



CENTRAL BANK OF THE REPUBLIC OF TURKEY



Financial Stability Report

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CENTRAL BANK OF THE REPUBLIC OF TURKEY

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This report, which aims to inform the public, is based mainly on December 2007 data. However, the report also includes the developments and evaluations until the publishing date of the report in Turkish. This text is fully available at the CBRT web site. The CBRT cannot be held accountable for decisions taken based on the information and data provided in this report.

FOREWORD

The current period, in which we published the sixth issue of the Financial Stability Report, has witnessed prevailing effects of the financial turbulence that started in the second half of 2007. In this challenging period, when cornerstones of the financial architecture are questioned, the provision and maintenance of financial stability have become priority targets of central banks and the coordination and cooperation among authorities have again been proven to be essential.

Although the threats in global economic conjuncture still exist, it is comforting that the impacts of turbulence on Turkey have so far remained limited. The close cooperation among our financial authorities, the existence of prudent regulations, the high risk awareness of the banking sector as well as the coherent and decisive implementation of monetary and fiscal policies have played significant role in this development.

However, in this environment of uncertainty, achieving the inflation target is more likely to take longer than expected and risks arising from the current account deficit maintain their importance.

In this framework, putting structural reforms into practice promptly and implementing effective risk management without concessions are significant in terms of safeguarding our economy against the adverse effects of global turmoil.

I hope that the assessments presented in this report will be beneficial.



Durmuş YILMAZ
Governor
Central Bank of the Republic of Turkey

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OVERVIEW

The unfavorable effects on financial markets of the problems experienced in the US subprime mortgage markets in 2007 also persist in 2008. In this period, financial stability has continued to be a priority for the central banks of developed countries. Meanwhile, inflation has been increasing in both developed and developing countries owing to the rapid increase in food, energy and commodity prices, and, at the same time, growth rates have started to decline all over the world. Despite the positive contribution of developing countries to growth and the ongoing capital flow into these countries, the global economy may be affected adversely in case the stagnation period in developed countries lasts longer.

GDP growth in Turkey stayed at 4.5 percent despite the 5 percent expectation in 2007 due to increased global uncertainty especially in the last quarter of the year. Meanwhile, the current account deficit continued to expand mainly due to price hikes in energy. Although, the current account deficit has been mainly funded by long-term capital inflows, since the full impact of global volatility is not yet known, the related risks still prevail.

The primary surplus of the consolidated government sector remained below the target in 2007 due to primary expenditures surpassing tax revenues. Nevertheless, the central government budget target was achieved thanks to the favorable performance of privatization revenues and lower than expected interest expenditures. The ratio of public debt stock to GDP continues to decline. Moreover, the share of debt stock sensitive to interest rate and exchange rate fluctuations continued to shrink as a result of the borrowing strategy implemented by the Treasury.

Despite an increase in the ratio of financial liabilities of households to GDP, which indicates higher access by households to financial services, it is still far below the average of EU countries. Since the majority of financial liabilities of households are fixed rate, they are not subject to interest rate risk. Nevertheless, the increase in FX indexed consumer loans, albeit their modest share in overall consumer loans augments the exchange rate risk of households. Therefore, it is still important that those who do not have foreign exchange income should avoid borrowing in foreign currency.

Despite their declining share in household liabilities, credit card balances incurring interest charges have been increasing. If households meet their credit needs via credit cards, which incur higher interest charges than other consumer loans, this will adversely affect their debt

repayment capacity. For that reason, it would be in the households' interest to use credit cards as a means of payment and to prefer consumer loans for their financing needs.

In 2007, the leverage ratios of firms declined and the upward trend in their profitability ratios continued. Despite limited growth in gross sales, the decline in financing costs was instrumental in the increase of profitability. From the perspective of the banking sector, the decline in the financing costs to assets ratios and also the surge in the interest coverage ratios, especially in the manufacturing industry, imply that firms have a high debt repayment capacity.

Corporate sector open positions continue to rise in line with increased external borrowing. It is important that firms without foreign exchange income avoid borrowing in foreign currency or manage their risks with derivatives. It is advisable that banks adopt a more cautious stance to curtail credit risk when lending to firms with high open positions and no foreign exchange income.

The Turkish banking sector continued to grow in 2007 and foreign participation also increased. The ratio of deposits and loans to GDP and the ratio of loans to deposits, important indicators of financial depth and intermediation level of the banking sector, kept rising.

The share of loans in banking sector assets continued to grow. However, in the upcoming period, the pace of growth in credit volume will be dependent on the developments in international markets and therefore on banks' liquidity preferences. While the downward trend in the Non-Performing Loan (NPL) ratio, though mainly as a result of higher increase in loans, continued, consumer loans display a higher NPL ratio.

The short position aversion tendency of the banking sector continues. The on-balance sheet short position resulting from funding a portion of YTL denominated loans with foreign currency resources is leveled off with off-balance sheet derivatives.

Liquidity risk maintains its importance due to ongoing global volatility. Though its dependency on wholesale funding sources is relatively low and liquidity adequacy ratios are far above the legal requirements, the Turkish banking sector, which is becoming more integrated with global markets, should act more cautiously with regard to liquidity management.

Despite high losses incurred by prominent international banks due to the global turmoil, the profitability performance of the Turkish banking sector improved in 2007 and the return on assets as well as on equity of the sector increased. A slight decline was observed in profitability in March 2008. Although the capital adequacy ratio (CAR) of the sector followed a downward trend due to the increased credit volume and the regulations made within the framework of convergence to Basel II, it markedly stood above the minimum capital requirement of 8 percent and the target ratio of 12 percent. The results of scenario analyses indicate that the current capital structure of the sector is robust enough to survive losses that may arise under various shock assumptions.

The Financial Strength Index, monitored closely as an indicator of the soundness of the banking sector, remained favorable albeit a limited decline in March 2008 due to slumps in Profitability, Capital Adequacy and Interest Rate sub-indices.

Ongoing turbulence in global markets, increased inflationary risks due to the upsurge in food, energy and commodity prices and the stagnation threat faced by developed economies require all our economic units to act cautiously in their decisions for the sake of financial stability in the upcoming period. Although the impacts of global volatility on Turkish economy have so far remained limited, because of its dependency on external financing and hence, its potential vulnerability to unfavorable developments in the international risk appetite, it is deemed critically important that a stable provision of external resources are retained and the fiscal and monetary discipline is maintained to prevent increases in risk premiums and to reduce fragilities. It is of vital importance that all economic units raise their risk awareness and take necessary precautions in order to limit risks and to allow the sound operation of financial markets.

I. MACROECONOMIC DEVELOPMENTS

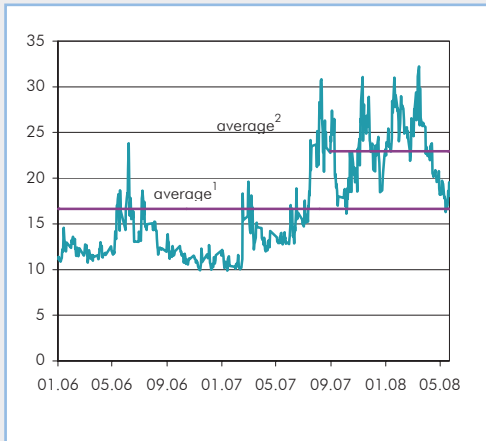
In this chapter, macroeconomic developments will be elaborated, taking into account the importance of such developments for financial stability.

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.

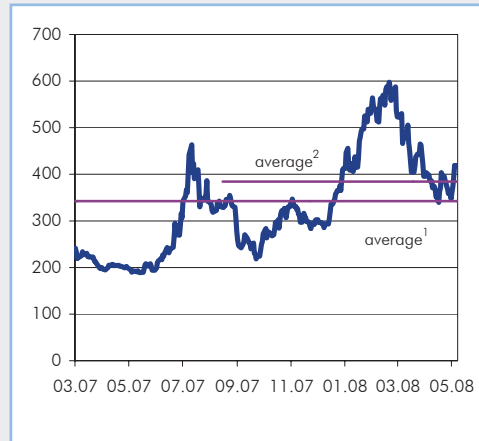
Chart I.1.
VIX Index



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

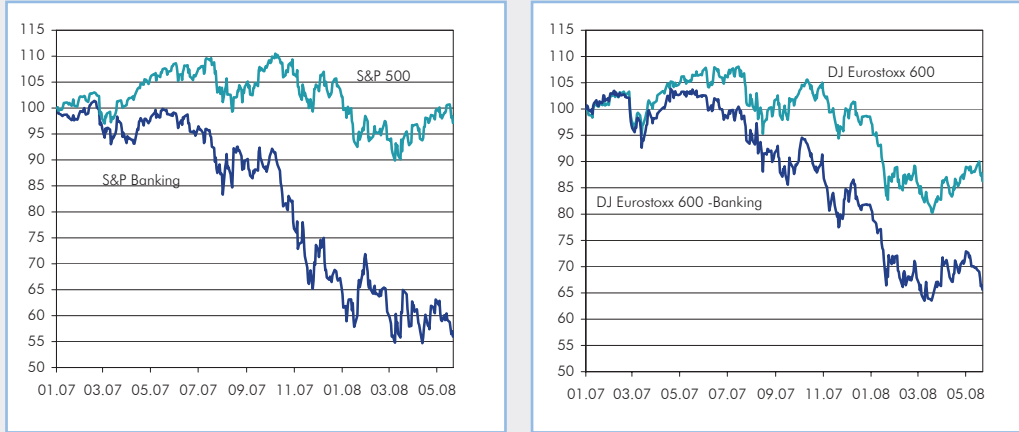


Source: Bloomberg

- (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).

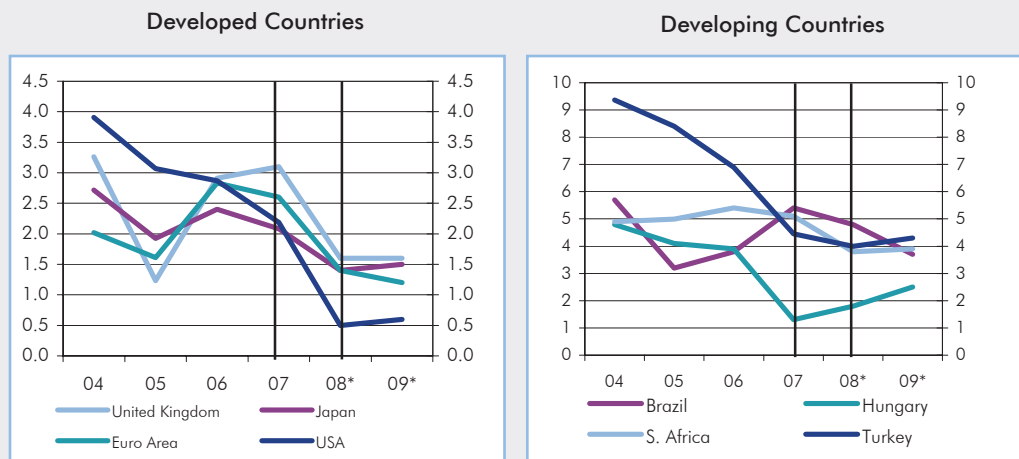
Chart I.3.
Stock Market Indices of Developed Countries



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 billion¹. The International Monetary Fund (IMF) projects that such losses might reach USD 945 billion². 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 (%)



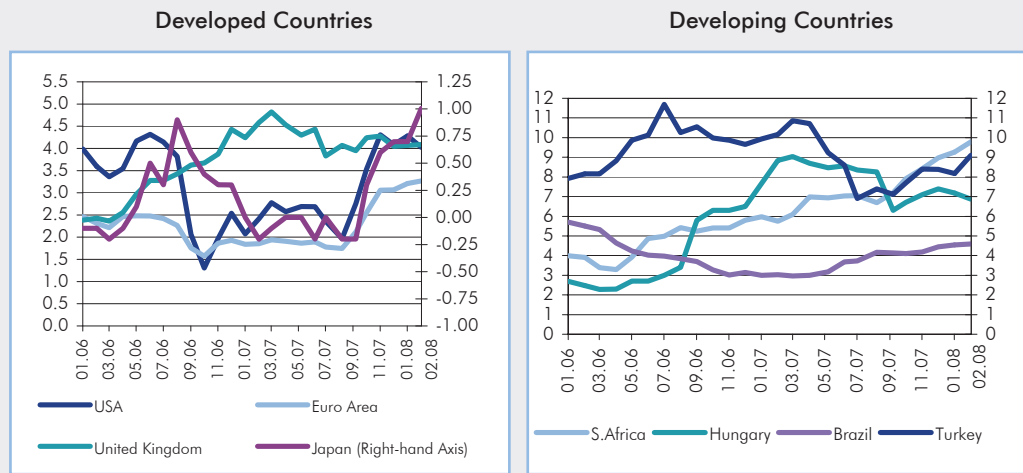
Source: IMF IFS, IMF WEO, EU European Economy
(*) Forecast (IMF)

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

² 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).

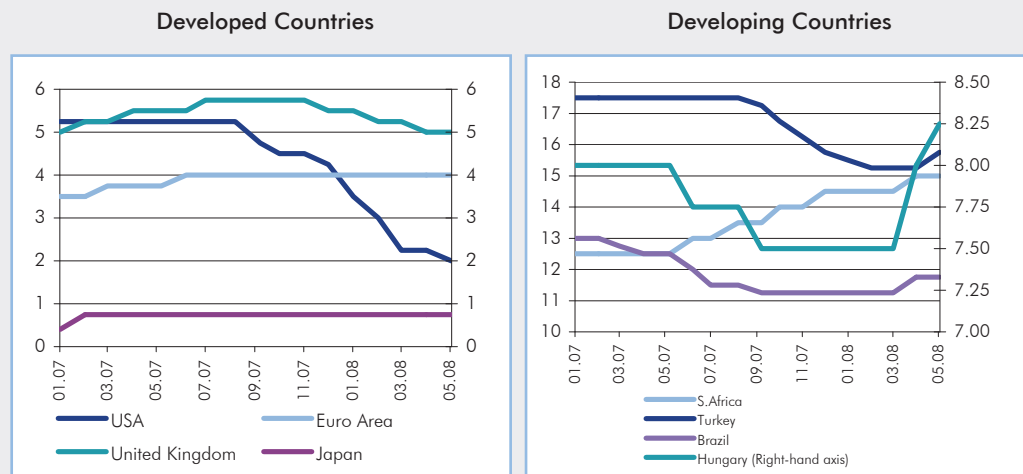
Chart I.5.
Inflation Rates of Selected Countries (Annual CPI % Change)



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 (%)

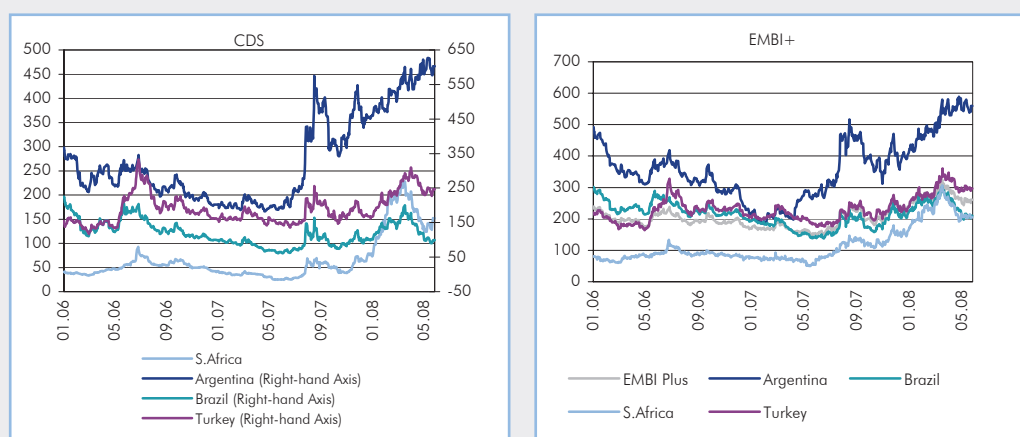


Source: Central Banks

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^{1,2} and Credit Default Swap Spreads³ 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)¹ 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, 2008².

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"³ 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.

(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 Reform¹

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)

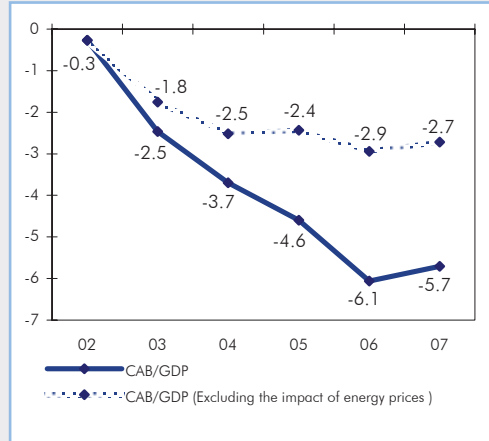
	2004	2005	2006	2007	Mar.08*
CURRENT ACCOUNT	-14.4	-22.1	-31.9	-37.6	-40.4
Foreign Trade Balance	-22.7	-33.0	-40.9	-46.7	-49.9
Total Exports of Goods	68.5	78.4	93.6	115.3	125.5
Total Imports of Goods	-91.3	-111.4	-134.6	-162.0	-175.4
Coverage Ratio (%)	75.1	70.4	69.6	71.2	71.6
Balance of Services	12.8	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
CAPITAL & FINANCIAL ACCOUNT	13.4	20.3	32.1	36.5	40.4
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
NET ERRORS & OMISSIONS	1.0	1.8	-0.2	1.1	0.0

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).

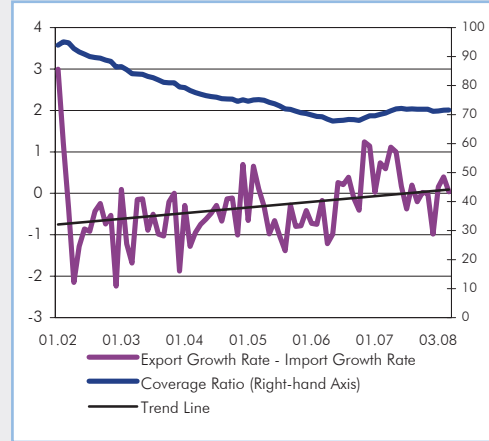
Chart I.8.
Current Account Balance (CAB) to GDP Ratio & The Impact of Energy Prices¹ (%)



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 Ratio¹ (%)

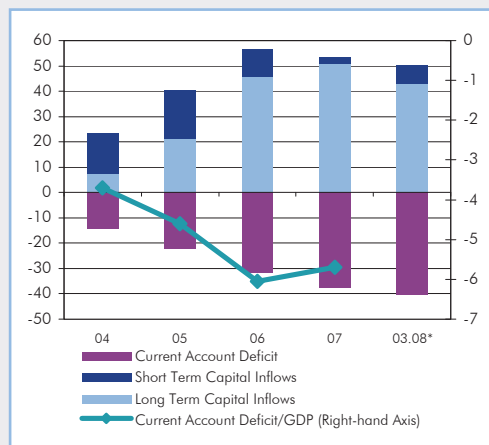


Source: CBRT

(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^{1,2} (USD in Billions, %)



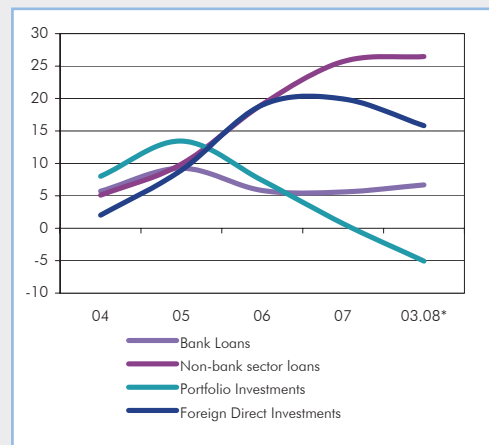
Source: CBRT

(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^{1,2,3,4} (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).

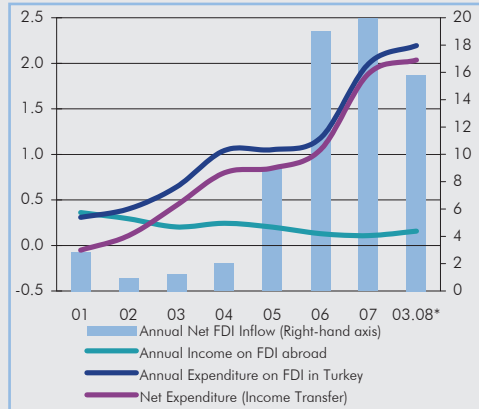
Box 3. **Foreign Direct Investments and Income Transfers**

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.

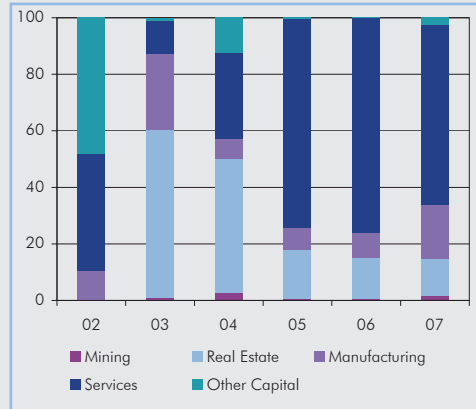
In line with the worldwide general trend, foreign direct investments displayed a significant rise in our country as well. Turkey, which received only USD 112 million net foreign direct investment in 2000, attracted approximately USD 20 billion in 2007. According to UNCTAD data, Turkey ranked 16th among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



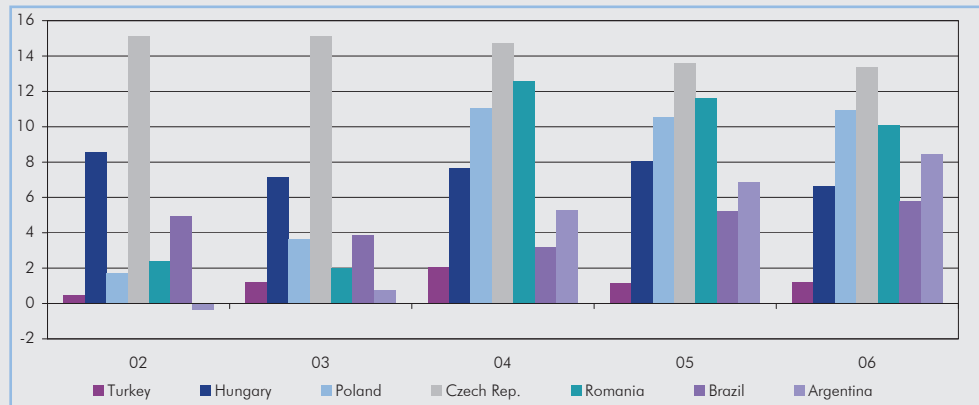
Source: CBRT

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).

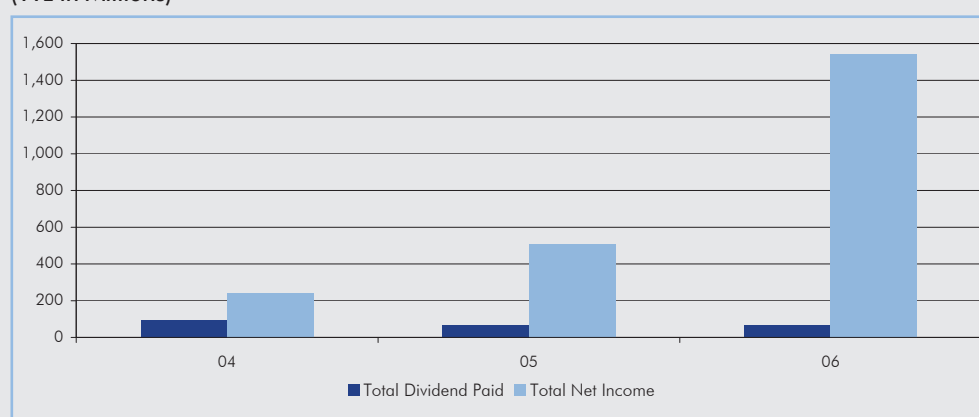
Chart 3.
Ratio of Annual Income Transfers to FDI Stock in Selected Economies (%)



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.

