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# **Transformation of the Turkish Financial Sector in the Aftermath of the 2001 Crisis**

## **Abstract**

This paper attempts to delineate the evolution of the Turkish banking sector in the post-crisis era after 2001. The paper summarizes the events in the Turkish banking sector until the 2001 crisis. After that, a section focuses on the major regulatory changes. A detailed account of the consolidation and transformation of Turkish banks following the crisis is presented with reference to various structural indicators of the sector. Efficiency and foreign bank entry are examined in for the post-crisis period as well.

**Keywords:** Turkish banking sector, post-crisis era after 2001, Efficiency, Foreign bank entry

**JEL classification:** G21, G28, O16

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# **Transformation of the Turkish Financial Sector in the Aftermath of the 2001 Crisis**

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## **1. Introduction**

The Turkish financial sector has shown remarkable progress in the period following the 2001 crisis. The improved macroeconomic conditions in the country, the increased fiscal discipline of the government and the restructuring of the institutional setting for the financial system were among the domestic causes of this development. Very favorable international liquidity conditions, international institutions' influences and the reforms in global banking standards were also profoundly effective factors during this transformation. Banking constitutes the major component of Turkey's financial sector. In 2008, banks' balance sheets comprised 88 per cent of the balance sheets of the sector (Table 1). Hence, this paper will analyze the developments in the banking sector to evaluate the financial sector's progress since 2001.

The catastrophic crises in 2000 and 2001 paved the way for a structural reform process in Turkey. Since the weaknesses in the banking sector were considered to be a major cause for the crises, efforts to restructure the Turkish economy were particularly focused on the banking sector. Extensive research was conducted in the immediate post-crisis era to analyze the crises and to evaluate these efforts. The more recent period up

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to 2008 in which some results of the restructuring and transformation have surfaced remains unexplored. This paper attempts to fill this gap.

#### INSERT TABLE 1

In the 1980s, the planned economy with its heavily restricted banking sector left its place to the changes effected by the attempts of liberalization in the Turkish economy, in sync with the rising neoliberalism in the world. Despite considerable improvements, the lack of an institutional structure was a major impediment. The 1990s were marked by high inflation, increasing public expenditures and excessive public sector borrowing. In this decade the government turned mainly to commercial banks, which in turn relied on short-term capital inflows, for deficit financing. Banks had little function as financial intermediaries; their main business was to lend to the government at high rates and borrow from abroad by exposing themselves to serious currency risk. State banks, which constituted a significant portion of the banking sector, were also largely used by the government to accomplish political objectives. They suffered duty losses for which they engaged in short-term borrowing at high interest rates, subjecting themselves to interest rate risk.

A confidence breakdown, the ensuing capital flight and the consequent rush to foreign currency led to the collapse of the IMF-supported exchange rate anchor program of 1999. The heavy depreciation of the currency resulted in the severe 2001 crisis, affecting especially the banks with serious open positions. As a result of this crisis, the

banking sector had to go through immense restructuring, with the total cost of the process amounting to 35.9 per cent of GDP in 2001 (Steinherr et al. 2004).

There was at least one good side to this devastating crisis. It provided regulators with the suitable environment to initiate a structural reform process. The Banking Regulation and Supervision Agency (BRSA) implemented a series of fundamental regulations on many issues including foreign exchange exposure, connected lending practices and capital adequacy standards. State banks were relieved of the burden of duty losses and some measures were taken to enhance their efficiency. The convergence of the regulatory framework to international standards and the proactive policies of the regulators are among the main reasons for the current soundness of the financial sector. Basel-II was the international benchmark for determining the regulatory framework. Redefining the risk groups of certain balance sheets assets, and increasing the provisions for certain off-balance sheet items and credit card installments are some examples of the proactive measures taken by the regulators in order to control banks' asset growth and risk taking. Regulations were accompanied with improving macroeconomic conditions and the tight fiscal practices of the government on the domestic front. Meanwhile, favorable global liquidity conditions prevailed in international markets.

In the post-crisis period, the number of banks in Turkey decreased until 2006 and has stayed at 50 since. Their asset and liability structure reflects financial deepening and increased intermediation activities. Profitability has been on the rise since 2005, and is now quite high compared to most European countries. Capital Adequacy Ratio (CAR)

has been declining, mostly due to stricter regulations and the increasing share of loans in assets in recent years, though it is above the required minimum of 8 per cent and the CARs of most European countries.

The duration between the crisis and 2004 can be described as the *recovery and stabilization period* due to the intense restructuring activities that characterize it. In this period, the banking sector was consolidated through mergers and made leaner through reductions in the numbers of branches and employees. This was also a recovery phase during which asset portfolios were rehabilitated and the capital base was strengthened. Starting with 2004, the Turkish banking sector entered a *growth period*. Total assets as percentage of GDP increased substantially and reached 71.5 in 2008. The numbers of branches and employees started to escalate in 2004. Securitization and syndication credits received by them surged in this period as well. These years were also marked with a sudden increase in foreign bank entry. The share of assets owned by foreign banks increased nearly tenfold between 2000 and 2008, with almost all of this growth taking place in 2005 and later.

Global conditions, improvements in the banking sector and macroeconomic conditions in Turkey as well as the conditions in the home countries of foreign banks affected foreign banks' entry decisions. Global liquidity conditions helped foreign banks raise funds to penetrate into the Turkish market. Low returns in home countries made expansion an inevitable path to follow for international banks. The December 2004 decision of the EU to start accession negotiations with Turkey contributed positively to foreign bank entries and the *growth period*. The declining inflation and public sector

borrowing requirement (PSBR) in Turkey brought the intermediation role of banks to the fore. It was not possible for foreign banks to benefit from the growing loan markets in Turkey through their small subsidiaries. Hence, they preferred to acquire existing banks to penetrate faster into the Turkish market. The regulations, supervision and the better fit to Basel-II guidelines also increased the confidence in the Turkish economy and provided more reliable means of assessment for foreign banks. So far, Turkey has benefited mainly from the capital inflows generated by these entries. The possible drawbacks of foreign bank entries are also discussed in this paper, though no significant negative impact has been observed yet.

There are two main approaches to evaluate the efficiency of the banking sector. Some studies examine various ratios to assess efficiency while others utilize econometric models to construct more unified indices. The general picture indicates an increase in the efficiency performances of banks in the post-crisis period. Various indicators also reveal convergence between the efficiency levels of state and private banks in recent years.

The outline of this study which attempts to delineate the evolution of the Turkish banking sector in the post-crisis era is as follows. The next section summarizes the events in the Turkish banking sector until the 2001 crisis. After that, a section focuses on the major regulatory changes. In the subsequent section, a detailed account of the consolidation and transformation of Turkish banks following the crisis is presented with reference to various structural indicators of the sector. Efficiency and foreign bank entry are examined in the last two sections.

## **2. Turkish Banking Sector Until 2001**

Until 1980s, Turkey was governed with planned development programs. The financial system virtually lacked securities markets and consisted mainly of commercial banks, with a predominance of public banks. Operating under the restrictions of a planned economy involving controlled interest rates, high reserve requirements, constraints on entry, and a limited range of products, banks were allocating almost three fourths of loanable funds as directed credit (Denizer 1999). The restrictions, in line with the government's protectionist policies, prevented the formation of a competitive banking sector.

Global paradigms and international institutions' recommendations and impositions were profoundly influential in the development of the Turkish financial system in the last decades. In 1980s, the eminent impacts of neoliberalism were witnessed in the financial realm around the globe. Banking deregulations and capital account liberalizations, which were later pointed out as the major causes of the endemic crises in the 1990s, prevailed all over the world. It was rhetorically argued that banking deregulations would allow market forces to more efficiently shape the evolution of financial systems, and that capital account liberalizations would allow savings to flow from low to high return countries, fostering world-wide growth and the betterment of low-income countries (Tirole 2002). To control banks' risk taking behaviour, prudential capital regulations were introduced in 1988 with Basel Capital Accord (Basel-I) in place of classical banking regulations on banks' assets, activities, interest rates and the like. The Accord

required banks to hold equity of at least 8 per cent of their risk-weighted assets. The basic logic behind these regulations was quite simple: their increased stake in the business would make banks internalize risks. However, the enormous amounts of short term capital inflows and serious banking sector weaknesses in the form of high credit, interest rate, exchange rate and portfolio risks, observed as stylized facts prior to almost all crises in emerging countries in the 1990s, forcefully demonstrated that liberalizations did not attain the desired ends at least in the 1990s (Yildiran 2008).

Turkey was also affected by these global developments. In early 1980s, as part of a broader liberalization process encompassing trade liberalization, some financial liberalization measures were introduced. Entry barriers were relaxed, loan and deposit rate controls were abolished and most of the directed credit requirements were removed so as to enhance competition and efficiency in the banking sector. However, the bankers' crisis that occurred in this liberalized environment in years 1981-1982 revealed the necessity of a new regulatory framework. The IMF and the World Bank were actively involved in the development of this framework. In 1983, the Saving Deposit Insurance Fund (SDIF) was established. In 1985, a new banking law (Banks Act No. 3182) was passed to lay down the institutional and legal foundations of prudential regulations. The law obliged banks to submit standardized accounting reports, participate in the SDIF and allocate provisions for non-performing loans. However, the law, which entrusted the responsibility of regulating and supervising banks to the Treasury, had two important shortcomings. Firstly, the regulatory institution was not independent of pressures from politicians and influential banking lobbies. Such pressures induced regulators to adopt a stance of inaction (regulatory forbearance)

restraining their timely intervention in ailing banks. Secondly, the primary objective of the regulatory institution (the Treasury), budgetary financing, was often conflicting with the responsibility of ensuring banks' soundness. As banks greatly facilitated budgetary financing by holding large amounts of government securities, the Treasury tended to overlook the unacceptable credit, interest rate and exchange rate risks of banks.

