

## I. MACROECONOMIC DEVELOPMENTS

In this chapter, macroeconomic developments will be elaborated, taking into account the importance of such developments for financial stability.

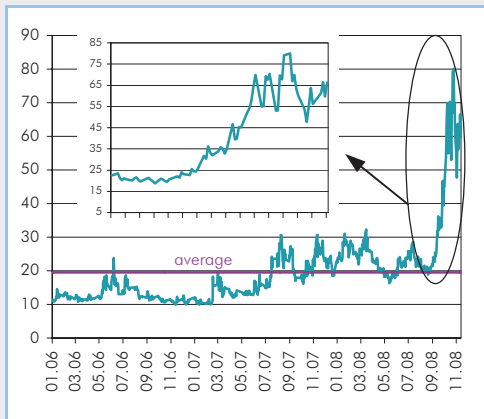
### I.1. External Sector

#### I.1.1. International Developments

As uncertainties in the international financial markets were transformed into a loss of confidence in financial institutions, the effects of the crisis that started in the US became more pronounced at global level in the last quarter of the year. Emerging markets, which had curbed the slowdown in the global economy with their growth performance in previous periods, also started to be influenced by the crisis due to the reversal of capital flows in an environment of decreasing confidence and contracting global economy.

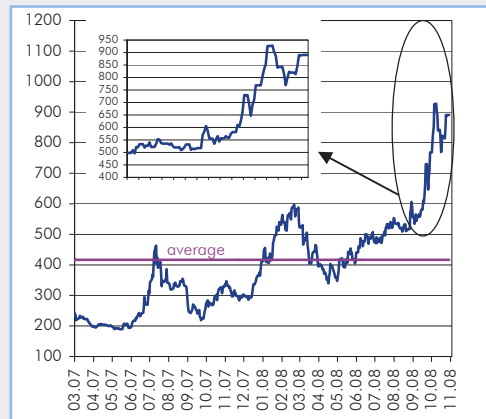
Unfavorable expectations escalated following the bankruptcy of certain large institutions operating in the financial markets of the US. Consequently, the VIX index, a widely accepted core volatility measure for the US stock market, reached a level around 80 following the fluctuation in the second half of 2007, while it remained at only 19.5 on average from 2006 to 2008 (Chart I.1). Likewise, averages of the iTraxx Europe Crossover Index, comprising 50 of the most highly traded sub-investment grade corporate bonds became 416.3 during the March 2007-November 2008 period and was over 900 in October 2008 (Chart I.2).

Chart I.1.  
VIX Index



Source: Bloomberg

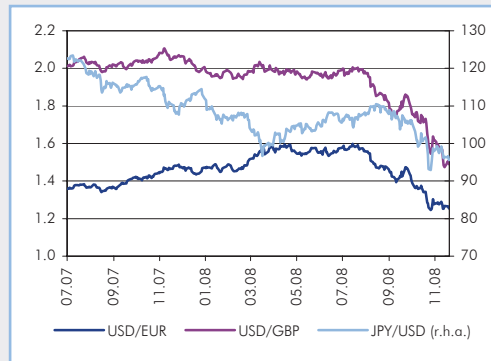
Chart I.2.  
iTraxx Europe Crossover Index



Source: Bloomberg

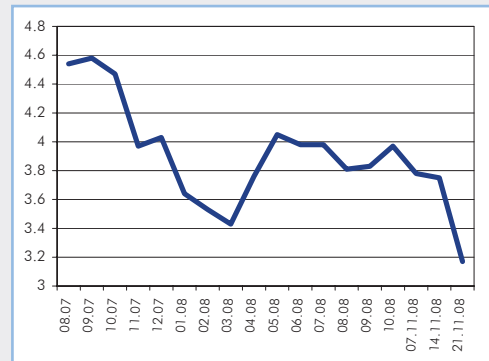
The lack of confidence problem that hinders banks operating in international markets from supplying each other with the required liquidity has spilled over to depositors and investors providing funds to banks. There is an increase in the capital requirement created by the losses due to non-performing loans of financial institutions and loss of value in securities. This fact causes the global liquidity shortage to deepen.

**Chart I.3.**  
**FX Rates of Developed Countries**



Source: Bloomberg

**Chart I.4.**  
**10-Year US Treasury Bond Yield (%)**

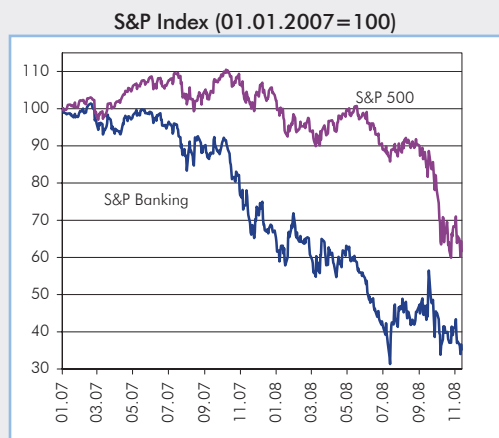


Source: Bloomberg

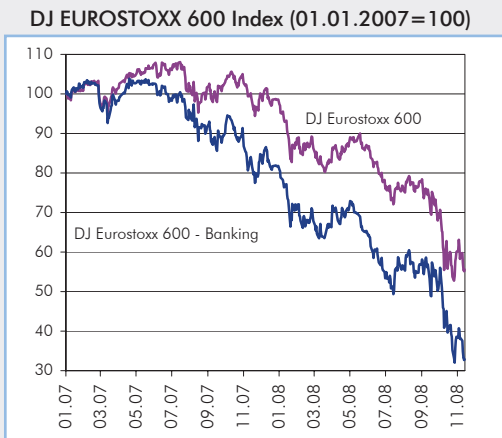
While credit and stock markets conducting USD transactions contracted, financial institutions carrying risks in these markets increased their demand for cash in order to compensate for their losses and to protect themselves from rising volatility. Thus, the rise in USD demand from financial institutions caused a rise in the value of USD against other important currencies. The yield on US government bonds has rapidly declined over the last year, reaching the lowest level of the last 48 years (Chart 1.3 and 1.4). Therefore, the Fed increased the volume of swap operations with the central banks of other developed countries in order to meet the USD demand.

The decrease in the asset prices of banks and the increase in liquidity requirements are interrelated and this issue combined with the lack of confidence problem leads to further deterioration of the fund raising capabilities of financial institutions. According to the October 2008 Global Financial Stability Report of the International Monetary Fund (IMF) the total loss of banks in the period between mid-2007, when the global turmoil began, and September 2008 was USD 580 billion. While 20 percent of this loss comprises that of 3 large banks, 75 percent is of 20 large banks and 95 percent of the mentioned loss is of North American and European banks. As a result of these developments leading to the accelerated loss of stock value of the financial institutions in stock markets of developed countries, the market value of the banks dropped more than 50 percent compared to early-2007 (Chart 1.5).

**Chart I.5.**  
**Stock Market Indices of Developed Countries**



Source: Bloomberg



**Box 1.****Financial Institutions Experiencing Problems due to Global Financial Crisis and the Interventions Made**

The mortgage crisis that began in July 2007 in the US was aggravated through the integrated financial markets and led to the collapse or change of hands of many financial institutions.

In the US, IndyMac Bank was taken over by the Federal Deposit Insurance Corporation (FDIC) and the liabilities of Fannie Mae and Freddie Mac were brought under Treasury guarantee in July 2008. The US Treasury took over Fannie Mae and Freddie Mac that it had provided with USD 200 billion worth of funds. In September 2008, after Lehman Brothers had filed for bankruptcy protection, US investment banks either closed down or transformed their activities one after another and their extensive international liabilities accelerated the spillover of the crisis.

In March 2008 Bear Stearns was acquired by JPMorgan and in September Merrill Lynch by Bank of America. The remaining two large investment banks Goldman Sachs and Morgan Stanley abandoned their investment bank status and became bank holding companies. Besides, the American insurance conglomerate AIG, which had provided large amounts of guarantee to European banks, was rescued from bankruptcy with collateralized emergency loans extended by the Fed and capital supplied by the US Treasury. In September, the bankruptcy of Washington Mutual, the 6th largest bank in the US, became the largest deposit-bank-bankruptcy yet to happen in the history of this country. The bank, which was placed into conservatorship of the FDIC was sold to JP Morgan on the same day, protecting taxpayers' interests. Finally, in the second half of November 2008, due to a significant decline in the stock value of Citigroup, the US Treasury decided to purchase USD 20 billion-worth of preferred stock in addition to its previous USD 25 billion-worth capital injection. Moreover, a government guarantee was provided for USD 306 billion of its domestic assets.

In Europe, mainly the Benelux countries have made extensive interventions. Following the loss of confidence by investors in the financial soundness of Fortisbank, the bank experienced a financial squeeze and the market value of its stocks fell by almost 35 percent. Consequently, in September 2008, the governments of Belgium, the Netherlands, and Luxembourg decided to inject EUR 11.2 billion of capital in the bank. When it became evident that this support was insufficient, on 3 October 2008 the Dutch government decided to buy the bank's operations in the Netherlands for EUR 16.6 billion. With this purchase the Dutch government also took over ABN Ambro stocks of Fortis. On 6 October 2008, the French bank BNP Paribas bought most of Fortis' operations in Belgium and Luxembourg for EUR 14.5 billion. This process made the Belgian government the largest shareholder of BNP Paribas with 11.6 percent and BNP Paribas became the bank with the largest deposit base in the Euro area.

At end-2007, investors lost confidence in Dexia, whose total asset size was EUR 605 billion and the market value of its stocks dropped by 30 percent. Based on these developments the French, Belgian, and Luxembourgian governments decided to inject EUR 6.4 billion capital in Dexia on 29 September 2008. Moreover, 10 days later it was announced that all liabilities of the bank had been put under guarantee for one year. After the rescue operation, the Belgian government became a shareholder and owned 25.5 percent of Dexia.

In the UK, Bradford&Bingley, the 9th largest bank of the country based on asset size, was nationalized. On 18 September 2008, HBOS, the largest mortgage provider in the UK, announced a merger with Lloyds Bank Plc as a result of losses stemming from its mortgage loan portfolio and the liquidity shortage caused by the global financial crisis. These two banks, which are expected to complete the merger by early 2009, will receive GBP 17 billion of capital support from the rescue package of the British government. Within the scope of the bailout package, details of which were unveiled on 13 October 2008, the British government declared that it would provide GBP 20 billion capital support for the Royal Bank of Scotland, whose asset size has been declining considerably with the deepening crisis.

The Swiss government decided to inject capital amounting to CHF 6 Billion to UBS, which has been subject to rapid fund withdrawals, and a maximum CHF 60 billion of troubled assets on the balance sheet of the bank would be transferred to a special fund guaranteed by the Swiss National Bank.

In the second half of 2008, the crisis that emerged in the US not only continued to intensify but also spilled over to European and Asian countries. In view of these developments, developed countries resorted to comprehensive measures in addition to liquidity support. The first of these measures was implementing emergency funding packages stipulating capital injection to financial institutions by the Treasuries of these countries. The most extensive of these financial aid packages was the one authorized by the US Congress. The second measure to be taken was to provide government guarantees of various degrees to liabilities of financial institutions in order to overcome the faults and problem of lack of confidence in the borrowing markets. The third measure taken was the easing of fiscal and monetary policies. However, the said measures failed to suffice due to the rapid decline in global financial activity and persistent lack of confidence in financial institutions.

## Box 2. Measures Taken Against the Crisis

	US	EU/ECB	Germany	Argentina	Australia	Brazil	Czech Republic	China	Indonesia	France	South Korea	UK	Switzerland	Italy	Iceland	Japan	Hungary	Mexico	Russia	Turkey
Liquidity injections <sup>1</sup>	x	x	#	x	x	x		x	x	#	x	x	x	#		x	x		x	x
Policy rate cuts <sup>2</sup>	x	x	#		x		x	x		#	x	x	x	#	x	x	x			x
Modif. to dom. market facilities <sup>3</sup>	x	x	#	x	x	x	x		x	#	x	x	x	#	x	x		x	x	x
Introduction or increase in foreign currency swap lines <sup>4</sup>	x	x	#		x	x			x	#	x	x	x	#	x	x		x		
Collateral swaps <sup>5</sup>	x											x	x	x						
Partial/full guaran. to bank liabilities	x	x	x		x					x	x	x		*					x	
Direct or indirect purchases of illiquid assets <sup>6</sup>	x	*	*		*														x	
Capital injections	x	x	x							x		x	x	*	x	*			x	
Nationalisations/conservatorships <sup>7</sup>	x	*										x		*	x					x
Restrictions on short selling <sup>8</sup>	x		x		x				x	x	x	x	x	x		x				x
Increased depositor protection <sup>9</sup>	x	x	x		x		x		x			x		*	x	*	x		x	*
Stand-by Agreement with IMF <sup>10</sup>															x		x			

Source: G-20 Study Group on Global Credit Market Disruptions, Central Bank web sites of above mentioned countries

x Measures implemented or in the process of being implemented.

\* New capacity created or announcements about intensions, but measures not implemented at this point.

# European Central Bank's decisions.

<sup>1</sup> To meet the liquidity requirements which have stemmed from the decline in the asset prices and loss of confidence in the markets, country central banks injected liquidity to the markets. In the US, where the problems are the deepest, Fed extended the range of collateral and provided significant amount of liquidity to the markets by implementing a number of new instruments. Likewise, ECB injected liquidity to the markets, and BoE increased its short term lending facilities and extended the maturity of repo operations. In Turkey, funding is increased via weekly repos.

<sup>2</sup> During the August 2007-November 2008 period, major Central Banks cut their policy rates as following: Fed: from 5.25 percent to 1 percent; ECB: from 4 percent to 3.25 percent; BoJ: from 0.5 to 0.3. As for Turkey, Monetary Policy Committee (MPC), kept its borrowing rates the same, while decreased the lending rates by 50 basis points on 22 October 2008. Then, on 19 November 2008 MPC cut its borrowing rates by 50 basis points and lending rates by 100 basis points. Iceland cut its rates by 350 basis points on October 15 and on October 28 increased by 600 basis points to 18 percent, whereas Hungary increased its rates by 300 basis points to 11.5 percent due to the depreciation of Forint on October 22, then on November 24 cut its rates by 50 basis points to 11 percent for the sake of growth and stability.

<sup>3</sup> On October, 2008, CBRT resumed its activities as an intermediary in the foreign exchange deposit market. Transaction limits in the Foreign Exchange and Banknotes Markets were increased to USD 10.8 billion in total on 24 October 2008. In addition, valid after 21 November 2008, the maturity of foreign exchange depo, that can be provided from CBRT, denominated both in US Dollars and Euro within the limits allowed in Foreign Exchange Depo Markets was increased from 1 week to 1 month. In the same market the lending rate which is used to be 10 percent was decreased to 7 percent for US Dollars and to 9 percent for Euro. As the majority of Hungarian Banks' loans is denominated in non domestic currency, private banks' need for foreign currency created pressure on Forint. Hungary borrowed EUR 5 billion from ECB against Euro-denominated collateral, and provided Euro to the private banks in Hungary in exchange for Forint.

<sup>4</sup> Within a coordinated fashion, central banks expanded their existing swap lines and created new swap lines. In this framework, Brazil, Korea, Mexico and Singapore are among the countries with which Fed did swap operations to control the pressures on US dollar funding markets.

