

Causes, Effects and Solutions of Banking Crises: The Case of Turkey

Türkiye'de Bankacılık Krizlerinin Nedenleri, Etkileri ve Çözüm Önerileri

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ABSTRACT

Baking crises are caused by the loss of solvency in banking system. The underlying factors can be attributed to banks inability to carry out their repayment obligations due to certain factors like liquidity shortage, capital shortage and loss of all capitals of banks. Crises in banking sector which performs crucial roles both in financial markets and reel sector result in failure of funds transfer, and this directly affects financial sector. The reasons and results of banking crises observed in distinct countries substantially differ from one another. Banking crises in 1994, 2000 and 2001, 2008 had serious negative effects on banking sector in Turkey. In this study, the causes and effects of banking crises and their repercussions on Turkish banking sector are discussed, and policies are recommended to prevent crises.

Keywords: Banking sector, banking crises, cost of crisis

ÖZET

Bankacılık krizleri, bankacılık sisteminin ödeme gücünü kaybetmesi nedeniyle ortaya çıkan bir kriz türüdür. Bankacılık krizleri, bankaların likidite yetersizliği, sermaye yetersizliği veya sermayelerinin tamamını kaybetmeleri sonucunda ödeme yükümlülüklerini yerine getirememeleri gibi birçok nedene bağlı olarak ortaya çıkmaktadır. Finansal sistem içinde hem finansal piyasalar hem de reel sektör arasında önemli bir rol üstlenen bankacılık sektöründe ortaya çıkan krizler reel sektörde aktarılan kaynaklarda aksamalara yol açmaktadır. Bu durum finans sektörünü derinden etkilemektedir. Dünya'nın birçok yerinde meydana gelen bankacılık krizlerinin nedenleri ve sonuçları birbirinden farklılık göstermektedir. Ülkemizde 1994, 2000 ve 2001, 2008 yıllarında yaşanan krizler bankacılık sektörünü olumsuz yönde etkilemiştir. Bu çalışmada bankacılık krizlerin nedenleri, etkileri, Türk bankacılık sektörüne yansıması ve krizlerin gerçekleşmesini önleyecek çözüm önerilerine yer verilmiştir.

Anahtar Kelimeler: Bankacılık Sektörü, Bankacılık Krizi, Krizin Maliyetleri

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1. Introduction

Banks take on vital roles in the financial markets of developing countries. They have a key position for establishing financial stability of the economic system, thus banking sector must have a stable structure. Banking sector involves risk and risk-taking decisions; therefore, any negative circumstance that could occur in this sector inevitably and swiftly affects other sectors and possibly other global economies, which are strongly tied in today's world.

Banking crises are caused by insolvency of banks. Governments must develop policies to minimize risks in banking activities and implement regulatory and observation mechanisms to prevent banking crisis.

A solid banking sector is a prerequisite for financial development. And fundamental precautions should be taken against banking crises to sustain fast developing and expanding banking sector. In this regard, this study investigates the causes of banking crises, their effects on Turkish finance markets and suggests possible solutions against crises. The study consists of five sections. The causes of banking crises are discussed in the initial two sections, and possible precautions are suggested against banking crises in the third section. The fourth section gives detailed information about banking crises that took place in Turkish finance history and reconstruction program for Turkish banking sector. The last section dwells upon the precautions and solutions specific to Turkey.

2. Banking Crisis and Effects

During banking crisis, concerned customers rush to withdraw their cash due to the loss of confidence in financial markets and banks. Banking sector becomes vulnerable to crisis on account of such factors as the weakness of financial system, unstable macroeconomic conditions, lack of auditing and regulatory mechanisms, inadequacy of legal regulations (Altunöz, 2013:15).

