



# Financial Stability Report

DECEMBER 2010  
VOLUME: 11

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## FOREWORD

*Although a long time has passed since the onset of the global financial crisis, its impact on economies, especially those of developed countries, is still intensely felt.*

*Due to the measures taken in the face of the crisis, room for fiscal policy has tightened to a great extent. Therefore, in order to attain sustainable growth, the central banks of developed countries continue to implement unprecedented policy measures to eliminate fragilities in the economy as a whole and in the financial system.*

*Of all these measures, expansionary monetary policies implemented especially by central banks of developed countries give way to a new global economic climate in the form of intense capital inflows to stable and dynamic emerging market economies by generating ample global liquidity and an increase in risk appetite. In this new climate, which we expect to be effective in the upcoming period, central banks will face questions of how to construct a policy framework to target both price and financial stability in case of a conflict between these two elements and which instruments to use.*

*Thanks to structural reforms that were implemented decisively, Turkey reinforced its macroeconomic fundamentals and attained a sound financial system. Eventually, Turkey became one of the countries to quickly eliminate the adverse effects of the crisis in 2010. Nevertheless, while benefiting from the advantages of the new global economic environment, it is essential to manage the risks the new environment has brought about in order to maintain macroeconomic stability in the upcoming period.*

*The Central Bank of the Republic of Turkey, whose primary objective is to maintain price stability, being one of the institutions responsible for financial stability will continue to follow a macro-perspective and, when necessary, will also continue to use all policy instruments available against the effects of the new global economic climate threatening financial stability.*

*The Financial Stability Report has been published for five years. I hope that the Report will contribute to raising public awareness regarding the importance of financial stability through its analyses and evaluations, which were prepared by a new understanding in line with the increasing significance of financial stability for policy-makers.*



Durmuş YILMAZ

Governor



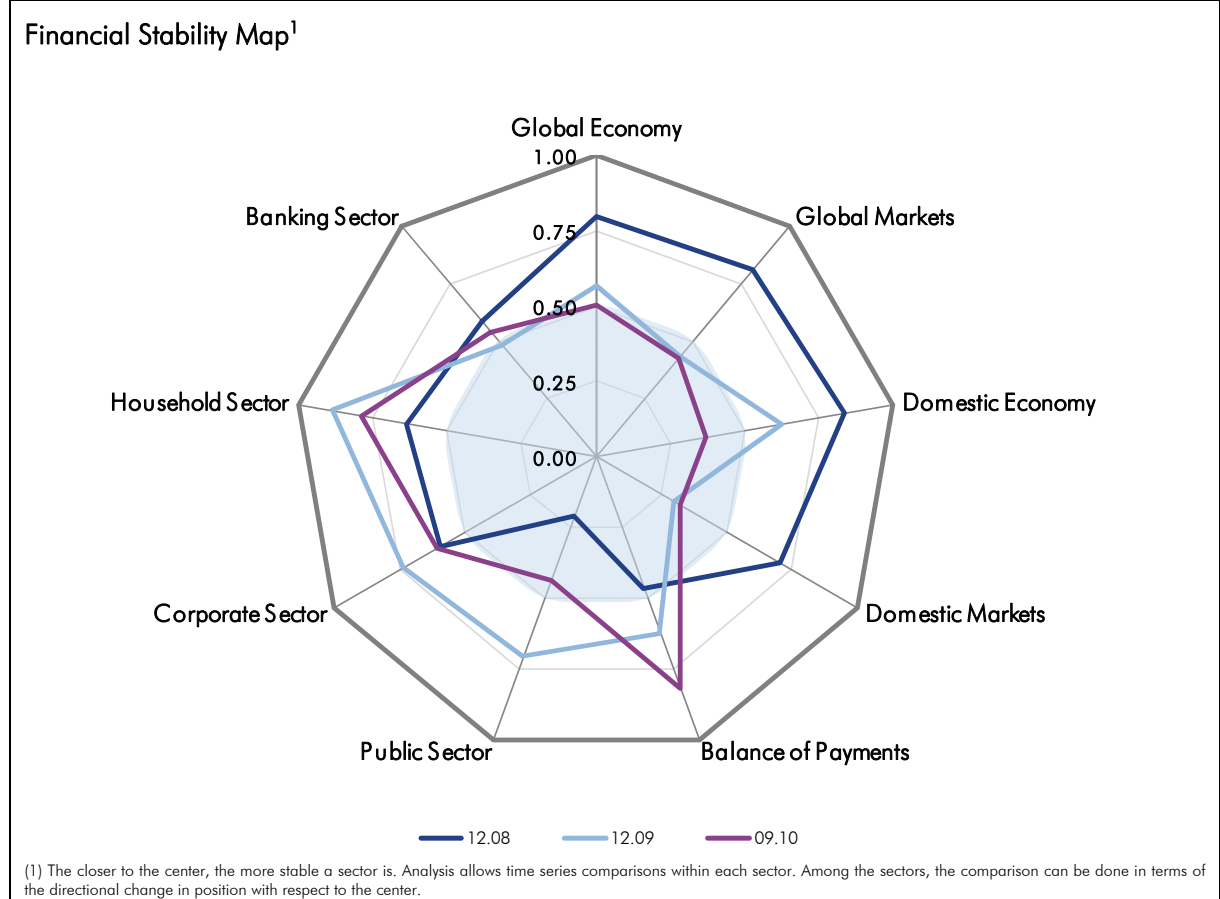
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## OVERVIEW

Considering the importance of evaluating the system regarding financial stability with a holistic approach, the Report examines the stability of the financial system in Turkey from a macro-perspective by analyzing national and international developments.



As also shown in the chart above, the crisis was initially felt in the domestic economy and the domestic markets. From the crisis to the recovery stage, an improvement has been seen in almost all fields except for the balance of payments. As for the rest, despite the loosening of fiscal policy and the increase in corporate and household non-performing loans in the first phase of the crisis; starting from the last quarter of 2009, the rise in tax revenues, the increase in profitability performance of firms and the slowdown in unemployment rate have led the rate of non-performing loans to start to decrease. Analyses in the Report indicate that Turkey's banking sector has a structure that supports rapid loan growth and maintains its resilience against shocks.

Although there is significant decoupling between the economic outlook of developing and developed countries, as a whole the global economy has gradually recovered. However, the risks primarily originating from developed economies remain, and especially the increasing problems in the banking and public sector of some European countries adversely affect the markets. There are still downside risks embedded in the future global growth outlook. Meanwhile, expansionary monetary policies and ample liquidity has favorably affected financial markets by alleviating worries of a "second slump". Emerging economies with relatively stronger public finances, financial structures and growth potential overcame the effects of the crisis faster and assumed a period of recovery prior to others. Nevertheless, considering the integrated structure of the global economy, it will be uncertain as to how



long the fast recovery trend will continue as it relies mostly upon domestic demand as long as the problems in developed countries are not completely solved.

The weak outlook of global growth has led central banks of developed countries to continue with expansionary monetary policy implementations and the balance sheets of central banks have grown dramatically in size. In line with this, capital inflows to developing countries gained pace with the increasing global liquidity. Expectations that short-term interest rates in developed countries will remain low for a long time pushed investors to seek high returns, hence the demand for investment instruments in developing countries increased. While the volatility indicators of asset prices have improved, the relief felt in interbank markets also contributed to the improvement in international markets. However, risk perceptions especially regarding countries in the euro area, that have trouble paying public debts have caused worries in international markets to persist.

In Turkey, the pace of recovery in economic activity was faster than expected and the Medium-Term Program (MTP) indicated that the fiscal discipline would continue. Additionally, the stability of the financial system, the favorable assessments of credit rating agencies, the fact that risk premium indicators are below pre-crisis levels all point to a favorable outlook for the Turkish economy. As a result of these developments, along with the stimulated demand for consumption and investment, firms and households' use of loans has accelerated, and the economy is growing mostly on account of the domestic demand. Coupled with these factors, capital inflow gains pace also being triggered by the increase in the global risk appetite, while market interest rates decrease; asset prices increase and the Turkish lira appreciates.

The recovery of the economy mostly based on domestic demand raises the debt ratios of both households and firms and increases the current account deficit. In the upcoming period, the course of short and long-term capital flows and the current account deficit are indicators that must be closely monitored with regard to financial stability. It is of vital importance to carefully monitor these indicators and take macroprudential measures on time and in an effective manner.

The policy instruments, which developing countries generally resort to against strengthening capital flows, attempt to curb capital inflows (Special Topic IV.2). Contrary to other developing countries, in Turkey, the acceleration of measures to reinforce financial stability in periods of increased capital flows is preferred. Given the current conjuncture, the public and private sector's avoidance of excessive borrowing; preference of longer maturities in all borrowings, opting to borrow in Turkish lira as much as possible and managing risks efficiently will considerably strengthen the resilience of the Turkish economy against external shocks.

Encouraging economic agents to borrow less and use more equity capital (low leverage) is one of the major steps to be taken in this respect. The MTP updated for the public sector indicates that fiscal discipline will continue; the increase in deductions from the Resource Utilization Support Fund (RUSF) applied to consumer loans; the upper limit of loan to value ratio set as 75 percent for housing loans and the targeting of a capital adequacy ratio of 12 percent for our banks, are measures taken to this end.

Secondly, maturity extension is encouraged in economic agents' borrowings. The successful efforts of the Treasury to extend maturities of public borrowings continue. Regarding the banking sector, in order to extend the maturities of liabilities, the issuance of Turkish lira bonds have been facilitated and some advantages for long-term deposits using reserve requirements will be provided through some new arrangements. Additionally, the overnight borrowing rate was lowered by 400 basis points at the

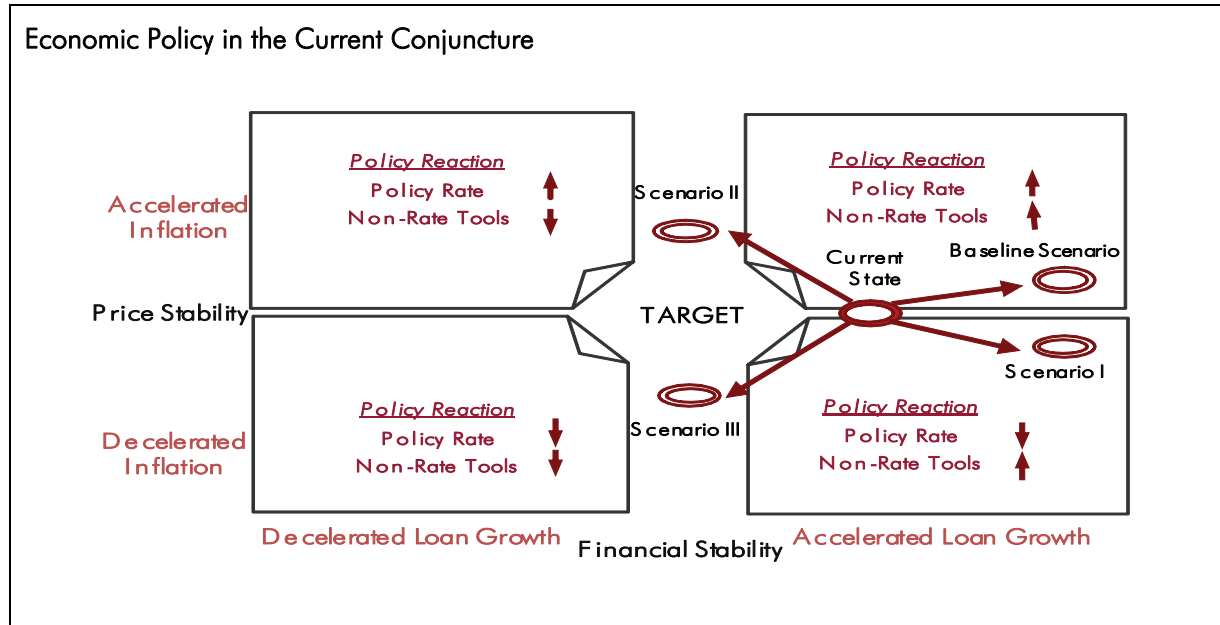
Monetary Policy Committee Meeting (MPC) in November 2010, which in turn facilitated the decline of short-term swap interest rates when necessary. All these measures are aimed at maturity extension.

Another measure was to encourage borrowing in Turkish lira and to adopt a leading policy preference of decreasing net foreign exchange debts. To this end, the Treasury is oriented towards borrowing in Turkish lira for the public sector and the CBRT increased reserve accumulation in periods of accelerated capital inflows. Developments and measures such as raising awareness of the floating exchange rate regime and exchange rate risk, the decline in inflation and Turkish lira-denominated interest rates besides the setting of foreign currency required reserve ratios higher encourage households and the corporate sector to borrow in Turkish lira. In addition to the inability of households to borrow in foreign exchange, not allowing the use of foreign-exchange-indexed loans has also reinforced this process. The arrangement in the foreign exchange net general position (FXGNP) regarding the banking sector and controlled permission by the BRSA for our banks to issue Turkish lira bonds all serve this purpose.

Lastly, the importance of improving the risk management culture of all economic agents has become more noticeable. In this respect, the steps to be taken for financial education are of great importance for the sound functioning of the system (Special Topic IV.7).

The monetary policy implemented by the CBRT is embodied in a framework in which price stability and financial stability complement each other.

In this context, we can summarize how the CBRT will use its policy tools in the forthcoming period under the possible scenarios mentioned in the previous inflation reports that have been shared with the public.



As illustrated in the figure above, while current economic conditions support keeping policy rates at low levels for a long period of time, developments in the aggregate demand composition necessitates that instruments other than the policy rate are brought to pre-crisis levels. Accordingly, this situation suggests that the CBRT has largely completed the exit strategy measures that it announced in April 2010.

The CBRT's **baseline scenario** mentioned in the October 2010 Inflation Report was based on an outlook where *"domestic demand is stronger compared to the previous reporting period, external demand continues to restrain economic activity, and thus aggregate demand conditions continue to support disinflation, albeit to a lesser degree"*. This baseline scenario assumes a policy framework that the measures outlined in our exit strategy will be completed by the end of the year, and that policy rates are kept constant at current levels for some time followed by limited increases starting from the last quarter of 2011, with policy rates staying in single digits throughout the forecast horizon (3 years). In this respect, non-rate tools will be actively used in order to address the risks on financial stability stemming from rapid loan expansion and deterioration in the current account balance.

The European Central Bank reluctantly joined the ranks of the Federal Reserve, Bank of England and Bank of Japan, which have engaged in monetary expansion, due to fast growing debt problems in Europe. As a result, materialization of the **Scenario I** has become more likely, as illustrated in the figure. In that case, the scenario described in the CBRT's October 2009 Inflation Report has become more likely, stating that: *"Another possible scenario is a surge in capital inflows to emerging markets owing to the relative improvement of credit risk across these countries. Ample liquidity driven by the expansionary fiscal and monetary policies on a worldwide scale, coupled with rising risk appetites, have led to large capital inflows to emerging markets. The current output gap would imply that a fall in the cost of imported inputs could be rapidly transmitted to consumer prices, suggesting that further acceleration in capital inflows may exacerbate downward pressures on inflation. Realization of such a scenario could lead to temporarily lower policy rates than envisaged in the baseline scenario"* (2009 IR-IV). In that case, along with temporary policy rate decreases, it would be appropriate to use non-rate tools effectively in the tightening direction in order to slow down the loan growth.

In the meantime, it should be noted that both recent economic developments in Europe and decisions taken by central banks of developed countries increase global economic uncertainty significantly. Should the measures taken lead to undesired inflationary effects on a global scale; the **Scenario II** illustrated in the figure might materialize. This implies the scenario mentioned in the October 2010 Inflation Report, indicating that: *"Food and commodity price inflation has soared recently. Currently noninflationary levels of the output gap and the strength of the Turkish lira have been limiting the pass-through from food and commodity prices to the prices of core goods and services. However, the potential second-round effects continue to be a risk if increases in food and commodity prices persist. Should such a risk materialize and lead to a deterioration in the price setting behavior, which would hamper achieving the medium-term inflation targets, an earlier-than envisaged tightening in the baseline scenario would be considered"* (2010 IR-IV). In that case, as domestic credit expansion would weaken, the use of non-rate tools might not be needed in the direction of tightening.

If measures taken in developed countries remain inadequate, the **Scenario III** might be considered. This situation points to the outlook described in October 2010 Inflation Report, reading: *"Recently, leading indicators of economic activity continue to slow down, underscoring the downside risks especially regarding the US economy. Furthermore, ongoing problems in credit, real estate and labor markets across advanced economies, and the uncertainties regarding the impact of a possible fiscal consolidation suggest that the downside risks regarding the pace of global growth are likely to persist for some time. Should the global economy face a longer-than-anticipated period of anemic growth, the monetary tightening envisaged during the final quarter of 2011 under the baseline scenario may be postponed. Moreover, an outcome whereby global economic problems intensify and contribute to a contraction of domestic economic activity may trigger a second round of easing"* (2010 IR-IV). In

this case, the use of non-rate tools might not be needed in the direction of tightening, as domestic credit expansion will weaken.

Although public sector budget deficit and public debt ratios in Turkey displayed a limited increase during the crisis, as was the case worldwide, due to the decline in revenues and fiscal expansion, tax revenues increased and expenditures showed a moderate rise owing to the economic revival. This development affects public finance in a positive way. In an environment of widening current account deficit, it is essential for financial stability that public savings are increased and fiscal discipline is sustained in line with the perspective given in the Medium-Term Program.

Factors such as strong public finance, improvement of profitability performance of corporate sector, and the fact that the ratio of household liabilities to GDP is low compared to other countries and they are mostly Turkish lira-denominated, increase the resilience of the economy against potential shocks.

The banking sector, which constitutes the majority of the Turkish financial sector, suggests that the ratio of non-performing loans declined in the aftermath of the crisis, thanks to the economic recovery and low interest rates. Banks' funding from foreign markets improved while the share of public securities in balance sheets decreased. Although capital adequacy ratios declined slightly on the back of the increased growth rate of loans, they are somewhat higher than the minimum and target ratios. In the upcoming period, as the competition increases, it is important that banks continue to act diligently in risk management while lending, to keep the improvement in asset quality.

The analyses carried out in the report show that the Turkish banking system has maintained its resilience against endogenous and exogenous shocks. However, increased capital inflows and loan growth, as well as the differentiation between growth rates of domestic and external demand becoming more marked require a cautious approach to financial stability. Against this background, the CBRT will continue to use macroprudential policy instruments, particularly the required reserves ratios and liquidity management actively in the upcoming period as well.

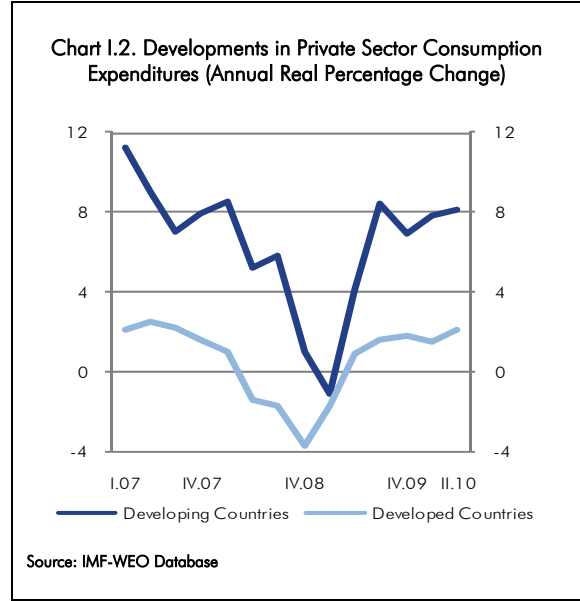
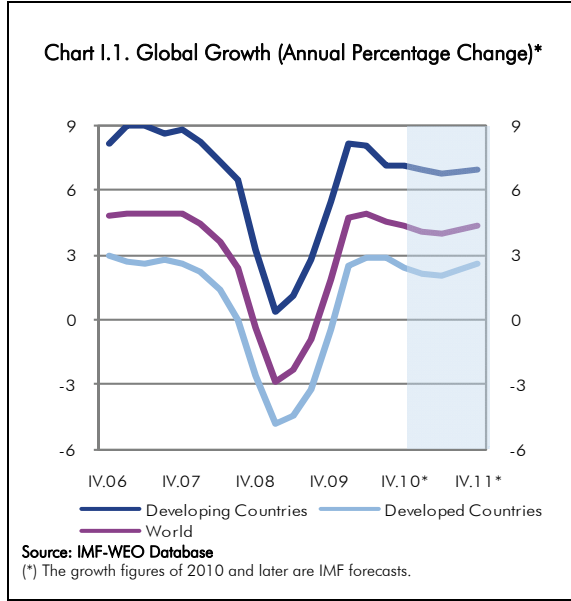


## I. INTERNATIONAL DEVELOPMENTS

*The recovery observed in the aftermath of the crisis continues with the differentiation among country groups. It is observed that the downside risks in the future global growth outlook persist. Vulnerabilities especially in developed countries, which suffer from serious deterioration in budget balance and excessive public debts, still continue. In the developed countries, since the problems in the financial sector have not yet been fully overcome and the desired increase could not be attained in employment, these factors affect the pace of economic recovery negatively. Although negative expectations have partially reduced global instability by encouraging savings, the lingering low level of resource utilization and the limited rise in consumption expenditures keep the deflation risk alive. Besides, the vulnerability of the financial sectors of developed countries to the possible shocks still continues. While developed countries struggle with vulnerabilities, developing countries with relatively strong public finance and financial structures have overcome the impacts of the crisis rapidly and experienced a serious recovery process; and thus, became the engine of global growth. However, as a result of the integrated structure of the global economy, it is uncertain as to how long developing countries can sustain this growth unless problems in developed countries are fully resolved.*

Especially in developed countries, it has been observed that accommodating fiscal policies and expansionary monetary policies have failed to generate the desired results on unemployment and growth. While the balance sheets of central banks of developed countries, that have rapidly eased policy rates, scaled up excessively, global liquidity soared and asset prices shot up. Due to expectations that short-term interest rates would remain low for an extended period in developed countries coupled with increased risk appetite, capital flows to developing countries accelerated. While local currencies of developing countries appreciated rapidly on the one hand; on the other hand, these countries were faced with the risks of deterioration in the current account balance, rapid acceleration in external borrowing and ballooning asset prices. So as to safeguard financial stability, some countries raised their reserves and introduced measures against capital inflows.

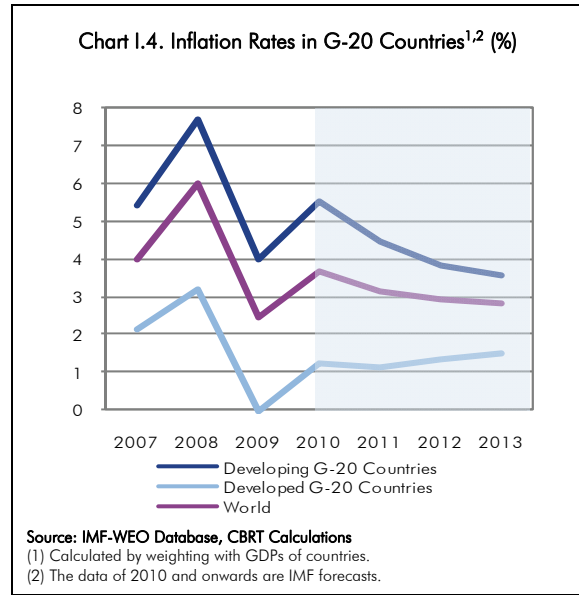
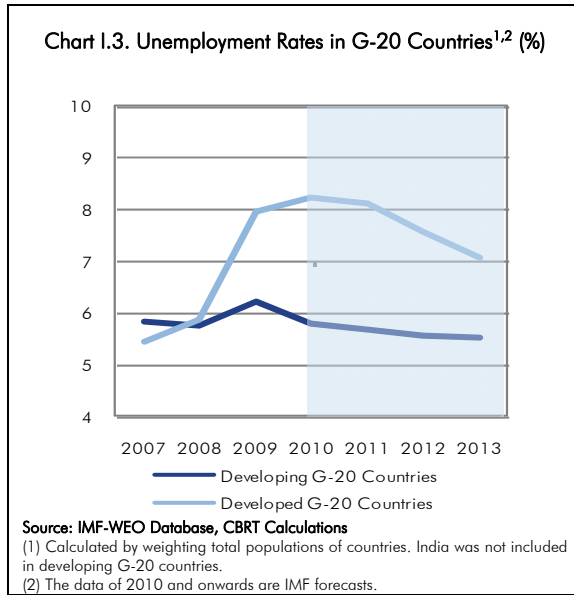
**While the global economy is recovering gradually driven by developing countries, the probability of a new global recession is decreasing.** While the recovery is weak and vulnerabilities persist in developed countries, developing countries continue their robust growth performance, and the decoupling between developed and developing countries with respect to growth dynamics continues. In fact, while the global growth forecast for 2010 was 4.3 percent, this rate was 2.4 percent for advanced economies and 7.1 percent for emerging markets (Chart I.1). One of the primary reasons for the low growth rates in advanced economies is the slow recovery of consumption expenditures due to existing problems in their labor markets. In developed countries, savings ratios are above pre-crisis averages due to the unstable recovery trend in unemployment, decline in household wealth and low consumer confidence, which in return constrains the effect of private consumption expenditures on economic recovery in the aforementioned countries (Chart I.2).



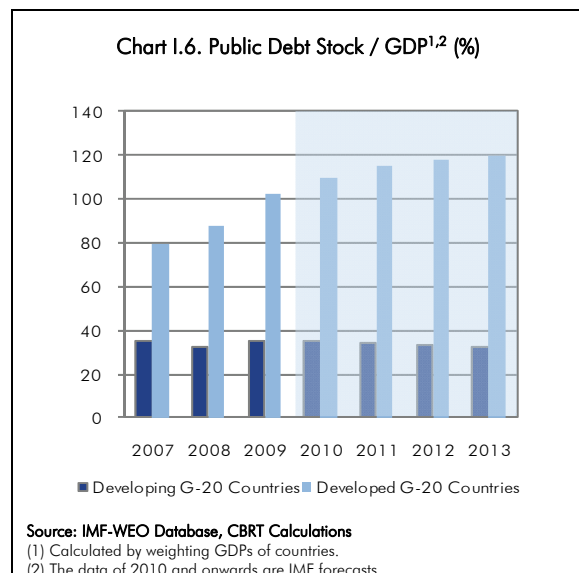
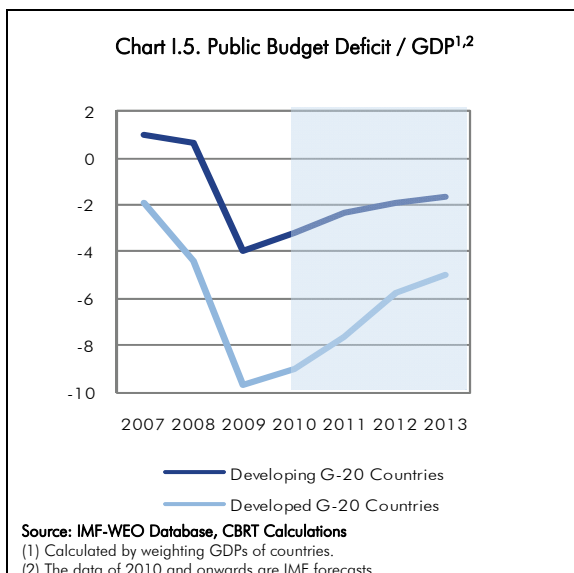
High unemployment rates in advanced economies indicate that problems in the labor market continue in these countries. The recent growth rates in developed countries have not led to any improvement in unemployment rates. It is estimated that more than 210 million people are unemployed worldwide, an increase of more than 30 million since the pre-crisis period and 75 percent of the increase has occurred in the advanced economies<sup>1</sup>. Meanwhile, the strong recovery in emerging markets has had a positive impact on unemployment rates underpinning the rise in consumption expenditures in these countries. The unemployment rate in developing G-20 countries, which was 6.2 percent in 2009, is expected to come down to 5.8 percent in 2010, and that of the developed G-20 countries, which was 8 percent in 2009, is expected to increase to 8.3 percent (Chart I.3).

While deflation risk still persists in advanced economies, inflation risk has become an issue for some developing countries. The weak total demand during the crisis period led to a rapid decline in inflation rates. Nevertheless, while low inflation rates continue in developed countries, inflation rates in developing countries have reached 2007 levels due to strong consumer demand and the rise in commodity prices (Chart I.4).

<sup>1</sup> IMF World Economic Outlook, October 2010.



While the increase in the indebtedness ratios of developed countries continues, the relatively positive outlook of public debt stock and budget performance indicators of developing countries persists. Owing to the broad-based fiscal stimulus packages introduced after the global economic crisis, the public support provided especially for the financial sector and decelerating economic activity, public incomes of advanced economies decreased and their public finances deteriorated. This fuelled concerns about the roll-over of debts of the developed countries. Accordingly, many developed countries led by EU countries launched a transition process towards tighter fiscal policies. On the other hand, it is observed that developing countries have maintained their pre-crisis strong fiscal structures (Chart I.5 and I.6).

