, in a period of mounting transport costs, Turkey's higher quality products and proximity to EU provides competitive advantage in exports of textiles and clothing. In fact, Turkey's share in clothing exports to EU has grown at a steady pace since the second half of 2006, while the share of China and India stopped growing (Graph 4.2.4). Yet, Turkey's share in textile exports to EU has been falling since the second half of 2007, whereas China's share is on the rise, which gives a negative outlook for textile exports.

Real imports remained relatively stable during the first quarter of 2008. However, given the slowdown in domestic demand and the weakening of the new Turkish lira, imports of consumption and capital goods dropped in the second quarter of 2008, resulting in a deceleration in real imports. In the first five months of 2008, year-on-year real import growth rate was lower than real export growth rate. In view of these developments, the trade deficit is expected to expand at a relatively slower rate in 2008. Nevertheless, a further strong bounce in prices of oil and other commodities will continue to pose a risk to the foreign trade deficit.

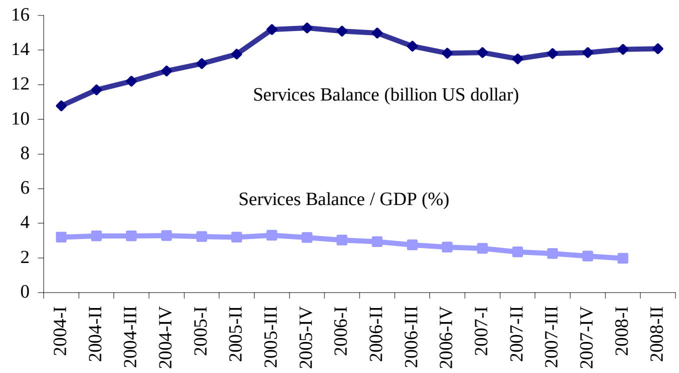
Graph 4.2.4. Trends in EU Textile and Clothing Imports by Selected Countries
(Share, Percent)



Source: Eurostat database.

The surplus in the services account, a major component to narrow down the current account deficit, has barely increased since 2006, and lost its weight in GDP despite the rise in services revenues. This was mainly attributable to the growth in services expenditures, particularly in residents' spending on foreign travel and insurance. Developments in the balance of payments during January-May 2008 indicate that this outlook was maintained in the first half of 2008.

Graph 4.2.5. Services Account of the Balance of Payments* and GDP

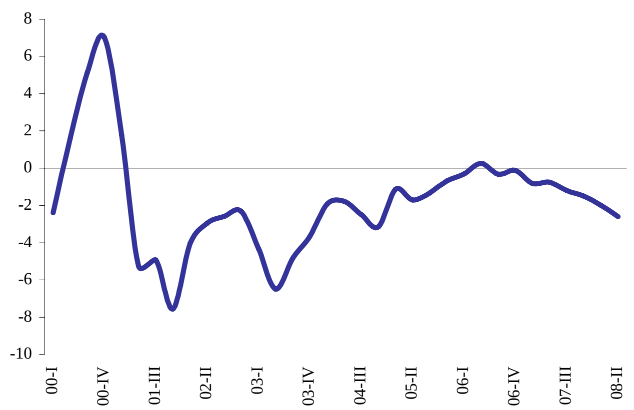


* Includes our estimate for the services balance in June.
Source: CBRT, TURKSTAT.

On balance, indicators for both consumption and investment demand suggest that domestic demand will be weaker in the second quarter of 2008 than in the first quarter. With the removal of the base effect from the first quarter of the year, GDP is likely to grow at a slower pace year-on-year in the second quarter. Yet, the contribution of net exports to GDP growth, which had been significantly less negative in the first quarter of 2008, is expected to turn positive in the second quarter. In sum, amid a more pronounced weakening of domestic demand, the rise in net external demand will help to halt the decline in GDP growth to some extent.

To this end, it is worthwhile to assess the outlook for total demand in terms of inflation. Domestic demand, which had grown at a moderate pace and supported disinflation since the second half of 2006, showed signs of some rebound in the third quarter of 2007. Nevertheless, the turmoil in international credit markets that became increasingly apparent in the last quarter of 2007 delays the rebound in domestic demand and puts pressure on residents' demand. Accordingly, the demand for imported consumption and investment goods has dropped sharply; but strong exports helped imports of intermediate goods to slow down at a modest pace. The ongoing turbulence in global financial markets and the prudent monetary policy stance will continue to restrain domestic demand in the coming months. Therefore, aggregate demand conditions are expected to have an added support for disinflation (Graph 4.1.17).

Graph 4.1.17. Output Gap
(Percent)



Source: CBRT.

4.3. Unit Labor Costs

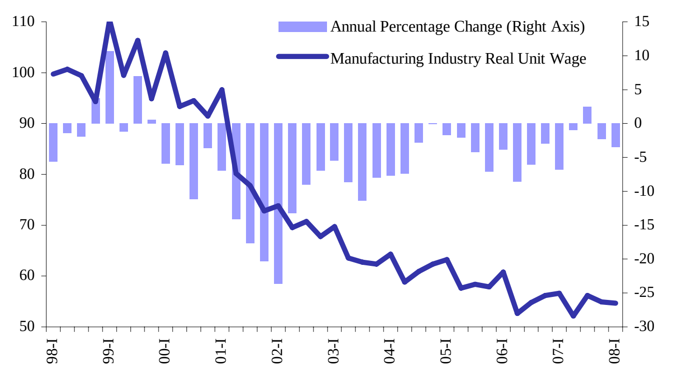
According to the "Index of Production Workers and Hours Worked in Production in Manufacturing Industry" compiled by the Turkish Statistical Institute (TURKSTAT), employment in the manufacturing industry rose by 1.7 percent in the first quarter of 2008 from a year earlier (Table 4.3.1). Production grew by 6.3 percent, pushing labor productivity up by 4.6 percent. The index of real unit wages fell by 3.5 percent on increased productivity (Graph 4.3.1). Accordingly, real unit wages have declined at a more rapid pace than the average rate in 2007 and continued to support disinflation in the first quarter of 2008.

Table 4.3.1. Employment, Real Wages and Productivity Developments in Manufacturing Industry
(Annual Percentage Change)

	2006	2007					2008
	Annual	I	II	III	IV	Annual	I
Employment(1)	-0.7	2.4	2.0	2.2	1.8	2.1	1.7
Public	-4.1	-3.2	-3.8	0.6	0.0	-1.5	2.4
Private	-0.4	2.7	2.5	2.3	1.9	2.3	1.6
Real Wages(2)	0.9	-2.1	-0.5	3.5	1.6	0.6	0.1
Public	-3.0	0.4	-2.1	3.8	-0.1	0.5	2.2
Private	1.9	-2.0	0.1	3.5	1.9	0.9	-0.5
Earnings(3)	0.9	-1.3	-0.1	3.7	0.6	0.7	2.0
Public	-1.5	1.1	0.3	3.0	0.8	1.3	6.8
Private	1.8	-1.0	0.5	3.9	0.8	1.0	1.0
Productivity(4)	6.7	5.1	0.5	1.1	3.9	2.6	3.7
Real Unit Wages(5)	-5.3	-6.9	-1.0	2.5	-2.3	-2.1	-3.5

(1) Manufacturing Industry Employment Index, 1997=100.
(2) Index of Real Wages per Working Hour, 1997=100.
(3) Index of Real Earnings per Worker, 1997=100.
(4) Index of Partial Productivity per Working Hour, 1997=100.
(5) Index of Real Unit Wages, 1997=100.
Source: TURKSTAT, CBRT.

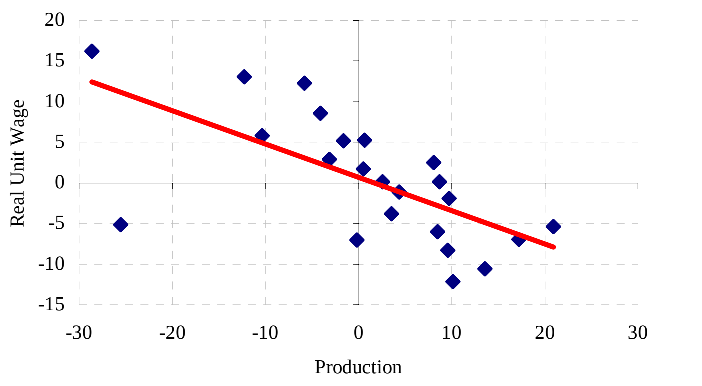
Graph 4.3.1. Index of Real Unit Wages per Working Hour
(1997=100)



Source: TURKSTAT, CBRT.

As the growth in real wages in manufacturing industry sectors was outpaced by gains in labor productivity, production and real unit wages demonstrated developments in opposite directions in the first quarter of 2008 (Graph 4.3.2). On average year-on-year, in 9 out of 23 manufacturing industry sectors, production expanded, but real unit wages declined; whereas in 7 out of the remaining manufacturing industry sectors, production fell, but real unit wages increased, which highlights the importance of production and thus labor productivity, for real unit wages (Table 4.3.2). In those 7 manufacturing industries with increased real unit wages, excluding leather and leather products, printing and publishing and furniture, producer prices grew at a slower pace than the average price increase in manufacturing industry. This suggests that the inflationary pressure from unit wages on the manufacturing industry as a whole will be limited.

Graph 4.3.2. Production and Real Unit Wages Development in Manufacturing Industry Sectors
(Average Annual Percentage Change, 2008-I)



Source: TURKSTAT, CBRT.