At least one of the following conditions should exist for banking crisis to become a systematic structural problem (Demirgür Kunt and Detragiache, 1998:91):

- Banking problems caused by largely expropriated banks.
- Unpaid loans surmounting 10% of total equities of banking system.
- Large customer rush to withdraw cash from banks and necessity for emergent actions like freezing deposits against crisis or enacting deposit insurance.
- Bailout budget accounting for 2% of GDP

The primary effect of banking crises manifests itself through deposit withdrawals. On the other hand, if the deposits are under a guarantee scheme in the banks, banking crisis can be confined from spreading other sectors. However, if the crisis should expand and confidence in banking sector is lost, large amounts of cash are outflowed and many banks go bankrupt. Also, the expenditures of the remaining banks will dramatically

increase. The effects of banking crisis are felt not only in banking sectors but in all economy. Therefore, banking crises require special attention of all parties (Günal,2012:230).

3. The Causes of Banking Crises

Banking crises disrupt the function of credit and payment balance of financial sector, limit individual and business operations and reduce the investment and consumption rates. Moreover, they result in capital outflows and loss of confidence in banks (Hoggart, Reis and Saporta 2001: 10, Kishan and Opiela, 2000: 121).

The reasons behind banking crises can be discussed under two main sub-sections i.e. microeconomic and macroeconomic factors.

3.1. Macroeconomic Factors

Macroeconomic instability is a major cause for banking crisis. Therefore, macroeconomic indicators e.g. price stability, course of inflation, growth rate, product output, consumption rate, investments, etc. are closely monitored (Kaya, 2015:559).

The macroeconomic causes of banking crises can be summarized under following main captions.

- **Inflation:** High inflation brings about uncertainty for a country. Firms will not make investment, while banks will become reluctant to give loans on account of uncertainty. Therefore, financial and banking system will not function well under these circumstances (Yüksel, 2015:21).
- **Low growth rate:** Low growth rate is another important factor causing banking crisis. Demirgürç Kunt and Detragiache reported a significant relation between low growth rate and banking crises (Demirgürç Kunt and Detragiache, 1998:10):
- **Exchange rate fluctuations:** In the cases of high fluctuations in exchange rates, banks could incur heavy financial losses. For instance, when a country's currency loses value with respect to one or more foreign reference currencies and banks have foreign currency debts higher than their equities, they will inevitably suffer from the increasing exchange rate, and the debts of banks with short positions will increase higher than their equities. In cases of very high devaluation, banks will most probably go bankrupt (Kaval, 2000:259).
- **Instability in international interest rates:** Countries would have to increase their interest rate due to the sudden upsurge in international interest rates. Firms would fail to pay their bank loans due to increasing cost of borrowing, which will have a domino effect resulting in banking crisis (Kaminsky, G. L., Reinhart. C. M., 1996:14)
- **Financial instability:** Financial stability is a state in which national economy is resistant to sudden economic shocks. There could be occasional fluctuations

and economy could become fragile and instability arises. Financial instability, in turn, causes loss of confidence in banking sector (Yüksel, 2015:29).

3.2. Microeconomic Factors

Microeconomic factors like fast increasing overdue or unpaid credits as well as risky transactions in portfolio could have strong effects over banking activities (Tunay, 2010:453). Microeconomic causes for banking crisis can be summarized as follows:

- **Banking risks:** Banks face many challenges. Banking risks can be divided in three main categories as credit risks, market risks and operational risks. Credit risk signifies the risk arising from a borrower failing to make necessary payments (Williamson,2008:12). Market risk is the risk for banks to experience losses due to fluctuations in interest rates, exchange rates and stock markets (Jorion, P., 1997:26).Operational risk covers other risks that banks encounter and not included in market and credit risk groups (Geiger, 2000: 4).
- **Bad management and inadequate auditing:** Another reason for failure in banking applications is the inadequate and discouraging management practices. The inexperienced and undereducated managerial staff is a factor contributing to the occurrence of banking crises. Predictive inspection mechanism for possible financial risk is an important component for banking sector.
- **Moral risk:** There is a common belief that bank failure will be curbed and they will never be let to go into bankruptcy somehow and they will receive incentives from the government when needed. However, banks might abuse this common belief for their own sake. This situation is known as moral risk, and banks could take higher risks as they think that government will support them at all costs. Higher risks will eventually result in banking failure and bankruptcy (Coşkun, 2001:43).
- **Intensive competition:** Increasing competition in banking sector creates certain problems for banks. The number of banks has substantially increased and all strive to expand, which grows credit amount. Accordingly, banks start to ignore morality reports of customers applying for credit. This could increase the amount of unpaid problematic credit. Dramatic increase of nonperforming loans could even result in bankruptcy in the long run.

