

## I. MACROECONOMIC DEVELOPMENTS

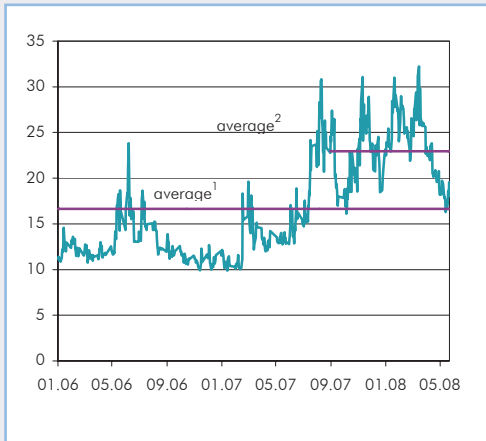
In this chapter, macroeconomic developments will be elaborated, taking into account the importance of such developments for financial stability.

### I.1. External Sector

#### I.1.1. International Developments

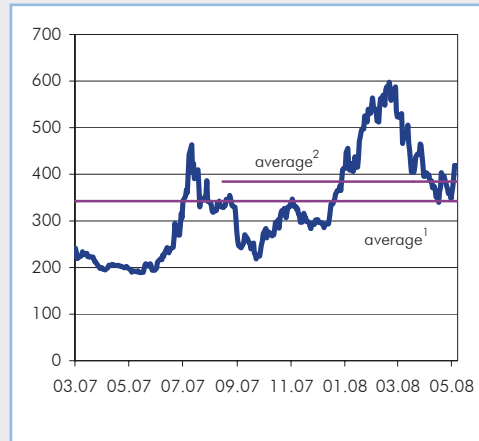
The previous report indicated that the unfavorable effects of the US subprime mortgage crisis had been limited, though not completely solved, by the interventions of the central banks of developed countries, and that the pressure on financial markets might continue throughout 2008, as a result of which financial markets might suffer instability.

**Chart I.1.**  
VIX Index



Source: Bloomberg  
(1) Calculated for the January 2006-May 2008 period.  
(2) Calculated for the period after September 2007.

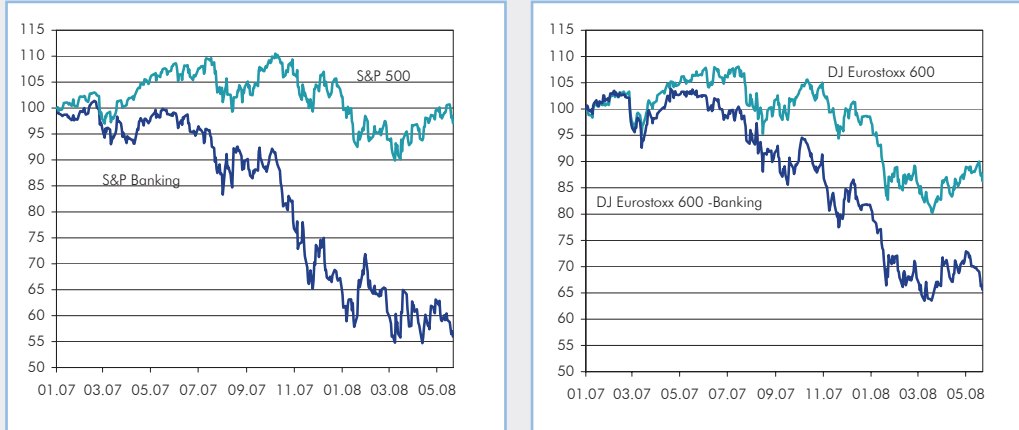
**Chart I.2.**  
iTraxx Europe Crossover Index



Source: Bloomberg  
(1) Calculated for the March 2007-May 2008 period.  
(2) Calculated for the period after September 2007.

As a consequence, the VIX index, a widely accepted volatility measure for the US stock market, reached an average level of 23 following the fluctuation in the second half of 2007, while it remained at only 16.6 on average during 2006-May 2008 period (Chart I.1). Likewise, averages of the iTraxx Europe Crossover Index, a basket of securities comprising 50 of the highly traded sub-investment grade corporate bonds, became 343 during the period March 2007-May 2008 and 384 in the post-fluctuation period (Chart I.2).

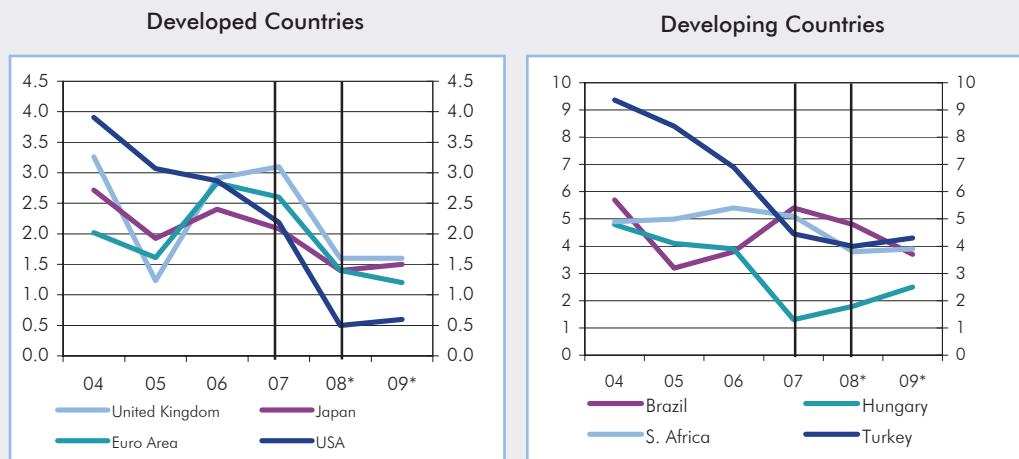
**Chart I.3.**  
Stock Market Indices of Developed Countries



Source: Bloomberg

From the perspective of financial institutions, the losses resulting from the turmoil still prevail. Figures compiled by Bloomberg suggest that the total losses incurred by more than 100 banks and securities firms due to asset write-downs and bad loans reached USD 323 billion<sup>1</sup>. The International Monetary Fund (IMF) projects that such losses might reach USD 945 billion<sup>2</sup>. Although general indices of the US and European stock markets display a relative recovery, the downward trend in banking sub-indices still prevail owing to the impact of the announced and expected losses (Chart I.3).

**Chart I.4.**  
Growth Rates of Selected Countries (%)



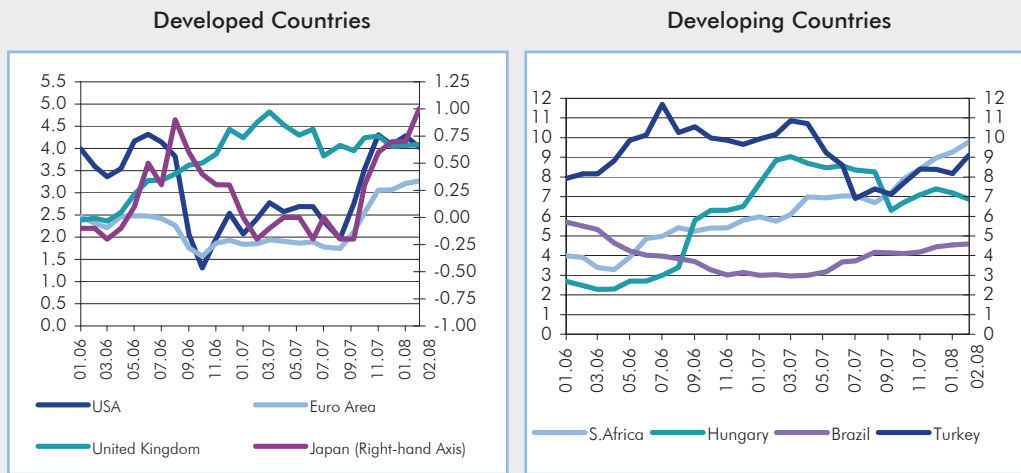
Source: IMF IFS, IMF WEO, EU European Economy  
(\*) Forecast (IMF)

<sup>1</sup> Bloomberg, May 9, 2008, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=af5QKJvhUzKY#>.

<sup>2</sup> These potential losses comprise residential housing loans of USD 565 billion, commercial housing loans of USD 240 billion, corporate loans (including collateralized loan commitments) of USD 120 billion and consumer loans of USD 20 billion. IMF Global Financial Stability Report, April 2008.

As the problems in the US subprime mortgage market started to spillover to the overall credit markets, tensions in the financial markets started to demonstrate its negative impact on the general economy. As a consequence, the IMF, in its World Economic Outlook published in April 2008, revised its GDP growth forecast regarding developed countries for 2008 and 2009 downwards (Chart I.4).

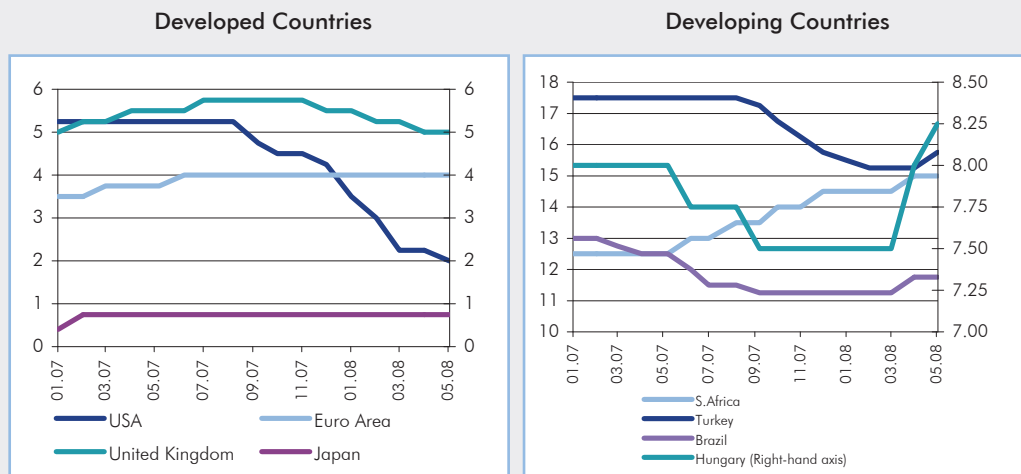
**Chart I.5.**  
Inflation Rates of Selected Countries (Annual CPI % Change)



Source: IMF IFS

Besides the slowdown in growth rates, inflation in developed and developing countries has entered an upward trend recently (Chart I.5). The increase in inflationary risks was mainly driven by the upsurge in commodity prices as well as food and oil prices.

**Chart I.6.**  
Policy Interest Rates of Selected Countries (%)

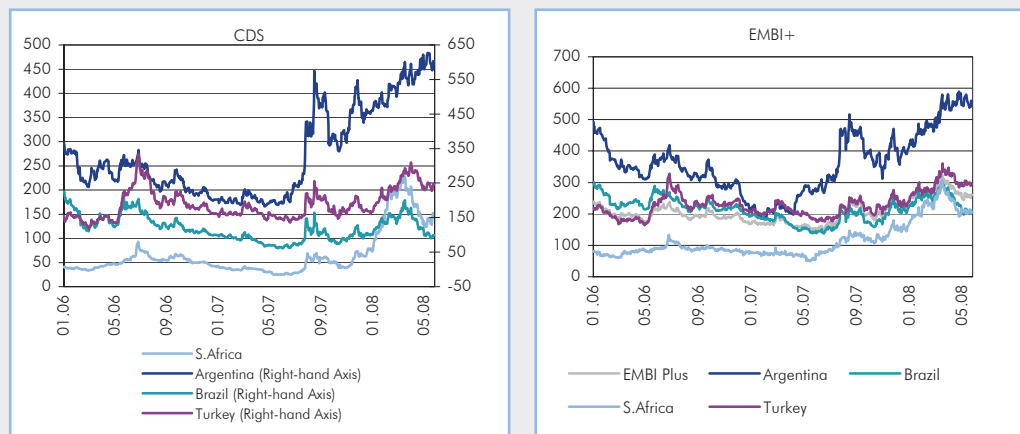


Source: Central Banks

It is observed at this point that the concerns of central banks of developed countries related to financial stability and economic growth are more evident. As a consequence, while the Fed has injected liquidity into the markets through new instruments in order to support the financial markets, it has also dropped its benchmark interest rate considerably. Following the Fed's approach, the BoE has also adopted an expansionary monetary policy, whereas the ECB and BoJ maintain their cautious stance with respect to monetary policy (Chart I.6). It is understood that the Fed's policy approach would lead to an inflation export to the rest of the world. Discrepancies in economic growth and inflation among Euro area countries also pose a challenge to ECB for the management of its monetary policy. On the other hand, projections related to the growth performance of developing countries are still relatively high contrary to those of developed countries. Although central banks of developed countries have loosened their monetary policy, developing countries have maintained and/or started to tighten their monetary policy stance (Chart I.6).

