“Revisiting the successive financial crises and bank failures on the threshold of a global hell: a qualitative review”

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Revisiting the successive financial crises and bank failures on the threshold of a global hell: a qualitative review

Abstract

The past couple of months have seen one of the worst financial crises in history that began in the US and then spread to Europe, Asia and the rest of the world since the Great Depression. In fact, rapid technological progress and new financial products together with liberalized and deregulated financial markets have increased financial integration across economies particularly in 1990s when financial landscape has intensely changed and then witnessed dramatic financial crises as well as significant bank failures affecting almost every country with a banking system. This paper is designed to review the past financial crises and bank failures, to discuss practical challenges faced and to re-examine Turkey's experience as a dramatic case on the threshold of a new and a harsh wide-reaching one with its grounds and disparities.

Keywords: financial crisis, innovation, integration of financial markets, bank failure, the US.
JEL Classification: G01, G15, G18, O31, O38, E44.

Introduction

The past couple of months have seen one of the worst financial crises in history, which started in the US and then spread to Europe, Asia and the rest of the world. In fact, in the past three decades, particularly since the liberalization of emerging economies and the growth of global financial integration, we have witnessed dramatic financial crises as well as significant bank failures affecting almost every country with a banking system[1]. Marini (2003) indicated that since the late 1970s, bank insolvencies have become increasingly common. Companies that had been performing well suddenly announced large losses because of credit exposures or derivative exposures that may or may not have been assumed to hedge balance sheet risk.

The term financial crisis is applied broadly to a variety of situations. Financial crisis can be categorized into three as *debt*, *currency* and *banking* crises. A debt crisis occurs if major debtors are unable or unwilling to pay the interest and redemption payments due on their debts while a currency crisis occurs due to speculative attacks resulting in devaluation. Therefore, a currency crisis is defined as a forced change in parity, abandonment of a pegged exchange rate. As for banking crisis, it occurs when many banks suffer runs at the same time. In a systemic banking crisis, all or almost all of the banking capital in a country is wiped out. In addition, a twin crisis, which consists of both a banking crisis and a currency crisis, might be occurred simultaneously.

This paper is designed to review the past financial crises and bank failures, to discuss practical challenges faced and to re-examine Turkey's experience as a dramatic case on the threshold of a new and a harsh wide-reaching one with its grounds and disparities. For this purpose, the present study has four sections. After a brief instruction, section 1 reviews the related literature broadly, whereas section 2 discusses experiences of Turkey as an emerging market. Section 3 discusses the new turmoil started in the US and then spread to the rest of the world, and the last section finally provides implications and concludes the paper.

1. Recurrent financial crises and bank failures: backgrounds

Considering the broad literature (e.g. Kaminsky, 1997, 1999; Garcia-Herrero, 1997; Eichengreen and Rose, 1998; Kaminsky and Reinhart, 1998, 1999; Goldstein and Turner, 1996; Caprio and Klingebiel, 1996, 1997, 1999, 2003; Fischer and Smaoui, 1997; Mishkin, 1996, 1997, 1999; Hardy and Pazarbasioglu, 1998; Gonzales-Hermosillo, 1999; Eichengreen and Bordo, 2002; Kaufman and Seeling, 2002; Kibritcioglu, 2003; Demirguc-Kunt and Detragiache, 1998, 2000, 2002, 2005; Laeven and Valencia, 2008; Masood and Stewart, 2009) most of which are empirical based on econometric models with regard to crises one can see that contemporary literature has started after banking troubles causing crises experienced around the world in 1980s leaving strict monetary policies, increase in interest rates and financial globalization and liberalization. It is seen that, financial crises in which banking sector played the vital role spread over by 1990s.

Financial crises are very costly events in terms of GDP lost. Caprio and Klingebiel (1996, 1999 and 2003) present data on bank insolvency episodes since the late 1970s. Some of these data between 1977 and 2002 are illustrated in Table 1.