Likewise, when a bank was in need of urgent liquidity, the Treasury was likely to refrain from injecting that amount, as this action might disturb the budgetary equilibrium (Alper and Öniş 2004).

Capital account liberalizations also took place in this decade. Households were allowed to hold foreign currency denominated deposits in 1984. The Central Bank established the Foreign Exchange and Banknotes Market in 1988. International capital flows were completely liberalized in 1989 along with the full convertibility of Turkish Lira. Other important developments of this decade were that the government securities market was established in 1985, the interbank money market became operational in 1986 and the Central Bank started open market operations in 1987.

1990s is a highly mismanaged period in the Turkish economic history, by virtue of short term and populist policies. Vast increases in public sector expenditures led to very high PSBR, inflation and interest rates during this decade. Banks, instead of fulfilling their financial intermediation role, played a vital role in financing budget deficits by holding sizeable amounts of government securities in their asset portfolios. Governments, on the other hand, granted many new licenses mostly to politically connected groups to reduce

their borrowing costs, leading ultimately to an inefficient banking system with excessive numbers of banks, bank branches and employees.<sup>1</sup>

High inflation rates were a major concern in this period; liberal foreign trade policies and a controlled exchange rate regime were the fashionable remedies proposed by international institutions. High PSBR and the resulting high interest rates, together with the government's commitment to the controlled exchange rate regime, led to immense amounts of short-term capital inflows, mostly through international interbank lending (Uluceviz and Yildiran 2008). The syndicated loans borrowed by private banks were used, to a significant extent, to acquire government securities. The excessive level of exchange rate risk assumed by some of these banks was disregarded by the Treasury. When the government attempted to suppress interest rates while adhering to the controlled exchange rate regime (impossible trinity), capital outflow broke out in 1994. Devaluation ensued; several banks with high open positions fell insolvent and were taken over by SDIF. A full-blown panic was prevented by launching the 100 per cent deposit insurance scheme, albeit credit crunch and economic contraction could not be avoided.

Following the crisis, with the stabilization program of the IMF, state economic enterprises and extra-budgetary-funds were reined in to enhance fiscal discipline and reduce budget deficits. However, these measures were not effective; governments had recourse to public banks to implement their rent-distributing policies. They employed Ziraat Bankası and Halkbank to extend subsidized credits to agricultural producers and small and medium sized enterprises (SMEs). The significant amount of duty losses of

the public banks (close to USD 20 billion) stemming from these directed lending practices could not be backed immediately by the Treasury due to budgetary concerns. The public banks were then obliged to raise funds from the markets, resulting in, to the detriment of the whole banking sector, very high interest rates on deposits and interbank borrowing (Alper and Öniş 2004). The number of private banks increased during this period. Not only was deficit financing a profitable business but also the private sector's access to funds was impaired due to the high PSBR. These provided motive to large industrial conglomerates for founding their own banks (Akçay 2001). Connected lending became prevalent. There was not sufficient regulation to put a check on this process, and political interference was abundant. As a result, the share of non-performing loans increased sharply after 1997 (Özatay and Sak 2002). In 1999, upon rising concerns over severe deteriorations in the fiscal balance and banking sector soundness, the IMF was invoked to standby to avert an imminent crisis.

Meanwhile, twin (currency-banking) crises prevailed all around the globe especially in the second half of 1990s. Neoliberal policies were deemed to be the underlying cause. It was envisioned that, with capital account and financial liberalizations, capital would be channeled toward investment opportunities in emerging countries. However the liberalizations led to severe banking sector weaknesses in these countries where institutional quality was not high. Serious doubts were cast on the adequacy of Basel-I in controlling banks' risk taking. The Accord was severely criticized for being too crude,<sup>2</sup> not incentive compatible, unable to respond to developments in the markets and for leading to excessive short-term capital flows to developing countries. To respond to these criticisms, some amendments were proposed in the New Accord (Basel II) in

1999. Risk groups were refined to make the Accord more risk-sensitive and a menu of regulatory approaches (standardized, internal rating based, etc.) was offered to banks to achieve incentive compatibility. Moreover, to prevent excessive short-term capital flows to emerging countries, the risk weights of the loans to these countries were based on external rating agencies' grades, and to enhance transparency and market discipline, disclosure requirements were imposed on banks.<sup>3</sup>

Concurrently, the IMF was also exposed to severe criticisms, in general for offering the same set of policies to all countries, and in particular for not being able to diagnose the symptoms leading to the Asian Crisis of 1997, in which banking sector problems had played a major role (Öniş and Aysan 2000). The IMF, having identified financial sector vulnerabilities as a key component of the Asian Crisis of 1997, started laying a strong emphasis on structural reforms in the financial sector in its programs after this catastrophe. In May 1999, the IMF and the World Bank jointly launched the Financial Sector Assessment Program to remedy the prevalent banking sector deficiencies observed in member countries. These institutions' recognition of the importance of financial sector regulations were hence reflected in the IMF-supported programs carried out in Turkey. The commitment to the regulation of financial markets and the strengthening of banks is visible in the Letters of Intent to the IMF in the period after the Asian Crisis<sup>4</sup>. Also apparent in these letters is the consequence given to the independence of the Central Bank. The 2000-2001 financial crises in Turkey, however, supplied the more suitable environment to implement reforms in these directions.

Under these global circumstances, an IMF-supported program was introduced at the end of 1999 in order to curb inflation via an exchange rate anchor in Turkey. With the IMF program a new banking law was enacted (Banks Act No. 4389). To remove the fundamental shortcomings of the previous law, an independent institution, the BRSA, was established in 1999 under the strict guidelines of the Financial Sector Assessment Program of the IMF and the World Bank (Al and Aysan 2006). Rendering the BRSA immune from the direct influences of politicians and banking lobbies, and assigning to it the single straightforward objective of ensuring the soundness of the banking sector were the major improvements. Within this framework, the BRSA was also given the exclusive right to grant banking licenses and to run the SDIF, the institution authorized to take over and restructure insolvent banks. Furthermore, the former distinction between public and private banks was abolished, and they were subjected to the same set of rules and regulations.

The BRSA could only be fully operational towards the end of 2000, and the Treasury was the reigning regulatory institution in the meantime. In this period, the banking sector was afflicted with extremely perverse structural problems, including the dominance of public banks and their huge duty losses, a small and fragmented banking sector, low asset quality, connected lending practices, an inadequate capital base, extreme exposure to market risk, inadequate internal control and risk management systems, poor corporate governance and lack of transparency (BRSA 2001).<sup>5</sup> All these deficiencies together with severe fiscal weaknesses were the factors that paved the way to the 2000-2001 crises. Besides, the insistence of the IMF on the controlled exchange

rate regime in the presence of significant macroeconomic imbalances needs be added to the above list of factors (Özatay and Sak 2002).

The crisis story was similar to its antecedent in 1994, except for the close surveillance of the IMF throughout the process. High PSBR and the commitment to the exchange rate regime led to short-term capital inflows. Private banks acquired large portfolios of government securities, financed by either foreign currency denominated loans or overnight repo transactions. The resulting extreme vulnerability of private banks to market risks was overlooked by the Treasury. The crisis started with the failure of Demirbank, which had aggressively invested in government securities and financed them in the overnight repo market. With the rising interest rates, the bank ran into liquidity problems. As the required liquidity could be obtained from neither the Central Bank nor the interbank market, Demirbank fell insolvent and was taken over by SDIF in December 2000. The duty losses of public banks augmented the concerns over the economy, and a full-scale currency attack started in early 2001, leading to the collapse of the exchange rate program. An abysmal depreciation of the currency ensued, resulting in the most severe financial crisis Turkey had ever experienced.<sup>6</sup>

#### INSERT TABLE 2

This calamity, however, yielded two important positive results. Firstly, the banking sector has become much sounder and leaner thanks to the lessons taken from the crisis. Secondly, regulators emerged quite powerful from the crisis, enabling them to implement regulatory reforms while domestic coalitions against reforms in the banking

sector were dissolved. The regulatory framework could be almost fully aligned with international standards starting with the May 2001 Banking Sector Restructuring Program executed by the BRSA in consultation with the IMF and the World Bank (Steinherr et al. 2004). A floating exchange rate regime, fiscal discipline and an independent central bank that will endeavor for price stability were the other covenants placed by these institutions in the wake of the crisis.

The most important factor that brought the Turkish banking sector from its miserable state after the 2001 crisis to its current well-capitalized, highly-liquid state with high asset quality and low exposure to market risks is the regulatory reforms that have been carried out since 1999. However, at least two other important factors should be mentioned as well. One is the macroeconomic stability and the unprecedented fiscal performance achieved in the post-crisis period. The other is the unusually favorable global liquidity conditions that were conducive to 26 consecutive quarters of uninterrupted growth.