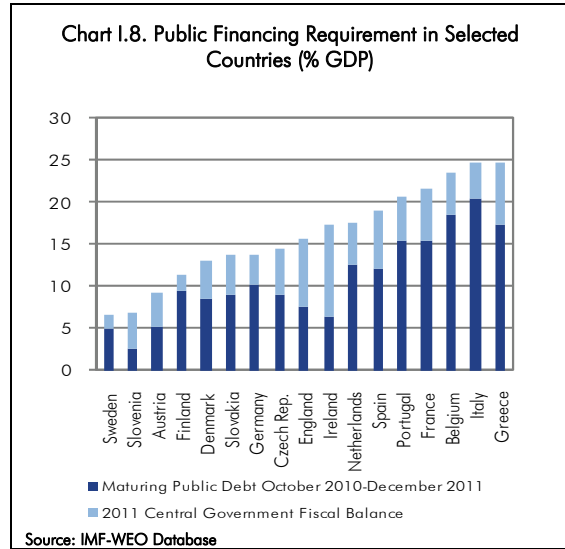
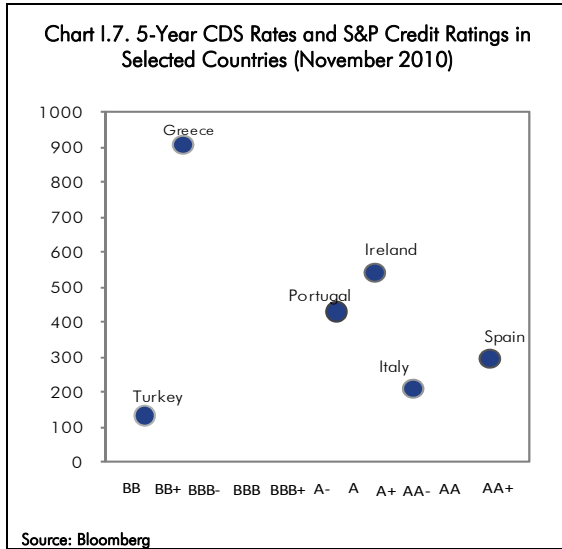


The deterioration in fiscal discipline in some European countries has led to the downgrading of credit ratings and record-highs in CDS rates. While the credit ratings of most of the 5 riskiest EU countries known as PIIGS<sup>2</sup> were lowered due to fiscal problems they had in 2010, their CDS rates reached historic highs (Chart I.7). The high budget deficits and indebtedness ratios of the PIIGS countries, which increase the default risk of these countries, have started to threaten the parties in a

<sup>2</sup> PIIGS countries are Portugal, Italy, Ireland, Greece and Spain.

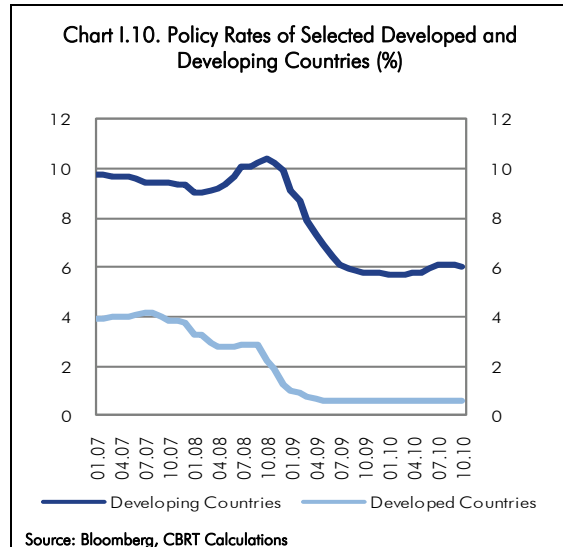
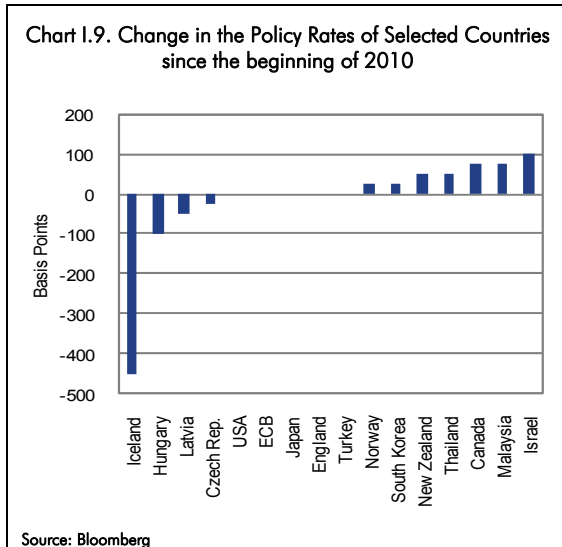


creditor position with these countries and hence, global financial stability. The failure of some countries to establish prudent and reliable medium-term fiscal policies in the face of these developments has also led to the continuation of bond market-driven risks. The maturing government bonds of several developed countries in the last quarter of 2010 and within 2011, may lead to an excessive financing requirement and a rise in borrowing costs due to intense competition (Chart I.8)<sup>3</sup>. Therefore, it is considered that the problems that could arise during the redemption of these bonds might disrupt financial markets via the bonds market and in return hinder global economic recovery.

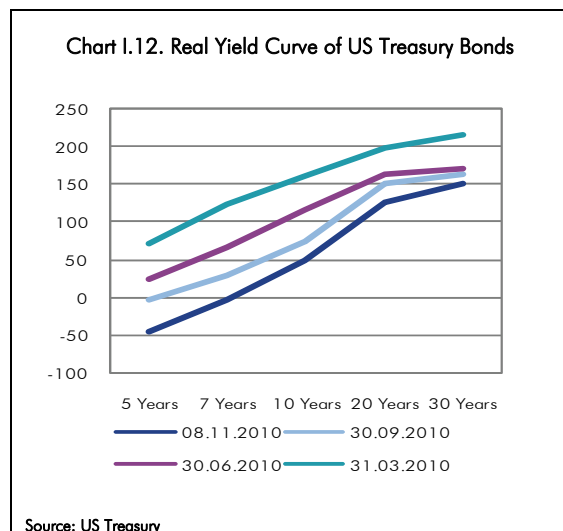
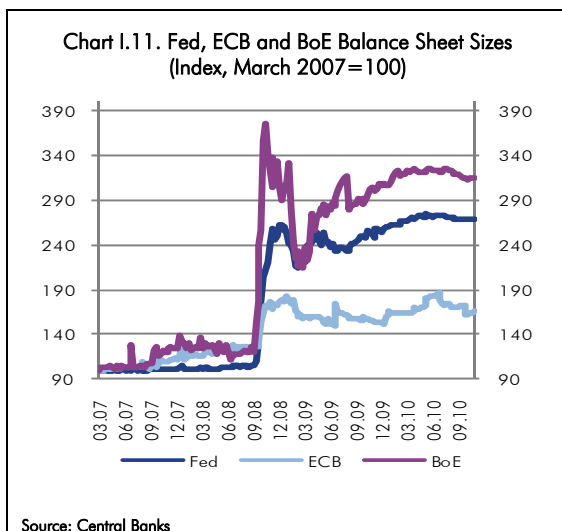


The limited room for maneuver in fiscal policy coupled with the weak outlook of economic recovery for advanced economies fuel expectations that accommodating monetary policies will continue. While the Federal Reserve (Fed), the Bank of England (BoE), the Bank of Japan (BoJ) and the European Central Bank (ECB) keep policy rates near zero, they indicate that they will maintain policy rates at this level in the upcoming period (Chart I.9). On the other hand, some developed and developing countries with relatively strong fiscal structures have launched exit strategies and assumed a normalization process in their monetary policies (Chart I.10). In fact Canada, Israel, New Zealand, Norway, South Korea and Malaysia have recently increased policy rates (Chart I.9).

<sup>3</sup> According to the IMF-WEO October 2010 Report, Japan should issue treasury bills and bonds during the rest of 2010 and in 2011, amounting to 40 percent of its GDP, while this ratio exceeding 20 percent for France, Italy and the USA.

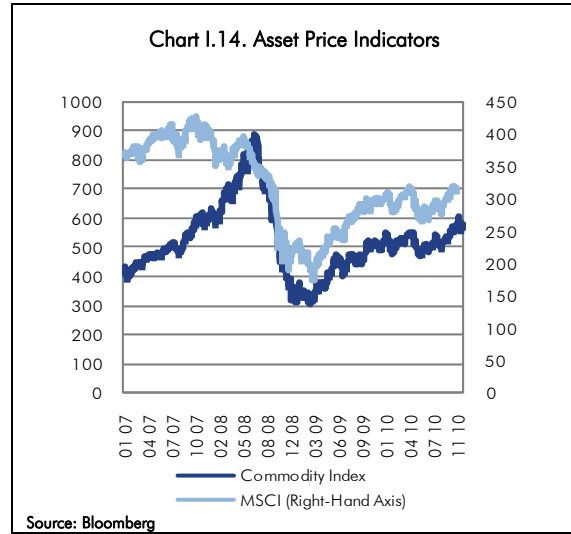
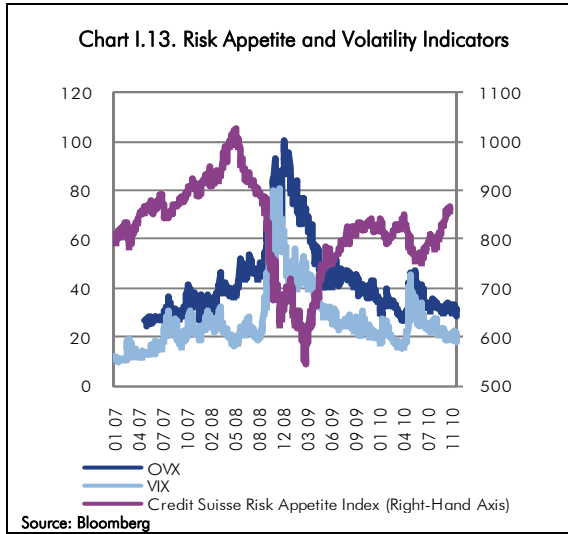


The balance sheets of the ECB, the BoE and especially the Fed had risen rapidly as a result of the expansionary monetary policies that they implemented in the face of the global financial crisis. As the intended macroeconomic results could not be achieved within the desired timeframe, at its meeting in November 2010, the Fed announced that with the second quantitative easing program, it is planned to purchase USD 600 billion-worth of long-term government bonds by the second half of 2011. The impact of the mentioned expansion on growth is questionable as the velocity of dollar is low in US. The expansionary monetary policies implemented by developed countries have increased global liquidity and led to sharp drops especially in bond rates. The consequences of the said quantitative easing policy would probably be felt on the bond market in the long run. The negative real returns of US Treasury notes that have 7-year or shorter maturities are considered as a risk factor in the financial system for the upcoming period. There are growing concerns that the bond market is over-priced and due to global economic recovery in the upcoming period, increases in interest rates might lead to some significant price movements in this market (Chart I.11 and Chart I.12).

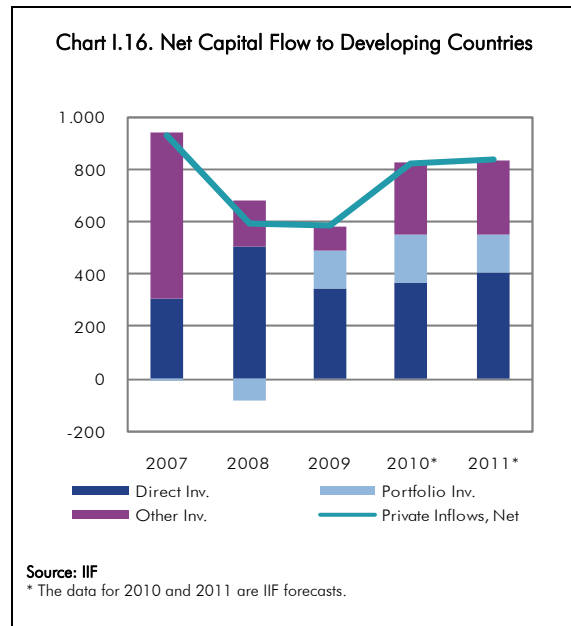
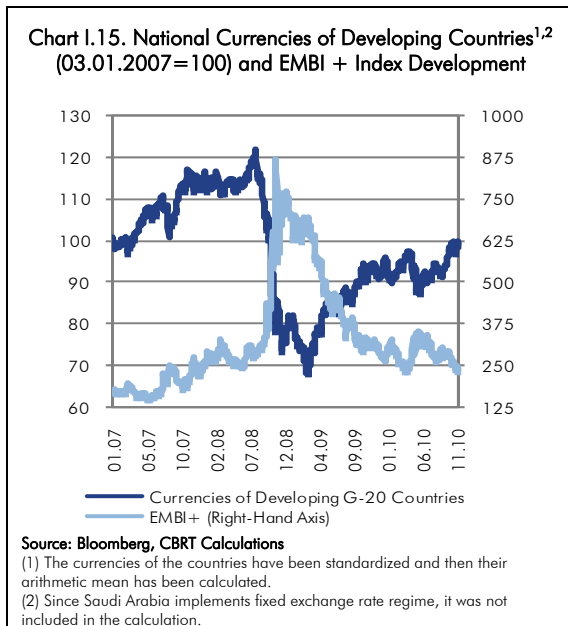


The global liquidity surplus as a result of swollen central bank balance sheets and the elevated risk appetite led to a rise in asset prices. Besides other factors, it is expected that the rise in asset prices will continue in the upcoming period due to the demand from developing countries enjoying high growth performances and the impact of the second quantitative easing program of the Fed (Chart I.13 and Chart I.14). Although the level of the risk appetite and asset prices on the market is lower

compared to the pre-crisis period owing to lingering perceptions that global vulnerabilities have not yet been eliminated, it is important to monitor developments in asset prices closely.



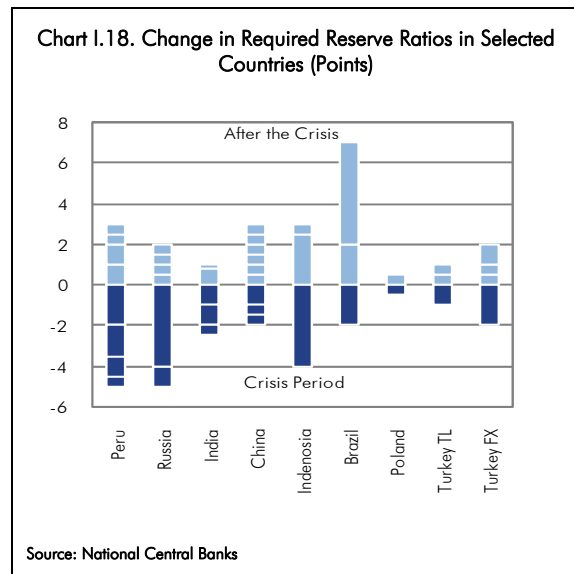
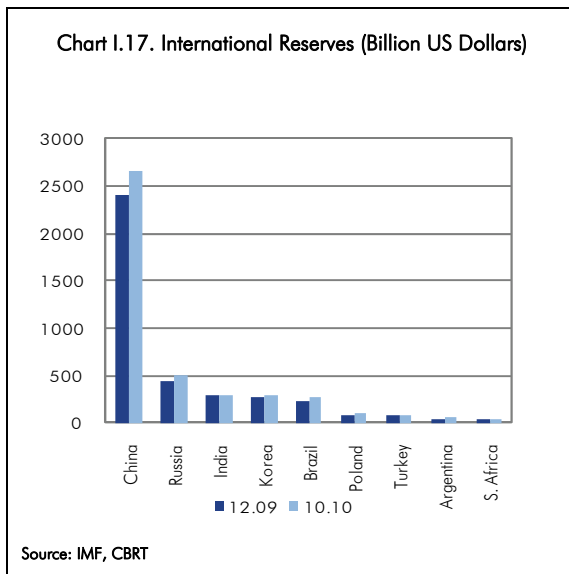
National currencies appreciate on the back of improved risk perceptions pertaining to developing countries, elevated yield seeking and accelerated capital flows. Increased capital flows to developing countries depending on low short-term interest rates in developed countries -that are expected to remain at these levels for quite some time- and the elevated risk appetite caused the appreciation of their national currencies, which suffered sharp drops during the crisis (Chart I.15). According to IIF calculations, net capital flow towards developing countries, which was USD 928.6 billion in 2007, dropped to USD 581.4 billion in 2009. Net capital flows towards developing countries is expected to reach USD 825 billion in 2010 owing to the fact that the risk premiums of these countries in the post-crisis process came down to pre-crisis levels and credit rating agencies upgraded their ratings (Chart I.16).



It is observed that countries resort to macro-prudential policies in order to control the risks that short-term capital inflows can potentially cause and in this period some countries increase their international reserves. With the aim of decreasing the vulnerabilities driven by capital inflows, some

countries have increased their reserves (Chart I.17). In order to prevent capital inflows, some countries such as developing Asian countries, have introduced macro-prudential measures for both domestic and foreign investors, while others have implemented some measures only for foreign investors (see Special Topic IV.2). Nevertheless, owing to the liquidity surplus in global markets and the low yields of developed countries, it is still ambiguous how effective the measures taken will be. Developing countries' decoupling from developed countries in terms of growth and the Fed's second quantitative easing program, which will further increase global liquidity, together fuel expectations that capital flows towards developing countries will continue incrementally in the upcoming period.

The required reserves, which are also used as a policy tool to decrease macro-financial risks, have been used intensively during and after the crisis. In this framework, some developing countries, including Turkey, have increased their required reserve ratios to pre-crisis levels within the scope of their exit strategy. Meanwhile, China and Brazil have even elevated their required reserve ratios above pre-crisis levels (Chart I.18).

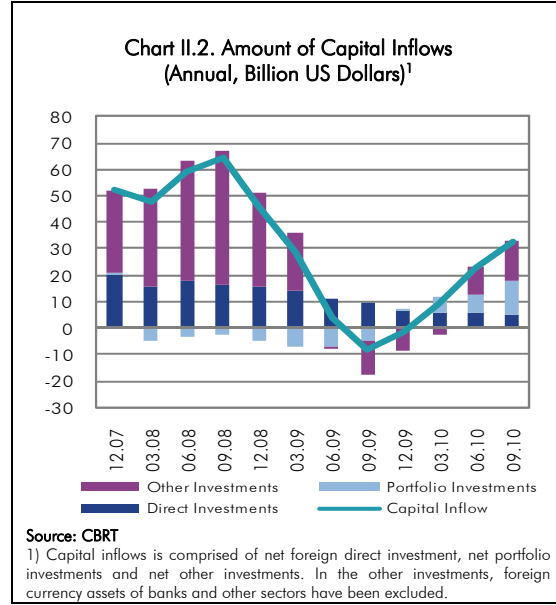
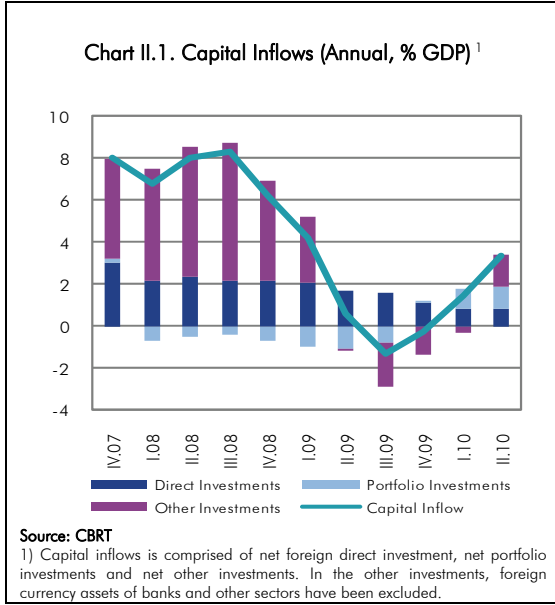


In the coming period; accelerated capital flows towards developing countries, any reversal in this trend and public finance problems in developed countries especially in EU countries are considered as the main risks that could potentially disrupt financial stability. While accelerated capital flows towards developing countries contribute to the fast growth of these economies, they also help the national currencies of these countries appreciate, which, in return, further increases the current account deficit of countries that had a deficit before. Should the public finance problems currently experienced in some EU countries spread to other developed countries, it is anticipated that the resultant negative developments in the markets would decrease the risk appetite. Furthermore, in case of changes in the current capital flow trend due to reasons such as the abandoning of expansionary monetary policies by developed countries, some vulnerability may emerge in the financial systems of developing countries in the upcoming period.

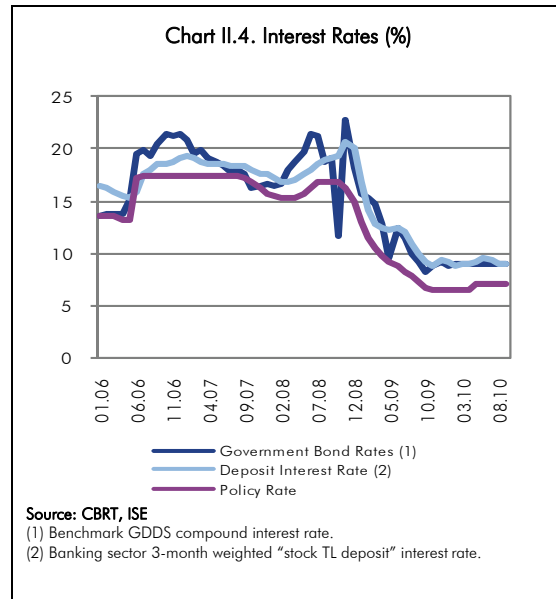
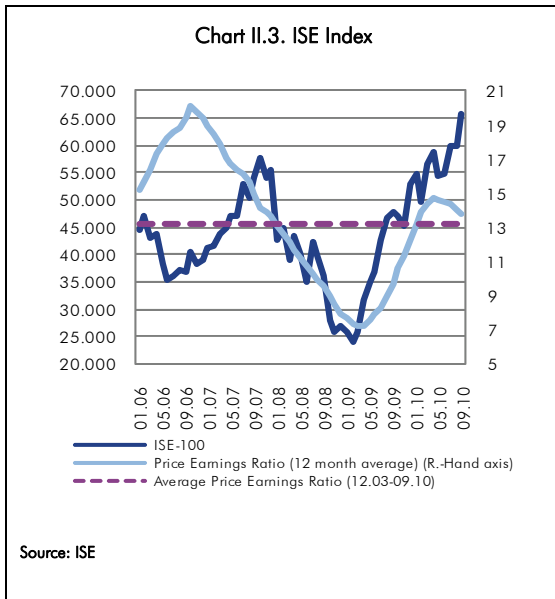
## II. DOMESTIC ECONOMIC OUTLOOK

*The faster than expected recovery in economic activity, the Medium-Term Program indicating that the financial discipline will continue, the stability in the financial system, the positive ratings of credit rating agencies and the risk premium indicators following a course even below pre-crisis levels, all suggest a positive outlook for the Turkish economy. As capital inflows accelerate along with these developments and the increase in the global risk appetite, market interest rates fall, asset prices escalate and the Turkish lira strengthens. In turn, these developments, trigger consumption and investment demand, increasing loans used both by households and firms, and contribute to growth of the economy on the back of domestic demand. Economic growth reflects positively on the labor market as well and despite the fact that unemployment rates are still above pre-crisis levels, they are in recess. Despite strong domestic demand, core inflation indicators display a positive outlook. However, the weak course of foreign demand, domestic demand-driven growth and the strengthening of the Turkish lira, negatively influence the foreign trade balance, leading to an expansion in the current account deficit. Consumption-driven tax revenues increasing parallel to economic recovery and public expenditures that are kept under control, affect public finance positively. In the upcoming period, besides the acceleration in short-term capital flows, loan growth with increased pace and widening of the current account deficit are important in terms of financial stability. In this framework, macroprudential measures will come to the forefront on Turkey's agenda as in other countries.*

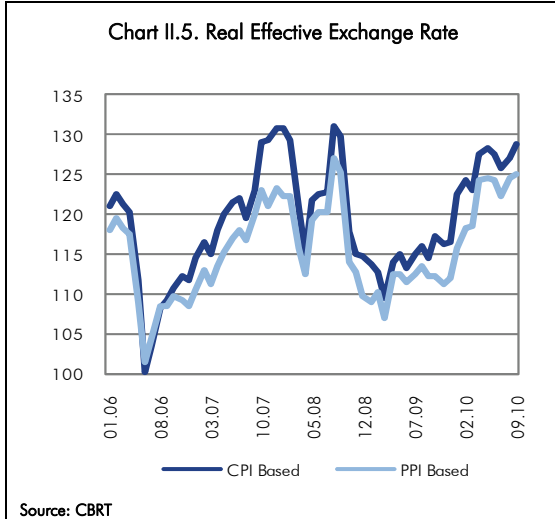
**The increase in the global risk appetite, the high growth rate of the Turkish economy, discipline in public finance, a sound financial system and relatively high interest rates lead to capital inflows, which are primarily composed of banks' borrowings from abroad and portfolio investments.** Net capital inflows, which reached 8.3 percent of the GDP during the third quarter of 2008, fell to 1.3 percent of GDP in the third quarter of 2009 on the back of the global crisis. This development was mainly attributable to the fact that the banks and other sectors were net external debt payers at that time. With the exit from the global crisis, capital inflows gained pace and reached 3.4 percent of the GDP by the second quarter of 2010 (Chart II.1). The increase in other liabilities, due to the surge in foreign borrowing of the banks, was particularly influential on the acceleration of capital inflows after the global crisis, and the weight of foreign direct investments on capital inflows gradually decreased. Of the capital inflows, reaching USD 32.6 billion dollars in annual terms as of September 2010, USD 14.6 billion was from other liabilities and USD 12.9 billion was from portfolio investments, but the share of foreign direct investments remained only USD 5.1 billion. A breakdown of the other liabilities indicates that while the net liabilities of the banks were on the rise, the other sectors were net external debt payers (Chart II.2). The main factor driving the non-financial institutions to be net external debt payers is the borrowing facility provided to firms with the amendment made to Decree No. 32 of the Law on Protection of the Value of the Turkish Lira; according to which firms were allowed to borrow in foreign currency from domestic branches under specified terms and conditions. Accordingly, it was observed that firms shifted their borrowing from abroad to domestic loans.



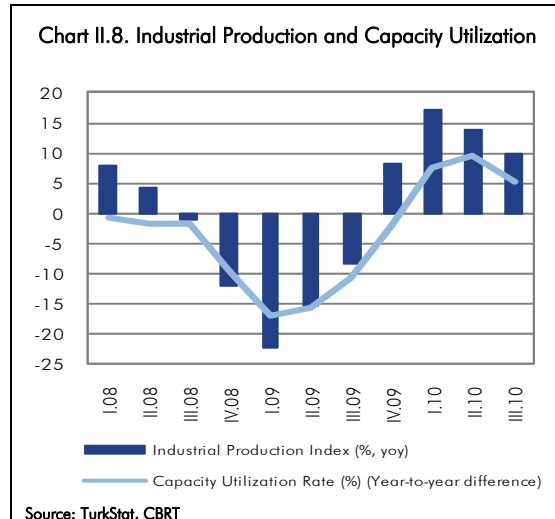
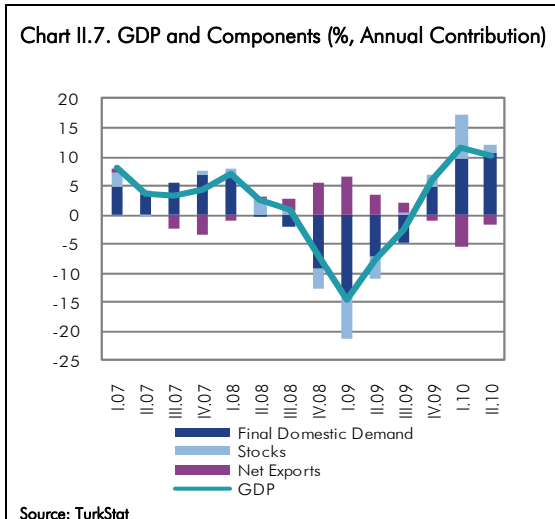
Capital inflows affect financial markets positively and support the surge in asset prices. Improvements in risk perceptions related to Turkey and the increase in global risk appetite both positively influence the stock and bond market. In 2010, the stock markets maintain their rising trend and the price-earnings ratios are close to historical averages (Chart II.3). Likewise, bond prices are also on the rise. Accordingly, GDDS interest rates are receding (Chart II.4).



Along with increasing capital inflows on the back of restored confidence in financial markets, liquidity conditions have improved and the Turkish lira has strengthened. Real effective foreign exchange indices point to a strengthening of the Turkish currency. As of September 2010, the Turkish Lira appreciated by 10.4 percent according to CPI based index and by 11.8 percent according to PPI based index, compared to end-2009 (Chart II.5). One of the best indicators in measuring the liquidity conditions is the spread between the bid and ask prices of financial assets (exchange rate and bond market). The market liquidity index which is formulated based on these indicators and which reflects the confidence in the market, increased after the peak of the global crisis, suggesting an improvement in market confidence; however, it is still behind pre-crisis levels (Chart II.6).