[1] For example, Hyogo (1995); Barings (1995); Nippon Credit (1998); Tokyo-Sowa (1999); Demirbank (2000); Malta National (2001); Hamilton (2002); Oakwood Deposit (2002); Southern Pacific (2003); Reliance (2004); and more recent Northern Rock (2007); Indymac (2008); Lehman Brothers (2008); Royal Bank of Scotland (2008); Fortis (2008) and Bear Sterns (2008), among others.

Table 1. Selected crises and estimated losses (1977-2002)

Economy	Crisis period	Cost to taxpayers (as % of GDP)
Argentina	1980-1982	55
Indonesia	1997-2002	55
China	1990-1999	47
Jamaica	1996-2000	44
Chile	1981-1983	42
Thailand	1997-2002	35
Macedonia	1993-1994	32
Turkey	2000-2001	31
Israel	1977-1983	30
S. Korea	1997-2002	28
Japan	1991-2002	24
Venezuela	1994-1995	22
Ecuador	1998-2001	20
Mexico	1994-2000	19
Malaysia	1997-2001	16
Slovenia	1992-1994	15
Brazil	1994-1999	13
Paraguay	1995-2000	13
Check Rep.	1989-1991	12
Taiwan	1997-1998	12
Finland	1991-1994	11
Jordan	1989-1990	10
Hungary	1991-1995	10
Norway	1990-1993	8
Sweden	1991-1994	4
US	1988-1991	3

Source: Caprio ve Klingebiel (2003) "Episodes of Systemic and Borderline Financial Crises" (manuscript), World Bank: Washington DC. January.

Kaminsky and Reinhart (1998, 1999) examined 20 countries in which 26 banking crises and 76 currency crises were experienced between 1970 and 1995 in their study in which they analyzed the correlation between banking crises, currency crises and twin crises therein both of them occur. They evidenced that, typical problems in banking sector emerge before currency crises although there is no reason indicating that, currency crises occur before banking crises. Furthermore, they reported that, currency crises activate a vicious spiral and deepen banking crises. However, they also emphasized that, banking crises experienced recently around the world were not passive (bank run) but they were active (increase in problem credits). Demirguc-Kunt and Detragiache (1998, 2000, 2005) found that, crises break out especially in macroeconomic environments in which growth rate is low, but inflation and interest rate are high in their empirical study in which they examined the reasons of systemic banking crises occurred in 1994 in developed and developing countries between 1980 and 2002. Gonzalez and Hermosillo (1999) found that uncollectible credits rapidly increase before the banks go bankrupt while capital adequacy ratios decrease in their empirical study in which they examined contributions of micro and macro factors to the banking crises, which were experienced in Mexico (1994-1995), Colombia (1982-1987) and USA (1986-1993).