<sup>5</sup> In UK with SLS and in the US with TSLF, the counterparties had the facility to swap their illiquid collateral with relatively liquid government securities.

<sup>6</sup> For example, the US Commercial Paper Funding Facility and an Australian government agency's intended purchase of MBS.

<sup>7</sup> For example, in UK, Northern Rock and Bradford & Bingley; in Iceland Glitnir, Landsbanki and Kaupthing banks are nationalised. In US, on 7 September 2008 FHFA placed Fannie and Freddie into conservatorship, where the shareholders' voting rights and dividend rights were suspended. Conservatorship will end when Fannie and Freddie reach sufficiently sound condition.

<sup>8</sup> Temporary restrictions on short selling. The restrictions on short selling in Japan have already existed before the crisis.

<sup>9</sup> The recent arrangements concerning the deposit insurance are presented within the table below.

<sup>10</sup> Via the stand-by agreements, IMF provided USD 15.7 billion to Hungary, USD 16.4 billion to Ukraine, USD 2.1 billion to Iceland and USD 7.6 billion to Pakistan. Moreover, IMF revealed to provide emergency liquidity support to the member countries up to five times of their quota if needed.

The developed countries, which take the most extensive measures against the crisis, are also the source of the crisis. Other countries take the necessary measures depending on the degree they have been affected by the crisis and the specifications of their financial sector.

In the early stages of the crisis, the authorities of developed countries, mainly the central banks, failed to follow coordinated policies. However, countries have now reached a consensus on strengthening coordination considering the unfair competition and the spill over effect. As a matter of fact, at the G-20 summit dated 14-15 November 2008, determination in enhancing cooperation, working together to restore global growth, and achieving the required reforms in the global financial system was declared.

Due to the severity and potential prevalence of recent fluctuations, many countries have increased the coverage of deposit insurance.

**Table 1. Changes in Deposit Guarantee Schemes**

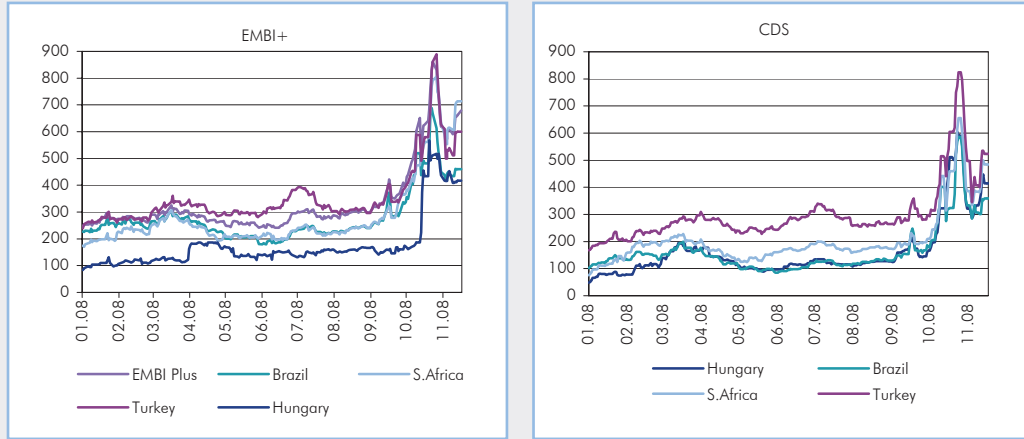
	Pre-crisis	Post-crisis
USA	Full guarantee up to USD 100 thousand for all accounts.	Guarantee amount for all accounts was increased to USD 250 thousand until 31 December 2009.
Germany	Various guarantee forms apply for different bank groups in Germany and the general practice is a minimum of EUR 20 thousand.	All accounts of real persons have full guarantee. This was a political announcement, there is no planned legislation.
Australia	No apparent deposit insurance scheme.	Unlimited guarantee for all deposits until 31 December 2011.
Czech Rep.	EUR 25 thousand	Unlimited guarantee up to EUR 50 thousand
EU	Minimum limit for deposit insurance is EUR 20 thousand.	Currently, the suggestion is to raise the EUR 20 thousand lower limits to EUR 100 thousand in one year and while the limit is suggested as EUR 50 thousand during the transition period.
Indonesia	Rupiah 100 million	Rupiah 2 billion
UK	Full guarantee up to GBP 35 thousand	The limit was raised to GBP 50 thousand.
Iceland	Private guarantee, no government security.	Unlimited guarantee for deposits of all persons and institutions.
Hungary	Forint 6 million	Forint 13 million. Political commitment was made to implement unlimited guarantee for all deposits.
Russia	Up to Rubles 100 thousand 100 percent, between 100 thousand and Rubles 400 thousand 90 percent guarantee.	Up to Rubles 200 thousand 100 percent, between 200 thousand and Rubles 700 thousand 90 percent guarantee.

Source: Deposit Insurance Institutions, central banks of the countries, ECB.

Over a short period of time, the limit and coverage of deposit guarantees were increased in many countries. Due to the integrated nature of the markets, this might cause unfair competition in countries that have not made any changes. Therefore in Turkey, while the power to regulate the coverage and amount of saving deposits and participation funds of real persons subject to insurance was vested in SDIF as stipulated by Banking Law No: 5411, the authority to increase the current YTL 50 thousand and to extend the insurance coverage was given to the Council of Ministers for a period of two years.

As emphasized in the previous report, the concerns of central banks of developed countries related to financial stability and economic growth are more evident. This pronouncement is becoming valid for emerging markets. It can be observed from the EMBI+ and CDS spreads of these countries that risk premiums are rising and fund withdrawals are experienced (Chart I.6).

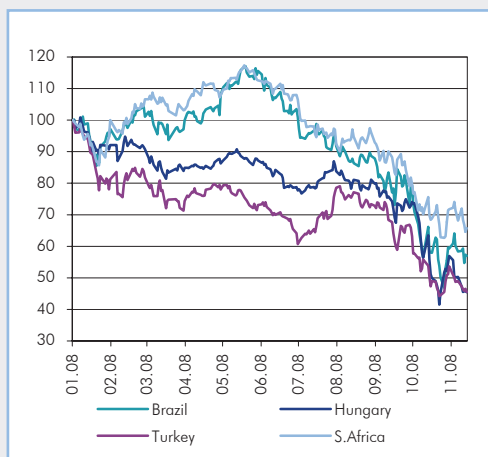
**Chart I.6.**  
**Risk Premia<sup>1,2</sup> and Credit Default Swap Spreads<sup>3</sup> of Selected Developing Countries and Turkey**  
**(Basis Points)**



Source: Bloomberg(1) Country risk premium is the difference between the relevant country's EMBI+ index and returns of US Treasury instruments. (2) EMBI+ index includes Eurobonds of 18 developing countries, Brady bonds and traded loans. The weight of each country in the index is different. For instance, Brazil's weight is 22.4, Turkey's weight is 10.04 and South Africa's weight is 1.82 percent in the EMBI+ index. Also the index is calculated for each country individually. (3) 5 year CDS contracts in USD are taken as benchmark.

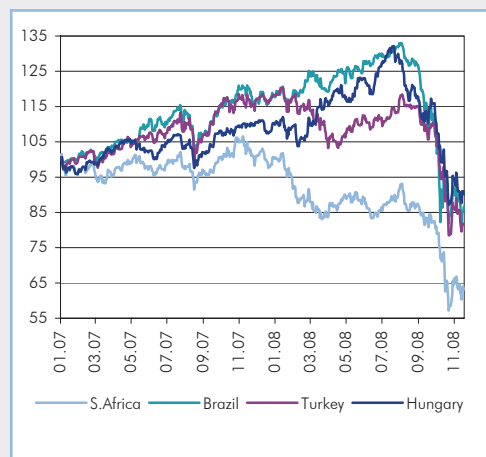
Uncertainties based on the enhanced turmoil in global financial markets lead to a weakening of the risk appetite and thus, capital outflow from developing countries. This situation causes significant depreciation in the currencies and financial instruments of developing countries, including Turkey (Chart I.7 and I.8).

**Chart I.7.**  
**Stock Market Indices of Developing Countries**  
**(01.01.2008=100)**



Source: Bloomberg

**Chart I.8.**  
**Nominal Exchange Rates of Developing Countries**  
**(01.01.2007=100)**

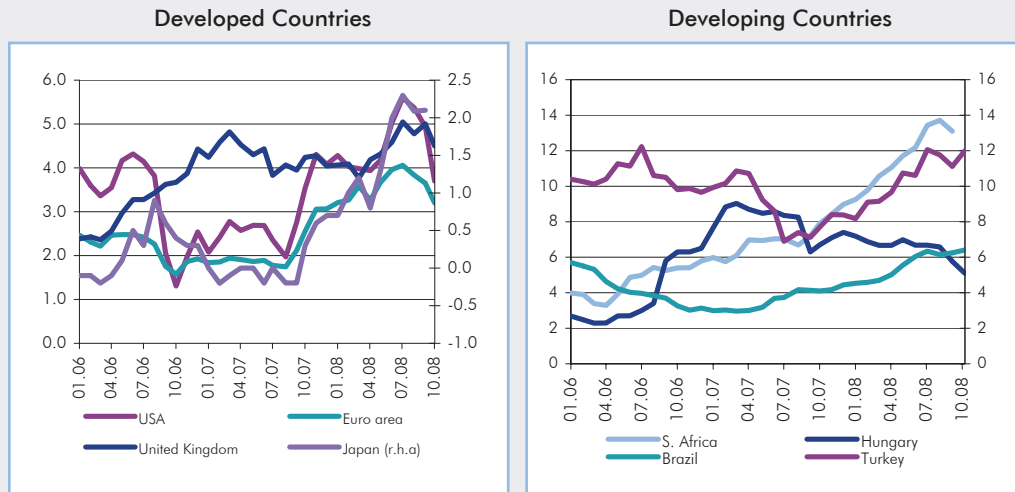


Source: Bloomberg

When assessed as a whole, despite having stronger macroeconomic foundations than before, developing countries are expected to be affected at various degrees from the global crisis based on their financing needs. Moreover, fragilities due to the depreciation of local currencies might be higher in countries of recent rapid credit growth, where most of this credit is in foreign currency and unhedged.

In the face of global turmoil, some countries need international support along with domestic measures to maintain confidence in the markets and provide FX liquidity and therefore they choose to make stand-by agreements with the IMF. Iceland, Hungary, Ukraine and Pakistan are countries that have made stand-by agreements with the IMF and Belarus and Serbia have been negotiating its terms.

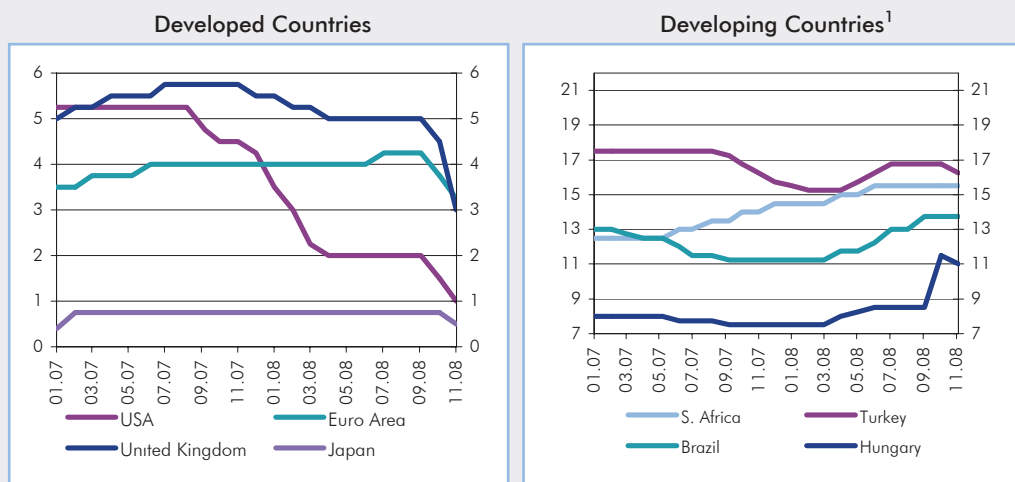
**Chart I.9.**  
Inflation Rates of Selected Countries (CPI, annual % change)



Source: IMF IFS

The slowdown in the global economy and the downward trend of commodity prices had favorable effects on the inflation rates of developed and developing countries and this situation is projected to continue in the upcoming period (Chart I.9).

**Chart I.10.**  
Policy Interest Rates of Selected Countries (%)



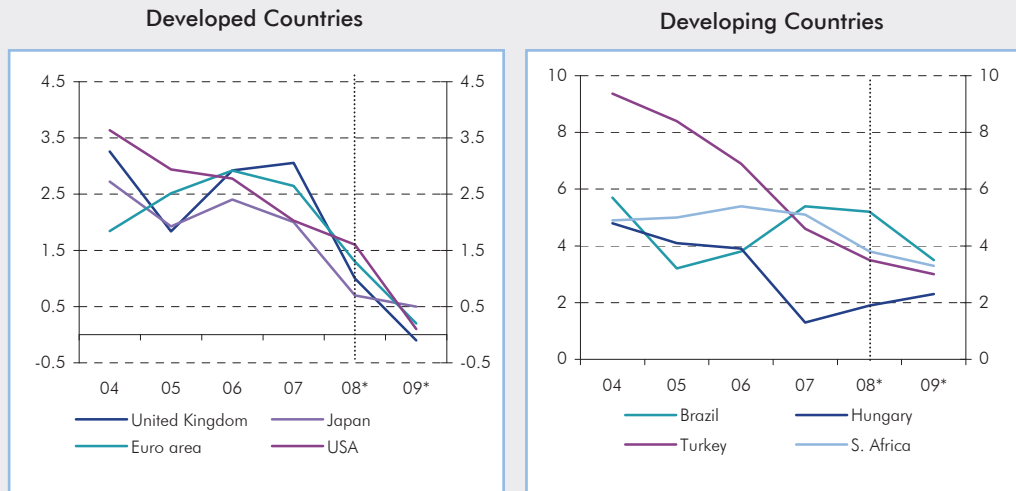
Source: Central Banks  
(1) Overnight borrowing rate was used for Turkey.

Interest rate cuts, which had been initiated by the central banks of developed countries with financial stability and economic growth concerns, continued following the downward



trend of inflation. Meanwhile, the central banks of developing countries either raised policy rates or kept the current level due to inflation worries (Chart I.10). However, with concerns of inflation diminishing after the second half of November 2008, albeit limited, interest rate cuts are observed in developing countries.

**Chart I.11.**  
Growth Rates of Selected Countries (Annual % change)



Source: IMF IFS, IMF WEO, EU European Economy  
(\* Forecast (IMF, October 2008))

It is expected that the negative repercussions of the turbulence in financial markets on the corporate sector will continue, leading to further deterioration in expectations of investors and a serious contraction of the global economy. As a matter of fact, growth rates for both developed and emerging economies have been revised downwards.