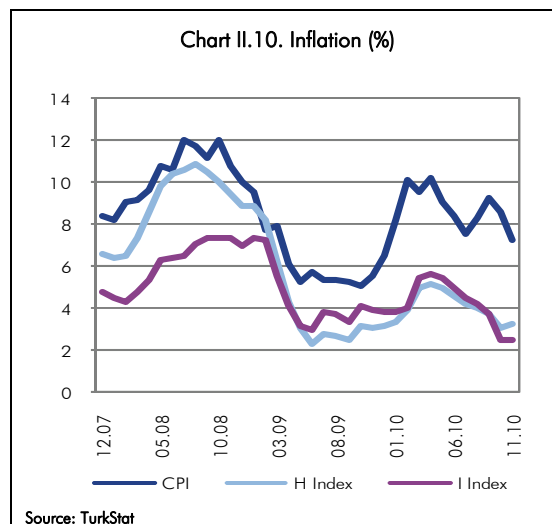
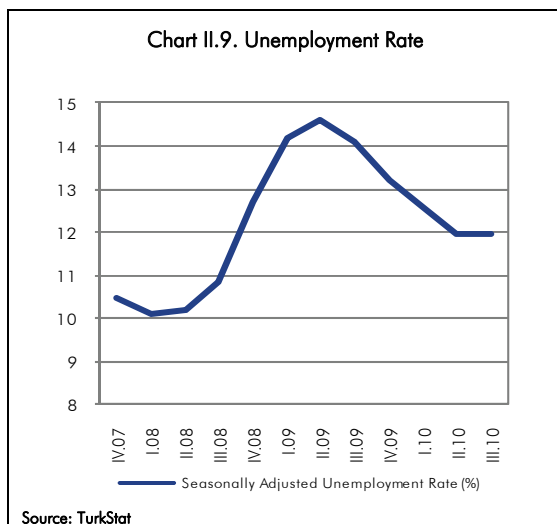


With the support of domestic demand, the economy is recovering fast. GDP increased by 11.7 percent year-on-year in the first quarter and by 10.3 percent in the second quarter of 2010. Consequently, GDP, which had shrunk by 11.1 percent in the first half of 2009, grew by 11 percent in the same period of 2010. The growth of the GDP was mainly driven by the final domestic demand. In the first half of 2010, the final domestic demand contributed to GDP growth by 10.3 points, with a breakdown of 5.4 points by private consumption expenditures, 4.6 points by investment expenditures and 0.3 points by public consumption (Chart II.7). The industrial production and capacity utilization data for the third quarter of 2010 demonstrate that economic growth continued in the third quarter as well. Although the rate of increase displays a downward trend, industrial production increased by 10 percent in the third quarter of 2010, whereas the capacity utilization rate increased by 5.4 points compared to the same period of the previous year and was realized as 74 percent (Chart II.8). It is anticipated that industrial production, which displayed a more moderate increase in the third quarter of the year compared to the first half, is to re-gain momentum in the last quarter based on increasing consumer confidence and strengthening propensity to invest owing to waning political uncertainty after the referendum.



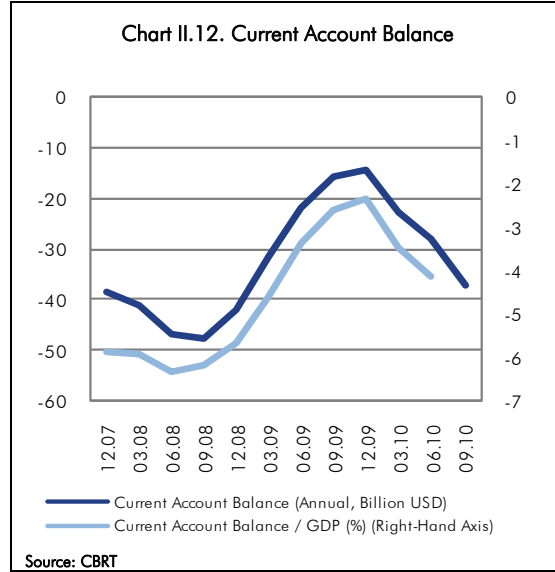
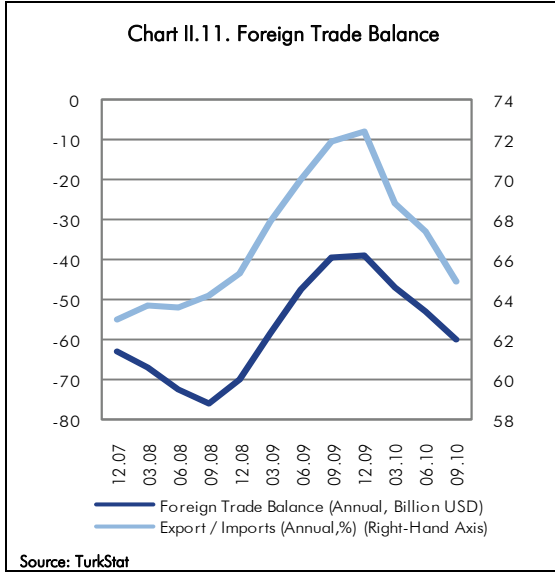
As unemployment rates are receding on the back of economic growth, the core inflation indicators are on a path consistent with the medium-term targets. The seasonally adjusted unemployment rate, which stood at 10 percent in April 2008, rose to 14.8 percent in April 2009 due to the global crisis and economic contraction. After this date, the unemployment rate decreased and

receded back to 12 percent by August 2010 (Chart II.9). Despite the improvement in employment conditions, unemployment rates are still at a high level. In this environment, the core inflation indicators have dropped to historic lows. While annual inflation was 7.3 percent in November 2010, core inflation indicators measured with H and I indices stand at 3.2 percent and 2.5 percent, respectively (Chart II.10). The fact that it took some time for capacity utilization rates to reach pre-crisis levels due to the weak course of foreign demand, the unemployment rate still preserves its high level despite the improvement in employment conditions and the strong position of the Turkish lira; all support the maintenance of low levels in core inflation indicators. In this framework, it is foreseen that annual inflation will be in a downward trend in the forthcoming period. The uncertainties in food prices continue to be the most fundamental risk regarding the short-term inflation outlook.

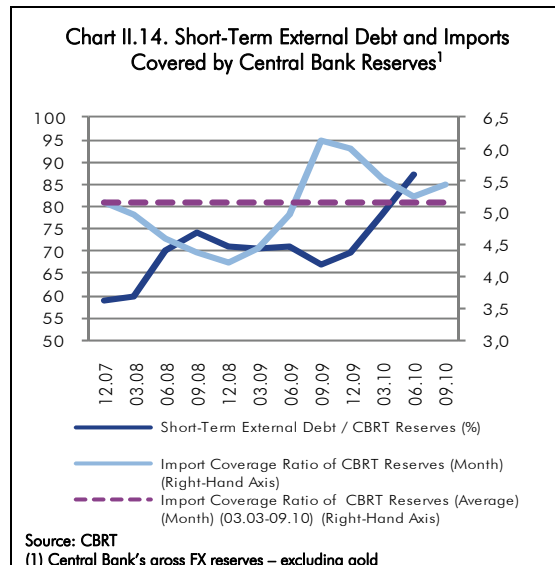
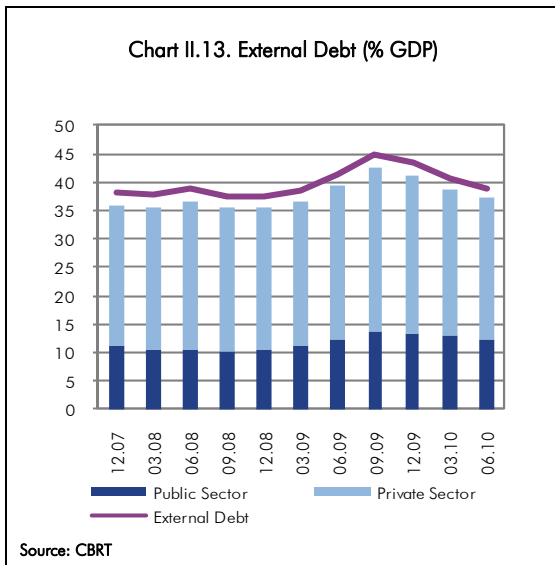


Domestic demand-based growth, appreciation of the Turkish lira, recovery in production, along with the need for imported intermediate goods and energy lead to an expansion in the current account deficit. Owing to the stagnation in economic activity due to the global crisis and the drop in commodity prices, the foreign trade deficit, which had been USD 75.8 billion annually in the third quarter of 2008, narrowed rapidly and fell to USD 38.8 billion as of the end of 2009. In response to the economic recovery, the foreign trade deficit started to rise again and reached USD 60 billion on an annual basis as of September 2010. As a result of these developments, the export/import coverage ratio, which stood at 72.5 percent at end-2009, decreased to 64.9 percent on an annual basis in September 2010 (Chart II.11). The differentiation in demand composition of economic growth, which is becoming more marked, affects the current account deficit negatively by increasing the foreign trade deficit. The current account deficit, reaching 6.3 percent of the GDP as of June 2008, declined to 2.3 percent of the GDP by the end of 2009 on the back of the global crisis and economic contraction. With the recovery in economic activity, the current account deficit started to rise again and reached to 4.1 percent of GDP in June 2010. Widening of the current account deficit continued in the third quarter of 2010 as well. The annual current account deficit, standing at USD 14.4 billion at end-2009, increased to USD 37.1 billion as of September 2010 (Chart II.12).



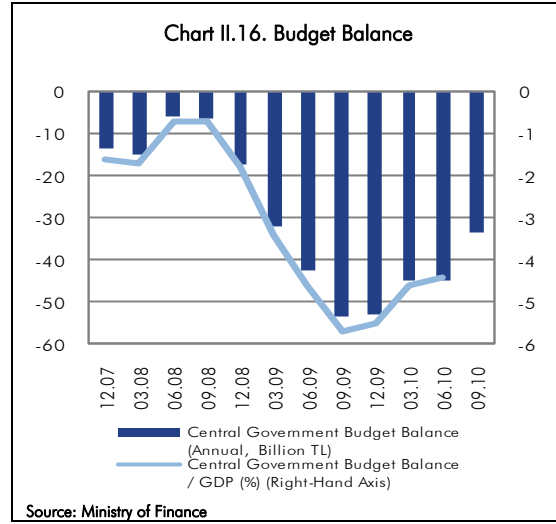
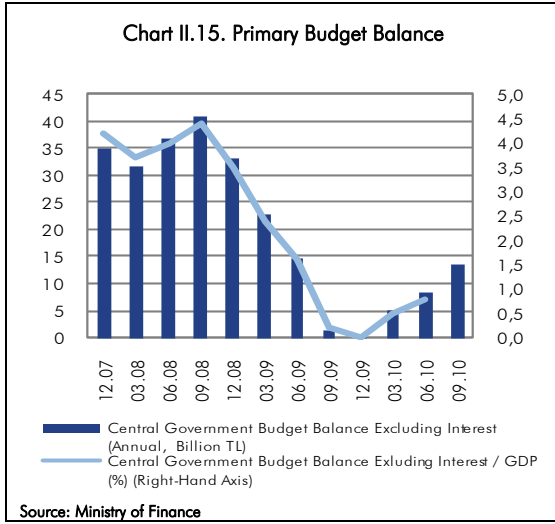


In spite of the rise in the current account deficit, the external debt service capacity indicators do not display a negative outlook. The ratio of external debt to GDP declined by 4.3 points and became 39 percent in the second quarter of 2010 compared to end-2009 (Chart II.13). The share of the short-term external debt within the total debt increased by 4.9 points to reach 23.3 percent compared to end-2009 figures. Although the ratio of short-term debt to Central Bank reserves is below 100 percent, it climbed to 87.3 percent in June 2010 from its level of 69.9 percent at the end of 2009. As of September 2010, the Central Bank reserves were able to meet the imports for a period of 5.5 months and, despite the recent decline, they are hovering around past averages (Chart II.14).

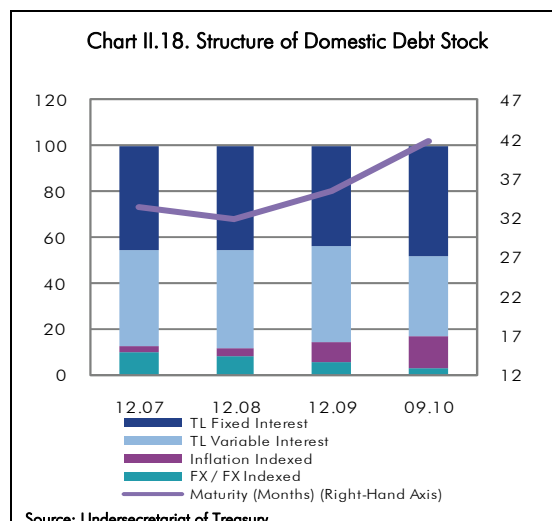
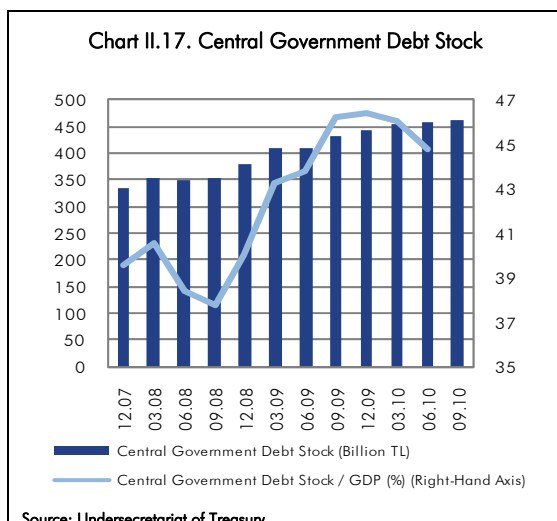


Increased tax revenues owing to the economic recovery and expenses that have been curbed have had a positive effect on public finance. Budget revenues based on indirect taxes surged due to the increase in domestic demand, interest expenses decreased on the back of falling interest rates and primary expenditures increased by a relatively small margin. In consequence, budget performance displays a positive outlook. The primary budget surplus, which had been TL 440 million in annual terms as of the end of 2009, increased to TL 13.7 billion year-on-year in September 2010. While the budget deficit stood at TL 52.8 billion in 2009, this figure receded to TL 33.2 billion year-on-year in September 2010. Thereby, the budget deficit, reaching 5.5 percent of GDP in 2009, when the economy shrank,

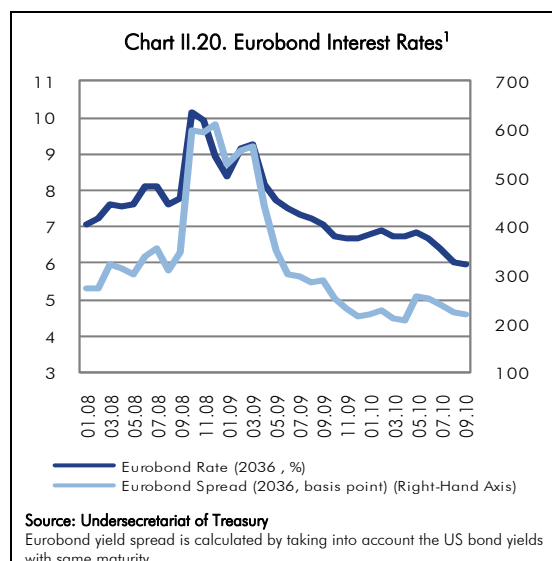
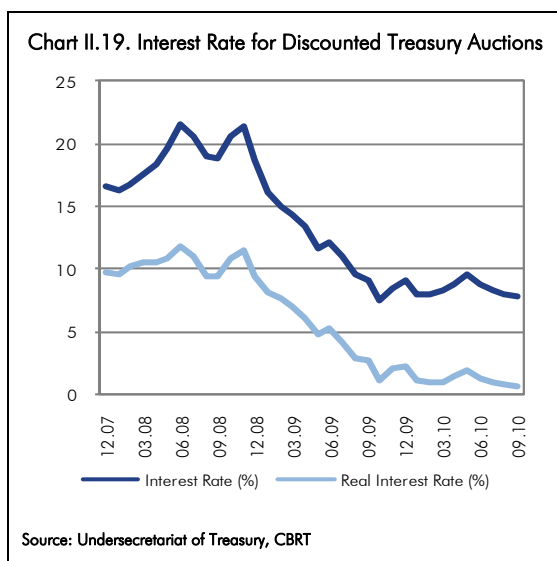
was down to 4.4 percent of GDP in the first half of 2010 (Chart II.15 and Chart II.16). In an environment of expanding current account deficit, it is considered essential for financial stability to contain public expenditures and not to slacken the discipline in public finance. In this framework, it is important to achieve the budget performance targets stipulated in the Medium Term Program (MTP) announced in October. As a matter of fact, the program targets anticipate a limited tightening in the fiscal policy in the upcoming period. The public finance indicators in the MTP indicate that the improvement that started to be observed in 2010 will continue with the contribution of an earlier and stronger than expected economic recovery.



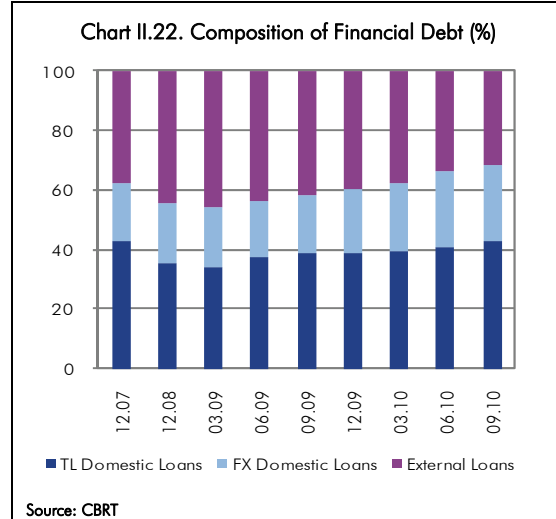
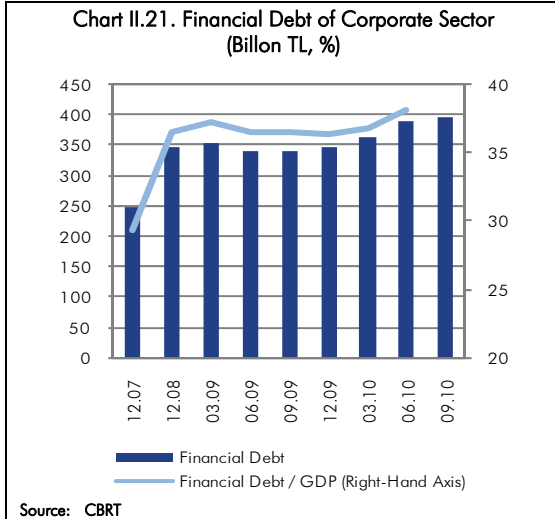
Public debt ratios and vulnerability indices of the debt stock are improving on the back of economic growth, positive budget performance and the drop in real interest rates. The rate of increase in central government debt stock, which had reached TL 441.5 billion in 2009 with an increase of 16.1 percent, slowed down in 2010. Central government debt stock displayed a limited increase by 4.3 percent in the first nine months of 2010, compared to end-2009 and was realized as TL 461 billion. The ratio of debt stock to GDP, which rose to 46.3 percent in 2009 with a 6.3-points increase, declined by 1.5 points in the second quarter of 2010 and fell to 44.8 percent (Chart II.17). 75.5 percent of the total debt stock of the central government is composed of domestic debt. The composition of the domestic debt stock reveals that the share of TL-denominated fixed rate debt and CPI-indexed debts are on the rise. In September 2010, the ratio of TL-denominated fixed rate debt to domestic debt stock increased by 4.2 points to reach 48.1 percent and those indexed to CPI increased by 5.5 points to become 14.5 percent, compared to end-2009. The maturity of domestic debt stock is also on the rise. The average maturity of domestic debt stock, which had been 32 months in 2009, increased to 42 months in September 2010 (Chart II.18). The decrease in the share of FX-denominated and FX-indexed stock is considered to be a favorable development in terms of the decrease in sensitivity to exchange rate risk, whereas, the increase in the share of fixed income securities and extension of maturity are considered positive in terms of decrease in sensitivity to interest rate hikes.



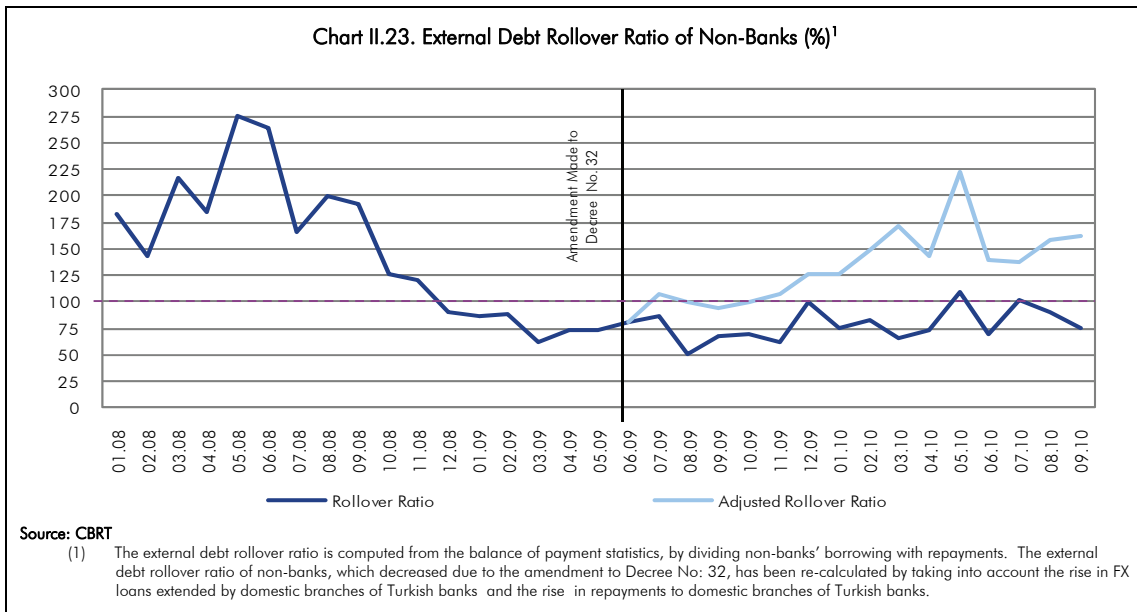
The narrowing of the budget deficit and improvement of public debt stock indicators underpin the decline in public borrowing costs. As a result of the increase in global risk appetite and positive developments in risk perceptions related to Turkey, the borrowing interest rate fell to 7.8 percent in discounted auctions as of September 2010. Adjusted for 12-month inflation expectations, it is observed that the real interest rate dropped to historic lows to stand at 0.6 percent (Chart II.19). As of September 2010, the Eurobond interest rate, which is to mature in 2036, was realized as 5.9 percent and the yield spread thereof declined to 218 basis points (Chart II.20).



On account of rapid economic recovery, fading uncertainties, the fall in interest rates and the improvement in lending conditions, corporate sector debt increased while the share of their foreign borrowing decreased. While no significant change was observed in firms' total financial debt in 2009, liabilities surged by 13.9 percent as of September 2010 compared to end-2009 and reached TL 395 billion. Consequently, the ratio of the corporate sector financial debt to GDP increased by 1.7 points in the second quarter of 2010, compared to end-2009 and reached 38 percent (Chart II.21). Although 57.4 percent of corporate sector debt is denominated in foreign currency, majority of this debt is long-term. As of September 2010, the share of foreign borrowing in total loans is 21.6 percent, whereas the share of FX loans extended to the corporate sector by domestic and foreign branches and affiliates of Turkish banks in total loans increased by 4.1 points compared to end-2009 and reached 78.4 percent (Chart II.22).

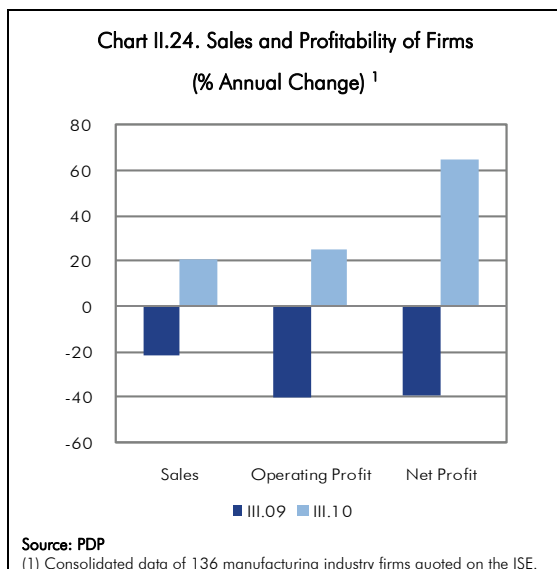


After the amendment to Decree No: 32 in June 2009, firms have shifted their credit utilization towards the domestic market and the external loans rollover ratio does not display any negative course. Between June 2009, when Decree No:32 was amended, and September 2010, the amount of loans extended to the corporate sector by foreign branches and affiliates of Turkish banks decreased by USD 7 billion, whereas the loans extended by foreign banks declined by USD 4.3 billion. On the other hand, FX loans extended by domestic branches of banks, increased by USD 27.8 billion. According to balance of payments data, the external debt rollover ratio of non-banks is 75 percent in September 2010; however, taking into consideration the increase in the volume of FX loans extended by domestic branches, the ratio is realized as 163 percent (Chart II.23).



Despite the rise in debt, corporate sector revenues from sales have increased and its profitability performance has remained strong. Total amount of sales revenues of manufacturing industry firms quoted on the Istanbul Stock Exchange (ISE) increased by 20.4 percent during the first nine months of 2010 compared to the same period of the previous year and their total net profits surged by 64.6 percent in the same period. Operating profits, which increased on the back of the rise in sales revenues, and the decrease in financial expenditures played pivotal role in firms' positive profitability performance (Chart II.24). As a result of these developments, the return on equity, which was 7.4

percent in the first nine-months of 2009, increased to 11 percent during the same period of 2010 (Table II.1). The increase in the profit margin was influential on the rise of return on equity of firms. The decrease in firms' financial expenditures, which are excluded from operating profits, affected their profit margin positively. As the net FX short position reaches 20.1 percent of own funds, appreciation of the Turkish lira puts downward pressure on exchange rate driven financial expenditures of firms and contributes to the rise in their profit margins.

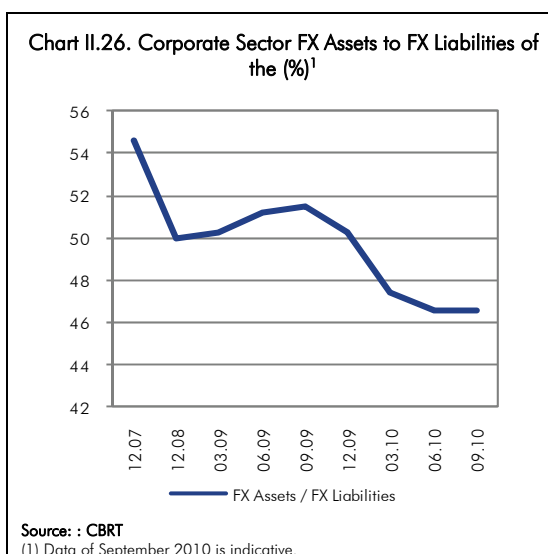
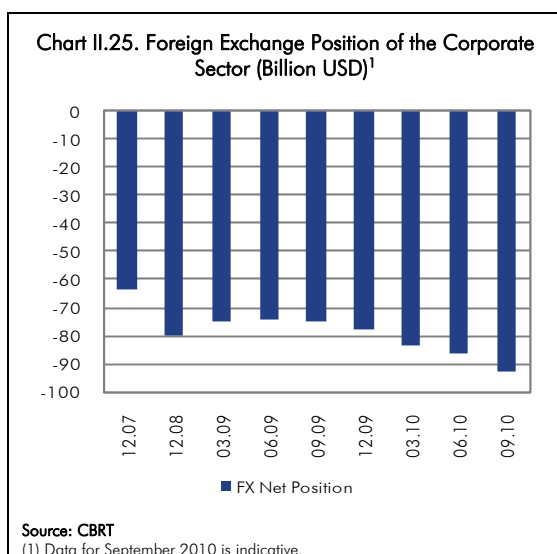


**Table II.1. Return on Equity and Its Components**<sup>1</sup>

	09.08	09.09	09.10
Net Profit / Equity (%)	12.3	7.4	11.0
Assets / Equity	1.95	1.99	1.94
Net Profit / Assets (%)	6.3	3.7	5.7
Sales / Assets	1.00	0.77	0.85
Net Profit / Sales (%)	6.3	4.9	6.7
Operating Profit / Sales (%)	9.2	7.0	7.3

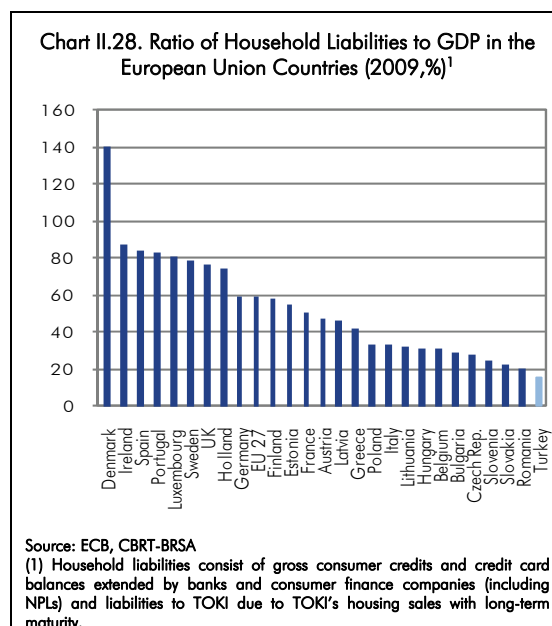
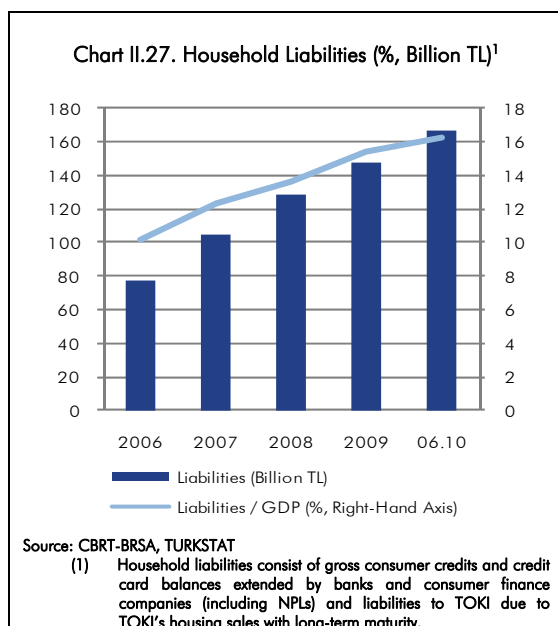
Source: PDP  
(1) Consolidated data of 136 manufacturing industry firms quoted on the ISE.