Table 4.3.2. Production, Real Unit Wages and Producer Prices in Manufacturing Industries
(Percentage change from a year ago)

	Production					Real Unit Wages					Producer Prices				
	2007			2008	4-Quarter	2007			2008	4-Quarter	2007			2008	4-Quarter
	II	III	IV	I	Average	II	III	IV	I	Average	II	III	IV	I	Average
Manufacturing industry	2.9	3.2	5.1	6.3	4.4	-1.0	2.5	-2.3	-3.5	-1.1	10.4	7.4	5.6	4.6	4.6
Food and beverages	2.3	2.3	-0.6	7.3	2.6	-3.2	1.9	1.8	0.0	0.1	4.1	6.8	9.6	11.8	11.8
Tobacco products	-16.3	-16.7	-11.9	-0.6	-12.3	14.4	18.8	5.3	16.6	13.0	8.1	4.2	2.1	1.5	1.5
Textiles	7.1	-2.0	-5.2	-12.3	-3.1	-5.1	6.4	2.2	7.9	2.9	11.7	8.1	4.1	0.7	0.7
Apparels	3.4	6.1	6.4	-1.6	3.5	-8.7	-2.1	-4.8	0.0	-3.8	7.8	8.5	8.2	6.4	6.4
Leather products, trunks, handbags etc.	5.2	-1.9	-10.9	-7.8	-4.1	2.9	9.1	12.2	10.3	8.5	12.3	9.7	6.3	4.8	4.8
Wood and cork products (excl. furniture)	19.8	23.7	3.1	8.0	13.5	-17.6	-15.7	0.1	-9.0	-10.6	8.0	9.1	8.7	7.1	7.1
Paper and paper products	6.9	7.3	6.6	17.5	9.6	-8.1	-2.3	-4.9	-17.3	-8.3	20.1	14.6	6.6	-0.4	-0.4
Printing and publishing	-1.1	2.8	2.3	-1.6	0.6	5.8	3.3	-0.5	12.0	5.2	9.7	9.0	8.1	7.7	7.7
Coke and refined petroleum products	-0.9	-0.7	-0.6	1.8	-0.2	-4.9	-11.1	-10.7	-2.4	-7.1	9.0	-1.3	0.9	7.7	7.7
Chemicals	0.9	14.8	20.0	7.5	10.1	-4.8	-10.6	-17.8	-14.5	-12.2	9.9	7.1	4.3	2.9	2.9
Plastic-rubber products	14.2	5.6	9.2	3.7	8.1	-5.9	2.7	3.3	10.1	2.5	12.6	9.6	6.3	3.4	3.4
Non-metallic minerals	-1.2	-0.7	-1.0	6.1	0.5	5.9	5.2	3.7	-5.8	1.7	9.9	8.9	7.3	5.2	5.2
Base metals	12.3	8.6	7.5	10.7	9.8	-5.8	1.7	-0.9	-2.6	-1.9	28.0	14.3	4.5	0.7	0.7
Metal products (excl. machinery and equipment)	10.8	12.8	15.0	-4.0	8.7	-0.6	-5.8	-4.0	10.6	0.1	13.4	12.7	11.1	8.5	8.5
Machinery and equipment n.e.t.	4.9	-1.7	-4.4	-5.1	-1.6	-4.4	12.5	1.6	11.7	5.2	10.9	7.7	4.5	1.6	1.6
Office, accounting and computing machinery	-54.2	20.8	-41.6	16.4	-28.6	145.0	9.1	49.1	-26.1	16.2	4.4	0.2	-5.3	-9.7	-9.7
Electric machinery and appliances n.e.t.	28.7	11.0	23.5	21.5	20.9	-14.7	6.7	-6.1	-5.7	-5.4	15.8	10.6	5.6	2.1	2.1
Radio, TV, communication tools	-34.1	-26.4	-25.2	-14.5	-25.5	9.4	-13.1	-12.7	-2.4	-5.2	2.6	-2.0	-7.0	-11.4	-11.4
Medical, precision and optical instruments, watches and clocks	-27.8	-4.0	-3.2	0.1	-10.3	32.3	-3.9	1.2	1.8	5.8	10.5	7.3	2.4	-3.2	-3.2
Motor vehicles and trailers	5.3	6.8	22.3	35.1	17.3	2.9	3.5	-8.4	-25.0	-7.0	9.3	7.6	5.2	2.1	2.1
Other means of transport	-1.2	13.0	14.7	8.5	8.5	-2.1	-11.2	-9.7	0.6	-6.0	-18.0	-34.4	-50.3	-58.8	-58.8
Furniture	-22.9	-9.9	1.5	18.9	-5.8	41.3	19.7	14.2	-11.1	12.3	20.4	17.4	12.1	5.5	5.5

Source: TURKSTAT, CBRT.

Since time series of wages in the services industry is not available in Turkey and compensation of employees series is not updated yet as a part of national accounts, it is rather difficult to analyze wage costs in the services industry. Yet, the results of the structure of earnings survey in 2006 released by TURKSTAT in July 2008 provide some indication of the level of wages in the services industry (Table 4.3.3). The level of wages in construction services and in hotels and restaurants is mainly close to minimum wage levels, while wages in financial intermediaries and in energy, education and health care services are well above the minimum wage level. The above data indicate that wages in construction services and in hotels and restaurants are relatively more sensitive to changes in minimum wages. However, because it is not possible to observe changes in the data over time, there is no possibility of evaluation of a wage-driven cost pressure on services. Besides, it would be rather difficult to perform a sound analysis over wage costs in a services industry where unregistered payments are highly common.

Table 4.3.3. Average Wages by Sectors
(2006)

Economic Activity (NACE Rev. 1.1)	Average monthly gross wage (YTL)
Total	994
Mining and quarrying	1 025
Manufacturing	893
Electricity, gas, steam and hot water supply	1 526
Construction	745
Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods	970
Hotels and restaurants	802
Transport, storage and communication	1 425
Financial intermediation	2 244
Real estate, renting and business activities	1 001
Education	1 257
Health and social work	1 187
Other community, social and personal service activities	967
Gross minimum wage (annual average)	450

Source: TURKSTAT, CBRT.

BOX 4.1. IS THERE ANY INCREASE IN ECONOMIC ACTIVITY IN THE FIRST QUARTER OF 2008? THE IMPACT OF SEASONAL VARIATIONS AND WORKING DAYS ON NATIONAL ACCOUNTS[1]

To focus on quarterly growth rates, instead of annual changes, in the data related to the trends in economic activity gives an opportunity to make a sound evaluation. Lower annual growth rates in times of strong base effects might be misinterpreted as a slowdown in economic activity, just as higher annual growth rates in the first quarter of 2008 compared to previous quarters, can be misleading that the economy is on a strong upswing. Annual and quarterly growth rates can move in opposite directions, but annual growth rates are likely to provide delayed information to explain slowdown and recovery. Although GDP grew by a more solid pace year-on-year in the second quarter of 2004, in the first quarter of 2007 and in the first quarter of 2008, compared to a quarter ago, seasonally adjusted quarterly growth rates pointed to a quarterly slowdown. There are incidents when annual growth rates fall, while quarterly changes suggest a rebound in economic activity (Table 1).

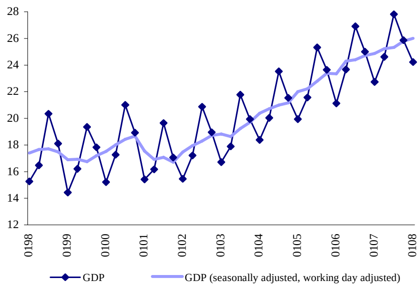
Table 1. Annual and Quarterly GDP Growth Rates
(Percent)

	Annual	Quarterly
04-1	10.0	3.5
04-2	11.9	1.7
04-3	8.1	1.3
04-4	8.0	0.8
05-1	8.5	3.9
05-2	7.7	1.1
05-3	7.6	2.6
05-4	9.8	2.5
06-1	5.9	-0.1
06-2	9.7	4.0
06-3	6.3	0.4
06-4	5.7	1.3
07-1	7.6	0.6
07-2	4.0	1.4
07-3	3.4	0.4
07-4	3.4	1.9
08-1	6.6	0.8

Source: TURKSTAT, CBRT.

The main problem one may encounter in quarterly growth rates is the impact of seasonal patterns on series.[2] For example, the data on GDP growth by quarters indicate that economic activity continued on a volatile path in which it peaked in the third quarter after recovering from a slump in the first quarter, and declined again afterwards (Graph 1). Therefore, in series with dominating seasonal patterns, quarterly comparisons made using raw data convey only a limited amount of information, which necessitates the use of seasonally adjusted series in comparing national income data from two consecutive quarters.

Graph 1. GDP at 1998 Prices
(Billion YTL)



Source: TURKSTAT, CBRT.

Moreover, public holidays and, in particular, religious holidays that occur at changing intervals have a great impact on the number of working days. Seasonal adjustment may not be sufficient to perform an accurate quarterly analysis in such cases. As religious holidays move based on lunar cycles, the changing distribution of holidays on a monthly/quarterly basis is a major factor to consider in seasonal adjustment. For example, the loss of working days that was equally distributed to the fourth quarter of 2006 and the first quarter of 2007 underwent a dramatic change between the final quarter of 2007 and the first quarter of 2008 (Table 2).

Table 2. Loss of Working Days due to Holidays

01-4	2
02-1	3
02-4	3
03-1	4
03-4	3
04-1	3
04-4	2
05-1	3
05-4	3
06-1	4
06-4	3
07-1	3
07-4	5
08-1	0

Source: CBRT.

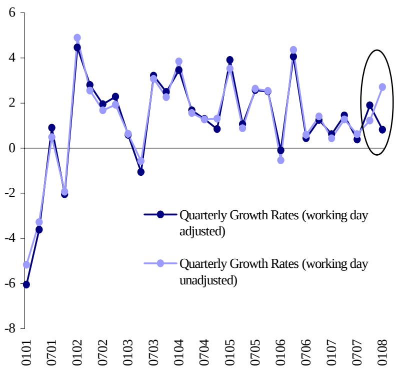
[1] Çağrı Sarıkaya (2008), "Is There Any Increase in Economic Activity in the First Quarter of 2008? The Impact of Seasonal Variations and Working Days on National Accounts", CBRT Research Note, soon to be published.

[2] For further information on how to use the Demetra program that enables public and religious holiday adjustments by a seasonal adjustment process, see Oğuz Atuk and Beyza Pınar Ural (2002), "Seasonal Adjustment Methods: An Application to the Turkish Monetary Aggregates", CBRT Book Series.