Disruptions and uncertainties in debt markets of developed countries still exist and majority of the liquidity needed can only be provided by central banks. Public authorities and private sector representatives emphasize that the uncertainties in global markets persist and therefore more comprehensive measures must be taken beyond liquidity injection into the markets by central banks. In addition to monetary policy measures in the US, fiscal policy measures such as tax deferrals and tax breaks, albeit limited, has been implemented in order to boost the economy. However, if the recovery from economic stagnation lasts longer than expected in the US, the global economy might face the danger of drifting towards stagnation.

**Chart I.7.**  
Risk Premia<sup>1,2</sup> and Credit Default Swap Spreads<sup>3</sup> of Selected Developing Countries (Basis Point)



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 21.43, Turkey's weight is 11.28, Argentina's weight is 3.07 and South Africa's weight is 1.72 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.

Developing countries, which have recently become more commercially and financially integrated with the global economy, would inevitably be affected by the unfavorable developments in developed countries. As a matter of fact, risk premiums of developing countries, including Turkey, have increased (Chart I.7).

Meanwhile, capital inflows towards developing countries continue and this presents a sustainable structure considering the weight of both portfolio and direct investments. This is mainly attributable to the growth performance of these countries, along with structural reforms and prudent economic policies that they have implemented recently.

However, aggravated global fluctuation increases the risks for developing countries. Instabilities in capital flows towards developing countries resulting from changes in investors' risk appetite or portfolio decisions are expected to worsen the already fragile economies. Within this framework, in order to maintain access to external resources on a stable basis and to prevent increases in risk premiums, it is critically important that the countries concerned maintain their fiscal and monetary discipline.

#### Box 1.

#### Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience

The Financial Stability Forum (FSF)<sup>1</sup> undertakes an analysis of the causes and weaknesses that have been emerged by financial turmoil and sets out recommendations for increasing the resilience of the financial system in its report dated April 7, 2008<sup>2</sup>.

The Forum highlighted the necessity of fair valuation practices as a prerequisite for liquidity conditions and the sound operation of credit mechanisms related to asset markets as well as the necessity of collaboration between financial institutions and independent auditing firms to improve the existing methods for disclosure and valuation of risks in the short-term. The Forum underlined the importance of close monitoring being maintained by supervisory authorities regarding whether the financial institutions' capital and liquidities are at an adequate level in the face of sudden risks and whether they could be increased when needed, and also indicated that central banks should continue to intervene in a coordinated, rapid and flexible manner when required.

In the medium-term, the Forum gave priority to the widespread implementation of Basel II risk framework and oversight; implementation of transparency, intra-day risk controls and stress tests as well as design of contingency funding plans in order to strengthen risk management standards for liquidity adequacy. In this framework, the report emphasizes the importance that large banks share their liquidity contingency plans with relevant central banks; supervisory authorities focus on the risk management capacity of financial institutions; and Basel II requirements are implemented with regard to off-balance sheet activities to ensure adequate management of risks within the financial system and to prevent arbitrage through off-balance sheet activities in high amounts.

"Originate-to-distribute models"<sup>3</sup> can be simply defined as transfer of risk, that is exposed by banks due their main intermediation function in the system (which is investing funds collected -mainly deposits- into credit business), out of balance sheet through methods like securitization.

In this regard, the Forum made recommendations on enhancing the standards for the origination, underwriting and insurance of the contract during the securitization process. At each stage of the securitization process, the role and use of credit ratings should be strengthened.

Contractors, insurers, credit rating agencies and investors in the process should be more transparent. Supervisory authorities should implement new regulations to encourage private sector initiatives for increasing access to information on underlying assets.

The Report also states that investors should not only rely on credit rating agencies while investing and that rating agencies should provide more information on structured products. Furthermore, the perfect awareness of risks by regulatory and supervisory authorities, improvement of coordination and enhancement of risk management capacity of the authorities are also elaborated in the report.

(1) Financial Stability Forum was convened in 1999 to promote international financial stability through information exchange and international co-operation. The Forum, bringing together the central banks of 12 countries, supervisory authorities and treasury departments as well as 11 international organizations, defines and assesses vulnerabilities affecting the international financial system and identifies actions needed to address these.

(2) Report of the FSF on Enhancing Market and Institutional Resilience Report, [http://www.fsf.org/publications/FSF\\_Report\\_to\\_G7\\_11\\_April.pdf](http://www.fsf.org/publications/FSF_Report_to_G7_11_April.pdf).

(3) "Originate to distribute" model, spreads the risks across the overall economy in response to banks' action to bundle their loans as a package and to sell them to other investors. All risks are transferred to other banks, insurance companies and investors with high leverage. These institutions are at the same time the major buyers of structured financial products and credit derivatives. Inability of close monitoring due to lack of transparency and possible liquidity squeeze derived by short-term funding of long-term investments are most significant weaknesses of this model.

## Box 2.

### The US Department of Treasury's Blueprint for Financial Regulatory Reform<sup>1</sup>

The process initiated by the US Department of the Treasury in March 2007 in order to improve the current supervisory structure of the country's financial services was released in March 2008.

The short-term recommendations made in the blueprint focus on improving cooperation among supervisory authorities and strengthening the oversight function of these authorities. The medium and long-term recommendations, on the other hand, aim to overcome certain dualities and complexities in the current US oversight and supervisory structure, especially to equip the existing supervisory structure to meet contemporary needs related to sub-segments of the financial services sector such as banking, insurance, securities and derivative transactions.

In this blueprint, the US Treasury envisages that the new supervision and oversight structure to be built would have an objectives-based approach and accordingly, it would require 3 different key authorities to serve for the following 3 main objectives:

- 1) Oversight and supervision of market stability (Market Stability Regulation)
- 2) Oversight and supervision of confidence and soundness of government-guaranteed activities (Prudential Regulation)
- 3) Oversight and supervision of conformity of commercial activities (Business Conduct Regulation)

In a general sense, the blueprint envisages expanding the Fed's authorities and functions related to regulation and supervision. Within this scope, it suggests that;

- a. The Fed should be the sole authority, as it currently is, to make regulations nationwide with respect to lending mortgage loans.
- b. Since non-depository financial institutions are important for market stability, the Fed's

regulations for the provision of liquidity should be expanded to cover these institutions as well and be made more transparent. Furthermore, liquidity should only be provided upon fulfillment of certain conditions and information needed by the Fed regarding borrowing institutions should be provided fully and timely.

c. Supervision of state-chartered banks with federal guarantee should be fully assigned to either the Fed or the FDIC (Federal Deposit Insurance Corporation).

d. For oversight and supervision of payment and settlement systems, a federal charter should be drawn up and the Fed should have primary oversight responsibilities for such systems.

Within the new oversight and supervision structure to be built, the Fed should be responsible for oversight and supervision of market stability; the to-be-established PFRA (Prudential Financial Regulatory Agency) should be responsible for the supervision of confidence in and soundness of government-sponsored financial services and the to-be-established BCRA (Business Conduct Regulatory Agency) should be responsible for the oversight and supervision of conformity of commercial activities by financial institutions.

(1) Blueprint for a Modernized Financial Regulatory Structure, The US Department of Treasury, March 31, 2008. <http://www.treas.gov/press/releases/reports/Blueprint.pdf>

## I.1.2. Balance of Payments

Table I.1. Balance of Payments (USD in Billions)

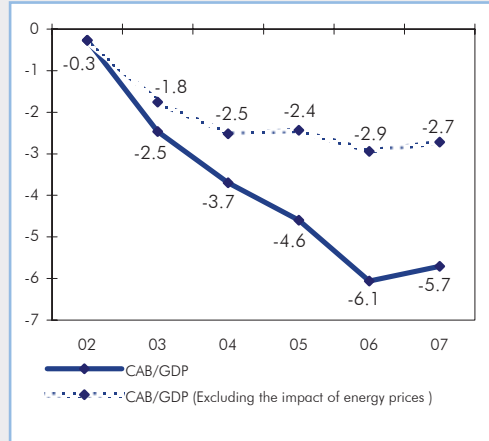
	2004	2005	2006	2007	Mar.08*
<b>CURRENT ACCOUNT</b>	<b>-14.4</b>	<b>-22.1</b>	<b>-31.9</b>	<b>-37.6</b>	<b>-40.4</b>
Foreign Trade Balance	-22.7	-33.0	-40.9	-46.7	-49.9
Total Exports of Goods	68.5	78.4	93.6	115.3	125.5
Total Imports of Goods	-91.3	-111.4	-134.6	-162.0	-175.4
Coverage Ratio (%)	75.1	70.4	69.6	71.2	71.6
Balance of Services	12.8	15.3	13.8	13.9	14.0
Balance of Income	-5.6	-5.9	-6.7	-6.9	-6.9
Current Transfers	1.1	1.5	1.9	2.2	2.4
<b>CAPITAL &amp; FINANCIAL ACCOUNT</b>	<b>13.4</b>	<b>20.3</b>	<b>32.1</b>	<b>36.5</b>	<b>40.4</b>
Foreign Direct Investments	2.0	9.0	19.0	19.9	15.8
Portfolio Investments	8.0	13.4	7.4	0.7	-5.1
Other Investments	4.2	15.8	11.8	23.9	31.3
Reserve Assets	-0.8	-17.8	-6.1	-8.0	-1.7
<b>NET ERRORS &amp; OMISSIONS</b>	<b>1.0</b>	<b>1.8</b>	<b>-0.2</b>	<b>1.1</b>	<b>0.0</b>

Source: CBRT

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

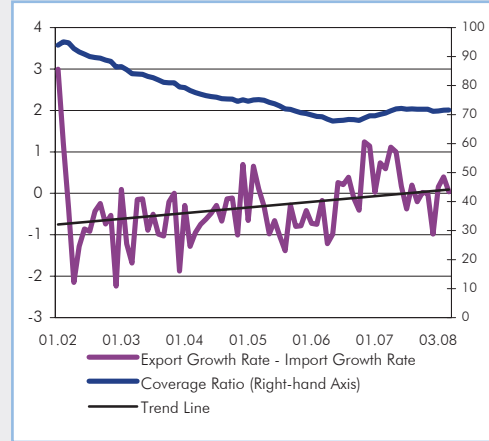
The annualized current account deficit, which did not display a significant change in the first half of 2007 compared to end-2006, started to climb from June 2007 onwards with the relatively higher pace of imports and became USD 40.4 billion as of March 2008. Meanwhile, the ratio of the current account deficit to GDP, which was 6.1 percent in 2006, dropped to 5.7 percent by end-2007. The same figures adjusted for energy prices would be 2.9 and 2.7 percent respectively (Table I.1, Chart I.8).

**Chart I.8.**  
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 2003-2007 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.

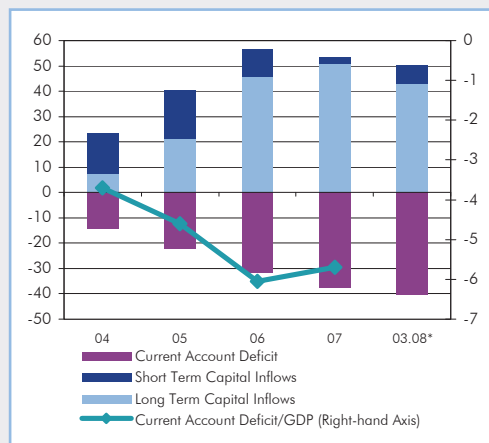
**Chart I.9.**  
Export-Import Growth Rates and The Coverage Ratio<sup>1</sup> (%)



Source: CBRT  
(1) Export and import growth rates are calculated on a monthly basis and cumulatively for the last 12 months. For instance, in January 2002 where the chart begins, total exports for the last 12 months increased by %1,1 vis-a-vis December 2001, whilst total imports decreased by %1,9 in the same period., which results in a difference of %3 in favor of exports.

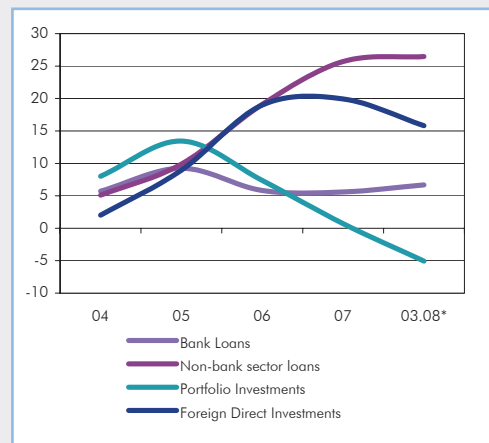
As for the foreign trade balance, as of March 2008 the annualized exports increased by 27.3 percent compared to the same period of last year and reached USD 125.5 billion, whereas imports, which displayed an increase of 25.4 percent in the same period, became USD 175.4 billion. Exports have displayed a faster year-on-year increase than imports since February 2007, which is considered a favorable development. Additionally, there is a trend in favor of exports for the last few years when the differences between the growth rates of 12-month cumulative exports and imports are analyzed on a monthly basis (Chart I.9).