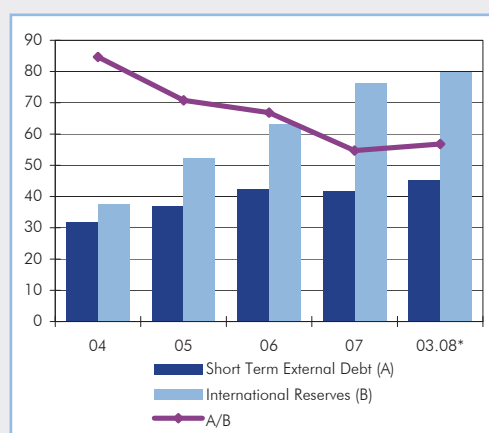
Chart 4.
Annual Net Income and Dividend Payment Figures of Foreign Owned Deposit Banks
(YTL in Millions)



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 Debt¹ and International Reserves² (USD in Billions, %)



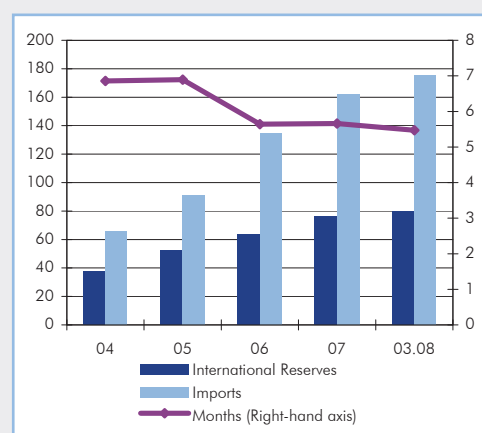
Source: Undersecretariat of Treasury, CBRT

(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^{1,2}
(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)

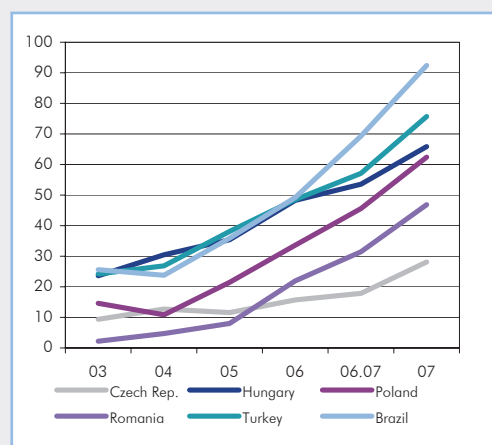
	2004	2005	2006	2007	Mar.08*
Current Account Balance	-14.4	-22.1	-31.9	-37.6	-40.4
Finance Accounts	13.4	20.3	32.1	36.5	40.4
General Gov. (incl. CBRT and CBRT Reserves)	2.4	-16.5	-2.9	-15.5	-14.0
Private Sector (incl. Banks)	11.0	36.8	35.0	52.0	54.3
Net Errors and Omissions	1.0	1.8	-0.2	1.1	0.0

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).

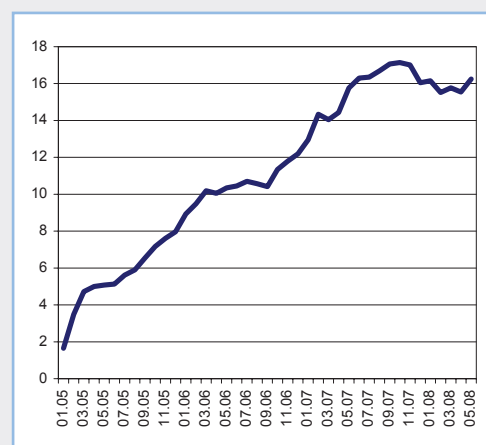
Chart I.14.
Net Receivables of International Banks from Selected Countries¹ (USD in Billions)



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).

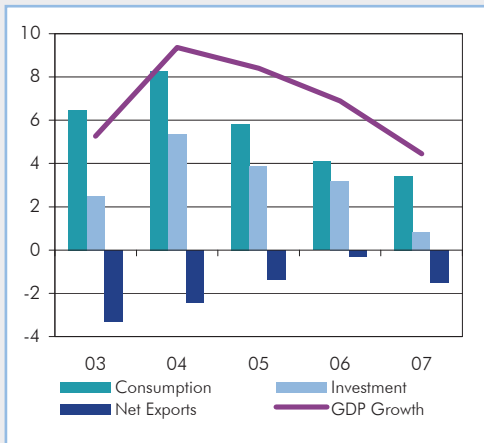
In conclusion, the current account deficit, the financing of which is highly sensitive to economic conjuncture, continues to expand due to the effect of high price hikes in energy. The impacts of global turbulence that made investors revisit their risk perceptions and investment preferences in international 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.

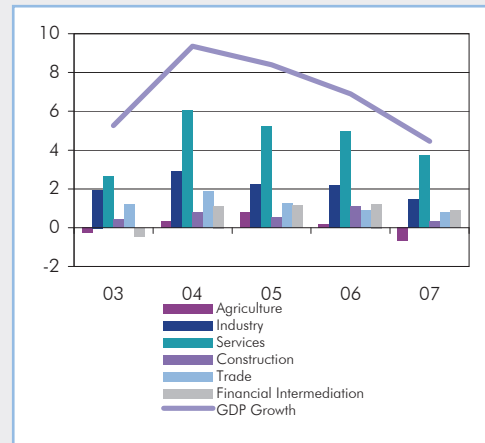
Chart I.16.
Growth Rate and Its Composition^{1, 2}
(%, Points)



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 Growth¹
(%, 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.

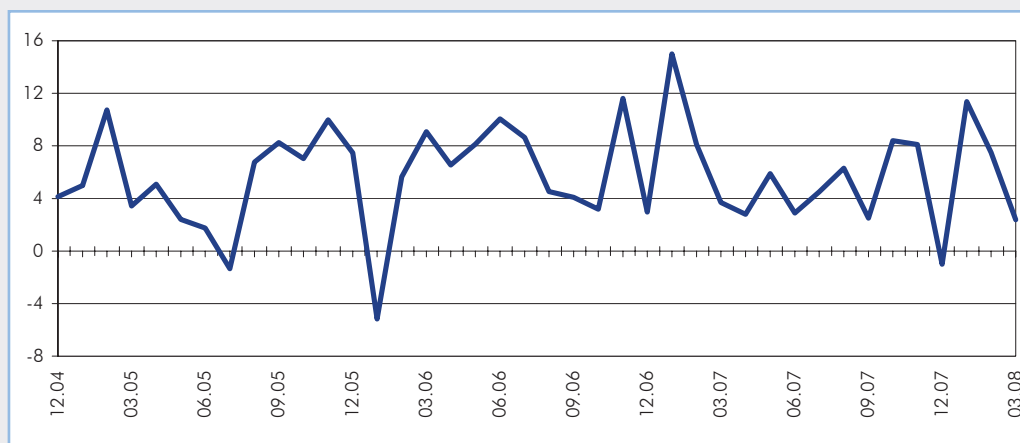
For the first time since 2002, the increase in investment expenditures lagged behind GDP growth, leading to a decline in the share of investments in growth. Meanwhile, net exports had a negative effect on growth in 2007, as the imports of goods and services increased more rapidly than the exports of 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 (%)^{1,2}



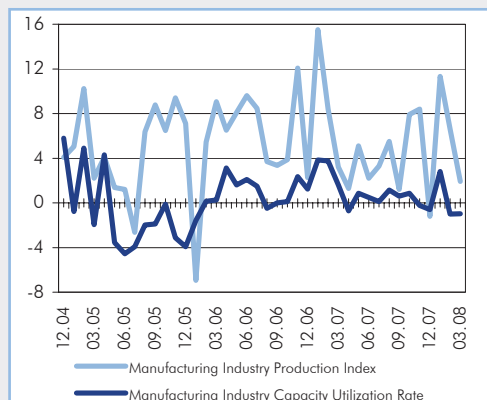
Source: TURKSTAT

(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).

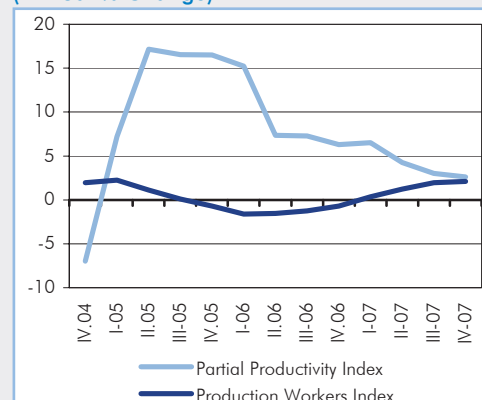
The rate of increase in the first quarter average of manufacturing industry production, the share of which is 86.9 percent in the industrial production index, declined by 2.1 percentage points compared to the previous year and became 6.4 percent. In March 2008, the capacity utilization rate in the manufacturing 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^{1,2} (%)



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^{1,2} (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

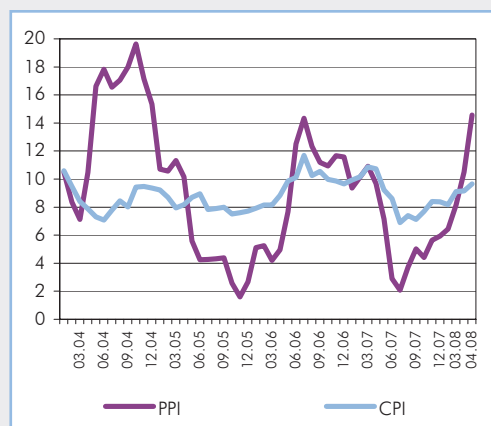
In order to improve the method, scope, consistency and international comparability of macroeconomic statistics of Turkey, TURKSTAT conducted studies for updating the System of National Accounts, and released the results of these studies on March 8, 2008. In this respect, the main changes are as follows:

- * 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.

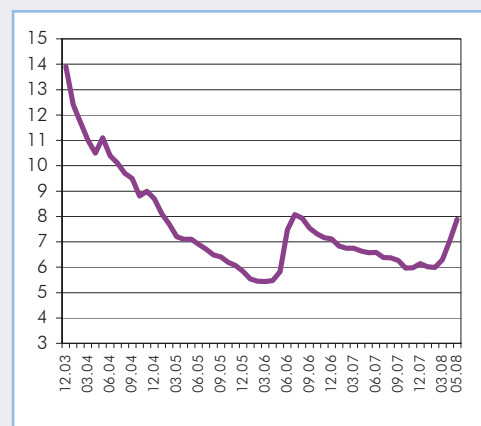
I.2.2. Inflation

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

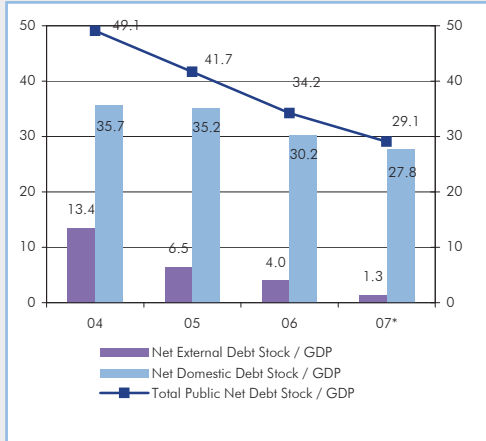
The Government has announced a Medium-Term Fiscal Framework to be implemented in the next five-year period, following the termination of the stand-by agreement with the IMF on May 11, 2008. In this framework, some of the targets for 2008 have been revised. Within this scope, the primary surplus target, 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

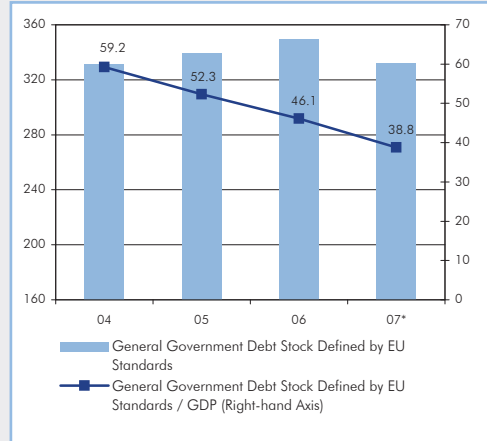
Source: MOF

Chart I.23.
Composition of Total Public Sector Net Debt Stock¹ (%)



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.

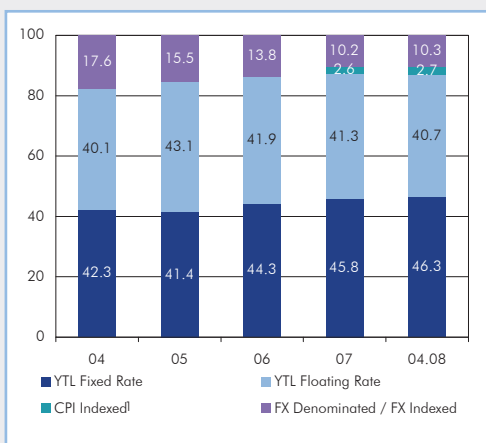
Chart I.24.
General Government Nominal Debt Stock Defined by EU Standards¹ (% , Billion YTL)



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.

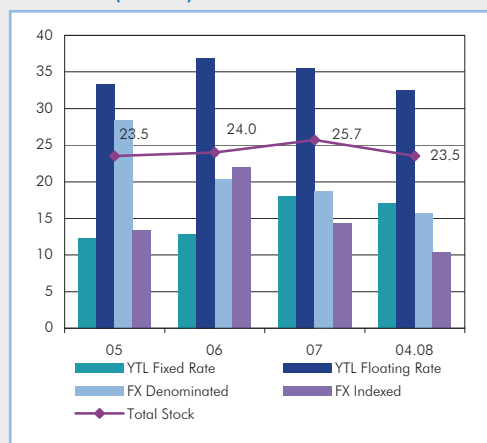
The ratio of public sector net debt stock to GDP continued to fall and stood at 29.1 percent by end-2007. This fall primarily stemmed from the rise in net assets of the unemployment insurance fund, the hike in the GDP and the decline in gross debt stock (Chart I.23). The decrease in YTL equivalent of 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)¹



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^{1,2,3} (%)



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.

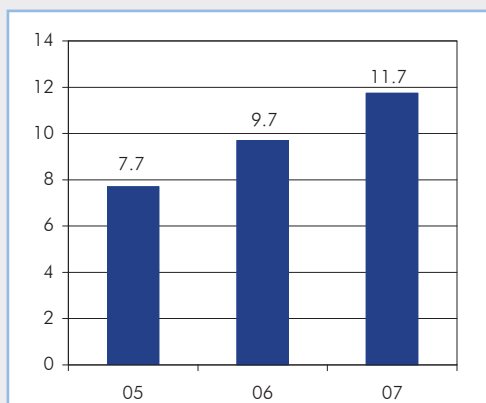
A large portion of total government securities is owned by banks, thus comprising a major part of banking sector assets. As of April 2008, the share of banks increased, whereas that of non-residents continued to decline (Chart I.27).

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).

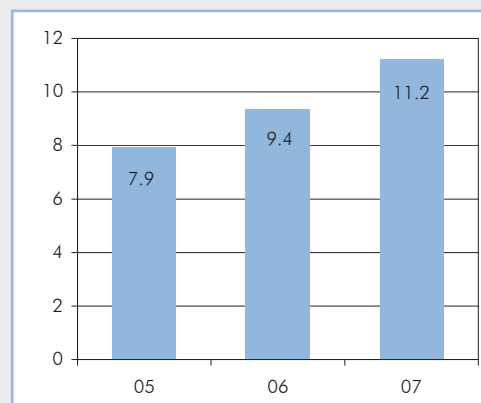
Chart I.28.
Household Liabilities to GDP (%)¹



Source: CBRT-BRSA, TURKSTAT

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

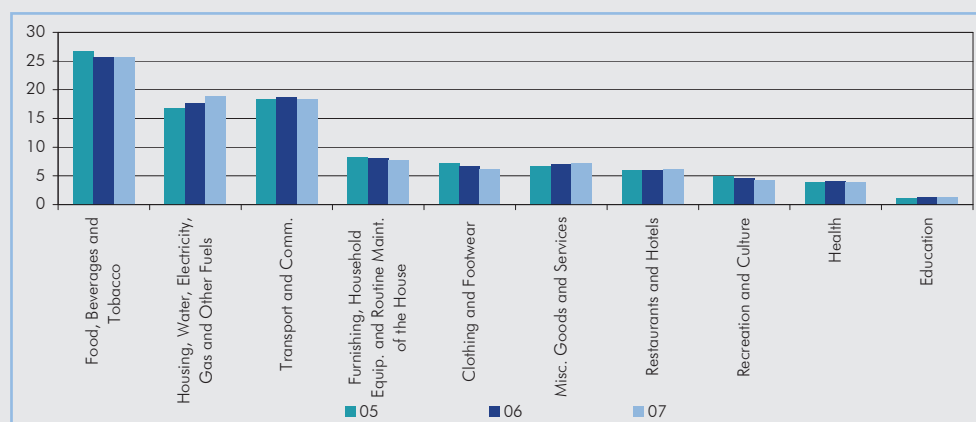
Chart I.29.
Retail Loans to Household Consumption Expenditures (%)¹



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 Expenditures¹ (%)



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^{1,2} (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 Holders¹

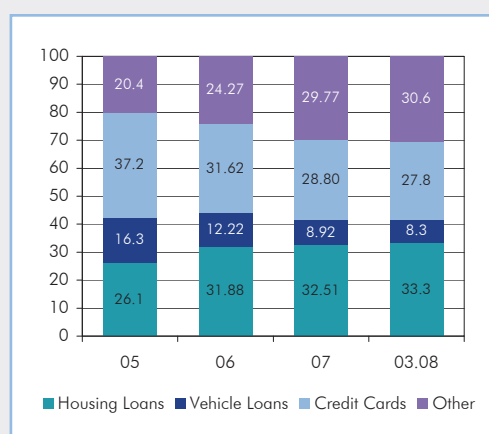
	I-07	I-08
Non-Performing Credit Card Holders	74,316	139,895
Non-Performing Consumer Loan Borrowers	12,649	32,927

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.

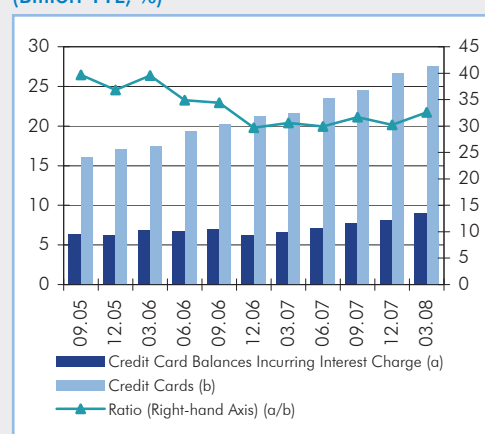
Chart I.30.
Decomposition of Household Debt (%)¹



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, %)

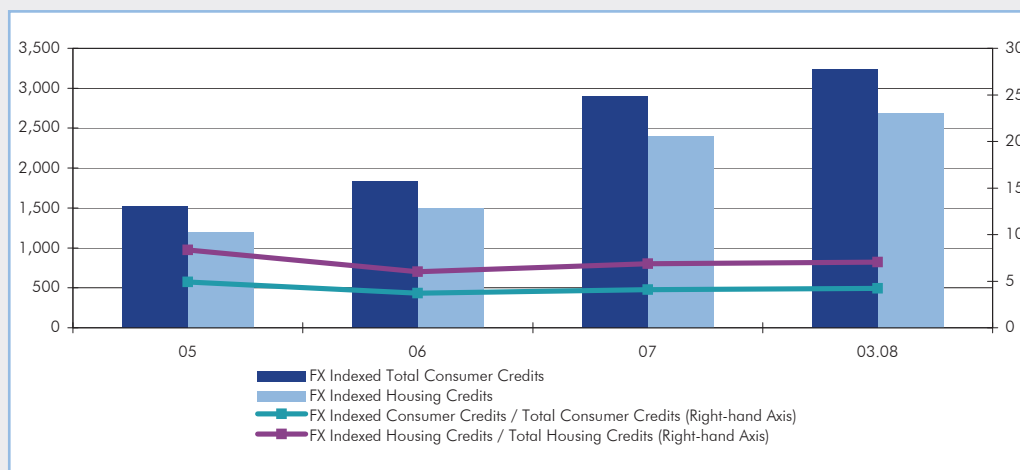


Source: CBRT

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, %)^{1,2}



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 Assets¹ (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
Total Assets	219.5	100.0	279.7	100.0	313.4	100.0	333.9	100.0

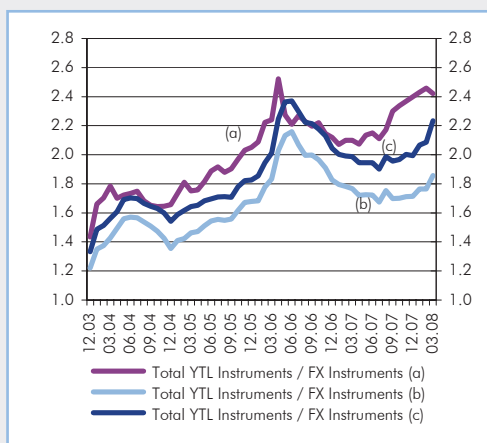
Source: BRSA-CBRT, CMB, CRA

(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 Instruments¹



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)

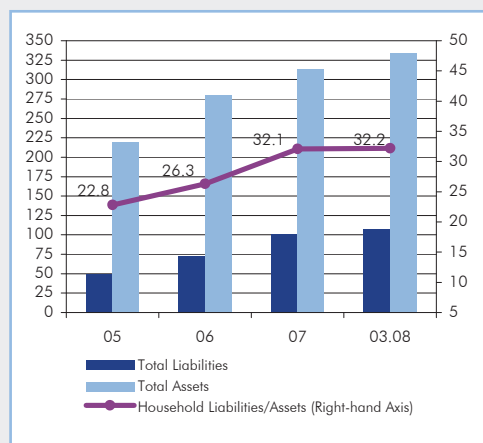
FX Instruments = FX Deposits + Gov. Dom. Debt Sec. + Eurobond + Participation Funds (FX)

(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, %)¹



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 Study¹ 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 population² 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 (%)¹

	All Companies			Manufacturing Comp.		
	2005	2006	2007	2005	2006	2007
Leverage and Capital Structure Ratios						
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
Liquidity Ratios						
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
Profitability Ratios						
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
Turnover Ratios						
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.

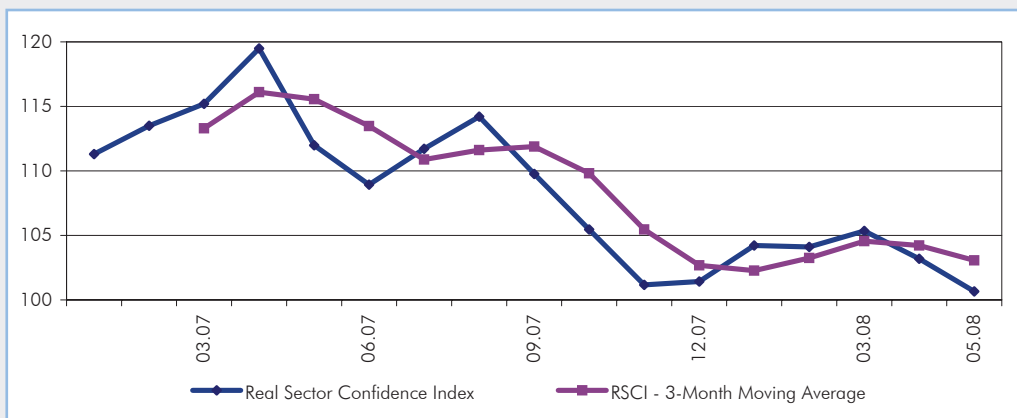
High levels of liquidity ratios indicate that the liquidity risk is manageable and that firms have the financial capability to repay their short-term debts. Nevertheless, the acid test ratio

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.

Chart I.35.
Real Sector Confidence Index



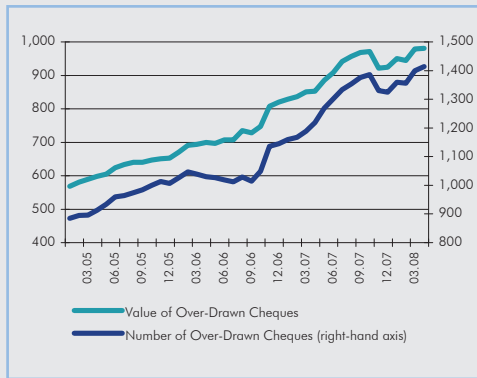
Source: CBRT

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 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

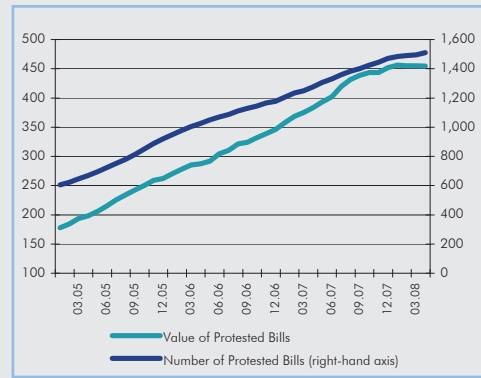
Protested bills, within the context CBRT Law No. 1211, Article 44; and over-drawn cheques in accordance with the "Law on Protection of Cheque Holders and Regulation of Payments by Cheques" No. 3167 are notified to the Central Bank and these notifications are compiled by the Central Bank to be distributed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

Chart 1.
The Amount (Real)¹ and Number² of Over-Drawn Cheques Reported to the Central Bank by Banks (Thousands YTL, Thousands)¹



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)¹ and Number² of Protested Bills Reported to the Central Bank by Banks (Thousands YTL, Thousands)



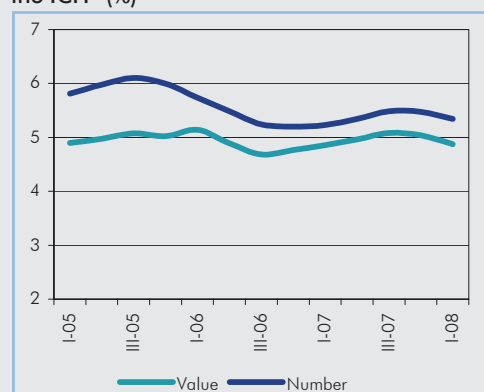
Source: CBRT
(1) Expressed in real terms using CPI (1994=100).
(2) The value and number of protested bills are annualized.