### **3. Major Regulatory Changes in the Banking Sector**

The regulatory reforms, initiated with the Banking Sector Restructuring Program in 2001 and continuously supplemented ever since, had four important objectives. The first was to restructure and rehabilitate the state banks financially, with the ultimate goal of privatizing them. Some measures taken towards this end were the elimination of duty losses and overnight liabilities, these banks' recapitalization, determination of deposit rates in congruity with the market and other efficiency-related operational restructuring

plans. Another aim of the program was to resolve the situation of the banks under the administration of the SDIF through sale, merger, liquidation or transfer. By the end of 2002, only two banks remained under the management of the SDIF out of the 20 brought under its control from 1997 to 2002 (Table 3). The third major purpose set by the BRSA was the strengthening of private banks. Based on dialogues with individual banks, the BRSA obtained letters of commitment from them concerning their restructuring strategies and followed up on their execution, intervening with those which were not able to come up with acceptable plans or to implement their plans. The last objective was to strengthen the regulatory and supervisory framework. The major regulatory attempts, which have been supported and/or sponsored by the IMF and aimed at aligning the regulatory and supervisory framework with the international standards set forth by Basel-II, can be categorized under the following headings:<sup>7</sup>

- ***Non-Performing Loans (NPL)***: The BRSA developed two legal frameworks to address the NPL of the banking sector. The establishment of asset management corporations was allowed. The platform, named the Istanbul Approach, gathered banks and firms to sign a treaty according to which nonperforming corporate loans would be restructured and banks would be allowed to remove these NPL from their balance sheets.
- ***Bank Ownership***: Adopting “fit and proper” criteria, rules for bank ownership were strengthened. Also, to enforce accountability, personal liability was brought to the members of the board of directors and managers whose decisions and actions caused the failure of the bank.

- **Capital Adequacy:** Capital adequacy ratio was set as 8 per cent in accordance with international standards, and its calculation was expanded to incorporate market risks, operational risks and off-balance sheet risks.
- **Connected Lending and Participations:** Risk groups were introduced and credits to banks' shareholders and subsidiaries were defined as belonging to the same risk group. The limit of a bank's exposure to a risk group was reduced from 75 per cent to 25 per cent of its net worth. Moreover, banks' non-financial subsidiaries were prohibited from exceeding 15 per cent of total net worth each, with the total such subsidiary share in net worth being bound by 60 per cent.
- **Foreign Exchange (FX) Exposure:** Banks were not allowed to take FX positions exceeding 20 per cent of their equity, and they were enabled to reduce their exposures through domestic debt swap auctions.
- **Loan Loss Reserves and Provisions:** Loans were classified into five categories: standard, watch list, limited collection possibility, doubtful collection possibility and write-off. Any nonpayment of principal or interest on due date or a deterioration of collateral quality causes the loan to be removed from the standard category. If nonpayment exceeds 180 days, the loan is progressively classified into the last three categories, which are regarded as nonperforming and require provisioning. Provisioning starts at 20 per cent and reaches 100 per cent for loans with a nonpayment period of one year. If a loan is classified as nonperforming, all loans of the same borrower are considered nonperforming. This regulation gives banks incentives for diversification and disincentives for connected lending.

- ***Deposit Insurance and the SDIF:*** To reduce moral hazard and enhance market discipline, a limited deposit guarantee scheme was introduced in place of the previous 100 per cent blanket guarantee. According to the new scheme, institutional depositors were taken out of the deposit insurance scope, and a limit of YTL 50 000 (approximately € 37 500) was placed on the individual depositors' protection scheme. Deposit insurance premiums were reduced and made risk-based. Administrations of the SDIF and BRSA were separated in 2004.
- ***Supervision:*** In addition to the on-site examinations of the BRSA through the Board of Sworn Bank Auditors, external and internal audit requirements were imposed on banks. External auditors are required to examine banks' financial statements according to the internationally accepted accounting principles and banks' own auditors are required to regularly submit reports on their banks' financial stance. The BRSA has particularly tightened the controls following the Imarbank case in 2003<sup>8</sup>
- ***Others:*** Internal risk monitoring standards were set. Consolidated reporting was required to incorporate the accounts of the off-shore subsidiaries of domestic banks. The Central Bank reduced the reserve and liquidity requirements by a total of two points as well as starting interest payments on FX denominated required reserves in order to enhance financial intermediation and provide flexibility in liquidity management. Regulations were brought on many issues including starting a bank, the opening of branches in Turkey and abroad, capital expansion, and acquisition and transfer of shares. Mergers and acquisitions were encouraged through tax incentives.

#### **4. Recovery, Stabilization and Growth of the Banking Sector**

The progress in the Turkish banking sector after the 2001 crisis can be categorized into two periods. The first spans the period up to 2004. This period can be called the *recovery and stabilization period*. The second is the *growth period* of the banking sector. In the early years of the *recovery and stabilization period*, there was an intense restructuring in the banking sector as the unsuccessful banks were taken over by the SDIF and some banks engaged in mergers and acquisitions (Table 2). In order to restructure state banks, USD 21.9 billion was spent on duty losses and recapitalization. The total transfer to the banks under the SDIF reached USD 21.8 billion. The cost of restructuring and recapitalization of public banks, banks taken over by the SDIF and other private banks amounted to USD 53.2 billion, which was 35.9 per cent of GNP in 2001 (Steinherr et al. 2004).

The *recovery and stabilization period* up to 2004 resulted in declines in the numbers of banks, branches and employees for the banking sector (Table 3). The numbers of branches and employees had dropped to 6,078 and 124,030 respectively by the end of 2003. Some of these branches had been opened towards the end of 1990s to be able to collect more deposits and buy high-yield government bonds. Certainly, some of them became inefficient in an environment of declining interest rates. The number of banks declined to 55 in 2003 from 85 in 2000. The general elections of November 2002 brought a single party government to power after a long period of coalition governments. In December 2002, the Copenhagen Summit fostered the support for

Turkey for the full membership negotiations with European Union (EU). The single party government continued the reforms and the restructuring program in the banking sector initiated by the former government after the 2001 crisis. These developments contributed to the favorable environment for the restructuring of the banking sector.

### INSERT TABLE 3

The Turkish banking sector entered a new phase which can be called the *growth period* in 2004. The Turkish economy grew by 9.3 per cent while the world economy reached a 5.1 per cent growth rate in this year. In December 2004, Turkey and EU agreed to start accession negotiations in September 2005. The assets to GDP ratio of Turkish banks rose by 11.7 per cent in 2005 (Figure 1). The number of bank branches increased by 2.3 per cent and reached 6,219 while the number of employees increased by 3.2 per cent and reached 127,944 in 2004. The number of banks has stabilized after 2005 at 50. The asset share of public banks declined from 38.2 per cent in 2004 to 25.4 in 2008 (Table 4). The number of branches increased by 5.1 per cent and reached 6,537, while the number of employees rose by 8.4 per cent and reached 138,724. After 2005, the numbers of branches and employees have continued to increase steadily. However, the most notable change in 2005 was the sudden increase in foreign bank entry. There were five major cases of foreign bank entry in 2005 and this trend has continued until June 2007 where the global liquidity conditions started to deter further entries. Some foreign banks like Fortis and Dexia acquired the majority shares of certain Turkish banks while others like GE Consumer Finance and Citigroup bought sizeable minority shares. The aggregate asset share of foreigners reached 41.5 per cent in July 2008 (Table 9). By

2005, international investors had more confidence in the Turkish banking sector. For example, banks in Turkey succeeded in raising securitization and syndication loans by more than 50 per cent in 2005, reaching USD 15.1 billion. This rising trend continued both in 2006 and 2007.

INSERT TABLE 4

The global financial crisis and tighter liquidity conditions appear to have put a halt to the growth period of the banking sector in Turkey. However, the banking sector in Turkey is likely to resume its growth performance once the global liquidity conditions get better. The basis for this conclusion becomes more apparent when we compare Turkey with some of the Eastern European countries. With respect to asset size to GDP ratio, the banking sector in Turkey ranks at the bottom after Romania (Table 5). Turkey has much lower ratios compared to the EU averages in terms of loans/GDP, deposit/GDP and loans/deposits. Hence, the banking sector in Turkey also has a great potential in terms of asset, loan and deposit growth. Remarkably low household indebtedness in Turkey compared with the EU countries reinforces the above conclusion (Table 6).

INSERT TABLE 5

INSERT TABLE 6

As for indicators of competition, the concentration ratios of the Turkish banking sector increased during the *restructuring and consolidation period*. The asset shares of the first five and ten banks in 2002 increased from 57.4 and 79.3 per cent to 58.1 and 82.0 per cent in 2004 (Table 7). The Herfindahl-Hirschmann Index (HHI) index also increased from 851.7 in 2002 to 905.9 in 2004 (Abbasoglu et al. 2007). During the *growth period*, there was a slight decline in all the concentration ratios indicating the rising competition in the sector in 2006. When the concentration ratios of the Turkish banking sector are compared to the EU, Turkey is rather close to the EU averages. 2007 figures, for example, show that the asset shares of the first five banks constitute 60 per cent of the banking assets in Turkey. The same ratio is 59 per cent for the EU-27 and 55 for the Euro Zone (Table 5). The first five banks of the banking sector in terms of asset size have remained almost unaltered since 2002. Hence, the consolidation and restructuring attempts after the 2001 crisis did not result in major changes in the concentration of banking assets.

#### INSERT TABLE 7

The total assets of the Turkish banking sector have shown a steady upward trend since 2002, exceeding YTL 650 billion by the end of the second quarter in 2008 (Figure 1). The total share of banking assets in GDP has been increasing since 2004, having reached 71.5 per cent by June 2008. The corresponding 2007 percentages were 334.09 for EU-27, 108.9 for Bulgaria and 76.79 for Poland.

#### INSERT FIGURE 1

The breakdown of assets and liabilities can be examined to observe financial deepening and the increasing intermediation activities of banks in Turkey. Loans have been taking up a growing share of bank assets as well as of GDP since 2003 (Table 8). Deposits constitute the largest part of funds and appear as a stable percentage of liabilities throughout the last five years (Figure 2). The share of deposits in GDP has been increasing since 2004. The ratio of loans to deposits has increased from 49 per cent in 2003 to 87 per cent in June 2008, exhibiting considerable improvement.