**Chart I.10.**  
Current Account Deficit and Capital Inflows<sup>1,2</sup> (USD in Billions, %)



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.11.**  
Main Financing Items of the Current Account Deficit<sup>1,2,3,4</sup> (USD in Billions)



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.



Lower interest rates and favorable future expectations thanks to the macroeconomic stability attained in recent years have led to an increased demand for consumption and investment in Turkey. The structural characteristic of Turkey's economy has required the import of huge amounts of intermediate goods in order to meet the increased aggregate demand in the said period. The current account deficit, which has exhibited an upward trend since 2002 and aggravated further by rising energy prices, was mainly financed by long-term capital inflows (Chart I.10). The majority of these long-term capital inflows consist of long-term borrowings of the private sector from abroad and foreign direct investments (Chart I.11).

The external financing need arising from the current account deficit reached USD 40.4 billion as of March 2008; however, Turkey received a net capital inflow of USD 42 billion within the last 12-month-period. The fact that 37.6 percent of this amount was generated by direct investments, which is considered as non-debt creating capital inflows, is important for the quality and sustainability of the current account deficit financing. Meanwhile, particularly as a result of significant outflows in August and November 2007 due to the global turmoil, the share of portfolio investments in total financing converged to zero by the end of 2007 and became negative as of March 2008. The share of the "other investments" item comprising long-term external borrowings of the private sector and banks, in total financing increased in the same period (Chart I.11, Table I.2).

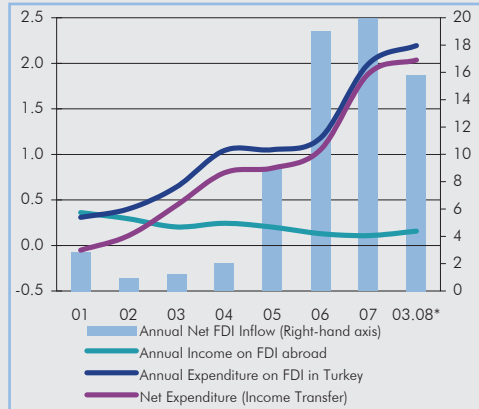
### **Box 3.** **Foreign Direct Investments and Income Transfers**

It is widely accepted by the international economics scholars that foreign direct investments (FDI) provide many benefits for developing countries such as technology transfer, improvement of the quality of employment and labor force, creation of a competitive business environment and the encouragement of institutionalization and thus contribute to economic growth.

The global liquidity surplus arising from the recent low course of interest rates especially in the markets of developed countries and increasing commodity prices, along with strong economic performance in developing countries and liberalization in investment policies and trade regimes led to increased direct investment in these countries. According to the United Nations Conference on Trade and Development (UNCTAD), foreign direct investment to developing countries, which was USD 212 billion in 2001, increased to USD 379 billion by the end of 2006.

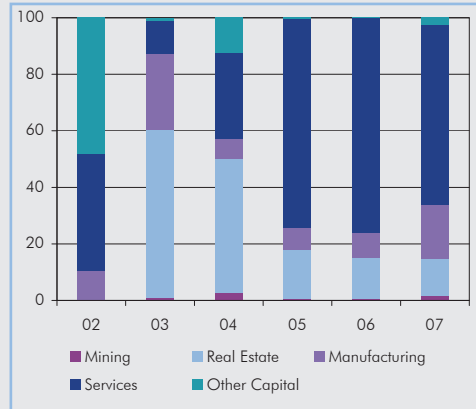
In line with the worldwide general trend, foreign direct investments displayed a significant rise in our country as well. Turkey, which received only USD 112 million net foreign direct investment in 2000, attracted approximately USD 20 billion in 2007. According to UNCTAD data, Turkey ranked 16th among countries that attracted the largest amount of foreign direct investment in 2006.

**Chart 1.**  
Foreign Direct Investments and Income Transfers (USD in Billions)



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

**Chart 2.**  
Sectoral Decomposition of Annual FDI Inflows (%)



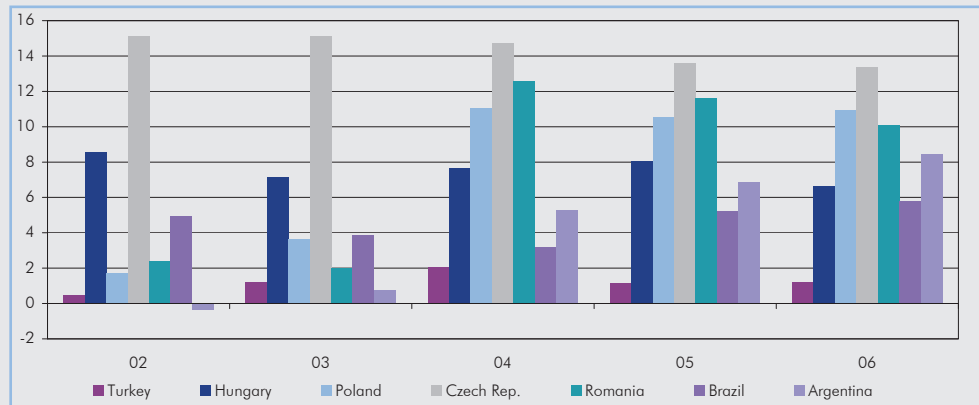
Source: CBRT

With the increase of foreign direct investments, the amount of income transferred abroad has become important. The annual net direct investment expenditure (i.e. income transfer), which was USD 180 million on average in the period 1990-2000, though translated to a low net income due to crises in 2000 and 2001, started to gain impetus again from 2002 onwards with the re-acceleration of direct investment inflows. Annual income transfer in the amount of USD 1.1 billion in 2006 reached USD 1.9 billion in 2007 (Chart 1).

Direct investment inflows that gained pace in 2006 particularly due to sizeable foreign acquisitions in telecommunications sector, maintained its high course in 2007 thanks to foreign purchases in the banking sector (Chart 1). The services sector accounted for 63.7 percent of foreign direct investments in 2007 (Chart 2).

An analysis of the ratio of annual income transfers to total FDI stock in the country suggests that income transfers from Turkey to abroad has remained quite low recently against some other developing countries receiving foreign direct investment (Chart 3).

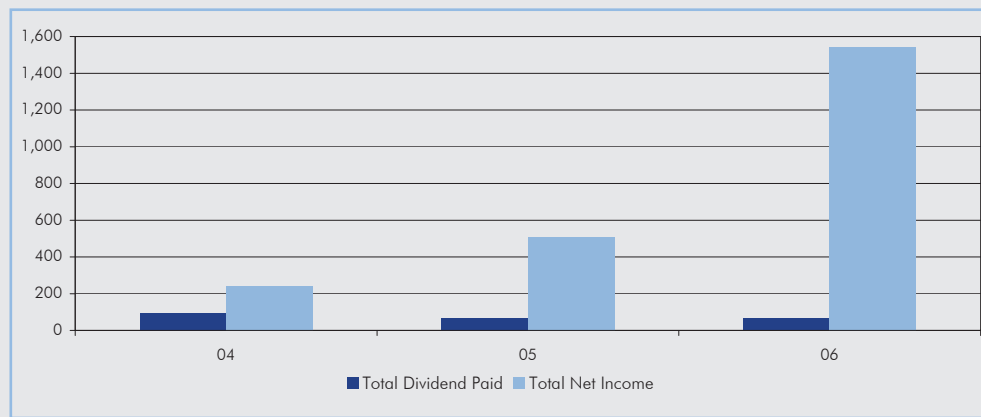
**Chart 3.**  
Ratio of Annual Income Transfers to FDI Stock in Selected Economies (%)



Source: UNCTAD

An analysis of foreign acquisitions in the banking sector, the most significant item of the services group, which has accounted for the largest part of recent foreign direct investments, indicates that foreign groups acquiring Turkish banks generally opt for increasing their equity capital and using them in domestic operations rather than transferring their income abroad (Chart 4). This strategy of foreign groups investing in the Turkish banking sector contributes to the promotion of competition in the financial services sector, the provision of firms and consumers with more credit facilities having more favorable terms and therefore to the development and deepening of the financial sector in Turkey.

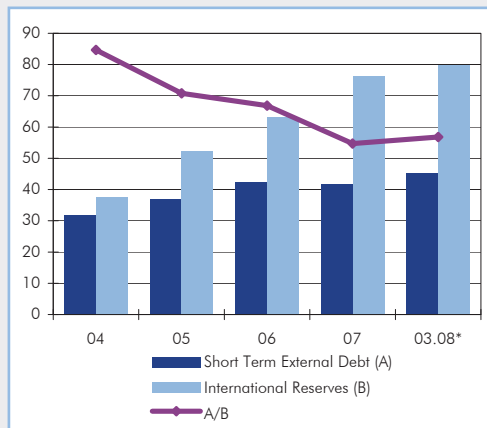
**Chart 4.**  
Annual Net Income and Dividend Payment Figures of Foreign Owned Deposit Banks  
(YTL in Millions)



Source: Banks' Independent Audit Reports

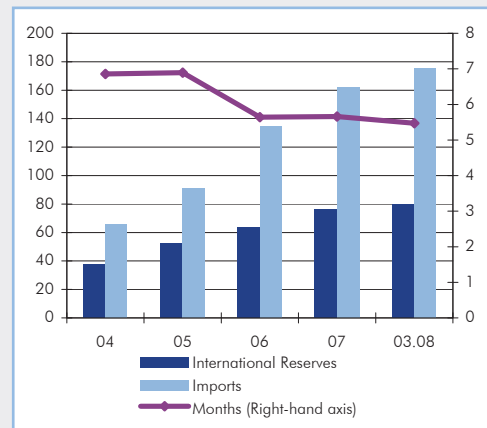
It is naturally expected that in any country, where foreign direct investments increase, income transfers generated by these investments are also boosted. But it is observed that income transfers from Turkey have remained limited so far.

**Chart I.12.**  
Short-Term External Debt<sup>1</sup> and International Reserves<sup>2</sup> (USD in Billions, %)



Source: Undersecretariat of 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.13.**  
Import Coverage Ratio of Reserves<sup>1,2</sup>  
(USD in Billions, 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 debt to international reserves, one of the indicators of external debt service capacity, which was 66.9 percent at the end of 2006, dropped to 54.7 percent by the end of 2007 owing to the continued rise in the Central Bank's international reserves and the drop in short-term debt stock. This ratio climbed as of March 2008 and became 56.8 percent (Chart I.12). The ratio of international reserves to total imports of a country indicates how long that country can provide inputs needed from external markets without depending upon any external support. Although this ratio dropped due to significant increases in imports recently, it remains above the minimum three-month-threshold acceptable by the IMF (Chart I.13).

**Table I.2. Parties Financing The Current Account Deficit (USD in Billions)**

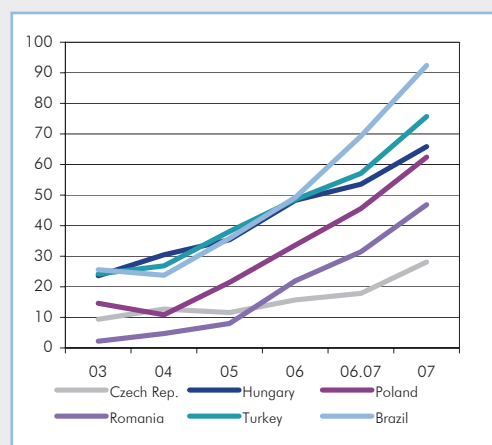
	2004	2005	2006	2007	Mar.08*
<b>Current Account Balance</b>	-14.4	-22.1	-31.9	-37.6	-40.4
<b>Finance Accounts</b>	13.4	20.3	32.1	36.5	40.4
General Gov. (incl. CBRT and CBRT Reserves)	2.4	-16.5	-2.9	-15.5	-14.0
Private Sector (incl. Banks)	11.0	36.8	35.0	52.0	54.3
<b>Net Errors and Omissions</b>	1.0	1.8	-0.2	1.1	0.0

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).