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.

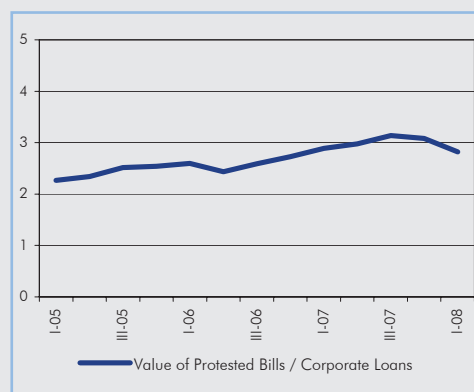
Meanwhile, it is considered that the number and amount of cheques processed in the Interbank Clearing House (ICH), established to provide the settlement of cheques among branches of banks as well as over-drawn cheques provide data that can be used as indicators. Moreover, commercial loans used by firms 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 ICH¹ (%)



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

Chart 4.
The Amount of Protested Bills/Corporate Loans¹ (%)



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^{1,2} (Million USD)

	2005	2006	Mar.07	Jun.07	Sep.07	Dec.07	Change Jun.07- Dec.07 (%)	Change 2006-2007 (%)
Assets	45,703	63,427	65,859	67,928	72,714	77,844	15	23
A. Deposits	30,890	45,452	45,815	47,189	51,205	54,832	16	21
-Domestic Banks ³	12,636	18,756	18,990	20,921	22,414	24,402	17	30
-Foreign Banks ⁴	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
Liabilities	72,255	99,935	108,223	117,012	128,270	138,595	18	39
A. Cash Loans	55,620	83,002	90,734	98,968	109,119	118,740	20	43
-Domestic ^{5,6}	20,696	29,495	31,228	33,687	38,243	40,850	21	38
Non-bank fin. institutions ⁷		4,869	5,305	6,125	7,288	8,220	34	69
-Foreign ⁸	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
Net Position	-26,552	-36,508	-42,364	-49,084	-55,556	-60,751	24	66

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^{1,2} (%)

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.

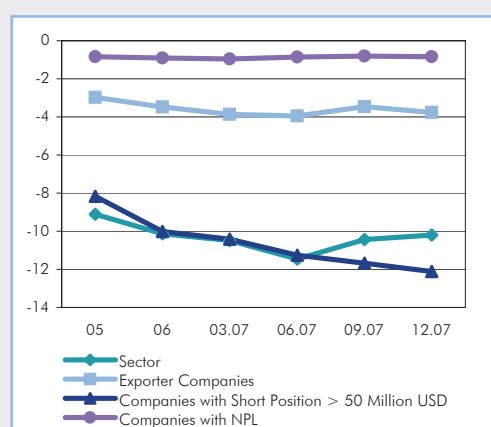
(2) International reserves are gross foreign exchange reserves of CBRT (including gold).

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 firms³, 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.

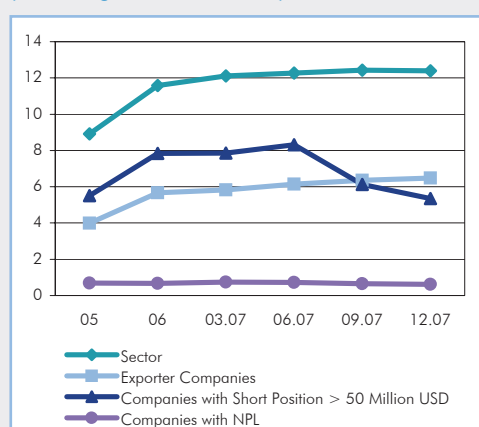
Chart I.37.
FX Position of ISE Companies¹ (Billion USD)



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 Companies¹
(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.

³ 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
CORPORATE SECTOR¹	19,105	13,853	9,401	13,780	16,947	1,997	75,083
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.

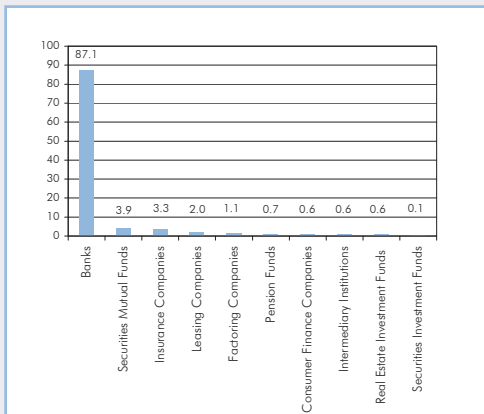
29.1 percent of long-term loans used by the corporate sector from abroad have upto one-year maturities. The services sector has the largest share among corporate sector loans with 56.9 percent. In the meantime, the shares of the transportation, storage, and communication sectors along with real estate, 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.

II. STRUCTURE OF THE FINANCIAL SECTOR

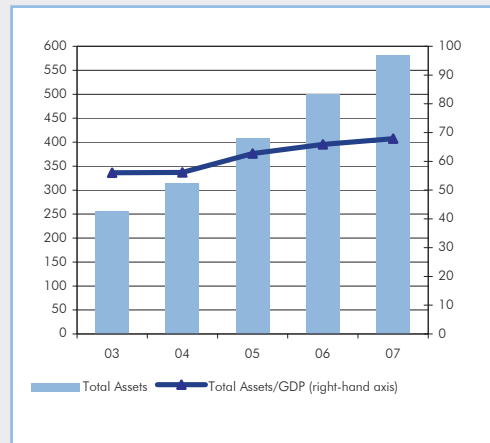
The Turkish financial sector maintained its stable growth trend in 2007. During the same period, the banking sector also continued to attract foreign investments.

Chart II.1.
Composition of Balance Sheet of the Financial Sector (%)¹



Source: BRSA,CBRT, Association of Capital Market Intermediary Institutions, CMB
(1) Figures are as of 2007.

Chart II.2.
Balance Sheet Size of the Banking Sector (Billion YTL, %)



Source: BRSA-CBRT

The total asset size of the financial sector, which grew by 18 percent compared to the previous year, reached YTL 668 billion as of end-2007. 87 percent of financial sector assets belong to banks (Chart II.1).

II.1. Banking Sector

The Turkish banking sector consists of deposit banks, development and investment banks and participation banks that operate according to profit/loss sharing principles.

As of end-2007, the number of banking sector staff increased by 16,907 compared to end-2006 and reached 167,760, whereas the number of banks remained at 50. By March 2008, BRSA, the number of staff rose by 5,265, reaching 173,025.

As of end-2007, the total asset size of the banking sector grew by 7 percent in real terms compared to end-2006 and reached YTL 582 billion, while it increased to 502 billion from 355

billion in USD terms, with a rise of 41 percent. The real increase remained limited, due to the decrease in the New Turkish Lira value of foreign currency items on the balance sheet, which resulted from the appreciation of the Turkish currency. By March 2008, the asset size of the banking sector rose to YTL 634 billion and declined to 485 billion in USD terms.

The ratio of the Turkish banking sector's balance sheet size to GDP increased to 67.9 percent at end-2007 from 65.9 percent at end-2006 (Chart II.2).

Meanwhile, as of end-2007 the concentration ratio of the first five banks was 60 percent, while the concentration ratio of the first 10 banks was 83 percent. The ratios that did not display a remarkable change compared to the end of the previous year, declined by one point each, as of March 2008.

Table II.1. The Financial Depth and Intermediation Level Indicators of the Banking Sector^{1,2}

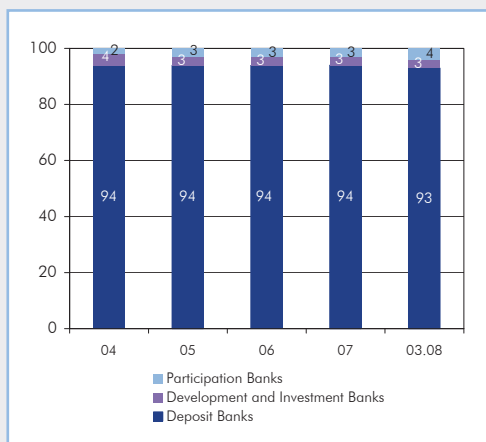
Years	Deposits / GDP	Loans / GDP	Loans / Deposits
2003	35.1	17.2	49.1
2004	35.2	19.8	56.3
2005	38.8	25.3	65.3
2006	40.6	30.0	74.0
2007	41.7	34.6	82.9

(1) Loans include non-performing loans.

(2) Deposits include participation funds, loans include funds extended by participation banks.

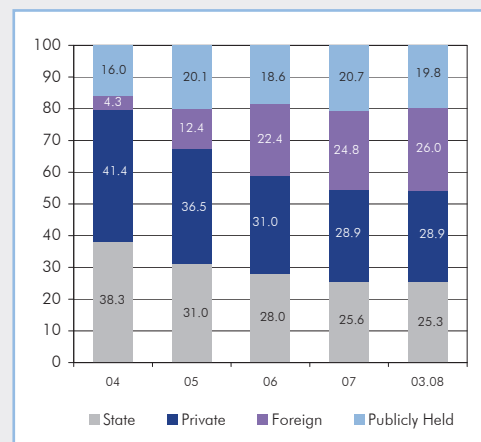
The ratio of deposits and loans to GDP and the ratio of loans to deposits, which reveal the financial depth and intermediation level of the banking sector, continue to increase.

Chart II.3. Banking Sector Assets by Groups (%)



Source: BRSA-CBRT

Chart II.4. Banking Sector Assets According to Equity Ownership (%)¹



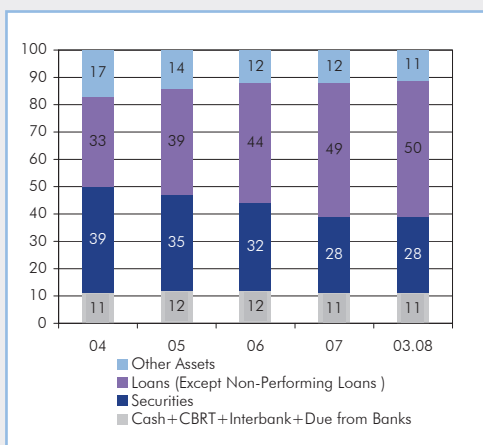
Source: BRSA-CBRT

(1) For publicly held shares no distinction is made between domestic and foreign investors.

By March 2008, of the 50 banks in the Turkish banking sector, 33 are deposit banks, 13 are development and investment banks and 4 are participation banks. As can be seen, deposit banking is dominant in the Turkish banking sector (Chart II.3).

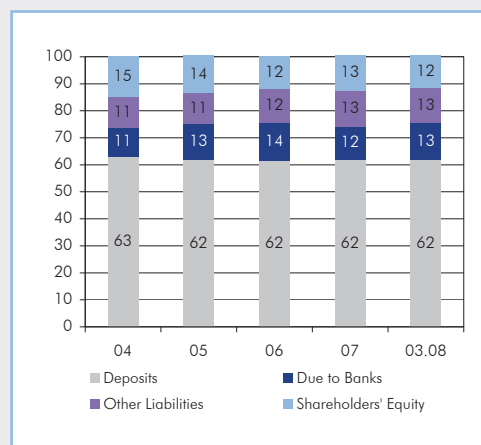
The Turkish banking sector continued to attract foreign investors in 2007. As a consequence, based on their share in paid-up capital, as of March 2008 the share of foreign stockholders in assets stood at 26 percent (Chart II.4). Meanwhile, according to data of the Central Registry Agency for March 2008, the share of foreign participation in publicly held shares was 17 percent of total assets of the sector. When these shares are included, the share of foreign participation in the banking sector reaches 43 percent.

Chart II.5.
Asset Structure of the Banking Sector (%)



Source: BRSA-CBRT

Chart II.6.
Liability Structure of the Banking Sector (%)



Source: BRSA-CBRT

The share of loan portfolio as the largest asset item continued to grow throughout the year and reached 50 percent by March 2008 (Chart II.5).

As of March 2008, the share of deposits as the largest source of funds remained the same with 62 percent, whereas the shares of shareholders' equity, and due to banks, which followed a rather volatile course, were 12 percent and 13 percent, respectively (Chart II.6).

II.2. Banking Sector Profitability and Capital Adequacy

II.2.1. Profitability^{4,5}

Despite fluctuations in the global markets and the world's major banks declaring high losses, profitability of the Turkish banking sector improved in 2007. The net profit of the sector increased by 34.4 percent at end-2007 compared to end-2006, and reached YTL 14.2 billion.

⁴ Participation banks are excluded as their operating principles differ from other banks.

⁵ Bank under SDIF is excluded.

Table II.2 Net Profit and Its Components (Million YTL)¹

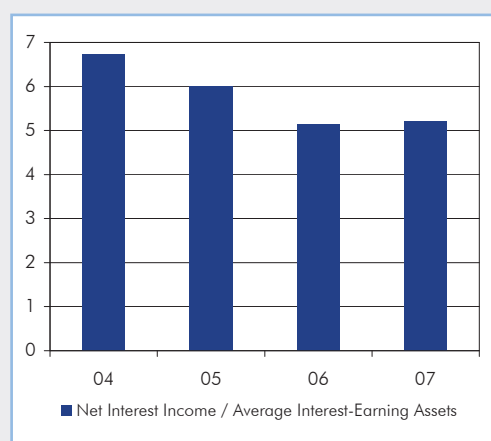
	2006	2007	Change (%)
I. Operating Income (A+B)	31,707	38,465	21.3
A- Net Interest Income	20,376	25,007	22.7
B- Non-Interest Income	11,331	13,458	18.8
II. Non-Interest Expenses (C+D)	18,484	22,249	20.4
C- Prov. for Credits and Other Receiv.	4,068	5,467	34.4
D- Other Operating Expenses	14,416	16,782	16.4
III. Net Operating Profit (I-II)	13,223	16,216	22.6
IV. Other Income	429	1,214	183.0
V. Provision for Taxes	3,070	3,203	4.3
VI. Net Profit (III+IV-V)	10,582	14,227	34.4

Source: BRSA-CBRT

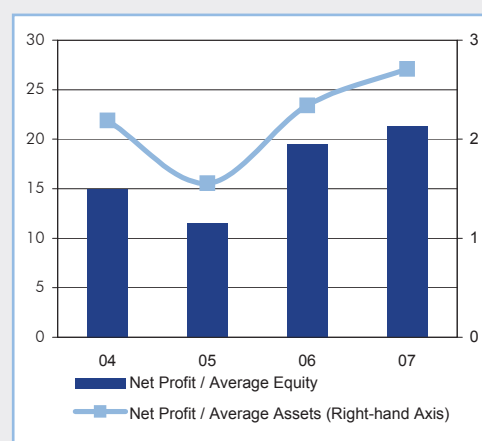
(1) Non-Interest Income = Net Fees and Commissions Income (including Banking Services Income) + Dividend Income + Net Trading Income (Loss) + Other Operating Income
Other Income = Profit Share Received Excluding Dividend Income + Extraordinary Income (Expenses).

The upsurge in profitability of the banking sector was triggered by net interest income that increased due to interest income on loans, along with the rise in net fees and commissions income as one of the non-interest income components. The significant increase in other income item mainly stems from extraordinary income (Table II.2).

As a result of the sector moving away from securities towards loans, the ratio of interest income on loans to total interest income, which was 51.1 percent as of end-2006, rose to 55.1 percent by end-2007, whereas the ratio of interest income on securities to total interest income dropped to 35.8 percent from 39.8 percent.

Chart II.7.
Net Interest Margin (%)

Source: BRSA-CBRT

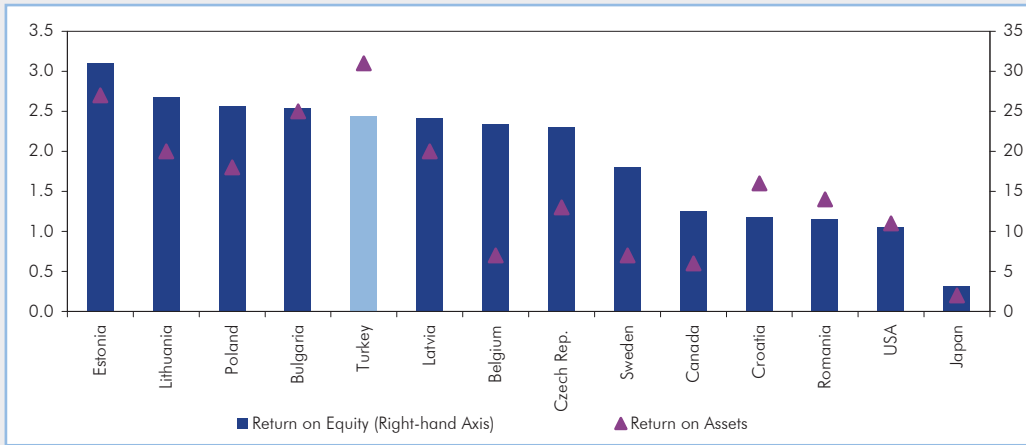
Chart II.8.
Return on Assets and Return on Equity (%)

Source: BRSA-CBRT

The downward trend in the ratio of net interest income to average interest-earning assets ceased in 2007 and by end-2007, this ratio stood at 5.2 percent with a limited increment (Chart II.7).

As of year end-2007, the return on assets and the return on equity were 2.7 percent and 21.3 percent, respectively. Both of these ratios display an upward trend compared to end-2006 (Chart II.8).

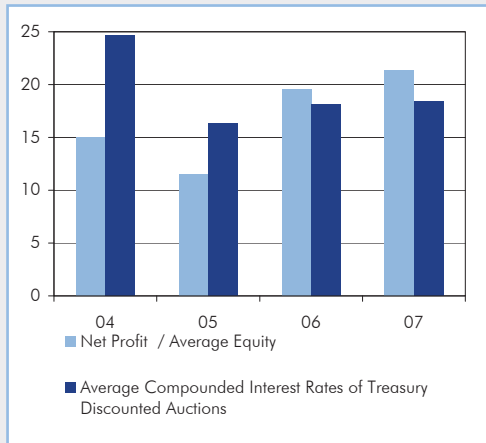
Chart II.9.
Return on Assets and Equity by Selected Countries (September 2007) (%)



Source: Global Financial Stability Report, IMF-April 2008

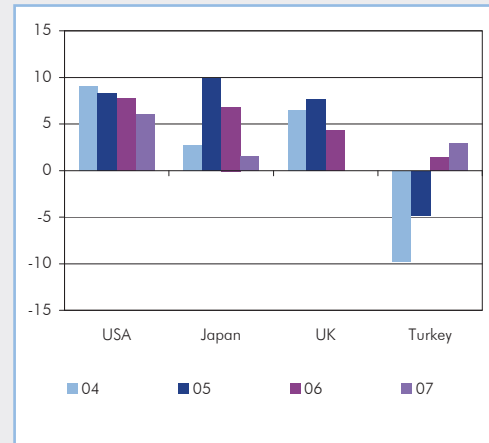
When compared with selected countries as of September 2007, the Turkish banking sector displays a good performance, especially with regard to return on assets (Chart II.9).

Chart II.10.
Return on Equity and Treasury Interest Rate (%)



Source: Treasury, BRSA-CBRT

Chart II.11.
Difference Between Return on Equity and Yield on Government Bonds (%)^{1,2}



Source: Treasury; BRSA-CBRT, IMF-IFS, Global Financial Stability Report, IMF-April 2008

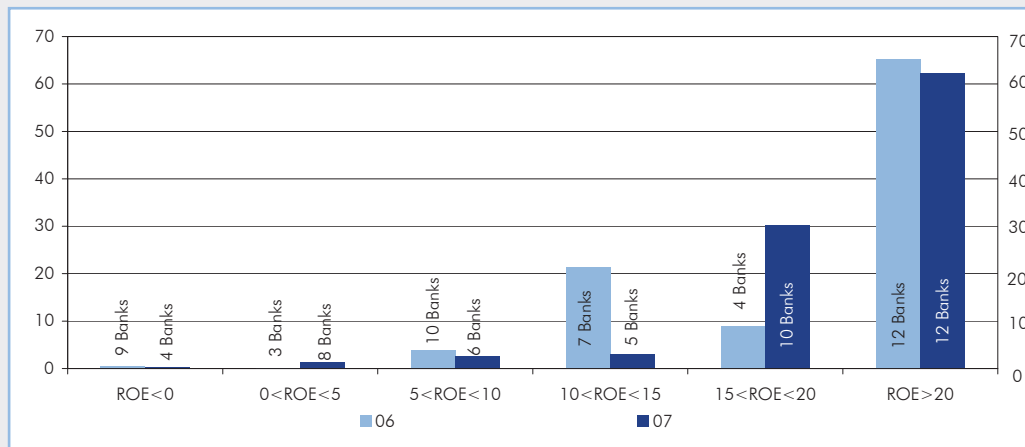
(1) In 2007, the data is as of September 2007 for USA and Japan, and it is as of December 2007 for Turkey. There is no data for UK as of 2007.

(2) Average compounded interest rates of Treasury discounted auctions are used for Turkey and 10-year government bond yield is used for other countries.

Before 2006, the ROE of the Turkish banking sector was lower than the average compounded interest rate of the Treasury auctions (Chart II.10). Starting from 2006, steady

increase in the ROE has been above the yield on government bonds, assessed as risk-free . The difference, which was 1.4 points at end -2006, reached 2.9 points by end-2007, indicating a favorable development, yet it is still low when compared to developed countries (Chart II.11). The high risk premium of our country is influential on this difference being low. On the other hand, the expectation that implemented policies will provide macroeconomic and financial stability in the medium and long run and consequently the risk premium will drop, ensures the growth of the banking sector and the persistent interest of foreign investors.

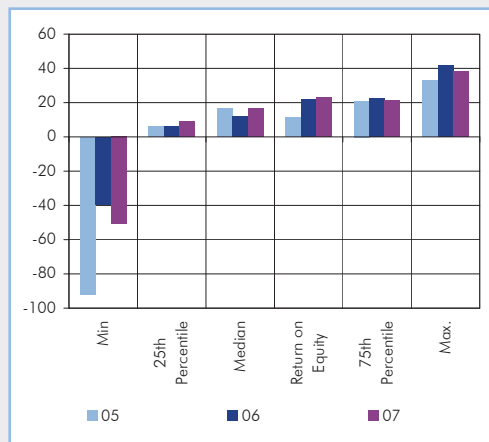
Chart II.12.
Return on Equity Based on Asset Share (%)



Source: BRSA-CBRT

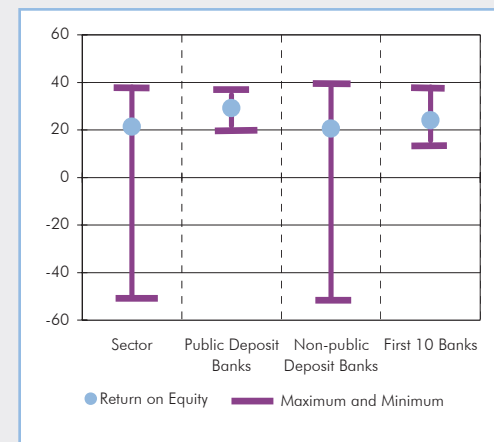
As of year-end 2007, the number of banks with a ROE over 15 percent rose to 22 from 16 and their share in total assets surged to 92.6 percent from 74.2 percent. The number of banks declaring losses dropped to 4 from 9 (Chart II.12).

Chart II.13.
Return on Equity of Deposit Banks (%)



Source: BRSA-CBRT

Chart II.14.
Return on Equity: Maximum and Minimum (December 2007) (%)



Source: BRSA-CBRT

The ROE of deposit banks have been increasing over the last three years. At end-2007, 75 percent of deposit banks have a ROE lower than 21.2 percent and though limited, it has a tendency to decline (Chart II.13). However, the asset size of deposit banks with a ROE over 21.2 percent comprises 47 percent of the total assets of the sector.

As of end-2007, the value range for the ROE is narrow for public deposit banks and the largest ten banks in terms of asset size. The broader range for non-public deposit banks is due to the effect of small banks (Chart II.14).