All types of loans have displayed an increasing trend in the *growth period*. However, the growth rates in retail lending, comprising consumer and credit card loans, have been higher than in corporate lending mostly due to the rises in housing and personal finance credits. In an increasingly stable environment, banks have preferred to focus on the highly profitable retail banking. When the extremely low household indebtedness in Turkey is taken into account, these high growth rates are not surprising (Table 6). In November 2008, retail credits and credits to SME's constituted about 32 and 24 per cent of total loans, respectively. Large enterprises, on the other hand, borrowed not only from Turkish banks but also from international financial markets at more suitable conditions. The risks associated with international borrowing are now borne by the corporate sector and not by banks like in 1990s. The recent high growth rates in retail loans may raise the concern that consumer credits are crowding out investment credits. However, in an open economy context, both consumption and investment in Turkey have been concurrently financed by capital inflows.

INSERT TABLE 8

INSERT FIGURE 2

Turkish banks are much more profitable than the banks in many European countries. Only some Eastern European countries like Estonia, Lithuania, Poland, and Bulgaria ranked above the banks in Turkey in terms of Return on Equity (ROE) in 2007 (Figure 3). With respect to Return on Assets (ROA), on the other hand, banks in Turkey have higher average ratios than the ratios of these Eastern European countries. During the *growth period*, ROE reached 19.2 per cent in 2006 from 10.9 per cent in 2005. In 2007 and in the first quarter of 2008 ROE continued to increase and reached 21.8 and 21.9 per cent, respectively. Considering the high returns on the Turkish government bonds, it is not surprising to observe these high ROE and ROA ratios. However, international comparisons show that with respect to either standard the banking sector profitability indicators are rather high in Turkey.

INSERT FIGURE 3

By March 2008, 40 out of 50 banks were profitable. This number indicates a decline in the number of profitable banks since 46 banks were profitable at the end of 2007. However, the assets of the profitable banks in total assets of the banking sector in Turkey have not changed much and stood around 99 per cent since 2006. Only some

small banks were not profitable in recent years. Moreover, 22 banks had ROE over 15 per cent in 2007. The assets of these 22 banks corresponded to 92.6 per cent of the total assets in banking, indicating high ROE for the major players in the market.

#### INSERT FIGURE 4

The banking sector reached higher levels of profitability especially in the growth period after 2005 (Figure 4). The profitability indicators can be quite volatile depending on the aggregate macroeconomic and bank specific conditions. However, it is safe to state that the banking sector attained a much stable path of profitability growth during the post-crisis period. The effects of the global liquidity crisis on the banking sector are likely to be seen in the upcoming years. If the banking sector passes this period without major damage, it will remain to be attractive for international investors.

CAR has been steadily declining in recent years in spite of the growth in total equity. There are two major reasons for this decline. First, the banks have lately increased their risk weighted assets by switching from government securities to loans in their asset portfolios. This shift has required banks to hold more capital since the risk weight for government securities is zero. Secondly, the regulators were cautious about global developments and the rapid surge in credits in Turkey, and took some precautions. The BRSA, for example, increased the risk weights for letters of guarantees and letters of credit by new amendments in the legislation. Another example is related to the credit card market. The required capital for the installment credit card receivables was increased with an amendment.

## INSERT FIGURE 5

CAR was 23.7 and 22.3 per cent in 2005 and 2006, respectively. It dropped to 18.9 per cent in 2007 and to 17.2 per cent in the first quarter of 2008 (Figure 5). In 2007, the radical decline in the CAR by 1.4 percentage points essentially stemmed from the requirement for the banks to hold additional capital to cover their operational risks beginning from June 2007. As compared to the 2001 crisis, the banks in Turkey appear to be much sounder in the face of the global crisis. Despite the declines in recent years, the CAR of the sector remained much higher than both the minimum requirement of 8 per cent and the target ratio of 12 per cent. As of March 2008, the CAR of 32 banks representing 52.2 per cent of the sector's assets was over 15 per cent. With these ratios, Turkish banks stand among the highly capitalized banks throughout the world (Figure 6).

## INSERT FIGURE 6

### **5. Assessment of Efficiency Improvement**

There are two main approaches to evaluate efficiency in banking. One approach is to analyze certain illustrative indicators of efficiency, which are mostly the ratios related to the profitability of banks. For example, Steinherr et al. (2004) utilize deposits/assets, deposits/branches, deposits/employees, employees/branches and assets/employees ratios

among such indicators. Certainly, Turkish banks performed much better after the crisis in terms of these indicators of efficiency. However, there is no common set of indicators to assess efficiency of banking. For example, some studies measure efficiency in terms of personnel expenses, commission revenues and net interest income as percentages of total operating expenses and total income. The personnel expenses/total operating expenses after the crisis suddenly shrank due to the declining number of employees, remained around 30 per cent between 2002 and 2004, and jumped to 37.2 per cent during the growth period in 2004-2007 due to the expansion in employment (BRSA 2007). Solely based on this measure, it can be wrongly concluded that the efficiency of banks gets worse after 2005. It is possible to draw similar faulty results from other indicators as well. For example, commission revenues/total operating expenses used to be 28.1 per cent in 2002. This ratio increased steadily in the *growth period* and reached 48.2 per cent in 2007. The rapid increase in this ratio is the result of another structural change in the banking sector after the crisis. Throughout 1990s, banks used to subsidize commission-generating services. Their interest incomes were so high that banks lowered fees and commissions to attract more deposits. However, due to the declining interest rates and increasing competition, the net interest income as percentage of total income has declined in the post-crisis period.

Although these illustrative indicators of efficiency may shed light on certain aspects of banking, they are often criticized on several grounds. This ratio analysis is often related to profitability measures. However, Abbasoğlu et al. (2007) show that certain efficiency measures do not have a statistically robust relationship with profitability indicators.

Moreover, it is often difficult to deduce general conclusions based on multiple

indicators of efficiency. Hence, the second approach produces a single index of efficiency by incorporating various measures of efficiency ratios. There are parametric and nonparametric estimations of efficiency scores. For example, Aysan and Ceyhan (2008a) calculate efficiency scores based on nonparametric estimations. They show that the efficiency scores of banks in Turkey rose in the post-crisis period. Also, their results reveal a convergence in the efficiency scores of private, state and foreign banks in the *growth period*. These results are confirmed by Steinherr et al. (2004). Aysan et al. (2009), on the other hand, generate the cost and profit efficiency scores using a panel stochastic frontier approach. Their estimation shows that cost efficiency scores steadily improve in the post-crisis period. However, profit efficiency scores increase initially in the post-crisis period, and deteriorate later during the growth period due to increasing competition and declining interest rates. The general conclusion from various measures of efficiency in the literature indicates that the banking sector has improved its efficiency during the post-crisis period and that there is a convergence in efficiency performances of different groups of banks in the second half of the 2000s.

## **6. Foreign Bank Entry in the Growth Period**

By the end of 2000, based on their share in paid-in capital, foreign banks' share in the assets of the Turkish banking sector was 2.8 per cent (BRSA 2001). By July 2008, this ratio increased almost ten times and reached 24.3 per cent. International investors also acquired publicly traded shares corresponding to 17.1 per cent of the total assets. Hence the aggregate share of international investors in the Turkish banking sector was 41.5 per cent in July 2008. This radical change in the ownership structure is actually rather

recent. In the *recovery and stabilization period*, foreign bank entry into the banking sector was negligible. Only HSBC took over Demirbank from the SDIF in 2002. Domestic banks became substantially undervalued after the 2001 crisis. Besides, the banks under the control of SDIF were ready to be sold to international investors. However, these were not sufficient to entice foreign banks into investing in the Turkish banking sector.

The sudden surge in foreign bank entry into Turkey started with the *growth period*. BNP Paribas launched the route with its acquisition of Türkiye Ekonomi Bankasi in February 2005. Four other major deals in 2005 were followed by seven acquisitions in 2006. The final deal was the acquisition of Oyakbank by ING Bank in June 2007.

Factors affecting foreign bank entry decisions during the *growth period* can be categorized as global, domestic and home country related. Global liquidity conditions facilitated international banks' penetration into developing countries. With their high credibility, they could easily raise funds in global markets to finance their acquisitions all over the world. The assets of international banks in developing countries increased almost three times its level in 2000 and reached USD 3 trillion in 2007 (World Bank 2008). Certainly, global liquidity conditions cannot per se explain the foreign acquisitions in Turkey. Under these favorable global liquidity conditions, which started around 2002, international banks initially preferred to expand into Eastern European countries rather than Turkey, reinforcing the argument that domestic conditions are at least as critical in this process.

## INSERT TABLE 9

The regulatory and supervisory reforms, the consolidation and restructuring in the sector, the commitment of the single party government to the reform process, the macroeconomic stability achieved by the successful monetary and fiscal policies, and the EU anchor strengthened at the beginning of 2005 altogether changed the perceptions about Turkey and contributed significantly to the foreign banks' entry decisions into Turkey. Another noteworthy factor was that the risk-averse owners of domestic banks were quite eager to sell their shares to international investors and exit from the banking business after the change in the regulation that held faulty bank owners personally liable for the losses of their banks.

Regarding the home country reasons, lower returns to banking in developed countries due to deeper financial markets and higher competition have provided the banks in these countries with strong incentives to expand into developing countries where returns are higher. Furthermore, scale economies in banking business due to heavy investments in technological infrastructures reinforce these incentives for expansion. Turkey, in this respect, stands as a country of substantial potential with its sizable and young population, extremely low household indebtedness and relatively undersized banking sector in terms of the total bank assets to GDP ratio (Table 6).