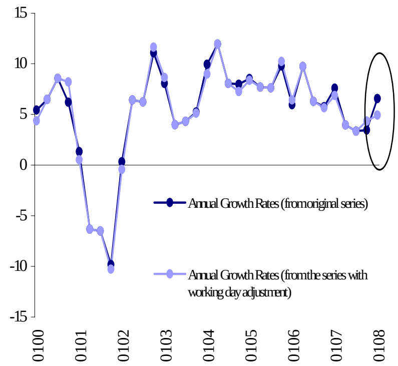
In that case, methods to adjust seasonal patterns regardless of the loss of working days may cause seasonal changes to look different than they actually do. A backward-looking analysis of Table 2 would reveal that the holiday-driven loss of working days in previous years was evenly distributed between the fourth and the first quarters. In that case, in comparing the said two quarters, methods that either take into account or ignore the loss of working days barely differ from each other; however, ignoring the loss of working days that piled up in the final quarter of 2007, one may undoubtedly find that GDP growth is lower and the quarterly growth rate for the first quarter of 2008 is higher than they actually are. In fact, the difference between quarterly growth rates driven by seasonal adjustment methods that either take into account or ignore the loss of working days is clearly visible (Graph 2). The quarterly growth rate in the fourth quarter of 2007 appears lower than it actually is if the loss of working days is not taken into account, while the reverse applies to the first quarter of 2008. The greater the difference in the loss of working days between the comparative quarters, the higher the measurement error. Accordingly, taking into consideration the loss of working days, GDP grows by 0.8 percent quarterly; but ignoring it, GDP grows by a stunning 2.7 percent. Such a big difference may be inevitably misleading with respect to the output gap, and, hence, the inflation outlook.

A similar analysis can be made by comparing annual growth rates in series that are only adjusted to working days. In GDP series, the fourth-quarter growth in 2007 was 3.4 percent year-on-year, which climbs up to 4.3 percent when a working day adjustment is made. In this example, it is quite clear that the loss of working days, which is up by two days in the final quarter of 2007 from a year earlier, made a negative contribution to the annual GDP growth. In contrast, there was no loss of working days in the first quarter of 2008 due to moving holidays, which accounted for 1.7 percentage points of the annual growth rate (6.6 percent) (Graph 3). In other words, with a working day adjustment, the first-quarter GDP growth falls to 4.9 percent year-on-year. There is no doubt that, if working days are taken into consideration, even comparisons of annual growth rates will not point to a sharp upturn compared to the fourth quarter of 2007.

Graph 2. Working Day Adjustment of GDP
(Quarterly Growth Rates, Percent)



Graph 3. Working Day Adjustment of GDP
(Annual Growth Rates, Percent)



Source: TURKSTAT.

In sum, quarterly growth rates, which convey information about the trends in economic activity, seem highly sensitive to seasonal patterns and the number of working days. Considering these factors in analyzing growth rates will help to better understand the economic framework underlying the monetary policy under the inflation targeting regime. The first-quarter annual GDP growth in 2008 may give a wrong impression that the economic has gained momentum. Seasonally (and working day) adjusted data point to a moderate growth, lower than the potential, compared to previous quarter. As it was the case, “seasonally adjusted” will refer to as both seasonally and working day adjusted in our Inflation Reports.

5. Financial Markets and Financial Intermediation

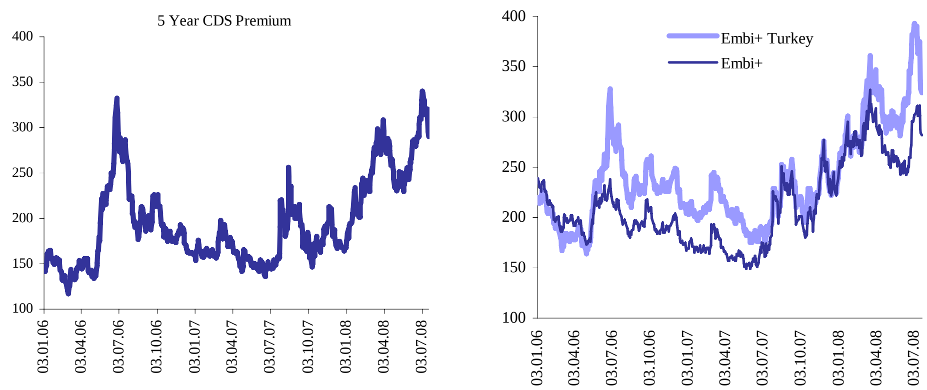
5.1. Financial Markets

In the second quarter of 2008, concerns over medium-term inflationary pressures heightened amid soaring food and oil prices while uncertainties about the extent and impacts of the financial crisis persisted. Accordingly, the deterioration in global risk perceptions continued.

Although the magnitude of the global slowdown is yet uncertain, indicators for the second quarter suggest that the world economy has performed better than expected, soothing fears that developed countries will fall into recession. However, worries that financial institutions may lose more than expected and problems may continue into coming months amid the financial turbulence, which started in the US mortgage industry and then spilled over into money and capital markets, added to the uncertainty surrounding financial markets. Moreover, escalating oil and food prices entrenched the uptrend in inflation and became one of the main drivers of global risk aversion.

Heightened risks to the global economy cause risk aversion and, therefore, increase risk premiums in emerging market economies and lead to a reduction in capital inflows to these economies. Risk premiums in developing countries continued to climb in the second quarter of 2008. Accordingly, Turkey’s risk premium on the 5-year Credit Default Swap (CDS) and the JP Morgan EMBI+ Turkey index has widened further (Graph 5.1.1). The prevailing global as well as domestic uncertainties caused Turkey’s risk premium to rise markedly above the average in other developing countries. Given the continued uncertainty over global economic prospects, the volatility in risk premiums and financial indicators cannot be expected to diminish for good.

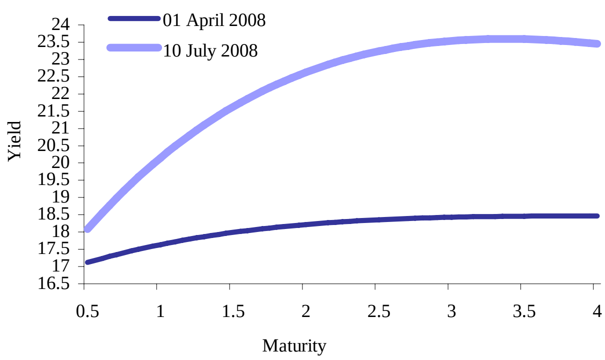
Graph 5.1.1. Risk Premium Indicators



Source: Bloomberg.

Policy rates were raised due to the increased uncertainty over the second quarter of 2008. In each maturity range, yields on April 1, 2008 were much higher than those on July 10, 2008 (Graph 5.1.2). This upward movement was due largely to the rise in risk premiums driven by heightened global and domestic uncertainties. In addition, the deterioration in inflation expectations resulting from elevated food and energy prices is also believed to have played a major role in driving rates higher. Moreover, on July 10, the long end of the yield curve had a negative slope compared to a period earlier, which, by no means, can solely suggest that medium-term inflation expectations are anchored around the target range, but surely is an indicator of intensified expectations that inflation will be back on a downward path in the medium term.

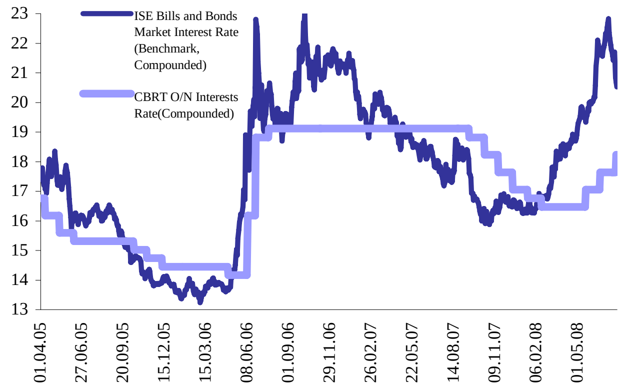
Graph 5.1.2. Yield Curves
(Percent)



Source: CBRT.

Against this background, after the first-quarter rise, the interest rate on the benchmark government security in the Istanbul Stock Exchange (ISE) Bonds and Bills Market climbed further in the second quarter. The benchmark security rate rose at a faster pace than the policy rate of the same period, which further widened the gap between the benchmark security rate and CBRT's overnight rate (Graph 5.1.3).

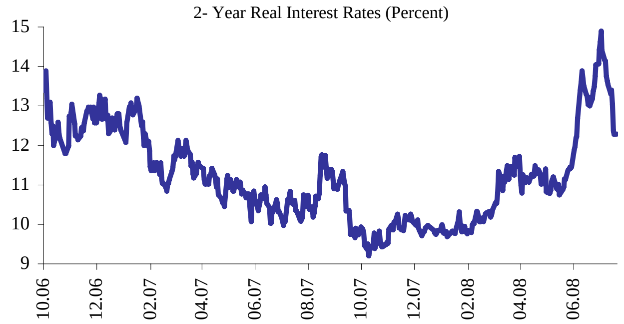
Graph 5.1.3. Changes in Interest Rates
(Percent)



Source: ISE, CBRT.

The marked increase in medium-term real interest rates continued into the second quarter due to increased domestic uncertainty (Graph 5.1.4). Higher real interest rates put pressure on domestic demand and help inflation ease.

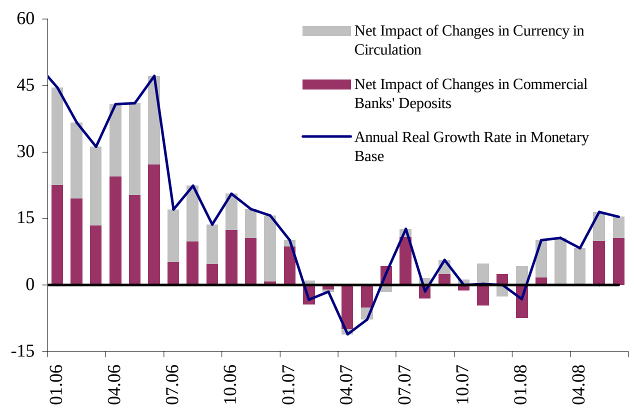
Graph 5.1.4. Changes in Real Interest Rates*
(Percent)



* Two-year real interest rates, calculated using 2-year nominal interest rates from the yield curve and inflation expectations from CBRT's Expectations Survey.
Source: ISE, CBRT.

The monetary base grew at a slower pace year-on-year in the second quarter of 2008, mainly in response to the amount of currency in circulation that has grown year-on-year in real terms since early 2008 and to the gains in bank deposits during May and June. The increase in monetary base has most likely resulted from an exchange of less liquid assets with more liquid and risk-free assets, triggered by increased uncertainty, and is therefore believed to bear no evidence of inflationary pressures (Graph 5.1.5).