4. Preventing Banking Failure

The first step to confine and prevent crisis is to ensure confidence in banking sector. Once the expansion of crisis is taken under control, banks should be restructured and regularized for finance sector. For this purpose, certain measures should be taken. In this regard, following steps are suggested to prevent banking crisis:

1. Deposit insurance scheme: In this scheme, it is aimed to stop depositors from panicking and running to banks for cash withdrawal. Private or public insurance companies can include deposit insurance under whole or partial

insurance in favor of the depositors. At the same time, this scheme is effectively used to give confidence that in case of banking failure or bankruptcy, depositors will be protected or reimbursed by the government (Diamond and Dybvig 2000: 14).

2. Effective surveillance and regulatory system: The main aim of the surveillance is to establish confidence and stability in financial system and minimize risks(Ayaz, 2011:42). In order to prevent banking crises, effective surveillance and regulatory systems should be developed.
3. Effective risk management policies: Risk management is quite important for banks. International regulations and criteria have been introduced to provide effective risk management in banks, which is known as Basel criteria (Babuşcu, 2005:4.).

5. Banking Crises in Turkey

5.1. 1994 Crisis

In 1994, foreign exchange reserve drastically declined due to high demand for foreign exchange. The steep demand could not be averted, and the government had to make devaluation, which deeply affected finance sector (Demirci, 2005:168).

During the 1994 crisis, many banks lost substantial amount of equities. Banking sector endured rapid shrinkage. Domestic private banks lost about 33% of their total assets. Similarly, total deposits in the banks shrunk by 14.7% in the first half of 1994. In order to prevent further loss of confidence in banks, government had to set 100% deposit guarantee in April, 1st(Kaya, 2015, 562).

5.2. 2000 November crisis

A Turkish bank which had large amounts of government debt securities started to sell them in the secondary markets as the credit channels were obstructed. This triggered sudden increase of interest rates (İşeri, 2004: 44).

Due to fragile structure of banking sector and international fluctuations, interest rates skyrocketed in November 2000, while stock exchange endured dramatic falls, which resulted in 2000 November crisis (Boratav, 2000:24-25).

Banks tended to close their open positions, which drew state-owned and private banks into a panic to borrow. Turkish banks were faced with some difficulties on external borrowing as risk premiums on borrowing interest rate in external (Euro) markets increased.

Banks' liquidity requirements rapidly increased, and banks looked for more liquidity through higher interest rates, which consequently increased the demand for foreign exchanges. In addition, foreign banks started to sell treasury securities and withdraw their investments from Turkey. This crisis influenced the markets, the real sector

experienced a contraction in demand, and speculations on foreign exchanges were stimulated. Higher interest rates, a \$7.5 billion IMF loan, and transfer of banks with higher liquidity requirements to the Savings Deposit Insurance Fund (SDIF) revived the markets (Ibiş, 2013:48).

5.3. 2001 February crisis

2000 November-2001 February crises were essentially exchange rate and banking related crises. The damages caused by 2000 November crisis, high interest rates and political instability played roles in the spread of crisis (Uygur, 2001:22). Following February 2001 crisis, “Banking Sector Restructuring Program” was enacted to reinstitute stability.

As a result of restructuring program, public banks share in the sector decreased, and concentration ration increased, as can be seen in Table 1.

Table 1. Banks share in the sector

| | T. Assets | | T. Deposits | | T. credits | |
|-----------------------|-----------|------|-------------|------|------------|------|
| | 2000 | 2001 | 2000 | 2001 | 2000 | 2001 |
| Merchant Banks | 96 | 95 | 100 | 100 | 91 | 87 |
| Public Banks | 34 | 32 | 40 | 32 | 27 | 21 |
| Private Banks | 47 | 56 | 44 | 61 | 54 | 61 |
| Future Banks | 9 | 4 | 13 | 5 | 7 | 1 |
| Foreign Banks | 5 | 3 | 3 | 2 | 3 | 3 |
| Dev. and Inv. banks | 4 | 5 | - | - | 9 | 13 |

Resource: BDDK, Banking Sector Restructuring Program Progress Reports and BAT, Banks 2001.