Table II.3 Net Profit and Its Components (Million YTL)¹

	03.07	03.08	Change (%)
I. Operating Income (A+B)	8,815	11,222	27.3
A- Net Interest Income	5,825	7,297	25.3
B- Non-Interest Income	2,990	3,925	31.3
II. Non-Interest Expenses (C+D)	4,853	7,147	47.3
C- Prov. for Credits and Other Receiv.	1,235	2,198	78.0
D- Other Operating Expenses	3,618	4,949	36.8
III. Net Operating Profit (I-II)	3,962	4,075	2.8
IV. Other Income	86	522	507.0
V. Provision for Taxes	771	945	22.6
VI. Net Profit (III+IV-V)	3,277	3,652	11.4

Source: BRSA-CBRT

(1) Non-Interest Income = Net Fees and Commissions Income (including Banking Services Income) + Dividend Income + Net Trading Income (Loss) + Other Operating Income
Other Income = Revenue from Profit Share Excluding Dividend Income + Extraordinary Income (Expenses).

Upon analyzing the first quarter of 2008, it is seen that the banking sector has failed to maintain the profitability performance of 2007. By March 2008, net profit of the sector rose by only 11.4 percent in comparison to the same period of the previous year and was YTL 3.7 billion (Table II.3). It is remarkable that in this period non-interest expenses has had a downward effect on profitability.

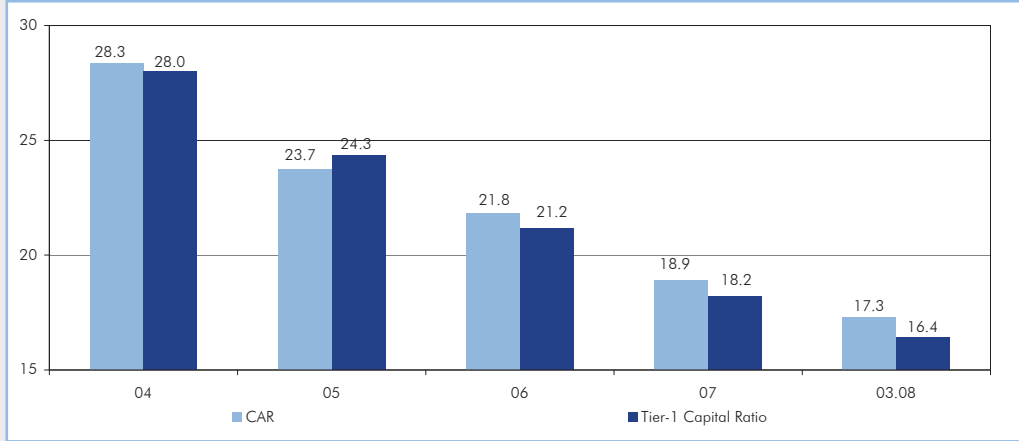
As of March 2008, in comparison to the same period of the previous year, the ROA of the banking sector dropped to 2.4 percent from 2.6 percent and the ROE to 20.1 percent from 21.3 percent. The net interest margin of the sector remained the same at 5.2 percent.

The ongoing global fluctuations might continue to have unfavorable effects on profitability during the rest of 2008.

II.2.2. Capital Adequacy

Although the unconsolidated capital adequacy ratio (CAR) of the banking sector, which is the ratio of own funds to the total exposure stemming from credit, market and operational risks, pursues a declining trend, it is well above both the minimum requirement of 8 percent and the target ratio of 12 percent for all periods under review.

Chart II.15.
Capital Adequacy Ratio (Unconsolidated) (%)

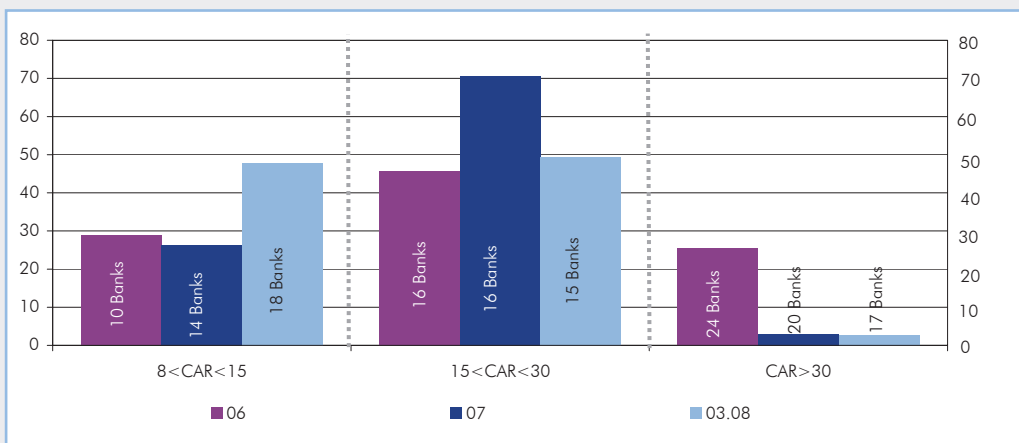


Source: BRSA-CBRT

The CAR of the banking sector decreased by 2.9 points at end-2007 compared to end-2006 and became 18.9 percent (Chart II.15). This fall in the CAR is essentially due to the requirement for banks to hold additional capital to cover operational risks beginning from June 2007. Moreover, in March 2008 the CAR of the sector dropped by another 1.6 points to 17.3 percent. This decline essentially stemmed from the increase in loans as well as the amendments in legislation changing the risk weights for letters of guarantee and letters of credit, effective from January 2008.

Even though the tier-1 capital ratio, which is the ratio of core capital to the total exposure stemming from credit, market and operational risks, continued its tendency to decline due to the above mentioned reasons; it stood at a high level of 18.2 percent as of December 2007, but dropped to 16.4 percent by March 2008. Despite the decline, the fact that the tier-1 capital ratio maintains its high level indicates that the Turkish banking sector has a high-quality capital structure.

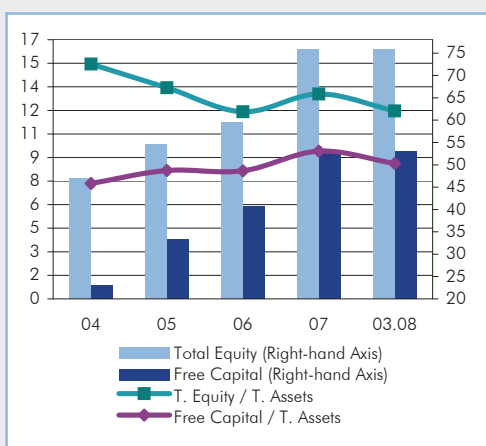
Chart II.16.
Asset Share of Banks Based on Capital Adequacy Ratio (%)



Source: BRSA-CBRT

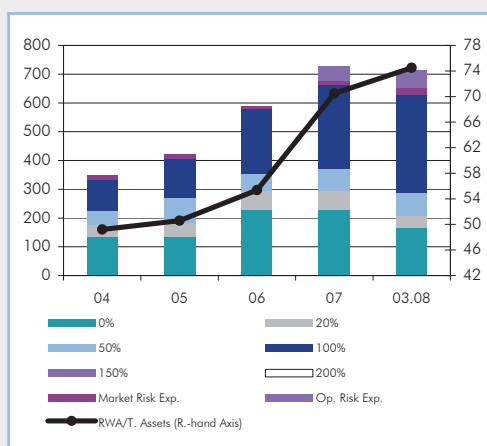
The CAR of the 40 banks, which hold 71.2 percent of sector assets remained above 15 percent at end-2006, while that of the 36 banks holding 73.6 percent of sector assets remained above 15 percent at end-2007 (Chart II.16). As of year-end 2007, the dramatic decline observed in asset shares of the banks which had a CAR above 30 percent stemmed from the fact that two banks having large asset shares migrated to the group with a CAR of 15-30 percent due to the capital that they had reserved for operational risks. As of March 2008, the CAR of the 32 banks which hold 52.2 percent of sector assets, exceed 15 percent.

Chart II.17.
Free Capital of the Banking Sector
(%, Billion YTL)



Source: BRSA-CBRT

Chart II.18.
Composition of Risk Exposures
(Billion YTL, %)



Source: BRSA-CBRT

The ratios of free capital to total assets and total shareholders' equity to total assets increased remarkably by end-2007. However, in March 2008, these ratios declined as the Securities Revaluation Fund produced a negative balance, reducing shareholders' equity and hence free capital, the rate of increase of which then lagged behind that of the assets (Chart II.17).

The ratio of the total exposure stemming from credit, market and operational risks to total assets surged to 74.5 percent in March 2008 from the 70.5 percent figure of end-2007 (Chart II.18).

It is known that the CAR of the Turkish banking sector is high due to the fact that Turkish banks hold large portfolios of government debt securities classified under 0 percent risk category. In an environment of increasing credit volume and in the process of convergence with Basel II, and despite the new application for reserving capital for operational risks and changing weights of some risks, the fact that the ratio maintains its high level is considered to be a positive development.

Today, it is observed that the fluctuations in the global financial markets have limited effects on Turkish markets. However, keeping in mind the intertwined nature of global markets and the persistence of problems, as well as the increasing volume of retail and corporate loans, strong capital and sound profitability structure are of crucial importance for the banking sector. Hence, the banking sector should avoid policies that might undermine its capital structure during such a period when the carried risks are more likely to materialize with the effects of developments.

Box 10.**Amendments to the Regulation Regarding the Measurement and Assessment of Capital Adequacy**

BRSA has been amending the capital adequacy regulation within the context of developments in the financial markets and convergence with Basel II, which was announced to be adopted by the beginning of 2009.

The most important of these amendments in regards the effects it has is the requirement for banks to hold additional capital for operational risks beginning from June 2007. Moreover, apart from those subject to lower risk weight, the temporary application indicating that letters of guarantee will be subject to 20 percent and letters of credit to 50 percent risk-weight ended in January 2008 and the risk weights of these items have been increased. Both of these amendments had a decreasing effect on the capital adequacy ratio.

With another amendment published in the Official Gazette on October 10, 2007, the "10 percent" category has been added to the risk-weighted assets. This category includes mortgage securities available for sale and held to maturity, which possess the qualifications stipulated by the legislation of the capital market and are issued by domestic banks and banks of the OECD countries, as well as their income accruals. An additional change, effective as of January 2008, is that in case the share of securities available for sale on the balance sheet is more than 10 percent of total securities, they will be accepted as trading accounts and assessed within the market risk exposure, thus capital will be calculated accordingly. This application decreased the zero percent risk-weighted assets category.

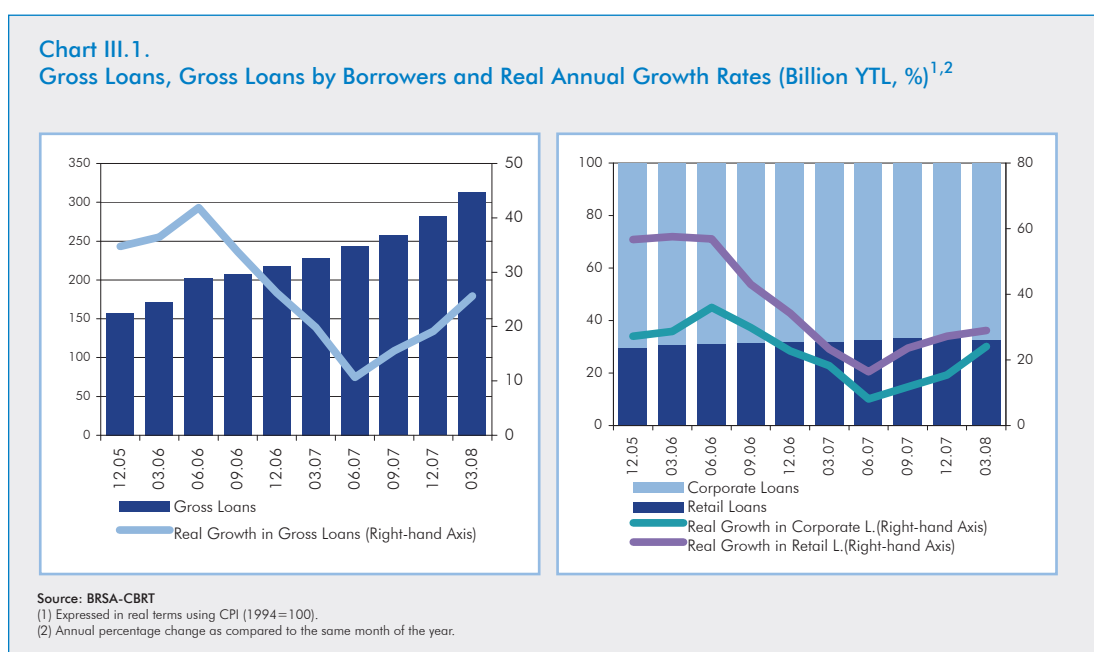
With the amendment published in the Official Gazette on March 22, 2008, the credit conversion rates of credit card limit liabilities and limit liabilities for deposit accounts with overdraft facilities were decreased to 20 percent from 50 percent. Another significant amendment was related to the installment credit card receivables that used to be treated as 100 percent risk-weighted. These receivables will be subject to maturity distinction and those with a remaining maturity of more than 6, less than 12 month-installments will be risk weighted at 150 percent, and those with a remaining maturity of more than 12 month-installments will be risk weighted at 200 percent. Since this will lead to an increase in the required capital, an indirect limitation is being imposed on installment credit card expenditures.

III. BANKING SECTOR RISKS

Participation banks, which have the same legal status as traditional banks but different operating principles, are excluded from the risk analyses of this section.

III.1. Credit Risk and Scenario Analysis

III.1.1. Credit Portfolio



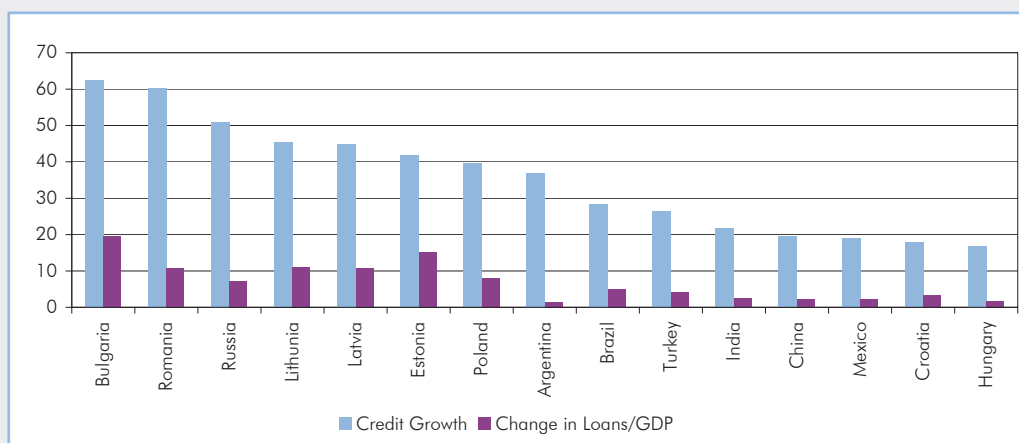
The gross credit volume⁶ of the banking sector increased by 19.2 percent in real terms compared to the same period last year and reached YTL 281.4 billion by end-2007. The rate of increase of credit volume, which declined due to tight monetary policy being implemented since the second quarter of 2006, re-entered an upward trend from the second half of 2007 onwards. In March 2008, credits increased annually by 25.6 percent in real terms and reached YTL 313.3 billion (Chart III.1).

The growth rate of retail loans, which are the main determinant of the increase in gross credit volume in recent years, is affected more by the monetary tightening compared to corporate loans as they are mostly extended in Turkish currency. However, the rate of increase in retail loans resumed its upward trend from June 2007 onwards. The share of retail loans in total loans, which was 31.8 percent at end-2006, increased to 34 percent at end-2007, but decreased in March 2008 and became 32.7 percent (Chart III.1).

⁶ Gross Loans = Total Loans + Gross NPLs

In the upcoming period, credit supply is expected to be determined by the course of turbulence in global markets. In this period, banks' tendency to hold more liquid portfolios will probably restrain credit growth, as well.

Chart III.2.
Credit Growth in Selected Countries and Change in Loans/GDP (2008) (%)



Source: IMF Global Financial Stability Report (April 2008)

Although Turkey's credit growth lagged behind that of Bulgaria, Romania, Lithuania, Latvia, Estonia and Poland, it stood at a high level of 26.5 percent in nominal terms at end-2007 (Chart III.2).

Table III.1. Some Selected Credit Ratios (Million YTL, %)

	2005	2006	2007	03.08
First 5 Banks¹				
Total Gross Loans	87,889	127,494	162,452	180,354
Share in Total Gross Loans	55.8	58.5	57.7	57.6
NPLs/Total Gross Loans	3.9	4	3.8	3.1
Loans/Deposits	54.7	79.9	88.8	91.1
First 10 Banks¹				
Total Gross Loans	127,913	183,154	236,833	262,556
Share in Total Gross Loans	81.2	84.1	84.2	83.8
NPLs/Total Gross Loans	5	3.8	3.6	3.1
Loans/Deposits	58.9	68.5	77.2	78.6
Sector				
Total Gross Loans	157,440	217,848	281,370	313,285
NPLs/Total Gross Loans	4.8	3.8	3.5	3
Loans/Deposits	64.8	73.5	82.3	83.9

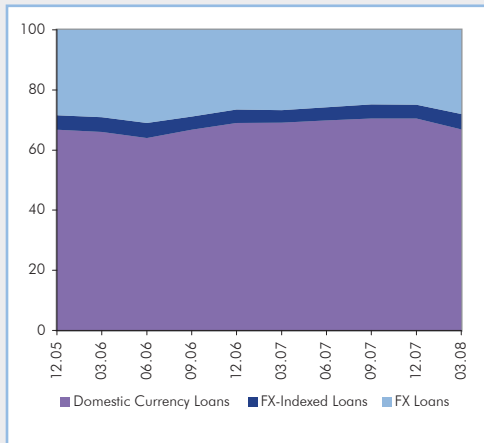
Source : BRSA-CBRT

(1) The first 5 and 10 banks have been taken into consideration according to the gross loans.

By the end of 2007, the share in total loans of the first five banks that extended the majority of loans declined by 0.8 points compared to the end of the previous year, while the share of the first ten banks rose by 0.1 points. The share of these banks in the total credit volume declined in the first quarter of 2008. At end-2007, the NPL ratios of both groups declined by 0.2 points. Yet, despite the continued downward trend in March 2008, the ratios of both groups remained above the sector average.

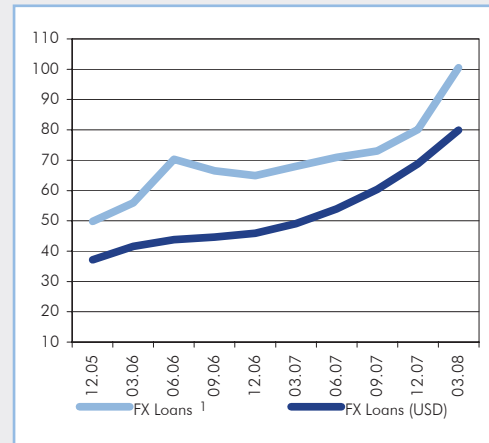
The loans to deposits ratio of the sector was realized as 82.3 percent as of end-2007 and reached its highest level in the last six years with a 1.6 point increase in March 2008. Meanwhile, the downward trend of NPL ratio continued although this was mainly due to the relatively higher increase in gross loans compared to that in non-performing loans. This decline is considered a favorable development as it indicates that the banking sector retained its soundness in a conjuncture where international banks face tremendous losses due to global fluctuations (Table III.1).

Chart III.3.
Currency Composition of Loans
(%, Excluding NPLs)



Source: BRSA-CBRT

Chart III.4.
FX Loans
(Billion YTL-USD, Excluding NPLs)



Source: BRSA-CBRT

(1) They were converted to USD using CBRT buying exchange rate as of month-end.

The share of domestic currency loans in total loans, which was 69.1 percent at the end of 2006, rose to 70.5 percent at the end of 2007 but went down to 66.9 percent in March 2008 (Chart III.3). Domestic currency loans, which displayed an increase of 33.8 percent compared to the same period of previous year, reached YTL 203.3 billion by March 2008.

FX loans⁷, which amounted to YTL 64.9 billion as of year end 2006, reached YTL 80.1 billion at end-2007 with a 23.5 percent-increase and later rose to YTL 100.5 billion in March 2008 with an annual increase of 47.8 percent (Chart III.4). The low rate of increase in the Turkish lira equivalent of FX loans stemmed from the appreciation of the Turkish currency in the last one-year period. In March 2008, the USD equivalent of FX loans increased in annual terms by 62.9 percent.

⁷ FX-indexed loans are considered within the scope of foreign currency loans.

Table III.2. Loan Distribution by Size (% , Excluding NPLs)

	Total Loans				Number of Customers			
	2005	2006	2007	03.08	2005	2006	2007	03.08
Greater than 1 Million YTL	41.5	42.1	39.8	42.5	0.04	0.05	0.05	0.06
Btw. 501 Thous.-1 Mil. YTL	4.5	4.6	4.8	4.6	0.03	0.05	0.05	0.05
Btw. 101-500 Thous. YTL	10.6	12.1	13.3	12.8	0.27	0.43	0.54	0.56
Btw. 51-100 Thous. YTL	5.6	6.7	7.8	7.7	0.4	0.67	0.87	0.91
Less than 51 Thous. YTL	37.8	34.5	34.3	32.5	99.26	98.81	98.48	98.42
Total	100	100	100	100	100	100	100	100

Source: BRSA-CBRT

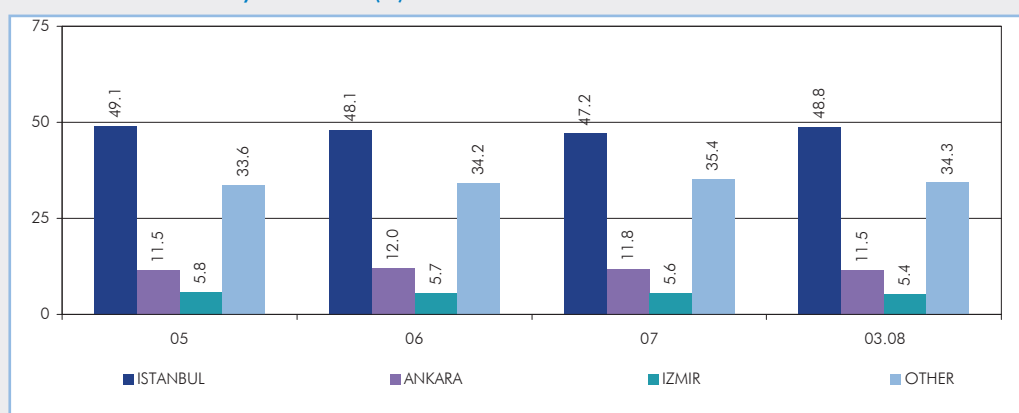
The distribution of loans by size suggests that in March 2008, the share of loans over YTL 1 million increased compared to previous periods, while the shares of all other loan groups decreased (Table III.2). The share of the number of customers receiving loans over YTL 1 million increased. The shares of the number of customers of loans between YTL 101-500 thousand and YTL 51-100 thousand also increased while the amount of these loans decreased.

Table III.3. Maturity Structure of the Loans (% , Excluding NPLs)

	2005	2006	2007	03.08
Betw. 0-12 Months	45.3	41.3	39.9	39.5
Betw. 12-24 Moths	23.3	17.8	16.4	16.0
Over 24 Months	31.4	40.9	43.7	44.5

Source: CBRT

The lengthening in maturity of loans in 2007 continued in the first quarter of 2008, as well (Table III.3). The share of the loans with a maturity longer than 24 months increased due to the long maturities of most housing and other consumer loans. Although extension of the loan maturity is deemed favorable in managing household debt and facilitating payment, it increases the maturity mismatch risk of the banking sector.

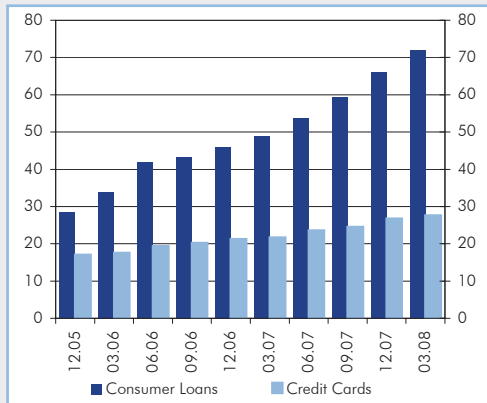
Chart III.5. Distribution of Loans by Provinces¹ (%)

Source: CBRT

(1) Loans are compiled based on bank reporting under the scope of Central Bank Law No:1211, Article 44. They include corporate loans that are greater than ten thousand New Turkish Liras (inclusive) and retail loans that are greater than 5 thousand New Turkish liras (inclusive); extended to real and legal bodies by banks (including external loans used by firms with the intermediation of banks) They are inclusive of non-performing loans and accrued interest and exclusive of non-cash loans. Since October 2007, firms have been disclosing their NPLs without any limits.