Almost all foreign banks preferred to expand in Turkey through acquisitions rather than establishing their own banks as a green-field investment. There are definitely some regulatory barriers to opening new banks in Turkey. BRSA appears to be reluctant to

issue new licenses. Moreover, it is quite difficult for a newly established foreign bank to obtain a significant market share in the Turkish banking sector. Hence, acquiring a domestic bank is an easier and faster route to penetrate in Turkey. As a matter of fact, foreign banks purchased the domestic banks at a premium to be able to capture market shares quickly and easily in this promising marketplace.

A number of foreign banks were operational in the Turkish financial markets through their branches and subsidiaries in 1990s. Their main activity was to buy high return government securities or lend domestic banks in the interbank market. However, as PSBR has declined since the 2001 crisis and the core function of banks, intermediation, has come to the fore, banks have started to explore the profit opportunities from corporate and retail lending. Hence, in addition to government bonds and interbank lending, foreign banks felt the mounting need of expanding their operations into these lucrative markets. Furthermore, some banks like NBG and EFG Eurobank have expressed their intentions to spread their investments to sectors other than banking as well.

Increasing foreign bank entry in recent years has generated arguments to limit foreign banks' presence in Turkey. In terms of majority shares, the foreign ownership in the Turkish banking sector is above the Euro Zone average of 19.5 per cent and, below the EU-27 average of 28.7 per cent. In Eastern Europe, however, these ratios are much higher, like 81.6 per cent in Bulgaria, 70.5 per cent in Poland and 57.4 per cent in Hungary (Table 10). Upon the experiences of Eastern European countries, one may think that once global financial conditions ameliorate, foreign bank ownership in

Turkey will continue to rise. However, Eastern European countries are rather unique in this respect. These countries received foreign bank entries when their banking systems were completely dysfunctional following the collapse of their former regimes, hence foreign banks were easily able to penetrate in these markets. However, banks in Turkey are much more experienced and sophisticated, implying that foreign bank entries are not likely to reach the levels in Eastern European countries in the near future (Steinherr et al. 2004).

#### INSERT TABLE 10

As the major foreign bank entries have occurred from 2005 on, it is still too early to fully assess their costs and benefits to Turkey. As an immediate benefit, they created considerable amounts of FDI inflows in the last three years. Actually, much more is expected from foreign banks (Aysan and Ceyhan 2008b). Since they have better access to international capital markets, they are expected to regularly bring capital at more suitable conditions: in larger quantities, with longer maturity and at lower costs. However, due to deteriorating global liquidity conditions, those expected capital inflows have not yet started. Such benefits of regular and favorable capital inflows are likely to be received during more stable periods in the coming years.

Foreign banks are expected to bring better technologies and thereby increase the efficiency of the sector. These expectations are not really verified. Aysan and Ceyhan (2007) report that the technologies of domestic banks are not necessarily less advanced than their foreign counterparts. In certain IT products, domestic banks are even claimed

to be superior. Moreover, some foreign banks like Fortis and NBB consider relocating some of their IT businesses in other countries to Turkey. Aysan and Ceyhan (2008c) also show that there are no statically significant efficiency differences between similar types of domestic and foreign banks.

As for the costs of foreign bank entries, the ongoing global credit crisis and the resulting financial problems in the home countries of some foreign banks (like Fortis and Dexia) intensified the concerns about capital flight by such foreign banks, though this possibility was considered to be a rather remote brainstorming exercise in 2005. With such fears, some depositors have already shifted their deposits from foreign to domestic banks.<sup>9</sup> Another concern is about the possibility that foreign banks may leave Turkey and put the Turkish financial system into jeopardy due to their problems in other parts of world. No such capital flight scenarios have realized yet.

It is argued that foreign bank entries have the potential to adversely affect competition. Since foreign banks have certain cost advantages in raising capital, they are expected to increase their market shares at the expense of domestic banks and acquire market power in financial markets. It is also argued that foreign banks may refrain from extending loans to SMEs and certain strategic sectors. As of now, the competition in the banking sector does not appear to be altered much. Measures like the concentration ratios of the first 5 banks or the HHI index demonstrate that there is only a slight increase in competition after 2005. Moreover, foreign banks do not seem to be specifically focusing on large corporations. On the contrary, they express their intentions to grow in high

return businesses like SME financing. In general, foreign banks do not appear to be diverging from their domestic counterparts.

There is another concern about foreign banks which has not been discussed much in the literature. Turkish banks have been operating in Eastern European, Balkan and Central Asian countries through their branches and subsidiaries. It is argued that when domestic banks are sold with short term motives and at high prices, some long-term strategic advantages are lost, making it more difficult for Turkish banks and firms to operate and spread in those countries. Overall, time will better reveal whether the benefits of foreign bank entries in Turkey will prevail over the costs.

## **7. Conclusion**

This paper has examined the unexplored restructuring and transformation experiences of the Turkish banking sector up to 2008. After briefly explaining the major characteristics of the banking sector until the 2001 crisis, the outbreak of the crisis and the regulatory measures in aftermath to strengthen banks are discussed. Regulators emerged rather powerful after the severe crisis to implement regulatory reforms while domestic coalitions against reforms in the banking sector were dissolved. The regulations mainly aimed at restructuring state banks, resolving the situation of the unhealthy banks under the SDIF, strengthening private banks and providing a better framework to regulate banks. To this end, many measures to limit various types of risks were institutionalized in the later years of the post-crisis period. Due to the lessons derived from crises, the regulators took a more proactive stance. Basel-II provided an important benchmark for

them to follow. Furthermore, certain proactive measures in recent years made the banking sector more prepared for the global shocks.

This paper has classified the post-crises era into two sub-periods. The first period comes up to 2004 and is named as the *recovery and stabilization period* of the banking sector in Turkey. The major characteristics of this period were the restructuring of the banking sector through regulations, the consolidation of the asset structure and reductions in the numbers of banks, employees, and branches. The sector started growing in 2004, marking the *growth period*. The numbers of bank branches and employees started to increase along with a rapid increase in the assets of the banking sector. The growth period has also coincided with the favorable global liquidity conditions in international financial markets and improved macroeconomic conditions at home. Declining inflation rates and fiscal prudence helped banks assume their intermediation role, transferring the weights in their portfolios from government securities to loans. The December 2004 decision of the EU to start accession negotiations with Turkey was another important milestone in the growth period as a result of which the confidence in the Turkish economy and especially in the banking sector has been strengthened.

Another important feature of the *growth period* was the significant foreign bank entry. Just in a couple of years, the asset shares of foreign banks increased substantially. The reasons for these foreign bank entries are classified into three groups as related to global, domestic and home country conditions. After covering these reasons, the paper has gone on to examine the costs and benefits of these entries. So far, Turkey has mainly benefited from the immediate capital inflows generated by foreign bank entries.

However, possible capital outflows and the loss of competitiveness of Turkish banks in Eastern Europe and Central Asia are potential drawbacks.

This paper has also investigated various widely used indicators of banking sector efficiency to uncover the structural change experienced in the sector during the post-crisis era. Efficiency indicators, both ratios and econometric indices, suggest that banks in general have reached higher levels of efficiency in this period. Furthermore, due to the regulations adopted, there appears to be a convergence in the efficiency performances of various types of banks. With respect to the profitability indicators, the banks reached higher profitability ratios after 2005. International comparisons reveal that ROE and ROA measures of profitability are rather high in Turkey, partly explaining the mounting interest of international investors in Turkish banks.