The number of banks operating in Turkish banking sector was 81 in June 2000; it decreased to 79 in December 2000 and to 74 in June 2001. Including branches in the Turkish Republic of Northern Cyprus and branches abroad, the number of branches was 7,687, 7,838, and 7,542 on the same dates, respectively. In June 2000, of these 74 banks, 56 banks were deposit money banks and 18 were investment and development banks. Of the 56 deposit money banks, 27 were private domestic banks, 17 were private foreign banks, 4 were state banks, and 8 were under the SDIF. There was a contraction in banking sector employment that paralleled the decrease in number of branches. Total employment in the banking sector decreased from 173,988 in December 1999 to 170,401 in December 2000; it decreased to 154,651 in June 2001. By June 2001, the number of persons employed by commercial banks was 149,169; in comparison, 5,482 were employed by development and investment banks. Of the persons employed by commercial banks, 60,341 persons were employed in state-owned banks, 68,485 in privately owned banks, 16,955 in banks in the Fund, and 3,388 in foreign banks (TBB, 2001:7).

As seen above, the per-branch employee number in state-owned banks is much higher than the per-branch employee numbers in private and foreign banks. This indicates both the overemployment in state-owned banks and the small-scale structure of private banks.

Table 2. Number of Banks Between 1980 and 2002

| YEARS | COMMERCIAL BANKS | | | | |
|----------------------------------|-------------------|---------------|---------------|----------------------|-----------|
| | State-owned Banks | Private Banks | Foreign Banks | Banks in Fund (SDIF) | Total |
| 1980 | 8 | 19 | 4 | - | 31 |
| 1990 | 7 | 25 | 22 | - | 54 |
| 1994 | 6 | 29 | 20 | - | 55 |
| 1999 | 4 | 31 | 19 | 8 | 62 |
| 2002* | 3 | 21 | 15 | 2 | 41 |
| DEVELOPMENT AND INVESTMENT BANKS | | | | | |
| 1980 | 4 | 2 | - | - | 6 |
| 1990 | 3 | 4 | 3 | - | 10 |
| 1994 | 3 | 6 | 3 | - | 12 |
| 1999 | 3 | 13 | 3 | - | 19 |
| 2002* | 3 | 8 | 3 | - | 14 |

Source: (TCMB, 2005) (*) as of November 11, 2002

The number of SDIF banks has changed continuously because of banks seized and merged by the Banking Regulation and Supervision Agency (BDDK). Establishing a banking institution in Turkey became easier in 1990s, hence the number of banks rapidly increased to 80; the size of their assets also increased (BDDK, 2002: 1).

5.4. The 2008 Global Economic Crisis

The 2006–2007 housing market financial crisis in the USA spread across the world. The unregulated finance industry was the main reason for the global financial crisis and global recession. The main reason for the U.S. subprime mortgage crisis and global financial crisis was that, after the peak of the U.S. real estate market in the year 2006, real estate prices began to crash (Hiç, 2009:1-4).

The impact of the global financial crisis on the Turkish banking sector occurred through the contractions in the credit channel and in rate of return. However, as an outcome of the regulations and reforms in the Turkish banking sector during the 2000–2001 crisis, the banking sector easily recovered from the contractionary effects of the global financial crisis. During 2009, the worst year of the financial crisis, the Turkish banking sector increased its net revenue and profits because of an increase in the net interest rate margin (Artar and Saridoğan, 2012:7).

After the 2001 crisis, Turkey proceeded on its way with its strong banking system, which has a strengthened capital adequacy ratio, strong public finance, low net public external borrowing, and by enforcing tight fiscal discipline (Batirol, 2008:1).

The banking sector financial strength index (Figure 1) shows that the financial strength index of the Turkish banking sector decreased after the initial impact of the global financial crisis in 2007, but due to financial measures, the index increased by 2008. The financial strength index continued to increase in 2009 following the increase in banking sector profitability (TCMB, 2011:52).