To sum up, the fact that early measures taken against the crisis by developed countries were uncoordinated, limited the expected positive impact. The efforts for coordinated policies against the crisis following the G-8 summit and central banks' coordinated measures such as interest rate cuts and liquidity supports to the financial markets started to produce results. Nevertheless, despite financial markets returning to normal operation, the deepening crisis in developing countries and the spillover to the rest of the world raise questions regarding the efficiency of the steps taken. Even though credits extended to some developing countries by the Fed or funds provided for EU member countries in distress by other members outside the EU budget have stimulated a recovery in expectations, the effect remains limited. Therefore, it is considered that in order to attain a permanent solution, the coordination between developed countries at central bank level should be enhanced to include developing countries and cover fiscal policy and structural areas as well. Besides, the short-term liquidity facility (SLF) announced by the IMF for developing countries which have sound macroeconomic conditions but experiencing a liquidity shortage due to unfavorable developments is a noteworthy step in this direction.

**Box 3.****G-20 Leaders Summit and Short-term Liquidity Facility Launched by the IMF**

On account of the evident effects of the global financial crisis on emerging economies, the International Monetary Fund (IMF) announced on 29 October 2008 that it would launch a program called "SLF-Short-term Liquidity Facility" to address the liquidity requirements of these countries.

The main goal of the program is to carry emerging markets through temporary FX liquidity problems that they may face due to the global financial crisis. The first prerequisite for applicant countries to qualify for the program is to have a strong track record of sound policies. Other criteria for eligibility are having access to international capital markets and sustainable debt burdens according to the IMF's analyses. Disbursement of IMF resources can be up to 500 percent of the quota for eligible countries, without the standard phasing and loan conditions of more traditional IMF arrangements, a process rendering the disbursement to be made quickly. Loans with three-month maturities are allowed to be drawn up to three times during a 12-month period.

Although the SLF program is considered a favorable step by the markets, some criticism have been made that its maturity is too short and the quantity limit of 5 times the country quota will be insufficient for some countries with deep markets. Moreover, some critics are of the opinion that SLF may encourage a capital outflow from the emerging countries, thereby creating an increasing effect on total indebtedness of the countries. Additionally, another point made is that countries supported by this IMF liquidity facility may slump as loss of confidence will arise with regard to their financial status (stigma effect).

In the declaration made following the G-20 summit held in Washington D.C. on 15 November 2008 to discuss the measures to be taken against the global crisis, the major role of the IMF regarding intervention in the crisis was referred to and it was emphasized that the SLF program is an appropriate step. Additionally, it is clear from the statements made following the summit that additional resources may be transferred to the IMF, thereby the IMF may function as a global lender of the last resort in this process. Accordingly, the Japanese government declared that an additional amount of USD 100 billion would be offered to the IMF.

In the G-20 summit issues such as:

- Reinforcement of transparency and accountability of financial markets,
- Improvement of supervision and oversight structures,
- Promotion of accuracy and reliability of financial markets
- Enhancement of international cooperation
- Restructuring of international financial institutions

were agreed upon.

Short and medium-term action plans were designed in this context and the responsibility for these plans - which are due in the first quarter of 2009 - were assumed by the finance ministers of member countries. The G-20 is going to review the course of the international financial system reform process, which is initiated by the decisions taken at this meeting, in the next summit to be held on 30 April 2009.

## I.1.2. Balance of Payments

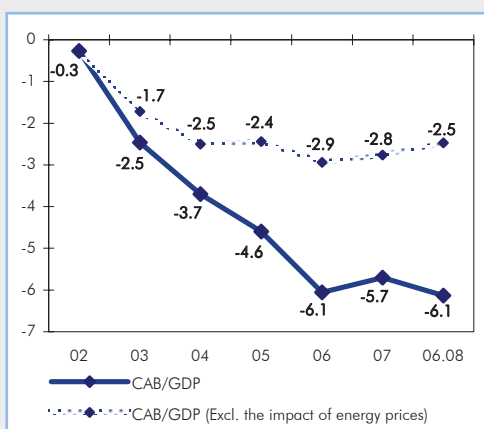
Table I.1. Balance of Payments (Billion USD)

	2004	2005	2006	2007	09.08*
<b>CURRENT ACCOUNT</b>	<b>-14.4</b>	<b>-22.1</b>	<b>-31.9</b>	<b>-37.7</b>	<b>-47.0</b>
Foreign Trade Balance	-22.7	-33.0	-40.9	-46.7	-57.6
Total Exports of Goods	68.5	78.4	93.6	115.4	145.1
Total Imports of Goods	-91.3	-111.4	-134.6	-162.0	-202.7
Coverage Ratio (%)	75.1	70.4	69.6	71.2	71.6
Balance of Services	12.8	15.3	13.8	13.9	16.3
Balance of Income	-5.6	-5.9	-6.7	-7.1	-7.9
Current Transfers	1.1	1.5	1.9	2.2	2.2
<b>CAPITAL &amp; FINANCIAL ACCOUNT</b>	<b>13.4</b>	<b>20.3</b>	<b>32.1</b>	<b>36.6</b>	<b>51.4</b>
Foreign Direct Investments	2.0	9.0	19.3	20.1	14.8
Portfolio Investments	8.0	13.4	7.4	0.7	-3.2
Other Investments	4.2	15.7	11.5	23.8	44.1
Reserve Assets	-0.8	-17.8	-6.1	-8.0	-4.3
<b>NET ERRORS &amp; OMISSIONS</b>	<b>1.0</b>	<b>1.8</b>	<b>-0.2</b>	<b>1.1</b>	<b>-4.4</b>

Source: CBRT  
(\* Cumulative figures for the last 12 months)

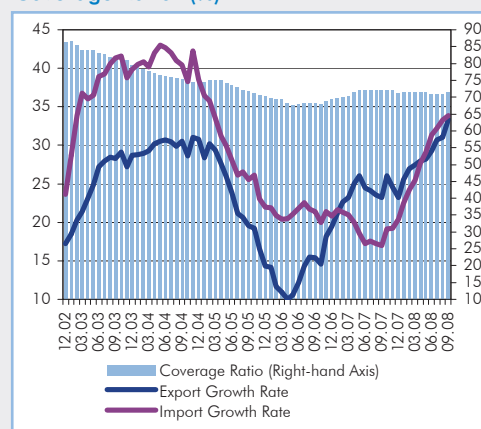
The upsurge in energy prices as of the second half of 2007 led the rate of increase of imports to transcend that of exports not in quantity but in value. This stimulated a fast growth in the current account deficit, reaching a historical peak of USD 48.4 billion as of August 2008. However, as the monthly deficit in September became less than USD 1 billion for the first time since October 2005, the current account deficit for 12 months became USD 47 billion. This is considered to be the first sign of the contraction trend to be seen in the current account deficit in the coming period. On the other hand, the ratio of current account deficit to GDP, which was 5.7 percent at end-2007, increased to 6.1 percent in the first half of 2008. Excluding the impact of energy prices, the ratio of current account deficit to GDP indicates a decline (Table I.1, Chart I.12).

Chart I.12.  
Current Account Balance (CAB) to GDP Ratio & The Impact of Energy Prices<sup>1</sup> (%)



Source: CBRT, TURKSTAT  
(1) The impact of energy price increases on the current account through the period 2003- June 2008 was calculated by keeping the prices of 2002 intact. Energy sub-items taken into account are stone coal and lignite, crude oil and natural gas under the mining and quarrying sector, and coke coal, refined petroleum products and nuclear fuels under the manufacturing industry.

Chart I.13.  
Export-Import Growth Rates and The Coverage Ratio<sup>1</sup> (%)

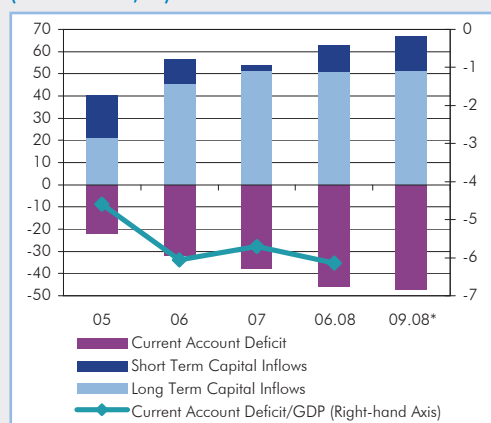


Source: CBRT  
(1) Export and import growth rates are calculated on a monthly basis and cumulatively for the last 12 months.

In September 2008, exports of the last 12 months recorded an increase of 33.3 percent compared to the same period of the previous year and amounted to USD 145.1 billion. Imports, which indicated an increase of 33.9 percent rose to USD 202.7 billion in the same period. Although the annual rate of increase in imports lagged behind that of exports in February 2007-April 2008 period, this was reversed in May 2008. Finally, the annual rate of increase in exports caught up with that of imports in September 2008 (Chart I.13).

While the surplus in the balance of services, which is another component of the current account, increased with the recovery in tourism revenues, the deficit in balance of income grew slightly particularly owing to increasing interest payments of the corporate sector. Current transfers comprising the amounts granted to the general government and the workers' remittances did not mark a remarkable change.

**Chart I.14.**  
Current Account Deficit and Capital Inflows<sup>1,2</sup>  
(Billion USD, %)



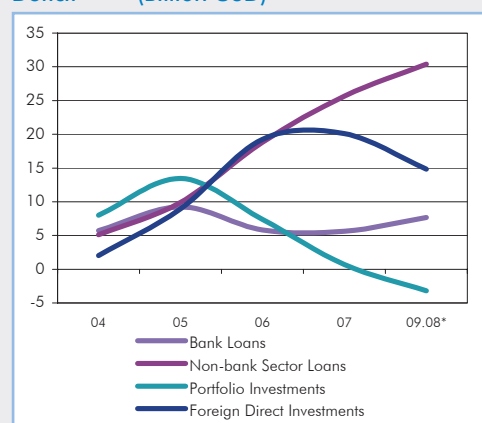
Source: CBRT

(1) Long-term capital inflows consist of foreign direct investment, debt securities of general government and banks, long-term cash loans, long-term trade loans and long-term deposits at CBRT.

(2) Short-term capital inflows consist of portfolio investments including equities and government bonds, short-term cash loans, short-term trade loans, short-term deposits at CBRT and banks and other short-term liabilities.

(\*) Cumulative figures for the last 12 months.

**Chart I.15.**  
Main Financing Items of The Current Account Deficit<sup>1,2,3,4</sup>  
(Billion USD)



Source: CBRT

(1) Bank loans: Net short-term and long-term loans borrowed by the banking sector from abroad.

(2) Non-bank sector loans : Net short-term and long-term loans borrowed by the nonbank sector (general government excluded) from abroad.

(3) Foreign Direct Investments: Foreign direct investment inflows (real estate purchases included).

(4) Portfolio investments: Government bonds, Treasury bills and stock purchases (+) and sales (-) of non-residents.

(\*) Cumulative figures for the last 12 months.

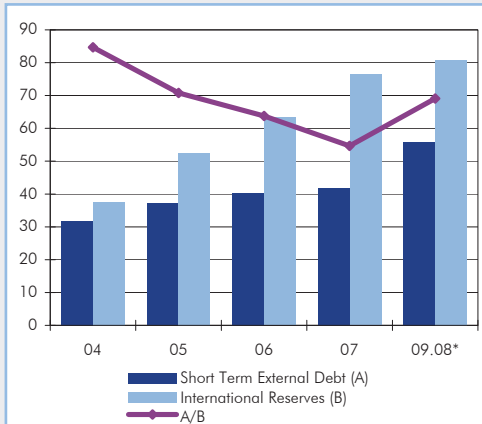
An analysis of the financing structure of the current account deficit suggests that the most important component is still the long-term capital inflows and that the major part of these inflows is provided through external borrowings made by the private sector. As a matter of fact, the share of the "other investments" item, comprising long-term external borrowings of the private sector and banks, in total financing has increased in the last 12-month-period by September 2008. The decline in the share of direct investments within total capital inflows is noteworthy, which is significant for the financing quality and sustainability of the current account deficit (Chart I.14. Chart I.15).

Net capital inflows to our country through direct investments and other investments amounted to approximately USD 58.9 billion in the last 12-month period by September 2008. Net capital outflows through portfolio investments became USD 3.2 billion in the same period. The increased outflow in portfolio investments was caused by the sales of government securities by non-residents due to the outbreak of the crisis in international markets (Chart I.15).

The drastic contraction of foreign liquidity facilities and the acceleration of capital outflows due to the setbacks in international markets are considered to be challenging factors

against the financing of the current account deficit. However, the decline in energy prices and the possible decrease in domestic and external demand resulting in the relative slowdown in growth may lead to a natural contraction period in the current account deficit. Therefore, the need for foreign financing may decrease.

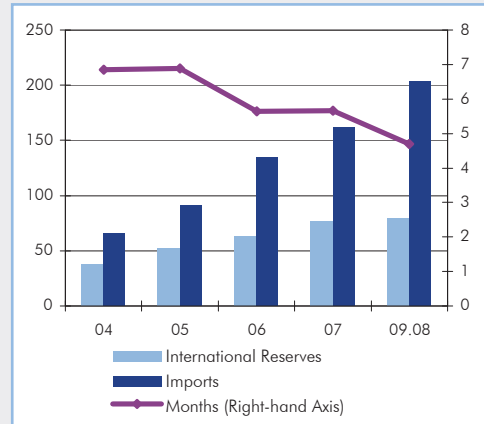
**Chart I.16.**  
Short-Term External Debt<sup>1</sup> and International Reserves<sup>2</sup> (Billion USD, %)



Source: TREASURY, CBRT

- (1) Short-Term External Debt = General Government + CBRT + commercial banks + other sectors.  
 (2) International Reserves = CBRT gross foreign exchange reserves (including gold)  
 (\*) Short-Term External Debt data are provisional.

**Chart I.17.**  
Import Coverage Ratio of Reserves<sup>1,2</sup>  
(Billion USD, Months)



Source: CBRT

- (1) International Reserves = CBRT gross foreign exchange reserves (including gold)  
 (2) Months figure indicates the number of months of imports that is covered by the year-end international reserve amount of that year.

The ratio of short-term external debt stock to international reserves, one of the indicators of external debt service capacity, was 54.7 percent at end-2007. However, as the increase in short-term external debt stock outpaced that of the Central Bank's reserves, this ratio reached 69.1 percent by September 2008 (Chart I.16). The ratio of international reserves to total imports of a country indicates how long that country can provide the inputs needed from external markets without depending upon any external support. Although this ratio has dropped due to significant increases in imports recently, it remains above the minimum three-month-threshold acceptable by the IMF (Chart I.17).

**Table I.2. Parties Financing the Current Account Deficit (Billion USD)**

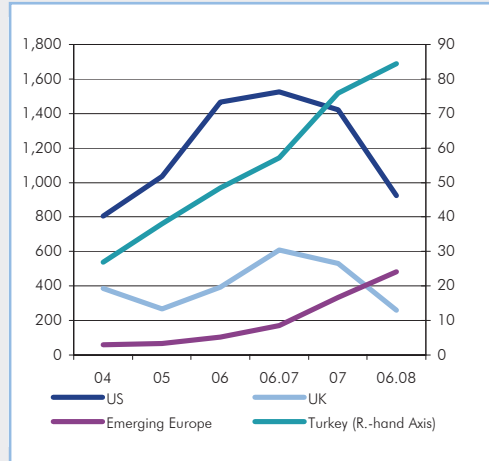
	2004	2005	2006	2007	09.08*
<b>Current Account Balance</b>	-14.4	-22.1	-31.9	-37.7	-47.0
<b>Finance Accounts</b>	13.4	20.3	32.1	36.6	51.4
General Gov. (incl. CBRT and CBRT Reserves)	2.4	-16.5	-2.9	-15.5	-9.2
Private Sector (incl. Banks)	11.0	36.8	35.0	52.1	60.6
<b>Net Errors and Omissions</b>	1.0	1.8	-0.2	1.1	-4.4

Source: CBRT

(\*) Cumulative figures for the last 12 months.