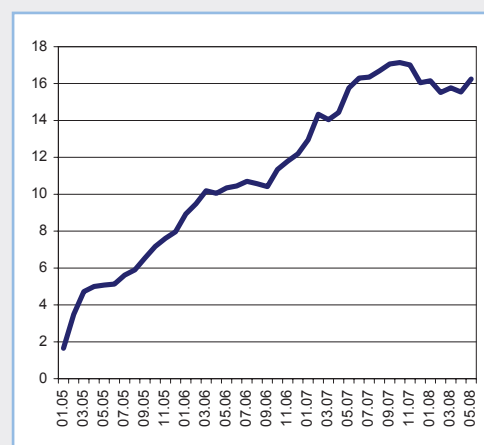
**Chart I.14.**  
Net Receivables of International Banks from Selected Countries<sup>1</sup> (USD in Billions)



Source: BIS

(1) Data for December 2007 are provisional.

**Chart I.15.**  
Net YTL-Denominated Bonds Issued by Foreigners (YTL in Billions)



Source: CBRT

Funds extended to developing countries by banks reporting to the Bank for International Settlements (BIS) continued to rise in 2007 despite global volatility. It is considered that there is no contraction in the credit supply to developing countries as the credit demand in such

countries mainly comes from the real sector and it is developed countries where the main lack of confidence in credit markets is experienced. Net receivables of international banks from Turkey reached USD 75.7 billion by the end of 2007(Chart I.14)

It is observed that YTL-denominated net bond issues of foreign banks, which displayed a downward trend due to global volatility after peaking in October 2007, have recently started to pick up (Chart I.15).

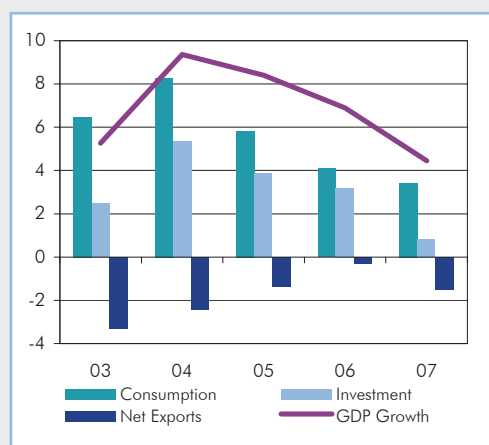
In conclusion, the current account deficit, the financing of which is highly sensitive to economic conjuncture, continues to expand due to the effect of high price hikes in energy. The impacts of global turbulence that made investors revisit their risk perceptions and investment preferences in international markets are not yet apparent. Therefore, risks stemming from the current account deficit remain significant given the fact that the effect of the turbulence on economic performance of developed countries may occur with a certain lag and have an impact on our country through various channels.

## I.2. Growth and Inflation

### I.2.1. Growth

In 2007, economic growth in Turkey continued to decelerate and became 4.5 percent.

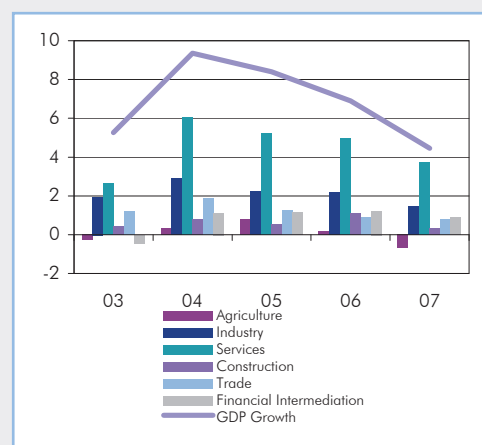
**Chart I.16.**  
Growth Rate and Its Composition<sup>1, 2</sup>  
(%, Points)



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.17.**  
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.

GDP growth remained below the expected 5-percent growth in 2007, owing to the slowdown in consumption expenditures of the public sector and investment expenditures of the private sector.

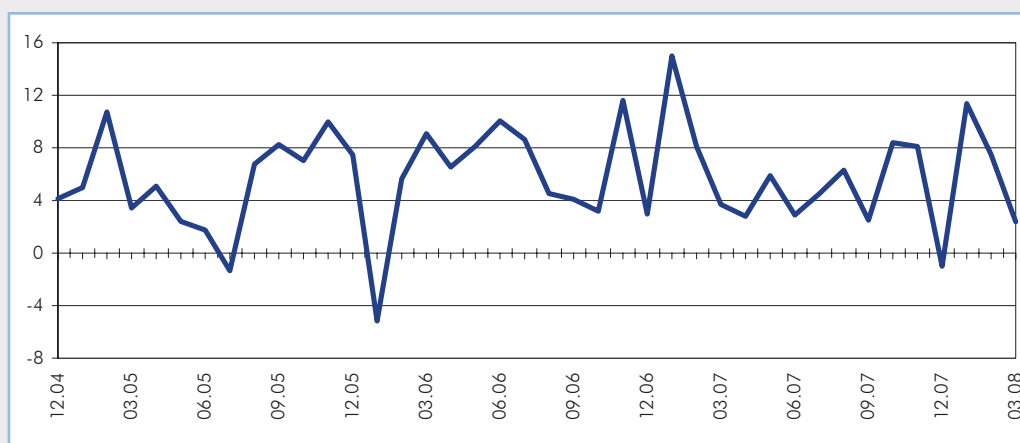
For the first time since 2002, the increase in investment expenditures lagged behind GDP growth, leading to a decline in the share of investments in growth. Meanwhile, net exports had a negative effect on growth in 2007, as the imports of goods and services increased more rapidly than the exports of goods and services (Chart I.16).

The household consumption expenditures item, which is the major expenditure component of the GDP, remained strong in 2007 with an increase of 4.6 percent, and contributed to growth by 3.2 percent with a mere decline of 0.1 percentage point. The rate of increase in public sector consumption expenditures decelerated by 5.7 percentage points in 2007 and declined to 2.8 percent, which stood as a factor putting pressure on growth (Chart I.16).

While investment expenditures of the private sector rose by 2.7 percent in 2007, those of the public sector increased by 7.6 percent. The contribution of investment expenditures to growth continued to decline, due to the high share of private sector investment expenditures in total investments (Chart I.16).

An analysis of the GDP by sectors with respect to production reveals that sectors, excluding agriculture, continued to contribute to growth in 2007, albeit at more moderate rates (Graph I.17). In 2007, production losses due to severe drought conditions in Turkey led to a contraction in the agricultural sector.

**Chart I.18.**  
Industrial Production Index (%)<sup>1,2</sup>



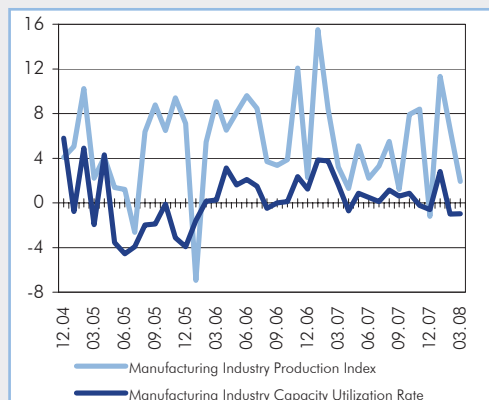
Source: TURKSTAT

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

Notwithstanding the ongoing slowdown in economic activity, industrial production increased by 6.9 percent in the first quarter of the year, owing to the low base effect of the first quarter of the previous year (Chart I.18).

The rate of increase in the first quarter average of manufacturing industry production, the share of which is 86.9 percent in the industrial production index, declined by 2.1 percentage points compared to the previous year and became 6.4 percent. In March 2008, the capacity utilization rate in the manufacturing industry decreased by 0.8 percentage points compared to the same month of previous year and became 81.2 percent (Chart I.19). According to the Manufacturing Industry Tendency Survey results, the shortfall of domestic demand still stood as the main reason for workplaces operating under capacity in March 2008.

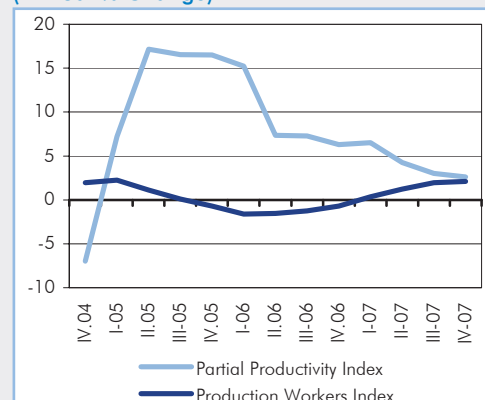
**Chart I.19.**  
**Manufacturing Industry Production and Capacity Utilization Rate<sup>1,2</sup> (%)**



Source: TURKSTAT

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

**Chart I.20.**  
**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.

The rate of increase in partial productivity per worker employed in the manufacturing industry declined to 2.7 percent in 2007 from 6.3 percent in 2006 due to the decline of the rate of increase in production to 4.8 percent as well as the 2.1 percent increase in the number of manufacturing sector workers in 2007 that had declined in 2006 (Chart I.20).

#### Box 4. Updates to National Income Calculations

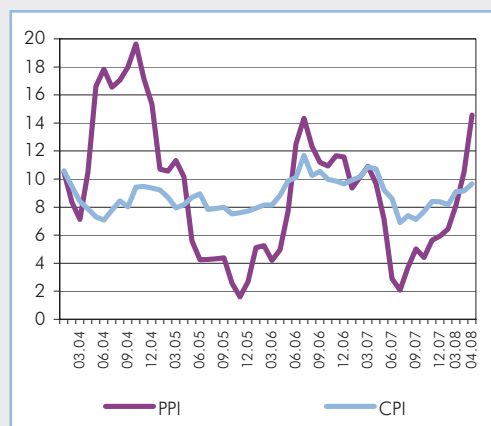
In order to improve the method, scope, consistency and international comparability of macroeconomic statistics of Turkey, TURKSTAT conducted studies for updating the System of National Accounts, and released the results of these studies on March 8, 2008. In this respect, the main changes are as follows:

- \* 1987 base year was replaced by 1998 base year.
- \* The United Nations System of National Accounts (SNA 68) was replaced by the European System of Accounts (ESA-95).
- \* The former series used to apply base-year prices in the estimations made with stable prices, whereas the new series uses average prices of the previous year.
- \* The number of houses, which was 13.9 million in the former series, became 19.2 million in the new series. Moreover, instead of the uniform imputed rent item used for owner-occupied households in the former series, the new series includes real rental cost, housing type and heating system details.
- \* The results of the 2002 General Census of Industry and Business Establishments and the related Structural Business Statistics Survey revealed an expansion of scope, and this expansion has been reflected on accounts.
- \* Imports and exports items, which were calculated according to the special trade system in the former series, have been calculated according to the general trade system in the new series.
- \* Economic activities such as Internet service providers, participation banks and private pension funds, which were not included in the former series, have been added to the scope of calculations.

Due to the updates and changes, some of which are listed above, the GDP increased by 34 percent in terms of current prices in the third quarter of 2007 compared to the former series, and became YTL 837.3 billion in annual terms.

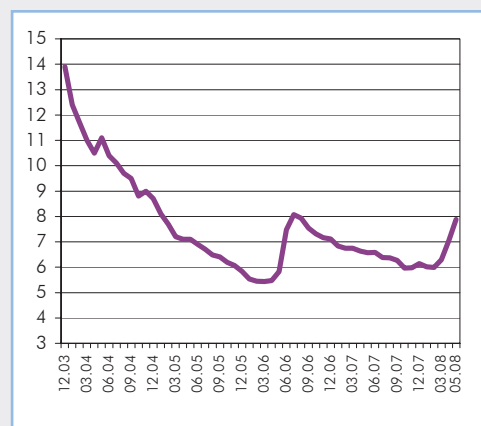
## I.2.2. Inflation

**Chart I.21.**  
Annual PPI and CPI Developments  
(Annual % Change)



Source: TURKSTAT

**Chart I.22.**  
12 Months Ahead CPI Expectations  
(Annual % Change)



Source: CBRT

Although annual Consumer Price Index (CPI) inflation, which was 9.65 percent in 2006, declined to 8.39 percent in 2007, the inflation target exceeded the 6 percent upper limit of the uncertainty band (Chart I.21). During this period, factors beyond the control of monetary policy, such as developments in oil, food and administered goods prices impeded the disinflation process. As a matter of fact, processed and unprocessed food prices increased at high rates in 2007 due to supply developments that were shaped mainly by drought conditions. Energy prices also increased at higher rates compared to the previous years. On the other hand, the decline in annual services prices throughout 2007 contributed to the marked slowdown in inflation, especially in the first half of the year. In the first quarter of 2008, unfavorable developments in food, oil and other commodity prices continued to affect inflation negatively, and annual CPI inflation, which had been 9.15 percent in March being stimulated also by the depreciation of the Turkish currency, rose to 9.66 percent in April.

Annual Producer Price Index (PPI) inflation, which is an important indicator for evaluating the cost-side effects on consumer inflation, dropped to 5.94 percent in 2007 from 11.58 percent in 2006 (Chart I.21). This decline was triggered by the decline in prices of durable goods and capital goods, which, can be attributed to the persisting effects of the monetary tightening, initiated in the second half of 2006. Meanwhile, no significant changes were observed in manufacturing industry prices in 2007 in general, excluding those of petroleum and food products. However, annual PPI inflation increased in the following months due to the increase in prices of agricultural, food and petroleum products, and reached 14.56 percent in April 2008.