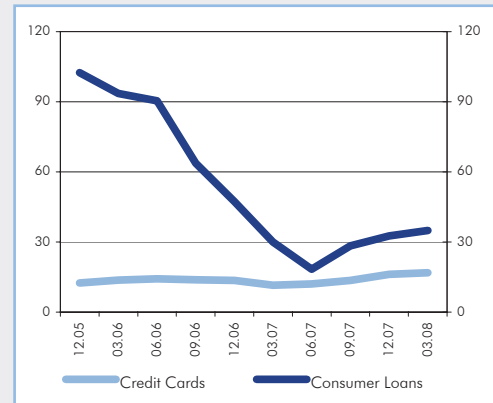
The geographical breakdown of loans shows that the shares of Ankara and Izmir in total loans continued to decrease as of March 2008, whereas the share of Istanbul increased compared to December 2007 (Chart III.5).

Chart III.6.
Retail Loans
(Excluding NPLs, Billion YTL)



Source: CBRT

Chart III.7.
Real Annual Growth Rates of Retail Loans (%)^{1,2}



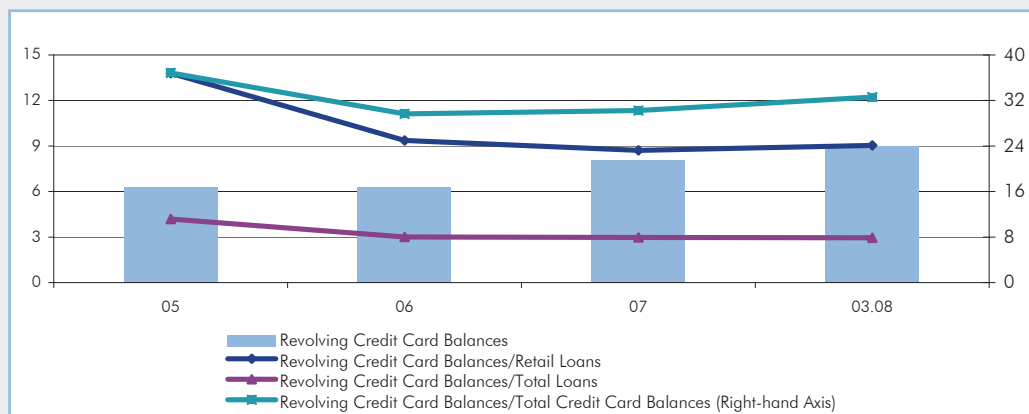
Source: CBRT

(1) Expressed in real terms using CPI (1994=100).

(2) Annual percentage change as compared to the same month of the previous year.

The real rate of increase in consumer loans stood at 32.5 percent in 2007. Despite having lagged behind its level of 2006 (47.6 percent), the said ratio reaccelerated as of March 2008 and rose to 34.9 percent (Chart III.7). The real rate of increase in credit cards⁸, which was 13.6 percent and 16.1 percent at end- 2006 and 2007, respectively, reached 16.8 percent as of March 2008 (Chart III.7).

Chart III.8.
Credit Card Revolving Rate¹ (Billion YTL, %)



Source: CBRT

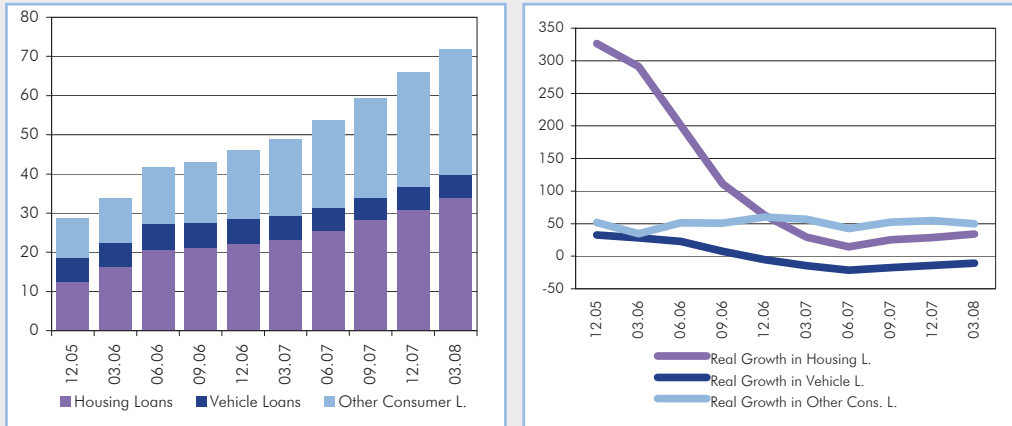
(1) Revolving credit card balances are the credit card balances which incur interest charges.

Meanwhile, although the part of credit card balances on which interest is charged has been increasing since 2005, its ratio to retail loans has maintained a horizontal course at 9 percent from 2006 onwards (Chart III.8).

⁸ Refers to the balance in the cash loans item, until credit card spendings and cash withdrawals are paid back to the Bank by the cardholder.

The upsurge observed in other consumer loans in 2007 stemmed from banks' campaigns targeted especially at wage earners. It is estimated that a certain amount of the other consumer loans extended in 2007 was used in the payment of the credit card debts with high interest rates.

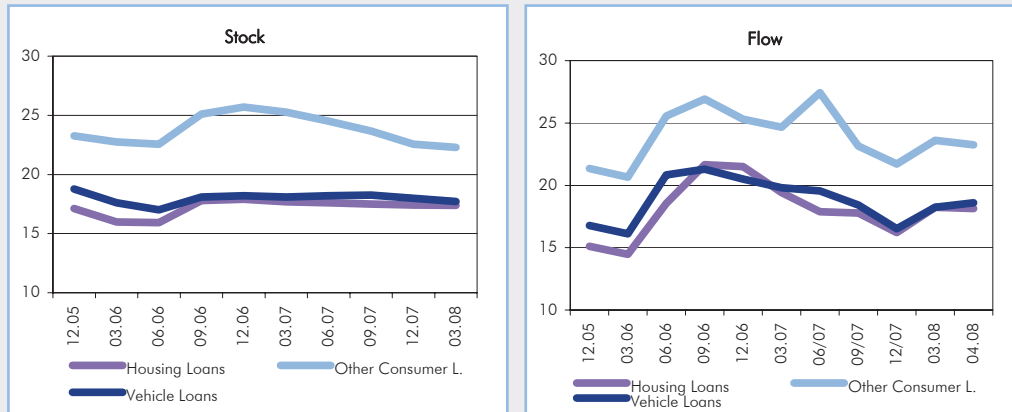
Chart III.9
Consumer Loans by Type and Real Growth Rate (Excluding NPLs, Billion YTL, %)^{1,2}



Source: CBRT
(1) Other consumer loans are consumer loans excluding housing and vehicle loans.
(2) Expressed in real terms using CPI (1994=100).

The real rate of increase in other consumer loans, which entered an upward trend from March 2006 onwards, was realized well above that of housing loans with 54.6 percent in 2007. Although the said rate of increase dropped to 49.6 percent by March 2008, it is still above that of housing loans. Meanwhile, vehicle loans have been declining in real terms since end-2006 (Chart III.9). As a result, the share of vehicle loans in consumer loans decreased while that of other consumer loans continues to increase. By March 2008, the shares in consumer loans of housing loans, other consumer loans and vehicles loans were realized as 47.3 percent, 44.6 percent and 8.1 percent, respectively (Chart III.9).

Chart III.10
Interest Rates (%)^{1,2}



Source: CBRT
(1) Other consumer loans are consumer loans excluding housing and vehicle loans.
(2) Weighted average interest rates.

Flow interest rates reflecting the latest development of interest rates suggest that consumer loan interest rates, which dropped parallel to the cut in CBT policy rates in the last quarter of 2007, entered an upward trend due to fluctuations in international markets in 2008. In April 2008, the highest increase compared to end-2007 was observed in vehicle loans with 2.08 points, whereas interest rates of housing loans and other consumer loans increased by 1.93 points and 1.55 points, respectively (Chart III.10). Meanwhile, stock interest rates maintained a relatively horizontal course due to the fixed rates of consumer loans extended previously (Chart III.10).

Table III.4. Sectoral Decomposition of Corporate Loans (Excluding NPLs) (%)^{1,2}

		Loans				FX Loans/Total Loans			
		2005	2006	2007	03.08	2005	2006	2007	03.08
1	Wholesale and Ret. Trade, Brokerage, Repair of Motor Vehicle	19.2	22.9	19.7	18.2	38.2	37.5	35.6	37.3
2	Transport, Storage and Communication	5.7	7.9	8.5	8.5	68.8	54.7	58.3	60.7
3	Textile and Textile Product Industry.	8.7	6.5	5.9	5.9	70.5	66.7	63.9	67.5
4	Construction	6.5	6.4	8.5	9.3	59.5	50.3	51.0	57.6
5	Industry of Tobac., Bever. and Food	7.3	5.5	5.8	5.5	47.9	46.2	43.5	48.1
6	Man. of Basic Metals and Fabricated Metal Prod.	5.5	5.5	5.8	6.2	73.9	73.5	70.6	73.8
7	Sources of Elect., Gas and Water	4.0	5.2	4.1	4.2	96.0	93.4	90.3	90.8
8	Agriculture, Hunting and Forestry	4.7	4.6	5.6	5.2	19.5	17.3	24.4	25.4
9	Man. of Machinery and Equipment	3.1	3.6	3.2	3.2	60.2	45.9	41.7	45.4
10	Hotels and Restaurants (Tourism)	3.1	3.4	3.1	3.5	77.6	75.8	71.2	76.2
	Total of 10 Sectors	67.9	71.4	70.2	69.6	55.8	51.7	50.3	54.1

Source: CBRT

(1) Loans are compiled based on bank reporting under the scope of Central Bank Law No:1211, Article 44. They include corporate loans that are greater than ten thousand New Turkish Liras (inclusive) and retail loans that are greater than 5 thousand New Turkish liras (inclusive); extended to real and legal bodies by banks (including external loans used by firms with the intermediation of banks) They are inclusive of non-performing loans and accrued interest and exclusive of non-cash loans.

(2) Excluding Financial Intermediation.

According to Central Bank Risk Center data, the share of the ten selected sectors in total corporate loans continued to decline and was realized as 69.6 percent as of March 2008. The sector with the largest share in total corporate loans is the "Wholesale and Retail Trade, Commissions and Motor Vehicles Services" with 18.2 percent, albeit its share is in decline. The shares of "Construction", "Transport, Storage and Communication" and "Basic Metals and Fabricated Metal Products" in total corporate loans increased, whereas that of the "Textile and Textile Products Industry" continues to decrease. By March 2008, the depreciation of the Turkish lira was also influential in the rise in the share of FX-loans in total loans. Meanwhile, FX-loans especially in "Construction", "Agriculture, Hunting and Forestry" and "Transport, Storage and Communication" sectors have been increasing since 2006 (Table III.4).

III.1.2. Non-Performing Loans

Non-performing loans increased by 20.1 percent at end-2007 compared to the same period last year and reached YTL 9.8 billion but later decreased to YTL 9.5 billion in March

2008. This actually stems from the amounts that have been written off, as the opportunity to collect these amounts no longer exists.

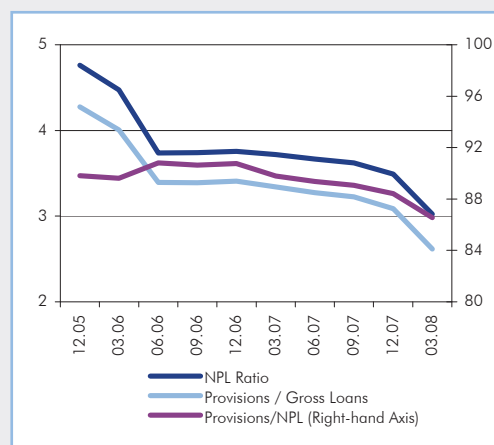
Table III.5. Total NPLs (Million YTL)¹

	2005	2006	2007	03.08
Loans and Other Rec. with Limited Collectibility	813	1,149	1,356	1,423
Doubtful Loans and Other Receivables	775	820	1,634	1,822
Loans and Other Receivables Classified As Loss	5,907	6,212	6,837	6,221
Total NPLs	7,495	8,182	9,827	9,465

Source: BRSA-CBRT
(1) Excluding İller Bank

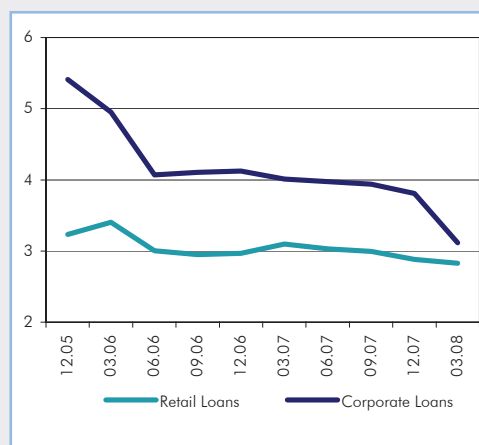
When the distribution of non-performing loans is analyzed, the share of loans and other receivables classified as loss maintains its dominance in the total non-performing loans in all periods. Meanwhile, the share of doubtful loans and other receivables, which was 10 percent at the end of the previous year, increased to 16.7 percent at end-2007 and then to 19.2 percent in March 2008 (Table III.5).

Chart III.11. NPL Ratio and Provisions to NPLs (%)



Source: BRSA-CBRT

Chart III.12. NPL Ratios for Retail Loans¹ and Corporate Loans² (%)



Source: BRSA-CBRT
(1) Retail Loans=Consumer Loans + Credit Cards
(2) Corporate Loans=Total Loans - Retail Loans

Despite the increasing amount of non-performing loans, the NPL ratio⁹ maintained a downward trend in 2007. The provisions to non-performing loans ratio that was 90.8 percent at end-2006 declined to 86.5 percent in March 2008. The provisions to credits ratio exhibited a similar trend (Chart III.11).

⁹ Non-Performing Loan Ratio= Gross Non-Performing Loans/ Gross Loans

Box 11.**Amendment to the Regulation on Provisions**

Pursuant to the “Regulation to Amend the Regulation on the Principles and Procedures for the Determination of the Quality of the Credits and Other Receivables by Banks and Provisions That are To Be Reserved by Banks”, which was published by the BRSA and was put into effect on February 6, 2008, general provisioning rate for the loans that are closely followed-up, which was equivalent to that of standard loans, was increased.

Accordingly, banks shall reserve as general provisions 1 percent of cash loans, 2 per thousand of the total of letters of guarantee, bill guarantees and other non-cash loans classified as standard and 2 percent of total cash loans, 4 per thousand of the total of letters of guarantee, bill guarantees and other non-cash loans classified as close follow-up.

When the development of non-performing loans is analyzed with respect to economic agents, it is seen that the NPL ratios for retail loans displayed a horizontal course, while that of corporate loans decreased. This decline mainly stemmed from the rise in corporate loans and the increase in the Turkish lira equivalent of corporate FX loans (Chart III.12).

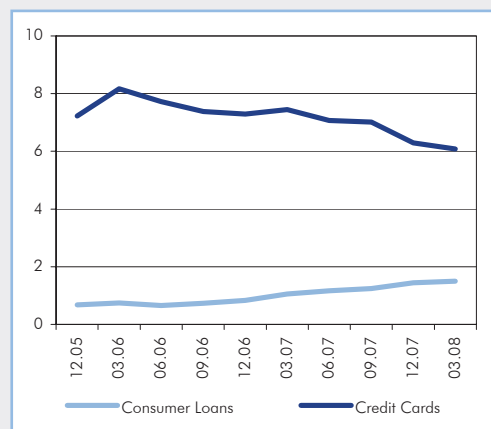
Table III.6.
NPL Ratios and Provisions to NPLs for Selected Countries (%)

	NPL Ratio				Provisions/NPLs			
	2005	2006	2007	Latest Data	2005	2006	2007	Latest Data
Argentina	5.2	3.4	2.9	Oct.	125.1	130.3	130.3	Oct.
Brazil	4.2	4.1	3.1	Sept.	151.8	152.8	182.4	Sept.
Bulgaria	2.2	2.2	2.2	Sept.	45.3	47.6	-	Sept.
Czech Republic	4.3	3.6	3	Sept.	63.2	58.5	56.4	Sept.
Croatia	6.2	5.2	4.9	Sept.	60	61.5	58.9	Sept.
Hungary	2.5	2.5	2.5	June	54.4	53.9	55.9	June
Latvia	0.7	0.4	0.4	Sept.	98.8	116.6	125.9	Sept.
Lithuania	0.6	1	0.9	Sept.	-	-	-	
Poland	7.7	3.5	3.1	Sept.	61.6	57.8	-	Sept.
Romania	8.3	8.4	9.1	Sept.	31.4	32	36.9	Sept.
Russia	3.2	2.6	2.6	June	156.3	159.3	-	Sept.
United Kingdom	1	0.9	-	Dec.	54	54.6	-	Dec.
USA	0.7	0.8	1.1	Sept.	155	137.2	104.8	Sept.
Turkey	3.9	3.2	3.6	Sept.	89.8	90.8	89.1	Sept.

Source: IMF Global Financial Stability Report, April 2008, BRSA-CBRT

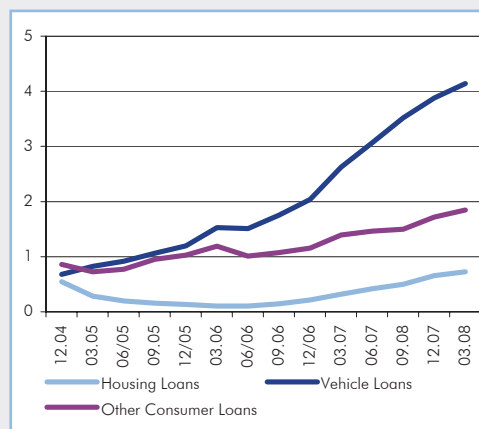
In 2007, the NPL ratio of Turkey remained below that of Romania and Croatia but displayed a higher trend compared to the NPL ratios of other selected countries. Meanwhile, it is seen that provisions to non-performing loans ratio for Turkey is higher than that of the selected countries excluding Brazil, Argentina and Latvia (Table III.6).

Chart III.13.
NPL Ratios for Retail Loans (%)



Source: CBRT

Chart III.14.
NPL Ratios¹ (%)



Source: CBRT

(1) Other consumer loans are consumer loans excluding housing and vehicle loans.

The NPL ratio of credit cards, which was above 8 percent in early 2006, entered a downward trend following the enforcement of the Law on Bank Cards and Credit Cards, and maintained this trend in 2007. In the last quarter of 2007, the NPL ratio of credit cards dropped significantly, as one bank wrote off the non-performing amounts of credit cards from its total assets. The said decline continued in the first quarter of 2008 and the NPL ratio of credit cards stood at 6.1 percent as of March 2008 (Chart III.13).

The NPL ratio of consumer loans has displayed an upward trend since the second half of 2006 and gradually increased from 0.8 percent at end-2006, to 1.4 percent at end-2007 and to 1.5 percent in March 2008 (Chart III.13). Based on types of consumer loans, vehicle loans have the highest NPL ratio. The said ratio increased further to 4.1 percent in March 2008. By March 2008, the NPL ratio of housing loans was realized as 0.7 percent, while that of other consumer loans increased to 1.8 percent (Chart III.14). Despite the high rate of increase in other consumer loans, their NPL amount also displays an upward trend.

Table III.7.
NPL Ratio for Some Selected Sectors (%)¹

	2005	2006	2007	03.08
1 Wholesale and Ret. Trade, Brokerage, Repair of Motor Vehicle	3.9	2.3	3.3	3.4
2 Transport, Storage and Communication	3.4	1.3	1.2	1.2
3 Textile and Textile Product Industry.	10.0	11.2	11.7	9.5
4 Construction	4.3	4.0	2.4	1.9
5 Industry of Tobacco, Beverages and Food	3.8	3.8	4.7	3.7
6 Manufacture of Basic Metals and Fabricated Metal Prod.	2.7	0.9	1.1	0.7
7 Sources of Electricity, Gas and Water	0.2	0.2	0.1	0.1
8 Agriculture, Hunting and Forestry	3.4	3.1	3.2	3.5
9 Manufacture of Machinery and Equipment	5.0	2.1	2.1	1.6
10 Hotels and Restaurants (Tourism)	3.1	2.4	2.4	1.8
Total of 10 Sectors	4.4	3.1	3.2	2.9

Source: CBRT

(1) Loans are compiled based on bank reporting under the scope of Central Bank Law No:1211, Article 44. They include corporate loans that are greater than ten thousand New Turkish Liras (inclusive) and retail loans that are greater than 5 thousand New Turkish Liras (inclusive); extended to real and legal bodies by banks (including external loans used by firms with the intermediation of banks) They are inclusive of non-performing loans and accrued interest and exclusive of non-cash loans. Since October 2007, firms have been disclosing their NPLs without any limits.

According to the Central Bank Risk Center data, the downward trend observed in NPL ratios of “Construction”, “Machinery and Equipment Industry” and “Hotel and Restaurants (Tourism)” sectors continued in March 2008, whereas NPL ratios of “Wholesale and Retail Trade, Commissions and Motor Vehicles Services” and “Agriculture, Hunting and Forestry” sectors have been increasing since 2006 (Table III.7).

Box 12.

Amendment to the Regulation on Risk Operations of The Customers of Banks and Other Financial Institutions

Risk Centralization system procedures, which are carried out by the Central Bank Risk Center in the framework of Article 44 of the Central Bank Law No.1211, have been amended with “The Regulation on Risk Operations of The Customers of Banks and Other Financial Institutions” promulgated in the Official Gazette No.26649, dated September 20, 2007. The data exchange with banks and other financial institutions since October 2007 is carried out in the framework of the principles and procedures defined in the “Circular on Risk and Notices of Protest” and in the notifications about credit limits and risks, total amount of receivables to be discharged are reported on a corporate basis regardless of their amount. Therefore, the data related to the default rates of corporate loans given in previous Financial Stability Reports have changed.

In the analysis of firms by sectors, the average default rate, which is calculated by dividing the number of loans monitored in the NPL accounts to total number of credits, rose to 7.2 percent by March 2008 (Table III.8).

The average default rate of the selected 10 sectors was realized as 5.8 percent in March 2008. Besides, default rates of “Wholesale and Retail Trade, Commissions and Motor Vehicles Services”, “Textile and Textile Products Industry”, “Food, Beverages and Tobacco Industry” and “Agriculture, Hunting and Forestry” remained above the average default rate of the selected 10 sectors by March 2008 (Table III.8).

Table III.8.
Default Rates for Some Selected Sectors (Item, %)^{1,2}

	10.07	12.07	03.08
1 Wholesale and Ret. Trade, Brokerage, Repair of Motor Vehicle	14.2	12.2	12.2
2 Transport, Storage and Communication	2.4	2.5	2.9
3 Textile and Textile Product Industry.	6.5	6.5	7.1
4 Construction	5.1	4.7	5.1
5 Industry of Tobacco, Beverages and Food	5.9	5.9	6.4
6 Manufacture of Basic Metals and Fabricated Metal Prod.	2.7	2.8	3.2
7 Sources of Electricity, Gas and Water	3.1	3.5	4.0
8 Agriculture, Hunting and Forestry	8.3	8.6	8.7
9 Manufacture of Machinery and Equipment	2.7	3.1	3.5
10 Hotels and Restaurants (Tourism)	4.5	4.7	5.1
Total of 10 Sectors	5.5	5.4	5.8
Total Corporate Sector	5.9	6.1	7.2

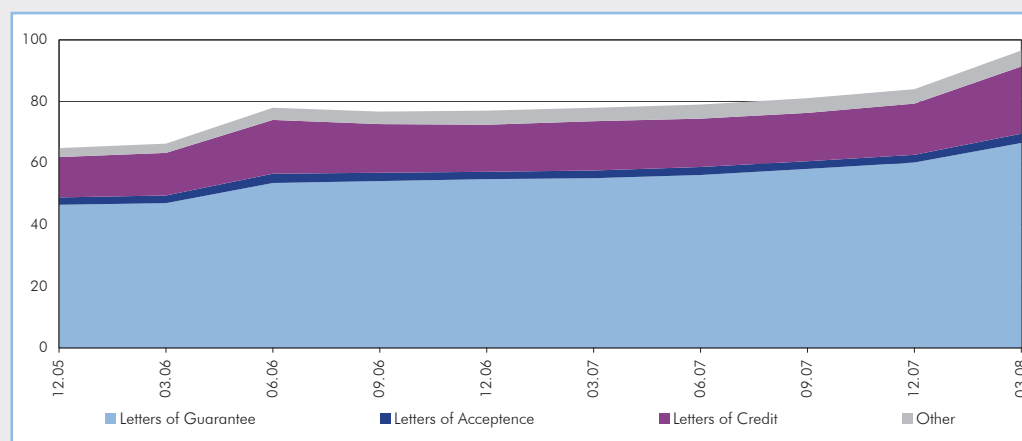
Source: CBRT

(1) Loans are compiled based on bank reporting under the scope of Central Bank Law No:1211, Article 44. They include corporate loans that are greater than ten thousand New Turkish Liras (inclusive) and retail loans that are greater than 5 thousand New Turkish Liras (inclusive); extended to real and legal bodies by banks (including external loans used by firms with the intermediation of banks) They are inclusive of non-performing loans and accrued interest and exclusive of non-cash loans. Since October 2007, firms have been disclosing their NPLs without any limits.