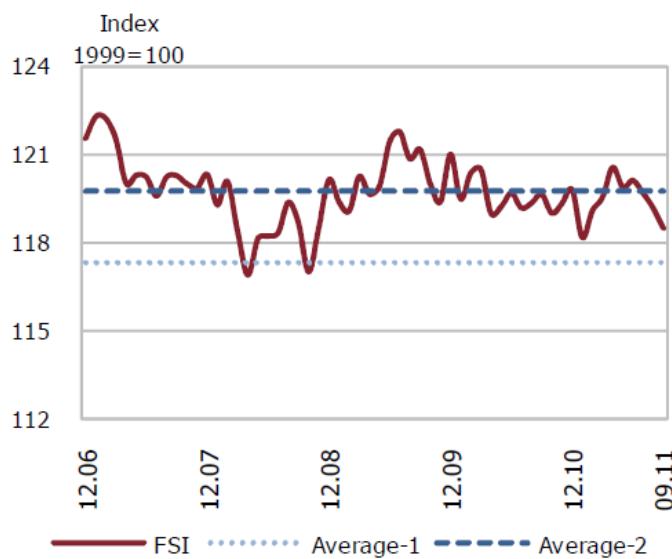


Figure 1. Banking Sector Financial Strength Index (TCMB, Financial Stability Report, November 2011, p.54).

Despite the contractionary effects of the global financial crisis on the Turkish economy and Turkish banking sector, no economic crisis ensued like those in the 1994 and 2000–2001 Turkish financial crises.

6. Early Warning Systems of Upcoming Banking Crises

The main indicators for early warning systems of upcoming banking crises can be summarized as follows:

- **Public Fiscal Deficit:** A fiscal deficit occurs when a government's total expenditures exceed the revenue that it generates (Ünsal, 2009:563). Budget deficit financing may be achieved through domestic borrowing, external

borrowing, or tax increases. Domestic borrowing leads an increase in interest rates, and higher interest rates in a country will tend to increase the cost of borrowing and consequently, decrease investment. A decline in investment will lead to lower profitability. Companies start to lay off their workers; therefore, the unemployment level increases. External borrowing is another way to finance a fiscal deficit. In this practice, governments sell government bonds to foreign investors. Accordingly, demand for the country's currency increases, and the exchange value of domestic currency increases. Therefore, the export amount increases while the amount of imports decreases, which leads to a current account deficit. An increase in tax rates is a way to finance a budget deficit. Increasing tax rates to increase tax revenue will lead to an increase in consumer burden. The amount of consumption decreases because of the higher tax rate. Thus, there is a decline in company revenues and producers must face the negative effects. It is clear that public fiscal deficits cause serious damage to economies. Countries may be faced with long-term crises because of public fiscal deficits (Yüksel,2015:46).

- **Current account deficit-to-GDP (Gross Domestic Product) Ratio:** A current account deficit is indicative of the possibility of a banking crisis. Analyses of the 1994 and 2001 Turkish financial crises confirm the current account deficit to be a significant early warning signal (Altunöz, U. (2014:116). A current account deficit-to-GDP ratio equivalent to 4% would be a crisis warning for an economy (Dornbusch, 2002:11). A current account deficit can be accepted as an early warning signal for the Turkish banking system.
- **A Sudden and High Capital Outflow in the Banking System:** A sudden capital outflow is one of the major reasons for banking crises. Also, higher capital outflows cause higher costs in crises (Cornford, A. and Akyüz, Y. (1999):563).
- **Deterioration of Balance Sheet:** A result of globalization is an increase in banking sector competition and the diversity of financial products. Which leads banks to take more risks. Consequently, some deteriorations in the balance sheet structure of banks occur; for example, a maturity mismatch between assets and liabilities in the balance sheet. A bank takes serious risks when it mismatches its balance sheet by having more short-term liabilities than it has short-term assets. A bank that is financing its short-term liabilities with long-terms assets inevitably faces a liquidity crisis with should a possible change in interest rate (Yüksel, 2015:46).