Consumer inflation has been rising significantly all over the world since 2007. Being a net commodity importer, Turkey's inflation is negatively affected by the hikes in energy and metal prices. In addition, cumulative increases in food and energy prices impede the disinflation process. Against this background, the Central Bank has revised its energy and food price estimations and hence, its inflation forecasts, significantly upwards. Moreover, exchange rate movements and deterioration in risk perception negatively affect both inflation and inflation expectations, which has become apparent from a marked increase in medium-term inflation expectations in the recent period (Chart I.22).



### I.3. Public Finance

The consolidated government sector primary surplus remained YTL 11.5 billion below the program target in 2007, owing to the limited increase in tax revenues and higher-than-expected primary expenditures, which arose particularly from social security and health expenditures (Table I.3). Meanwhile, the ratio of primary surplus to GDP stood at 3.5 percent.

**Table I.3. Consolidated Government Sector Primary Surplus Targets and Realizations (Billion YTL)**

	2004	2005	2006	2007
Primary Surplus Target (including SEEs)	26.2	30.4	34.5	40.7
Primary Surplus Realization (including SEEs)	27.8	28.3	36.2	29.2
Realization/Target (%)	106	93	105	72

Source: Treasury

In 2007, central government budget revenues and primary expenditures increased by 9.3 and 17.1 percent, respectively. The ratio of expenditures covered by revenues declined by 4.2 percentage points compared to the previous year, due to the 14.3 percent increase in total expenditures (Table I.4). Despite the significant increase in primary expenditures, central government budget target has been achieved, as a result of the favorable performance of privatization and interest revenues as well as lower-than-expected interest expenses.

**Table I.4. Central Government Budget Performance (Bilion YTL)**

	2006	2007	Chng. (%)	2007 Budget Target	Jan.-April 2007	Jan.-April 2008	Chng. (%)	2008 Budget Target	Real./Annual Real. (Jan.-April 2007) (%)	Real./Budget Target (Jan.-April 2008) (%)
Expenditures	178.1	203.5	14.3	205.0	65.8	70.2	6.7	222.6	32.3	31.5
Primary Expenditures	132.2	154.8	17.1	152.0	46.8	52.3	11.8	166.6	30.2	31.4
Revenues	173.5	189.6	9.3	188.2	60.4	64.8	7.2	204.6	31.9	31.7
Reven. to Expend. (%)	97.4	93.2	-	91.8	91.8	92.2	-	91.9	-	-
Budget Deficit	-4.6	-13.9	202.2	-16.8	-5.4	-5.4	0.0	-18.0	38.8	30.3
Primary Surplus	41.3	34.8	-15.7	36.1	13.7	12.5	-8.8	38.0	39.2	32.8

Source: Ministry of Finance

In the first four months of 2008, expenditures increased by 6.7 percent compared to the same period of 2007, while revenues rose by 7.2 percent. The ratio of expenditures covered by revenues increased compared to the same period of the previous year, and reached 92.2 percent, due to revenues increasing at a higher rate than expenditures. Although the 11.8 percent rise in primary expenditures had a boosting effect on expenditures, the 5.9 percent decline in interest expenses helped restrain this effect. A detailed analysis of primary expenditures reveals that increases in personnel expenditures and current transfer items played a significant role in the increase in primary expenditures. The increase in current transfers resulted mainly from social security transfers and expenditures that increased due to early

payments of agricultural subsidies. Meanwhile, expenditures on purchases of goods and services increased at a moderate rate, mainly owing to the decline in health expenditures.

The increase in revenues was triggered particularly by the 21.4 percent increase in tax revenues. In the first four months of 2008, the rate of increase in tax revenues almost doubled the rate of increase in non-interest budget expenditures. Analyzed in terms of tax types, it is observed that the highest increases were recorded in corporate tax with 40.8 percent, VAT on imports with 26.9 percent and income tax with 26.3 percent. Non-tax revenues, which decreased by 38.2 percent in the first four months of 2008 due to the base effect arising from the revenue obtained from the sale of Turk Telecommunications Inc. in March 2007, restrained the increase in budget revenues. Parallel to these developments, the central government budget primary surplus decreased by 8.8 percent compared to the same period of the previous year and became YTL 12.5 billion, whereas the budget deficit remained stable at YTL 5.4 billion.

#### Box 5. Medium-Term Fiscal Framework

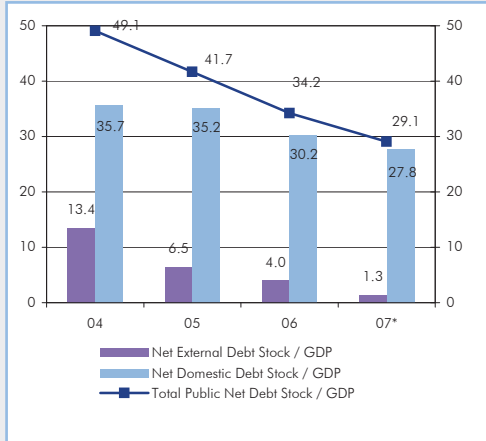
The Government has announced a Medium-Term Fiscal Framework to be implemented in the next five-year period, following the termination of the stand-by agreement with the IMF on May 11, 2008. In this framework, some of the targets for 2008 have been revised. Within this scope, the primary surplus target, which was realized at 3.5 percent in 2007 and projected to be 4.2 percent in 2008, has been revised as 3.5 percent of GDP. At the same time, the ratio of central government budget deficit to GDP, which was targeted to be 1.9 percent, has been reduced to 1.4 percent. In addition, it was announced that a primary surplus policy consistent with the target ratio of medium-term public debt stock to GDP would be implemented in the new period. It was also clarified that the revisions for 2008 are essentially triggered by the change in macroeconomic targets as well as the changes in policies influential on central government budget revenues and expenditures, and that the revisions are aimed at accelerating the employment reform package, the local administrations reform and the investments in the GAP project (Southeastern Anatolian Project).

**Table 1. Medium-Term Financial Framework (As a percentage of GDP)**

	2007	2008	2009	2010	2011	2012
Total Public Primary Surplus Ratio	3.5	3.5	3.0	2.7	2.5	2.4
Central Government Budget	2.5	2.7	2.3	2.0	1.7	1.7
Other Public	1.0	0.8	0.7	0.7	0.8	0.7
Central Government Budget Balance	-1.6	-1.4	-1.4	-1.3	-1.7	-1.6
Central Government Budget Revenues	20.6	20.4	20.4	20.3	20.2	20.0
Central Govern. Budget Primary Expenditures	18.1	17.7	18.1	18.3	18.5	18.3
Privatization Revenues	0.8	1.2	1.0	0.7	0.5	0.2
EU-Defined Gross Public Debt Stock	38.8	37.0	35.0	33.0	31.0	30.0

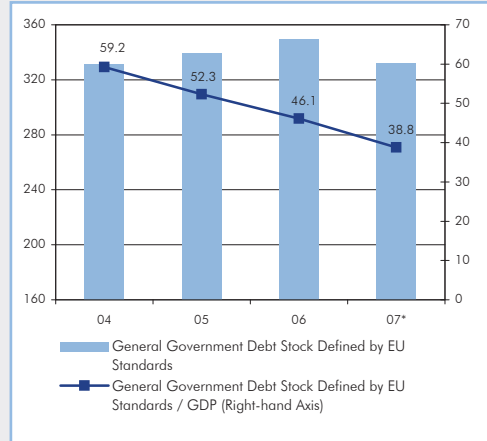
Source: MOF

**Chart I.23.**  
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 are provisional.

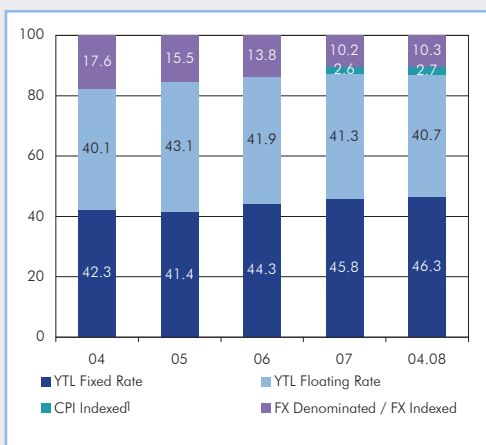
**Chart I.24.**  
General Government Nominal Debt Stock Defined by EU Standards<sup>1</sup> (% , Billion YTL)



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

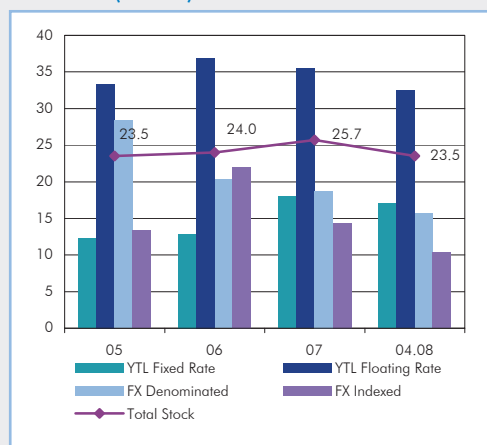
The ratio of public sector net debt stock to GDP continued to fall and stood at 29.1 percent by end-2007. This fall primarily stemmed from the rise in net assets of the unemployment insurance fund, the hike in the GDP and the decline in gross debt stock (Chart I.23). The decrease in YTL equivalent of foreign currency debts due to the parity effect was influential in the decline of public sector gross debt stock. The general government nominal debt stock to GDP ratio, as defined by the EU, continued to decrease (Chart I.24).

**Chart I.25.**  
Composition of Domestic Debt Stock (%)



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

**Chart I.26.**  
Maturity Structure of Government Debt Securities (Month)<sup>1</sup>



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

As to the composition of domestic debt stock, the share of debt stock sensitive to the exchange rate declined in 2007, whereas it displayed a limited increase as of April 2008. This development stemmed from the recent depreciation of the Turkish currency. The share of

floating-rate government securities also decreased at end-2007. As of April 2008, the decrease in this share continued, which points to a decline in the sensitivity of domestic debt stock to interest rate risk (Chart I.25). The financing program of the Treasury for the year 2008 projected that no FX-indexed securities will be issued, the FX-denominated domestic debt roll-over ratio will not exceed 60 percent and YTL borrowings will be made primarily with fixed rate instruments. Hence, the downward trend in the share of debt stock sensitive to exchange and interest rate risk is expected to continue.

The average maturity of government securities extended to 25.7 months by end-2007, whereas it declined to 23.5 months as of April 2008 (Chart I.26).

**Chart I.27.**  
Government Debt Securities by Holders<sup>1,2,3</sup> (%)



Source: BRSA - CBRT

(1) Based on nominal amounts.

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

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

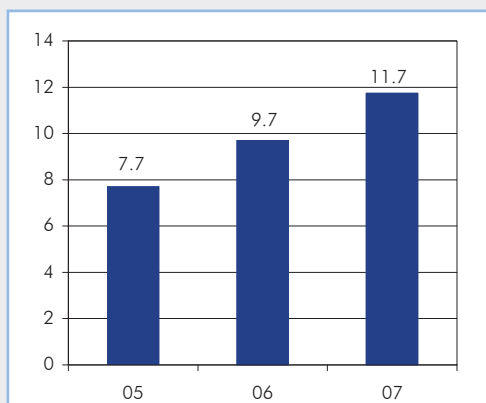
A large portion of total government securities is owned by banks, thus comprising a major part of banking sector assets. As of April 2008, the share of banks increased, whereas that of non-residents continued to decline (Chart I.27).

## I.4. Private Sector Developments

### I.4.1. Households

Household borrowings from the financial sector continued to increase in 2007 as well. The ratio of total household liabilities to GDP rose to 11.7 percent in 2007 from 9.7 percent in 2006 (Chart I.28). The portion of household consumption expenditures financed with retail loans, excluding housing loans, increased to 11.2 percent in 2007 from 9.4 percent in 2006 (Chart I.29).