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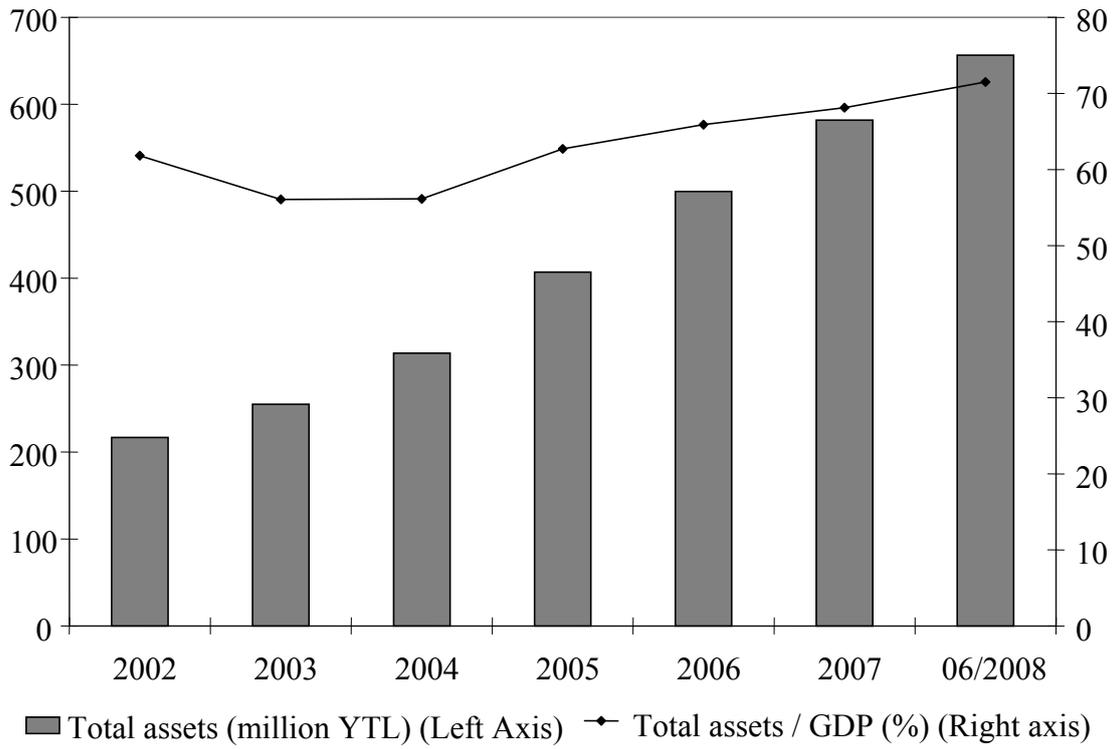
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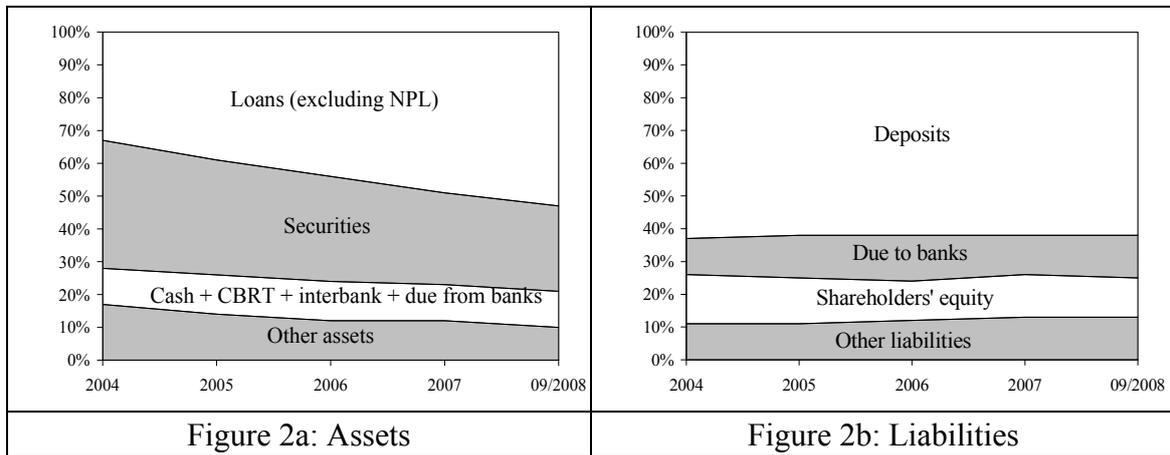
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Figure 1: Total assets in the Turkish banking sector



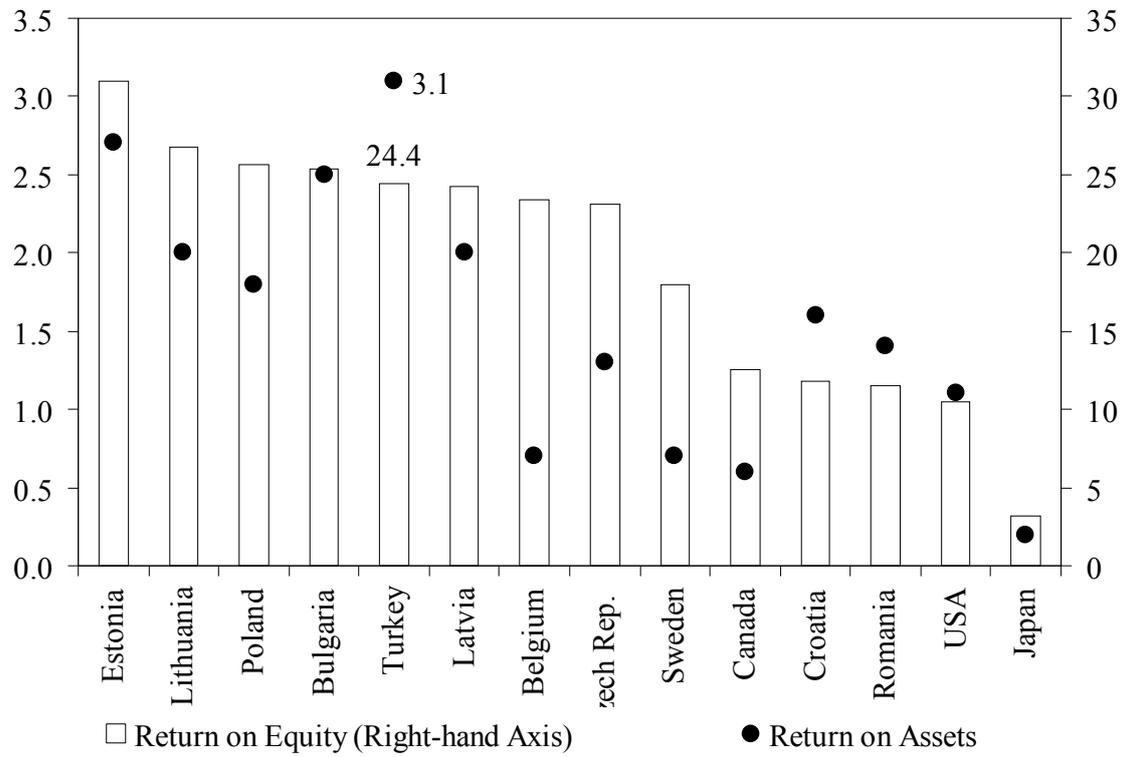
Source: CBRT Financial Stability Report, November 2008; BRSA.

Figure 2: Asset and liability structure of the Turkish banking sector in percentages



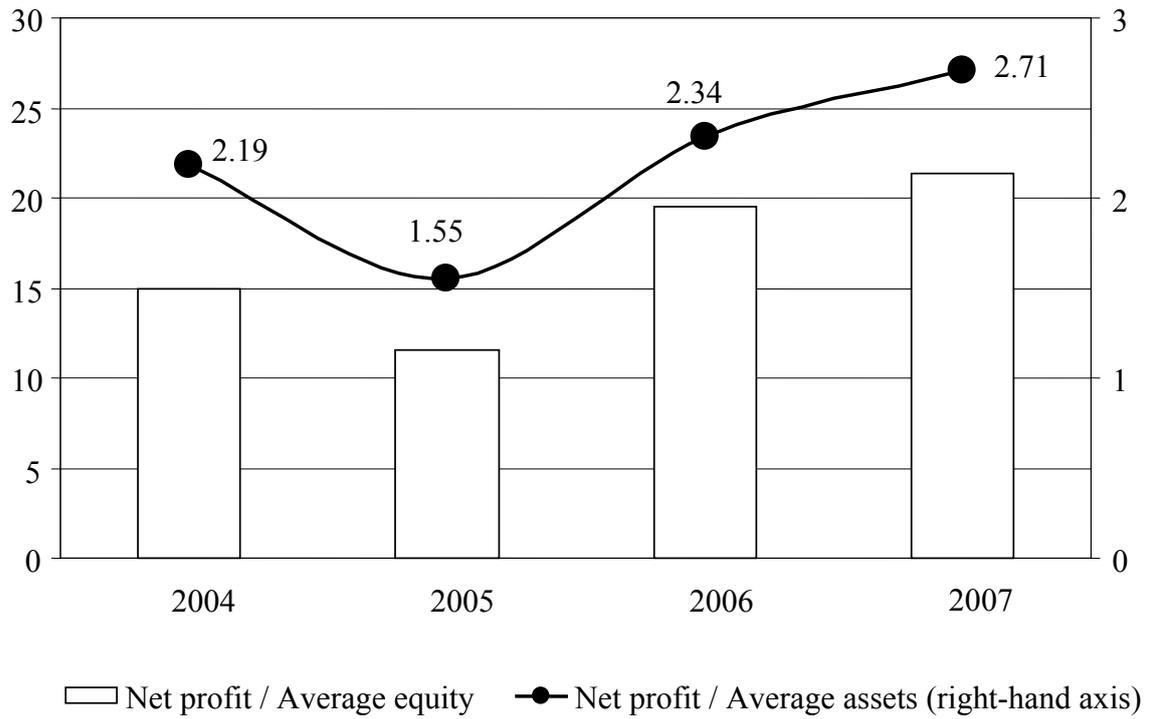
Source: CBRT and BRSA.

Figure 3: Returns on equity and assets in 2007



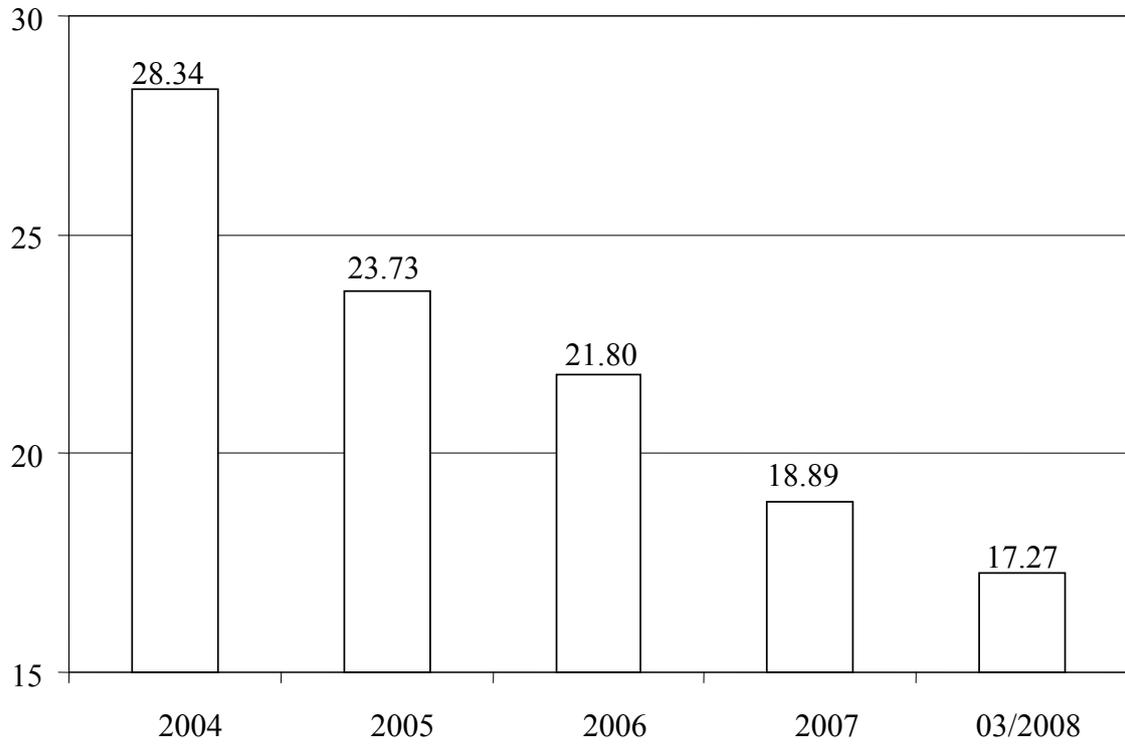
Source: CBRT Financial Stability Report, May 2008.