(2) Excluding Financial Intermediation.

III.1.3. Non-Cash Loans

Chart III.15
Non-Cash Loans by Type (Billion YTL)



Source: BRSA-CBRT

The ratio of off-balance sheet liabilities, which include banks' non-cash loans and commitments, to total balance sheet size decreased gradually from 15.9 percent at year-end-2006 to 14.9 percent at year-end 2007 and later increased again to 15.8 percent by March 2008.

The ratio of non-cash loans (Chart III.15), which are mainly composed of letters of guarantee and letters of credit, to cash loans was 35.4 percent at end-2006. This ratio decreased to 29.8 percent at end-2007 but then went up to 30.8 percent in March 2008. The share of foreign currency denominated non-cash loans was 64.5 percent in March 2008.

III.1.4. Credit Risk Scenario Analysis

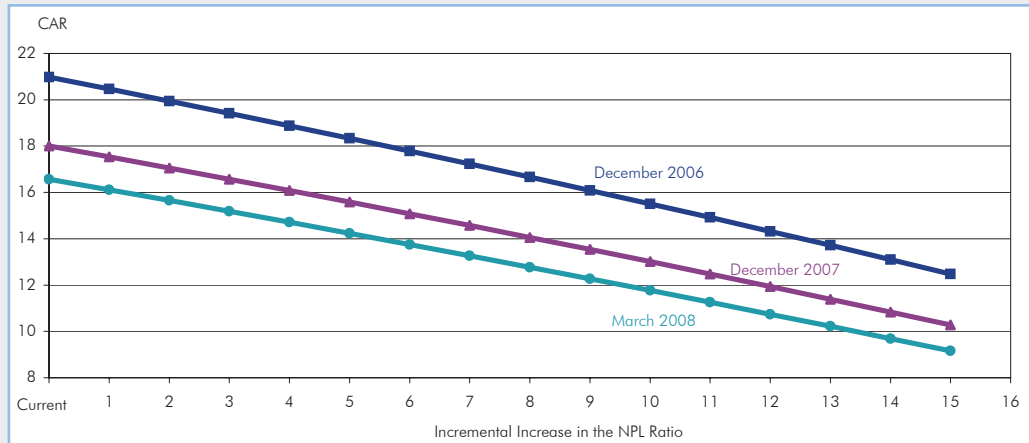
With the aim of assessing the credit risk that the banking sector might be exposed to, analyses were conducted on how the CARs of banks might be affected by a probable increase in NPL ratios as of March 2008.

Within this framework, scenario analyses were conducted under the following assumptions:

- i) The total credit amount of banks remains unchanged,
- ii) NPLs resulting from shocks have the same composition as the existing NPLs of banks. For banks, which did not have any NPLs before the shocks, in the event of a shock, their post-shock NPLs are classified as "loans and other receivables with limited collectibility", setting aside a 20 percent provision.
- iii) Post-shock NPLs are accounted in the 100 percent risk weight category for the calculation of pre-shock CARs.
- iv) There is no change in the total risk weighted assets and own funds of the sector except for the shocks.

Moreover, collateral amounts were not taken into account when calculating additional provisions.

Chart III.16.
Effects of Credit Shocks on the CAR of the Sector (%)¹



Source: BRSA-CBRT
(1) Excluding the SDIF Bank, Iller Bank and banks that do not have loans in their portfolio.

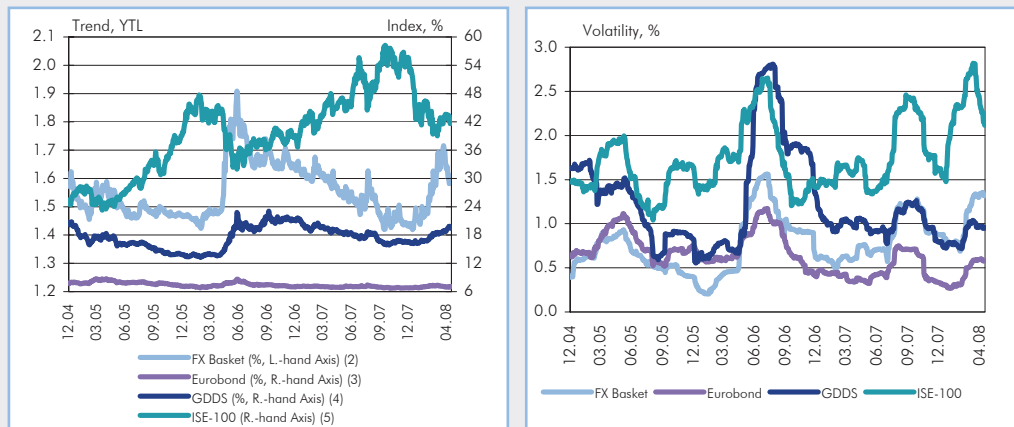
The scenario analysis focuses on the effects of 1-15 point-incremental increases in the NPL ratio of the CAR of the banking sector. Accordingly, the 15-point increase in the NPL ratio of the banking sector reduced the CAR of the sector by 8.5 points as of December 2006 and by 7.4 points as of March 2008 (Chart III.16). As a result of the maximum shock, the CAR of the sector decreased to 9.2 percent but still remained above the legal limit of 8 percent. As a result of the shocks exceeding 10 points, the CAR of the sector remained below the target ratio of 12 percent.

III.2. Market Risk and Scenario Analyses

In this section, where the implications of the developments in interest and FX risk on bank balance sheets are assessed, the impact of two scenarios based on hypothetical and historical data are analyzed.

III.2.1. Market Risk

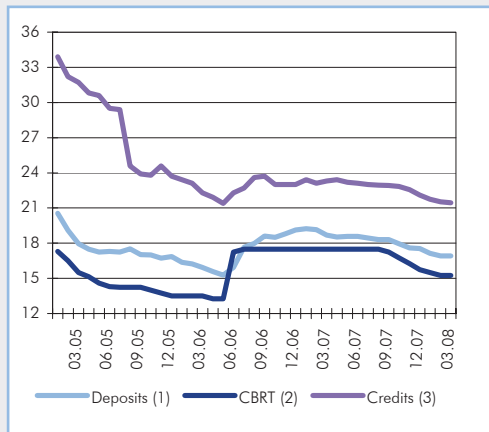
Chart III.17.
Foreign Exchange Rates, Interest Rates and Equity Prices¹



Source: CBRT
(1) For volatility calculations, standard deviation of daily logarithmic yield of the related market instrument (60 day moving average) is used.
(2) 50 percent of the Foreign Exchange Basket is in USD and the rest is in Euro.
(3) Based on USD denominated Eurobond interest rate with 2030 maturity.
(4) Based on the interest rate on the GDDS with the largest transaction volume in the secondary market.
(5) Calculated by dividing ISE-100 by 1,000.

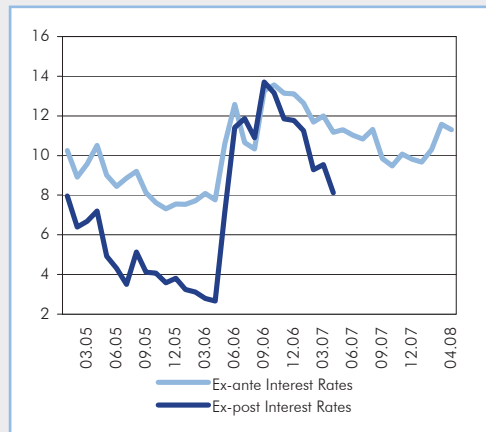
Fluctuations in international markets affected the financial markets in Turkey, as in other developing countries. Beginning in February 2008, the ISE index started to decline, interest rates on GDDS increased and YTL began to depreciate. Parallel to these developments, the volatility in financial markets increased. After the second half of April, the Turkish lira started to appreciate again and the volatility in the ISE index somewhat declined (Chart III.17).

Chart III.18.
Interest Rates (%)



Source: ISE, CBRT
 (1) Banking sector 3-month weighted "stock YTL deposit" interest rate.
 (2) CBRT overnight (O/N) borrowing rate.
 (3) Banking sector weighted "stock YTL credit" interest rate.

Chart III.19.
Ex-ante¹ and Ex-post²
Real Interest Rates of GDDS (%)

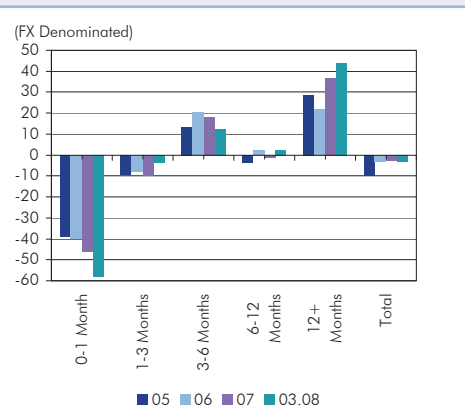
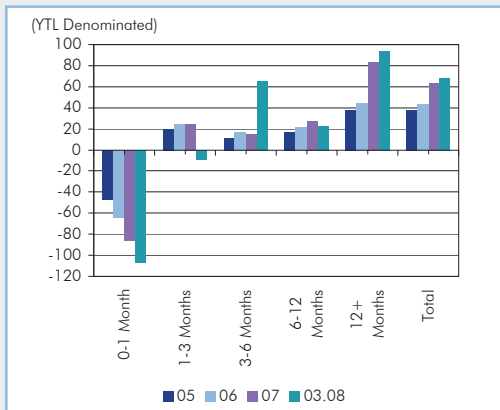


Source: Calculated by using the data of CBRT, ISE and TURKSTAT.
 (1) Ex-ante interest rate = $\frac{(1 + \text{nominal interest rate})}{(1 + \text{expected inflation rate})} - 1 \times 100$
 (2) Ex-post interest rate = $\frac{(1 + \text{last year's nominal interest rate})}{(1 + \text{realized inflation rate})} - 1 \times 100$
 As expected inflation rate, yearly ex-ante CPI figures in the bi-weekly Survey of Expectations published by the CBRT are used.

In the September 2007-February 2008 period, interest rates on deposits and loans displayed a downward trend due to the decline in policy rates but started to increase as of March, parallel to developments in international markets (Chart III.18).

The expected real interest rate rose to 11.3 percent in April 2008 from 9.8 percent at year-end 2007 (Chart III.19).

Chart III.20.
Interest Rate Sensivity Gap of the Banking Sector (Billion YTL)^{1,2}

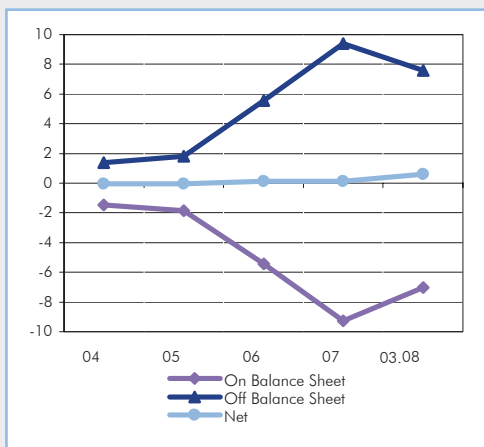


Source: BRSA-CBRT
 (1) Time to re-pricing is used.
 (2) Excluding SDIF bank.

In terms of the days to re-pricing period of the banking sector, it is observed that the negative interest-sensitive YTL and FX gaps were mainly concentrated in the 0-1 month maturity bracket, similar to previous periods (Chart III.20).

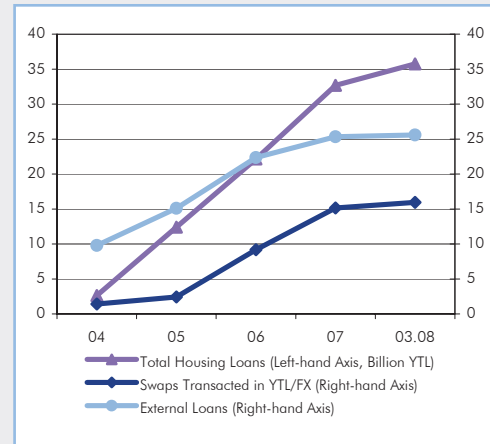
The positive sensitivity gap in the 1-3 month maturity bracket at end-2007 turned to negative in the March 2008 period. In terms of the overall position, while the interest rate-sensitive total YTL gap is positive, the interest rate-sensitive total FX gap is negative (Chart III.20).

Chart III.21.
Foreign Exchange Position of the Banking Sector¹ (Billion USD)



Source: BRSA
(1) Participation Banks are included.

Chart III.22.
Financing of Housing Loans and Swap Purchases (%)^{1,2,3} (Billion YTL, Billion USD)



Source: BRSA-CBRT
(1) "External loans" consist of syndication and securitization loans.
(2) The banks which extend housing loans are taken into consideration.
(3) Participation Banks are excluded.

The course of net overall FX position of the banking sector is almost balanced, while the on-balance sheet position is short (Graph III.21).

The main reason for the banking sector to have a high on-balance sheet short position is the funding of YTL denominated loans by foreign currency resources. Banks convert a portion of their long-term foreign currency loans from abroad into Turkish currency through swap operations and extend long-term housing loans (Chart III.22).

Banking sector, which offsets its on-balance sheet short position with the off-balance sheet long position, has USD 40.3 billion invested in selected derivative assets in YTL as the counter currency, as of March 2008. USD 35.4 billion of this amount is conducted with financial sector institutions.

III.2.2. Scenario Analyses

III.2.2.1. Interest Rate and Exchange Rate Increases

In this section, the individual and collective effects of interest rate increases and appreciation of exchange rates on the banking sector are analyzed under two different scenarios assuming that the shocks occur independently.

Under Scenario A, it is assumed that Turkish lira depreciates by 30 percent against other currencies, the interest rates for the Turkish currency and foreign currencies increase by 6 and 5 points, respectively, and Eurobond prices decline by 5 percent.

Under Scenario B, it is assumed that Turkish lira depreciates by 30 percent against other currencies, interest rate increases are twice the interest rate fluctuations observed during the 2006 May-June period, and Eurobond prices decrease by 5 percent¹⁰.

Table III.9. Interest and FX Rate Increase Scenarios

	SCENARIO A	SCENARIO B
A. Depreciation of YTL	30 percent depreciation of YTL against other currencies	30 percent depreciation of YTL against other currencies
B. Interest Rate Increase-YTL	Re-pricing of YTL interest sensitive assets and liabilities falling in 0-1 and 1-3 month maturity brackets at 6 points higher	Re-pricing of YTL interest sensitive assets and liabilities falling in 0-1, 1-3, 3-6 month maturity brackets at 9, 8, 11 points higher, respectively.
C. Interest Rate Increase-FX	Re-pricing of YTL interest sensitive assets and liabilities falling in 0-1 and 1-3 month maturity brackets at 5 points higher	Re-pricing of YTL interest sensitive assets and liabilities falling in 0-1, 1-3, 3-6 month maturity brackets at 1.1, 0.7, 1.1 points higher, respectively.
D. Trading Portfolio-YTL ¹	6 points increase in market interest rates of YTL denominated fixed income securities in the trading portfolio	Increase in market interest rates of YTL denominated fixed income securities in the trading portfolio by 9, 8, 11 points for the 0-1, 1-3, 3-6 month and remaining maturity brackets, respectively.
E. Eurobond Portfolio	Decrease in prices of Eurobonds in the trading portfolio by 5 percent	Decrease in prices of Eurobonds in the trading portfolio by 5 percent

Source: CBRT

(1) BRSA defines the trading portfolio as "Securities in the trading portfolio" and "Securities available for sale" in accordance with the description of the Basel Committee.

FXNGP data was used in calculating the effects of exchange rate appreciation on the sector. While calculating the impact of interest rate increases on the sector, the re-pricing gap method, which complements the standard method and is recommended by the Basel Banking Committee, was employed. In this framework, the difference between interest rate-sensitive assets and liabilities in the time to repricing maturity brackets of 0-1, 1-3, and 3-6 months were used.

In the scenario analyses based on repricing, it was assumed that:

- The interest rate sensitivity of banks' assets and liabilities has remained unchanged throughout the analysis period,
- Demand deposits are not interest rate-sensitive,
- There are no new fund inflows or outflows,
- The interest rate increase would last for 3 months in scenario A and for 6 months in scenario B.

¹⁰ GDDS interest rates have been taken into account for the interest rate increases following the May-June 2006 fluctuations.

The loss of value in the Turkish currency-denominated discount securities within the trading portfolio and the Eurobond portfolio to stem from the rise in interest rates has also been calculated.

Table III.10. Results of Market Risk Scenarios¹ (Million YTL)

	Scenario A			Scenario B		
	2006	2007	03.08	2006	2007	03.08
A. YTL Depreciation						
a. Total	80.36	7.26	258.49	80.36	7.26	258.49
Profit (Loss)/Equity (%)	0.16	0.01	0.36	0.16	0.01	0.36
b. Banks Gaining Profits	269.73	226.48	417.30	269.73	226.48	417.30
c. Banks Suffering Losses	-189.37	-219.21	-158.80	-189.37	-219.21	-158.80
Loss of Banks Suffering Loss/Equity (%)	-1.41	-0.09	-0.13	-1.41	-0.09	-0.13
B. Interest Rate Increase						
a. YTL	-172.20	-466.29	-1,236.61	258.30	-725.14	-103.98
b. FX	-290.24	-425.69	-485.31	-1.97	-71.39	-145.79
Profit (Loss) due to Interest Rate Incr. (a+b)	-462.44	-891.98	-1,721.92	256.33	-796.54	-249.77
Profit (Loss) due to Interest Rate Incr./Equity (%)	-0.89	-1.33	-2.43	0.49	-1.18	-0.35
C. YTL Trading Portfolio						
Loss in Value due to Interest Rate Incr.	-1,549.42	-2,342.07	-2,569.87	-2,701.65	-4,058.21	-4,442.79
Loss in Value due to Int. Rate Incr./Equity (%)	-3.00	-3.49	-3.63	-5.23	-6.04	-6.29
D. Eurobond Portfolio						
Loss in Value	-631.58	-695.99	-831.84	-631.58	-695.99	-831.84
Loss in Value/Equity (%)	-1.22	-1.03	-1.17	-1.22	-1.03	-1.17
E. Total Impact						
Profit/Loss	-2,563.09	-3,922.78	-4,865.15	-2,996.54	-5,543.49	-5,265.91
(Profit/Loss)/Equity (%)	-4.96	-5.84	-6.88	-5.90	-8.26	-7.45
Current CAR of the Sector (%)	19.78	17.44	16.01	19.78	17.44	16.01
After-Shock CAR of the Sector² (%)	18.80	16.42	14.90	18.63	16.00	14.81

Source: CBRT

(1) Excluding SDF bank, T. Kalkinma Bank, İller Bank and Eximbank.

(2) After-shock profit/loss amounts under the scenarios are assumed to affect only equity but not the risk weighted assets.

III.2.2.1.1. Depreciation of YTL

Due to the exchange rate shock, the banking sector incurs a profit as of March 2008 owing to its long position. Meanwhile, the share of losses of banks in equity, arising from their open positions caused by the exchange rate shock, does not mark a significant change compared to end-2007 (Table III.10).

III.2.2.1.2. Interest Rate Increases and Loss in Value

i) As a result of scenarios A and B, the YTL denominated interest income declines as of March 2008. In Scenario A, the decline in interest income is rather high compared to end-2007, owing to the increasing short position in the 0-1 month maturity bracket and long position in

the 1-3 months maturity bracket turning into a short position. As for scenario B, based on the assumption that the shock will last for 6 months, the significant increase in the long position in the 3-6 month-maturity bracket limits the decline in interest income arising from shocks, compared to 2007.

As for foreign currency, interest income declines as a result of the shock in both scenarios. The level of the decline does not display a remarkable change compared to end-2007 under Scenario A, while it increases due to the downward trend in the long position in the 3-6 month-maturity bracket under Scenario B.

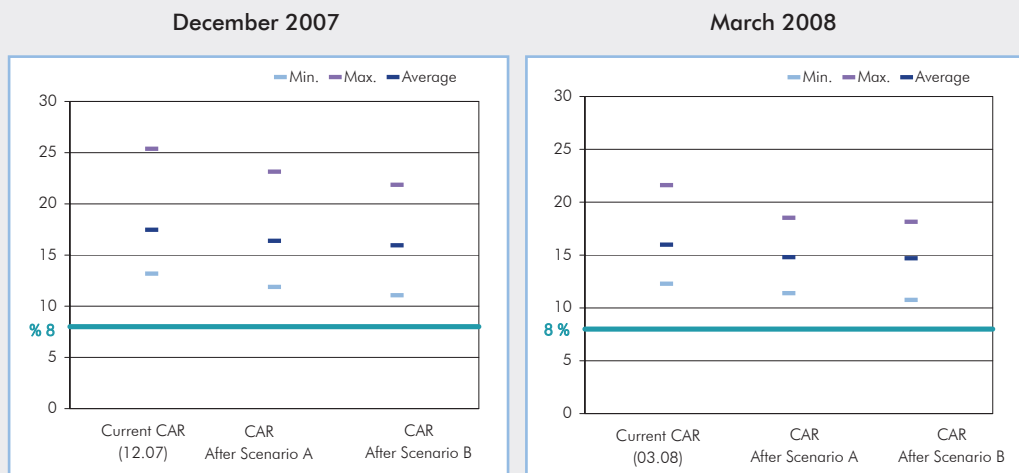
As of March 2008, while the ratio of the total effect of interest rate shocks to equity increases under Scenario A due to the high level of decline in interest income, it decreases under Scenario B due to the slight decline therein.

ii) The loss in the market value of Turkish currency denominated discount securities arising from interest rate increases went up slightly in March 2008. Nevertheless, the ratio of these losses to equity does not mark a noteworthy change particularly under Scenario A.

iii) The loss of value in the Eurobond portfolio increases compared to end-2007.

In conclusion, as of March 2008, losses increased under Scenario A and decreased under Scenario B, compared to the figures observed at end-2007. A decline of 1 percentage point in the capital adequacy ratio is seen under both scenarios.

Chart III.23.
Impacts of the Scenarios on the Largest 10 Banks of the Sector¹



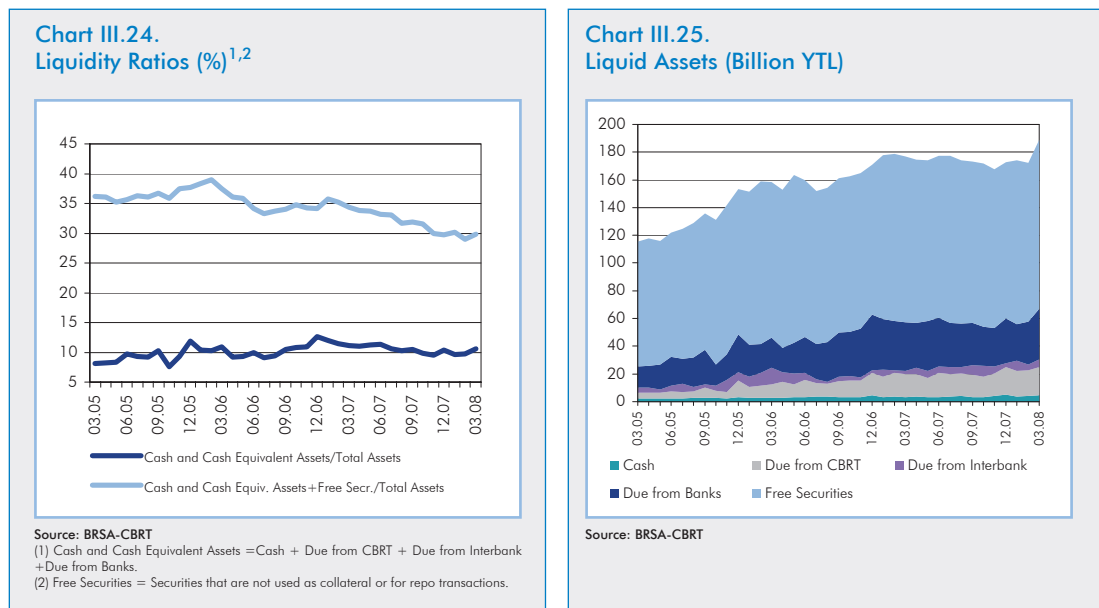
(1) Largest 10 Banks considering their share in total assets are included in the analysis.