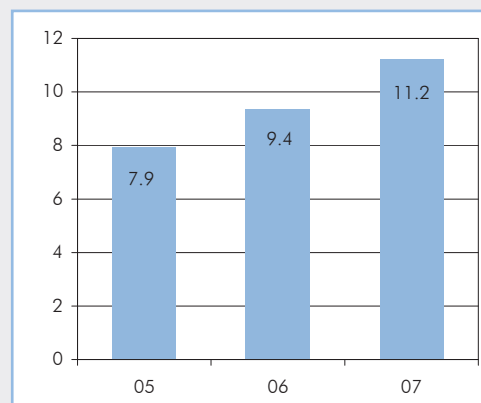
**Chart I.28.**  
Household Liabilities to GDP (%)<sup>1</sup>



Source: CBRT-BRSA, TURKSTAT

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

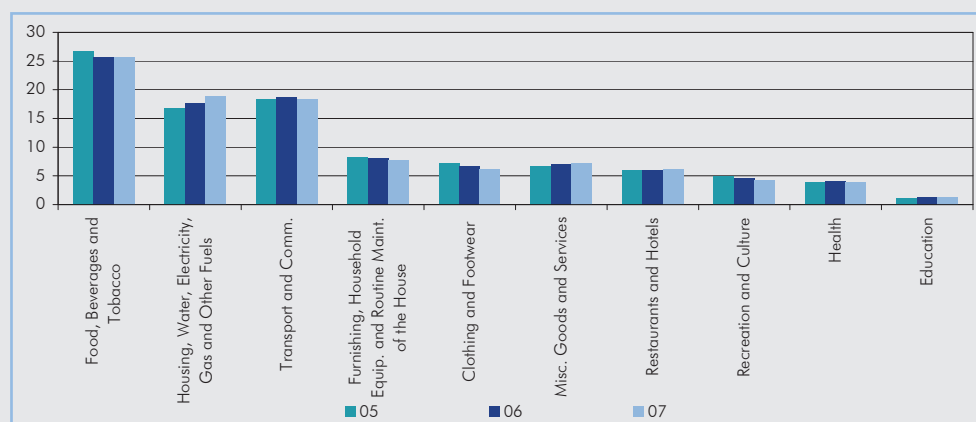
**Chart I.29.**  
Retail Loans to Household Consumption Expenditures (%)<sup>1</sup>



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.

**Box 6.**  
Decomposition of Final Consumption Expenditures<sup>1</sup> (%)



Source: TURKSTAT

(1) Final consumption expenditures consist of domestic final consumption expenditures of resident and non-resident households.

The Turkish Statistical Institute (TURKSTAT) announced the new national income series compatible with the European System of Accounts (ESA-95) on March 8, 2008. TURKSTAT has made important changes in the method and scope of the new series calculations with base year 1998. Being one of the GDP expenditure items, the Private Final Consumption Expenditures item is now calculated with a different method within the new series calculation, as well. Each expenditure item in the series with base year 1987 shows the expenditures of resident households, whereas expenditure components in the series with base year 1998 show the expenditures of residents and non-residents in Turkey. The final consumption expenditures of residents are calculated by adding the expenditures residents made abroad and deducting the domestic expenditures of non-residents from the expenditures of residents and non-residents in

Turkey. Private final consumption expenditures are examined in six separate sub-categories in the series with base year 1987, while they are separated into ten sub-categories in the series with base year 1998.

The largest share in the decomposition of final consumption expenditures, which amount to YTL 632.7 billion according to the new series, belongs to expenditures on Food, Beverages and Tobacco with 25.8 percent, followed by Housing, Water, Electricity, Gas and Other Fuels with 18.9 percent and expenditures on Transportation and Communication with 18.4 percent. The total share of these three main items of expenditure is 63.1 percent. The decomposition of household expenditures did not change significantly in 2007 compared to 2006, except for the Housing, Water, Electricity, Gas and Other Fuels item, which increased from 17.7 percent in 2006 to 18.9 in 2007.

The ratio of household interest payments to disposable income and the ratio of total household debt to disposable income, which are indicators of households' repayment capacity, also increased in 2007 compared to 2006 and became 4.6 percent and 29.5 percent, respectively (Table I.5).

**Table I.5. Household Disposable Income, Indebtedness and Interest Payments<sup>1,2</sup> (Million YTL)**

	2004	2005	2006	2007
Household Interest Payments	7,219	10,209	12,109	15,576
Household Debt	28,073	50,033	73,537	100,564
Household Disposable Income	218,752	255,640	292,775	340,786
Interest Payments / Disposable Income (%)	3.3	4.0	4.1	4.6
Debt / Disposable Income (%)	12.8	19.6	25.1	29.5

Source: BRSA-CBRT, TURKSTAT, SPO

(1) Household debt consists of gross consumer credits and credit card balances extended by banks (excluding participation banks for 2004) and consumer finance companies.

(2) Household disposable income for 2006 and 2007 are calculated by using private sector disposable income estimation for 2006 and 2007 which are mentioned in the 2008 Annual Programme, under the assumption that the 2005 ratio of household disposable income to private sector disposable income has not changed.

Meanwhile, the number of consumer loan and credit card defaulters remarkably increased as of the first quarter of 2008 compared to the same period of 2007, partially due to the removal of the minimum notification limit in defaulted individual credits and credit cards as of October 2007 (Table I.6).

**Table I.6. Number of Non-Performing Consumer Loan Borrowers and Credit Card Holders<sup>1</sup>**

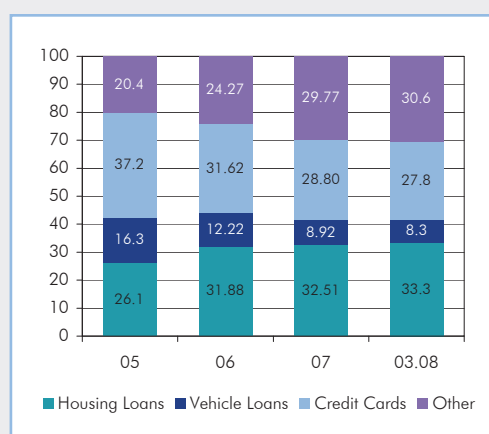
	I-07	I-08
Non-Performing Credit Card Holders	74,316	139,895
Non-Performing Consumer Loan Borrowers	12,649	32,927

Source: CBRT

(1) It indicates the number of borrowers of consumer loans and credit cards that have been transferred to the NPL accounts of banks and reported to the Risk Center as non-performing consumer loans and credit cards as of the first quarters of the 2007 and 2008.

When the development of household debt is analyzed in terms of debt types, it is observed that despite the 39.4 percent increase in housing loans in 2007 compared to 2006, the share of housing loans in total loans displayed only a limited increase due to the 67.6 percent rise in other loans, and the share of other loans rose to 29.8 percent from 24.3 percent, whereas the share of automobile loans and credit card balances declined (Chart I.30). As of March 2008, no significant change was observed in the decomposition of loans compared to end-2007. While the asset in housing and automobile loans is directly accepted as collateral, other retail loans with a share of 58.4 percent are not collateralized with any tangible assets. However, as such loans are generally extended to wage earners against guarantees, it can be said that the credit risk is not higher than that of housing and automobile loans.

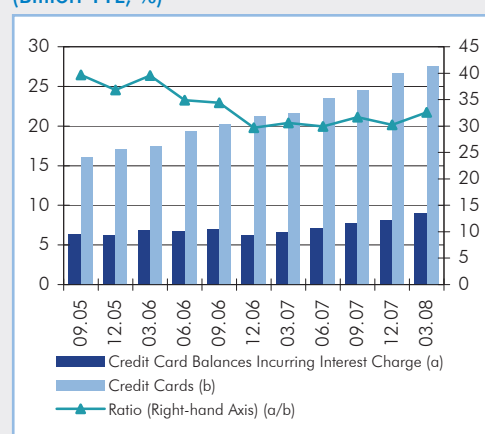
**Chart I.30.**  
Decomposition of Household Debt (%)<sup>1</sup>



Source: BRSA-CBRT

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

**Chart I.31.**  
Credit Card Balances of Deposit Banks and Balances That Incur Interest Charge (Billion YTL, %)

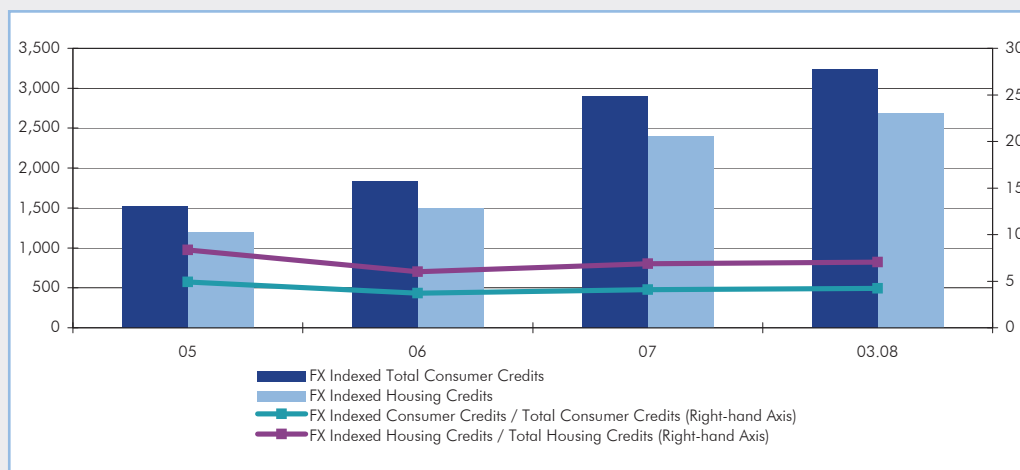


Source: CBRT

Despite its declining share in the financial liabilities of households, credit card balances continue to increase. Credit card balances incurring interest charges rose to YTL 8.9 billion as of March 2008 from YTL 6.4 billion in September 2005 (Chart I.31). However, while the portion incurring interest charges was 39.7 percent of the credit card balance in 2005, it declined to 32.6 percent in 2008.

Regarding consumer loans in Turkey, floating-rate is only applicable to housing loans. However, the share of such loans is extremely low, limiting the interest rate risk of households. The ratio of FX-indexed consumer loans to total consumer loans increased to 4.1 percent at end-2007 from 3.7 percent at end-2006, and did not display any significant change as of March 2008. On the other hand, the share of FX-indexed housing loans in total housing loans, which was 6 percent as of end-2006, rose to 6.9 percent as of end-2007 and reached 7 percent in March 2008 (Chart I.32). Notwithstanding its low share in retail loans, the increase in FX-indexed consumer loans reinforces the exchange rate risk of households. Therefore, it is obvious that households without foreign exchange income should avoid borrowing in FX.

**Chart I.32.**  
**FX Indexed Total Consumer Credits and FX Indexed Housing Credits (Million YTL, %)<sup>1,2</sup>**



Source: CBRT-BRSA

(1) FX indexed credit information for consumer finance companies cannot be obtained.

(2) NPLs are excluded.

Total financial assets of households, which increased by 12 percent in 2007 and reached YTL 313.4 billion, stood at YTL 333.9 billion as of March 2008 (Table I.7).

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

	2005		2006		2007		03.08	
	Billion YTL	% Share	Billion YTL	% Share	Billion YTL	% Share	Billion YTL	% Share
YTL Deposits	90.4	41.2	113.6	40.6	142.5	45.5	154.7	46.3
FX Deposits	59.8	27.2	75.0	26.8	78.5	25.0	87.4	26.2
FX Deposits (Billion USD)	44.5	-	53.4	-	67.0	-	69.4	-
Currency in Circulation	18.3	8.3	24.7	8.8	26.2	8.4	26.7	8.0
GDDS+Eurobond	32.6	14.9	28.2	10.1	19.6	6.3	20.7	6.2
Mutual Fund	-	-	17.5	6.3	22.6	7.2	23.2	6.9
Stocks	15.7	7.2	15.8	5.6	17.5	5.6	14.1	4.2
Private Pension Funds	1.2	0.5	2.9	1.0	4.6	1.5	4.8	1.4
Repos	1.5	0.7	2.0	0.7	1.9	0.6	2.3	0.7
<b>Total Assets</b>	<b>219.5</b>	<b>100.0</b>	<b>279.7</b>	<b>100.0</b>	<b>313.4</b>	<b>100.0</b>	<b>333.9</b>	<b>100.0</b>

Source: BRSA-CBRT, CMB, CRA

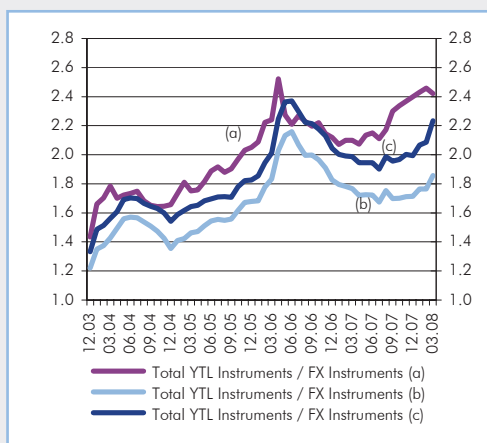
(1) YTL and FX deposits includes participation funds.