The FX assets and liabilities of firms suggest that the FX net short position has increased and currency risk still remains important for them. The net short position of the corporate sector, which started to decrease after the global crisis, assumed an upward trend with the economic recovery. The FX short position that declined by 2.5 percent year-on-year in 2009 increased by 18.9 percent in September 2010 compared to end-2009 and reached USD 92.6 billion (Chart II.25). As of September 2010, the ratio of FX assets to FX liabilities went down by 3.7 points compared to end-2009 and declined to 46.6 percent (Chart II.26).



While household liabilities are on the rise, the debt service capacity does not display a negative outlook. On account of the improvement in consumer confidence owing to the decrease in interest rates and fading uncertainties, household indebtedness continued to rise. The ratio of household

liabilities to GDP, which was 15.4 percent in 2009, surged to 16.2 percent in the first half of 2010 (Chart II.27). However, when compared with selected EU countries, it is observed that the said ratio is low in Turkey (Chart II.28).



The fall in interest rates reduces the interest burden on households despite increased indebtedness. In response to the recovery in the labor market, the disposable income of households increased. Household borrowing costs declined on the back of the fall in interest rates on loans as a result of the decrease in policy rates and rising competition among banks. Thus, the ratio of household interest payments to disposable income, which had surged to 5.9 percent in 2009, declined to 4.8 percent in the first half of 2010 (Table II.2).

**Table II.2. Household Disposable Income, Liabilities and Interest Payments<sup>1,2,3</sup> (Million TL)**

	2008	2009	09.10
Household Liabilities	128.966	147.083	177.314
Household Disposable Income	352.764	358.713	407.234
Household Interest Payments	19.653	21.114	19.697
Interest Payments / Household Disposable Income (%)	5,6	5,9	4,8
Liabilities/Household Disposable Income (%)	36,6	41,0	43,5

Source: BRSA-CBRT, TURKSTAT, SPO

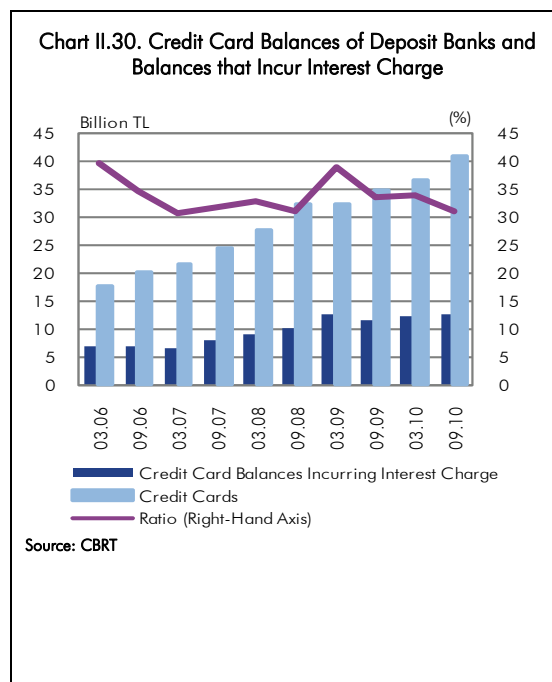
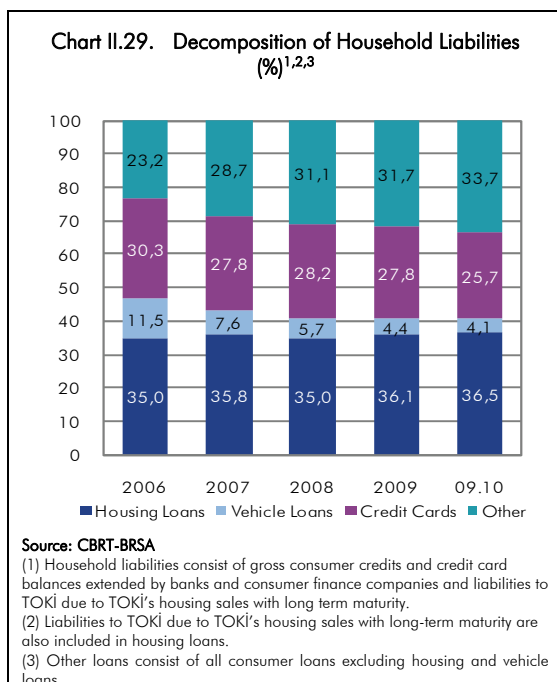
(1) Household liabilities consist of gross consumer credits and credit card balances extended by banks and consumer finance companies and liabilities to TOKI due to TOKI's housing sales with long-term maturity.

(2) As the repayments related to liabilities from TOKI's housing sales with long-term maturity are indexed to civil servant salaries, they are not included in interest payments.

(3) Household disposable income has been calculated by using the private sector disposable income estimation for 2009 and 2010 as mentioned in the 2011 Annual Program, assuming that the ratio of household disposable income for 2008, which was generated from the Income and Living Conditions Survey, to private sector disposable income has not changed. Since household disposable income generated from the Income and Living Conditions Survey has been utilized, the figures differ from those in the previous Financial Stability Reports.

While the share of housing and other loans within household liabilities has increased, that of vehicle loans and credit cards has decreased. When the development of household liabilities is analyzed by type, it is observed that other loans increased by 28.1 percent, housing loans went up by 21.7 percent, vehicle loans surged by 13.6 percent and credit card balances increased by 11.7 percent in September 2010 compared to end-2009 figures. As a result of these developments, while the shares of other consumer loans and housing loans within household liabilities increased, those of vehicle loans and credit cards decreased (Chart II.29). Although credit card balances continued to rise in 2010, the

ratio of credit card balances that incur interest charges to total credit card balances declined compared to end-2009 figures. (Chart II.30).



The number of consumer loan and credit card defaulters has decreased. According to the Central Bank Risk Center data, the number of consumer loan and credit card defaulters, which were 1,721,004 at end-2009, decreased to 1,688,567 by September 2010 (Table I.6).

Table II.3. Number of Credit Card and Consumer Loan Defaulters<sup>1</sup>

	2008	2009	03.10	09.10
Banks	997.095	1.489.131	1.400.177	1.392.635
Asset Management Companies <sup>2</sup>	139.862	330.156	430.197	443.866
Finance Companies	21.884	23.463	22.991	22.346
Total <sup>3</sup>	1.093.47	1.721.004	1.690.726	1.688.567

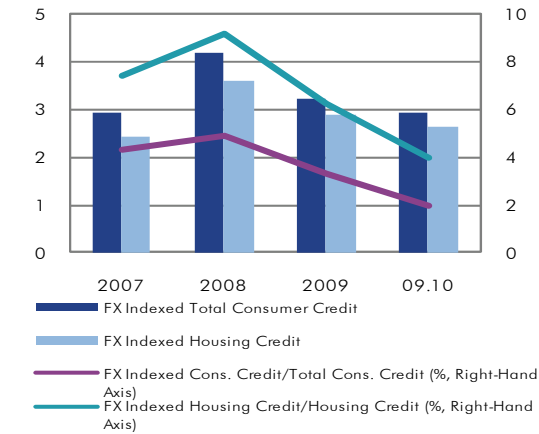
Source: CBRT

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

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

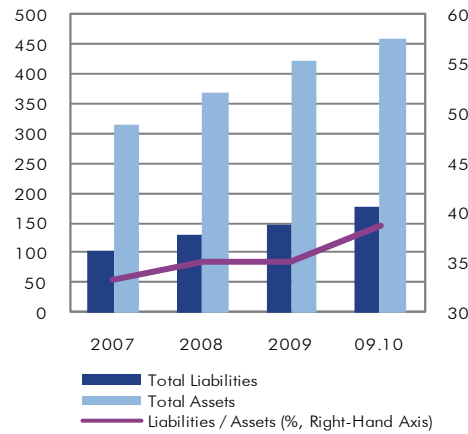
(3) As customers may have registry to more than one financial institution group, the sum of the three rows in the table and grand total are not equal.

**Household liabilities do not bear interest rate and exchange rate risk.** As opposed to many emerging market economies, primarily the Eastern Europe and Baltic countries, most of household liabilities in Turkey are denominated in local currency. Households in Turkey are not allowed to borrow in foreign currency and with the amendment to Decree No. 32 in June 2009; they are precluded from utilizing FX-indexed loans, as well. Thus, the ratio of FX-indexed consumer loans to total consumer loans, which was 4.9 percent in 2008, decreased to 3.3 percent at end-2009 and went down to 2 percent in September 2010 (Chart II. 31). Besides the low level of exchange rate risk they are exposed to, most of the loans granted to households do not bear interest rate risk, as they are fixed-rate loans.

Chart II.31. FX-Indexed Consumer Credits and FX-Indexed Housing Credits (Billion TL, %)<sup>1</sup>

Source: BRSA-CBRT, SPK, CRA

(1) Consumer finance companies are not included.

Chart II.32. Household Financial Assets and Liabilities (Billion TL, %)<sup>1</sup>

Source: BRSA-CBRT, CMB, CRA

(1) Household Assets = Savings Deposits + FX Deposits + Currency in Circulation + GDDS + Eurobonds + Stocks + Repos + Pension Funds + Mutual Funds (since December 2006). Household liabilities consist of gross consumer credits and credit card balances extended by banks and consumer finance companies and liabilities to TOKI due to TOKI's housing sales with long-term maturity.

As household liabilities rose faster than assets, the ratio of liabilities to assets increased as well. The ratio of household liabilities to financial assets, which had declined slightly during the crisis, went up to reach 38.7 percent due to faster rising liabilities compared to assets in the first three quarters of 2010 (Chart II.32). The share of TL deposits, which constitutes the largest portion of household assets, went down in 2009, but resumed its 2008 levels in 2010. With the recent appreciation in Turkish lira against the US dollar and Euro, the share of FX deposit accounts in financial assets started to decline since 2008. Accordingly, the ratio of TL investment instruments to FX investment instruments increased compared to end-2009. Moreover, the share of government securities and Eurobonds decreased due to their low yields, while the share of equities and private pension funds increased (Table II.4 and Chart II.33). Particularly the increase in long-term pension funds is considered to be a positive development with regard to the financial system.

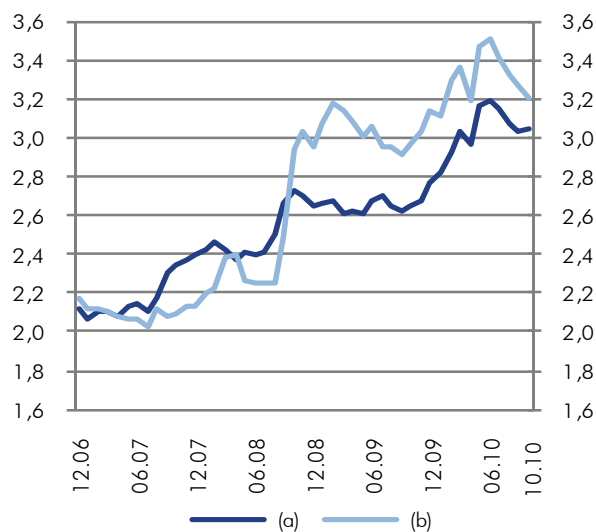


Table II.4. Composition of Household Financial Assets (Billion TL, %) <sup>1</sup>

	2008		2009		10.10	
	Billion TL	% Share	Billion TL	% Share	Billion TL	% Share
TL Deposits	188.1	51.3	209.6	49.9	236.5	51.1
FX Deposits	88.3	24.1	98.2	23.4	100.5	21.7
- FX Deposits (Billion USD)	58,6	-	65,2	-	70,3	-
Currency in Circulation	30,6	8,3	35,4	8,4	43,4	9,4
GDDS+Eurobond	19,7	5,4	14,1	3,3	10,1	2,2
Mutual Funds	20,8	5,7	26,1	6,2	27,2	5,9
Stocks	10,6	2,9	24,6	5,9	29,9	6,5
Private Pension Funds	6,3	1,7	9,0	2,1	11,5	2,5
Repos	2,2	0,6	2,3	0,5	3,1	0,7
Precious Metal Deposits	0,3	0,1	1,1	0,3	1,0	0,2
<b>Total Assets</b>	<b>366,9</b>	<b>100,0</b>	<b>420,4</b>	<b>100,0</b>	<b>463,3</b>	<b>100,0</b>

Source: BRSA-CBRT, CMB, CRA

(1) TL and FX deposits include participation funds.

Chart II. 33. Ratio of Household TL Investment Instruments to FX Investment Instruments <sup>1</sup>

Source BRSA-CBRT, CMB, CRA

(1) TL Instruments = Deposits + Repos + Gov.Dom.Debt.Sec. + Participation Funds (TL) + Stocks + Private Pension Funds + Mutual Funds (starting from April 2006); FX Instruments = FX Deposits + Gov.Dom.Debt.Sec. + Eurobond + Participation Funds (FX).  
(a) Current TL value of FX deposits and Participation Funds (FX).  
(b) For FX deposits and Participation Funds (FX), exchange rate prevailing on 29.12.2006 is used and the parity effect is eliminated.

It is much more important nowadays to ensure that financial services and tools that are becoming gradually more diverse and complicated are utilized according to their purpose, as well as to ensure that individuals are aware of their responsibilities and the risks that they take in this regard. In the aftermath of the financial crisis, work undertaken in the international arena in this field has gained pace. Within this context, it is of particular importance in terms of the CBRT's objective to support financial stability that priority is given to financial education for raising financial awareness, in cooperation with other related institutions and agencies. (Special Topic: IV.7).

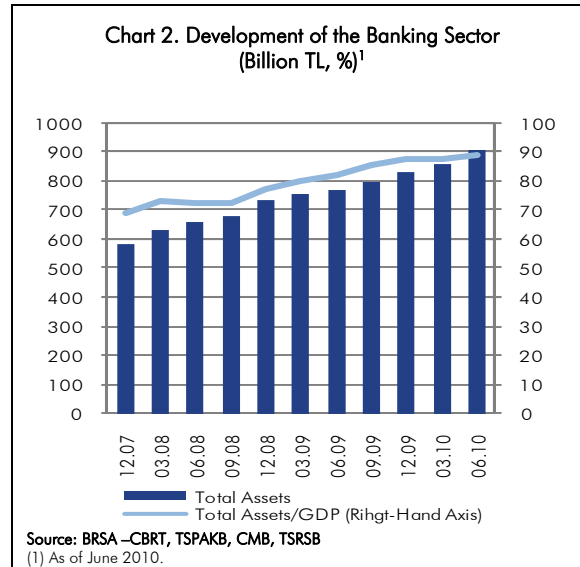
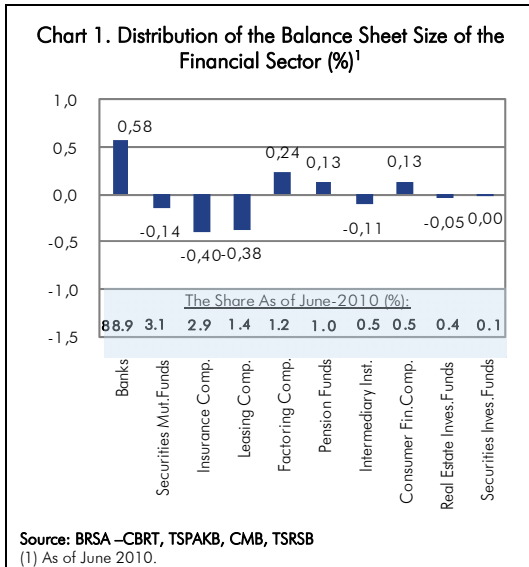
In the forthcoming period, continuing credit growth with increased pace on the back of strong capital inflows and the probable rise in the current account deficit stand as major threats to financial stability. Ample liquidity at global level stemming from expansionary monetary policies implemented by developed countries and relatively high yield lead to capital inflows to Turkey. The Turkish lira appreciates and market interest rates decline on the back of capital inflows, which, in turn, triggers the demand for consumption and investment. Additionally, differentiation in domestic and foreign demand becomes more apparent, the economy gains strength in response to domestic demand, household and corporate indebtedness increase and the current account deficit widens. Within this framework, the Central Bank will continue to use macroprudential policy instruments, primarily the required reserve ratios and liquidity management, effectively, in the upcoming period as well. On the other hand, strong public finance indicators, improvement in the profitability performance of firms, and the fact that the ratio of household liabilities to GDP is low compared to other countries and that they are Turkish lira-denominated increases the resilience of the Turkish economy against potential shocks.

Another risk factor is the deepening of public finance problems in developed countries particularly in EU countries and/or potential change in the tendency of capital inflows due to ceasing

the implementation of expansionary monetary policies by developed countries. Deepening of public finance problems in the EU –if it occurs- might directly affect the Turkish economy through credit and investment channels as well as through foreign trade channel since the EU is our most significant trade partner. A potential change in the trend of capital inflows will affect Turkey as well as other emerging economies.

## GENERAL STRUCTURE OF THE FINANCIAL SYSTEM

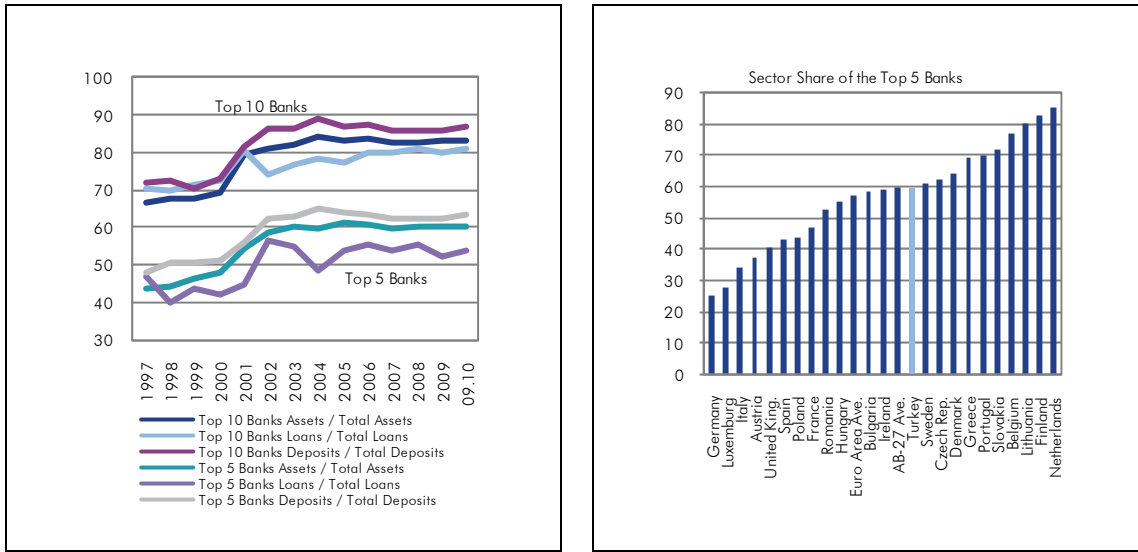
The Turkish financial sector, mostly composed of the banking sector, has followed a sound growth path. The balance sheet of our financial sector, which continued to grow in 2010 as well, grew by 17.3 percent annually to reach TL 1,022 billion in June 2010 and its ratio to GDP became 100 percent. The share of banks, which accounts for 88.8 percent of sector assets, rose by 0.7 percent, while the shares of factoring companies and pension funds increased by 0.2 percent and 0.1 percent, respectively, compared to the same period of the previous year (Chart 1). The total asset size of the banking sector, which weighs the most in the financial sector, rose by 11.2 percent in nominal terms and by 6.1 percent in real terms, to reach TL 927 billion in September 2010, compared to end-2009. Whereas, in terms of US dollar, it reached 642.5 billion with an increase of 14.6 percent. The ratio of the banking sector's total assets to GDP rose from 87.6 percent at end-2009 to 88.6 percent in the second quarter of 2010 (Chart 2).



Among the 49 banks operating in the Turkish banking sector as of September 2010, the share of the first 5 banks depending on asset size is 60.2 percent, while the share of the first 10 banks is 83.5 percent. While concentration is seen more on deposits, it is lower on credits.

In 2009, the level of concentration of the first 5 banks in Turkey was on a par with the EU average (EU-27), at 60 percent, and was also listed in the middle ranks among selected EU countries (Chart 3).

Chart 3. Concentration of the Turkish Banking Sector and a Comparison with Selected EU Countries (%)<sup>1</sup>

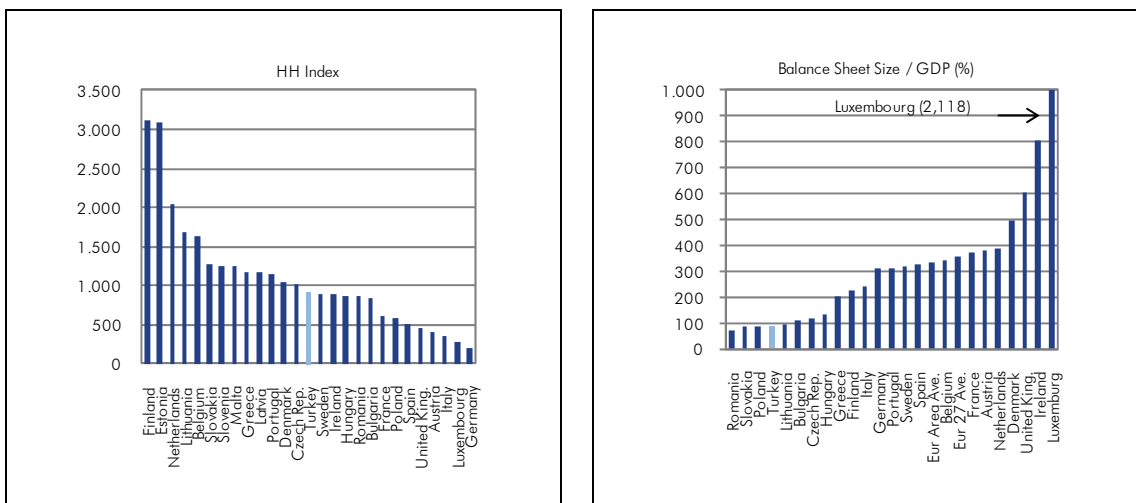


Source: BRSA, CBRT, ECB Report – 2010  
(1) Data as of 2009.

The Turkish banking sector’s level of concentration displays a similar view in comparison with another concentration indicator, the Herfindahl-Hirschman Index (HHI)<sup>4</sup>. In fact, the concentration of the Turkish banking system ranks around the middle when compared to EU countries; outpaces that of developed countries and falls behind that of most of the emerging market economies (Chart 3). The said index, which stood at 632 for EU-27 and at 633 for the euro area average as of 2009, in Turkey rose from 886 in 2008 to 913 in 2009.

The share of the balance sheet size of the Turkish banking sector in GDP, which was 87.6 percent at end-2009, is larger than that of Poland, Slovakia and Romania, whereas smaller than that of other EU countries. This is an indicator of the high growth potential of the Turkish banking sector (Chart 4).

Chart 4. Comparison Between The Ratio of HHI Value and Balance Sheet Size of the Turkish Banking Sector to GDP with The Same Ratio in Selected EU Countries (%)<sup>1</sup>



Source: TurkStat, BRSA, CBRT, ECB Report – 2010  
(1) Data as of 2009.

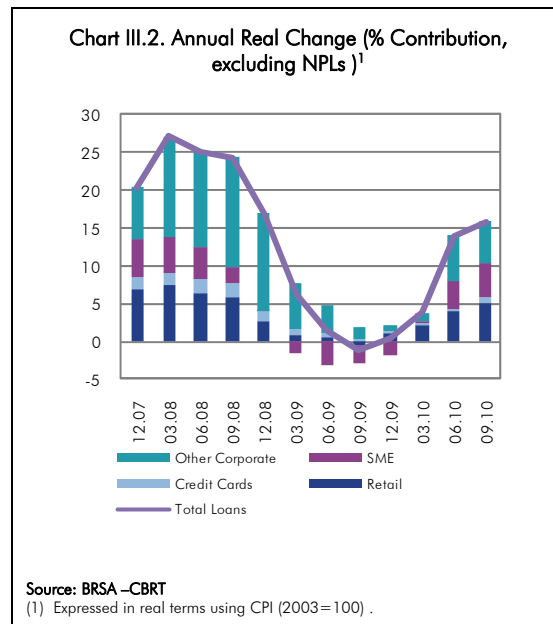
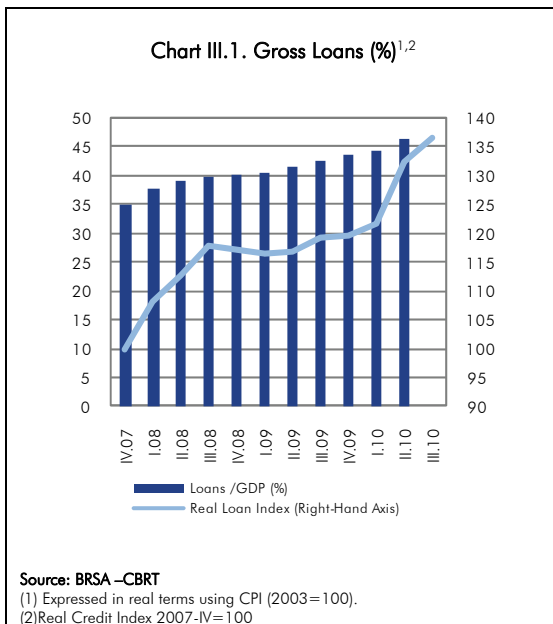
<sup>4</sup> HHI, is defined as the sum of the squares of the market shares of financial institutions operating in a market and used as a measure of the amount of competition in that market. A rise in the index shows an increase in concentration. An index ranging from 1000 to 1800 indicates that there is a moderate concentration in the sector, whereas a value above 1800 points to a high level of concentration.

### III. DEVELOPMENTS IN THE BANKING SECTOR AND RISKS

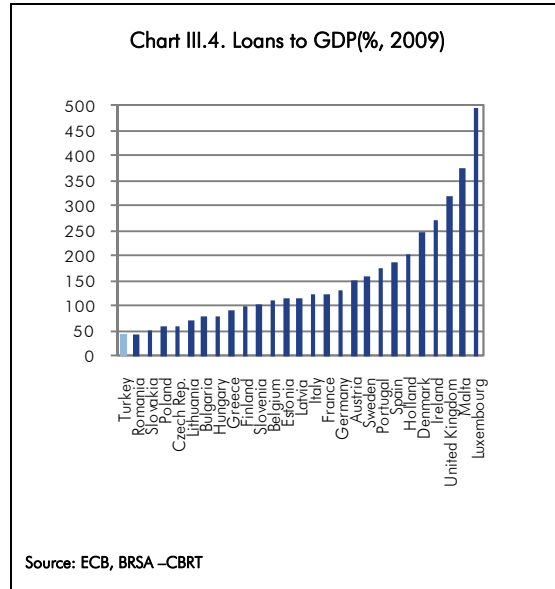
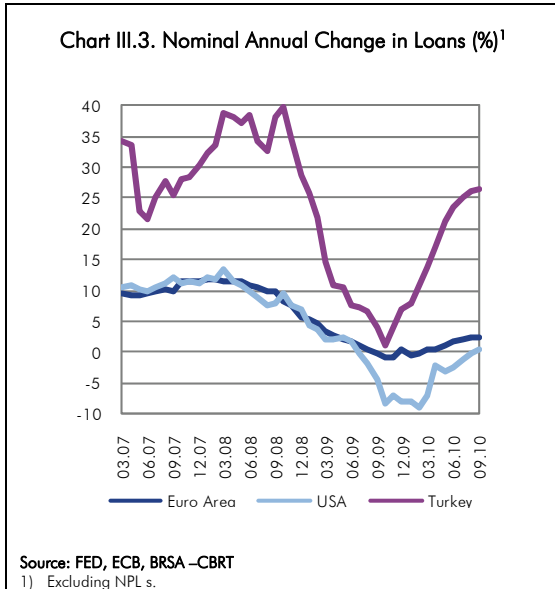
During the global crisis, the credit growth rate, especially that of Small and Medium-Sized Enterprises (SME) loans, slowed down, investments on government securities by banks increased, non-performing loan (NPL) ratios went up and financing abroad declined. In this period, the decline in interest rates parallel to the CBRT policy rate cuts resulted in the increase of the net interest margin for the banking sector due to the maturity mismatch in their balance sheets and therefore their profitability increased. However, soaring NPLs became a factor that limited this development. Though the share of loans on the balance sheet decreased, the rise of investments into government securities and the improved profitability performance, led to an increase in the capital adequacy ratio.