Figure 4: Net profit indicators



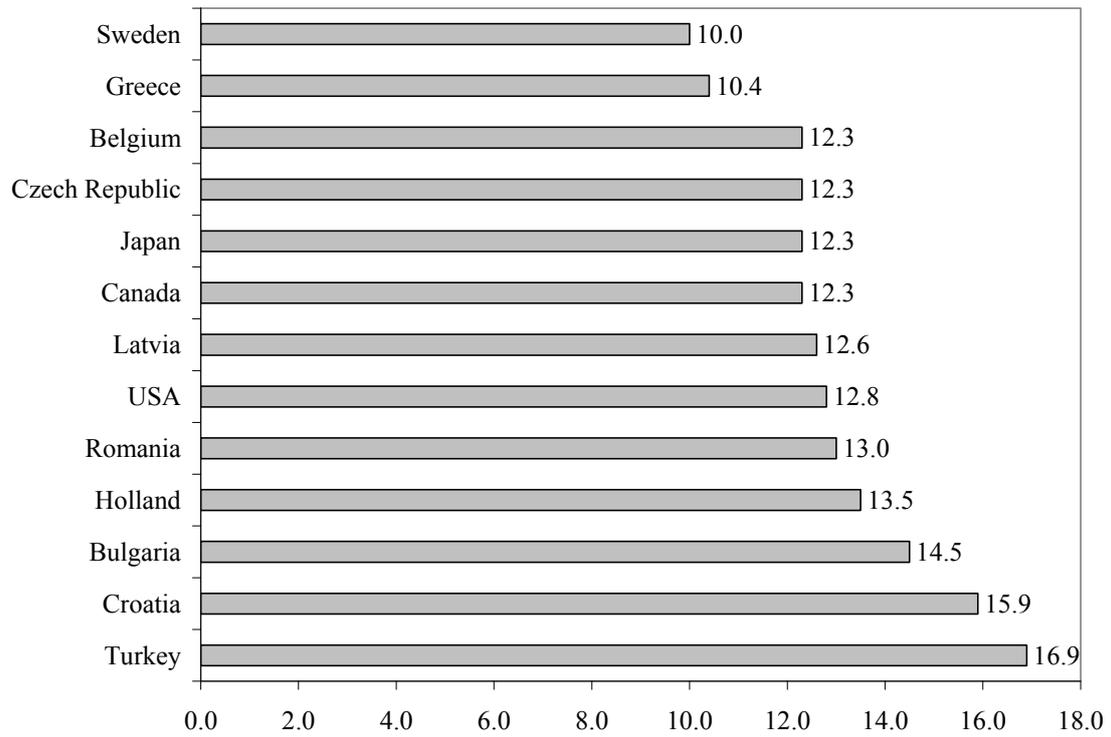
Source: CBRT Financial Stability Report, May 2008.

Figure 5: Capital adequacy ratio in Turkish banks



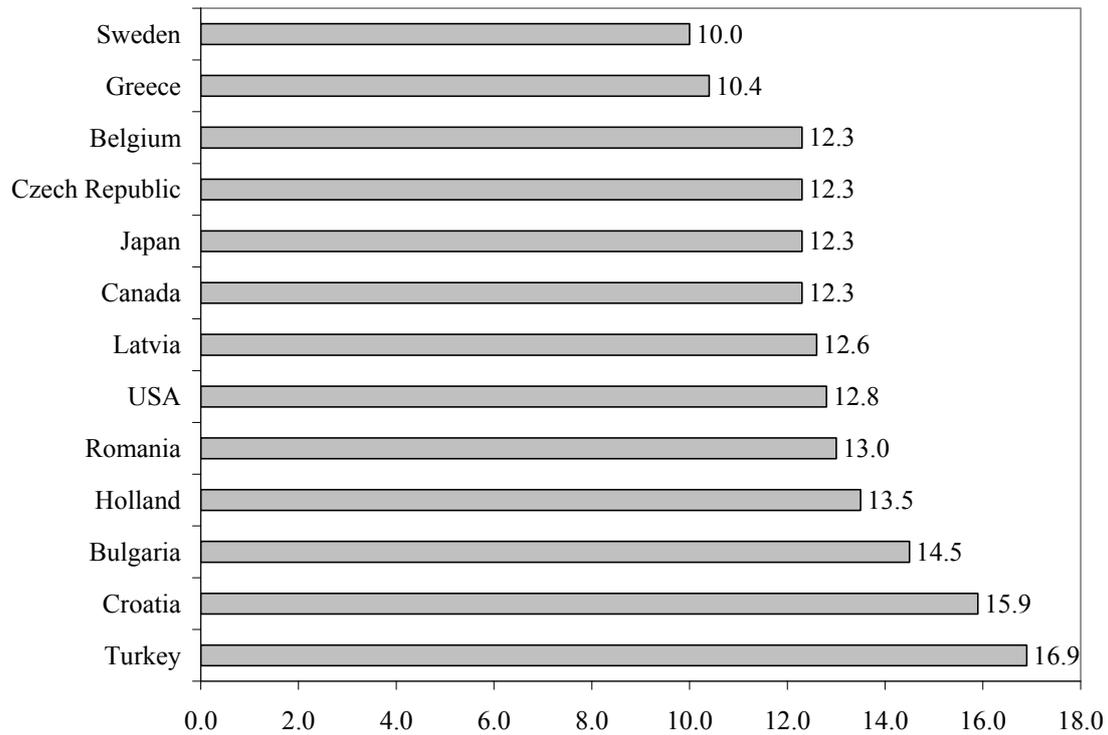
Source: CBRT Financial Stability Report, May 2008.

Figure 6: CAR by selected EU and candidate countries



Source: CBRT Financial Stability Report, November 2008.

Figure 7: CAR by selected EU and candidate countries



Source: CBRT Financial Stability Report, November 2008.

Table 1: Composition of balance sheet of the Turkish financial sector in 06/2008

	<b>Ratio</b>
Banks	88.0
Securities Mutual Funds	3.3
Insurance Companies	3.1
Leasing Companies	2.0
Factoring Companies	1.2
Pension Funds	0.7
Consumer Finance Companies	0.6
Intermediary Institutions	0.5
Real Estate Investment Funds	0.5
Securities Investment Funds	0.1
	<b>100.0</b>

Source: CBRT Financial Stability Report, May 2008.

Table 2: Banks taken over by the SDIF 1998-2003

<i>Bank</i>	<i>Takeover date</i>	<i>Status</i>	<i>Resolution date</i>
Bank Expres	Dec 12, 1998	Sold to Tekfenbank	Jun 30, 2001
Interbank	Jan 7, 1999	Merged with Etibank	Jun 15, 2001
Esbank	Dec 21, 1999	Merged with Etibank	Jun 15, 2001
Egebank	Dec 21, 1999	Merged with Sümerbank	Jan 26, 2001
Yurtbank	Dec 21, 1999	Merged with Sümerbank	Jan 26, 2001
Yaşarbank	Dec 21, 1999	Merged with Sümerbank	Jan 26, 2001
Sümerbank	Dec 21, 1999	Transferred to Oyakbank	Jan 11, 2002
Etibank	Oct 27, 2000	Merged with Bayındırbank	Apr 4, 2002
Bank Kapital	Oct 27, 2000	Merged with Sümerbank	Jan 26, 2001
Demirbank	Dec 6, 2000	Shares transferred to HSBC	Oct 30, 2001
Ulusalbank	Feb 28, 2001	Merged with Sümerbank	Apr 17, 2001
Iktisat Bankası	Mar 15, 2001	Merged with Bayındırbank	Apr 4, 2002
Sitebank	Jul 9, 2001	Shares transferred to Novabank	Jan 25, 2002
Bayındırbank	Jul 9, 2001	Restructured as "Birleşik Fon Bankası" under SDIF	Dec 7, 2005
Kentbank	Jul 9, 2001	Merged with Bayındırbank	Apr 4, 2002
EGS Bank	Jul 9, 2001	Merged with Bayındırbank	Jan 18, 2002
Tarişbank	Jul 9, 2001	Shares transferred to Denizbank	Dec 27, 2002
Toprakbank	Nov 30, 2001	Merged with Bayındırbank	Sep 30, 2002
Pamukbank	Jun 19, 2002	Transferred to Halkbank	Nov 12, 2004
Imarbank	Jul 3, 2003	Decision to liquidate taken	Continuing

Source: SDIF

*Table 3: Structural indicators of the banking sector*

	2000	2001	2002	2003	2004	2005	2006	2007	06/2008
<b>Number of banks</b>	85	67	59	55	53	51	50	50	50
Public deposit banks	4	3	3	3	3	3	3	3	3
Private deposit banks	28	22	20	18	18	17	14	12	11
Banks under the SDIF	11	6	2	2	1	1	1	1	1
Foreign deposit banks	18	15	15	13	13	13	15	17	18
Development and investment banks	18	15	14	14	13	13	13	13	13
Participation banks	6	6	5	5	5	4	4	4	4
<b>Number of branches</b>			6,351	6,078	6,219	6,537	7,296	8,117	8,722
Deposit banks			6,169	6,046	6,186	6,220	6,898	7,653	8,203
Development and investment banks			34	32	33	25	42	42	48
Participation Banks			148			292	356	422	471
<b>Number of employees</b>			126,539	124,030	127,944	138,724	150,793	167,760	177,175
Deposit banks			118,321	118,603	122,592	127,851	138,426	153,212	161,483
Development and investment banks			5,688	5,427	5,352	5,126	5,255	5,361	5,378
Participation banks			2,530			5,747	7,112	9,187	10,314

*Source:* BRSA Financial Markets Report, June 2008; BRSA.