The share of savings deposits, which has the largest share in household assets, continued to grow and reached 46.3 percent as of March 2008. The share of savings deposits in total deposits also increased to 63.9 percent as of March 2008, parallel to the declining share of FX deposits due to the parity effect (Table I.7).



When adjusted according to the exchange rate and parity effect, the ratio of total Turkish currency instruments to foreign currency instruments started to increase especially as of the last quarter of 2007 (Chart I.33). Meanwhile, the ratio of household financial liabilities to financial assets rose to 32.2 percent as of March 2008, due to the rise in retail loans (Chart I.34).

**Chart I.33.**  
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)

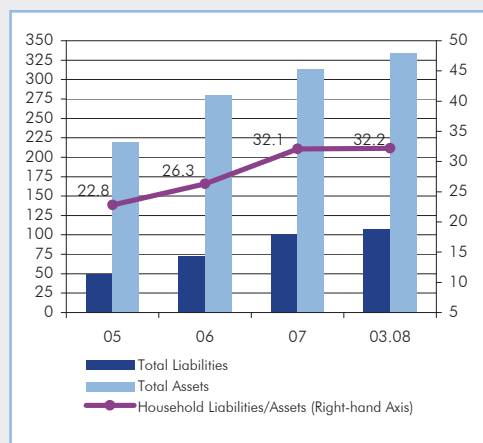
FX Instruments = FX Deposits + Gov. Dom. Debt Sec. + Eurobond + Participation Funds (FX)

(a) Current YTL value of FX deposits and Participation Funds (FX).

(b) For FX deposits and Participation Funds (FX), exchange rate prevailing on 31.12.2002 is used.

(c) For FX deposits and Participation Funds (FX), exchange rate prevailing on 31.12.2002 is used and the parity effect is eliminated

**Chart I.34.**  
Households' Financial Assets and Liabilities (Billion YTL, %)<sup>1</sup>



Source: BRSA-CBRT, CMB, CRA

(1) Household Assets = Savings Deposit + FX Deposit + Money in Circulation + Gov. Dom. Debt Sec. + Eurobond + Repos + Stocks + Pension Funds + Mutual Funds (starting from April 2006)

Household's Liabilities consists of gross consumer credits and credit card balances extended by banks and consumer finance companies.

The ratio of household liabilities to GDP, which is an indicator of access to financial services, and the ratio of debt and interest payments to disposable income are also on the rise in Turkey. Nevertheless, these ratios are still well below the averages of EU countries.

### Box 7. Employment in Turkey and the Employment Package

The Turkey Labor Market Study<sup>1</sup> issued by the World Bank in April 2006 outlines a comparison of growth and employment figures in Turkey, Ireland, Spain, France, Greece, Portugal, South Korea, Mexico, Argentina and Brazil in the period between 1981 and 2003. In terms of growth performance, Turkey ranks third following Ireland and South Korea, while it ranks seventh in terms of employment figures.

The GDP growth of Turkey has been 4.3 percent on average in the 1987-1997 period. During the same period, annual average unemployment rates stood at 8 percent. While the annual average rate of GDP growth was 4.1 percent in the 1998-2007 period, the annual average rate of unemployment became 9 percent. As for the 2002-2007 period, the annual average rate of GDP growth and the average rate of unemployment stood at 6.9 percent and 10.2 percent, respectively.

According to the results of the household labor force study by TURKSTAT, the non-institutional civil population<sup>2</sup> is 69 million 372 thousand as of February 2008. While 49 million 672

thousand of this population are aged 15 and over, 22 million 804 thousand people are included in the labor force. 20 million 162 thousand of the labor force are employed. Hence, participation in the labor force in Turkey is 45.9 percent, the employment rate is 40.6 percent and the unemployment rate is 11.6 percent.

**Table 1. Employment According to Field of Economic Activity (Thousand Person, %)**

	2006	2007	Feb.07	Feb.08
Employed	20,954	21,189	20,058	20,162
Unemployed	2,295	2,333	2,587	2,642
Unemployment Rate	9.9	9.9	11.4	11.6
Agriculture	5,713	5,601	5,003	4,751
Industry	4,135	4,185	4,074	4,285
Construction	1,189	1,224	943	1,020
Services	9,918	10,180	10,040	10,105

Source: TURKSTAT

As of February 2008, of those employed, 50 percent work in the services sector, 24 percent work in the agricultural sector and 21 percent work in the industrial sector. Even though the share of agricultural sector in employment is declining, it is still above the averages of OECD and EU countries.

The above-mentioned study of the World Bank underlines the high level of non-wage costs, such as taxes and insurance premia, and qualifies this situation as a potential restraining factor on employment.

Law No. 5763, which is also known as the employment package by the public and was drafted with the aim of providing a solution to the unemployment problem in the medium term, was published in the Official Gazette on May 26, 2008 and put into effect.

One of the most important objectives of this Law is to encourage the employment of the youth and women by alleviating the administrative and financial burdens on employment. According to the law, the Social Security premia of the youth aged 18-29 and women aged 18+ to be newly employed will be gradually covered by the unemployment insurance fund for a period of 5 years, and the 5-point portion of the employers' share in disability, old-age and survivors insurance premia will be undertaken by the Treasury. In addition, the liability of the private sector to employ the disabled has been reduced from 6 percent of the total number of employees to 3 percent, and the liability to employ ex-convicts has been eased. Another objective of this Law is to realize vocational training projects required for a more qualified labor force, by resorting to resources allotted from the unemployment fund.

(1) World Bank, Turkey Labor Market Study, April 2006.

(2) Non-Corporate civil population refers to all the population excluding the residents of schools, dormitories, hotels, kindergartens, rest homes for elderly people, hospitals, prisons, military barracks or recreation quarters for officers.

## 1.4.2. Corporate Sector

### 1.4.2.1. Financial Analysis of Firms

As it is known, the most comprehensive data set concerning the corporate sector is Company Accounts, which is published by the Bank and used in our former reports. However,

since this data set is published once a year, it becomes necessary to find an alternative and to update the data set to use in the financial analysis of the corporate sector. Therefore, in this volume of the report, the financial statements of 192 companies, which have been continuously traded on the ISE between 2005-2007, but which are not financial entities or do not include any financial institutions in their consolidated financial statements, are analyzed. Of these 192 companies, 146 are manufacturing companies.

However, companies listed on the ISE are large companies, which have high export opportunities and many funding alternatives other than banking credits, such as capital markets and their shareholders equity is relatively stronger. Therefore, it should be taken into consideration that these companies' financial indicators can differ from the indicators of the whole corporate sector. Moreover, when the data of companies listed on the ISE is distributed according to subsectors, it should be noted that some concentrations occur within specific sectors and thus sectoral advantages/disadvantages may be reflected in the ratios.

**Table I.8. Financial Ratios (%)<sup>1</sup>**

	All Companies			Manufacturing Comp.		
	2005	2006	2007	2005	2006	2007
<b>Leverage and Capital Structure Ratios</b>						
Leverage Ratio	44.7	48.5	46.4	43.0	47.5	46.4
Equity / Total Debt	116.4	100.5	110.5	125.8	105.2	111.7
Short-Term Liabilities / Total Assets	30.9	32.5	31.9	30.2	32.2	31.5
Financial Debts / Total Liabilities	31.0	32.1	29.4	33.4	37.4	34.1
Financial Debts / Total Assets	13.9	15.6	13.7	14.4	17.7	15.8
Financing Expenses / Total Assets	1.4	2.2	1.7	1.2	2.1	1.3
Financing Expenses / Sales Revenue	1.2	1.9	1.4	0.9	1.6	1.0
Interest Coverage Ratio (Times)	6.3	4.7	7.5	7.3	4.9	9.1
<b>Liquidity Ratios</b>						
Current Ratio	142.8	143.4	149.5	154.6	152.1	152.3
Liquidity (Acid Test) Ratio	106.7	106.2	112.8	111.2	108.3	107.3
Cash Ratio	33.3	32.9	36.3	29.0	27.0	25.3
<b>Profitability Ratios</b>						
Net Profit / Assets (ROA)	5.6	6.8	8.7	5.5	7.3	8.5
Net Profit / Equity (ROE)	10.8	13.9	16.9	10.2	14.6	16.4
<b>Turnover Ratios</b>						
Inventory Turnover Ratio (Cost of Sales/Aver. Invent.)	-	8.2	7.3	-	7.9	6.9
Receivables Turnover Ratio (Net Sales/Trade Receiv.)	7.7	7.5	7.7	7.6	7.2	7.4
Asset Turnover Ratio (Net Sales/Total Assets)	1.2	1.2	1.2	1.3	1.3	1.3

Source: ISE

(1) "Minority Interests" of the companies which prepare consolidated financial tables according to the full consolidation method are not included in equity.

High levels of liquidity ratios indicate that the liquidity risk is manageable and that firms have the financial capability to repay their short-term debts. Nevertheless, the acid test ratio

of manufacturing firms and the cash ratio, which shows how these firms use working capital, have been declining since 2005. Moreover, it is seen that the inventory turnover ratio declined in the said period. In other words, the stock-keeping duration for goods/services produced has extended, whereas the collection process for receivables has shortened due to the increase in the receivables turnover ratio (Table I.8).

In 2007, contrary to the previous year, the share of equities increased, while the leverage ratio declined. It is believed that the said decline resulted both from the slowdown in borrowing rates of firms in line with the loss of pace in domestic demand and the decline in foreign currency financial borrowing of firms due to the appreciation of Turkish lira (Table I.8).

Meanwhile, despite the upsurge in equities, the remarkable upward trend in the return on equity (ROE) of firms continued, reaching 16.9 percent in 2007. Return on assets (ROA) rose to 8.7 percent at end-2007 (Table I.8). The decline in financing expenses was instrumental in the rise in profitability, despite the limited increase in gross sales. The interest coverage ratio, which is the ratio of earnings before interest and tax to financing expenses, was 7.5 in 2007 for all firms, following a fall in 2006. Especially in the manufacturing industry, the decline in the ratio of financing expenses to assets and the rise in the interest coverage ratio indicate that the debt service capacity of firms is high.

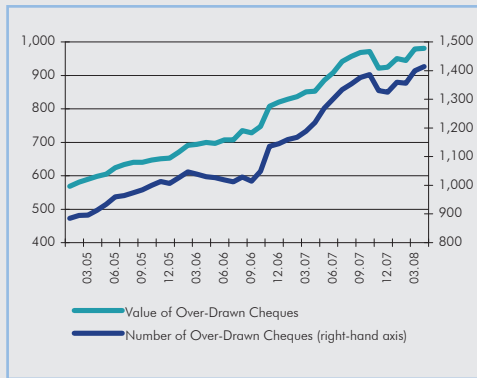


The CBRT Business Tendency Survey ,and Real Sector Confidence Index prepared to determine general tendencies in cyclical developments and provide economic decision making units with necessary information on future expectations, dropped by 2.5 points in May 2008 in comparison to the previous month and became 100.7 percent. Upon analyzing the factors creating the index, it is seen that expectations regarding export orders over the next three months, current overall orders, and the general business situation have an increasing effect on the index. Meanwhile, volume of output over the next three months, current amount of stocks of finished goods, fixed investment expenditures, total employment over the next three months, and overall orders over the past three months have a decreasing effect on the index (Chart I.35).

### Box 8. Protested Bills and Over-Drawn Cheques

Protested bills, within the context CBRT Law No. 1211, Article 44; and over-drawn cheques in accordance with the "Law on Protection of Cheque Holders and Regulation of Payments by Cheques" No. 3167 are notified to the Central Bank and these notifications are compiled by the Central Bank to be distributed to relevant institutions. The information is used as reference in loan evaluations of clients by the relevant institutions.

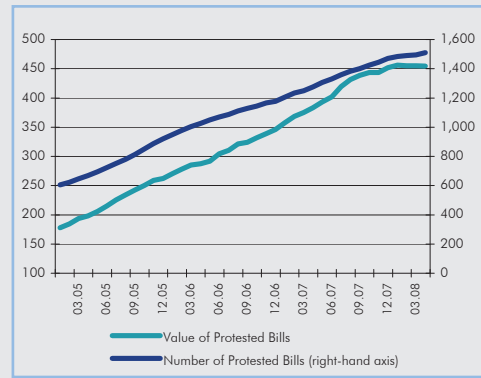
**Chart 1.**  
The Amount (Real)<sup>1</sup> and Number<sup>2</sup> of Over-Drawn Cheques Reported to the Central Bank by Banks (Thousands YTL, Thousands)<sup>1</sup>



Source: CBRT

- (1) Expressed in real terms using CPI (1994=100).  
(2) The value and number of over-drawn cheques are annualized.