While exiting the crisis, as a result of the recovery in economic activity and low interest rates, the increase in all types of loans, especially SME loans, accelerated and NPL ratios declined. While the banking sector's external financing facilities improved, investment in government securities slowed down. Despite improvements in the credit quality, along with the narrowing net interest margin, profitability performance indicators entered a downside trend. Meanwhile, the capital adequacy ratio, still being above the minimum requirement and target ratios, experienced a limited decrease due to the rapid increase in loans. With the domestic and foreign demand separation in the economy in relation to rapid credit expansion and the increase in the current account deficit accruing together, this might raise concerns about financial stability in the coming periods. On the other hand, preserving effective risk management in the increased competitive environment and active credit market is a major important issue.

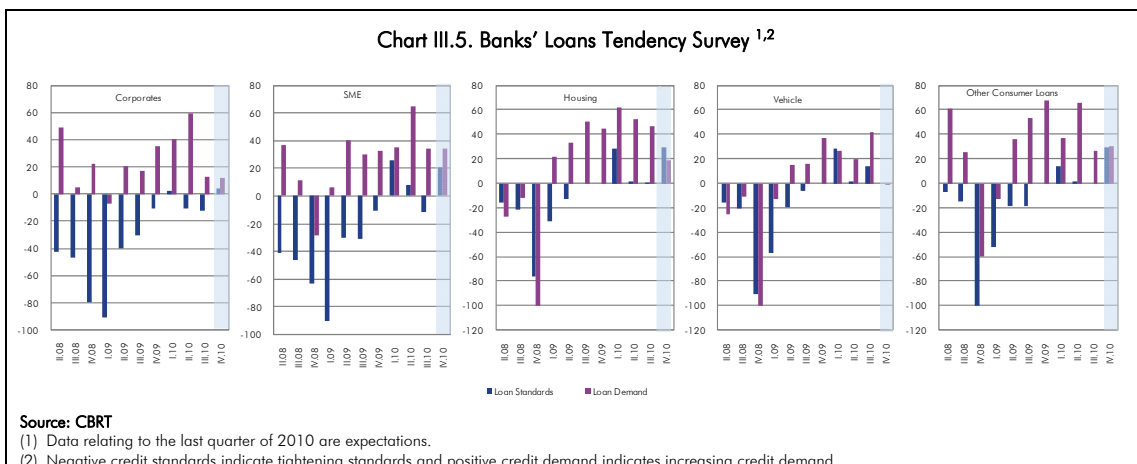
As a result of the recovery in economic activity, a significant rebound has been observed in credit volume. Gross real credits following a horizontal course during the crisis period, exhibited a rapid increase commencing from the second quarter of 2010. The rate of gross credits to national income, increased to 46.4 percent as of June 2010 (Chart III.1). The share of credits in total assets increased to 51.3 percent as of September 2010 and the real annual growth rate accelerated to 15.8 percent. It is noticeable that SME loans, which were affected the most by the global crisis and decreased in real terms, contributed to credit growth with other corporate and retail loans during the exit process of the crisis. Of the annual 15.8 percent real increase in credits, 5.1 points originates from consumer loans, 4.6 points from SME loans and 5.4 points from other corporate loans (Chart III.2).



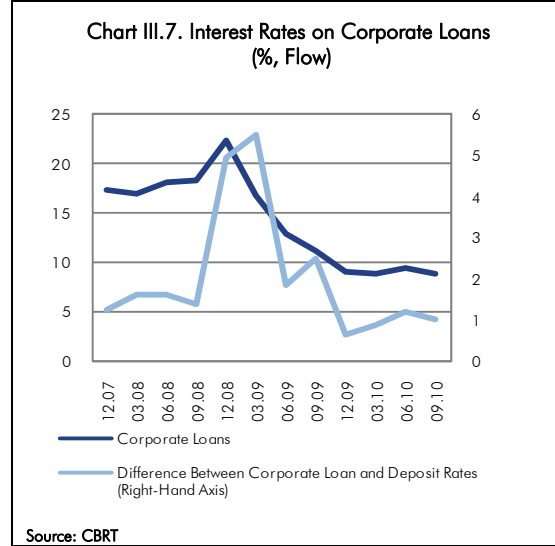
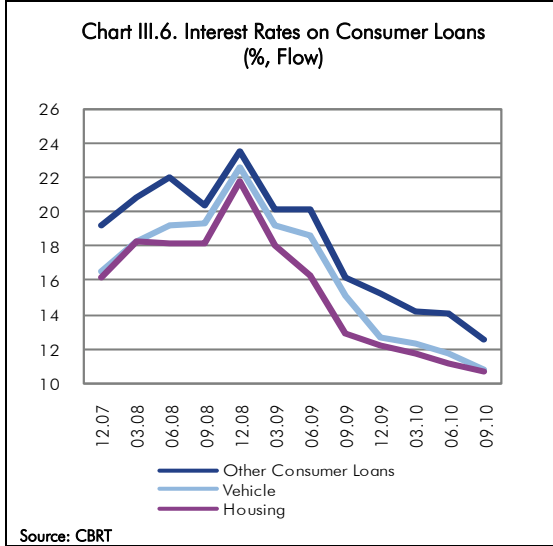
**Turkey decouples from developed countries in terms of credit growth.** In developed countries, banking sector problems still persist and there is not any noticeable improvement in the credit volume. As of September 2010, annual credit growth in the euro area became 2.4 percent, 0.6 percent in the USA and 26.5 percent in Turkey (Chart III.3). Meanwhile, despite the fast recovery in credit growth, the rate of bank loans to national income in Turkey is still low compared to other countries. This situation has enabled Turkey to be relatively less affected by the crisis and also indicates the existence of growth potential (Chart III.4).



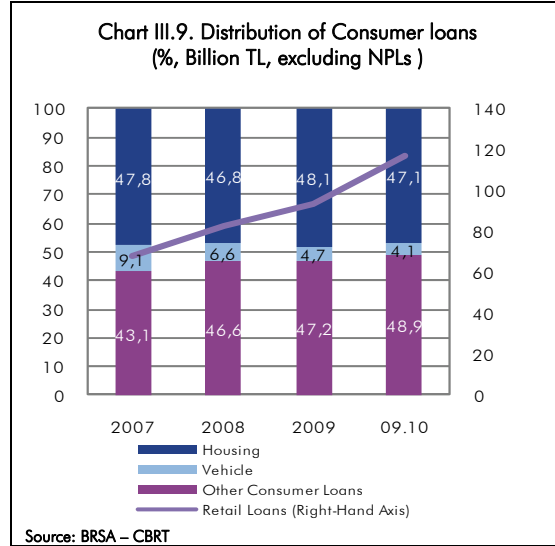
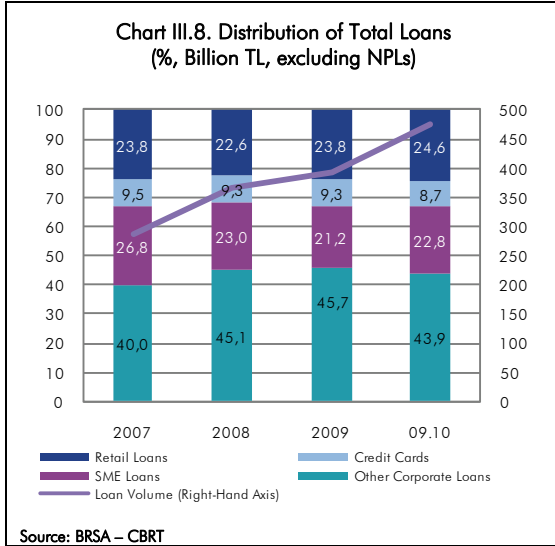
**Credit realizations mostly reflect demand dynamics.** The results of the Banks’ Loans Tendency Survey suggest that contrary to the expectations that banks would not change the standards for small and medium sized enterprises and large enterprises and standards for the short and medium term credits would be loosened in the July-September 2010 period; the expected loosening was not realized in all types of credits. In fact, banks starting to loosen the standards applied to retail loans, during the first quarter of 2010 while they did not change standards much during the second and third quarters. Along with this, credit demands of both enterprises and households, despite the state of loosening during the third quarter of 2010, continued to increase throughout the year. The increase in consumer confidence affected the demand of retail loans positively. It is observed that firms, which had applied for loans to roll over their existing debts during the crisis, recently started to apply for investment purposes (Chart III.5).



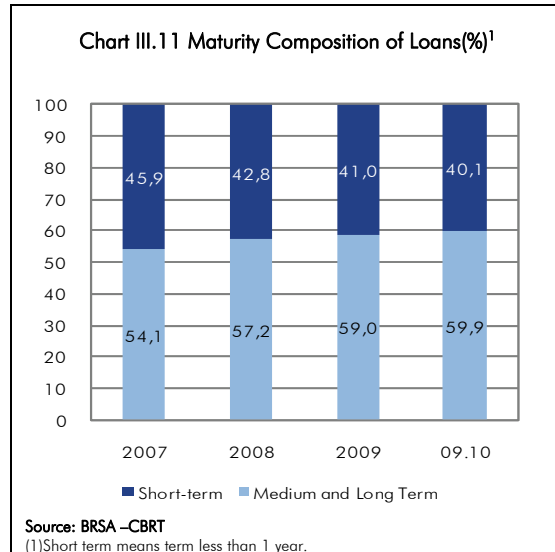
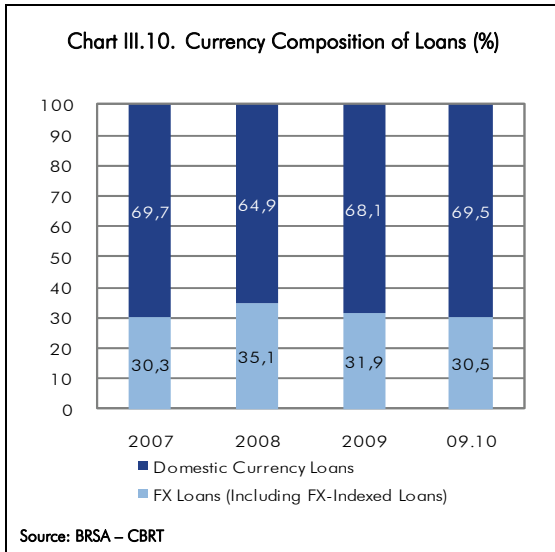
The historically low-levels of credit interests and the spread between corporate loans and deposits indicate a decline in the tightening loan supply. The interest rate for vehicle loans decreased to an annual rate of 10.8 percent, for housing loans to 10.7 percent, for other consumer loans to 12.6 percent and for corporate loans to 8.7 percent. The spread between the interest rates of corporate loans and deposits is at historically low levels (Chart III.6 and Chart III.7).



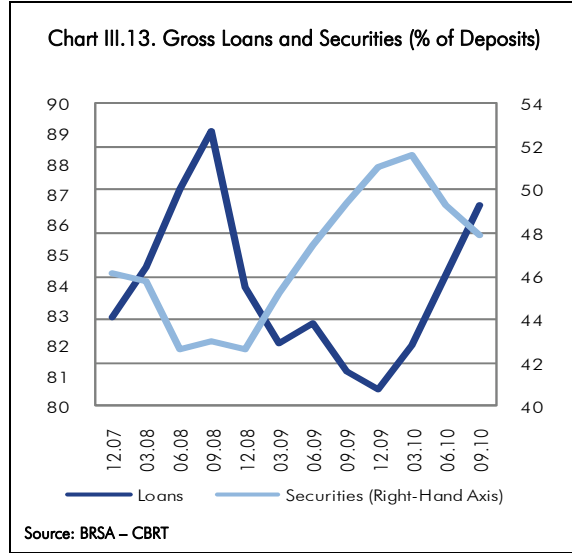
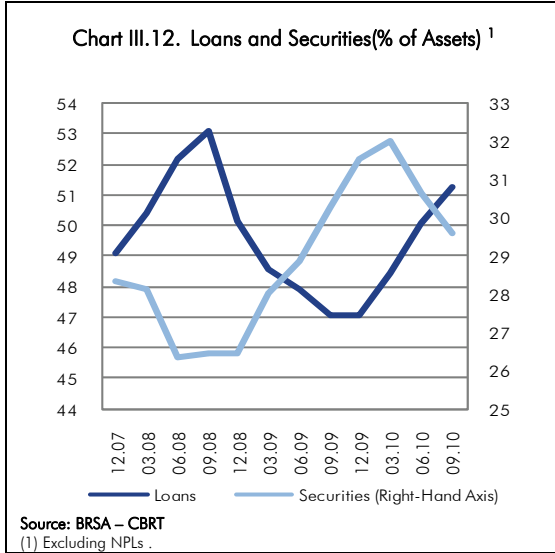
The share of SME loans and consumer loans in the loan portfolio is increasing. The share of consumer loans and SME loans increased by 1,8 points and was realized as 56.1 percent as of September 2010 compared to the end of 2009 (Chart III.8). This is considered to be positive for diversification of the credit portfolio. When the sub-items of consumer loans, which mostly consist of housing and other consumer loans is analyzed, the increase in the share of other consumer loans is noticeable (Chart III.9). The Undersecretariat of Treasury was authorized by a Council of Ministers Decision to transfer cash funds of up to TL 1 billion and/or issue private placement domestic government bonds for institutions who are granting credit guarantees to meet the financing requirements of SME's. During the January –October 2010 period, a guarantee totaling TL 216.1 million was granted. Along with this support, a target is set to issue credit to a total of 3 billion TL to the firms that bear the burden of interest only at the rate of  $\frac{1}{4}$  based on the rate of interest of 0.94 percent by using the resources of KOSGEB. Of this amount, it is planned that a portion totaling 1.5 billion TL is to be allotted for scale-indexed growth credit support and the other half as export credit support. Upon the start of the application process from 23 November 2010, in a rather short period of time, SME's showed great interest in scale-indexed credit support and a request totaling TL 2,93 billion was received. In the upcoming period, it is expected that these incentives will support the increase in loans extended to SME's. On the other hand, as per Article 45 of the CBRT Law, the limit for using export re discount credits set aside for the private sector through Eximbank was increased to USD 2.5 billion in April 2009 and credit conditions were eased. Accordingly, the amount of USD 1.4 billion was realized in 2009. In the first 11 months of 2010, these credits, totaling USD 1.1 billion, were mainly allotted to firms engaged in activities in sectors of manufacture of base metal and fabricated metal production, machinery and equipment and textile and textile products.



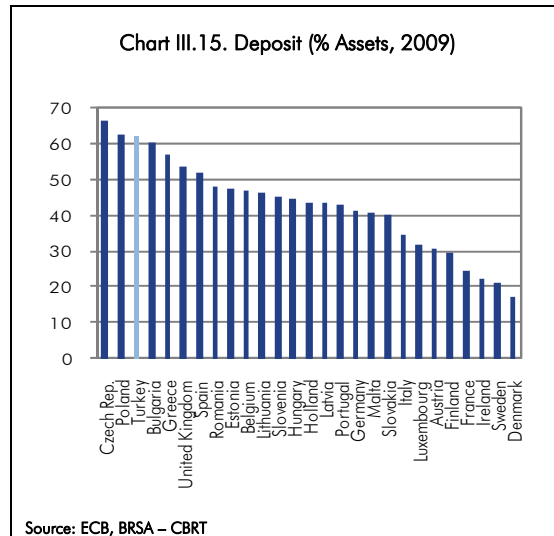
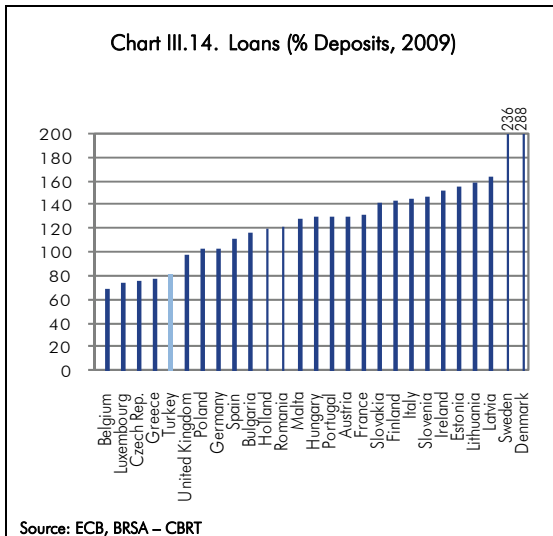
Credits are mostly extended in TL and their maturities are becoming longer. As of September 2010, including FX-indexed loans, the share of FX denominated loans in total loans became 30.5 percent and due to the faster increase in the share of TL loans and the appreciation of TL, the share of FX denominated loans in total loans has declined (Chart III.10). On the other hand, the share of short-term loans in total loans decreased by 1 point as of September of 2010 compared to the previous year and was realized as 40.1 percent. The extension of loan maturities is favorable for parties utilizing credits; however, for the banking sector, with respect to lowering the risk of maturity mismatch, it is also important to extend the maturities of liabilities (Chart III.11).



Parallel to the credit growth, loan to deposits ratio increased whereas the share of securities, the weight of which increased during the crisis, decreased within the total assets. As the share of credits in the total assets increased by 4.2 points as of September 2010 compared to year-end figures of the previous year and reached 51.3 percent, the share of securities decreased by 1.9 points to 29.6 percent (Chart III.12). The loan to deposits ratio increased to 86.7 percent, yet it could not achieve its pre-crisis level (Chart III.13).

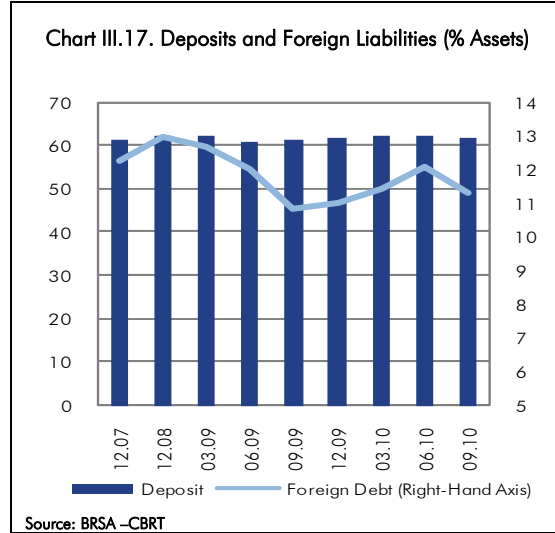
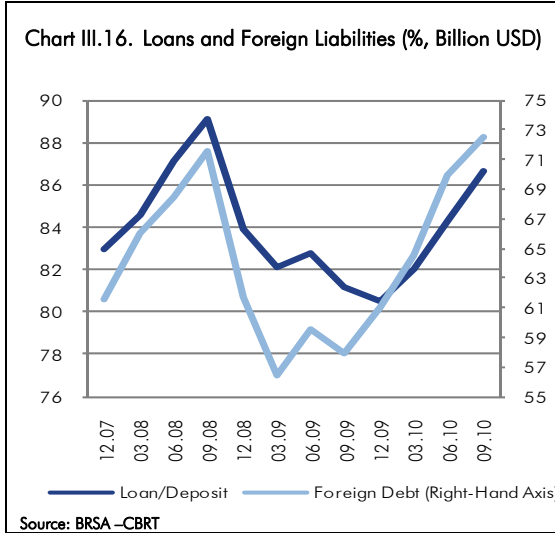


Compared to other countries, loans in Turkey are funded with stable resources and they mainly consist of deposits. Compared to non-deposit resources, deposits are considered as a more stable source of funds. Due to this, a loan to deposits ratio below 100 percent shows that liquidity risk depending on refunding is low. Contrary to the deposit dominating funding structure in Turkey, in the European Union the loan to deposits ratio is 113.3 percent and the rate of deposits to total assets is 40.1 percent (Chart III.14 and Chart III.15).

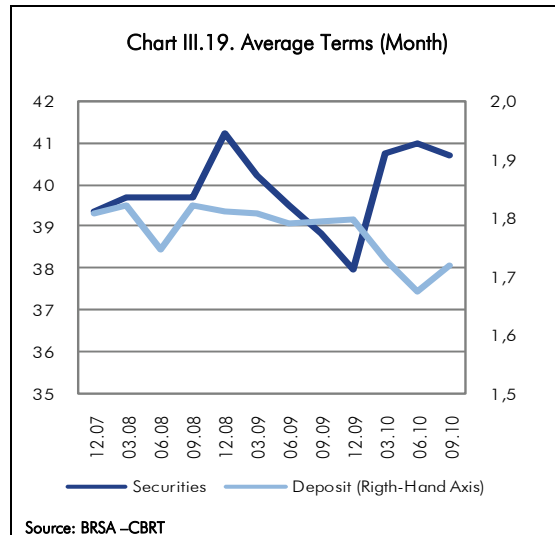
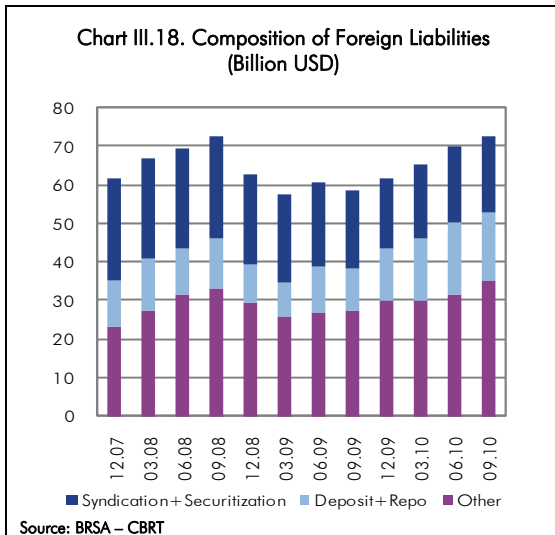


Liabilities mainly consist of deposits but the increase in banks’ liabilities abroad was also effective in the acceleration of the loan to deposits ratio. The loan to deposit ratio sharply decreased during the crisis period, while the banks’ external borrowing facilities followed a stagnant course. The decline in the external liabilities of banks during the crisis period was driven both by the decrease in banks’ demands for foreign credits and the banks’ willingness to downsize their balance sheets due to financial problems. Parallel to the mitigation of the crisis, a rebound in the external borrowing markets started to occur. By September 2010, the total amount of external liabilities of the banking sector was USD 72.5 Billion and 11.3 percent of the total assets were funded by external liabilities (Chart III.16 and Chart III.17).



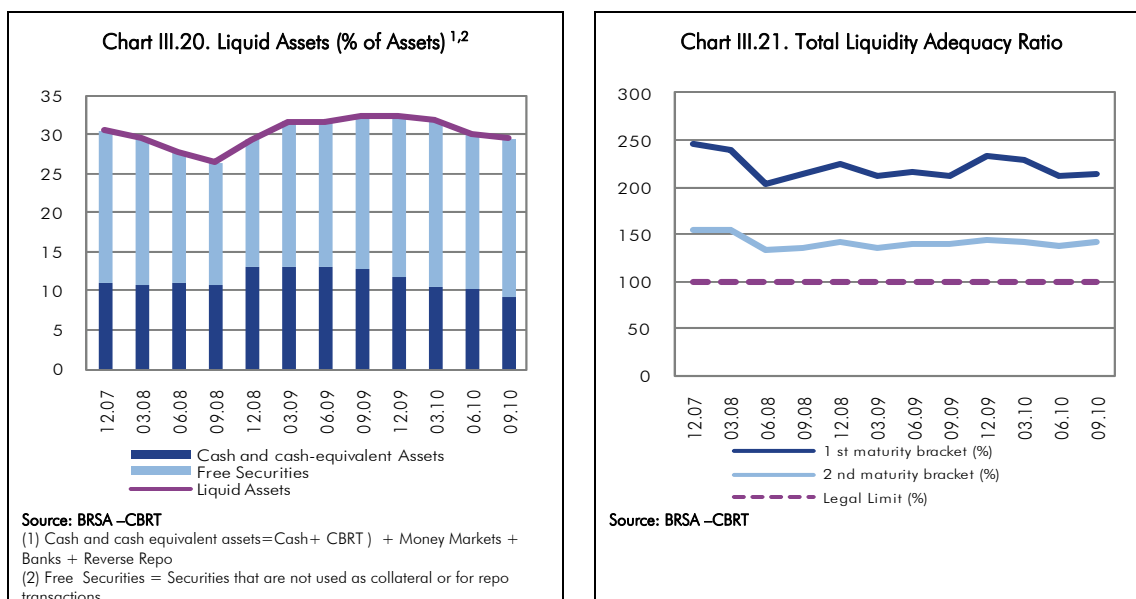


Recovery in the external borrowing market and the increase in diversification of resources other than deposits have contributed to the maturity extension of liabilities. Along with the recovery in the external borrowing market, the total amount of syndication and securitization credits of the banks, which was 19.9 billion USD as of September 2010, showed an increase of USD 2 billion according to year-end figures of 2009 (Chart III.18). The increase of syndication credits continues with more favorable conditions and terms during the last quarter of 2010. However, the deposits that form the weighted portion of the liabilities have an average maturity of 1.7 months as of September 2010 (Chart III.19). As a measure to strengthen financial stability, the Central Bank of the Republic of Turkey may differentiate the required reserve rates applied to Turkish Lira deposits according to maturities with the aim of extending maturity of deposits. Meanwhile, the granting of permission by the BRSA to issue domestic bonds in TL is seen as a positive step that will contribute to maturity extension in the upcoming period.



With the increase in credits, the tendency of banks to remain liquid is decreasing; however, it is observed that the liquidity ratios of the sector are above the minimum requirement. Along with the increasing tendency to extend credits, the share of liquid assets on the balance sheet has gone down slightly. As of September 2010, the ratio of liquid assets to total assets decreased by 2.8 points compared to end-2009 and was realized as 29.4 percent. The decrease in cash and cash equivalent assets was influential on the decline in the ratio of liquid assets to total assets (Chart III.20). Despite the

decline in the share of liquid assets on the balance sheet, the total liquidity adequacy ratios of the banking sector, computed in accordance with the Regulation on the Measurement and Assessment of Liquidity Adequacy of Banks still remain above the legal ratios (Chart III.21).



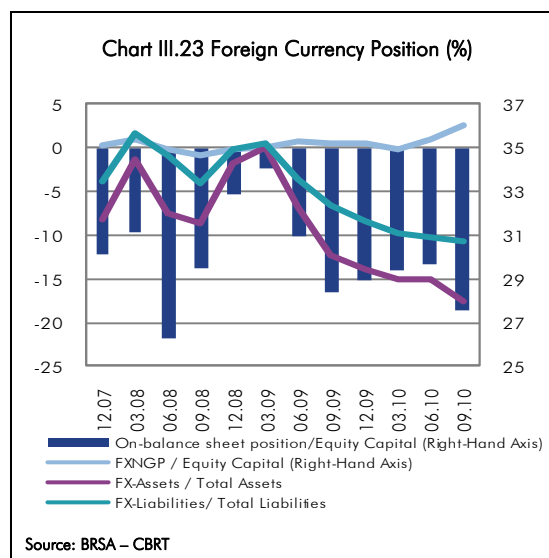
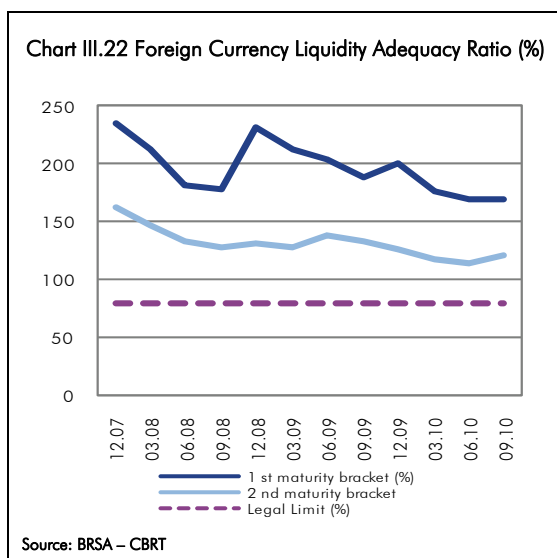
The measures taken by the CBRT regarding foreign exchange and Turkish Lira markets during the crisis period are gradually being lifted; thereby increasing the importance of effective liquidity management by banks. Considering the normalization in the money and credit markets, at its meeting held on April 13, 2010, the Monetary Policy Committee decided to gradually remove the liquidity measures applied during the crisis period. Within the framework of the exit strategy, the amount of liquidity provided, which was in excess of market needs during the crisis period, has gradually started to be decreased and technical interest rate adjustments have been made. The CBRT started to determine the amount of funding via repo auctions to ensure that, at the end of the day, there is less excess liquidity in the market and has tightened the amount of liquidity withdrawn in the Istanbul Stock Exchange (ISE) Repo-Reverse Repo Market and at the Interbank Money Market within the CBRT. The interest rate for one-week repo transactions, which currently stands at 7 percent, has been determined as the policy rate and the auctions have started to be held as quantity tenders with fixed interest rates. As a step in the technical interest rate adjustment process, while the interest rate for the weekly repo auction has been kept unchanged, the overnight interest rates have been reduced and 3-month repo auctions were ceased. The Monetary Policy Committee, at its meeting held on November 11, 2010, decided to reduce the interest rates for overnight borrowing by an additional 400 basis points, thereby increasing the difference between lending and borrowing rates. Furthermore, the required reserves ratios were brought to pre-crisis levels in line with the exit strategy.