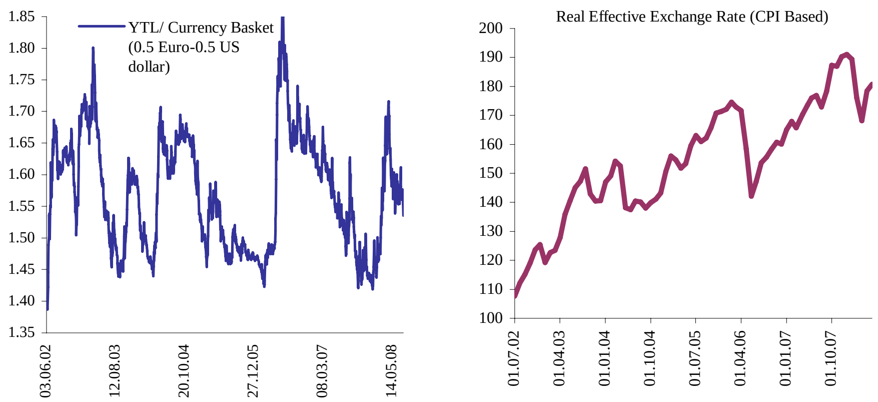
Graph 5.1.5. Annual Real Growth in Monetary Base
(Percent)



Source: CBRT.

After having lost value against major currencies in the first quarter due to uncertainties over the world economy, the new Turkish lira regained some strength towards the end of the second quarter. As funds migrated from capital markets into the money market, instead of rushing into foreign exchange markets as in previous quarters, exchange rates have remained relatively stable. The recent strengthening of the new Turkish lira eased the impact of the first-quarter depreciation on inflation (Graph 5.1.6).

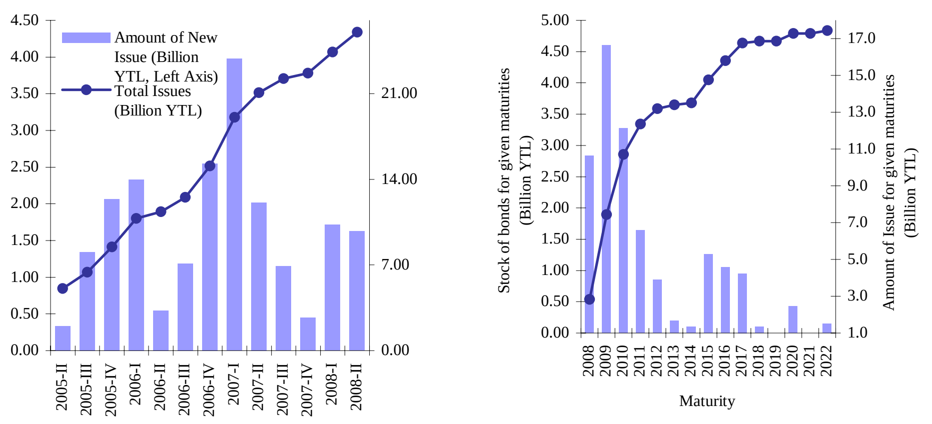
Graph 5.1.6. Changes in Exchange Rates



Source: CBRT.

The ongoing international liquidity crisis and global risk aversion continued to tighten financing conditions. The amount of YTL-denominated global bonds issued by foreign financial institutions, an indicator of foreign demand for YTL-denominated assets, hardly changed from the first quarter, but dropped slightly from a year ago (Graph 5.1.7). Total bond stock, on the other hand, increased from the previous quarter. Despite higher interest rates, the demand for these instruments was quite limited, indicating that access to global financial markets is still a problem.

Graph 5.1.7. YTL Denominated Bonds Issued by Foreign Financial Institutions

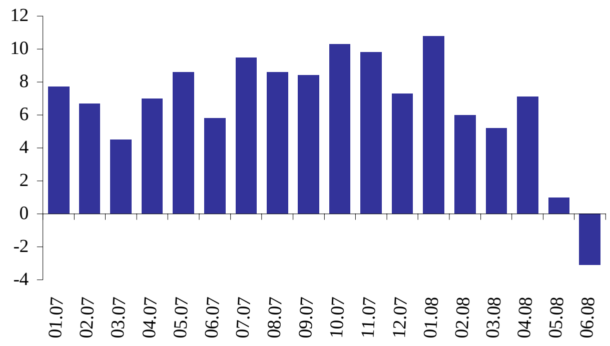


Source: Reuters.

CBRT’s net foreign exchange purchase through several auctions amounted to around 1.97 billion US dollars in the second quarter of 2008. CBRT’s foreign exchange reserves rose to 75.9 billion US dollars as of July 4, 2008.

Excess liquidity sterilized through the overnight market decreased further in the second quarter (Graph 5.1.8), driven by the growing demand for money, the reduced number of daily foreign exchange purchase auctions, and Treasury’s reduced foreign currency borrowing and increased cash assets for a mass redemption during the July-August period (see Box 5.1.). In view of these developments, the Central Bank provided markets with ample liquidity whenever needed by conducting repo auctions that aim at keeping overnight interest rates at levels close to CBRT’s borrowing rate. Under current circumstances, the liquidity shortage that occasionally emerged in the second quarter is not expected to be long-lasting. On balance, the monetary policy reference rate will continue to be CBRT’s overnight borrowing rate.

Graph 5.1.8. Excess YTL Liquidity
(Monthly Averages, Billion YTL)

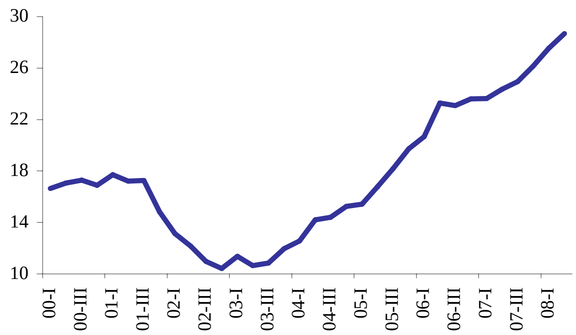


Source: CBRT.

5.2. Financing and Loans

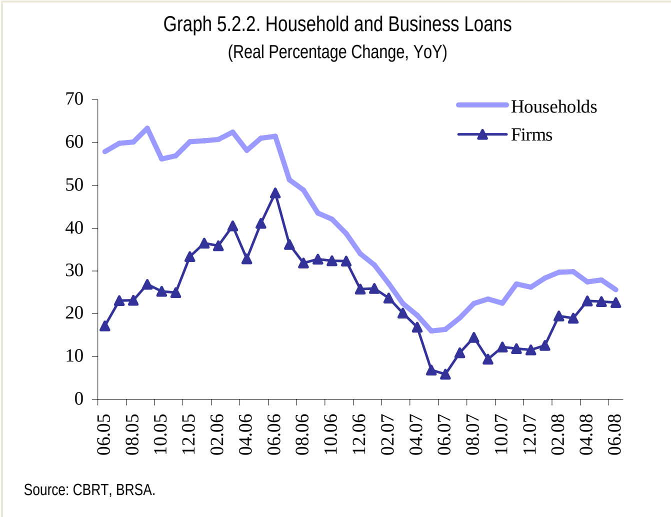
In the second quarter of 2008, total loans continued to grow at a steady pace, while the ratio of real sector loans to GDP expanded further (Graph 5.2.1). Due to the global financial turbulence, residents had limited access to loans. However, the ongoing demand for household and business loans and the competition in commercial bank lending helped loans to grow further.

Graph 5.2.1. Real Sector Loans/ GDP*
(Percent)



*Real sector loans are composed of household loans and business loans. 2008Q1 GDP shows estimated figures.
Source: CBRT.

Despite the reduction in foreign borrowing facilities, real sector loans did not see any notable slowdown in the second quarter. Meanwhile, consumer loans declined slightly year-on-year in real terms, whereas business loans continued to grow at a steady pace. Real sector loans were largely boosted by loans extended to companies by foreign branches of commercial banks (Graph 5.2.2). The ongoing global credit crunch continues to pose a risk to real sector's borrowing facilities and thus to overall economic activity.



Among the types of consumer loans, housing loans continued to grow in real terms in the second quarter, albeit at a slower pace, while high-cost personal loans and use of credit cards remained on the rise. Automobile loans, on the other hand, registered some rebound but continued to trend downward in real terms (Table 5.2.1).

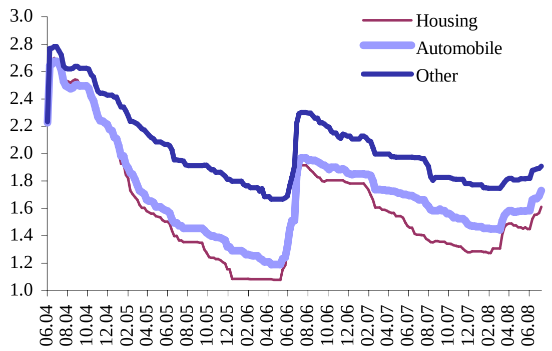
Table 5.2.1. Consumer Loans and Claims from Credit Cards
(Real Percentage Change, QoQ)

	2007				2008	
	I	II	III	IV	I	II
Consumer loans	2.6	9.0	10.0	6.6	5.6	4.8
Housing loans	2.7	7.5	10.2	5.4	6.5	4.2
Automobile loans	-8.9	-3.4	-2.0	-1.4	-4.5	-1.9
Other loans	6.6	14.5	12.8	9.9	6.7	6.7
Credit cards	-1.6	7.7	2.4	3.2	2.2	5.9

Source: CBRT.

The reduced ability of commercial banks to provide loans, driven by global financial tensions, is expected to further restrain credit expansion. As the YTL-denominated global bonds issued by foreign financial institutions did not experience a renewed acceleration despite rate hikes, commercial banks failed to have access to long-term YTL-denominated loans in swaps (Graph 5.1.7). Moreover, the recent slowdown in the expansion of loan syndication and securitization suggests that foreign borrowing facilities have partially decreased. On balance, uncertainties over international markets are likely to decrease credit supply as they prompt commercial banks to cut direct loans and choose a more liquid portfolio.

Graph 5.2.3. Consumer Loan Rates
(Monthly, Percent)



Source: Websites of selected commercial banks.

Along with the run-up in policy rates in the second quarter, the uptrend in interest rates on consumer loans became more pronounced. Interest rates on housing, automobile and personal loans went up by 13, 16 and 10 percentage points, month-on-month, respectively, from a quarter ago (Graph 5.2.3). Despite the increase in interest rates, given the strong capital position of commercial banks and their ongoing deposit growth and foreign inflows, credit expansion is expected to continue in the upcoming period, though at a lesser pace.