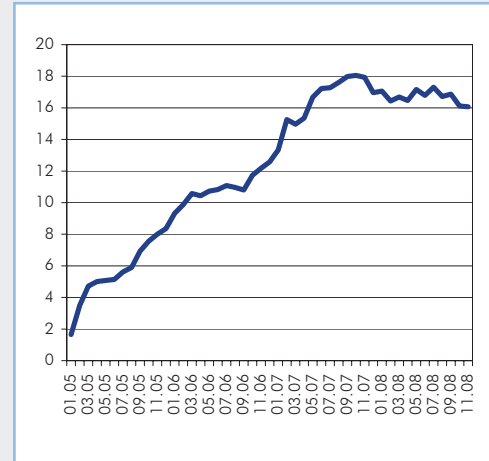
In general terms, the current account deficit resulting from the private sector's economic activities are financed by long-term funds obtained mainly by the private sector, including banks, as in previous years (Table I.2).

**Chart I.18.**  
Net Receivables of International Banks from Selected Countries<sup>1</sup>  
(Billion USD)



Source: BIS  
(1) Data for June 2008 are provisional.

**Chart I.19.**  
YTL-Denominated Bonds Issued by Foreigners  
(Outstanding Amount in Billion YTL)



Source: CBRT

Funds extended to developing countries by banks reporting to the Bank for International Settlements (BIS) continued to rise in the first half of 2008 despite global financial volatility. Net assets of these international banks in Turkey reached USD 84.5 billion by June 2008. On the other hand, it is remarkable that the net assets of these international banks in the US, the place of origin of the global credit crisis and the UK, one of the countries mostly affected by this crisis, recorded a significant decline (Chart I.18).

The outstanding amount of bonds denominated in YTL issued by foreigners had reached YTL 18.1 billion by October 2007. However, the decline in new issuance owing to the negative developments in international markets in the subsequent period, led the total amount of outstanding bonds to decrease to YTL 16.1 billion by November 2008 (Chart I.19).

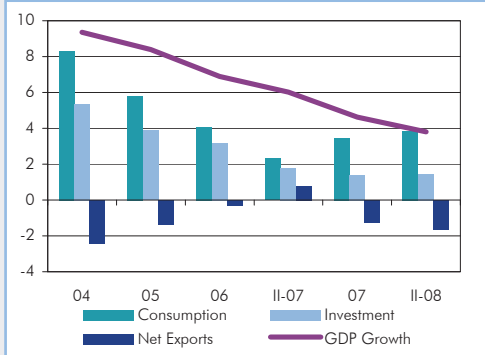
The current account deficit, which originated from high growth rates as a result of the economic policies implemented since 2001, rapidly expanded due to hikes in energy prices. However, sharp decreases in commodity prices, the recent slowdown in domestic demand and the depreciation in YTL will create a decreasing effect on the current account deficit in the forthcoming period.

## I.2. Growth and Inflation

### I.2.1. Growth

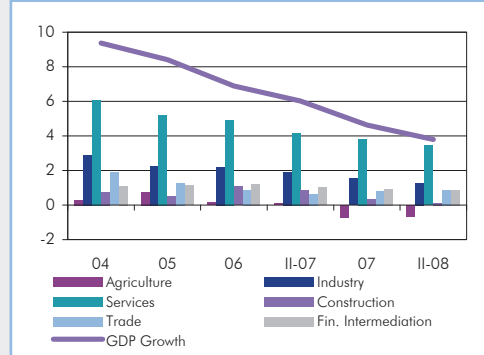
The Gross Domestic Product (GDP) grew by 3.8 percent per annum in the first half of 2008 as imports of goods and services outpaced exports of goods and services, and the slowdown in stocks growth.

**Chart I.20.**  
Growth Rate and Its Composition<sup>1, 2</sup> (% , Points)



Source: TURKSTAT  
(1) Percentage change compared to the same period of the previous year.  
(2) Net exports = Exports of Goods and Services-Imports of Goods and Services

**Chart I.21.**  
Contributions of Sectors to Growth<sup>1</sup> (% , Points)



Source: TURKSTAT  
(1) Construction, trade and financial intermediation are accepted as sub-sectors of services sector and are included therein.

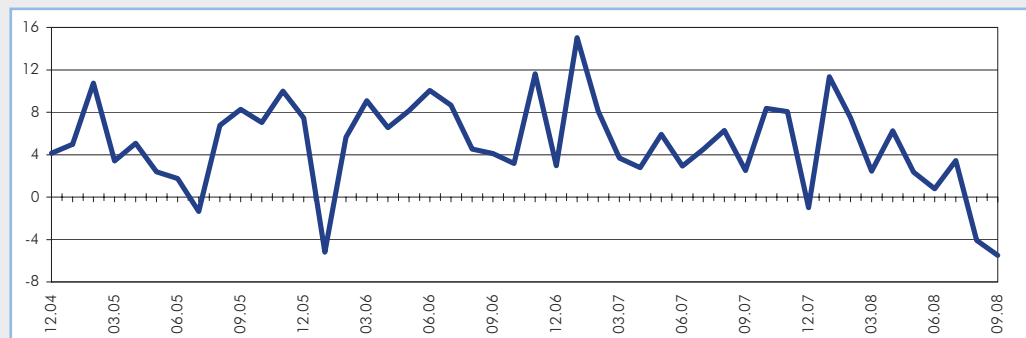
The household consumption expenditures item, which is the major expenditure component of the GDP remained strong, increasing by 5.3 percent per annum in the first half of 2008, thereby contributing to growth by 3.6 points, which is 0.8 point higher than the figures of end-2007. On the other hand, public consumption expenditures grew by 2 percent annually in the same period, which emerged as a factor to decelerate growth (Chart I.20).

While investment expenditures of the private sector, which has a high share in total investment expenditures, rose annually by 6.8 percent in the first half of 2008, those of the public sector decreased by 1.2 percent. Despite the decline in public investments, the contribution of total investment expenditures to growth increased by 0.1 point to 1.5 points compared to the figures of end-2007 due to the increase of private sector investment expenditures (Chart I.20).

As the increase in exports of goods and services lagged behind the increase in imports of goods and services, the negative contribution of net exports to growth rose by 0.4 point compared to end-2007, which became a determining factor in the deceleration of growth (Chart I.20).

An analysis of the GDP by sectors with respect to production reveals that in the first half of 2008, the contribution of trade to growth increased, the contraction in agriculture continued and the contributions of other sectors to growth decelerated. On the other hand, financial intermediaries remained strong in terms of contribution to growth (Chart I.21).

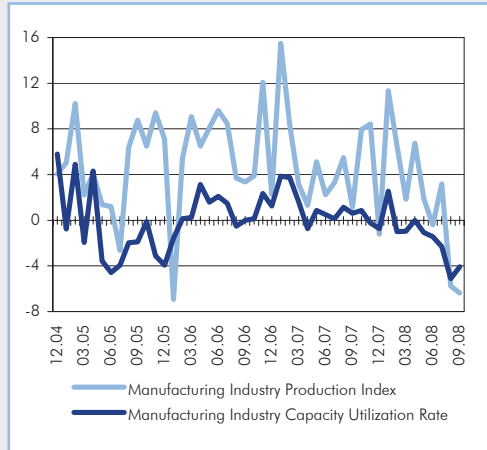
**Chart I.22.**  
Industrial Production Index (%)<sup>1,2</sup>



Source: TURKSTAT  
(1) Percentage change compared to the same month of the previous year.  
(2) Monthly Industrial Production Index 1997=100

Owing to the slowdown in economic activity, industrial production decreased by 5.5 percent in September 2008 compared to the same month of the previous year. This deterioration originates from the manufacturing industry (Chart I.22).

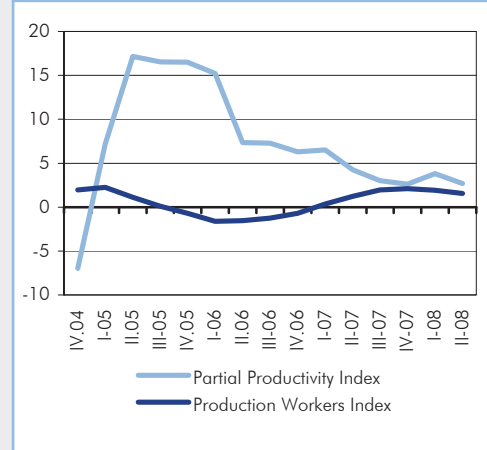
**Chart I.23.**  
Manufacturing Industry Production and Capacity Utilization Rate<sup>1,2</sup> (%)



Source: TURKSTAT

- (1) Percentage change compared to the same month of the previous year.  
(2) Monthly industrial production index 1997=100

**Chart I.24.**  
Number of Workers and Partial Productivity per Worker for the Manufacturing Industry<sup>1,2</sup> (Annual % Change)



Source: TURKSTAT

- (1) Annualized data is used in calculations.  
(2) 1997=100 index is used.

Manufacturing industry production dropped by 6.4 percent in September 2008 compared to the same month of the previous year. Additionally, the rate of increase in the first nine months average of manufacturing industry production fell by 2.8 points to 1.9 percent compared to the previous year. This deterioration stems particularly from the manufacturing of communication apparatus, textiles, leather and clothing.

The capacity utilization rate in the manufacturing industry declined by 4.1 points in September 2008 compared to the same month of the previous year and became 79.8 percent (Chart I.23). According to the Manufacturing Industry Tendency Survey results, the shortfall of domestic demand still remained the main reason for workplaces operating under capacity in September 2008.

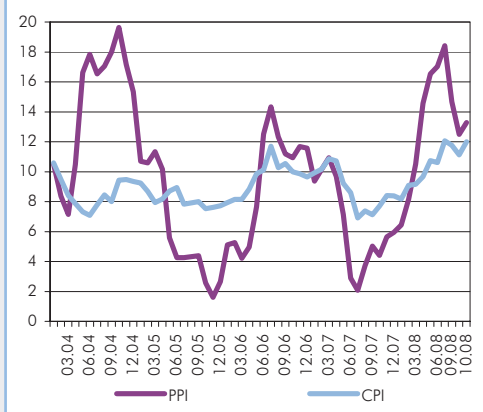
The rate of increase in partial productivity per worker employed in the manufacturing industry declined to 2.7 percent in the second quarter of 2008 from 4.2 percent in the second quarter of 2007 due to the decline in the rate of increase in production during the second quarter of 2008 (Chart I.24).

### I.2.2. Inflation

Annual Consumer Price Index (CPI) inflation, which was 8.39 percent in 2007, rose to 9.15 percent in the first quarter of 2008, remaining above the upper limit of the uncertainty band set around the path consistent with the end-year inflation target. In the first quarter of 2008, developments in the prices of food, oil and other commodities impeded the disinflation process.

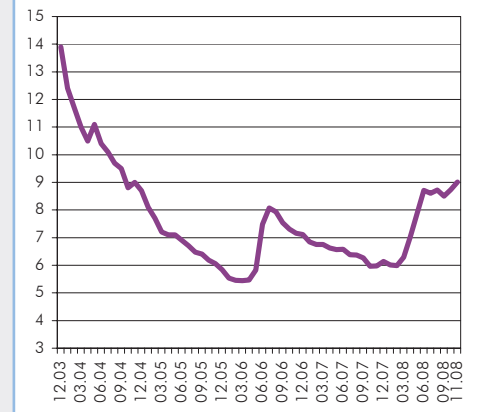


**Chart I.25.**  
Annual PPI and CPI Developments  
(Annual % Change)



Source: TURKSTAT

**Chart I.26.**  
12 Months Ahead CPI Expectations  
(Annual % Change)



Source: CBRT

In the second quarter of 2008, the annual CPI increase became 10.61 percent due to both the direct effects of the high rises in food and energy prices, and their indirect effects on prices of services. In addition to this, the delayed effects of the depreciation of the New Turkish Lira in the first four months of the year also played a role in the rise in inflation during the second quarter. The base effect of food prices and the hike in energy prices in July 2008 became determining factors in the annual rise of the CPI to 12.06 percent. Although the annual CPI increase fell to 11.13 percent in September 2008 due to the effect of the deceleration of food price inflation, it rose to 11.99 percent in October mainly owing to the temporary increase in vegetable prices (Chart I.25).

Annual changes in the producer price index (PPI), which is significant in terms of the assessment of cost-side effects on consumer inflation, was 5.94 percent in 2007, but it rose to 17.03 percent in the first half of 2008 and to 18.41 percent in July 2008. This increase is mainly driven by the rises in prices of agricultural and petroleum products besides the basic metal industry. In the subsequent period, although the annual PPI increase fell to 12.49 percent in September owing to the decreases in commodity prices like oil and basic metal, it rose to 13.29 percent in October, which can be attributed to increases in the manufacturing prices of furniture and clothing (Chart I.25).

The deterioration in inflation expectations stemming from price hikes in energy and commodity prices in the first half of 2008 ceased in the third quarter of 2008 as a result of the monetary tightening. The expectation of an annual CPI increase of 8.95 percent in November 2008 relating to the upcoming 12 months indicates that the expectations that inflation will fall below current levels still remain (Chart I.26).

It is foreseen for the coming period that problems in international credit markets and the global economy will continue to limit the domestic and external demand for a relatively long time and therefore the effect of movements in exchange rates on inflation would be limited. Moreover, plunges in oil and other commodity prices will have a favorable effect on inflation.

### I.3. Public Finance

Central government budget expenditures and revenues rose by 7.4 percent and 12.8 percent respectively in the first ten months of 2008 compared to the same period of 2007. Meanwhile, the ratio of expenditures covered by revenues increased by 4.6 percentage points compared to the same period of the previous year and became 97.3 percent (Table I.3).

While the rise in expenditures is driven by the primary expenditures, which rose by 11.2 percent, interest expenses limited the increase in expenditures with a decrease of 2.9 percent. Current transfers, personnel expenditures and capital expenditures items are influential in the increase of primary expenditures (Table I.3).

**Table I.3. Central Government Budget Performance (Bilion YTL)**

	January- October 2007	January- October 2008	Change (%)	Budget Realizations 2007	2008 Budget Target	Real./Annual Real. (Jan.- Oct. 2007) (%)	Real./Budget Target (Jan.- Oct. 2008)(%)	Realization Forecast 2008 <sup>1</sup>
<b>Expenditures</b>	168.2	180.7	7.4	204.1	222.6	82.4	81.2	229.5
Interest Expenditures	44.7	43.4	-2.9	48.8	56.0	91.6	77.5	54.5
Primary Expenditures	123.5	137.3	11.2	155.3	166.6	79.5	82.4	175.0
<b>Revenues</b>	155.9	175.8	12.8	190.4	204.6	81.9	85.9	215.4
Tax Revenue	123.8	140.3	13.3	152.8	171.2	81.0	82.0	174.7
Reven. to Expend.	92.7	97.3	-	93.3	91.9	-	-	93.9
<b>Budget Deficit</b>	-12.3	-4.9	-60.2	-13.7	-18.0	89.8	27.2	-14.1
<b>Primary Surplus</b>	32.4	38.5	18.8	35.0	38.0	92.6	101.3	40.4

Source: Ministry of Finance, State Planning Organization  
(1) Taken from the 2009 Annual Program.