The amount of GDDS that can be accepted as collateral for banks borrowing from the CBRT is able to meet the probable withdrawal of significant amounts of deposits in case of a stress-scenario. In the scenario analyses, deposit withdrawals are combined with value losses in free government securities that are not used as collateral or for repo transactions. The analysis results reveal that when the maximum shock is applied, free GDDS can meet deposit withdrawals (Table III.1).

DEPOSIT WITHDRAWALS/FREE GDDS (%)		DEPOSIT WITHDRAWALS			
		5%	10%	15%	20%
VALUE LOSS OF FREE GDDS	5%	16.1	32.2	48.4	64.5
	10%	17.0	34.0	51.0	68.1
	15%	18.0	36.0	54.0	72.1
	20%	19.1	38.3	57.4	76.6

Source: BRSA- CBRT

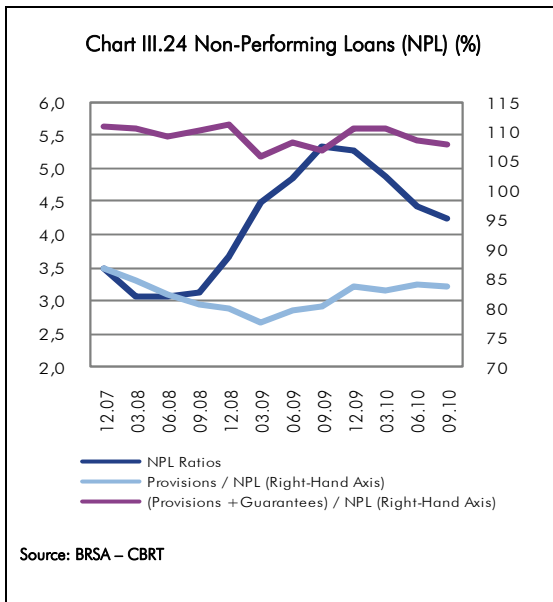
The foreign exchange liquidity ratio is above the legal ratio, the foreign exchange position is balanced and the share of foreign exchange assets and liabilities on the balance sheet is falling. The foreign currency liquidity adequacy ratio is above 80 percent, which is the minimum legal ratio (Chart III.22). It is noteworthy that the weight of FX assets and FX liabilities on the balance sheet is at historically low levels. As of September 2010, including those indexed to foreign exchange, the ratio of FX assets to total assets is 28 percent, the ratio of FX liabilities to total liabilities is 30.8 percent. The on-balance sheet short position, which is closed with off-balance sheet transactions consisting mostly of swap transactions rose as of September 2010. In the same period, while the ratio of on-balance sheet short position to own funds was 18.5 percent, the ratio of the foreign currency net general position computed by taking off-balance sheet transactions into consideration to own funds was realized as 2.7 percent (Chart III.23). Within the scope of exit strategies, similar to the measures taken in the Turkish lira markets, the CBRT is diminishing the measures taken towards foreign exchange liquidity gradually. Considering the recent improvements in international liquidity conditions and the rise in the foreign exchange liquidity of the banking sector, the intermediation function of the CBRT in the Foreign Exchange and Banknotes Market Foreign Exchange Deposit Market was ceased as of 15 October 2010. On the other hand, the CBRT continues to hold foreign exchange buying auctions to accumulate reserves in periods in which foreign exchange supply is higher than its demand.



In Turkey, the liquidity ratio for the second maturity bracket is similar to the Liquidity Coverage Ratio within the framework of Basel III and it is considered that the banking sector will easily adopt the new international arrangements. In parallel to the lessons derived from the global crisis, the Basel Committee has developed two types of global liquidity ratios for the liquidity arrangements of cross-border banks. According to the first ratio called the Liquidity Coverage Ratio-LCR, within a specified scenario, banks have to maintain liquid assets to meet liquidity needs that may arise within a period of

30 days. In order to support the liquidity coverage ratio, to address structural liquidity mismatches and to keep core funding above a certain level, the Committee is working on developing a second ratio called the Net Stable Funding Ratio–NSFR. According to this ratio, the ratio of the available amount of stable funding of a bank to the required amount of stable funding must be greater than 100 percent. The timetable is determined for both ratios; it has been decided to commence reporting for information purposes beginning 1 January 2012, and the ratios will move to minimum standards as of 1 January 2015 and 1 January 2018 for LCR and NSFR, respectively (Special Topic IV.6).

**The quality of the credit portfolio improved and the ratio of non-performing loans for all credit types decreased.** As of September 2010, the ratio of non-performing loans (NPL) to the total amount of credits decreased by 1.9 points compared to the end of the last year and was realized as 4.3 percent. The fall in the NPL ratio is attributable to the rise in credits as well as deductions from the portfolio upon collection, sale or deletion of these loans (NPL) from assets. The NPL ratio revealed a tendency to decline for all types of loans, however the fall in the NPL ratio was the most rapid for SME loans. The coverage ratio is high and reached 83.8 percent as of September 2010. The total value of provisions and the portion of collateral to be considered exceed the amount of non-performing loans. The high coverage ratio and decreasing NPL ratio show that indicators of credit risk are improving. (Chart III.24 and Table III.2).

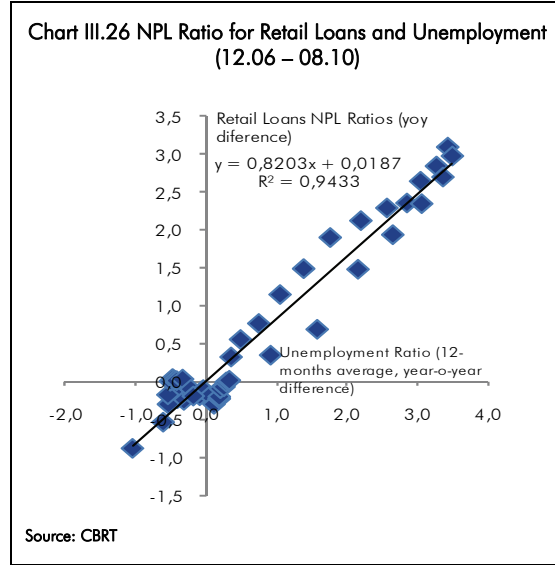
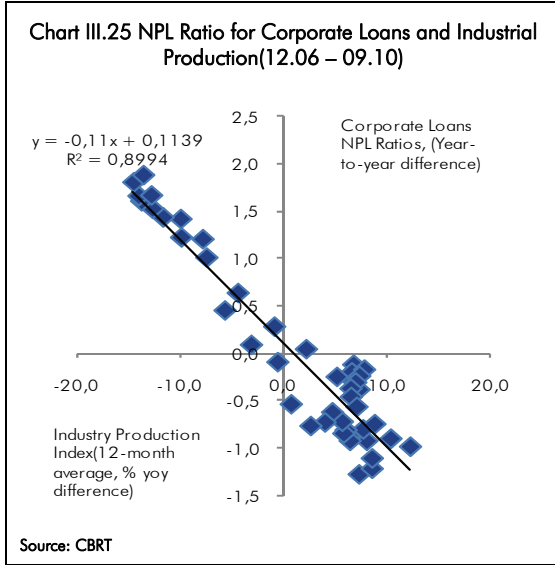


**Table III.2 NPL Ratios by Credit Types (%)**

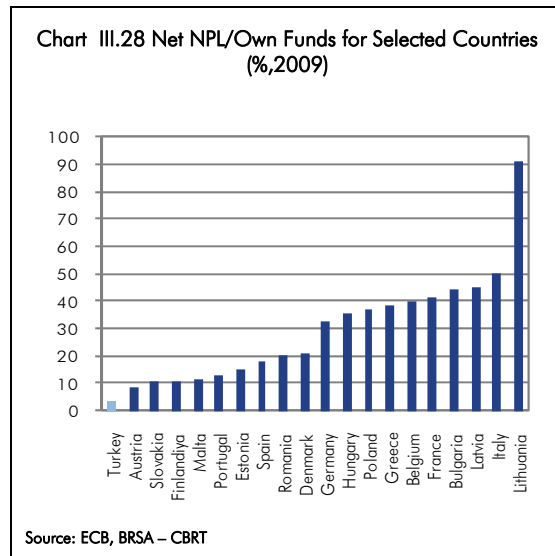
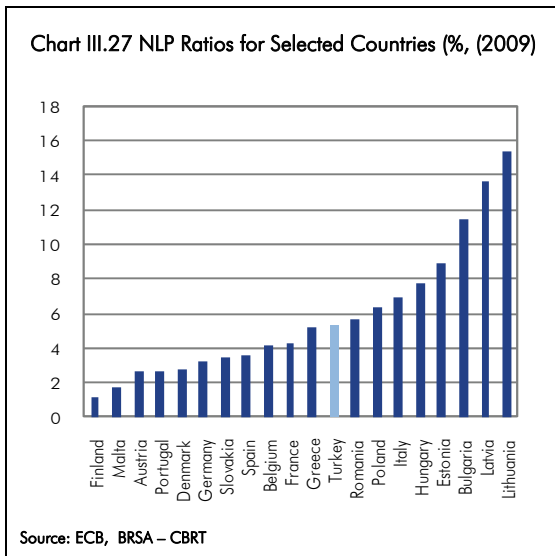
	2008	2009	09.10
Total loans	3,7	5,3	4,3
Corporate Loans	3,7	4,9	4,0
-- SME Loans	4,8	7,6	5,5
--Other Corp. L.	3,1	3,6	3,2
Retail loans	3,7	6,0	4,8
-Consumer loans	2,4	4,1	3,2
--Housing	1,3	2,1	1,6
--Vehicle	6,0	10,3	7,6
--Other	3,0	5,5	4,3
-Credit cards	6,5	10,4	9,1

Source: BRSA – CBRT

**The fall in the NPL ratio is attributable to the recovery in loans as well as to the fall in unemployment rates and economic growth.** Improvements in the economy have a positive effect on loan re-payment performance. There is a close relationship between the NPL ratio for corporate loans and economic growth. In periods of increasing production and growth, the NPL ratio for corporate loans decreases (Chart III.25). The NPL ratio for retail loans bears a close relationship with the unemployment rate. In periods of falling unemployment rate, the re-payment capacity of households improves and the NPL ratio decreases (Chart III.26).

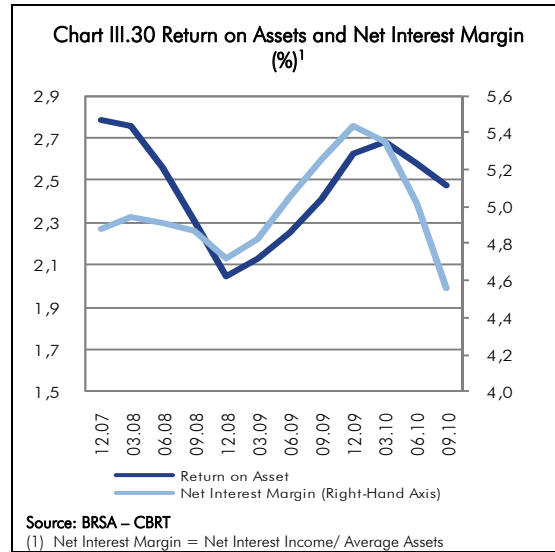
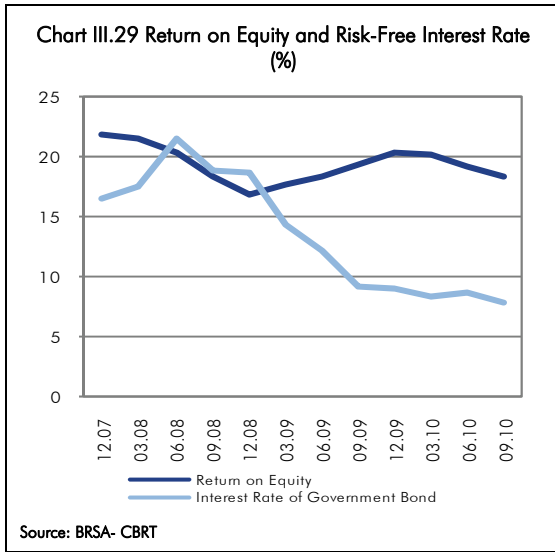


When compared to selected countries, it is observed that the NPL ratio of the banking sector is at reasonable levels. The NPL ratio in EU countries is 4.2 percent and the coverage ratio is 50.5 percent as of end-2009. As a result, the ratio of net NPLs to own funds was realized as 21.7 percent. Although the NPL ratio in Turkey is close to the EU average, due to the high coverage ratio, NPLs are not a major threat to own funds. (Chart III.27 and Chart III.28).

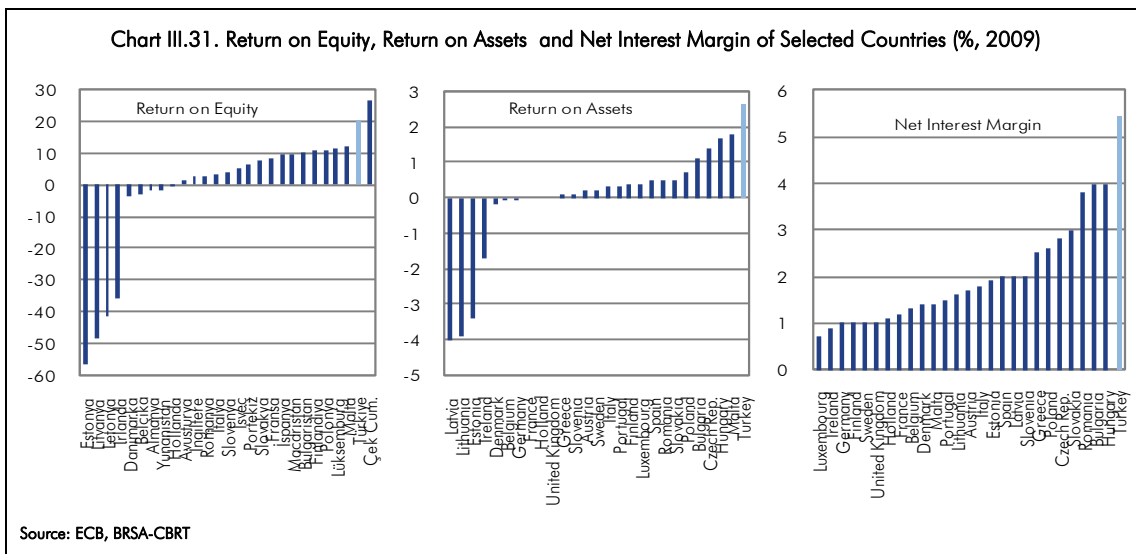


Despite the ongoing strong profitability of the banking sector and improvements in the quality of loans, the indicators of profitability performance have shown a tendency to decline. During the first nine months of 2010, the net profit of the banking sector was realized as 16.9 billion TL with a year-on-year increase of 7.4 percent. The rise in net profits of the banking sector is mainly attributable to the fall in loan loss provision expenses. It can be observed that profits before tax and provisions decreased by 8.5 percent year-on-year and profitability performance indicators assumed a declining trend. As of September 2010, the return on equity decreased by 2 points compared to the previous year-end figures and went down to 18.3 percent. Despite the fall in the return on equity, it is observed that, the return received is above the alternative risk-free rate of return (Chart III.29). The fall in the return on equity, is attributable to the decline in the return on assets due to the contraction in the net interest margin. As of September 2010, the return on assets dropped by 0.1 points compared to the end of the last year and was realized as 2.5 percent, while the net interest margin, with a contraction of 0.9 points, went down

to 4.6 percent (Chart III.30). During the crisis, as a result of the maturity mismatch, the fall in interest rates led to a positive effect on the net interest margins and profitability of the sector. In the post-crisis period, the fall in interest margins is attributable to the competitive prices applied to loans and deposits.

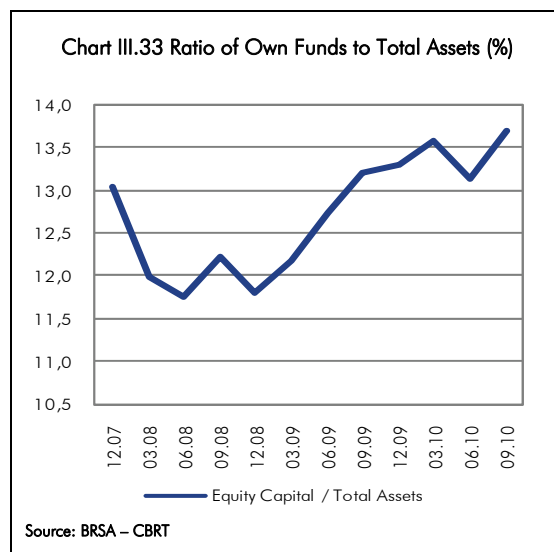
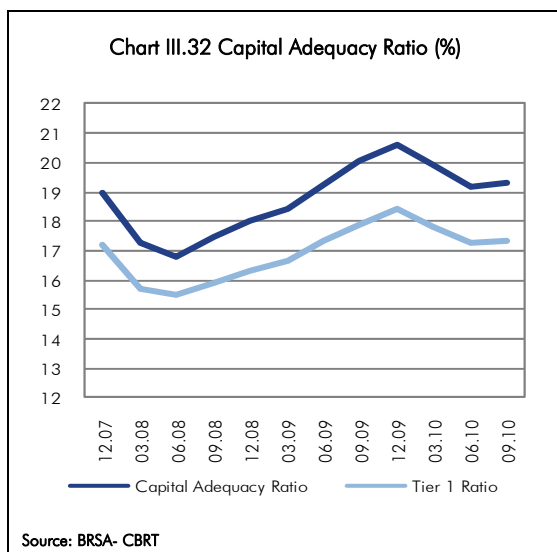


**Profitability indicators of the banking sector are above those of other countries.** It is observed that the return on equity, return on assets and the net interest margins of the banking sector of Turkey are rather high compared to those prevailing in EU member countries. In EU countries, return on equity was 3.8 percent, return on assets was 0.2 percent and the net interest margin was 1.7 percent in 2009 (Chart III.31).

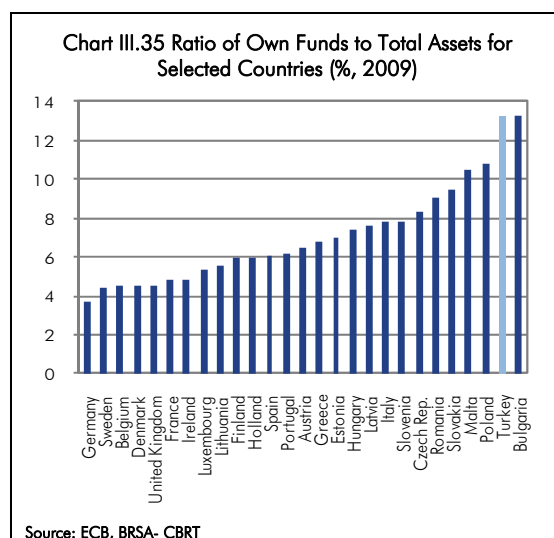
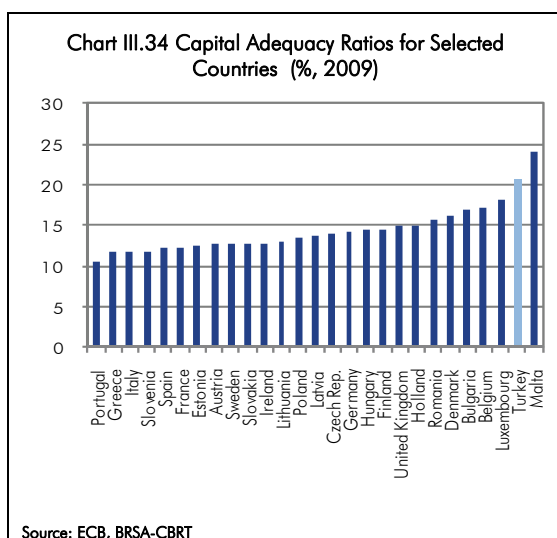


While the decrease in the leverage ratio still continues, the rapid growth in loans has led the capital adequacy ratio, which assumed an upward trend in the crisis period, to decrease. The capital adequacy ratio, which fell to 19.3 percent as of September 2010, with a decrease of 1.3 points compared to the previous year-end figure, is still well above the legal and target ratios (Chart III.32). Besides this, it is noticeable that the loss absorption capacity and the quality of regulatory capital is high. As of September 2010, the Tier 1 ratio has been realized as 17.4 percent, only 1.9 points below the capital adequacy ratio. At the same time, it is noteworthy that the Tier 1 capital is mainly composed of paid-in capital and retained earnings and the share of senior subordinated debt within Tier 1 capital is only 0.1 percent. Despite the decrease in the capital adequacy ratio, it is observed that the leverage

ratio of banks declined. The ratio of own funds to total assets increased by 0.3 points and reached 13.6 percent (Chart III.33).



Compared to other countries, the Turkish banking sector operates with a high capital adequacy ratio and low leverage ratio. When compared with EU countries, it can be observed that the banking sector has adequate capital and a low leverage ratio. Turkey is among the countries with the highest capital adequacy ratio and highest own funds to total assets ratio for the banking sector. In EU countries, the share of own funds on the balance sheet is 4 percent on average and the capital adequacy ratio is 13.2 percent (Chart III.34 and Chart III.35).



Scenario analysis, which tests the durability of the banking sector to shocks originating from credit and market movements, also shows that the sector has the capacity to absorb shocks. According to the scenario analysis, when maximum shocks are applied to the exchange rate, Eurobond returns, interest rates and NPLs simultaneously, the capital adequacy ratio of the sector decreases by 8.1 points; but still remains above the 8 percent legal ratio (Table III.3 and Chart III.36).

Table III.3 Scenarios Applied<sup>1</sup>

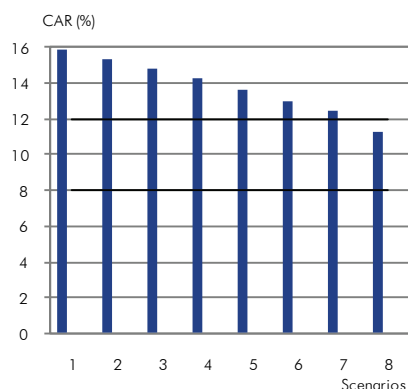
Scenario	Exchange Rate (% increase)	Eurobond (% loss of value)	Interest Rate (point increase) <sup>2</sup>	NPL (point increase)
1	30,0	5,0	10,0	3,0
2	31,5	5,3	10,5	4,0
3	33,0	5,5	11,0	5,0
4	34,5	5,8	11,5	6,0
5	36,0	6,0	12,0	7,0
6	37,5	6,3	12,5	8,0
7	39,0	6,5	13,0	9,0
8	40,5	6,8	13,5	11,0

Source: CBRT

(1) In scenario analysis, taking into consideration the past crises, shocks are applied to the risk factors simultaneously.

(2) It is the Turkish Lira interest rate shock. The shock of foreign currency interest rate is about 1/3 of the one applied to Turkish Lira interest rate shock.

Chart III.36 Results of Scenario Analysis

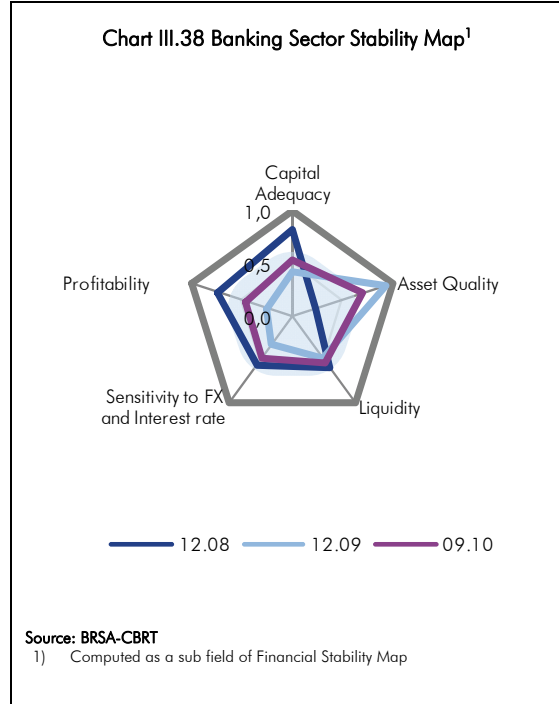
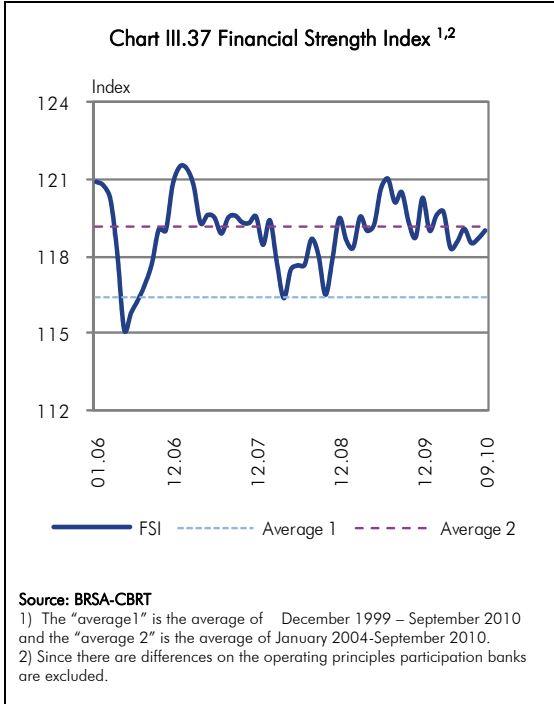


Source: CBRT

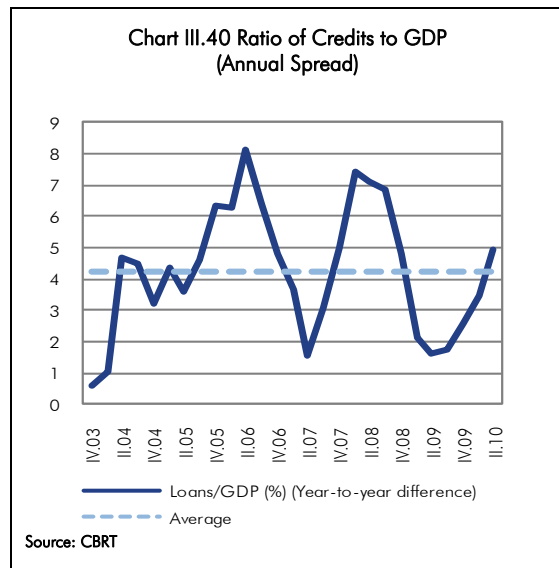
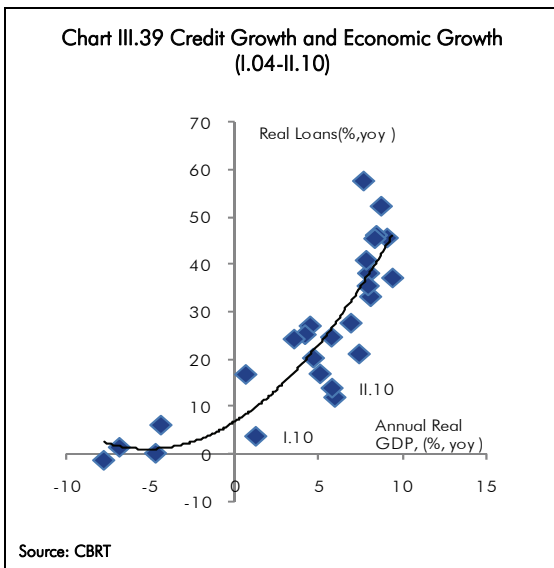
Along with the high capital adequacy ratio, the fact that own funds are mainly composed of paid-in capital and retained earnings with a high loss absorption capacity indicates that the Turkish banking sector will not experience difficulties adapting to Basel III regulations. According to Basel III regulations, while the minimum capital adequacy ratio was kept at 8 percent, the minimum core Tier 1 (composed of paid-in capital and retained earnings) ratio was raised from 2 percent to 4.5 percent and Tier 1 ratios were raised from 4 percent to 6 percent in order to improve the quality of capital. At the same time, a conservation buffer of 2.5 percent is applied to these ratios and hence a drop in the capital adequacy ratio below the minimum requirement during crisis periods is prevented. Along with the conservation buffer, the core Tier I capital ratio increases to 7 percent, Tier 1 capital ratio increases to 8.5 percent and the capital adequacy ratio increases to 10.5 percent. It is expected that a long period of time will be required to meet these minimum ratios and it is planned that regulations will be fully implemented in 2019. On the other hand, the Basel Committee decided to support the risk-based capital adequacy ratio with a leverage ratio, which is not risk-based and is calculated by dividing Tier 1 capital with on-and-off balance sheet assets. The ratio, which is expected to be around 3 percent, will be finalized after the testing phase and it is thought that it will be effected in 2018 (Special Topic IV.6).