To sum up, in view of the increased perception of uncertainty and the reduced credit supply, credit expansion is not expected to gain momentum in the upcoming period. CBRT will continue to carefully monitor credit developments as they relate to the total final domestic demand and the soundness of the financial system.

BOX 5.1. CHANGES IN LIQUIDITY AND MONETARY POLICY REFERENCE RATE

After the crisis in February 2001, the Central Bank purchased the government bonds in portfolios of state-owned banks and banks under supervision of the Savings Deposit Insurance Fund (SDIF) to meet their liquidity needs and has been buying foreign currencies to add to its reserves since 2002, which created structural excess liquidity in the market. Despite ups and downs, the excess market liquidity continued into May 2008. The excess liquidity was generally sterilized through the overnight market via YTL deposit transactions in the Interbank Money Market and reverse repo transactions in the Istanbul Stock Exchange Repo-Reverse Repo Market. Meanwhile, occasional liquidity shortages were offset by CBRT's repo auctions and other open market transactions, and markets were provided with the liquidity they needed. Accordingly, the overnight rate went close to CBRT's borrowing rate, and the borrowing rate came to be referred to as the *reference rate* for monetary policy operations.

As of May 2008, liquidity shortages have been more frequent and of longer duration. In this period, the Central Bank provided the required liquidity into the system via one-week repo auctions so as to prevent the overnight rate from surpassing CBRT's borrowing rate. In addition, there has been some undesired volatility in the overnight rate due to unforeseen liquidity changes arising from banks' demand for reserves. In view of these developments, the Monetary Policy Committee decided to reduce the margin between the borrowing and the lending rate by 50 basis points in July in order to reduce any volatility in market rates.

Factors that Determine the Amount of Liquidity in the Market

The liquidity in the market is basically affected by (i) changes in monetary base, (ii) CBRT's foreign currency purchase/sale operations, (iii) interests paid/collected by CBRT for open market operations and interests paid by CBRT for YTL reserve requirements, (iv) Treasury's primary surplus, (v) the spread between Treasury's redemption and issue of net YTL government bonds, excluding the Central Bank, and (vi) privatization and SDIF-related YTL transfers to the Treasury. In addition, as they determine Treasury's YTL-denominated borrowing requirement, the spread between Treasury's redemption and issue of Eurobond and FX-denominated government bonds, net foreign currency inflows or outflows due to privatization and SDIF transfers and foreign debt repayment/borrowing, and Treasury's redemption to CBRT and CBRT profit transfers can all indirectly affect the YTL liquidity in the market.

The excess market liquidity rose to YTL 5.6 billion at the end of the first quarter of 2008 from YTL 3.9 billion at end-2007, and was replaced by a liquidity shortage of YTL 8.4 billion at the end of the second quarter. The shift from excess liquidity to liquidity shortage was largely driven by the marked increase in monetary base, Treasury's net YTL-denominated collections and CBRT's reduced FX purchase amount. The increase in monetary base was fueled by the incentive of commercial banks to keep reserves by about YTL 6 billion above the average at the end of period. Meanwhile, the Treasury's position as a net foreign debt payer put some indirect downward pressure on liquidity (Table 1).

Table 1. Factors Affecting End-Quarter Liquidity

(billion YTL)	31.12.07	31.3.08	30.6.08	Impact on liquidity 2008-I	Impact on liquidity 2008-II	Total
Liquidity in the market	**3.9**	**5.6**	**-8.4**	**1.7**	**-14.0**	**-12.3**
Monetary base	**46.4**	**43.0**	**52.1**	**3.3**	**-9.1**	**-5.8**
Currency issued	27.4	28.3	29.4	-0.9	-1.1	-2.0
Free deposits	18.9	14.7	22.7	4.2	-8.0	-3.8
CBRT operations affecting liquidity in the market				**4.8**	**3.2**	**8.0**
FX purchase				4.0	2.6	6.6
YTL reserve requirements and OMO rates and others				0.8	0.6	1.4
Public operations (excl. redemptions to CBRT)				**-6.4**	**-8.1**	**-14.5**
Redemption of net YTL gov. bonds (redemption-issue)				1.4	2.4	3.8
Primary surplus				-8.1	-8.8	-16.8
YTL denominated privatizations and SDIF transfers and other operations				0.2	-1.8	-1.5

Conclusion and Projections

Under the assumption that the Central Bank will leave FX purchase auction amounts at current levels and the Treasury’s financing program for the second half will proceed as previously planned; according to medium-term liquidity projections, excess market liquidity may continue into the remainder of the year, but liquidity shortages may occasionally occur, particularly during holidays. Therefore, unless liquidity conditions change dramatically, the Central Bank will leave its current liquidity management strategy unchanged in the remainder of the year. In case of a liquidity shortage, the bank will provide the market with ample liquidity via one-week repo auctions, and unless markets are highly volatile, in determining auction amounts, the overnight rate will be kept at or around CBRT’s borrowing rate. On balance, whenever a liquidity shortage occurs, the *reference rate* for monetary policy operations will continue to be CBRT’s overnight borrowing rate.

6. Public Finance

Given the improved level and structure of public debt stock, the primary surplus target/national income ratio was lowered by 1 percentage point from previous years to 5.5 percent in 2008.[1] However, public finance targets for 2008-2012 have been modified according to the Medium Term Fiscal Framework (MTFF) adopted on May 3, 2008. Medium-term public finance projections in the MTFF took into account policy steps such as employment plan, the local administration reform program and the promotion of investments in areas covered by the Southeastern Anatolia Project (SAP) together with the revision in national income accounts. Accordingly, the target ratio of the total public-sector primary surplus to GDP was reduced from 4.2 percent (5.5 percent based on the old national income accounts) in 2008 to 3.5 percent. Similarly, the ratio of the central government primary surplus to GDP was revised down to 2.7 percent from an initial target of 3.4 percent for 2008. Despite the reduction in the target ratio of central government primary surplus, the ratio of budget deficit to GDP was lowered to 1.4 percent from an initial target of 1.9 percent. The inclusion of privatization revenues in the budget was the main source of the decline in the central government budget deficit target.

The success of fiscal policy in the past few years significantly helped lower inflation expectations and fostered higher growth rates. To ensure a long-lasting effect of this contribution, fiscal stance has to be kept tight and micro-level reforms that help improve the investment climate and boost productivity and competitiveness should be implemented effectively. Therefore, the introduction of MTTF-related structural reforms and the mobilization of financing resources for investment in infrastructure are viewed as positive developments in that they will drive economic productivity gains in the medium and long run. On the other hand, the global financial downturn and elevated food and energy prices that push up global inflation heightened the uncertainties in the world economy. In addition to increased global uncertainties, the slowdown in domestic demand may affect the tax performance and the rise in input prices may boost budget expenditures, which will have a dampening effect on public finance targets. Global uncertainties not only necessitate to keep fiscal policy tight but also put pressure on budget expenditures and lead to losses in tax revenues. Thus, to preserve

[1] Based on GNP (1987=100) series.

macroeconomic stability, some fiscal space needs to be created and the reform process should proceed.

Due to a sizable drop in interest expenditures, central government expenditures declined in the first half of 2008, though at a modest pace, from a year earlier. Non-interest expenditures of the central government increased by 8.2 percent driven by, in order of significance, personnel expenditures, current transfers and purchase of goods and services. Health care expenditures saw a notable decline. On the other hand, budget revenues rose by 8.1 percent despite the sharp downturn in non-tax revenues, mainly due to growing tax revenues, particularly income tax, corporate tax and value added tax on imports. Despite higher inflation, revenues from domestic value added tax grew only modestly due to the weakening of domestic demand. Consequently, the central government budget balance remained in slight surplus in the first half of the year and primary surplus achieved 59.6 percent of its year-end target.[2] However, the first-half performance of the budget is not expected to continue into the second half of the year as interest expenditures in particular, and budget expenditures will climb further and the softening in domestic demand will reduce tax revenues.

6.1. Budget Developments

In the first half of 2008, the central government total budget balance and primary balance registered a surplus of 1.9 and 22.7 billion New Turkish liras, respectively, and primary surplus achieved 59.6 percent of its year-end target (Table 6.1). In the same period, central government budget revenues increased by 8.1 percent while expenditures dropped by 0.1 percent, from a year ago. Non-interest budget expenditures rose by 8.2 percent, whereas interest expenditures decreased by 22.9 percent as the debt service for 2008 mounted up in the second half. Falling interest expenditures were the key driver of the moderate decline in central government budget expenditures.

[2] Year-end targets set out in MTFF are omitted.

Table 6.1. Central Government Budget Aggregates
(billion YTL)

	2007 January-June	2008 January-June	Rate of Increase (Percent)	Realization/ Budget Target (Percent)	2008 Budget Target**	2008 Budget Target/GDP*
Central Government Expenditures	**100.68**	**100.59**	**-0.1**	**45.2**	**222.6**	**22.8**
A) Interest Expenditures	**26.89**	**20.74**	**-22.9**	**37.0**	**56.0**	**5.7**
B) Non-Interest Expenditures	**73.79**	**79.85**	**8.2**	**47.9**	**166.6**	**17.1**
I. Personnel expenditures	21.97	24.51	11.5	50.3	48.7	5.0
II. Government premiums to social security agencies	2.73	3.05	12.0	47.7	6.4	0.7
III. Purchase of goods and services	8.35	9.16	9.7	40.0	22.9	2.3
IV. Current transfers	32.78	35.23	7.5	50.9	69.2	7.1
V. Capital expenditures	4.47	4.68	4.8	39.7	11.8	1.2
VI. Capital transfers	1.88	1.13	-40.0	54.0	2.1	0.2
VII. Lending	1.62	2.10	29.7	53.3	3.9	0.4
Central Government Revenues	**94.79**	**102.51**	**8.1**	**50.1**	**204.6**	**21.0**
A) Central Budget Revenues	**92.37**	**99.46**	**7.7**	**49.9**	**199.4**	**20.4**
I-Tax revenues	70.59	82.75	17.2	48.3	171.2	17.5
1. Taxes on income and profits	21.83	26.63	22.0	50.6	52.6	5.4
2. Taxes on property	1.76	2.07	17.9	51.4	4.0	0.4
3. Domestic taxes on goods and services	29.40	32.39	10.2	45.4	71.4	7.3
4. Taxes on international trade and transactions	13.49	17.09	26.7	51.0	33.5	3.4
II-Non-tax revenues	21.78	16.59	-23.8	58.8	28.2	2.9
B) Revenues of Special Budget Administrations	**1.56**	**1.85**	**18.1**	**54.0**	**3.4**	**0.4**
C) Revenues of Regulatory and Supervisory Agencies	**0.86**	**1.20**	**40.1**	**69.6**	**1.7**	**0.2**
Budget Balance	**-5.88**	**1.92**	**-**	**-**	**-18.0**	**-1.8**
Primary Balance	**21.01**	**22.66**	**7.8**	**59.6**	**38.0**	**3.9**

*GDP is assumed to grow by a nominal 14 percent in 2008.
** Year-end targets set out in MTTF are yet to be entered in the Table.
Source: Ministry of Finance.