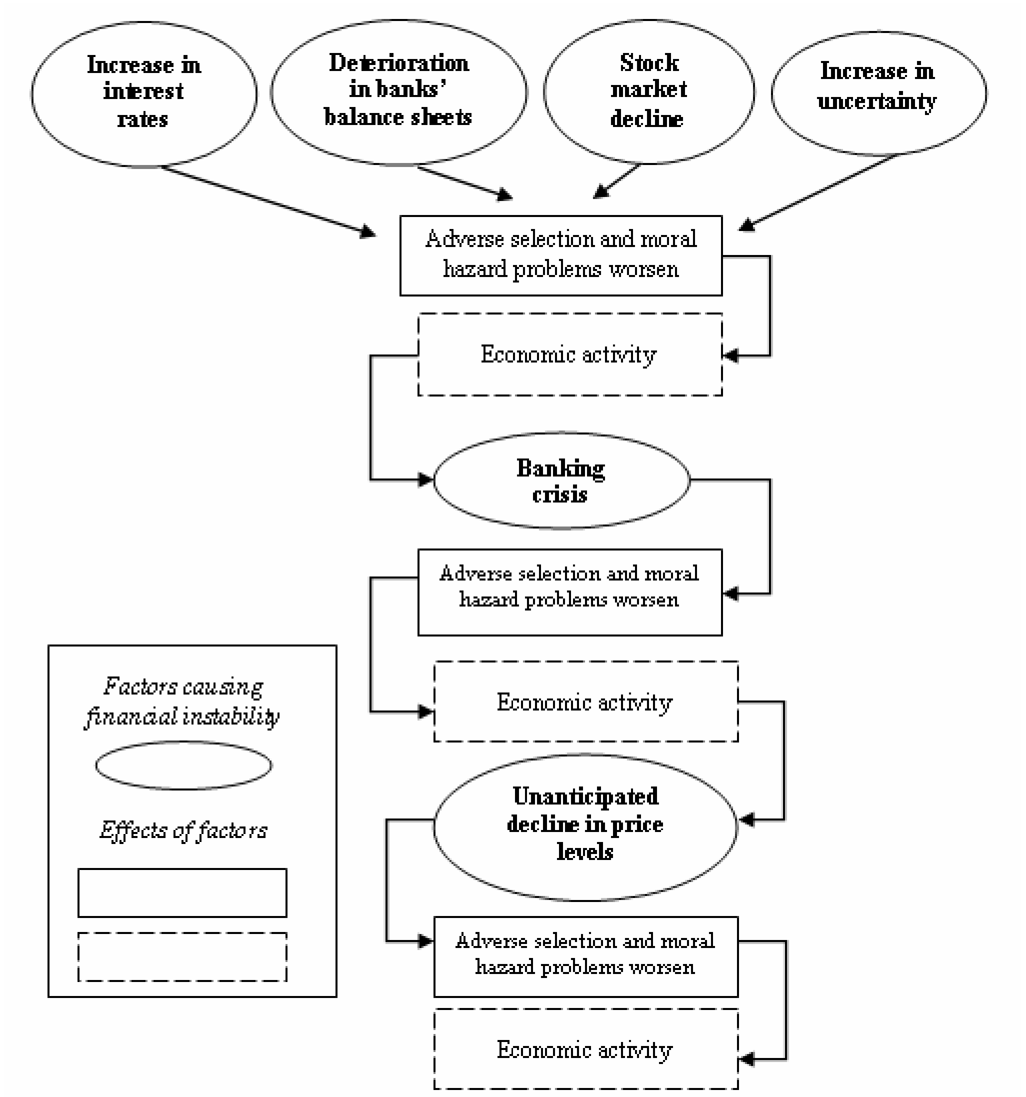
Mishkin (1996, 1997, 1999) stated that the initial impetus for financial instability is the same for both developed countries and emerging-market countries and specified the following four factors causing financial instability (see Figure 1):

- increase in interest rates;
- deterioration in banks's balance sheets;
- stock market decline;
- increase in uncertainty.

When these factors occur, investments and financial activities will become limited and also they cause bank panics due to adverse selection and moral hazard caused by asymmetric information[1]. Asymmetric information means that, one of the parties has less information compared with the other. It is one of the most important obstacles preventing effective operation of financial system. Adverse selection causes that, banks apply a credit rationing causing them to send back most of customers demanding credit even though they agree to pay high interests or they carry high risks by following an aggressive credit policy[2].

[1]Akerlof (1970) explained why the market for used cars, some of which may be "lemons" (defective used cars in American slang), doesn't function very well. The buyer of a used car does not know previously if it is a good or a lemon. So the buyer's best guess for a given car is that the car is of average quality; hence, he or she will be willing to pay for it only the price of a car of known average quality. This means that the owner of a good used car will be unable to get a high enough price to make selling that car rewarding. Thus, owners of good cars will not place their cars on the used car market. The withdrawal of good cars reduces the average quality of cars on the market, causing buyers to revise downward their expectations for any given car. This motivates the owners of moderately good cars not to sell, and so forth. Financial markets are not that different from the used car market. Potential borrowers know more about the projects they want to finance than prospective lenders.