When indicators pertaining to the soundness of the banking system are analyzed from a macro point of view, it is observed that the banking system is generally sound. From the crisis to the recovery stage, the ratio of non-performing loans has decreased on the back of recovery in economic activity and the low level of interest rates. While foreign borrowing opportunities of the banking sector have improved, the share of government securities on the balance sheet has decreased. Despite the improvement in loan quality, along with the contraction in the net interest margin, profitability performance indicators assumed a downward trend, and despite still being above the minimum and target ratios, the capital adequacy ratios fell due to the rapid rise in loans. In line with all these developments, the index has recently been following a low course (Chart III.37 and Chart III.38).

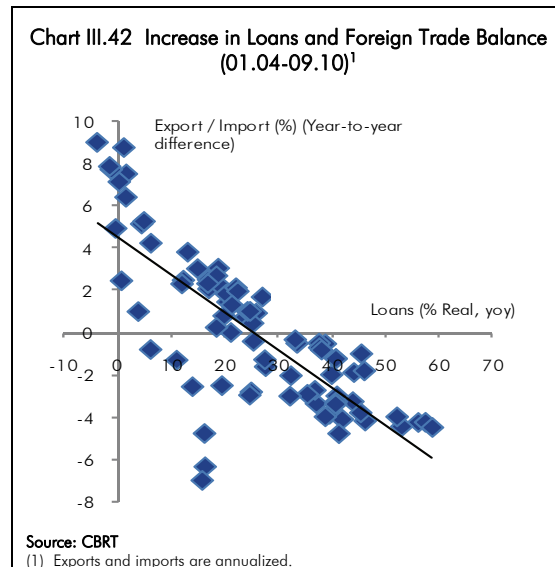
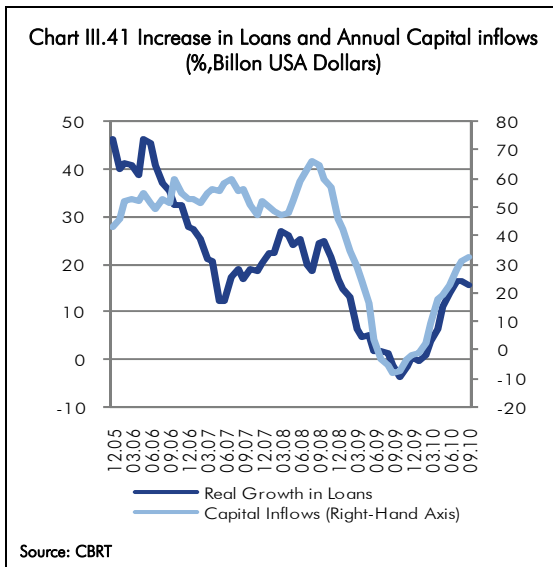




Credit growth is an indicator that should be monitored closely for financial stability in the forthcoming period. Despite the increase in loans, the historical data do not yet indicate excessive loan growth. The average real rate of increase of loans in the banking sector during the 2003-2009 period was 23.9 percent. As of September 2010, the year-on-year real increase in loans was 15.8 percent, which is below average. The loan to deposit ratio, which was 89.7 percent in August 2008 prior to the global crisis, is still below the pre-crisis level, at 83.8 percent in September 2010. As of the second quarter of 2010, the loans to GDP ratio stands at 44.4 percent, and the annual rate of increase is 4.9 points. The ratio of loans to GDP increased on average by 4.2 points annually between 2003 and 2009. Although the increase in the loan to GDP ratio is above the average, it is observed that increases of 8.1 percent and 7.4 percent in the second quarter of 2006 and in the first quarter of 2008 were experienced respectively. In this respect, it is considered that the increase in loans does not currently indicate excessive loan growth (Chart III.39 and Chart III.40).



Currently, although no excessive loan growth is observed, the increase in domestic demand, which accelerated on the back of loan growth and capital inflows, may potentially lead to economic instabilities such as foreign trade and current account deficits. Loan growth and foreign capital inflows were experienced during the recovery from the global crisis. In October 2009, the annual net foreign capital inflows decreased to USD 3.8 billion, while loans contracted by 3.8 percent year-on-year in real terms. As of September 2010, real loan growth increased to 15.8 percent and foreign capital inflows increased to USD 32.6 billion (Chart III.41). Growth driven by domestic demand, fuelled by the increase of loans and capital inflows, results in the widening of foreign trade and current account deficits, and exacerbates the vulnerability of the economy (Chart III.42). If capital inflows continue and global growth does not accelerate in the upcoming period, the differentiation between domestic and foreign demand might become more apparent. With a view to limiting risks in this regard, additional policy tools other than short-term interest rates are required. In this context, if differentiation between domestic and foreign demand occurs along with rapid loan growth and deterioration in the current account deficit - thus leading to concerns over financial stability - the CBRT might use alternative instruments, such as required reserves and liquidity management, while formulating monetary policy.



Due to contraction of interest margins and increased competition, it is important for banks to maintain effective risk management in their lending processes in the upcoming period. The banks' intention to compensate the negative effect of a lower interest margin on profitability with credit growth, as well as increased competition in the credit market may lead to the under-pricing of credit risks. In such a case, implementing effective risk management is important to sustain the improvement in the asset quality of the sector.

## IV. SPECIAL TOPICS

### IV.1 Approaches to Preventing and Resolving Systemic Risks: Macroprudential Policies and Funds for Resolution of Systemic Risks

While liberalization in the regulation of the financial markets has been in progress for almost the last two decades, financial market players and policy makers started to attach more importance to risk management in line with the fact that financial instruments have become more diverse and complicated. Accordingly, policies that mostly safeguard the soundness of financial institutions have been emphasized in regulations, aimed at preventing the build up of excessive risks and vulnerabilities within the financial system.

However, the last global crisis has shown that current financial arrangements, microprudential policies and financial safety networks including the deposit insurance system fell short of identifying systemic risks, containing vulnerabilities in the financial system and curbing the adverse effects of exogenous shocks on the financial system.

With a number of banks defaulting, especially in developed countries, during the crisis, the provision of capital support to uphold the financial system operational and to ensure that the existing institutions continued to perform their activities, other measures taken by the public sector, proved to be costly. This, in turn, not only damaged the market discipline, but also explicitly revealed that holistic policies aimed at the entire system are needed.

As they are complementary to micro-prudential policies, macro-prudential policies mainly aim to mitigate systemic risks, and, in turn, to prevent systemic financial crises. The IMF, FSB and BIS define systemic risk as “a risk of disruption to financial services that is caused by an impairment of all or parts of the financial system and has the potential to have serious negative consequences for the real economy”. This definition covers any component of the financial system; an institution, a market or an instrument. Moreover, considering that all these factors somewhat bear the potential to impose a systemic risk to some extent, the effects of the impairment of any of these parts on the real economy are emphasized in the definition of systemic risk.

Nevertheless, all parts of a system displaying a stable outlook does not mean that the entire system is on a stable course; because “externalities” in the system, potentially caused by all the actors with no defects in their financial structures might engender a serious fragility for the entire system. Therefore, macro-prudential policies that safeguard the whole system are needed as a complement to micro-prudential policies, which mainly safeguard the individual parts of the system.

Within this context, two dimensions of these policies come to the forefront. The first of these is the prevention of accumulation of systemic risks, which emerges as a result of the interaction among financial institutions, instruments and markets within a financial system, and the second is improvement of the resilience of the financial system against potential vulnerabilities due to procyclicality.

In the event of the emergence of vulnerabilities in a financial system stemming from systemic risks and the deterioration of financial stability due to these vulnerabilities, macro-prudential instruments are expected to create a counter-cyclical movement; in other words, to function as a “systemic stabilizer” within the system. In an environment of excessive credit expansion and increased on-balance sheet exposure of banks due to swollen asset prices, it is expected that the increase of capital buffers by banks and their use of this additional source in the event of the emergence of risks will reduce vulnerabilities in

the financial system. One of the natural outcomes of such a counter-cyclical instrument is to hamper the negative interaction between the corporate sector and the financial system especially at times of deterioration in the course of the economy.

Country practices show that many countries attach more and more importance to the prevention of systemic risks and implement certain measures that might currently be considered macroprudential in a general sense, despite the differences in structures and usage. Among these, measures such as amending the minimum ratio or credit risk weights within the scope of the capital adequacy ratio arrangements; restricted lending in fast-growing credit categories; change in provision ratios regarding credits; adoption of dynamic provisioning; imposing tax-like additional liabilities on credits; and change in required reserve ratios come to the forefront. In this sense, it is aimed to adopt a counter-cyclical stance and eliminate the adverse effects of the financial crisis as much as possible.

Another significant development is that some of the developed countries made (or have been making) radical changes in their regulatory and supervisory structures as well as in their legal infrastructures, as a way of addressing systemic risks, before the financial crisis was over.

The Dodd-Frank Act that was prepared to eliminate structural and other problems caused by the financial crisis and that took effect on 21 July 2010 establishes the “Financial Services Oversight Council”. The “Financial Services Oversight Council”, which is planned to be established in order to evaluate the vulnerabilities and shocks exposed by the financial system as a whole, will accordingly provide the necessary communication and cooperation mechanisms among the related regulation and supervision authorities. The Council will also focus on the identification, monitoring and resolution of systemic risks borne by financial institutions of a large and complicated structure. Furthermore, the Council will be able to authorize the Fed to supervise non-bank firms that might cause systemic risks. The Fed will be authorized to supervise banks with assets above USD 50 billion and as charged with consolidated supervision, it will assume the responsibility for identifying whether risks arise from banks or their affiliated associates.

The Law adopted by the European Parliament on 22 September 2010, which will take effect in 2011, establishes a “European Systemic Risk Board–ESRB” that will monitor macro risks. Although the Board will be physically established within the ECB, it is envisaged to be fully independent of the ECB. The Board consists of central bank governors of member states and European supervision authorities in addition to the president and vice-president of the ECB. Supervision authorities of member states do not have the right to vote although they are included in the Board. As the Board is a platform gathering central bank governors and supervision authorities, it will pave the way to further harmonization of micro and macro risk-oriented policies. The ESRB is legally assigned with identifying and assessing systemic risks that may emerge or has emerged within the European Union. Moreover, the European financial system has also been restructured. In this context, the existing supervisory authority unions comprising supervision authorities of EU member states have been transformed and restructured as the European Banking Authority (EBA), European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA). While the former institutions replaced by the new authorities make only advisory and non-binding decisions, the mandates of the newly established European Supervision Authorities have been expanded and they have assumed a more effective role in regulation.

The UK government has been working on a law, which transfers the regulation and supervision authorities of the Financial Services Authority (FSA) to the BoE, making the BoE the single authority

within the system instead of opting for a tri-partite structure consisting of FSA, BoE and the Treasury. The FSA, on the other hand, is planned to be transformed into an entity that will defend consumer rights in a more effective way, under the name of "Consumer Protection and Markets Authority". Besides, a "Financial Policy Committee" is planned to be established in addition to the Monetary Policy Committee (MPC) within the BoE. The Committee will aim to enhance financial resilience by identifying and resolving systemic risks and vulnerabilities, and to maintain macroeconomic stability by taking measures against instabilities in the financial system.

The aim of financial structuring in developed countries is to prevent the recurrence of costs incurred due to financial crises. During the financial crisis, banks lacked liquidity and trust to other financial institutions, and even terminated their operations, as a result of which serious impairments were observed especially in the operation of advanced financial markets. In order to cope with this situation, while central banks as the lender of the last resort provided emergency funding to banks in need of liquidity, treasuries of developed countries provided banks with systemic importance, which became unoperational, with capital support at times when central bank funding remained insufficient. A lesson derived from this experience is that such funding is likely to cause more serious problems in terms of the strains they place on both public finance and central bank balance sheets. Banking sector-related measures that had to be taken by some countries (Iceland and Ireland) deteriorated public finance in these countries and led to additional vulnerabilities. Another important fact learnt from the crisis is that the cost of measures taken to restore financial stability is not sustainable in terms of social justice. Moreover, provision of funding for such measures frequently takes time, due to their urgent nature and size, and they necessitate the collaboration of countries and international agencies. This situation causes delays in timely implementation of measures, which, in turn, results in irrevocable consequences.

In the current conditions, the costs of crises are incurred mainly by the public and, in some countries; a portion of these costs is collected from financial institutions through taxes. Within this scope, in some countries exposed to crisis, it is observed that this tax is being imposed on banks to be used for financing the cost of the crisis. In the USA, it is envisaged to collect taxes from banks, thrift institutions, intermediaries, insurance companies and companies holding such financial institutions whose sizes are above USD 50 billion. The ratio of the tax is stipulated to be 0.15 percent of their liabilities and the tax is planned to be collected for duration of 10 to 12 years. Hungary opted for taxation of the assets of banks, insurance agencies and other financial institutions at a ratio of 0.07 percent for a period of 3 years. In France and in UK, where the same practice is in place, banks are also required to pay taxes on premium payments.

Another solution adopted for covering crisis-related costs is to provide financing facilities in advance for policy measures to be taken in the event of a potential crisis. Within this framework, the source of funding that comes to the forefront with regard to systemic risks is the funds to be provided by way of "ex ante" taxation of financial institutions. In practice, it is seen that some steps are being taken in this regard by some advanced economies and international agencies. Accordingly, Sweden and Germany established a systemic crisis fund to be used for measures to be taken in such circumstances in 2009 and 2010, respectively. "Ex ante" taxes (from 0.02 percent to 0.04 percent), to be collected from banks against the contribution that they would have to make for financing the cost of crisis in the aftermath of a potential banking crisis, make up the primary source of finance for such funds. Within this scope, it is expected that capital support to be provided to the banking sector and the funds envisaged to be used in credit and guarantees will be completely built up in approximately 15 years.

The European Commission and the IMF also have similar recommendations in this field, whereby either all financial institutions or investment firms besides commercial banks are also included under the tax coverage.

**Table 1: Examples of Systemic Crisis Fund and Proposals**

	Germany	Sweden	European Commission	IMF
<b>Name of the Practice</b>	The "Law on Establishment of Restructuring Fund for Credit Agencies" published in June 2010 was approved by the Cabinet on 25 August 2010.	The Law No. SFS 2008:814 (Effect on 1 August 2009)	COM(2010) 254 (Press release dated 26 May 2010)	Financial Stability Contribution Fund (The proposal mentioned in the Report submitted to the G-20 in January 2010)
<b>Institutions where the practice is implemented / to be implemented</b>	Banks	Banks	Banks and investment agencies	All financial institutions
<b>Ratio</b>	(According to the size of the bank) 0.02% - 0.04% + 0.00015% of the total value of off-balance sheet derivatives	0.036%	Not specified	Less than 0.2%
<b>Base of the practice</b>	Total Liabilities - deposits – equity capitals	Liabilities other than insurance coverage	Preferably liabilities. However the Commission considers other alternatives as well.	All liabilities under the insurance coverage including off-balance sheet items.
<b>Total fund amount envisaged to be collected annually</b>	Euro 1.2 billion is envisaged to be collected per annum (approximately 0.05 of GDP)	Roughly 2.5% of total GDP during 15 years	Roughly 2-4% of the total GDP of the EU	2-4% of the target GDP.
<b>Time to build up the fund</b>	Not specified	15 years	Not specified	Approximately 10 years

Systemic risk has two dimensions in general; the first is the relation of financial instabilities with macro economy, and the second is instabilities emerging in the financial system. As policies to be implemented for the prevention of systemic risks will differ according to the source of the risk, different roles fall upon the authorities that supervise the financial sector, central banks and treasuries. Meanwhile, central bank duties related to the implementation of monetary policy and functions as the lender of the last resort place them in a strategic position in terms of macroprudential policies.

## IV.2 Measures Taken by Developing Countries to Restore Financial Stability during and after the Crisis

The financial crisis, which started in the USA in 2007 and spread to many countries, became a global crisis and had significant impacts on developing countries. Developing countries were severely affected by the crisis as they had increasingly been integrating into the global financial system in recent years. Therefore, as the global financial crisis started to deepen as of the third quarter of 2008, developing countries faced significant capital outflows. Meanwhile, as the effects of the financial crisis started to be observed on the corporate sectors of developed countries, this effect spread to developing countries as well. Nevertheless, their relatively stronger financial structures coupled by the measures they took during the crisis have helped developing countries to recover faster. During this process, the recovery in the economic performance of developing countries was underpinned by increased capital inflows due to the expansionary monetary policies adopted by developed countries. Therefore, with the supportive effect of global integration, developing countries actively used monetary and fiscal policies to counter-balance cyclical movements in their economies while taking various measures to restore financial stability.

Within this framework, developing countries resorted to decreasing policy rates and required reserve ratios as a measure against liquidity squeeze on the back of the decline in net capital inflows. However, these countries were faced with a liquidity surplus again as the mentioned outflow trend reversed and policy rates were kept low globally, and they started to gradually raise the required reserves to pre-crisis levels. In Turkey, a similar policy was followed with respect to monetary policy exit strategies. Accordingly, in the aftermath of the crisis, where capital flows continued, many countries enjoyed an environment free from inflationist pressure and policy rates were kept more or less at the same level, required reserves were not only used for liquidity management purposes but also as a more broad based macro-prudential instrument. In some countries, instruments such as loan-value ratios were also used to mitigate the effects of the rise in liquidity on credit volume and asset prices (IMF, 2010a).

Especially in developing countries, imposing capital controls as a direct measure against the recent rise in capital flows towards them is once again popular. Within this framework, with the aim of safeguarding financial stability, developing countries regarded capital controls as part of their policy packages to decrease the inflow of hot money, maintaining autonomy on monetary policy, remedying fluctuations in exchange rates and valuation (Ostry et al., 2010). However as countries differ with respect to their financial structures, monetary policy conditions and current account balances at the outset, the type and timing of capital controls would significantly vary from one country to another. For instance, Brazil chose to impose direct taxes to curb capital inflows while countries like Peru, Colombia, Thailand and Indonesia introduced measures like high required reserve implementation for short-term foreign credits and a minimum timeframe for foreign direct investments to stay within the country. Meanwhile, with the aim of decreasing exchange rate exposure, South Korea tried to discourage short-term foreign borrowing by introducing limitations on FX-denominated derivative operations and the net FX position.

Countries, which opt for independent monetary policy and floating exchange rate regime in the open economy paradigm (impossible trinity) suggesting an independent monetary policy, fixed exchange rate regime and free capital movement, face with the nominal appreciation of exchange rates and inflation dilemma when capital inflows surge. Besides reducing financial vulnerabilities, the reserve

policies that the countries implement also contribute to settling the dilemma in question. However, the general findings suggest that the effectiveness of sterilized FX interventions fall short of preventing the appreciation of exchange rates when capital inflows are permanent (IMF, 2007). In this framework, while sterilized foreign exchange interventions contribute to the sustainability of capital inflows with the domestic and foreign interest rate differential, they also bring out a cost aspect. Therefore, sterilization can also be achieved through raising the required reserves over the banking sector, thus increasing the importance of required reserves as a policy tool.

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Table 1. Measures Taken to Restore Financial Stability

Measure	Description	Country																			
		Brazil	Argentina	Mexico	Chile	Peru	Colombia	India	Hong-Kong	Croatia	Russia	Hungary	S. Africa	China	Indonesia	S. Korea	Malaysia	Philippines	Singapore	Thailand	Taiwan
Measures against excessive rise in asset prices	Loan-to-value ratio								x							x	x	x	x		
	Arrangements in real estate market							x	x							x			x		
Measure against liquidity management and credit supply	Required reserves	x				x	x	x		x	x	x		x	x						
Measures against exchange risk exposure	Measures regarding FX position		x	x				x					x			x	x	x			
	Measures making FX borrowing difficult															x					
Supervision/ Inspection	Limitations on capital adequacy, liquidity and leverage ratios								x										x		
	Macro stress tests		x						x							x		x	x	x	
Measures against capital flows	Reserve management and FX interventions	x	x					x													
	Increased control over inflows-direct taxes <sup>1</sup>	x																			x
	Macro-prudential measures-required reserves and other measures					x				x						x					x
	Administrative measures <sup>2</sup>							x	x						x						x
	Liberalization of outflow controls <sup>3</sup>		x	x	x			x								x	x	x		x	

Source: IMF (2010a, b, c), national central banks and articles on press.

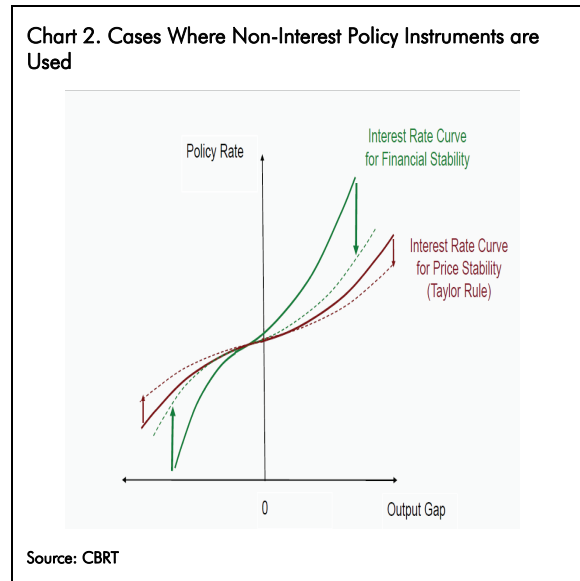
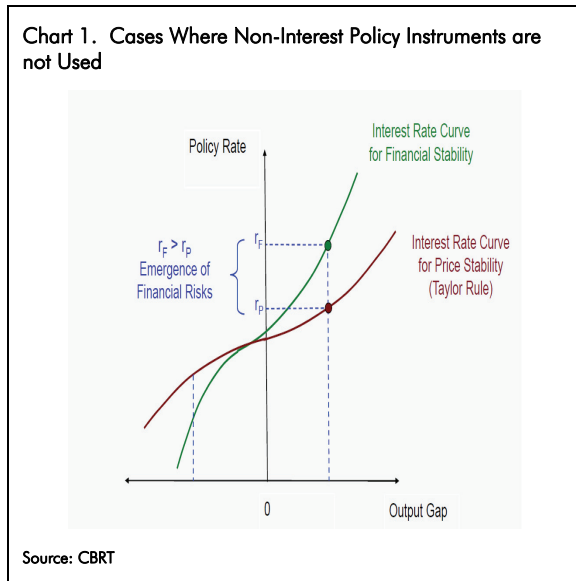
(1) Brazil: Imposed a tax of 4 percent on fixed-rate securities and equity securities purchases (March 2008- 1.5 percent, October 2009-2 percent, and October 2010-4 percent). Thailand: Imposed a withholding tax of 15 percent on income from domestic bonds purchased by foreign investors. Even if taxing capital flows cannot be used directly as a macro-prudential instrument for financial stability, it may contribute to financial stability through its potential impact on the composition of capital flows.

(2) Colombia: Introduced a minimum time frame for foreign direct investments to stay within the country, however it was removed in October 2010. Taiwan: Introduced limitations on short-term deposit accounts opened by non-residents. Indonesia: Introduced a rule that residents and non-residents shall keep the bonds that they purchase from the central bank for a period of one-month. India: Introduced limitations on foreign borrowing.

(3) Covers 2008 and before and comprises either lifting or easing control over transactions of residents abroad (IMF, 2010b). Another policy instrument that can be used to decrease net capital flows at times of strong capital inflow is to ease controls over capital outflows.

### IV.3 Required Reserves as a Macroprudential Policy Instrument

Within the framework of the inflation targeting regime, the primary objective of central banks is to establish and maintain the price stability. To this end and in line with the classical Taylor Rule (1993), central banks use the policy rate as the primary instrument. The Taylor Rule defines the nominal interest rate as a function of divergence of the actual inflation rate from its targeted level and output gap. Therefore, the rule helps in determining the interest rate necessary to attain the inflation target. On the other hand, interest rates are also the primary determinants for other factors such as credit growth, asset prices and the current account deficit important for financial stability. Thence, parallel to the Taylor Rule, which gives the interest rate necessary for price stability, an interest rate necessary for financial stability can also be determined. However, the interest rate necessary for price stability in the economy may not always be compatible with the interest rate necessary for financial stability. The interest rate policy which keeps inflation under control in the periods of rapid economic growth may not be able to prevent the emergence of financial risks. On the other hand, in case of a deep recession, in order to establish price stability an interest rate may be required that is higher than the rate necessary for financial stability (Chart 1). In both cases, policy instruments other than the interest rate may be needed to make sure policy rate achieve both price and financial stability. Using the aforementioned instruments would narrow the margin between the interest curves that ensures both price and financial stability by flattening them and in this way contribute to serving both objectives (Chart 2).



In this framework, required reserves are deemed to be an effective policy instrument for establishing financial stability. As is known, the required reserve implementation foresees that a certain ratio of some of the basic sources that the banks can use for lending shall be kept at the central bank reinforcing the central bank's control over domestic money supply and liquidity management. Moreover, the implementation also functions to adjust credit volume by changing the amount of loanable funds of banks and reducing volatility in short-term interest rates. Due to their above-mentioned functions, required reserves can be used both as a monetary policy instrument and a macroprudential policy instrument and contribute to achieving price as well as financial stability.

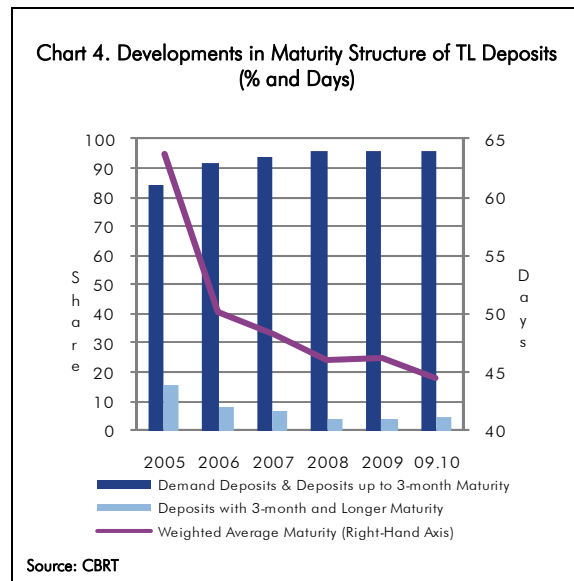
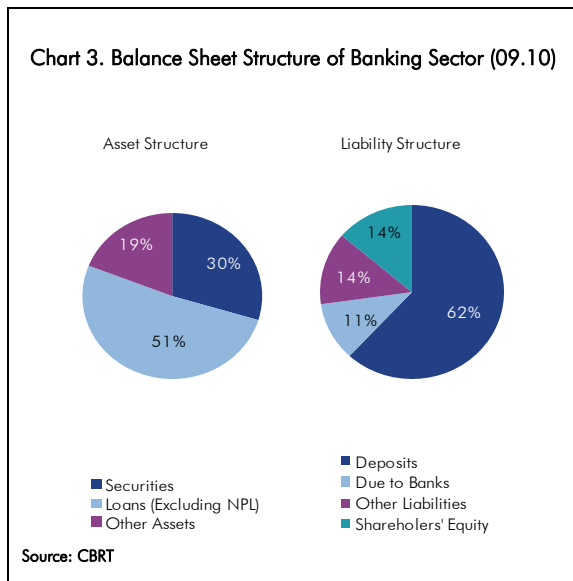
In this respect, from the onset of the crisis, required reserves, which have a direct impact on the amount, have been effectively used to restore financial stability in Turkey. The required reserve

implementation has been set out in CBT's Communiqué No: 2005/1 and the Communiqué stipulates that banks shall maintain 6 percent of the TL-liabilities and 11 percent of FX-liabilities, subject to required reserves at the Central Bank in cash.

As foreign financing facilities of the banking sector became scarce due to the global financial crisis, in addition to other measures, the CBRT reduced the FX required reserve ratio by 2.0 percentage points in December 2008, providing the banking system with additional foreign currency liquidity amounting to approximately USD 2.5 billion as of that period. Moreover, with the aim of supporting the rise in credits in 2009, the Turkish lira required reserve ratio was reduced by 1 percentage point in October 2009, providing the banking system with an additional Turkish lira liquidity of approximately TL 3.3 billion as of abovementioned period.