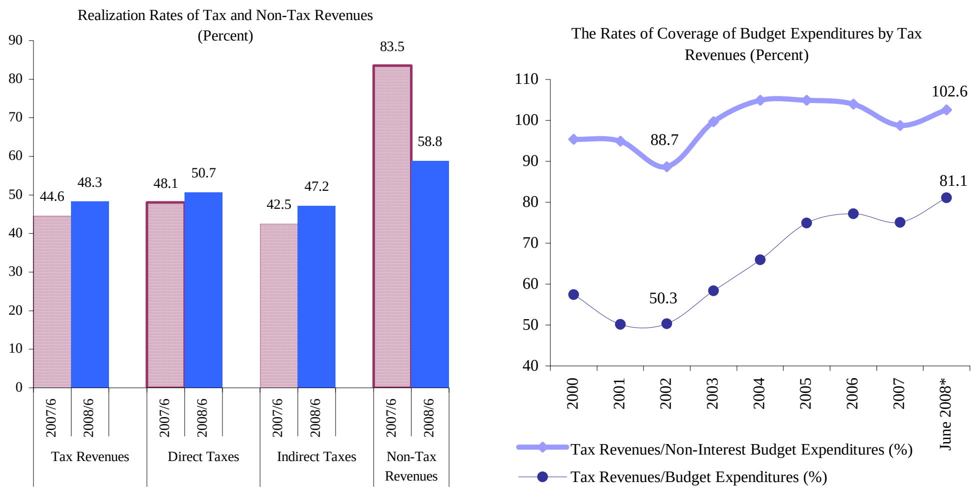
Personnel expenditures and current transfers contributed by 3.4 and 3.3 percentage points, respectively, while capital transfers contributed by 1.0 percentage points to the 8.2 percent rise in central government non-interest budget expenditures. Although health care expenditures dropped by 3.8 percent from a year earlier, purchase of goods and services increased by 9.7 percent and accounted for 1.1 percent of the rise in non-interest budget expenditures. Whether the decline in health care expenditures will be permanent or not is of critical importance to the second-half performance of budget expenditures.

Even though non-interest budget expenditures grew at a modest pace in the first half, recently adopted policies may increase public expenditures in the second half of the year and in coming years. Costs arising from policy decisions that boost expenditures, such as housing assistance payments, resource allocation for SAP and the employment plan, will be financed by the Unemployment Fund and the Privatization Fund, and therefore will exert no pressure on the central government budget. However, the deduction on central government budget funds available to local administrations, which was temporarily lowered to 20 percent from 25 percent, will widen the central government budget deficit.

Tax revenues grew substantially in the first half of 2008. Non-tax revenues dropped by 23.8 percent from a year ago, while tax revenues increased by 17.2 percent. Taxes on wages and profits rose by 22.0 percent, making the largest contribution to the growth in tax revenues. The rise in taxes on wages and profits was mainly driven by strong corporate tax and income tax revenues that rose by 25.9 and 20.5 percent, respectively. Corporate tax revenues grew on the back of the base effect from an unpaid tax amount allowed as a deduction in January 2007 following the corporate tax rate cut in 2006. At the same time, the strong growth in corporate profits in 2007, particularly in commercial banks, and the increased efficiency of tax collection were the main factors behind this positive development. Similarly, the compression of income tax brackets is believed to have added to the performance of income tax collection.

In the first half of 2008, domestic value-added taxes and private consumption taxes were up 4.7 and 11.8 percent, respectively, from the comparable period in 2007, which, however, still lagged behind the overall rate of increase in tax revenues. Value-added taxes on imports, on the other hand, increased by 27.2 percent from a year ago, driven by soaring import prices, particularly energy prices, and growing imports.

Graph 6.1.1. Tax Revenues



Source: Ministry of Finance.

*Annualized data
Source: Ministry of Finance.

The realization rate for tax revenues in the first half of 2008 was higher than a year earlier. The realization rates for direct and indirect taxes were 50.7 and 47.2 percent, respectively. The realization rate for non-tax revenues was lower from a year ago due to the base effect from the privatization of Turk Telecom, yet hit a stunning 58.8 percent (Graph 6.1.1). The rate of coverage of central government budget expenditures by tax revenues reached an 8-year high of 81.1 percent. In addition, the rate of coverage of central government non-interest budget expenditures by tax revenues was 102.6 percent. These rates point to the success of the fiscal discipline that has been effective since 2002 and its reflection in the revenue-expenditure balance (Graph 6.1.1).

On balance, the marked decline in interest expenditures and the strong performance of tax revenues during the first half of 2008 helped central government budget to give a surplus of YTL 1.9 billion. Besides, due to several second-half developments, such as the mounting debt service, the increasingly dampening impact of economic slowdown on tax revenues and the prevailing impacts of policy decisions that may boost expenditures, the first-half performance of the budget is not expected to continue into the second half of the year. Yet, the central government budget target for 2008 is expected to be met.

The consolidated public-sector primary surplus amounted to YTL 29.2 billion at end-2007, far below the target of YTL 40.7 billion (Table 6.2). Accordingly, the public-sector primary surplus over national income ratio dropped to around 3.5 percent, partly due to the renewed national account series, and missed the end-2007 target of 6.5 percent. In the first four months of 2008, the consolidated public-sector primary balance, excluding SEEs, posted a surplus of YTL 10.1 billion. As of April, the said surplus amounted to a cumulative YTL 29.4 billion over the past one year.

Table 6.2. Program-Defined Consolidated Public Sector
(Cumulative, billion YTL)*

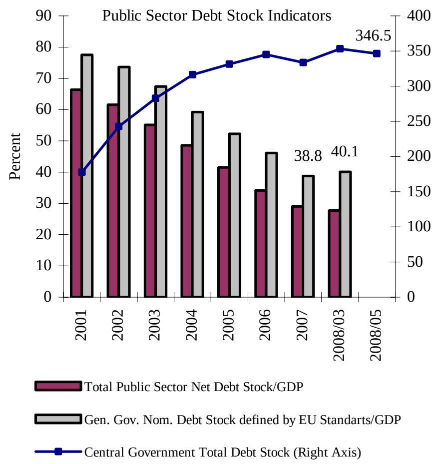
	2005	2006	2007	Mart-2008	Nisan-2008
Realizations					
Primary Balance	**28.3**	**36.2**	**29.2**	**10.4**	**-**
Primary Balance (excl. SEEs)	**23.6**	**34.6**	**26.7**	**8.8**	**10.1**
Central government budget	24.1	33.5	21.7	8.3	9.7
Overall Balance	**-4.2**	**-1.2**	**-10.0**	**-1.2**	**-**
Central government budget	-11.5	-6.9	**-20.7**	**-4.4**	**-5.4**
Targets					
Adjusted Program**					
Primary Balance	30.4	34.5	40.7		
Primary Balance (excl. SEEs)	26.7	31.8	38.2		
Overall Balance	-19.7	-6.5	-5.5		

* Figures for 2008 are provisional.
** Budget targets set at the turn of the year are revised by selected adjustment items, which are then defined as adjusted program targets.
Note: **Consolidated Public Sector** = Central Govt. + 23 SEEs + Extra Budgetary Funds (Defense Industry Support Fund, Privatization Fund and Social Assistance and Solidarity Encouragement Fund) + Social Security Agencies + Unemployment Insurance Fund.
Overall Government = Consolidated Public Sector + Local Administrations + Revolving Funds + Non-CGS SEEs.
Source: Treasury.

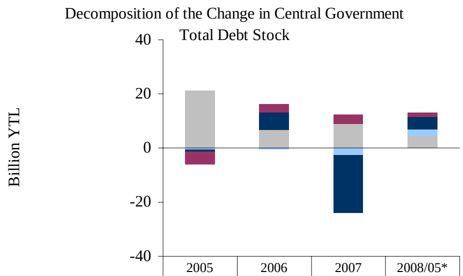
6.2. Developments in Debt Stock

The central government debt stock increased by 3.9 percent to YTL 346.5 billion in May 2008, compared to 2007. Net domestic debt growth, the overall effect of exchange rate movements, net foreign debt growth and the parity effect accounted for YTL 4.5 billion, 4.4 billion, 2.5 billion and 1.6 billion, respectively, of the YTL 13 billion rise in the central government debt stock. Meanwhile, the ratio of net total public debt stock to GDP edged down to 27.8 percent in the first quarter of 2008, maintaining the downward trend of the last six years (Graph 6.2.1). The ratio of EU-defined central government nominal debt stock to GDP went up to 40.1 percent in March 2008, from end-2007. The improvement in public debt stock ratios within the Medium Term Fiscal Framework is expected to continue into 2012, and the ratio of EU-defined central government nominal debt stock to GDP is expected to drop to 30 percent by 2012 once budget targets are met.

Graph 6.2.1. Public Debt Stock Indicators
(Billion YTL)



Source: Treasury.