When the impact of Scenario A and B on the CARs of the 10 banks with the highest share in assets are analyzed, even though their maximum, minimum, and average CAR levels did not decline below the legal limits, they were below the levels of end-2007.

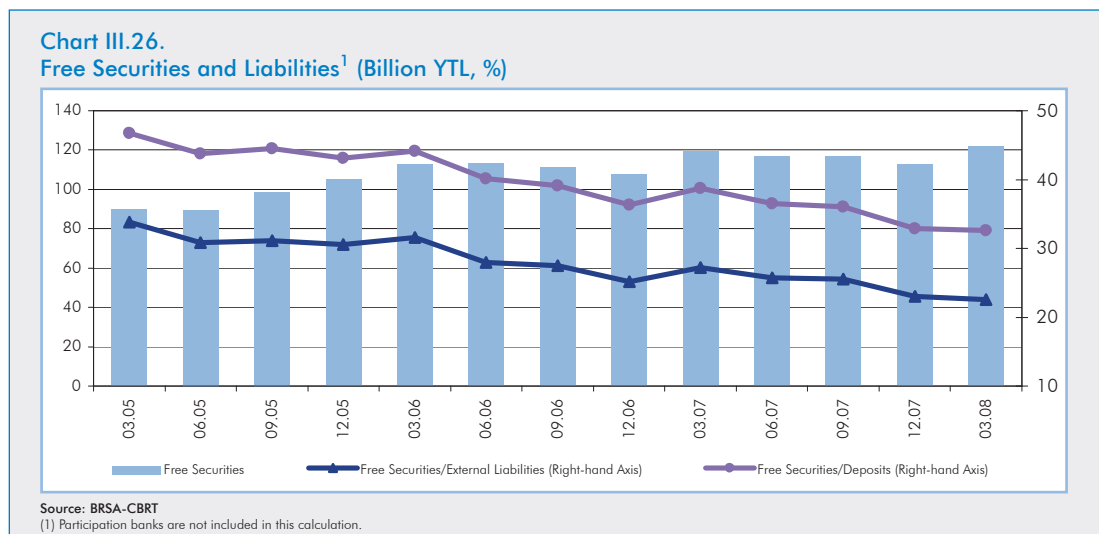
III.3. Liquidity Risk¹¹

The ratio of liquid assets of the banking sector comprising of cash and cash equivalent assets to total assets has exhibited a declining trend since early 2007 and was maintained at a level of 10 percent. As of March 2008, with a slight acceleration, it was realized as 10.6 percent as a result of the increase in the “due from banks” item.

When the free securities not used as collateral or for repo transactions are taken into consideration, this ratio also displayed a tendency to decline, but as of March 2008 it showed a limited increase and stood at 29.8 percent because of the rise in the due from banks and the free securities (Chart III.24).



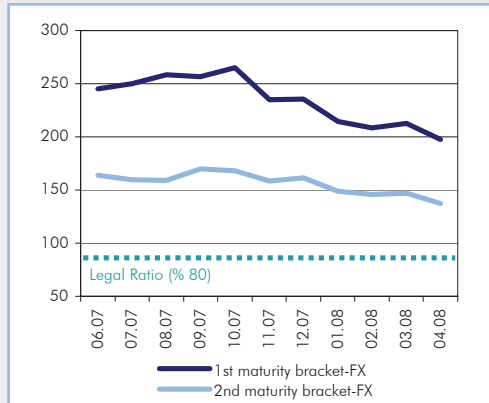
Within the cash and cash equivalent assets, “due from banks” has the largest share. (Chart III.25). The most remarkable development as of March 2008 has been the increase in the due from banks item and the free securities portfolio.



¹¹ Participation banks are included in the assessments made in this chapter.

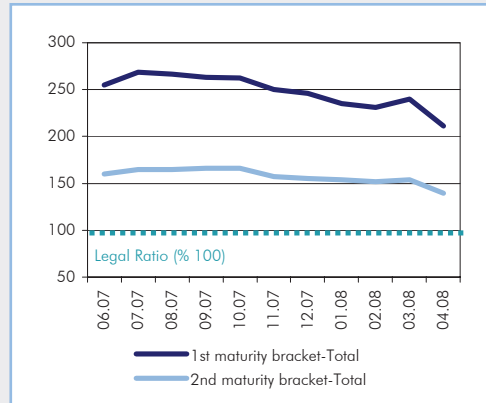
The ratio of free securities, which can be accepted as collateral by the Central Bank to provide liquidity in the event of a temporary liquidity shortage, to liabilities was 22.6 percent in March 2008. The free portfolio/deposits ratio was 32.6 percent as of the same date (Chart III.26). Both ratios have been unchanged since the year-end.

Chart III.27.
FX Liquidity Adequacy Ratios (%)



Source: BRSA-CBRT

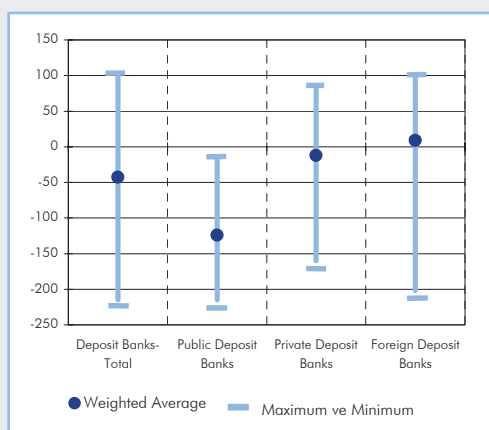
Chart III.28.
Total Liquidity Adequacy Ratios (%)



Source: BRSA-CBRT

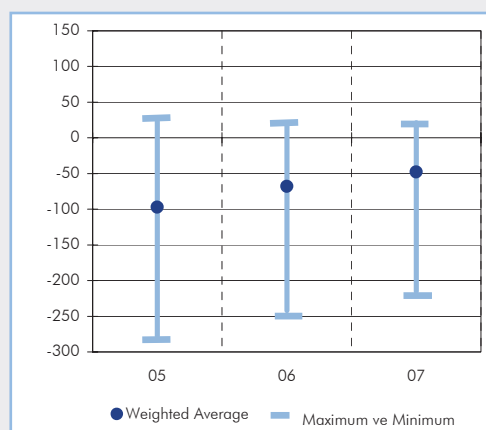
The liquidity adequacy ratios of the banking sector, calculated pursuant to the “Regulation Relating to the Measurement and Assessment of Liquidity Adequacy of Banks”, are well above the legal ratio¹² for both total and foreign currency and for the 1st and 2nd maturity brackets¹³ despite their downward trend since the last quarter of 2007 (Chart III.27 and Chart III.28). The sharp downward movement in the said ratios observed in April 2008 is mainly due to the amendments to the legislation introduced on 5 April 2008 (Box 13).

Chart III.29.
Funding Gap (%)^{1,2}



Source: BRSA-CBRT
(1) Funding Gap = (Customer Credits-Deposits)/Customer Credits
(2) Birleşik Fon Bankası (Bank under SDIF) is excluded.

Chart III.30.
Funding Gap for the 10 Largest Banks With Respect to their Asset Size (%)



Source: BRSA-CBRT

¹² These ratios, for both maturity brackets, are defined as 100 percent for the total liquidity and 80 percent for FX liquidity.

¹³ Assets and liabilities with remaining maturity of 0 to 7 days are included in the 1st maturity bracket and those between 0 and 31 days are in the 2nd.

As the sum of the loans granted by the deposit banks to the non-financial sector is lower than the deposits belonging to the non-financial sector as of 2007, these banks have a funding surplus; however, this varies among banks. An analysis of bank groups indicates that public deposit banks have a funding surplus by nature and the value range is comparatively less. (Chart III.29). As for the foreign deposit banks group, some banks are more dependent on more volatile interbank funds, which leads the group to have a funding deficit. An analysis of the first 10 banks in terms of asset size suggests that the differentiation among the banks diminished as of 2007 (Chart III.30).

Box 13.

Amendments to the Regulation Relating to the Measurement and Assessment of Liquidity Adequacy of Banks

The regulation issued by the BRSA to ascertain that banks have adequate cash assets and inflows to fully and duly meet their cash outflows and to ensure more efficient liquidity management, was amended on April 5 2008. With the amendment, the rate of consideration for overdraft loans included under liquid assets was reduced to 45 percent from 90 percent of stock value, regardless of maturity. This change was influential in the downward movement of ratios. Based on the data of the week of 25 April 2008, excluding other effects, the ratios marked a decline of 8 percent in the 1st and 7 percent in the 2nd maturity brackets, due to this amendment.

Another change is related to a new ratio calculated by stock values and a hundred percent consideration rate. Under this arrangement, the weekly simple arithmetical average of the ratio of the sum of the selected asset items to the sum of selected liability items that are calculated daily over stock values regardless of maturity, should not be less than seven percent. However, this ratio is foreseen to be applied as at least five percent in the first 3 months and at least six percent for the second 3 months. This ratio stood at 10.1 percent for the sector in the week of 25 April 2008.

III.4. Financial Strength Index

The Financial Strength Index (FSI) is computed with the aim of forming an “aggregate indicator” relating to the direction of the financial strength of the banking sector. Six sub-indices (asset quality, liquidity, exchange rate risk, interest rate risk, profitability, and capital adequacy) were used to form this index. Ratios projecting the risks and fragilities of the banking sector were selected under each sub-index and these ratios formed the index with certain weights (Table III.11).

Table III.11 Financial Strength Index Variables

	Financial Strength Indicators	Direct. of the Impact	Weight
Asset Quality	Gross Non-Performing Loans / Gross Loans	negative	0.33
	Net NPL/Shareholders Equity	negative	0.33
	Fixed Assets/Total Assets ¹	negative	0.33
Liquidity	Liquid Assets/Total Assets ²	positive	1.00
Exchange Rate Risk	On-Balance Sheet FX Position/Own Funds ³	negative	0.50
	FX Net General Position / Own Funds ⁴	negative	0.50
Interest Rate Risk	(Interest Sensitive YTL Assets with a Maturity up to 1 Month-Int. Sensitive YTL Liabilities with a Maturity up to 1 Month)/Equity ⁵	negative	0.50
	(Interest Sensitive FX Assets with a Maturity up to 1 Month-Int.Sensitive FX Liabilities with a maturity up to 1 Month)/Equity ⁵	negative	0.50
Profitability	Net Profit / Total Assets	positive	0.50
	Net Profit / Shareholders Equity	positive	0.50
Capital Adequacy	Free Capital / Total Assets ⁶	positive	0.50
	Capital adequacy Ratio	positive	0.50

(1) Fixed Assets consist of subsidiaries, assets to be sold, fixed assets and net non-performing loans.

(2) Liquid Assets consist of cash, due from the CBRT, due from money market, due from banks and receivables from reverse repo transactions.

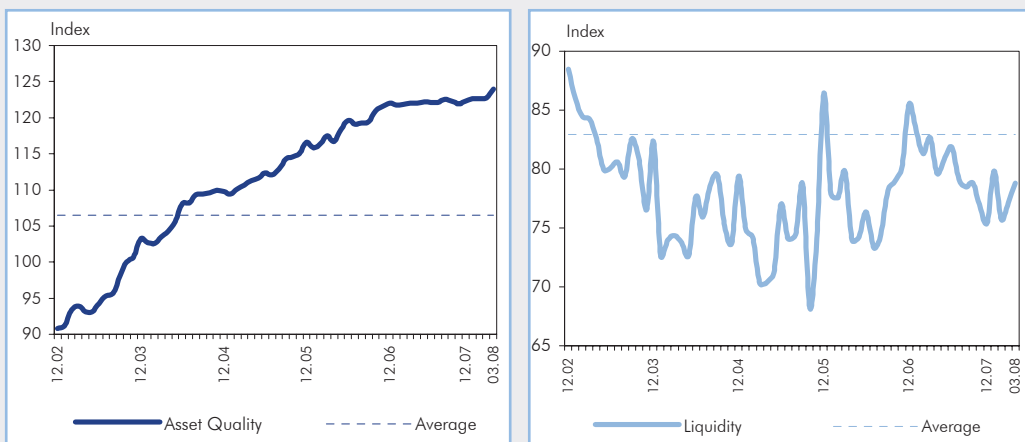
(3) Own funds is the regulatory capital, and it is different from the equity in the balance sheet. The calculation is in absolute values.

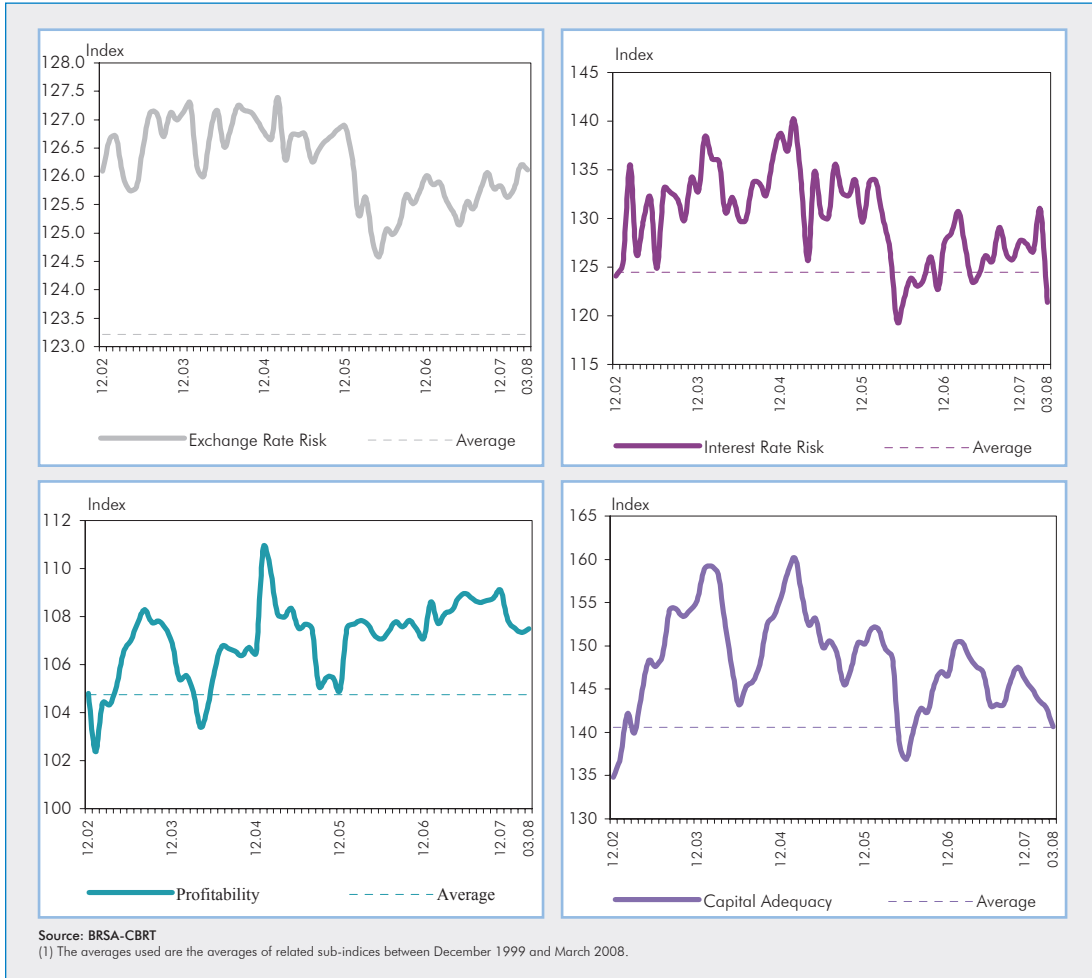
(4) Foreign exchange net open position is the sum of on and off balance sheet foreign currency positions. The calculation is in absolute values.

(5) The calculation is in absolute terms.

(6) Free capital is calculated by deducting fixed assets from equity.

Chart III.31.
Financial Strength Sub-Indices¹ (1999=100)



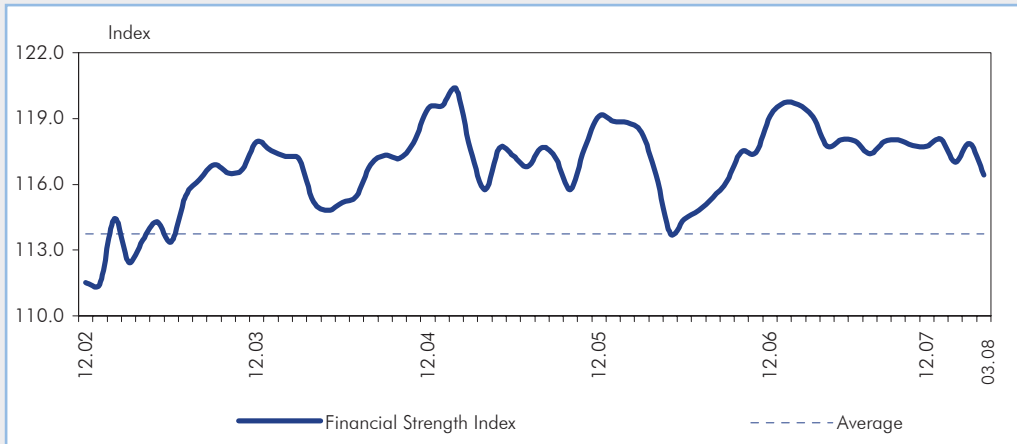


The assessment of the sub-indices that form the FSI is as follows (Chart III.31);

- i. Asset Quality Index: Asset Quality Index, which was 122.7 at end-2007, rose to 124 in March 2008 due to the recovery mainly in the NPL ratio.
- ii. Liquidity Index: The Liquidity Index, which was 79.8 at end-2007, dropped to 78.8 in March 2008 owing to the limited decline in the share of liquid assets in total assets.
- iii. Exchange Rate Risk Index: The Exchange Rate Risk Index, which was 125.6 at end-2007, rose to 126.1 in March 2008. Due to the limited open position of the banking sector, this index follows a stable course.
- iv. Interest Rate Risk Index: The Interest Rate Risk Index, which was 127.3 in December 2007, fell to 121.4 in March 2008. The increase in the ratio of the difference between YTL-denominated interest-sensitive assets up to 1 month and interest sensitive liabilities up to 1 month to equity was instrumental in this decline of the interest rate risk index.
- v. Profitability Index: The index, which was 107.8 at end-2007, declined to 107.5 in March 2008 due to the decrease in the return on assets of the banking sector.

vi. Capital Adequacy Index: The index, which stood at 145 at end-2007, fell to 140.7 in March 2008, owing to the increase in loans as well as the change in the risk weights of letters of guarantee and letters of credit that came into effect in January.

Chart III.32.
Financial Strength Index¹ (1999=100)



Source: BRSA-CBRT

(1) The average used is the average of financial strength index between December 1999 and March 2008.

The Financial Strength Index monitored as an indicator of the stability of the banking sector, dropped to 116.4 in March 2008 due to the decline in the Profitability, Capital Adequacy and Interest Rate Risk Indices.

IV. FINANCIAL INFRASTRUCTURE

In the last twenty years, rapid technological progress, decrease in restrictions and globalization of financial markets have led to a rise in financial activities. These increasing financial activities have contributed to an increase in the volume and value of domestic and cross-border payments. The increasing number and value of transactions within the payment systems highlight the importance of these systems.

In this context, the existence of secure and efficient-functioning national payment systems is crucial as it relates to the monetary policy practices of central banks, financial stability and economic progress.

In the report on “Central Bank Oversight of Payment and Settlement Systems”, issued by the Committee on Payment and Settlement Systems (CPSS), BIS, it is noted that there are a number of payment and settlement systems operating safely and efficiently without the intervention of public sector. However, the report also emphasises that overseeing such systems is useful to mitigate the systemic risks arising from payment systems, to ensure coordination among the participants and to prevent monopolies regarding these systems.

This section presents the recent developments in the Turkish Interbank Clearing-Real Time Gross Settlement System (TIC-RTGS), through which real-time settlement of transactions in New Turkish Lira are realized; the Turkish Interbank Clearing-Electronic Securities Transfer and Settlement System (TIC-ESTS), which facilitates the dematerialized and real-time transfer and settlement of securities in electronic form; the cheque clearing system that enables clearing of cheques on accounts among banks and the card based payment system.

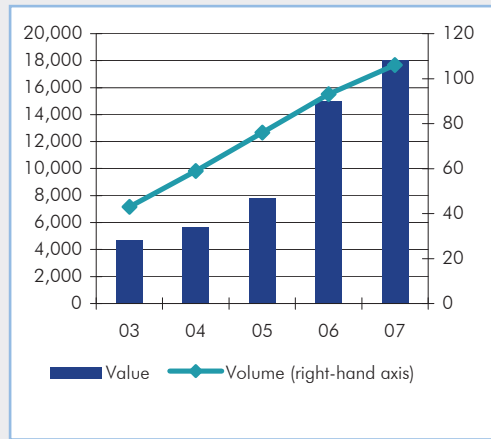
IV.1. Turkish Interbank Clearing-Real Time Gross Settlement System (TIC-RTGS) and Electronic Securities Transfer and Settlement System (TIC-ESTS)

The TIC-RTGS, which is owned and operated by the CBRT, is considered a systemically important payment system because, being the only large-value interbank payment system as well as settling all other payment systems in Turkey, it processes an extremely high value of transactions.

The ETIC-ESTS, which works in an integrated manner with the TIC-RTGS, ensures the transfer and settlement of participants' securities. Transactions in the TIC-ESTS system are performed with the Delivery versus Payment (DvP) principle, in which the delivery of securities and settlement of payments are realized simultaneously.

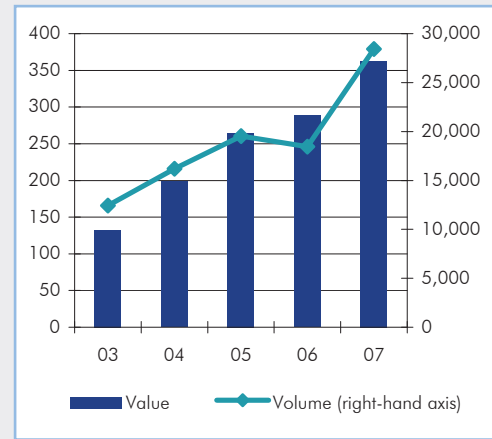
In Turkey, According to the "TIC-RTGS/ESTS Operating Rules" only the banks operating under the Banking Law No.5411 can participate in these systems.

Chart IV.1
Volume and Value of TIC-RTGS Transactions
(Billion YTL, Million)



Source: CBRT

Chart IV.2
Volume and Value of DvPa¹ Transactions in
TIC-ESTS (Billion YTL)



Source: CBRT
(1) DvP: Delivery versus Payment

Transaction value of TIC-RTGS rose by 19.9 percent in 2007 compared to the previous year and reached YTL 18,041 billion. The number of TIC-RTGS transactions performed in 2007 increased by 13.9 percent compared to the previous year, reaching a total of 106 million (Chart IV.1).

In 2007, the value of DvP transactions through TIC-ESTS increased by 25.7 percent while the number of transactions mounted by 54.1 percent and reached YTL 363 billion and 28.4 thousand respectively (Chart IV.2).

Since there are no upper and lower limits for the value of transactions to be performed through TIC-RTGS, both large and small value payments are processed through it. Therefore, the number of TIC-RTGS transactions is higher than that of many European countries. As of 2007 the ratio of payment transactions of small amounts (below YTL 3,000) to the total number of transactions in TIC-RTGS was 77 percent. On the other hand, value of TIC-RTGS transactions to the GDP ratio reveals that Turkey is behind European countries. However, the value of TIC-RTGS transactions, which was 12.1 times the GDP in the previous year, reached 20 times the GDP in 2006 and continued to rise in 2007 reaching 21.1 times the GDP (Table IV.1). The financial markets in Turkey are not as developed as those in the countries compared, and this is considered to be one of the reasons why the value of TIC-RTGS transactions and the ratio of this value to the GDP are low compared to other countries.