7. Turkish Banking Sector Restructuring Program

In order to strengthen the structure of banks of which financial and profitability status deteriorated due to the crises experienced in Turkish banking system, a new action titled “Banking Sector Restructuring Program” was enacted in 2001 May.

The aim of this program is to establish a strong banking sector which can resist to shocks and compete in the international finance sectors.

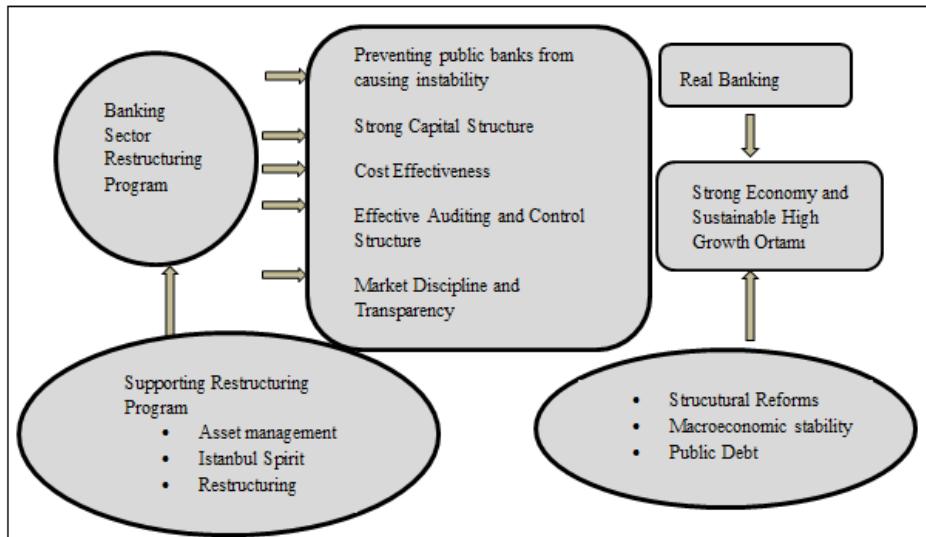


Figure 2. Restructuring program scheme (BDDK, 2009, From Crisis to Financial Stability- Turkey Experience).

The Restructuring Program aimed to eliminate problems of banking crises and establish a strong, healthy and functional banking sector. This can be expressed as follows (BDDK, 2009:11).

- 1) To strengthen private banks adversely affected by the crises
- 2) To enact legislative regulations for effective auditing and more competitive structure in banking sector
- 3) To restructure financial and operations aspects of public banks
- 4) To resolve the banks incorporated in to saving deposit insurance fund as soon as possible

7.1. Restructuring of State-Owned Banks

Financial restructuring of the state banks concentrated on:(1) liquidation of duty losses; (2) elimination of short-term liabilities; (3) strengthening the capital base; (4) determination of deposit rates in line with the market rates; and (5) efficient management of the loan portfolio.

State-owned banks deteriorated rapidly because of the accumulation of duty losses, inefficient use of funds, and inefficient management resulting from political intervention. Within the scope of financial restructuring, funds were transferred to

improve the balance sheet and capital structures of state-owned banks (Keskin, İnan, Mumcu, and Erdönmez, 2008:42)

The management of three state banks (Ziraat, Halk, and Emlak) was transferred to a newly appointed Joint Board of Directors, and the Emlak Bank was transferred to the Ziraat Bank on July 9, 2001. The capital adequacy ratios of those banks were brought above the regulatory requirement (Toprak and Demir, 2006,19.)

7.2. Restructuring of Private Banks

The November 2000 and February 2001 banking crises had negative effects on state-owned and SDIF-controlled banks, and on private banks as well.