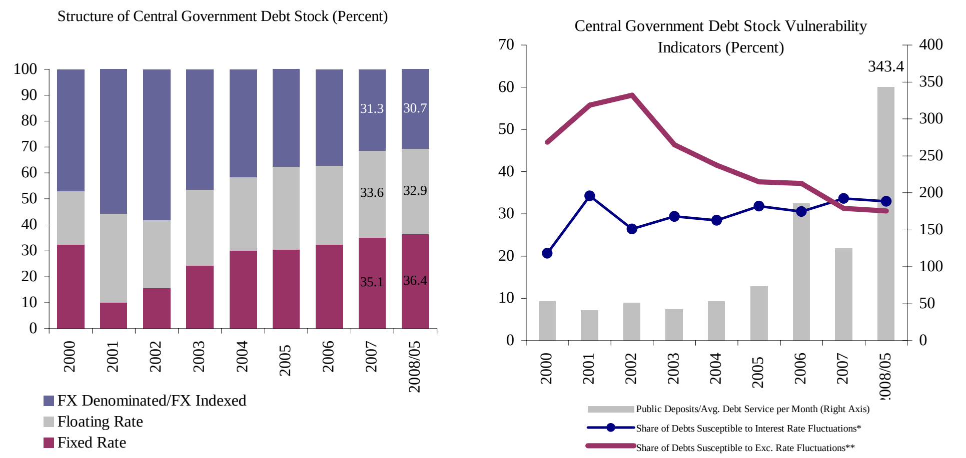


	2005	2006	2007	2008/05*
Parity Effect	-4.8	3.2	3.4	1.6
Tot. Exc. Rate Effect	-0.8	6.4	-21.2	4.4
Net External Borrowing	-0.6	-0.5	-2.6	2.5
Net Domestic Borrowing	21.1	6.7	8.9	4.5

* Changes compared to end-2007.
** Changes arising from movements in USD/EUR and USD/SDR parities.
*** Changes arising from movements in the YTL/USD parity.
Note: Changes in net debt denotes the change adjusted for the exchange rate and parity effect.
Source: Treasury, CBRT.

In the first five months of 2008, the share of fixed-rate instruments in central government debt stock increased compared with end-2007, while the share of exchange-rate indexed and floating rate instruments decreased (Graph 6.2.2). Although the share of exchange-rate sensitive (FX-denominated and FX-indexed) instruments had trended substantially down since 2002 and amounted to 30.7 percent in May 2008, the upward shift in exchange rates continues to put pressure on EU-defined public debt stock. Nevertheless, the maturity of the current FX-denominated debt stock is relatively lengthened and the Treasury still holds a sizeable amount of foreign exchange deposits, which altogether mitigates the risks associated with exchange rate volatility on public sector.

Graph 6.2.2. Structure of Central Government Debt Stock

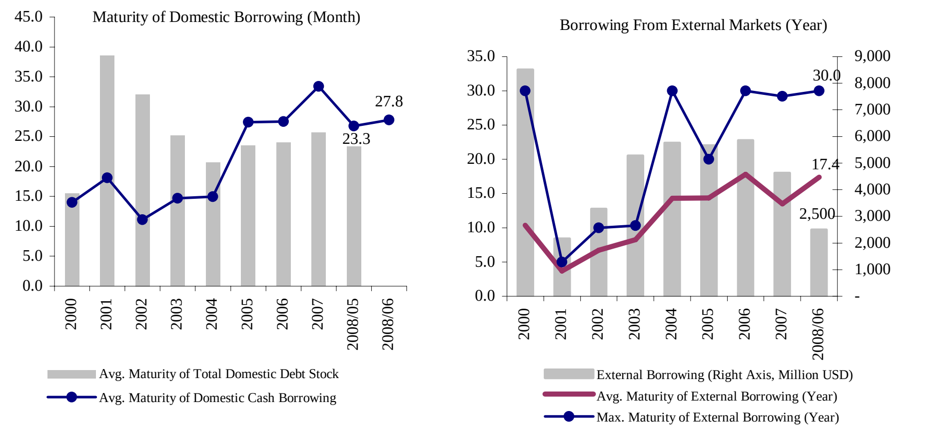


* Debt stock sensitive to interest rates contains discounted securities with a maturity less than 1 year and government securities with flexible interest rates.
** Debt stock sensitive to exchange rates contains foreign debt stock and FX-denominated and FX-indexed domestic debt stock.
Source: Treasury, CBRT.

In line with the financing strategy intended for reducing the liquidity risk, the ratio of public deposits to average monthly debt service ended May 2008 at a striking 343.4 percent (Graph 6.2.2). The Treasury is expected to maintain its policy of holding large reserves in 2008, which is considered to be helpful in offsetting potential spillovers from the liquidity squeeze in global credit markets.

The average maturity of domestic cash borrowing equaled 27.8 months in the first half of 2008, down from 2007. Likewise, the average maturity of total domestic debt stock also fell to 23.3 months in May 2008. Moreover, bond issues yielded a USD 2.5 billion worth of long-term foreign debt in June 2008 with an average maturity of 17.4 years (Graph 6.2.3).

Graph 6.2.3. Maturity of Borrowing from Domestic and Foreign Markets



Source: Treasury, CBRT.

7. Medium Term Projections

In this chapter, based on the analysis set out in the entire Report, we summarize our revised assumptions underlying forecasts and present relating medium-term inflation and output gap forecasts. In addition, we share our alternative scenarios for food and energy prices and resulting inflation and output gap forecasts, as we did in the April Inflation Report. In the last part, we give a brief account of the potential risks that might cause our baseline-scenario forecasts to deviate significantly. Forecasts in this Report cover the next three years.

7.1. Current Stance, Short-Term Outlook and Assumptions

The assumptions underlying medium-term forecasts are discussed in two groups: assumptions related to domestic economic activity and assumptions related to external factors. These assumptions are revised based on the data released after the April 2008 Inflation Report and compiled from the general outlook, analyses and expertise presented in previous chapters.

We stated in our April Inflation Report that the leading indicators for the first quarter signaled a slowdown in economic activity. In fact, growth figures for the said period indicated that the sharp fourth-quarter increase in GDP was not long lasting and the economy continued to lose pace, and have broadly matched out forecasts in the preceding Report.

The demand for private consumption and private investment was the main driver of GDP growth in the first quarter of 2008. Net foreign demand continued to make a negative contribution to growth, though to a lesser extent compared to previous quarters due to stronger exports.

As suggested by leading indicators for consumption and investment demand, domestic demand is weaker in the second quarter compared to the first one. Thus, in the second quarter, domestic demand is expected to make a reduced contribution to growth, while net foreign demand will have a positive contribution. With the removal of the base effect, annual GDP will grow at a more modest pace in the second quarter than in the first quarter.

Year-end and medium-term inflation expectations have edged up from the previous Inflation Report. In order to contain the deterioration in inflation expectations and to prevent the materialization of the second-round effects of supply-side shocks, the Central Bank raised policy rates by a cumulative 150 basis points in the past three months. Market rates increased more substantially than policy rates in the second quarter due to rising risk premium and inflation expectations. Higher market rates added to factors that restrained domestic demand.

The rebound in the new Turkish lira during the past two months has limited the pass-through impact of the significant weakening that took place in the first four months of 2008. In the April Inflation Report, the impact of the changes in exchange rates during the first four months was estimated to add around 2 percentage points to the end-2008 headline inflation. Given the recent exchange rate movements, we now anticipate a cumulative pass-through of about 1.2 percent points for 2008.

Tight credit conditions and the prudent monetary policy stance are expected to further restrain domestic demand, and, thus, aggregate demand conditions will continue to support disinflation in the upcoming period.

The first-half-year increase in food prices has been higher than in the past few years. Although unprocessed food prices followed a relatively favorable course, processed food inflation remained on the rise, due to domestic supply shortages and elevated international food prices. Against this backdrop, we have revised our assumptions for food inflation slightly upwards, from 13 percent to 14 percent for 2008, and from 8 percent to 9 percent for 2009. These changes have led to an upward revision in our 2008 and 2009 inflation forecasts by about 0.3 percentage points. We assume that food inflation will moderate gradually in time, falling down to 7 percent by the end of 2010.[1]

Baseline assumptions in the April Inflation Report envisaged a constant path for oil prices around USD 105 per barrel for 2008, 2009 and 2010. However, oil prices continued to rise on the back of increasing international commodity prices, necessitating an upward revision. Taking the average futures prices in the first three weeks of July as a benchmark, our baseline scenario for oil prices has been revised up to USD 140 per barrel. This revision has increased the end-2008 inflation forecast by 1.8 percentage points, and also

[1] Assumptions for food prices are based on the analyses in Box 3.1.

added to the end-2009 forecasts 0.6 percentage points. An upward revision is also expected in electricity tariffs, given the automatic price adjustment.

Other significant variables providing input to medium term inflation forecasts are the assumptions related to external economic activity. Our Euro area growth forecasts have been revised upward since the April Inflation Report. In view of forecasts and survey results from international agencies, our euro area growth forecast for 2008 is revised up to 1.6 percent from 1.3 percent. We assume euro area inflation to be above 2 percent in 2008 and to edge down by 2009. In addition to the euro area, we also incorporated our estimates for other developed economies and changes in international liquidity conditions into developing forecasts.

7.2. Medium-Term Outlook

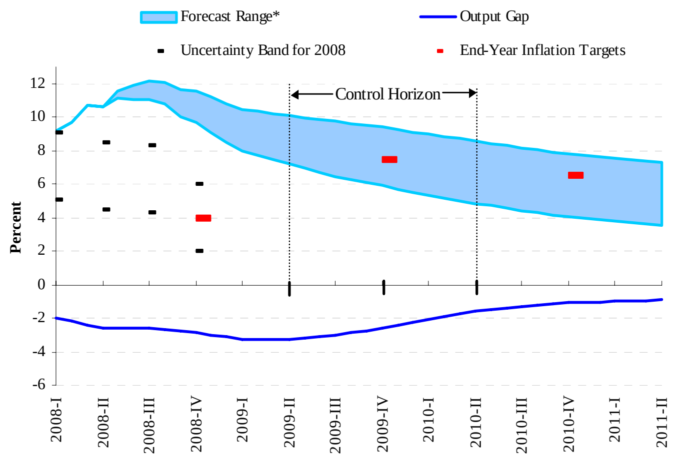
This part, firstly, presents our baseline-scenario forecasts that are developed within the framework of the abovementioned assumptions and projections. Furthermore, we propose two alternative scenarios using optimistic and pessimistic assumptions due to ongoing uncertainties over food and energy prices, and present our resulting inflation and output gap forecasts.

7.2.1. Baseline Scenario

In view of the above assumptions, we now forecast inflation to be around 10.6 percent at the end of 2008. Under the assumption of a limited tightening towards the end of 2008, our medium term forecasts suggest that, with 70 percent probability, inflation will be between 5.9 and 9.3 percent (mid-point 7,6) at the end of 2009, and between 4 percent and 7.8 percent (mid-point 5.9) at the end of 2010. Inflation is expected to drop to 5.4 percent by mid-2011 (Graph 7.2.1.1). We expect non-food inflation to be lower than these figures.