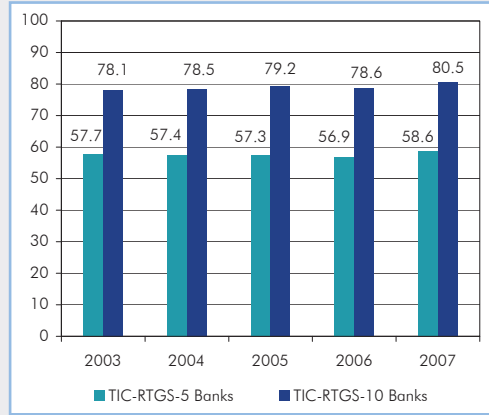
Table IV.1
Real Time Gross Settlement (RTGS) Systems-Country Comparison

Country-Name of Paym. Sys.	2002	2003	2004	2005	2006
Belgium (ELLIPS)					
Transac. Volume (Million)	1.7	1.8	1.8	1.8	1.7
Transac. Value (Billion USD)	12,573	15,307	18,233	21,448	24,373
Transac. Value/GDP	49.9	49.4	50.6	57.2	61.4
France (TBF)					
Transac. Volume (Million)	3.8	3.9	4.0	4.3	4.6
Transac. Value (Billion USD)	86,003	108,750	134,697	151,425	169,587
Transac. Value/GDP	58.9	60.4	65.3	71.0	75.4
Netherlands (TOP)					
Transac. Volume (Million)	4.8	4.9	5.0	4.7	4.8
Transac. Value (Billion USD)	23,519	29,669	36,878	38,126	40,146
Transac. Value/GDP	53.7	55.1	60.5	60.3	59.9
Germany (RTGS-Plus)					
Transac. Volume (Million)	31.9	32.8	34.1	35.8	37.9
Transac. Value (Billion USD)	117,616	145,123	157,005	172,023	189,140
Transac. Value/GDP	58.2	59.4	57.2	61.7	64.9
Switzerland (SIC)					
Transac. Volume (Million)	177.0	192.7	209.1	256.4	317.1
Transac. Value (Billion USD)	28,767	33,202	33,762	32,956	35,781
Transac. Value/GDP	103.1	102.2	93.0	88.6	92.2
TARGET					
Transac. Volume (Million)	64.5	66.8	69.4	76.3	83.3
Transac. Value (Billion USD)	373,434	478,474	558,091	613,614	676,602
CLS					
Transac. Volume (Million)	1.7	19.3	32.6	47.9	61.5
Transac. Value (Billion USD)	23,790	220,574	379,506	545,838	714,320
Turkey (EFT)					
Transac. Volume (Million)	33.9	43.0	58.7	76.4	93.1
Transac. Value (Billion USD)	2,214	3,122	3,986	5,806	10,528
Transac. Value/GDP	9.6	10.2	10.2	12.1	20.0

Source: BIS, CBRT

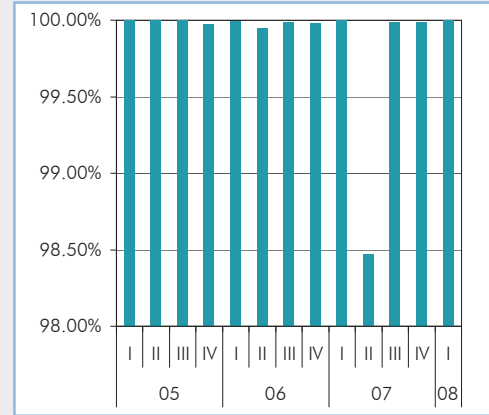
The concentration ratio, which indicates the share of banks' transactions within the total transactions in TIC-RTGS with regard to number of transactions, marked an increase in 2007 compared to the previous year's in terms of the first five and ten largest banks and reached 58.6 and 80.5 percent, respectively (Chart IV.3).

Chart IV.3
Concentration in the Number of Transactions in the TIC-RTGS Accounted for by Five and Ten Largest Banks (%)¹



Source: CBRT
(1) CBRT transactions are excluded.

Chart IV.4
Availability Ratios of TIC-RTGS-ESTS System (%)



Source: CBRT

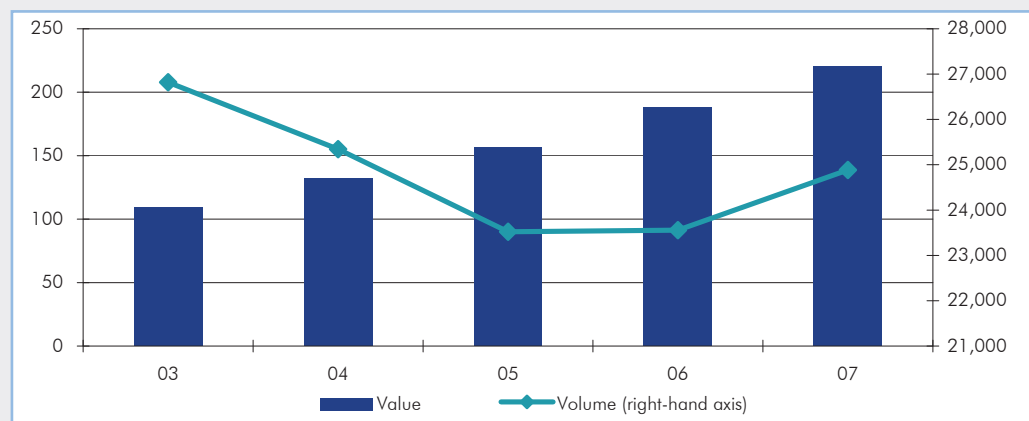
The availability ratio, which indicates the continuity of the payment system and which is the ratio of the time span that the participants can access the system to the total working hours, was 99.61 percent on average in 2007 for the TIC-RTGS (Chart IV.4). The decline observed in the availability ratio of the TIC-RTGS in the second quarter of 2007 stemmed from an operational failure (breakdown in hardware) that occurred at 2:23 p.m. on May 14, 2007 and continued for the rest of the day. After taking prompt contingency measures, the system started end of day transactions on May 15, 2007 at 00:30 a.m.

IV.2. Cheque Clearing System

The cheque clearing operations, which play an important role in payment systems, are carried out by the Interbank Clearing Houses Center (ICH) under the oversight of the CBRT.

As of year-end 2007, out of 41 banks that participated in the interbank cheque clearing operations, 7 were engaged only in physical presentation of cheques whereas the remaining 34 were also engaged in non-physical presentation.

Chart IV.5
Volume and Value of Cheques Transacted in ICH (Billion YTL, Thousand)



Source: CBRT

The number of cheques, which were subject to the cheque clearing process in ICH, rose by 5.6 percent compared to 2006, amounting to 24,886 thousand in 2007. In the given period, the value of cheques increased by 17.1 percent and reached YTL 220.5 billion (Chart IV.5).

In the cheque clearing system, after the completion of the provision process, the debit and credit positions of the participants are determined by multilateral netting.

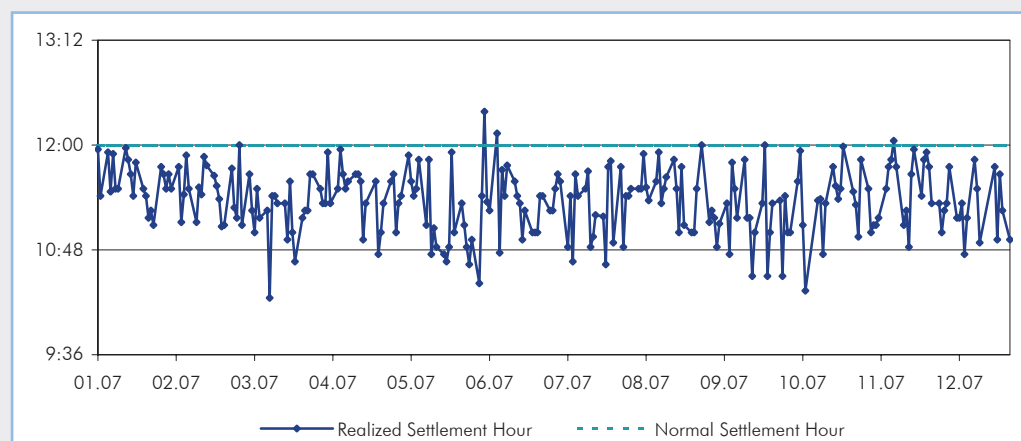
Table IV.2 Cheque Clearing System-Netting Ratio

	2003	2004	2005	2006	2007
Netting Ratio (%)	70.42	71.92	71.96	74.79	77.82
Transaction Value (Billion YTL)	109.5	131.9	156.2	188.3	220.5
Liquidity Saving Ratio (Billion YTL)	77.1	94.8	112.4	140.8	171.6

Source: CBRT

Since the cheque clearing system operates according to the multilateral netting method, the liquidity requirements of participants stemming from their cheque transactions is decreasing. The netting ratio of transactions realized through the cheque clearing system increased compared to the previous year and reached 77.8 percent in 2007 (Table IV.2).

**Chart IV.6
Settlement Hours of Cheque Clearing System-2007**



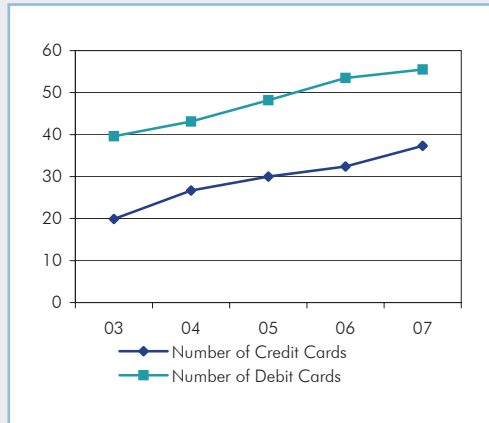
Source: CBRT

In the cheque clearing system, in order to finalize settlement all banks that become debtor as a result of netting, have to fulfill their obligations no later than 12:00 on the following business day. In 2006, settlement in the cheque clearing system was delayed four times, for a total of 95 minutes, as participants performed their obligations later than the due time. On the other hand, in 2007, delays in the cheque clearing system occurred three times, and the total duration of delays amounted to 34 minutes (Chart IV.6). While the average settlement time in the cheque clearing system was 11:27 a.m. in 2006, it was 11:22 a.m. in 2007. Consequently, in 2007 favorable developments were observed in the cheque clearing system regarding both the number and total duration of delays in settlements and the average time of settlement.

IV.3. System of Payment by Cards

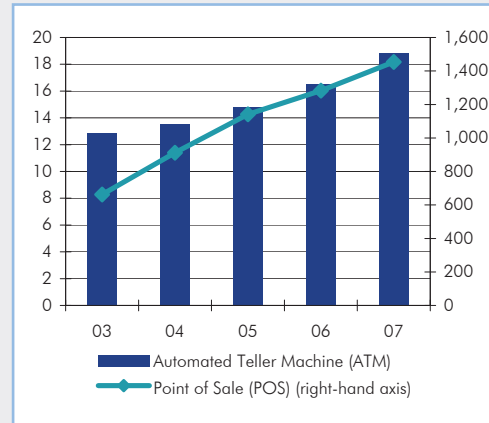
The settlement of debit and credit cards, which are two leading non-cash payment instruments, are executed by the Interbank Card Center (BKM).

Chart IV.7
Number of Credit Cards and Debit Cards
(Million)



Source: BKM

Chart IV.8
Number of ATM and POS
(Thousand)

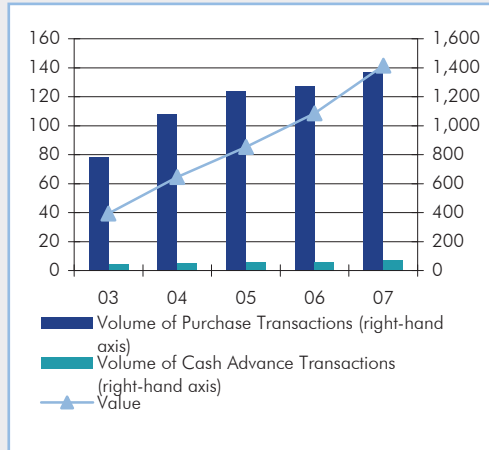


Source: BKM

As is the case in the world, the number of debit and credit cards marked considerable annual increases in Turkey. The number of credit cards, which was 32.4 million by the end of 2006, rose by 15.1 percent by the end of 2007 reaching 37.3 million. The number of debit cards in the same period reached 55.5 million with an increase of 3.7 percent (Chart IV.7).

Due to the widespread use of debit and credit cards, the number of point of sale (POS) devices and automated teller machines (ATM) have been increasing continuously in recent years. The number of POS devices and ATMs increased by 13.3 and 13.9 percent compared to 2006 and reached 1.5 million and 18.8 thousand respectively in 2007 (Chart IV.8).

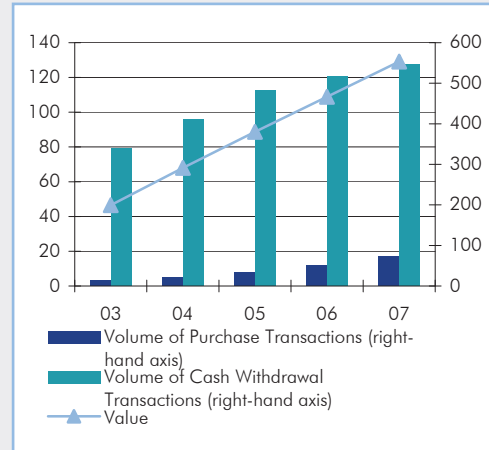
Chart IV.9
Volume and Value of Credit Card Transactions
(Billion YTL, Million)¹



Source: BKM

(1) Domestic and international use of domestic credit cards

Chart IV.10
Volume and Value of Debit Card Transactions
(Billion YTL, Million)¹



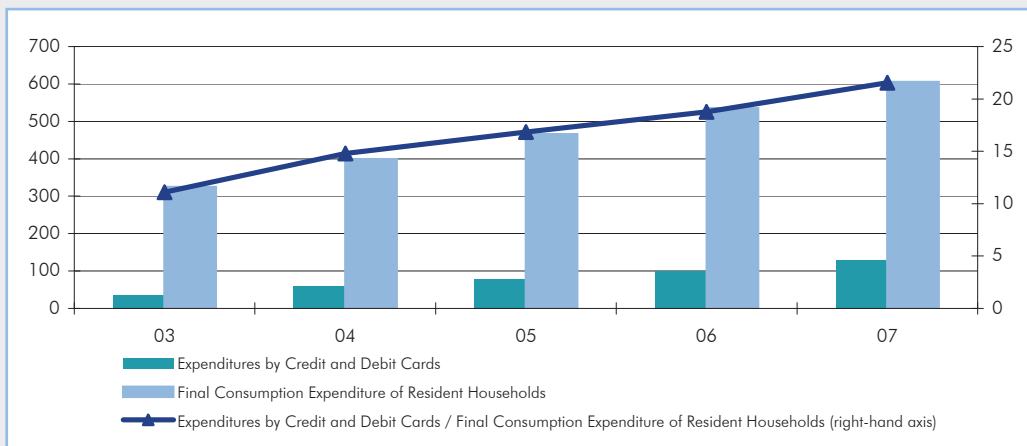
Source: BKM

(1) Domestic and international use of domestic debit cards

Credit cards are widely used in Turkey. The volume of credit card transactions rose by 8.2 percent and reached 1,444 million while the value of credit card transactions increased by 30.5 percent amounting to YTL 141,468 million in 2007 compared to the previous year. The share of purchasing transactions within total credit card transactions in 2007 was 94.9 percent in volume and 90.5 percent in value (Chart IV.9).

By analysing the volume and value of debit card transactions, it is observed that, in parallel with credit cards, there is a year by year increase in the use of debit cards. On the other hand, this analysis also reveals that debit cards are mainly used for withdrawing cash rather than purchasing. Out of the 619.7 million debit card transactions in 2007, 88.1 percent comprised cash withdrawal transactions (Chart IV.10).

Chart IV.11
Expenditures by Credit and Debit Cards and Final Consumption Expenditures by Resident Households¹ (Billion YTL, %)



Source: TSI, BKM

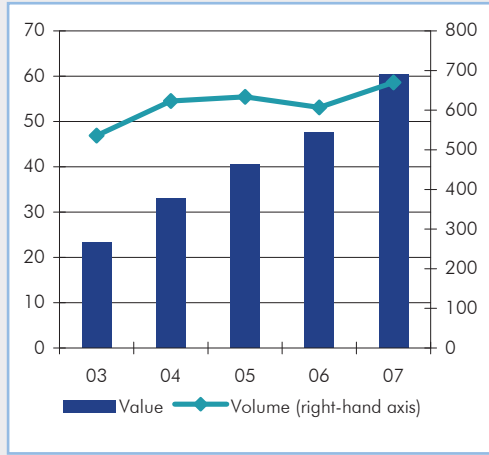
(1) Domestic and international use of domestic credit and debit cards are taken into consideration for the calculation of expenditures by credit and debit cards.

In Turkey, it is observed that the share of the debit and credit card usage within the total expenditures has increased over the years. While the ratio of expenditures made by debit and credit cards to final consumption expenditures of resident households was 18.8 percent in 2006, it continued to rise and reached 21.5 percent in 2007 (Chart IV.11).

BKM was established in 1990 with the partnership of 13 public and private Turkish banks for the purpose of carrying out the interbank clearing of debts and credits of cardholders stemming from their card transactions. It also aims to provide solutions to common problems within the system and to develop the rules and standards of credit and debit cards in Turkey.

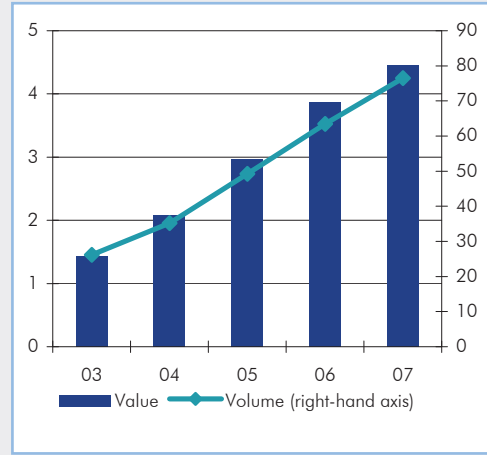
Debit and credit cards can be used via POS devices or ATMs of the issuer banks, as well as the devices of other banks that have agreements with member merchants. When debit and credit cards are used via ATMs or POS devices not belonging to the issuer bank, the clearing and netting of transactions are made through the BKM; while the settlement is realized on the BKM's accounts at the CBRT.

Chart IV.12
Volume and Value of Credit Cards Processed in the Card Clearing System (Billion YTL, Million)



Source: BKM

Chart IV.13
Volume and Value of Debit Cards Processed in the Card Clearing System (Billion YTL, Million)



Source: BKM

The volume of transactions which were subject to credit card clearing process rose by 10.3 percent compared to the previous year and reached 669.8 million; while the value of transactions increased by 27.2 percent amounting to YTL 60.4 billion in 2007 (Chart IV.12).

According to the BKM data, the volume of transactions which were subject to the clearing process of debit cards rose by 20.5 percent compared to the previous year and reached 76.5 million, while the value of transactions increased by 15 percent reaching YTL 4.5 billion in 2007 (Chart IV.13).

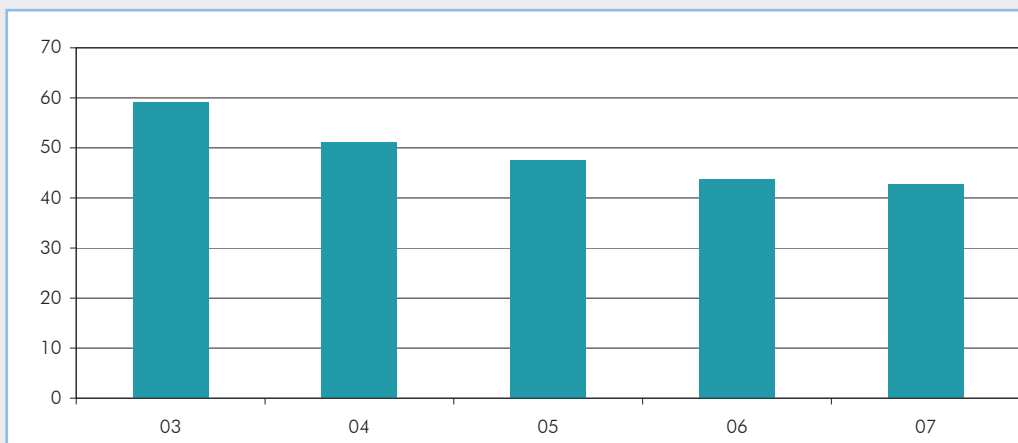
Table IV.3 Card Clearing and Settlement System–Netting Ratio (%)

	2003	2004	2005	2006	2007
Clearing and Settl. of Credit Cards					
Netting Ratio (%)	77.7	78.6	77.7	81.7	78.3
Transaction Value (Billion YTL)	23	33	41	48	60
Liquidity Saving (Billion YTL)	18	26	32	39	47
Clearing and Settl. of Debit Cards					
Netting Ratio (%)	59.7	59.4	58.3	60.8	64.0
Transaction Value (Billion YTL)	1.4	2.1	3.0	3.9	4.5
Liquidity Saving (Billion YTL)	0.9	1.2	1.7	2.4	2.9

Source: BKM

As is the case with the cheque clearing system, the card clearing system also operates according to the multilateral netting method and therefore reduces the liquidity requirements of participants stemming from card transactions. The netting ratio of credit card transactions realized through the system decreased to 78.3 percent and the liquidity requirement relating to credit card transactions decreased by YTL 47 billion in 2007. This same ratio was 64 percent for debit card transactions and YTL 2.9 billion of liquidity was saved (Table IV.3).

Chart IV.14
Ratio of Value of Credit Card Transactions Subject to Clearing Process to Total Value of Credit Card Transactions (%)



Source: BKM

The ratio of the value of credit card transactions subject to clearing to total transactions for credit cards, which was 59.1 percent in 2003, decreased to 42.7 percent in 2007 (Chart IV.14). This decline also indicates that as a result of promotions, tendency to use credit cards via POS and ATM devices of the issuer banks has increased.

Box 14.
Assessments Regarding Payment Systems in the Financial Sector Assessment Program for Turkey

The Financial System Stability Assessment (FSSA) Report, which is prepared subsequent to the joint Financial Sector Assessment Program (FSAP) of the IMF and the World Bank, and includes assessments about the financial sector, has been published on the IMF web site¹.

In the Report, the TIC-RTGS/ESTS and the cheque clearing system are considered as systemically important payment systems.

The Report notes that, within the framework of its tasks relating to financial stability, the CBRT attaches great importance to promoting the security and efficiency of payment and settlement systems. It also states that systemically important payment systems are highly consistent with the core principles set out by the BIS-CPSS Committee; that the payment and settlement systems are technically efficient and reliable and that they are supported by the appropriate regulatory framework and effective oversight. In addition, a sound legal framework is ensured regarding the payment systems.

The Report highlights that regarding the TIC-RTGS/ ESTS systems, arrangements related to the intraday liquidity facility, queuing facilities with priorities and gridlock resolution mechanisms to reduce liquidity risk for participants are in line with international practices. It also states that the security, operational reliability and standards of emergency arrangements are high and that participation in the payment systems is fair, objective and publicly available.

Moreover, the report emphasizes that the readily available system information is sufficient for use by participants to fully understand the financial, operational, and reputational risks that they will be exposed to through participation in the TIC-RTGS/ESTS . Besides, it is noted that no unsettled transaction remains at day-end and that the CBRT is not exposed to credit risk, as the intraday liquidity facility is provided by the CBRT against collateral.

It is assessed that the cheque clearing system is functioning smoothly; that technological developments are introduced to the system to reduce settlement cycle and a new system is put into effect to facilitate image transfer. It is also added that the cheque clearing system is robust and operationally reliable and that it allows participants to manage liquidity and credit risks proactively.

The Report also underlines that the definition of payment finality in payment systems is not explicitly laid down in CBRT Law and that mechanisms need to be developed to prevent the unwinding procedures in the event that a participant fails to fulfill her obligations in the cheque clearing system. It is also added that whereas the cheque clearing system satisfies market needs, settlement cycle could be further shortened via technological facilities. Lastly, the report concludes that consumer protection policies regarding payment systems need to be established.

(1) <http://www.imf.org/external/pubs/ft/scr/2007/cr07361.pdf>

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ABBREVIATIONS

ATM	: Automated Teller Machine
BIS	: Bank for International Settlements
BKM	: Interbank Card Center
BRSA	: Banking Regulation and Supervision Agency
CAR	: Capital Adequacy Ratio
CBRT	: Central Bank of the Republic of Turkey
CDS	: Credit Default Swap
CMB	: Capital Markets Board
CPI	: Consumer Price Index
CRA	: Central Registry Agency
DvP	: Delivery versus Payment
ECB	: European Central Bank
EMBI	: Emerging Market Bond Index
EU	: European Union
FDIC	: Federal Deposit Insurance Corporation
FED	: Federal Reserve Bank
FSAP	: Financial Sector Assessment Program
FSE	: Financial Strength Index
FSF	: Financial Stability Forum
FXNGP	: Foreign Exchange Net General Position
GDDS	: Government Domestic Debt Security
GDP	: Gross Domestic Product
IMF	: International Monetary Fund
ISE	: İstanbul Stock Exchange
NPL	: Non Performing Loans
OECD	: Organization of Economic Co-operation and Development
POS	: Point of Sale
PPI	: Producer Price Index
ROA	: Return on Assets
ROE	: Return on Equity
SDIF	: Saving Deposits Insurance Fund
SPO	: State Planning Organization
TIC-ESTS	: Turkish Interbank Clearing-Electronic Security Transfer System
TIC-RTGS	: Turkish Interbank Clearing-Real Time Gross Settlement System

TURKSTAT	: Turkish Statistical Institute
USA	: United States of America
VAT	: Value Added Tax
VIX	: Chicago Board Options Exchange Volatility Index