To solve the capital inadequacy problem of private banks, time-bound commitment letters were taken to increase capital adequacy ratios up to 8% until the end of 2001. To decrease the equity costs of the banks, CBRT accepted to pay an interest based on market rates for required reserves of saving deposits in TL. Legal regulations were carried out to ease and to promote the union of banks and their subsidiaries (BDDK, 2001:48)

7.3. Restructuring of SDIF (Savings Deposit Insurance Fund)-controlled Banks

The total number of banks taken over by the SDIF was 2 at the end of 1998, and it increased to 8 in 1999. At the end of 2000, the total number of banks taken over by the SDIF was 11. Four banks (Egebank, Yurtbank, Yaşarbank and Bank Kapital) were merged with Sümerbank on January 26, 2001. In 2001, Ulusal Bank and İktisat Bankası were taken over by SDIF in February and March, respectively. Ulusal Bank was merged into Sümerbank. Thus, as of May 2001, there were 8 banks managed by the SDIF. All SDIF Banks, excluding Demirbank, were put under the joint board of management (BDDK, 2001:15).

Table 3. Banks' Transfer to the SDIF

| | |
|---|--|
| Banks Act Nr. 3182 | Ticaret Bankası, Bank Ekspres, Interbank |
| Article 14/3 of the Banks Act Nr. 4389 | Yaşarbank, Demirbank, Sitebank, Ulusalbank, Tarişbank |
| Article 14/3 and 4 of the Banks Act Nr. 4389 | Egebank, Yurtbank, Sümerbank, Esbank, Etibank, Bank Kapital İktisat Bankası, Bayındırbank, Kentbank, EGS Bank, Toprak Bank Pamukbank |

Source: BDDK, Banking Sector Restructuring Program, Ankara, 2001.

SDIF banks were under a resolution process through merger, sale, and liquidation, and were subjected to a comprehensive financial and operational restructuring process.

Table 4. List of Banks Merged and Sold Transferred to the SDIF

| BANKS MERGED | | | BANKS SOLD |
|-----------------------|---------------------|--------------------------|--|
| Merged into Sümerbank | Merged into Etibank | Merged into Bayındırbank | Demirbank (Sold to HSBC). |
| Yaşarbank | Esbank | Kentbank | Sümerbank (Sold to the Oyak Group) |
| Yurtbank | İnterbak | Toprakbank | Bank Ekspress (Sold to the Tekfen Group) |
| Ulusal Bank | | Etibank | Sitebank (Sold to Novabank) |
| Bank Kapital | | EGS Bank | Tarişbank (Sold to Denizbank) |
| Egebank | | İktisat Bankası | |

Source: BDDK, Turkish Banking Sector Restructuring Program, Ankara, 2001

A fund of USD 22.5 billion was required for SDIF banks to financially strengthen, restructure, and transfer their liabilities. USD 17.3 billion was provided by state-owned banks; the remaining USD 5.2 billion was provided by the SDIF revenue (BDDK, 2001:26)

7.4. 2016 Outlook of the Turkish Banking Sector

The financial structure of the Turkish banking sector was strengthened, the number of bank employees and branches increased, and a more balanced assets and liabilities structure was realized in the banks through the banking restructuring program in the aftermath of Turkish banking crises.

In the aftermath of the 2001 crisis, there were 54 banks in Turkey (40 deposit banks, 14 development and investment banks). The number of banks decreased to 45 in 2013. In 2015, the number of deposit banks increased to 34, and the number of development and investment banks was 13. The total number of banks increased to 52 in 2015 with the inclusion of participation banks. In that period, the number of state-owned banks remained constant, 11 private banks were closed, the number of banks under the Fund decreased from 2 to 1, and the number of foreign banks increased to 21 (Arican and Yücememiş, 2016:48).

For the Turkish Banking system over the period of October-December 2016, the total number of persons employed in deposit banks and development and investment banks decreased to 196,699 and the number of branches decreased to 10,781 (TBB, 2016:3).