[2] The income, which banks expect from their investments, depends on the possibility for turning their credits opened back with their legal interests. In other words, banks prefer to give collectible credits under normal conditions. However, keeping the customers under control is very hard for banks. Therefore, credit rationing is applied. Thus, credit rationing may be defined as that, banks limit the credits although those, who demand to use credit, agree to take on debt with the existing interests. See, Stiglitz, J.E and Weiss, A. (1981) "Credit Rationing in Markets with Imperfect information", *American Economic Review*, Vol. 71, pp. 393-410.



Source: Mishkin (1997), "The Causes and Propagation of Financial Instability: Lessons for Policymakers", Maintaining Financial Stability in a Global Economy Symposium Proceedings. 28-30 August, Federal Reserve Bank of Kansas: Kansas City, p. 74.

Fig. 1. Propagation of financial instability in developed countries

Karacan (1999) pointed out to the fact that these four basic factors are valid for both developed and developing economies although their emerging ways or reasons are different. However, these basic factors have institutional variations activating varied spreading mechanisms in the economies about spreading of financial instability. Ingves (2003) and Coskun (2001) divided the factors causing banking crises with their most prevalent reasons into two groups: microeconomic (bad banking) and macroeconomic (bad operating environment). Fischer and Smaou (1997) emphasized risky transactions and bad credit portfolio of banks for failures of banks after financial liberalization in their study in which they examined 82 banks in Greece, Indonesia, Korea, Malaysia, Mexico, Thailand and Taiwan. Demirguc-Kunt and Detragiache (2002) produced an index showing explicit deposit insurance structure for 61 countries between 1980 and 1997. In addition, they found through their empirical study that explicit deposit insurance causes increase in possibility for banking crises. According to Marini (2003), this study supports the hypothesis that "deposit insurance raises ethical risks". Similarly, Kibritcioglu (2003) also stated that the existence of deposit insurance can encourage bank management for taking excessive risk. In other words, banks start to invest their funds in the sectors with more risk as the limit of deposit insurance increases. Then, ethical risk problem emerges. Unlimited deposit insurance was brought to the system because of the crises experienced in Scandinavian Countries in early 1990s, in Turkey in 1994 and in Mexico in 1995. Unlimited deposit insurance emerges as an official intervention to the system for preventing rushing to the banks at the instance of a crisis. However, it should be kept in mind that it can cause more significant damages to the system during the process by preventing competition among banks.

Erdogan (2002) categorized the reasons for banking crises into three headlines: i) *Macroeconomic factors and economy policie,s* ii) *improper applications in bank management policies and deficiencies in legal arrangement,* iii) *politic interventions and public banks*. According to this, banks, which are building stones of financial sector, experience troubles in fulfilling their obligations in the payments system because of the changes in macroeconomic balances such as overwhelmed financial asset prices, sharp increases in interest rates, decreases in exchange rates and continuous stagnation. On the other hand, banks go under more risk because of improper legal practices regulating banks' activities. Furthermore, improper practices in banking management and illegal policies disturb the nature of the sector.

Insufficiency in legal regulation required for preventing such practices of banks produces the groundwork for banking crises in many occasions. Finally, it can be said that an effective auditing supported by a strong substructure and regulative authorities are extremely required for the banks for executing their activities in a proper way. The fact that governments use banks for their political purposes disturbs competition regime and causes the banks to deviate from their activity purposes. Because of such practices, banks become unable to manage their balance sheets effectively. As a natural result of that, governments generally hold public banks responsible for such obligations, because it is seen that, public banks trigger systemic crises in many developing countries.

Governmental interventions to the banks' activities are not restricted by public banks. Governments may direct private banks also for the credits for some sectors or making some persons use credit and providing facilities in interests. Furthermore, the banks are forced for holding public bonds by the governments and their profitability may be threatened by increasing reserve requirements and taxes. Banking systems weakened by macroeconomic fluctuations, improper management and insufficient legal arrangements, become susceptible to banking crises upon governmental interventions intended for public and private banks.