The above policy perspective is built on currently available data and should by no means be perceived as a commitment of the CBRT. Therefore, any new data or information regarding the inflation outlook may lead to a change in our policy stance.

Graph 7.2.1.1. Inflation and Output Gap Forecasts



*The shaded region indicates the 70 percent confidence interval for the forecast.

According to leading indicators, the recent slowdown in economic activity will continue into the upcoming period. Output gap forecasts that are developed from this assessment and under the assumption of a limited tightening towards the end of 2008 suggest that aggregate demand conditions will continue to support the disinflation process over 2008 (Graph 7.2.1.1)

To sum up, although economic activity in the past quarter have evolved in line with our expectations, the significant increases in food and oil prices have led to an upward revision in our forecasts. The main message of the forecast is that preventing the materialization of potential second round effects and ensuring a steady decline in inflation, requires the monetary policy to maintain a cautious stance for a while.

7.2.2. Alternative Scenarios

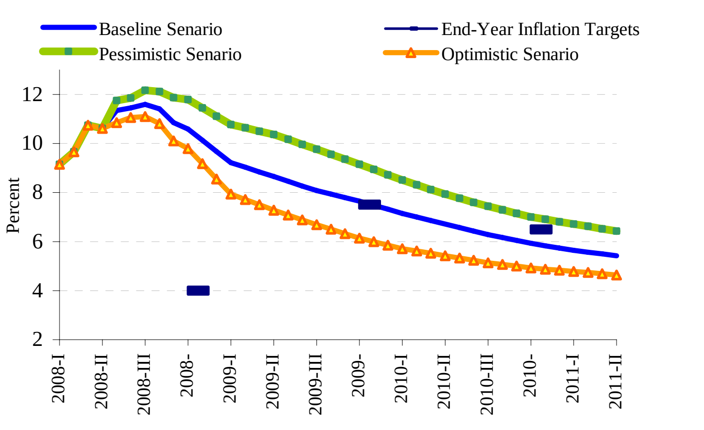
Changes in food, oil and other commodity prices put pressure on inflation in Turkey, as in the rest of the world, and require an upward revision in inflation forecasts. In other words, our forecasts deviate largely due to unforeseen developments that are beyond the control of monetary policy.

Believing that the publicizing of the alternative scenarios regarding food and oil prices would provide a better assessment for the inflation outlook and monetary policy, we had presented our inflation forecasts under different scenarios in our April Inflation Report. Due to ongoing uncertainties regarding oil and agricultural commodity prices, we did the same in this Report in order to enhance the predictability of the monetary policy.

In our pessimistic scenario, we assume that food price inflation materializes at 16, 12, and 10 percent, respectively, in 2008, 2009 and 2010, whereas oil prices rise to USD 180 at the end of 2008, staying constant thereafter.[2] Assuming a gradual monetary tightening in the rest of the year, our forecasts under this scenario suggest that inflation will be 9.1 percent at the end of 2009 and around 7 percent at the end of 2010 (Graph 7.2.2.1).

In our optimistic scenario, we assume that food price inflation materializes at 12, 6, and 4 percent, respectively, in 2008, 2009 and 2010, whereas oil prices ease to USD 100 at the end of 2008, staying constant thereafter. Assuming that policy rate stays constant for a while and gradually eases thereafter, our forecasts under this scenario suggest that inflation will be 6.1 percent at the end of 2009 and around 4.9 percent at the end of 2010 (Graph 7.2.2.1).

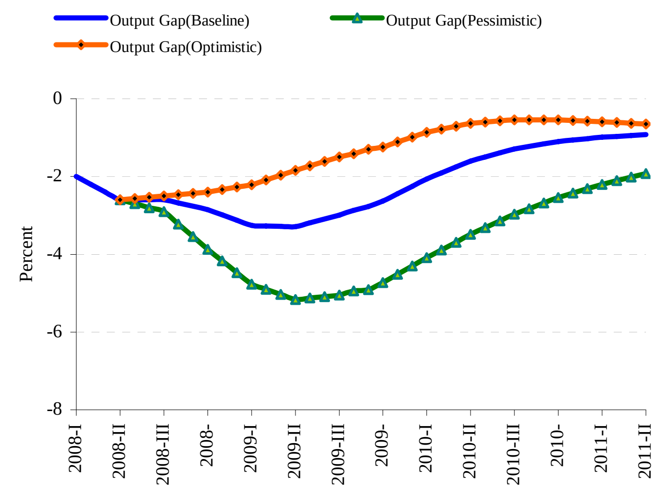
Graph 7.2.2.1. Inflation Forecasts: Baseline Scenario and Alternative Scenarios



Our output gap forecasts under both scenarios are shown in Graph 7.2.2.2. According to our optimistic scenario, the output gap shrinks gradually in the upcoming period, whereas in the pessimistic scenario, the output gap continues to widen for some time and narrows starting from mid-2009.

[2] Our optimistic and pessimistic scenarios for oil prices are based on the three-month average of the crude oil volatility index (OVX) from Chicago Board Options Exchange (CBOE).

Graph 7.2.2.2. Output Gap Forecasts: Baseline Scenario and Alternative Scenarios



7.3. Risks

Our baseline scenario is based on quite conservative assumptions for food and energy prices, implying that downside risks on these factors are as significant as upside risks. Besides, uncertainties over food and energy prices still remain. The above forecasts convey information on inflation projections and the relevant policy response under alternative scenarios for food and energy prices. Accordingly, monetary policy will be conducted so as to minimize upside deviations from the targets should the upside risks materialize. Downward surprises in food and energy prices, on the other hand, will be perceived as an opportunity to bring inflation back to target in a shorter period than envisaged in our baseline scenario.

Despite the expected decline in inflation in the medium term, uncertainties exist regarding the degree of inflation persistence. Long-lasting supply shocks have been keeping headline inflation at elevated levels and thus increasing the risk of rising backward-looking schemes in the wage and price setting behavior. Although the widening output gap should contain the second round effects of the supply shocks, the exact pace of disinflation would still depend on the extent that new inflation targets serve as a strong reference for economic agents. Having this in mind, the CBRT will continue to focus on enhancing the credibility of the new inflation targets. In this context, developments in the general pricing behavior and the underlying inflation trends will be monitored closely.

International financial markets remain fragile and credit conditions continue to tighten up. The eventual impact of the financial turmoil on the global economic activity is yet to be seen. Moreover, rising commodity prices continue to threaten price stability. These uncertainties have been dampening the risk appetite and thus slowing down the capital flows to emerging markets, leaving these economies susceptible to shifts in the market sentiment. Domestic uncertainties have exacerbated these effects, as manifested by the significant rise in the sovereign credit risk of Turkey in the first half of the year, compared to the average risk premium of emerging economies. The CBRT will not display a sharp reaction to temporary fluctuations in the financial markets, unless there is a long lasting deterioration in expectations and a significant worsening in the general pricing behavior.

Finally, our medium-term projections assume that there will be no further increases in indirect taxes or in administered prices, except those required by the automatic pricing mechanisms. In other words, a necessary tightening in the fiscal balance would largely be met by expenditure cuts and not higher indirect taxes. Any deviation from this framework may lead to a revision of the outlook for inflation and monetary policy.

7.4. Conclusion

Since the adoption of the inflation targeting regime, soaring food and energy prices have made it hard to fight inflation. The adverse impact of ongoing global and domestic uncertainties on inflation expectations requires the monetary policy stance to be more cautious. In order to avoid any deterioration in the general pricing behavior, the Bank tightened its monetary policy in the past three months. The monetary tightening was successful in controlling expectations, bringing the deterioration in inflation expectations to a halt in July.

The current policy stance supports the downward trend in inflation. We expect inflation to remain at elevated levels in the short term before gradually moderating towards the targets. Our revised forecasts suggest that inflation targets of 7.5, 6.5, and 5.5 percent set for the next three years are attainable, even under quite conservative assumptions on food and energy prices. Adverse impacts of the supply side shocks on the economy will be more limited should all the economic agents take these targets as a benchmark in forming their expectations.

Prudent monetary policy is a necessary but not a sufficient condition for attaining price stability. The support from fiscal policy and structural reforms are also critical in this respect. Sound fiscal policy has been one of the main factors in driving inflation down to single digits. The role of fiscal policy will continue to be critical in the road to price stability. Preserving the resilience of the economy, especially under current conditions, requires the continuation of fiscal discipline and structural reforms. In this respect, the European Union accession process and the implementation of structural reforms envisaged in the economic program remain to be of utmost importance. In particular, advances in structural reforms, which would improve the quality of fiscal discipline and enhance the productivity, are monitored closely by the CBRT with regard to their implications on macroeconomic and price stability.

GRAPHS

1. OVERVIEW

2. INTERNATIONAL ECONOMIC DEVELOPMENTS

3. INFLATION DEVELOPMENTS

4. SUPPLY AND DEMAND DEVELOPMENTS

TABLES

ABBREVIATIONS

ABCP	Asset Based Commercial Paper
BoC	Bank of Canada
BoJ	Bank of Japan
CBRT	Central Bank of the Republic of Turkey
CDS	Credit Default Swap
CPI	Consumer Prices Index
CSRA	Credit Suisse Risk Appetite Index
ECB	European Central Bank
EMBI	Emerging Markets Bonds Index
EMI	Emerging Markets Index
EU	European Union
Fed	Federal Reserve
GDP	Gross Domestic Product
HICP	Harmonized Index of Consumer Prices
IEA	International Energy Agency
ISE	Istanbul Stock Exchange
LME	London Metal Exchange
LIBOR	London Interbank Offered Rate
MSCI	Morgan Stanley Capital Index
MTFT	Medium term Fiscal Framework
OECD	Organization for Economic Co-Operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PCDF	Primary Dealer Credit Facility
PMI	Purchasing Managers Index
SAP	Southeastern Anatolia Project
SCA	Special CPI Aggregates
SNB	Swiss National Bank
SDIF	Savings Deposits Insurance Fund
SEC	Securities and Exchange Commission
TAF	Term Auction Facility
TEA	Turkish Exporters' Assembly
TURKSTAT	Turkish Statistical Institution
TSLF	Term Securities Lending Facility
USA	United States of America
VAT	Value Added Tax
WGMA	White Goods Manufacturers Association
WASDE	World Agricultural Supply and Demand Estimates
YTL	New Turkish lira