*Table 4: Banking sector assets according to equity ownership (%)*

	2004	2005	2006	2007	<b>09.2008</b>
State	38.3	31.0	28.0	25.6	25.4
Private	41.4	36.5	31.0	28.9	29.0
Foreign	4.3	12.4	22.4	24.8	25.4
Publicly held	16.0	20.1	18.6	20.7	20.2

*Source:* CBRT Financial Stability Report, May 2008; CBRT.

*Note:* Publicly held shares include both domestic and foreign investors.

Table 5: Selected balance sheet items in selected EU Countries and Turkey (2007)

	Assets / GDP (%)	Deposits / GDP (%)	Loans / GDP (%)	Loans / Deposits (%)	Share of the Largest 5 Credit Institutions (%)
Germany	312.12	119	130	109	22
Belgium	392.32	155	126	81	83
Bulgaria	108.09	69	67	97	57
Czech Republic	109.81	73	53	72	66
France	353.14	83	114	137	52
United Kingdom	499.95	290	288	99	41
Latvia	154.57	72	104	145	67
Lithuania	85.01	42	63	152	81
Luxembourg	2,533.27	819	531	65	28
Hungary	107.35	51	65	128	54
Poland	76.79	48	43	91	47
Romania	59.37	32	35	109	56
Greece	167.41	109	87	80	68
Euro zone average	318.48	112	136	121	55
EU-27 average	334.09	136	157	116	59
Turkey	68.14	42	35	83	60
Turkey 06/2008	71.5	44	38	87	59

Source: CBRT Financial Stability Report, November 2008.

Note: The definition of “credit institutions” may differ across countries.

Table 6: Ratio of total household debt to GDP in selected EU countries and Turkey

	2005	2006	2007
Lithuania	13.2	19.3	25.9
Czech Republic	14.3	17.3	21.4
Hungary	16.9	21.1	23.2
Latvia	27.1	38.3	43.3
Poland	15.1	18.2	23.7
Italy	27.6	29.2	30.3
Greece	36.2	41.0	40.9
Portugal	67.3	74.3	78.6
Spain	68.6	76.8	80.4
EU-27	54.6	56.4	55.8
Turkey	7.7	9.7	11.7

Source: CBRT Financial Stability Report, November 2008.

Table 7: Concentration Indicators by Total Assets

	2002	2003	2004	2005	2006	2007
First 5 banks	57.4	59.0	58.1	61.4	60.9	59.8
First 10 banks	79.3	80.6	82.0	82.9	83.5	82.5
HHI	851.7	904.6	905.9	934.7	911.0	879.1

Source: BRSA Structural Developments in Banking, December 2007.

Table 8: Indicators of the intermediation level of banks and financial deepening

<i>Years</i>	<i>Deposits/GDP</i>	<i>Loans/GDP</i>	<b>Loans/Deposits</b>
2003	35	17	49
2004	35	20	56
2005	39	25	65
2006	41	30	74
2007	42	35	83
6/2008	44	38	87

Source: CBRT Financial Stability Report, May 2008 and November 2008.

Note: Loans include non-performing loans. Deposits include participation funds and loans include funds extended by participation banks.

Table 9: Foreign capital in the Turkish banking sector (July 2008)

	<i>Bank's share in total assets</i>	<i>Foreign Share (a)</i>	<i>Share of foreign-owned stock exchange</i>	<b>Total foreign capital share (b)</b>
ABN AMRO BANK	0.2	100	0	100
AKBANK T.A.Ş.	11.3	10.3	25.8	36.1
ALBARAKA TURK KATILIM BANKASI A.Ş.	0.7	61.9	11.4	73.3
ALTERNATİFBANK	0.5	0	0.1	0.1
ARAP TÜRK B.	0.1	64	0	64
ASYA KATILIM BANKASI A.Ş.	1.2	0	28	28
BANK MELLAT	0	100	0	100
BANKPOZİTİF KREDİ VE KALKINMA BANKASI A.Ş.	0.2	65	0	65
CALYON BANK T.A.Ş.	0	100	0	100
CITIBANK	0.7	100	0	100
DENİZBANK	2.7	75	24.8	99.8
DEUTSCHE BANK A.Ş.	0.2	100	0	100
EUROBANK TEKFEN A.Ş.	0.5	93.2	0	93.2
FİNANSBANK A.Ş.	3.8	51.7	38.3	90
FORTIS BANK A.Ş.	1.7	65	29.2	94.2
HABİB BANK	0	100	0	100
HSBC BANK	2.2	100	0	100
ING BANK A.Ş.	2.3	100	0	100
İMKB TAKAS VE SAKLAMA BANKASI A.Ş.	0.3	4.9	0	4.9
JP MORGAN CHASE BANK	0	100	0	100
KUVEYT TÜRK EVKAF FİNANS KURUMU A.Ş.	0.7	80.2	0	80.2
MERRILL LYNCH	0	100	0	100
MILLENİUM BANK	0.2	100	0	100
SOCIETE GENERALE	0.1	100	0	100
ŞEKERBANK	1.1	0	47.3	47.3
T.EKONOMİ B.	2.1	0	11.7	11.7
T.GARANTİ B.	11.7	20.8	42.1	62.8
T.HALK B.	7	0	5.9	5.9
T.İŞ BANKASI	13	0	21.9	21.9
T.SİNAI KALKINMA B.	0.8	0	6.6	6.6
T.VAKIFLAR B.	7.3	0	21.5	21.5
TAIB YATIRIM BANKASI A.Ş.	0	99.3	0	99.3
TEKSTİL BANKASI A.Ş.	0.5	0	3.8	3.8
TURKISH BANK	0.1	40	0	40
TURKLAND BANK A.Ş.	0.1	100	0	100
TÜRKİYE FİNANS KATILIM BANKASI A.Ş.	1	60	0	60
UNICREDIT BANCA Dİ ROMA	0	100	0	100
WESTLB AG	0.1	100	0	100
YAPI VE KREDİ B.	9.3	76.2	6.6	82.8
<b>Sector Total (%)</b>		<b>24.3</b>	<b>17.1</b>	<b>41.5</b>

Source: BRSA Financial Markets Report, June 2008.

Notes: (a) Foreign share = (ratio of foreign share in bank \* bank's assets) / total assets of the sector. (b) Total = foreign share + stock market shares.

Table 10: Foreign participation in the banking sector in selected EU countries and Turkey in 2007 (%)

	<i>Foreign participation (%)</i>		<b>Foreign participation (%)</b>
Belgium	24.8	Luxembourg	95.0
Bulgaria	81.6	Poland	70.5
Czech Republic	91.5	Portugal	23.0
France	12.9	Romania	82.1
Germany	11.1	United Kingdom	53.4
Greece	23.2	Euro zone average	19.5
Hungary	57.4	EU-27 average	28.7
Latvia	58.0	Turkey	24.8
Lithuania	83.7	Turkey 06/2008	25.6

Source: CBRT Financial Stability Report, November 2008.

<sup>1</sup> See Celasun (1998), Akyüz and Boratav (2003) and Ertuğrul and Selçuk (2001)

<sup>2</sup> In Basel I, banks' assets were classified into four risk-weight groups (0 percent, 20 percent, 50 percent and 100 percent) according to the debtor category (i.e. OECD countries' governments, banks in OECD countries, municipalities and corporations, respectively).

<sup>3</sup> The discussions on these proposals continue, and it seems that they will last long. For more on Basel-I and II, see (Yildiran 2008) and the references therein.

<sup>4</sup> These Letters of Intent can be accessed at <http://www.imf.org/external/country/tur/index.htm?pn=0> (last accessed on January 21, 2009).

<sup>5</sup> These structural issues along with the weak regulatory and supervisory framework were also pointed out to be the reason of the negligible presence of foreign banks in the sector till early 2000's (Ersel 1999).

<sup>6</sup> See Table 2 for a list of failed banks.

<sup>7</sup> See Steinherr et al. (2004) and various reports of the BRSA and CBRT for more details.

<sup>8</sup> This case, which is rather considered to be part of the institutional learning process, staggeringly showed how monitoring system could fail to detect looting and illegal reporting practices of banks.

<sup>9</sup> The head of BRSA, Tevfik Bilgin, has announced that BRSA has been closely following the foreign banks and that they would not be allowed to transfer the deposits in Turkey to their home countries.

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