The rise in revenues is mainly triggered by the increase of 13.3 percent in tax revenues. When analyzed in terms of tax types, it is observed that the highest increases were recorded in corporate tax with 27.2 percent, VAT on imports with 19.6 percent, income tax with 13.1 percent and SCT with 10.4 percent. While the primary expenditures rose by 11.2 percent, the ratio of primary expenditures covered by tax revenues increased from 100.2 percent in the first ten months of 2007 to 102.2 percent in the same period of 2008, as a result of an increase of 13.3 percent in tax revenues.

Non-tax revenues went up by 9.4 percent in the same period. This increase is mainly driven by the transfer of YTL 6 billion from the Privatization Fund within the scope of Law No. 4046 and the transfer of YTL 1.3 billion from the Unemployment Insurance Fund within the scope of Law No 4447 to the Treasury. These funds were registered as revenue in the central government budget and were intended to finance investments in GAP (Southeastern Anatolia Project) and expenses of the employment package. Parallel to these developments, the central government budget primary surplus increased by 18.8 percent compared to the same period of the previous year and became YTL 38.5 billion, while the central government budget deficit decreased by 60.2 percent and became YTL 4.9 billion.

The 2009 Annual Program presents the Central Government Budget Realization forecasts for the year 2008. According to the Program, both revenues and expenditures are expected to exceed the target by the end of 2008. The Program also states that, as the nominal GDP is expected to exceed program targets due to the deflator being remarkably higher than the program, tax revenues for 2008 are expected to exceed the target by YTL 3.5 billion. Non-tax revenues are also expected to exceed the budget target, particularly due to YTL 7.3 billion which was transferred from Privatization and Unemployment Insurance Funds to the Treasury within the scope of Laws No. 4046 and 4447 and registered as revenue in the central bank government budget, despite not being anticipated in the budget. It is foreseen in the Program that primary expenditures will exceed the central government budget target by YTL 8.5 billion due particularly to personnel and capital expenditures, which are expected to exceed the target. Personnel expenditures, for which YTL 48.7 billion is allocated in the budget, are expected to

amount to YTL 50.4 billion by end-2008 due to the salary improvements. Besides, capital expenditures are expected to exceed the budget by YTL 5.9 billion by end-2008 due to GAP Action Plan; other investments relating to economic development and social improvement; and additional expenditures for expropriations allocated to the General Directorate of Highways and the Ministry of Health.

The Program also estimates that total revenues and total expenditures will exceed the budget target by YTL 10.8 billion and YTL 6.9 billion respectively. Accordingly, the budget deficit, which was targeted to be YTL 18 billion for the year 2008, is expected to decline to YTL 14.1 billion. However, as the major part of revenues is composed of privatization revenues and other revenue items, while the central government primary surplus target, as defined by the IMF, was YTL 31.7 billion, its realization is estimated to remain at YTL 25.8 billion and its ratio to GDP is expected to be 2.6 percent.

#### Box 4. 2009 Budget Targets

The 2009 Annual Program was published in the Official Gazette on 30 October 2008. According to the Program, the ratio of central government budget revenues to GDP, which is expected to be realized as 21.7 percent in 2008, is targeted to increase to 22.4 percent in 2009. Tax revenues are expected to be influential in 0.6 percentage point of this increase.

The ratio of central government primary expenditures to GDP are expected to increase by 0.8 percentage point; while interest expenses are foreseen to decline by 0.3 percentage point in 2009 compared to 2008. The highest- proportional increase within total expenditures is expected to be in current transfer expenditures with 28.8 percent. This increase is mainly attributed to the cost of around YTL 4.7 billion arising from the compensation of 5 percentage points of the employer insurance premium by the Treasury and the transfers aimed at covering the social security deficit. A transfer of YTL 2.8 billion from the Privatization and Unemployment Insurance Funds is foreseen for expenditures to be made within the context of the GAP Action Plan in 2009.

Within the context of the expectations for revenues and expenditures, the central government budget deficit, which is expected to be realized as 1.4 percent of GDP in 2008, is targeted to decline to 1.2 percent in 2009. The ratio of central government budget primary surplus to GDP, as defined by the IMF, which is expected to become 2.6 percent in 2008, is targeted to be 2.4 percent in 2009. The ratio of public sector primary surplus to GDP, as defined by the IMF, on the other hand, is targeted to increase from 2.7 percent to 3 percent as a result of the expected decline in the other public sector borrowing requirement.

**Table 1. 2009 Annual Program**

	2008 <sup>1</sup>	2009 <sup>2</sup>
GDP (% Change)	4.0	4.0
End-year CPI (%Change)	10.0	7.5
Public Sector Primary Surplus as Defined by the IMF <sup>3</sup> / GDP	2.7	3.0
Central Government Primary Surplus as Defined by the IMF / GDP	2.6	2.4
Central Government Budget Expenditures / GDP	23.1	23.6
Central Government Budget Revenues / GDP	21.7	22.4
Central Government Primary Expenditures / GDP	17.6	18.4
Central Government Interest Expenses / GDP	5.5	5.2
Central Government Tax Revenues / GDP	17.6	18.2
Central Government Budget Balance / GDP	-1.4	-1.2

Source: SPO

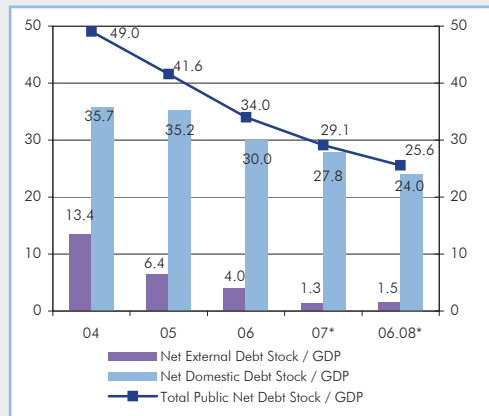
(1) Realization forecasts

(2) Program

(3) Includes General Public and SEE'S.

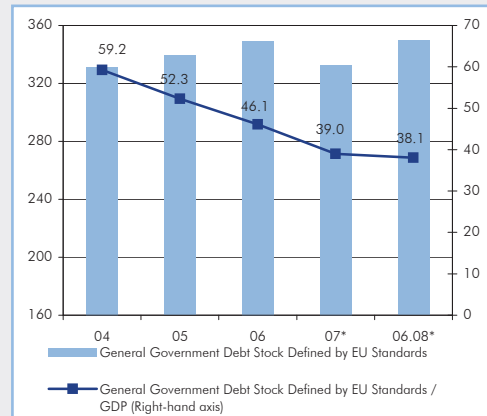
The ratio of public sector net debt stock to GDP continued to fall and stood at 25.6 percent by June 2008. This decrease was mainly attributable to the increase in public deposits and net assets of the Central Bank (Chart I.27). The public sector gross debt stock, on the other hand, increased due to the rise in both domestic and external gross debt stock. The general government nominal debt stock to GDP ratio, as defined by the EU, displayed a limited decrease (Chart I.28).

**Chart I.27.**  
Composition of Total Public Sector Net Debt Stock<sup>1</sup> (%)



Source: Treasury  
(1) Public sector net debt stock is calculated by subtracting central bank net assets, public deposits and unemployment insurance fund net assets from public gross debt stock.  
\*Figures for 2007 and 2008 are provisional.

**Chart I.28.**  
General Government Nominal Debt Stock Defined by EU Standards<sup>1</sup> (% , Billion YTL)

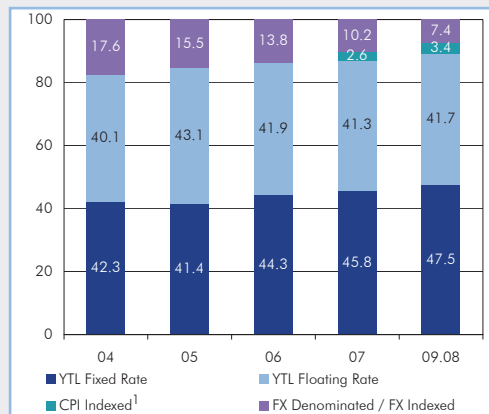


Source: Treasury  
(1) Consolidated nominal debt stock as defined in European System of Accounts 95 (ESA 95) deficit and debt manual.  
\*Figures for 2007 and 2008 are provisional.

Regarding the composition of domestic debt stock, the share of debt stock, sensitive to exchange rate, has fallen by September 2008; whereas the share of floating-rate government securities displayed a limited increase (Chart I.29).

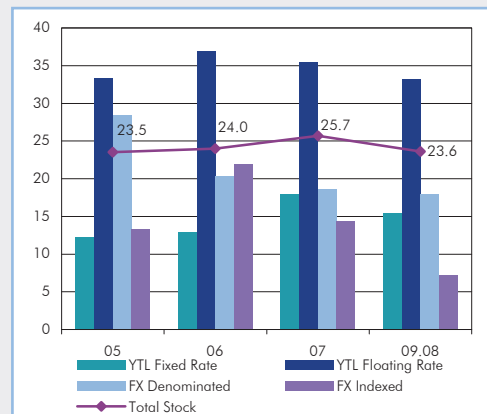
The average maturity of government securities, which increased to 25.7 months at end-2007, decreased to 23.6 months in September 2008 (Chart I.30).

**Chart I.29.**  
Composition of Domestic Debt Stock (%)



Source: Treasury  
(1) CPI-indexed bonds have been issued since February 2007.

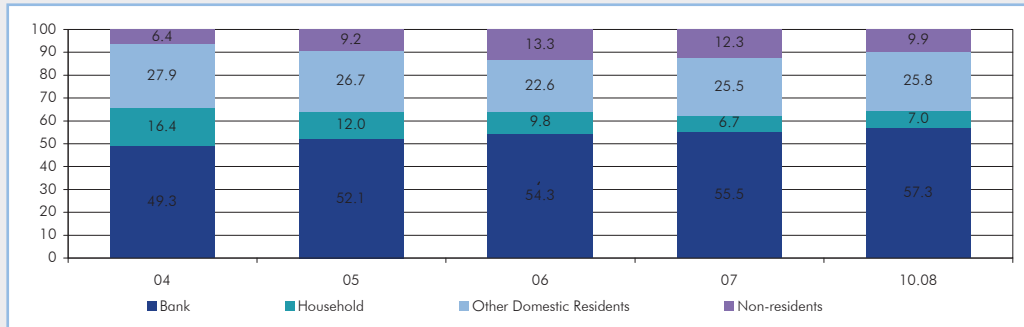
**Chart I.30.**  
Maturity Structure of Government Debt Securities (Month)<sup>1</sup>



Source: Treasury  
(1) Calculation is based on term to maturity.

A large portion of total government bonds is owned by banks, thus comprising a major part of banking sector assets. The share of banks increased, whereas that of non-residents maintained its downward trend in 2008 (Chart I.31).

**Chart I.31.**  
Government Debt Securities by Holders<sup>1,2,3,4</sup> (%)



Source: BRSA-CBRT

(1) Based on nominal amounts.

(2) "Bank" includes GDSS owned by banks operating in Turkey; "Household" includes GDSS that belong to real persons kept at domestic banks; "Other domestic residents" includes GDSS of domestic legal persons except banks and households also GDSS of mutual funds kept at banks and "Non-residents" involves non-resident real and legal persons' GDSS kept at domestic banks.

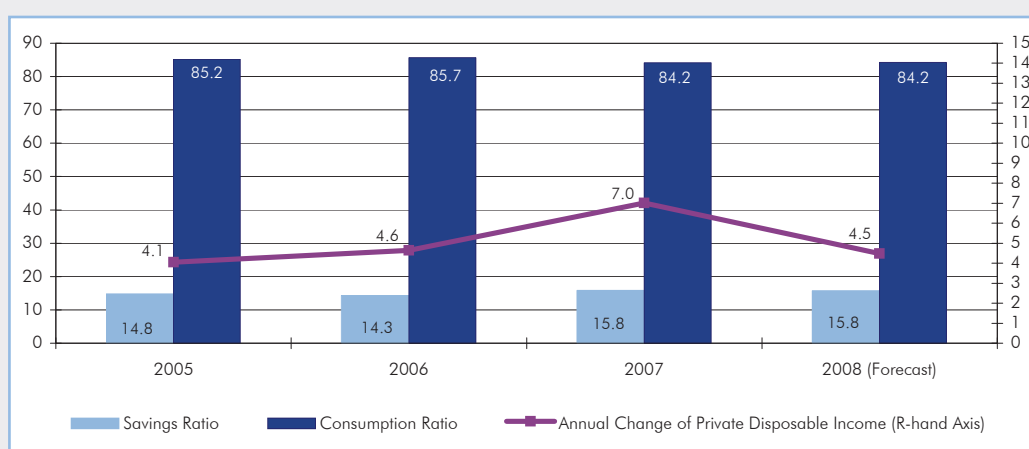
(3) GDSS owned by the Central Bank are excluded.

(4) Data for October 2008 are as of October 10, 2008.

#### I.4. Private Sector Developments

Private disposable income rose by 7 percent in 2007. The growth rate of private consumption which was 5 percent in 2006, declined to 4 percent in 2007 owing to decreases in clothing-footwear and recreation-culture sectors and slow growth in food-beverages-tobacco, furnishings-household equipment and transportation-communication sub-sectors. Due to the deceleration of the private consumption rate, savings ratio increased to 15.8 percent in 2007. The Annual Program for 2009 envisages that private disposable income will grow by 4.5 percent in real terms in 2008, while the rate of increase in private consumption will drop to 3.5 percent (Chart I.32).

**Chart I.32.**  
Private Sector Consumption and Savings Ratios and Real Disposable Income<sup>1,2,3</sup>



Source: SPO

(1) Private sector's consumption and savings ratio is in current prices, private sector's disposable income is calculated using CPI (1998=100)

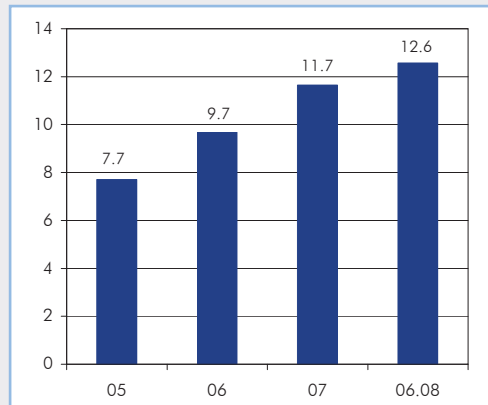
(2) Savings Ratio = Total Private Savings / Private Disposable Income

(3) Consumption Ratio = Total Private Consumption / Private Disposable Income

### 1.4.1. Households

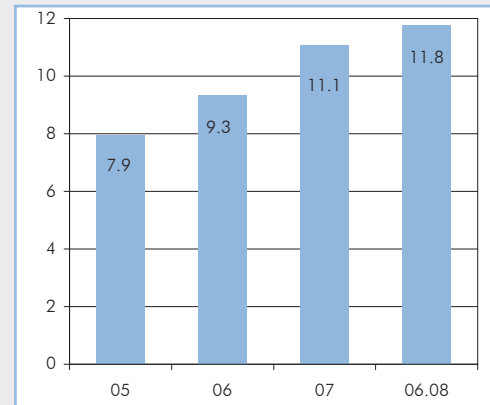
Household liabilities continued to increase in the first half of 2008. The ratio of total household liabilities to GDP rose to 12.6 percent in the first half of 2008 from 11.7 percent in 2007 (Chart I.33). In the same period, the portion of household consumption expenditures financed by retail loans, increased from 11.1 percent to 11.8 percent (Chart I.34).