**Chart 2.**  
The Amount (Real)<sup>1</sup> and Number<sup>2</sup> of Protested Bills Reported to the Central Bank by Banks (Thousands YTL, Thousands)



Source: CBRT

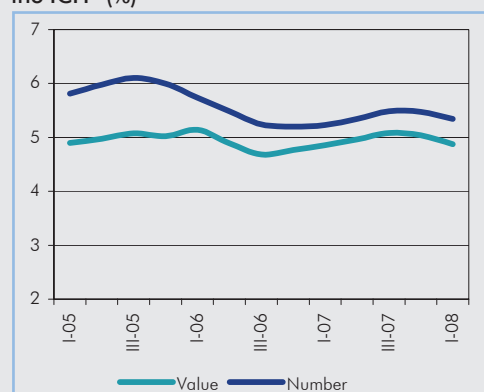
- (1) Expressed in real terms using CPI (1994=100).  
(2) The value and number of protested bills are annualized.

The number and amount of protested bills and over-drawn cheques declared by banks to the Central Bank continue their upward trend (Chart 1, Chart 2).

However, due to the lack of data on total number and amount of cashed cheques and bills in Turkey, it is not possible to determine the ratio of over-drawn cheques to cashed cheques and that of protested bills to cashed bills, thus a reliable evaluation of the development cannot be provided.

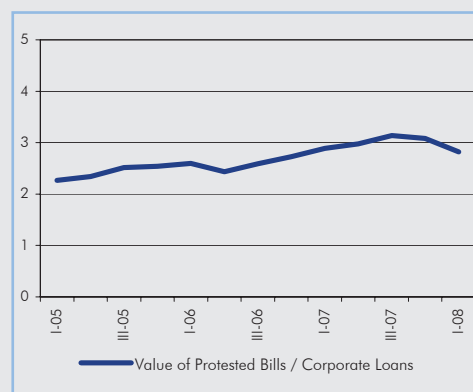
Meanwhile, it is considered that the number and amount of cheques processed in the Interbank Clearing House (ICH), established to provide the settlement of cheques among branches of banks as well as over-drawn cheques provide data that can be used as indicators. Moreover, commercial loans used by firms from banking sector in financing their activities and cashed bills might be considered as correlated. In this framework, the ratio of protested bills to commercial loans may ease the interpretation of economic activity.

**Chart 3.**  
The Ratio of Over-Drawn Cheques Presented to the ICH to the Total Cheques Presented to the ICH<sup>1</sup> (%)



Source: CBRT  
(1) The value and number of over-drawn cheques are annualized.

**Chart 4.**  
The Amount of Protested Bills/Corporate Loans<sup>1</sup> (%)



Source: BRSA-CBRT  
(1) The amount of protested bills are annualized.

The ratio of the value of over-drawn cheques submitted to clearing houses to total value of cheques presented is around 5 percent and does not display a significant change over the years (Chart 3). Besides, the ratio of protested bills to commercial loans, which was 2.7 percent at end-2006, rose to 3.1 percent at end-2007 and dropped again to 2.8 percent in March 2008 (Chart 4).

#### 1.4.2.2. Foreign Exchange Position

Foreign exchange positions of firms operating in Turkey cannot be calculated by referring to their balance sheets since the financial statements of firms are prepared in terms of the total Turkish currency amount, regardless of the currency composition. However, in order to provide a general idea of the exchange rate risk of firms, the foreign currency position of the sectors other than household and the financial sector can be calculated approximately using data compiled from balance of payments statistics and various statistical reportings made by banks to the Central Bank, as well as the database of the Treasury and the "Locational Banking Statistics" database of the Bank for International Settlements (BIS).

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 statements, 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.

##### 1.4.2.2.1. Foreign Exchange Position of the Corporate Sector

While in the previous issues of the report, the foreign exchange position of the non-banking sector was provided; this volume analyzes the foreign exchange position of the corporate sector. In this framework, data of financial institutions other than banks (leasing, factoring, and consumer financing firms) were excluded from the assets and liabilities, whereas the obligations of real sector firms to these institutions were included.

Table I.9. FX Assets and Liabilities of the Corporate Sector<sup>1,2</sup> (Million USD)

	2005	2006	Mar.07	Jun.07	Sep.07	Dec.07	Change Jun.07- Dec.07 (%)	Change 2006-2007 (%)
<b>Assets</b>	<b>45,703</b>	<b>63,427</b>	<b>65,859</b>	<b>67,928</b>	<b>72,714</b>	<b>77,844</b>	<b>15</b>	<b>23</b>
A. Deposits	30,890	45,452	45,815	47,189	51,205	54,832	16	21
-Domestic Banks <sup>3</sup>	12,636	18,756	18,990	20,921	22,414	24,402	17	30
-Foreign Banks <sup>4</sup>	18,254	26,696	26,825	26,268	28,791	30,430	16	14
B. Securities	1,036	934	1,001	819	807	830	1	-11
C. Export Receivables	6,721	9,584	10,072	10,715	10,926	11,991	12	25
D. Foreign Dir. Invest. to Abrod.	7,056	7,457	8,971	9,205	9,776	10,191	11	37
<b>Liabilities</b>	<b>72,255</b>	<b>99,935</b>	<b>108,223</b>	<b>117,012</b>	<b>128,270</b>	<b>138,595</b>	<b>18</b>	<b>39</b>
A. Cash Loans	55,620	83,002	90,734	98,968	109,119	118,740	20	43
-Domestic <sup>5,6</sup>	20,696	29,495	31,228	33,687	38,243	40,850	21	38
Non-bank fin. institutions <sup>7</sup>		4,869	5,305	6,125	7,288	8,220	34	69
-Foreign <sup>8</sup>	34,924	53,507	59,506	65,281	70,876	77,890	19	46
Long Term	33,736	52,124	58,204	63,342	68,722	76,293	20	46
B. Import Payables	11,029	11,767	12,437	13,311	14,197	14,583	10	24
C. Protocol. Receiv. of SDIF	5,606	5,166	5,052	4,733	4,954	5,272	11	2
<b>Net Position</b>	<b>-26,552</b>	<b>-36,508</b>	<b>-42,364</b>	<b>-49,084</b>	<b>-55,556</b>	<b>-60,751</b>	<b>24</b>	<b>66</b>

Source: BRSA-CBRT, Treasury, SDIF, BIS

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

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

(3) Participation funds in participation banks are included.

(4) "Deposits-Foreign Banks" data received from BIS 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 60.8 billion at end-2007, with a 66 percent upsurge compared to the previous year. The loans extended by foreign banks, with an increase of 46 percent over the last year, were instrumental in this hike. The short position of the real sector, which declined in the second half of 2006, increased throughout 2007 (Table I.9).

Chart I.36. Ratios Related to FX Position of the Corporate Sector<sup>1,2</sup> (%)

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

(1) GDP and exports of goods &amp; services are computed on a yearly basis. International reserves are outstanding amounts at the end of period.

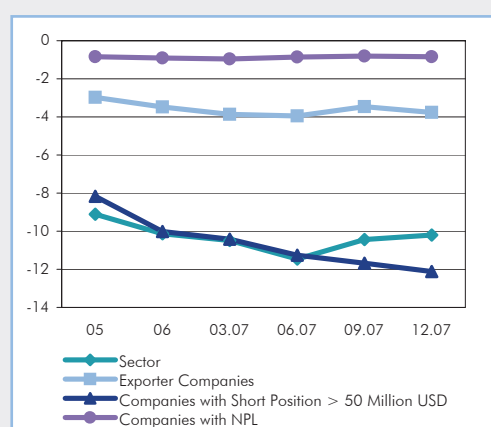
(2) International reserves are gross foreign exchange reserves of CBRT (including gold).

The ratio of the corporate sector short position to GDP, exports, and international reserve rose throughout 2007 in line with the increase in the net short position (Chart I.36).

#### I.4.2.2.2. Foreign Exchange Position of the Corporate Sector Firms Listed on the ISE

This section examines foreign exchange positions and credit obligations of corporate sector firms listed on the ISE to the banking sector. The analysis covers 192 non-financial firms<sup>3</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 institution in their consolidated financial statements.

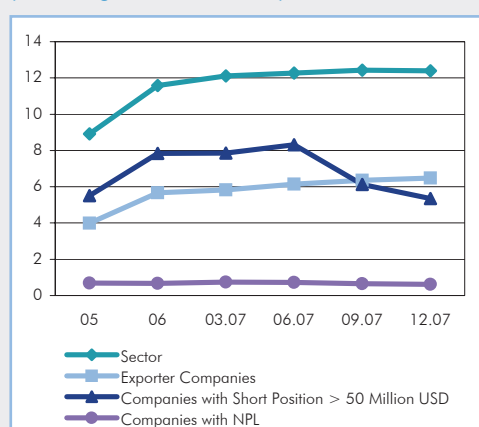
**Chart I.37.**  
FX Position of ISE Companies<sup>1</sup> (Billion USD)



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.38.**  
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.

The short position of firms analyzed, which was USD 11.5 billion in June 2007, declined to USD 10.2 billion by end-2007 (Chart I.37). By June 2007, while 141 of firms analyzed had a short position of USD 12.7 billion, the number of firms with short positions fell to 127 by end-2007. Nevertheless, the total short position of these firms reached USD 13.6 billion. The short position of the 42 firms with short positions over-50 million is USD 12.1 billion.

The short position of non-exporting firms, which was USD 7.5 billion in June 2007, dropped to USD 6.4 billion by end-2007.

Total loans of firms analyzed, including NPL, reached YTL 12.4 billion by end-2007, with a 6.9 percent rise compared to the end of the previous year. 18 of these firms have NPLs. Due to the exclusion of some big firms with short positions over USD 50 million as of June 2007, the amount of loans of these firms included in this group declined significantly (Chart I.38).

Though the number of non-exporting firms with short positions declined in the second half of 2007, their short position amounts rose. Considering the fact that exchange rates may move in both directions under the floating exchange rate regime, it is important that these firms should use derivative products to avoid exchange rate risks.

<sup>3</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.



**Box 9.****Sectoral Composition of the Long-Term Loans of the Corporate Sector from Abroad****Table 1.  
Remaining Maturity Distribution of Long-Term Loans Received from Abroad by Corporate Sector According to Sectors (Million USD)**

As of December 2007	1-12 Months	13-24 Months	25-36 Months	37-60 Months	61-120 Months	Over 120 Months	Total
<b>CORPORATE SECTOR<sup>1</sup></b>	<b>19,105</b>	<b>13,853</b>	<b>9,401</b>	<b>13,780</b>	<b>16,947</b>	<b>1,997</b>	<b>75,083</b>
AGRICULTURAL SECTOR	116	96	46	61	146	0	465
INDUSTRIAL SECTOR	9,188	6,056	4,180	5,932	6,394	131	31,881
1. Manufacturing	7,439	4,641	2,670	4,155	3,857	78	22,840
- Metal Products	1,105	708	395	977	1,523	15	4,723
- Food, Beverage and Tobacco Prod.	1,560	778	568	426	388	0	3,720
- Textiles and Wearing Apparel	1,204	634	451	535	361	33	3,218
- Motor vehicles	781	709	303	370	663	16	2,842
- Office Machinery and Computers	679	512	145	280	86	0	1,702
- Paper, Paper Products, Print & Publ.	278	338	183	405	161	14	1,379
- Chemical Products	762	138	97	128	134	0	1,259
- Mechanical Products	264	365	159	355	40	0	1,183
- Others	806	459	369	679	501	0	2,814
2. Mining and Quarrying	1,006	687	474	867	1,595	5	4,634
3. Elect., Gas and Water Supply	743	728	1,036	910	942	48	4,407
SERVICES SECTOR	9,801	7,701	5,175	7,787	10,407	1,866	42,737
1. Trans., Storag. and Comm.	1,997	1,116	1,231	3,296	5,737	1,381	14,758
2. Real Est., Renting and Bus. Serv.	2,639	3,287	2,031	1,751	1,406	19	11,133
3. Construction	2,016	1,531	711	961	1,548	224	6,991
4. Wholesale and Retail Trade	1,692	784	463	484	567	196	4,186
5. Hotels and Restaurants	466	479	321	522	545	9	2,342
6. Others	991	504	418	773	604	37	3,327

**Source: CBRT**

(1) As being different from the long term loans given in Table I.9, it includes YTL loans received from abroad by the corporate sector and excludes loans received from shareholders abroad of companies with foreign capital.

29.1 percent of long-term loans used by the corporate sector from abroad have upto one-year maturities. The services sector has the largest share among corporate sector loans with 56.9 percent. In the meantime, the shares of the transportation, storage, and communication sectors along with real estate, renting and business activities sector are noteworthy as well. The share of industrial sectors in total loans is 42.5 percent and most of these loans are used by the manufacturing industry (Table 1).

63.9 percent of loans used by the corporate sector from abroad is USD-nominated, while 34.3 percent is Euro-nominated. The remaining 1.8 percent is in other currencies.