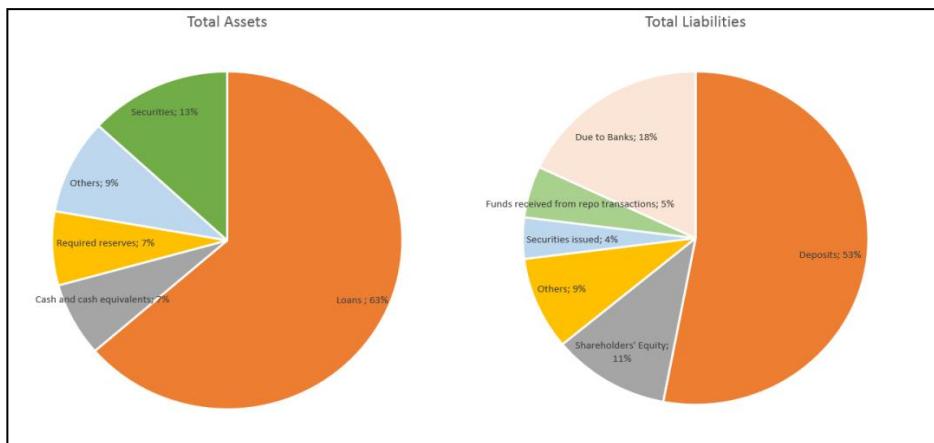


Figure 3. The Turkish Banking System by December 2016: Total Assets and Liabilities (BDDK, Main Indicators of the Turkish Banking Sector, December 2016)

The total assets of the Turkish banking increased by 7.8% compared to the previous quarter and rose to TRY 2.731 billion as of year-end 2016. Loans had shares of 63 percent in total assets. The share of deposits in total liabilities was the highest, with a 53% ratio, the share of funds borrowed was 18%, and the share of marketable securities was 5%. The net profit across the Turkish banking sector rose to TL 38 billion in 2016. The number of state-owned banks, domestic private, and foreign private banks had increased in 2016 compared with 2015. The loan volume of the banking sector amounted to TL 1.747 billion; TL 1.131 of this amount was foreign exchange loans (BDDK, 2016:6, 8,10).

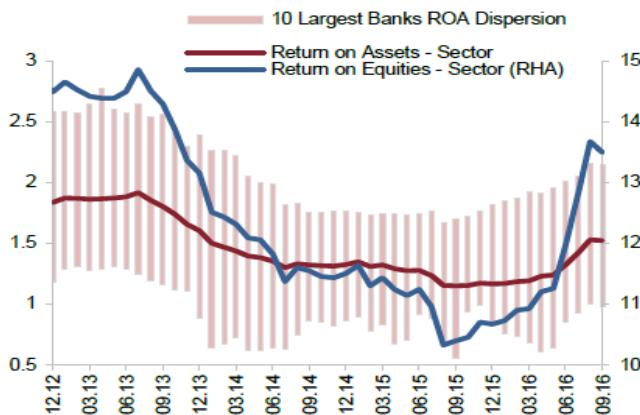


Figure 4. Return on Assets (ROA) and Return on Equities (ROE) (TCMB, Financial Stability Report, November 2016, Financial Section, p.54)

As of September 2016, the banking sector's annual cumulative net income increased by around 50 percent compared to the same period the previous year. Accordingly, the return on assets (ROA) and return on equity (ROE) of the banking sector also increased significantly over the past one year. This improvement in the indicators of profitability is a widespread phenomenon on a bank-by-bank basis. The enhancement in profitability supported equities, and thereby, with slowdown in loan growth, affected capital adequacy ratio (CAR) positively (TCMB, 2016:53). The data analysis of the Turkish banking sector suggests that the sector achieved a healthier structure in the aftermath of the crisis.

8. Conclusion

A banking crisis occurs when banks in a country lose an important part of their equities and enter into serious solvency or liquidity problems, upon which government take action and confiscate banks. In addition, banking crisis stimulates depositors to rush to banks for cash withdrawal due to confidence loss in banks. The primary reasons for banking crisis are lack of auditing mechanism, mismanagement, exchange crisis, and increasing interest rates. The biggest effect of banking crisis is the economic disruption in national economy. If banking crisis can be foreseen, necessary measures can be taken in time. For banking sector to have a sound structure, the sector should be improved to become crisis resistant. In this regard, policies and legislative regulations should be developed to solve structural problems that could trigger crisis. For this purpose, innovative arrangement should be introduced to change the structure of banking system into a more competitive and crisis resistant form. To conclude, the macroeconomic bases and financial structure of the Turkish banking sector should be strengthened in a sustainable way to decrease the effects of possible banking crises. In this regard, both financial macroeconomic policies, banking sector supervision, and risk management policies should be effectively designed and implemented.

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