In the Press Release on the Monetary Policy Exit Strategy of 14 April 2010, it was stated that measures related to foreign exchange liquidity would gradually be taken to pre-crisis levels in an orderly manner as normalization in the global markets became significant and afterwards, parallel to the developments in liquidity conditions and credit markets, the ratios of firstly the FX required reserves and then the Turkish lira required reserves were gradually increased to 11 and 6 percent, respectively, which were the pre-crisis levels. Meanwhile, pursuant to the change made in the required reserve policy on 23 September 2010, the remuneration of Turkish lira required reserves was terminated.

The changes in required reserve implementation have been made with the aim of ensuring the active use of required reserves as one of the tools to reduce the risks that could emerge in the macro-economy, particularly via the current account deficit, and financial markets.



Deposits are the main source of funding for the Turkish banking sector. The total amount of deposits, which was TL 573 billion as of September 2010, comprises 62 percent of total resources. Loans and securities make up the biggest shares in assets with 51 percent and 30 percent, respectively (Chart 3). The ratios of total loans and securities to deposits are 83 percent and 48 percent, respectively. Therefore, the Turkish banking sector is mostly dependent on individual and corporate depositors for obtaining and distributing funds.

However, the ongoing maturity mismatch problem between loans and securities, and the deposits continues to increase. The maturity of Turkish lira deposits, which have gradually been

declining since 2005, decreased to 44 days by September 2010 (Chart 4). This increases the banking system's interest rate and liquidity risks and constitutes a risk to the stability of the financial system. Therefore, with the aim of reinforcing financial stability, within the framework of macro-prudential policy implementation, it is planned to rearrange the required reserves so as to encourage extending the maturities of Turkish lira deposits.

#### IV.4 Systemically Important Financial Institutions

One of the most important lessons learned from the global financial crisis is that some concrete measures on a national as well as international scale are needed to mitigate the risks created by systemically important financial institutions. There are mainly three widely-accepted criteria for determining the degree of systemic importance of these institutions. These are: size (total of assets and market share), financial interconnectedness (the volume and frequency of transactions made with other financial institutions) and limited substitution opportunities with respect to their function in the financial system (for instance having a high share in the payments system). Due to their above-mentioned characteristics, a problem in systemically important institutions can spread to the entire system and damage the economic activity that is hard to compensate. Actually, the authorities in many developed countries especially the United States, had to provide systemically important financial institutions with unprecedented amounts of financial support from public funds to bail them out. This support deteriorated budget balances in countries that already had high indebtedness ratios and led to new vulnerabilities originating from public finance.

As a consequence of all these developments, one of the main topics on the agenda of the G-20 for reforming the global financial system became formulating special measures to lift the implicit public support guarantee for systemically important financial institutions and erase the “too big to fail” perception among market players. G-20 leaders assigned this agenda topic to the Financial Stability Board (FSB) and asked it to coordinate international studies and draw up a policy framework by November 2010.

Pursuant to the directives of the G20 leaders, the FSB submitted a policy framework to the G-20 leaders suggesting the effective supervisory oversight of systemically important financial institutions, the development of resolution mechanisms, improved loss absorbency capacity for these institutions and the strengthening of the financial market infrastructure. The mentioned policy framework was laid down in the “Reducing the moral hazard posed by systemically important financial institutions – FSB Recommendations and Timeline” document and the document was voted on at the G-20 Summit in the South Korean capital, Seoul, on 11-12 November 2010 and announced on 12 November 2010. The document comprises the FSB’s 51 recommendations and the efforts to be made by member states and international standard-setting bodies, and the deadlines to be finalized. Accordingly, the FSB and national authorities will determine globally systemically important financial institutions (G-SIFI) by using the quantitative and qualitative indicators to be set by international standard-setting institutions, and the Peer Review Council to be established within the FSB will inspect whether the additional measures are implemented in the same way in all countries proportionally to the risks that these institutions pose.

The following are the main items of the policy framework endorsed by FSB members –Turkey included- to reduce the risks posed by systemically important financial institutions functioning nationally or globally:

- Necessary improvements in national bank resolution regimes will be carried out so that all banks can be resolved without destabilizing the financial system and public support;
- Because of the risks they engender, systemically important financial institutions and in particular financial institutions that are globally systemic (G-SIFIs) shall be exposed to a higher loss absorbency capacity than those stipulated in Basel III standards.

- A more intensive supervisory oversight shall be provided for all financial institutions that can pose systemic risk;

- Necessary standards to achieve a robust national financial infrastructure shall be implemented to reduce the contagion risk;

- The appropriateness and consistency of the measures implemented by national authorities of the home country and the host country regarding globally systemically important financial institutions shall be inspected regularly by the Peer Review Council and reported to the FSB;

Additionally, home jurisdictions for global SIFIs (G-SIFIs) should:

- enable a rigorous co-ordinated assessment of the risks that the G-SIFIs cause, through international supervisory colleges;
- make international recovery and resolution planning mandatory for G-SIFIs and negotiate institution-specific crisis cooperation agreements within Cross-border Crisis Management Groups (CMGs);
- subject their G-SIFI policy measures to review by the proposed Peer Review Council.

The national authorities are expected to have completed some studies by the end of 2011 to be able to implement the FSB's policy framework on systemically important financial institutions, the main pillars of which have been mentioned above. The level of completion of these studies and deficiencies that may arise during implementation will be subject of FSB thematic or country peer review assessments and they will also be assessed as part of the IMF/World Bank FSAP.

In Turkey, thanks to the structural reforms made in the aftermath of the 2001 crisis, a sound supervision and oversight structure for the banking system has been achieved and the current resolution regime endows the authorities with detailed and broad powers. Moreover, the financial positions of all banks within the system are subject to on-site and off-site supervision; in case a bank fails to fulfill its obligations, they are warned on time and urged to introduce additional measures.

In the Turkish legislation, there are no special clauses for banks that might be considered as systemically important due to the size of their balance sheet, however the utmost importance is attached to the supervision and oversight of such banks. Besides, in the upcoming period, some steps can be taken regarding systemically important institutions within the framework of our commitments in international platforms and in our country's interests.

Table 1. Timetable for actions regarding FSB Recommendations on Systemically Important Financial Institutions

Action	Responsible	Completed by
<b>Higher loss absorbency</b>		
Studies on additional loss absorbency	BCBS	Mid-2011
Assessment of legal, operational, market capacity and other issues relating to contractual and statutory bail-ins	FSB and members	Mid-2011
Recommendations on additional degree of loss absorbency and instruments	FSB in consultation with BCBS	December 2011
<b>Resolution</b>		
Assessment of SIFI resolvability and needed legal and regulatory reforms	FSB members	March 2011
Formulation of resolvability criteria and key attributes of effective resolution regimes	FSB in consultation with BCBS, IMF, IAIS, IOSCO	Mid-2011
Assessment on the basis of resolvability criteria and key attributes of needed changes and improvements of national resolution regimes and policies	FSB members	End-2011
Thematic peer review on key attributes of effective resolution regimes	FSB in consultation with BCBS CBRG	End-2012
Recommendations on the legal and operational aspects of contractual and statutory bail-ins	FSB working group (to be established)	Mid-2011
Institution-specific cross-border cooperation agreements for global SIFIs	Home and key host authorities of G-SIFIs	End-2011
Report on progress on institution-specific recovery and resolution plans for global SIFIs	FSB Cross-border Crisis Management Group	End-2011
<b>Strengthening SIFI Supervision</b>		
Self-assessments against relevant Basel Core Principles on effective supervision	FSB members	Mid-2011
Self-assessments against relevant IOSCO Core Principles on effective supervision	FSB members	Early 2012
Review of relevant Core Principles relating to supervisory powers, mandates and consolidated supervision	BCBS, IAIS, IOSCO	End-2012
Report on improvements of supervisory colleges	BCBS, IAIS, IOSCO	End-2012
Status report on implementation of SIFI supervisory Intensity and Effectiveness Recommendations	FSB group of senior line supervisors	End-2011
<b>Strengthening Core Financial Market Infrastructures</b>		
Review of standards for financial market infrastructure	CPSS, IOSCO	Early 2011 (consultative report) End-2011 (final report)
Assessment of progress on implementation of FSB OTC Derivatives WG Recommendations	FSB OTC Derivatives WG	March 2011
<b>Peer reviews of G-SIFI policies</b>		
Determination of those institutions to which the FSB G-SIFI recommendations will initially apply	FSB and national authorities, in consultation with the BCBS, CGFS, CPSS, IOSCO and IAIS	Mid-2011
Provisional methodology for assessing systemic importance	BCBS	End-2010 (draft) Early-2011 (finalized)
Evaluation framework for G-SIFI policies	FSB in consultation with standard-setters	End-2011
Establishment of Peer Review Council within FSB	FSB	End-2011
Initial assessment of G-SIFI policies	FSB Peer Review Council	End-2012

## IV.5 Developments Regarding Credit Rating Agencies

Rating analysis, which is one of the factors that determine the direction of capital flows in global financial markets, has gained more importance for official authorities and investors as financial markets become complicated and types of instruments and debtors become more diversified. The fact that rating analysis is followed by a broad investor group enables an increase in the number of capital markets and funding facilities that debtors can apply to. Another factor that intensifies the importance of ratings is that the supervisory and regulatory authorities use these ratings as an instrument in international regulations such as the Basel II criteria.

The global financial crisis and the fluctuations in financial markets brought the activities and positions of Credit Rating Agencies (CRAs) into question. Although CRAs provide markets and investors with important information, they have been subject to the serious criticism that they caused the crisis to deepen. The CRAs, which lost part of their reputation after the Asian Crisis of 1997-98, the Enron Scandal of 2001 and the collapse of two American conglomerates, WorldCom and Parmalat, in 2002-2003, were accused of making deficient and inaccurate rating analysis during the sub-prime mortgage crisis, which first started in the USA in 2008, and spread globally to the current financial crisis in the EU.

The primary criticism against CRAs is that they downgrade ratings after the crisis. Making adjustments in countries' ratings during the course of the crisis especially fuels concerns over the accuracy and stability of rating practices.

Another criticism against CRAs is that they are either over-optimistic or over-pessimistic in their rating criteria and ratings. In the aftermath of the financial crisis in the EU, the investment grades of some countries with a quite unfavorable economic outlook were still kept positive after downgrading their ratings, while the ratings of some countries, which were less affected by the crisis and have a more favorable economic and financial stability outlook, are still kept low. In fact, this situation, which can be regarded as a dilemma, can be clearly observed in country CDS premium levels that price the credit and collapse risk in the market (Chart I.7).

As CRAs generate most of their income from governments and companies that issue securities and thus request ratings from CRAs, some market participants claim that CRAs can make biased and inaccurate ratings for the sake of safeguarding their business relations. Moreover, the fact that these agencies can provide consultancy services for the companies they produce ratings for, increases the risk of abuse and conflict of interest.

The intense criticism of CRAs creates the need for them to be legally liable for the ratings they apply and to be under constant supervision. In this respect, focusing on oversight and transparency, many countries started to take the necessary steps to develop a regulatory framework for CRAs.

In the USA, regulations for CRAs started to be implemented before the crisis. The U.S. Credit Rating Agency Reform Act, which was enacted in 2006, endowed the U.S. Securities and Exchange Commission (SEC) with the authority to regulate credit rating agencies. With the act in question, the SEC aims to prevent a likely clash of interests and to enhance transparency and information standards for the rating process.

At international level, arrangements related to CRAs were addressed in G-20 meetings. G-20 leaders, who gathered in London in 2009 decided that a regulatory supervision regime including CRAs' registry operations would be established by the end of 2009 and that the said regime would comply



with the Main Code of Conduct of the International Organization of Securities Commission (IOSCO). Following the G-20 meeting, enhancement of the oversight and supervision of CRAs started to be addressed through national and regional initiatives. The European Union (EU) enacted a new law on the oversight and supervision of CRAs in December 2009. With the new law, it was decided that all CRAs operating in the EU would be registered and supervised by the Committee of European Securities Regulators (CESR). In June 2010, the European Commission drew up a draft that granted a special supervisory authority to the European Securities and Market Authority (ESMA) for the centralization of supervision of CRAs, which was being carried out at national level. It was stipulated in the draft that the ESMA would be authorized to request information, open an investigation and carry out on-site supervision.

Another source of criticism, which national and international authorities are trying to find a solution to, is the dependency upon rating-based regulations. The high dependency on the ratings of CRAs in internal evaluations used in the calculation of capital adequacy in Basel II gave rise to intensive efforts for the settlement of this issue in Basel III. Within this framework, parallel to the declaration of the G-20 meeting held in Toronto in June 2010, the Financial Stability Board (FSB) started to work on a draft to reduce the dependency on external ratings in regulations. In the following period, the Dodd–Frank Wall Street Reform and Consumer Protection Act took effect in the USA and reforms aimed at CRAs were introduced. It is indicated in the Law that the dependency of supervision agencies on CRAs while rating their security issues, might be reduced by alleviating some of the legal obligations promoting the use of credit ratings.

The significance of credit rating agencies is obvious for the sound functioning of financial markets. However, experiences of crises indicate that these agencies somehow contribute to the deepening of crises and financial instability due to problems originating from their current status and way of functioning. In this context, recent arrangements and studies for the decentralization of these agencies are considered to be favorable steps.

## IV.6 Basel III Reform Measures

Following the latest global crisis, the Basel Committee on Banking Supervision, which our country is also a member of, embarked on regulatory works to improve the banking sectors' ability to absorb shocks and strengthen their capital. Following these works, documents called Basel III were published. The basic principles of the new regulations to be adopted within a certain timetable are stated below.

### Capital Adequacy, Main Elements of Capital

The changes in the regulation of capital adequacy in Basel III target the improvement of the quantity and quality of capital besides the building up of a capital buffer depending on the phase of the economic cycle. With the regulations, the core Tier I capital ratio, which consists of paid capital that has a higher loss absorbency capacity and retained earnings, was raised from 2 percent to 4.5 percent and the Tier I capital ratio was increased from 4 percent to 6 percent. Contrary to previous standards, with the new regulations, it is envisaged that some items that used to be deducted from the capital are to be directly deducted from the core Tier I capital for the calculation of the capital adequacy ratio.

Basel III reform measures change not only the definition and amount of capital, but also the calculation of risk-weighted assets in the denominator of the capital adequacy ratio. In this context, the capital requirement regarding the trading accounts and securitization transactions has been increased and some changes were introduced in the calculation of counterparty credit risk.

Another new concept introduced with Basel III reform measures is the capital conservation buffer. The conservation buffer shall be added to the core Tier I capital, Tier I capital and the capital adequacy ratios to serve as precautionary capital. When the conservation buffer is included in calculations, the core Tier I capital ratio, the Tier I capital ratio and the capital adequacy ratio will increase to 7 percent, 8.5 percent and 10.5 percent, respectively. If the conservation buffer cannot be ensured, banks can continue to operate; however, constraints on profit distribution shall be introduced.

With the new regulations, in addition to the conservation buffer, a countercyclical capital buffer was introduced ranging between 0 and 2.5 percent according to national circumstances and the decisions to be taken by the relevant authority with a view to alleviating the economic counter-cycles in periods of excess credit growth. This capital buffer is aimed at hindering excess credit growth.

A long period of transition was envisaged to limit the adverse effects of the new regulations on the global economy and the changes related to the definition of capital and the ratios are planned to be fully effective as of the start of 2019 (Table 1).

**Table 1. Timetable for Basel III Implementation**

Ratios (%)	Current	2013	2014	2015	2016	2017	2018	2019
Core Tier I Capital Ratio	2.0	3.5	4.0	4.5	4.5	4.5	4.5	4.5
Tier I Capital Ratio	4.0	4.5	5.5	6.0	6.0	6.0	6.0	6.0
Capital Adequacy Ratio	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Capital Conservation Buffer					0.625	1.250	1.875	2.5
Core Tier I Capital + C. Buffer		3.5	4.0	4.5	5.125	5.750	6.375	7.0
Tier I Capital + C. Buffer		4.5	5.5	6.0	6.625	7.250	7.875	8.5
Capital Adequacy Ratio + C. Buffer		8.0	8.0	8.0	8.625	9.250	9.875	10.5

The Turkish banking system has a lower share of subordinated debt within equity capital, while that of quality capital, which consists of paid capital and retained earnings with high capacity of loss absorbency, is high. Contrary to the banking systems of developed countries, the differences among Turkey's capital adequacy ratio, Tier I capital and core Tier I capital ratios are less. Therefore, the new regulations in capital introduced by Basel III will be much more demanding for the banking systems of developed countries. Coupled with the changes in the quality of capital, the greater loss absorbency capacity of equity capital items included in the calculation of the capital adequacy ratio will greatly contribute to global financial stability.

### **Leverage Ratio**

The recent crisis indicated that the countries' banking systems have high levels of on-balance sheet and off-balance sheet debts. It also indicated that the high risk-weighted capital adequacy ratios of banks might not be sufficient indicators of their resilience. Therefore, in Basel III rules, a non-risk-based leverage ratio regulation was covered. This is aimed at both supporting the risk-focused capital adequacy approach and hindering the debt ratios of banks.

Considering the results of quantitative impact studies and the sector's views, the Committee decided that the leverage ratio would be calculated by dividing common equity, calculated according to the new definition laid down by Basel III, by the sum of off-balance sheet items considered by certain conversion rates and the assets. The leverage ratio is envisaged as 3 percent minimum and a gradual transition period is planned. The leverage ratio, which is planned to take effect on 1 January 2018, will be subject to tests and calibrations in the transition period. It is also aimed to assess the extent of achievements in targets with the leverage ratio. Equity capital has a high weight within balance sheets in the Turkish banking sector and our banks operate with a low leverage ratio. In this context, we do not expect significant troubles in the adoption of the aforementioned regulations.

### **Global Liquidity Ratios**

In line with the lessons we have learnt from the recent global crisis, the Basel Committee tries to develop global liquidity ratios for international banks. The purpose of these ratios is to globally harmonize the supervision of liquidity risk and to enhance its resilience.

The introduction of two ratios as global liquidity ratios is planned. Firstly, according to the Liquidity Coverage Ratio (LCR), banks will be required to hold an adequate level of unencumbered assets with high liquidity to meet their liquidity needs over a period of 30 days under a determined liquidity stress scenario. According to this ratio, the ratio of liquid assets to the net cash outflows to be made within 30 days needs to be 100 percent or above. The numerator of the ratio is obtained by applying certain discount rates to the value of assets defined as liquid assets. Liquid assets consist of cash, due from the central bank, government debt securities and securities under state guarantee, high quality corporate sector bonds and bills and asset-backed securities. In the denominator of the ratio, haircuts are applied to cash inflows emanating from on-balance sheet and off-balance sheet transactions and expected to realize within 30 days, while run-off rates are applied to cash outflows emanating from on-balance sheet and off-balance sheet transactions and are expected to realize within 30 days. Net cash outflows are obtained by subtracting the amount that is obtained by multiplying the cash inflows with the aforementioned ratios from the sum that is obtained by multiplying the cash outflows with the aforementioned ratios.

In addition to the liquidity coverage ratio, a second ratio called the Net Stable Funding Ratio (NSFR) was developed to underpin LCR, to contain structural liquidity mismatches and maintain core funding above a certain level. According to the NSFR, the ratio of a bank's available amount of stable funding to the required amount of stable funding should be greater than 100 percent. The amount of available stable funding consists of the sum of capital, liabilities with an effective maturity of more than one year, demand deposits, and a certain portion of retail deposits with maturities of less than one year and wholesale funds with maturities of less than one year. The required amount of stable funding, on the other hand, is calculated by classifying the assets from the most to the least liquid ones and subjecting them to certain haircuts. For example, while a 5 percent required stable funding factor is applied to government debt securities, 100 percent required stable funding factor is applied to tangible fixed assets. The amount of required stable funding includes the amount of required stable funding arising from off-balance sheet activities as well.

The timetable for the adaptation process of the aforementioned ratios has been scheduled. It has been decided to start information-based reporting as of 1 January 2012 for both ratios and to adopt the ratios as a requirement by 1 January 2015 for LCR and by 1 January 2018 for NSFR.

## IV.7 Financial Awareness and Financial Education

Products and services are constantly getting more diversified in financial markets. This offers a great range of alternatives to individuals in decisions of investment, consumption and savings, while raising the risks taken by individuals. Meanwhile, changing social and demographic conditions require each individual of all ages and income groups to become more informed about financial issues in all aspects of their lives. When combined with poor levels of financial education, all these bear doubts about the extent of the awareness of individuals regarding the risks and decisions they take.

In this regard, the significance of raising “awareness” in financial matters and offering “financial education” to individuals comes to the forefront. Financial education provides individuals with information on financial products and services and thereby enhances the effective use of financial products.

Considering that the financial sector is still developing in our country and that our debt ratio is lower than in many countries, handling financial education in this phase will greatly contribute to the sound growth of the financial sector. For example, in view of their effect on the debt ratio of households, all types of monetary liabilities to be collected, commissions to be paid, account operating fees and interest rates on deposit accounts with overdraft facilities for banking transactions should be made clear in contracts to be made prior to opening accounts. This shall serve the benefit of individuals as well as the whole system as customers will be aware of the monetary liabilities they assume and understand the operations they undertake with the bank, and have information on the applications of the bank in a competitive environment.

Financial education not only increases the welfare of individuals, but also contributes to the increase in the social welfare and more efficient functioning of the financial markets, and thereby to the achievement of financial and economic stability. As a matter of fact, the concepts of financial stability and financial education are closely related. This is the point where the role of the central bank comes to the forefront with regard to financial education.

Nowadays, many central banks consider financial stability as a supplementary objective besides the primary objective of price stability. This objective is set down in the laws of some of the central banks including the Central Bank of the Republic of Turkey. Thus, central banks stand in the forefront regarding studies on financial education in various ways and dimensions due to legal liabilities on the one hand; and the close relationship between financial education and financial stability on the other.

Meanwhile, the recent global crisis clearly underlined the importance of financial education and its relationship with financial stability. Following the crisis, studies on financial education were conducted both on national and international platforms.

As a result of the concerns raised by its members regarding the negative effects of poor levels of financial education, the OECD launched studies on financial education in 2003. The OECD now conducts studies in three main areas, such as analytical research and analysis publications on financial education, the establishment of principles and standards and the improvement of international cooperation. The OECD has two important applications regarding the improvement of international cooperation. The first of these is the web-site, the “International Gateway on Financial Education”, established in 2008 ([www.financial-education.org](http://www.financial-education.org)). The second is the international working group called INFE (International Network on Financial Education), consisting of experts on financial education

who work in the public sector. INFE, which has held two meetings since its establishment in 2008, has more than 135 members from 68 countries including Turkey.

An analysis of studies conducted by various countries on financial education suggests that many studies have been undertaken in this area for a long time; however, efforts to establish a “financial education national strategy” have recently gained importance in a gradually increasing number of countries.

The Czech Republic embarked on studies to establish a financial education national strategy in 2005. The strategy is directed by the Undersecretariat of Treasury; while the Czech National Bank and the Ministry of Education share the responsibility regarding the studies. A policy framework of three pillars, one of which is financial education, was declared in the country by the Undersecretariat of Treasury in 2007. This framework was updated in 2010 and the five-year national strategy designed for financial education was approved by the Czech Republic.

In Australia, national coordination of financial education is conducted by the “Australian Securities and Investments Commission (ASIC)”. Australia embarked on studies on national strategy at the start of 2009. In this context, the ASIC holds monthly meetings with shareholders and organizes quarterly meetings with the “Financial Literacy Board” operating under the Australian government, to which it provides secretarial services. Moreover, the ASIC founded a National Education Reference Group consisting of officials from the Education Department, non-governmental organizations and consumer associations for the exchange of information and advice regarding financial literacy in schools.

In South Africa, financial education is a part of the regulations regarding the protection of consumers and the “Financial Services Board – FSB” is in charge of national coordination. Studies to establish a national strategy were launched in 2008 and the strategy is planned to be effective in 2011.

Studies on financial education in the United Kingdom date back compared to other countries. A Steering Group for Financial Capability was started in November 2003 with a view to raising public awareness regarding financial services that are mentioned in the law of the “Financial Services Authority (FSA)”, which is the inspection authority”. A survey was done in 2006 to estimate the level of financial education and the existing national strategy was formed in March 2006. A joint working plan with the Treasury was declared in 2008. The “Consumer Financial Education Body (CFEB)” was founded in April 2010, responsible for the national strategy of the United Kingdom.

In 2002, within the context of studies on financial education, the Office of Financial Education was founded in the United States of America (USA) under the US Treasury. In 2003 the US Congress established the “Financial Literacy and Education Commission (FLEC)”. The Commission is supported by the US Treasury and consists of 22 member institutions including the Federal Reserve. After issuing a national strategy in 2006, the Commission reviewed and updated this strategy in 2009 and issued its strategy for 2011.

Studies on financial education at various platforms are carried out in the European Union as well. In December 2007 the European Commission published a communiqué on financial education to define some basic principles besides future plans. The “Expert Group on Financial Education (EGFE)” which was founded in 2008 holds regular meetings with its 25 members and continues to conduct studies on financial education such as national strategies, financial crisis and financial education, financial education in schools and pension funds. Moreover, a “European Database for Financial

Education” was set up on the European Commission web-site in 2009 to provide information on financial education programs offered by the public and private sector in the European Union.

As a matter of fact, due to the cultural, economic and social differences among countries, there is no one single strategy that would be suitable for each country and in every situation. However, various country samples and studies of international organizations constitute remarkable guidelines for every country to design its own financial education strategy.

Institutions in Turkey attach importance to the issue of financial awareness and financial education as well. Both with regard to their duties and responsibilities and in the context of social responsibility projects, many of our institutions conduct studies in various fields independently from each other. Meanwhile, considering the importance of this issue with regard to the benefits it will generate in individual and social respects, it is clear that financial education requires a national policy framework. In this respect, there is a need to create a “financial education national strategy” with the cooperation and the know-how to be offered by all relevant institutions in order to raise nationwide financial awareness and to enhance the efficiency of financial education studies.

The Central Bank of the Republic of Turkey, beyond the meaning it bears as a concept, supports and actively continues to cooperate with the relevant institutions and organizations for studies in the national and international arena regarding financial education as they are closely related to financial stability.

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**ABBREVIATIONS**

ASIC	:	Australian Securities and Investments Commission
BIS	:	Bank for International Settlements
BoE	:	Bank of England
BoJ	:	Bank of Japan
BRSA	:	Banking Regulation and Supervision Agency
CDS	:	Credit Default Swap
CESR	:	Committee of European Securities Regulators
CMB	:	Capital Markets Board
CMG	:	Crisis Management Group
CPI	:	Consumer Price Index
CPSS	:	Committee on Payment and Settlement Systems
CRA	:	Central Registry Agency
CRA's	:	Credit Rating Agencies
EBA	:	European Banking Authority
ECB	:	European Central Bank
EGFE	:	Expert Group Financial Education
EIOPA	:	European Insurance and Occupational Pensions Authority
EMBI+	:	Emerging Markets Bond Index
ESMA	:	European Securities and Markets Authority
ESRB	:	European Systemic Risk Board
EU	:	European Union
FCA	:	Foreign Currency Account
Fed	:	Federal Reserve System
FIEG	:	Financial Inclusion Experts Group
FSA	:	Financial Services Authority
FSB	:	Financial Stability Board
FX	:	Foreign Exchange

FXNGP	:	Foreign Exchange Net General Position
G-20	:	Group of 20
GDDS	:	Government Domestic Debt Securities
GDP	:	Gross Domestic Product
GFSR	:	Global Financial Stability Report
G-SIFI	:	Global systemically Important Financial Institutions
HHI	:	Herfindahl-Hirschman Index
IAIS	:	International Association of Insurance Supervisors
IIF	:	International Finance Institute
IMF	:	International Monetary Fund
INFE	:	International Network on Financial Education
IOSCO	:	International Organization of Securities Commissions
ISE	:	Istanbul Stock Exchange
KOSGEB	:	Small and Medium Enterprises Development Organization
LCR	:	Liquidity Coverage Ratio
RUSF	:	Resource Utilization Support Fund
SME	:	Small and Medium Size Enterprise
SP	:	Securities Portfolio
SPO	:	State Planning Organization
MPC	:	Monetary Policy Committee
MSCI	:	Morgan Stanley Global Standard Indices
MTP	:	Medium-Term Plan
NPL	:	Non-performing Loan
NSFR	:	Net Stable Funding Rate
OVX	:	Oil Volatility Index
PDP	:	Public Disclosure Platform
PIIGS	:	Portugal, Ireland, Italy, Greece and Spain
PPI	:	Producer Price Index

SDIF	:	Savings Deposit Insurance Fund
S&P	:	Standard and Poor's
TARP	:	Troubled Asset Relief Program
TL	:	Turkish Lira
TOKİ	:	Housing Development Administration of Turkey
TSPAKB:		The Association of Capital Market Intermediary Institutions of Turkey
TSRSB	:	The Association of the Insurance and Reinsurance Companies of Turkey
TurkStat:		Turkish Statistical Institute
USA	:	United States of America
VIX	:	Chicago Board of Exchange Volatility Index
WEO	:	World Economic Outlook