**Chart I.33.**  
Household Liabilities to GDP (%)<sup>1</sup>



Source: CBRT-BRSA, TURKSTAT  
(1) Household liabilities consist of gross consumer credits and credit card balances extended by banks and consumer finance companies

**Chart I.34.**  
Retail Loans to Household Consumption Expenditures (%)<sup>1</sup>



Source: CBRT-BRSA, TURKSTAT  
(1) Retail loans consists of gross consumer credits and credit card balances extended by banks and consumer finance companies less housing credits.

By September 2008, household liabilities increased by 24 percent and interest payments rose by 19.8 percent compared to end-2007. The ratio of household interest payments to disposable income, one of the indicators of households' repayment capacity, did not display a remarkable change compared to 2007, whereas the ratio of total household debt to disposable income increased to 22.6 percent (Table I.4).

**Table I.4. Household Disposable Income, Indebtedness and Interest Payments<sup>1,2</sup> (Milion YTL)**

	2006	2007	09.08
Household Interest Payments	12.109	15.576	18.655
Household Debt	73.410	99.494	123.409
Household Disposable Income	404.677	465.992	545.377
Interest Payments / Disposable Income (%)	3,0	3,3	3,4
Debt / Disposable Income (%)	18,1	21,4	22,6

Source: BRSA-CBRT, TURKSTAT, SPO

(1) Household debt consists of gross consumer credits and credit card balances extended by banks and consumer companies and is assumed to remain unchanged until year-end.  
(2) Household disposable income is calculated by using private sector disposable income estimation for 2006, 2007 and 2008 as mentioned in the 2009 Annual Programme, under the assumption that the 2005 ratio of household disposable income to private sector disposable income has not changed.

When compared with selected countries, the ratio of household liabilities excluding housing loans to GDP stands close to those of newcomers to the EU, whereas the ratio of total liabilities to GDP is still lower than that of many countries, including new members of the EU (Table I.5).

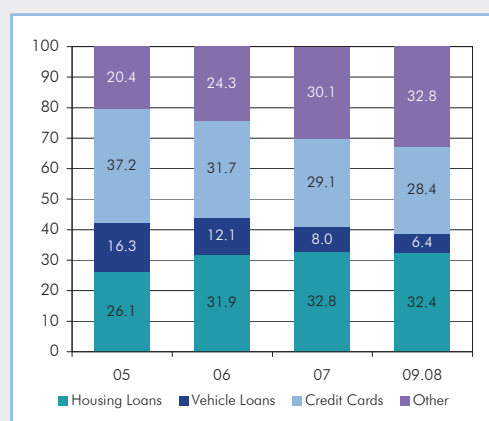
Table I.5. Household Liabilities to GDP in Selected Countries (%)

	Household Liabilities Excluding Housing Loans/GDP <sup>1</sup>			Household Liabilities/GDP <sup>2</sup>		
	2005	2006	2007	2005	2006	2007
Lithuania	4.1	6.7	8.6	13.2	19.3	25.9
Czech Republic	4.7	5.3	6.2	14.3	17.3	21.4
Hungary	6.8	9.2	10.9	16.9	21.1	23.2
Latvia	7.7	9.3	9.3	27.1	38.3	43.3
Poland	9.7	10.7	13.1	15.1	18.2	23.7
Italy	12.3	12.7	13.0	27.6	29.2	30.3
Greece	12.4	14.2	13.2	36.2	41.0	40.9
Portugal	13.9	15.1	16.5	67.3	74.3	78.6
Spain	19.1	20.8	21.2	68.6	76.8	80.4
EU 27	15.3	15.3	15.0	54.6	56.4	55.8
Turkey	5.7	6.6	7.8	7.7	9.7	11.7

Source: ECB, CBRT

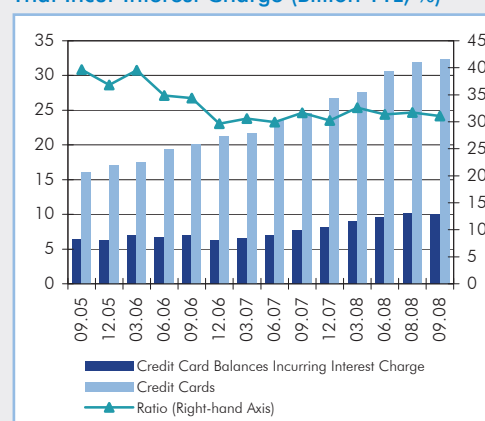
(1) The figure for Turkey as of June 2008 is 8.4.  
(2) The figure for Turkey as of June 2008 is 12.6.

When the development of household liabilities is analyzed in terms of debt types, it is observed that housing loans increased by 22.1 percent and other loans by 35.3 percent in September 2008 compared to end-2007. The share of other loans in total loans continued to rise, whereas that of vehicle loans declined. The share of housing loans and credit card balances, on the other hand, remained approximately the same (Chart I.35).

Chart I.35.  
Decomposition of Household Debt (%)<sup>1</sup>

Source: BRSA-CBRT

(1) Household debt consists of gross consumer credits and credit card balances extended by banks and consumer finance companies.

Chart I.36.  
Credit Card Bal. of Deposit Banks and Balances  
That Incur Interest Charge (Billion YTL, %)<sup>1</sup>

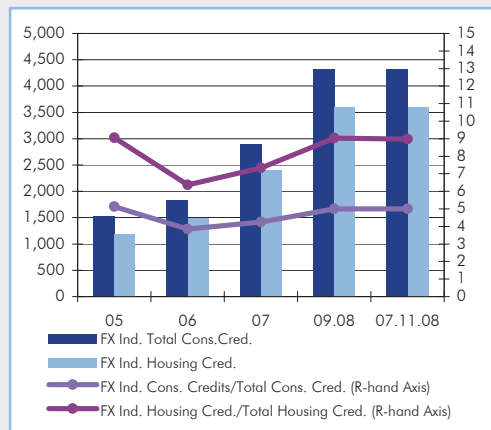
Source: CBRT

While their share in households' financial liabilities did not display a significant change compared to end-2007, credit card balances are still on the rise. Credit card balances incurring interest charges, on the other hand, rose to YTL 10.1 billion as of September 2008 from YTL 8.1 billion as of end-2007 and the ratio to credit card balances increased to 31.1 percent. (Chart I.36).

The floating-rate is only applicable to housing loans in Turkey. However, the share of such loans is only 0.22 percent, limiting the interest rate risk of households. The ratio of FX-

indexed consumer loans to total consumer loans increased to 5 percent as of September 2008 from 4.3 percent at end-2007, whereas the share of FX-indexed housing loans in total housing loans increased from 7.3 percent to 9 percent during the same period (Chart I.37). On the other hand, FX-indexed retail loans have a relatively low share in total retail loans compared to selected countries (Chart I.38). Additionally, FX indexed liabilities of households to the banking sector is USD 3.5 billion as of September 2008, whereas FX assets of households is USD 70.7 billion and households carry a long position in FX. While these indicators reveal that exchange rate risk of households is low, it is obvious that the repayment ability of households without foreign exchange income will be adversely affected if Turkish Lira depreciates.

**Chart I.37.**  
FX Indexed Total Consumer Credits and FX Indexed Housing Credits (Million YTL, %)<sup>1,2</sup>

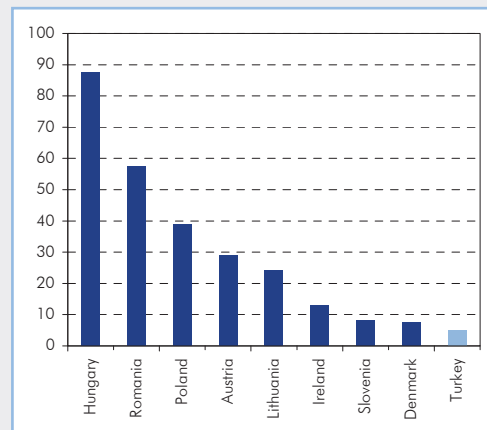


Source: CBRT-BRSA

(1) Consumer finance companies are excluded.

(2) NPLs are excluded.

**Chart I.38.**  
FX Retail Loans in Total Retail Loans for Selected Countries (%)



Source: CBRT, National Central Banks

According to Central Bank Risk Center data, as of September 2008 the number of consumer loan and credit card defaulters increased by 39.8 percent in comparison to end-2007 and reached 911.456 (Table I.6).

**Table I.6. Number of Consumer Loan and Credit Card Defaulters<sup>1</sup>**

	2007	03.08	06.08	09.08
Banks	641,708	646,425	754,307	832,698
Asset Management Companies <sup>2</sup>	0	87,132	82,315	123,251
Finance Companies	12,898	11,112	15,005	17,627
Total <sup>3</sup>	651,911	706,282	812,571	911,456

Source: CBRT

(1) Customers with more than one registry to a particular financial institution group are counted only once.

(2) Represents non-performing loans taken over by Asset Management companies from the SDIF and banks.

(3) As customers may have registry to more than one financial institution group, the sum of the three rows in the table and grand total are not equal.

Total financial assets of households increased by 12.2 percent in comparison to end-2007 and reached YTL 351.6 billion as of September 2008 (Table I.7).



Table I.7. Composition of Household Financial Assets<sup>1</sup> (Billion YTL, %)

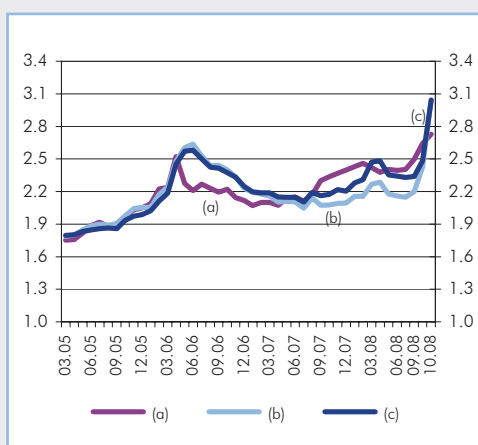
	2006		2007		09.08	
	Billion YTL	% Share	Billion YTL	% Share	Billion YTL	% Share
YTL Deposits	113.6	40.6	142.5	45.5	170.7	48.5
FX Deposits	75.0	26.8	78.5	25.0	83.9	23.9
FX Deposits (Billion USD)	53.4	-	67.0	-	68.1	-
Currency in Circulation	24.7	8.8	26.2	8.4	32.1	9.1
GDDS+Eurobond	28.2	10.1	19.6	6.3	21.1	6.0
Mutual Fund	17.5	6.3	22.6	7.2	21.5	6.1
Stocks	15.8	5.6	17.5	5.6	13.7	3.9
Private Pension Funds	2.9	1.0	4.6	1.5	5.8	1.6
Repos	2.0	0.7	1.9	0.6	2.8	0.8
Total Assets	279.7	100.0	313.4	100.0	351.6	100.0

Source: BRSA-CBRT, CMB, CRA  
(1) YTL and FX deposits include participation funds.

The share of savings deposits, which has the largest share in household assets, continued to grow and reached 48.5 percent as of September 2008. The share of savings deposits in total deposits, which was 64.5 percent at end-2007, increased to 67 percent as of September 2008 (Table I.7). However, due to the depreciation of the Turkish currency since October 2008, real persons converted their FX deposit accounts into Turkish Lira. As a matter of fact, when adjusted according to the exchange rate and parity effect, the ratio of total Turkish currency instruments to foreign currency instruments started to increase as of September 2008 (Chart I.39).

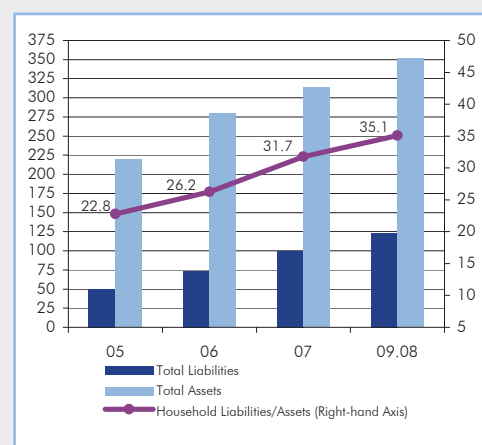
Meanwhile, the ratio of household financial liabilities to financial assets rose to 35.1 percent as of September 2008, due to the faster increase of liabilities (Chart I.40).

Chart I.39.  
Ratio of YTL-FX Denominated Investment  
Instruments<sup>1</sup>



Source: BRSA-CBRT, CMB, CRA  
(1) YTL instruments = Deposits + Repos + Gov.Dom.Debt.Sec. + Participation Funds (YTL) + Stocks + Private Pension Funds + Mutual Funds (starting from April 2006); FX Instruments = FX Deposits + Gov.Dom.Debt.Sec. + Eurobond + Participation Funds (FX).  
(a) Current YTL value of FX deposits and Participation Funds (FX)  
(b) For FX deposits and Participation Funds (FX), exchange rate prevailing on 31.12.2004 is used.  
(c) For FX deposits and Participation Funds (FX), exchange rate prevailing on 31.12.2004 is used and the parity effect is eliminated.

Chart I.40.  
Households' Financial Assets and Liabilities  
(Billion YTL, %)<sup>1</sup>



Source: BRSA-CBRT, CMB, CRA  
(1) Household Assets = Savings Deposits + FX Deposits + Money in Circulation + Gov.Dom.Debt.Sec. + Eurobonds + Repos + Stocks + Pension Funds + Mutual Funds (starting from April 2006). Household liabilities consists of gross consumer credits and credit card balances extended by banks and consumer finance companies.

Since the share of floating-rate and FX-indexed household liabilities is limited, households are affected less by unfavorable developments in the economic conjuncture relative to other countries.

## I.4.2. Corporate Sector

### I.4.2.1. Financial Analysis of Firms

As it is known, the most comprehensive data set concerning the corporate sector is CBRT Company Accounts. Table I.8 presents the provisional data related to 5602 firms, compiled within the scope of this study.

**Table I.8. Financial Ratios (%)**

	All Companies			Manufacturing Comp.		
	2005	2006	2007	2005	2006	2007
<b>Leverage and Capital Structure Ratios</b>						
Leverage Ratio	49.2	49.9	48.2	47.9	48.9	47.8
Equity / Total Debt	103.1	100.3	107.6	108.8	104.5	109.4
Short-Term Debt / Total Liabilities	35.8	36.0	35.4	34.8	35.6	34.7
Bank Loans / Total Debt	31.3	34.7	33.2	38.6	41.5	41.7
Bank Loans / Total Liabilities	15.4	17.3	16.0	18.5	20.3	19.9
Short-Term FX Cash Loans/Foreign Sales	14.7	13.9	11.3	15.0	14.3	10.8
Interest Expense / Net Sales (%)	1.6	3.1	2.1	1.7	3.2	2.0
Interest Coverage Ratio (Times)	4.1	3.1	4.4	3.5	2.8	4.5
<b>Liquidity Ratios</b>						
Current Ratio	139.8	143.6	143.4	157.5	157.6	160.8
Liquidity (Acid Test) Ratio	101.9	103.9	103.1	94.4	94.6	96.7
Cash Ratio	23.9	25.7	24.8	29.4	26.7	28.7
<b>Profitability Ratios</b>						
Net Profit / Assets (ROA)	3.8	5.7	5.7	3.7	5.7	6.9
Net Profit / Equity (ROE)	7.5	11.4	10.9	7.0	11.2	13.2
<b>Turnover Ratios</b>						
Inventory Turnover Ratio (Cost of Sales/Aver. Invent.)	-	7.6	7.1	-	5.5	5.4
Receivables Turnover Ratio (Net Sales / Trade Receiv.)	5.7	5.5	5.4	5.6	5.5	5.7
Asset Turnover Ratio (Net Sales/Total Assets)	1.0	1.0	1.0	1.2	1.2	1.2

Source: CBRT Company Accounts (Provisional Data)

The corporate sector maintained its profitability thanks to the brisk domestic and external demand together with the low course of financing costs in 2007. Another factor that affected the profitability ratio of firms positively in 2007 was the appreciation of the YTL. As a matter of fact, the net foreign currency gain that accounted for 7.2 percent of the net profit in 2006 rose to 20.3 percent in 2007. In the meantime, financing costs contributed to profitability by decreasing 32.6 percent in real terms parallel to the fall in interest rates.

The appreciation of the YTL in 2007 decreased the FX debt of firms, which, in turn, slowed down the growth of total debt. While total debt increased by 7 percent, the leverage (debt/asset) ratio dropped as a result of the increase in total assets by 11 percent (Table I.8).

The high course of liquidity ratios indicates that firms have the financial capability to repay their short-term debts. Despite liquidity ratios that remained relatively flat in the corporate sector in 2007, the ratios of manufacturing firms increased.

The ratio of short-term FX cash loans to foreign sales, which indicate the firms' repayment capacity of short-term FX loans, was realized as 11.3 percent with a decline by 2.6 points in 2007. This was mainly driven by the fact that the revenues of firms from sales were denominated in Euro, which appreciated against the USD. However, beyond the contraction in external demand due to global developments, it is expected that the depreciation of the Euro against the USD will have adverse effects on firms that borrow in foreign currency.

Moreover, it is seen that the inventory turnover ratio declined in 2007, in other words, the stock-keeping duration for goods and services produced extended (Table I.8).

Since CBRT Company Accounts are published on an annual basis, it is necessary to find an alternative and up-to-date data set to use in the financial analysis of the corporate sector. Therefore, basic financial ratios were calculated using the data pertaining to the selected 189<sup>1</sup> firms traded on the ISE in order to analyze the developments in 2008.

**Table I.9. Financial Ratios of Selected ISE Firms<sup>1</sup> (%)**

	All Companies		Manufacturing Comp.	
	12.07	06.08	12.07	06.08
Leverage Ratio	46.2	50.8	46.8	52.1
Short-Term Debt / Total Liabilities	31.8	34.2	32.3	36.6
Financial Debt / Total Debt	40.3	42.1	43.2	43.8
Financial Debt / Total Liabilities	18.6	21.4	20.2	22.8
Liquidity (Acid Test) Ratio	98.7	93.5	91.8	82.4
Cash Ratio	37.4	33.7	25.2	19.9
Net Profit / Assets (ROA)	8.3	7.8	7.8	6.8
Net Profit / Equity (ROE)	15.5	15.3	14.6	13.7

Source: ISE

(1) Financial Reportings of firms is in line with Communiqué on Principles Regarding Financial Reporting Standards in Capital Markets\* (Serial: XI, No: 29) of the Capital Markets Board of Turkey, starting from first interim period financial tables after 1 January 2008. Regarding past data, only 2007 year-end statements have been prepared in accordance with the new reporting principles. Therefore, to carry out the analyses December 2007-June 2008 financial statements were used.

The leverage ratio of firms that declined in 2007 rose in the first half of 2008 in addition to other factors, due to the depreciation of the YTL and the share of financial debt in total debt increased (Table I.9).

The decline in profitability ratios, especially the slowdown in domestic and external demand in the second half of the year, the depreciation of the YTL and the increase in interest rates have led to a deterioration in financial structures and a decline in the debt service capacity of firms in 2008 (Table I.9). The CBRT's liquidity measures also aim to restrain the adverse effects of these developments.

<sup>1</sup> Due to the change in accounting period of a firm operating in the tourism sector, the number of firms is different from the number stated under the "Foreign Exchange Position of the Corporate Sector" heading due to the inaccessibility of the firm's December 2007 financial statements as per the "Communiqué on Principles Regarding Financial Reporting Standards in Capital Markets" (Serial: XI, No: 29) of the Capital Markets Board of Turkey.

### Box 5. Export Developments

According to Turkish Exporters Assembly (TEA) data, exports of Motor Vehicles and Related-Industry, Iron and Steel Products, Clothing and Ready-Wear Sector, Chemicals and Chemical Products, and Electric-Electronic sectors accounted for 60.4 percent of the total exports as of October 2008. While the ten-month export growth of the said sectors that made up 66.2 percent of total exports in January-October 2008 period is 34.44 percent, a decline of 4.25 percent in October is noteworthy. As a matter of fact, motor vehicles and related-industry, one of the sectors with the largest share in exports, and the clothing and ready-wear sectors displayed a monthly decline of 21.8 percent and 17.15 percent, respectively, compared to October 2007.

**Table 1. First 5 Sectors with the Largest Share in Exports as of October 2008 (Thousand USD)**

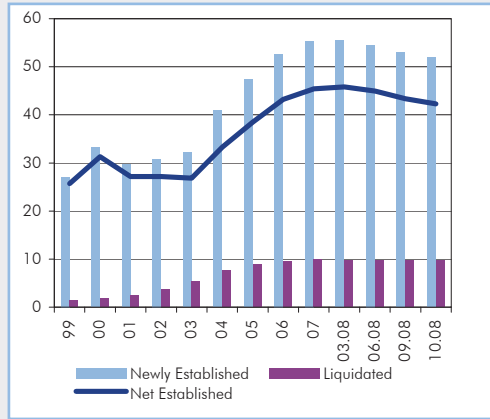
Sectors	January–October				October			
	2007	2008	Annual Chng. (%)	Share	2007	2008	Annual Chng. (%)	Share
Motor Vehic. and Rel.-Ind.	16,965,540	22,230,935	31.04	19.87	1,927,686	1,507,417	-21.8	15.82
Iron and Steel Prod.	9,510,549	17,718,394	86.30	15.84	920,943	1,216,692	32.11	12.77
Cloth. and Ready-Wear	13,144,870	13,579,589	3.31	12.14	1,296,020	1,073,738	-17.15	11.27
Chem. and Chem. Prod.	8,275,875	12,146,071	46.76	10.86	961,205	1,059,007	10.17	11.11
Electric-Electronic	7,204,775	8,403,909	16.64	7.51	905,138	898,811	-0.7	9.43
The First 5 Sectors in Total	55,101,609	74,078,898	34.44	66.23	6,010,992	5,755,665	-4.25	60.4
Grand Total	85,378,000	111,857,738	31.01	100	9,711,185	9,529,945	-1.87	100

Meanwhile, Automotive Manufacturers Association (AMA) data indicate a decline of 22 percent in total production, with 24 percent pertaining to automobiles and 15 percent pertaining to commercial vehicles as of October 2008. Given that vehicle loans extended by banks decreased by 2.8 and by 2.5 percent in the first ten months of 2008 and in the last month (September-October 2008) respectively, it is considered that the contraction in the automotive sector might become more apparent in the upcoming period due to a drop of domestic sales of automobiles in addition to the drop in sales abroad.

Moreover, the industrial production index decreased by 5.5 percent as of September 2008 in comparison to the same period of the previous year. The second manufacturing sector with the highest change (variation) in the industrial production index was "Tanning and Dressing of Leather, Luggage, etc" sector with a decline of 23.8 points. Considered along with the decrease of exports in the textile sector, this situation reveals the contraction in the sector.

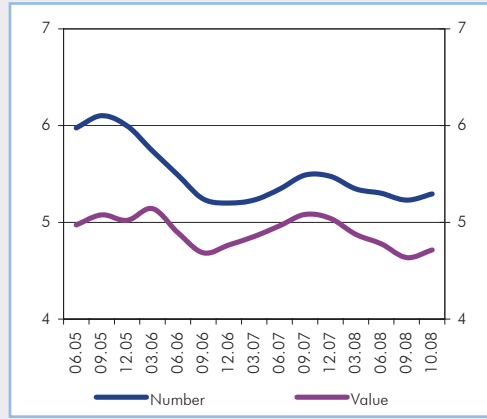
The contraction observed in the sale and production in these sectors also implies that firms have been adversely affected by recent developments in international markets. Considering that approximately 60 percent of Turkey's exports are sold to EU markets, it is possible that exports, especially in textiles and automotive sectors, will not follow a strong course in the forthcoming period due to decreasing demand in line with the slowdown of consumption in the EU arising from the global crisis.

**Chart I.41.**  
Number of Newly Established and Liquidated Companies and Cooperatives (Thousand)



Source: TURKSTAT

**Chart I.42.**  
The Ratio of Over-Drawn Cheques Presented to the ICH to the Total Cheques Presented to the ICH (%)

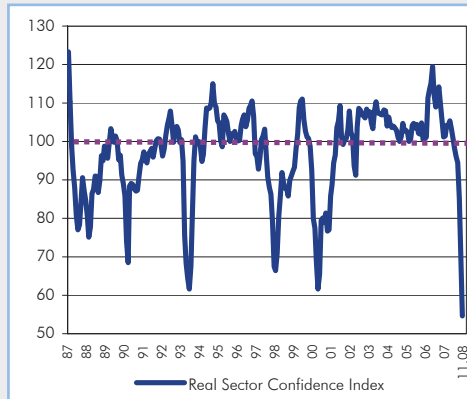


Source: CBRT

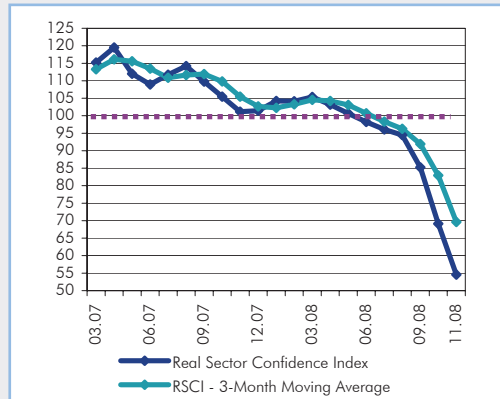
The net number of newly-established companies and cooperatives that remained flat since 2006 started to follow a downward trend and declined by 6 percent as of October 2008 in comparison to the same period of the previous year (Chart I.41).

The ratio of over-drawn cheques submitted to clearing houses to the total cheques presented has been around 5 percent in terms of number and amount since 2005 and has not displayed a significant change over the years (Chart I.42).

**Chart I.43.**  
Real Sector Confidence Index



Source: CBRT



The CBRT Business Tendency Survey and Real Sector Confidence Index prepared to determine general tendencies in cyclical developments and provide economic decision-making units with necessary information on future expectations, dropped by 46.6 points in November 2008 in comparison to the same period of the previous year and became 54.6 points. Analysis of the diffusion indices pertaining to the survey questions that made up the CBRT Business Tendency Survey and Real Sector Confidence Index suggests that all expectations, primarily those regarding the general business situation, the volume of output over the next three months, the export orders over the next three months have a decreasing effect on the index. Especially, the decline in the general business situation to 31 points with a decrease by 33.5 points within the last two-month period as of November 2008 is remarkable (Chart I.43).

### I.4.2.2. Borrowing Structure of the Corporate Sector

Corporate sector financial debt displaying an upward trend reached YTL 300 billion, approximately 57 percent of which accounted for FX denominated debt, as of August 2008.

**Table I.10. Financial Debt of the Corporate Sector (Million YTL)**

	2005 <sup>1</sup>	2006	2007	08.08 <sup>1</sup>
<b>Corporate Sector Loans</b>	<b>129,374</b>	<b>201,663</b>	<b>245,916</b>	<b>300,446</b>
<b>A. Domestic Loans</b>	<b>81,670</b>	<b>125,798</b>	<b>154,433</b>	<b>185,590</b>
a. YTL	53,766	84,174	106,894	128,312
b. FX (Including FX-indexed)	27,904	41,624	47,539	57,278
In USD terms	20,796	29,613	41,007	48,764
<b>B. External Loans</b>	<b>47,704</b>	<b>75,865</b>	<b>91,483</b>	<b>114,856</b>
1. From Foreign Branches of Banks Established in Turkey	19,416	27,644	37,012	48,058
a. YTL	1,033	954	1,175	390
b. FX	18,383	26,690	35,837	47,668
In USD terms	13,700	18,988	30,913	40,582
2. From Banks Abroad	28,288	48,221	54,471	66,798
In USD terms	21,082	34,306	46,986	56,869

Source: BRSA-CBRT

(1) As the data for financial leasing, factoring and consumer finance companies are obtained starting from 2006 the data for 2005 cannot be included. Since the data for these companies are presented quarterly, the data for June 2008 instead of August 2008 is used.

FX loans received by the corporate sector amounts to USD 146.2 billion, USD 89.3 billion of which came from domestic and foreign branches of banks established in Turkey and from the non-banking financial sector, whereas the loans received from banks abroad amounted to USD 57 billion (Table I.10). In other words, 61 percent of total FX loans of the corporate sector were extended by banks established in Turkey.

**Table I.11. Sectoral Breakdown of the Remaining Maturity Composition of Long-Term Loans Received from Abroad by Corporate Sector (Million USD)**

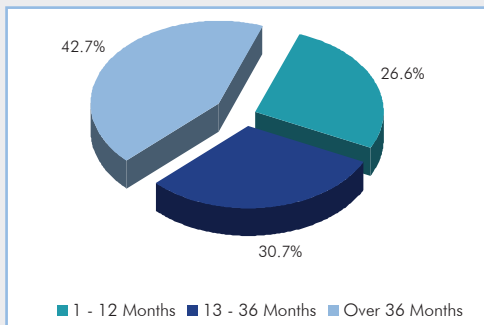
(As of August 2008)	1-12 Months	13-24 Months	25-36 Months	37-60 Months	61-120 Months	120+ Months	Total
<b>CORPORATE SECTOR<sup>1</sup></b>	<b>24,972</b>	<b>16,423</b>	<b>12,412</b>	<b>18,109</b>	<b>19,210</b>	<b>2,807</b>	<b>93,933</b>
<b>AGRICULTURAL SECTOR</b>	<b>104</b>	<b>51</b>	<b>40</b>	<b>51</b>	<b>47</b>	<b>0</b>	<b>293</b>
<b>INDUSTRIAL SECTOR</b>	<b>10,060</b>	<b>8,257</b>	<b>5,764</b>	<b>7,900</b>	<b>7,139</b>	<b>161</b>	<b>39,281</b>
1. Manufacturing	8,602	6,345	3,844	5,280	4,533	94	28,698
- Metal Products	1,510	971	828	1,279	1,359	52	5,999
- Food, Bev. and Tobacco Prod.	1,809	2,135	604	964	221	0	5,733
- Textiles and Wearing Apparel	1,131	655	469	661	387	0	3,303
- Motor Vehicles	842	657	267	385	661	14	2,826
- Office Mach. and Computers	584	164	155	422	582	9	1,916
- Chemical Products	692	379	313	218	342	0	1,944
- Other Non-Metal. Min. Prod.	373	223	256	531	434	0	1,817
- Mechanical Products	573	386	398	185	75	0	1,617
- Paper, Pap. Prod., Print & Publ.	375	251	191	203	114	19	1,153
- Others	713	524	363	432	358	0	2,391
2. Elect., Gas and Water Supply	858	1,325	1,477	1,536	1,457	63	6,716
3. Mining and Quarrying	600	587	443	1,084	1,149	4	3,867
<b>SERVICES SECTOR</b>	<b>14,808</b>	<b>8,115</b>	<b>6,608</b>	<b>10,158</b>	<b>12,024</b>	<b>2,646</b>	<b>54,359</b>
1. Real Est., Rent. and Bus. Serv.	4,932	3,154	2,458	2,923	1,868	945	16,280
2. Trans., Storg. And Comm.	2,029	1,351	1,460	3,451	5,603	1,273	15,167
3. Wholesale and Retail Trade	3,428	1,298	825	1,177	1,701	122	8,551
4. Construction	2,584	1,144	1,000	878	1,540	243	7,389
5. Hotels and Restaurants	803	619	361	727	570	8	3,088
6. Others	1,032	549	504	1,002	742	55	3,884

Source: CBRT

(1) As being different from the long term loans given in Table I.12, it includes YTL loans received from abroad by the corporate sector and excludes loans received from shareholders abroad of companies with foreign capital.

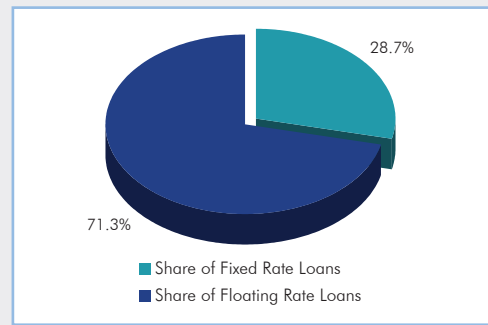
The services sector has the largest share with 57.9 percent in the long-term loans received by the corporate sector from abroad. The loans of real estate, renting and business services sector and the transportation, storage and communication sector that have a significant share in the services sector include the external loans received by a number of firms with foreign capital operating in these sectors in order to pay acquisition (including privatization) cost. The share of industrial sector loans in total loans is 41.8 percent and the majority of these loans were received by the manufacturing industry (Table I.11).

**Chart I.44.**  
Remaining Maturity Composition of Long-Term Loans Received from Abroad by Corporate Sector (%) (As of August 2008)



Source: CBRT

**Chart I.45.**  
Interest Rate Composition of Long-Term Loans Received from Abroad by Corporate Sector (%) (As of August 2008)

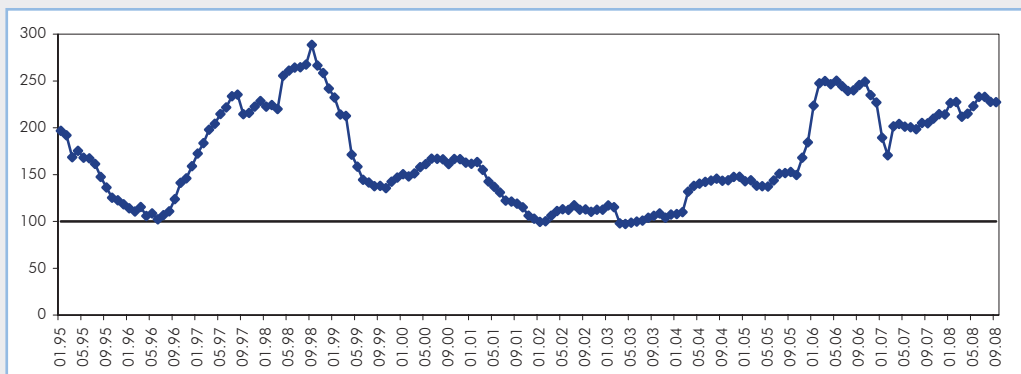


Source: CBRT

By August 2008, 26.6 percent of long-term loans received by the corporate sector from abroad were the loans with the maturity of up to one-year (Chart I.44).

By August 2008, 28.7 percent of long-term loans received by the corporate sector from abroad were fixed rate, whereas 71.3 percent were floating rate loans. 63.5, 34.8 and 1.7 percent of the said loans were denominated in USD, EURO and in other foreign currencies, respectively (Chart I.45). In August 2008, no significant change was observed in FX composition and interest rates of corporate sector debts compared to end-2007.

**Chart I.46.** Roll-over Ratio of Long-term Loans Received by the Non-banking Private Sector<sup>1</sup> (%)



Source: CBRT

(1) The roll-over ratio was calculated by dividing long-term loans received from abroad by the non-banking private sector by loan repayments in the relevant period according to annualized monthly balance of payments data.

It is seen that the roll-over ratio of external long-term loans of the non-banking private sector did not drop below 100 percent even during the 2001 crisis (Chart I.46). Nevertheless,

when trying to assess the future outlook, it should be acknowledged that the 2001 crisis was of domestic origin, whereas today, foreign borrowing facilities have shrunk due to the global crisis.

#### I.4.2.3. Foreign Exchange Position of the Corporate Sector

Foreign exchange positions of firms operating in Turkey cannot be calculated by referring to their balance sheets, since financial statements of firms are prepared in terms of the Turkish currency amount, regardless of the currency composition. However, in order to provide a general idea concerning the exchange rate risk of firms, the table of Foreign Exchange Assets and Liabilities of Non-Financial Companies prepared by CBRT is posted quarterly on our website and sheds light on the foreign exchange position of the corporate sector. Besides, the foreign currency positions of non-financial firms listed on the ISE, which constitute an important part of the corporate sector, have been calculated by referring to footnotes in their disclosed financial statement, and the exchange rate risks, as well as the cash loan risks of those firms have been examined.

The exchange rate risk of firms in the corporate sector has been analyzed and assessed from a macro perspective. Hence, considering that some firms have short positions while others have long positions, it would be more accurate to evaluate the vulnerability of the corporate sector to exchange rate risk by making individual analyses for each firm.

**Table I.12.**  
**FX Assets and Liabilities of Corporate Sector<sup>1,2</sup> (Million USD)**

	2005	2006	2007	03.08	06.08	Change 06.08-12.07 (%)
<b>Assets</b>	<b>45.702</b>	<b>63.426</b>	<b>77.862</b>	<b>80.856</b>	<b>85.811</b>	<b>10</b>
A. Deposits	30.890	45.452	54.834	55.378	58.307	6
-Domestic Banks <sup>3</sup>	12.636	18.756	24.402	24.051	26.092	7
-Banks Abroad <sup>4</sup>	18.254	26.696	30.432	31.327	32.215	6
B. Securities	1.035	933	830	898	851	3
C. Export Receivables	6.721	9.584	12.007	14.177	15.493	29
D. Foreign Dir. Invest. to Abrod.	7.056	7.457	10.191	10.403	11.160	10
<b>Liabilities</b>	<b>72.245</b>	<b>99.889</b>	<b>138.810</b>	<b>154.436</b>	<b>167.256</b>	<b>20</b>
A. Cash Loans	55.578	82.907	118.906	135.207	145.096	22
- Domestic <sup>5,6</sup>	20.796	29.613	41.007	48.139	48.252	18
Non-bank fin. institutions <sup>7</sup>	0	4.869	8.220	8.715	8.742	6
- External <sup>8</sup>	34.782	53.294	77.899	87.068	96.844	24
Long Term	33.594	51.911	76.303	85.345	94.681	24
B. Import Payables	11.034	11.791	14.606	15.693	18.584	27
C. Protocol Receiv. of SDIF	5.633	5.191	5.298	3.536	3.576	-32
<b>Net Position</b>	<b>-26.543</b>	<b>-36.463</b>	<b>-60.948</b>	<b>-73.580</b>	<b>-81.445</b>	<b>34</b>

Source: CBRT

(1) Amounts in the table may be different from those published in the preceding issues due to the updates of the data.

(2) Data on non-financial public enterprises is not included.

(3) Participation funds in participation banks are included.

(4) "Deposits-Foreign Banks" data covers the data of foreign branches of the banks established in Turkey. On the other hand, it should be taken into consideration that the deposits of real persons and non-bank financial institutions may be included in this data.

(5) Funds extended by participation banks are included.

(6) FX indexed loans are included.

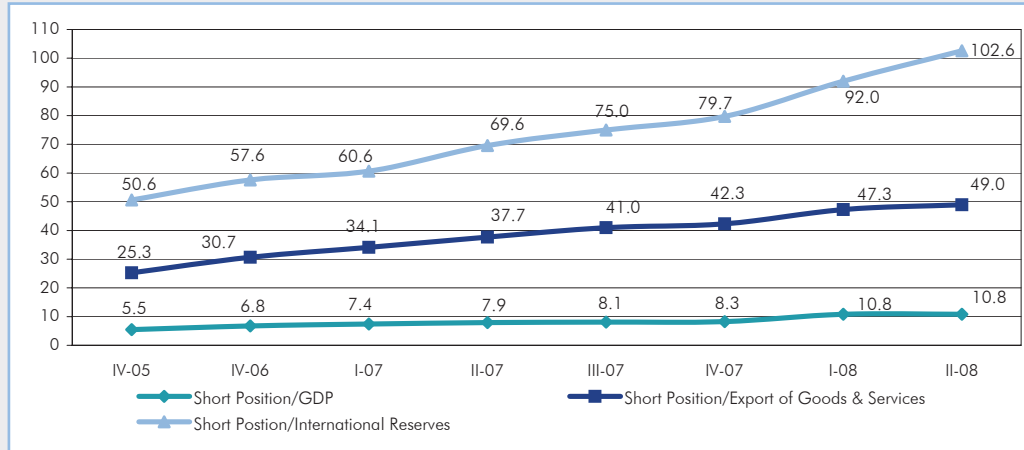
(7) It consists of leasing, factoring and consumer finance companies. Since the data of these companies has been started to be reported in 2006, the data of 2005 is not available.

(8) Loans extended by foreign branches of the banks established in Turkey are included.

The net short position of the corporate sector rose to USD 81.5 billion in June 2008, with a 34 percent upsurge compared to end-2007. The loans extended by foreign banks, with an increase of 24 percent over the last six months, were instrumental in this hike (Table I.12). Provisional data for August indicate that there has been no significant change in the short position of the corporate sector compared to that of June.



**Chart I.47.**  
Ratios Related to FX Position of the Corporate Sector<sup>1,2,3</sup> (%)



Source: BRSA-CBRT, TURKSTAT, Treasury, SDIF, BIS

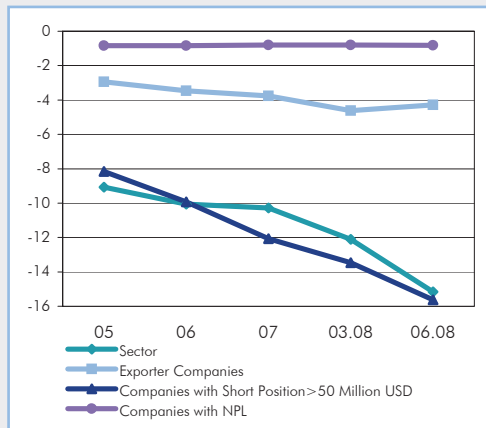
- (1) GDP and exports of goods & services are computed on a yearly basis. International reserves are outstanding amounts at the end of period.
- (2) International reserves are gross foreign exchange reserves of CBRT (including gold).
- (3) The short position is converted into YTL using the foreign exchange rate of the related period and divided by GDP.

The ratio of the corporate sector short position to GDP, exports, and international reserves rose in the first half of 2008 in line with the increase in the net short position (Chart I.47).

#### 1.4.2.3.1. Foreign Exchange Position of the Corporate Sector Firms Listed on the ISE

This section analyzes the foreign exchange positions and credit obligations of corporate sector firms listed on the ISE to the banking sector. The analysis covers 190 non-financial firms<sup>2</sup>, whose financial statements are published by the ISE and which disclose their foreign exchange positions in their balance-sheet footnotes and, do not include any financial institutions in their consolidated financial statements.

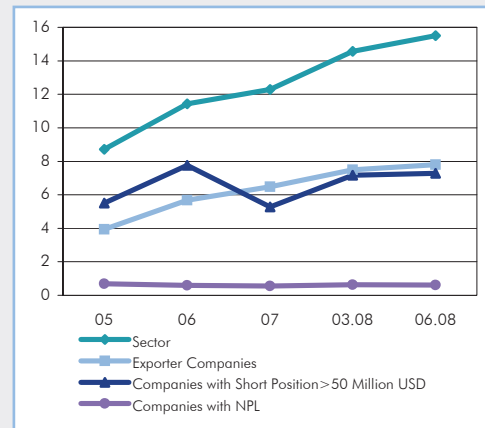
**Chart I.48.**  
FX Position of ISE Companies<sup>1</sup>  
(Billion USD)



Source: ISE

- (1) As of year-end periods, companies for which the share of exports in net sales is equal to or greater than 30 percent, are considered exporter companies.

**Chart I.49.**  
Cash Loans Extended to ISE Companies<sup>1</sup>  
(Including NPL, Billion YTL)



Source: CBRT

- (1) According to Risk Centre records, the cash loans are the loans which are extended directly by domestic banks or extended by foreign banks with guarantee or through intermediation of domestic banks.

<sup>2</sup> Firms that are consolidated under another company, the shares of which are publicly traded at ISE, have not been re-included in the analysis.

The short position of firms analyzed, which was USD 10.3 billion at the end of 2007, increased to USD 15.2 billion by June 2008 (Chart I.48). By the end of 2007, while 126 of firms analyzed had a short position of USD 13.6 billion, the number of firms with short positions rose to 133 and the total short position of these firms reached USD 17.2 billion by June 2008. The short position of the 42 firms with short positions over-50 million reached USD 15.6 billion with an increase of 29.5 percent.

The short position of non-exporting firms, which was USD 6.5 billion at end-2007, increased to USD 10.9 billion by June 2008.

Total loans of firms analyzed, including NPL, reached YTL 15.5 billion by June 2008, with a 26.3 percent rise compared to the end of 2007. 16 of 17 firms with NPLs had short positions amounting to USD 814 million, while the amount of their cash loans became YTL 604 million, YTL 439 million of which were NPLs (Chart I.49).

In view of the fact that the number of non-exporting firms with short positions and the amount of their short positions increased in the first half of 2008, the number of firms with NPLs and their NPL amounts are expected to rise due to the depreciation of the Turkish currency.