Afsar (2004) accentuated that, the leading indicators being used in foreseeing crises are closely related with the expectations about which general factors will cause a crisis. From this point of view, if financial problems are considered as main factors for crises, financial deficits, public consumption and the credits, which are opened by the banking system to public sector, will become the main indicators. On the other hand, if it is believed that the main reason for the crises is weakness of the financial sector, financial liberalization measures such as increase in credits used by private sector and variation in money multiplier and the variables such as short-term liability position of the banking system, nature of the domestic interest rates and stock price movements may be employed as indicators. In addition to the leading indicators for a potential financial crisis to be experienced in the future, main indicators also exist for estimation of sizes of this crisis. Sharp fluctuations in exchange rates, extremely high increases in overnight interest and significant decreases in currency reserves are the most important ones of such indicators (Catalca et al., 2008).

In sum, common variables in the mentioned studies above may be listed as follows: a) relating to the nature of the financial system i) *internal loan stock of the banking sector*, ii) *the ratio of money supply defined as M2 to the money supply defined as M1*, iii) *real interest rates*, iv) *stock price volatility*, v) *net external assets and short-term foreign money obligations of banking system*, and vi) *net external loans of private companies*; b) relating to external balance i) *increase in exchange rate*, ii) *real effective exchange rate*, iii) *balance of payments*, iv) *short-term flows in foreign capital*, and v) *net international reserves*; c) relating to the macroeconomic variables i) *real economic growth rate*, ii) *the ratio of expenditures on consumption and the sum of the investments to the total savings*, iii) *public sector deficits*, and iv) *inflation*. However, it should be kept in mind that not only macroeconomic factors cause financial crises but also mismanagement of banks on micro base may trigger significant financial crises or make the existing crises deeper. Banks or financial institutes are affected not only by external developments. In financial sector, which has become more and more dynamic and complex in recent years, the ability and resolution of the banks, which provide funds for real sector through the foreign funds obtained mostly from depositors, in managing such foreign funds as well as their effective risk management comprehension are vitally important for economic stability in a country.

2. Turkey experience

The first results of post-1980 economic transformation and financial liberalization policies, which started with the resolutions of January 24, 1980 in Turkey, are considerable decrease in inflation from 107% to 25%, a balanced budget and good financial discipline, increase in export, currency inflow and good credibility of the country. However, this new system failed to adapt to the mentioned structural change instantly, a financial crisis emerged in the middle of 1981 (Uzunoglu, 2003; Catalca et al., 2008). According to Erdogan (2002), Turkish banking sector met the competition concept through the resolutions of January 24, 1980 for the first time in republican past of the country and it was observed that, the system was enhanced through liberalization in the financial system and acceleration in economic growth, stock brokers increased their activities and the most important that the crisis fact in the banking system emerged as a factor threatening financial system as a result of globalization. Sahozkan (2003) summarized main lines of the changing policies practiced in the banking system in this process as follows:

- making interest rates free, transition from governed interest to free interest;
- allowing real interest rates for achieving positive level;
- facilitating introduction of new banks to the system;
- making the sector available for the international markets, especially permitting for providing funds from foreign markets;
- permitting the banks within the system for transactions in foreign money;
- making arrangements intended for making the banks go under a construction complying with international standards (such as capital adequacy ratio recommended by Basel Committee).

The banking system brought off the adaptation to the first of these arrangements (making interest rates free) very rapidly from July 1, 1980. However, this adaptation was not proper because the sector was confused by positive interest and high interest concepts. Free interest practice became the policies of the banks for attracting savings resting under the pillow through high interest rates. On the other hand, some banks made short selling by using saving certificates to bearer. This was a great false for the sector. In this process, interest competition was encouraged by the fact that bankers were rapidly reproduced having no legal base and the sector coveted fund resources.

This competition inevitably became "Ponzi financing" between bankers after a while. Aggressive interest policies applied by especially small banks for taking share from the system caused increases in fund acquirement and use costs and then, this caused over-due receivable problems. This encouraged situation affected financial structure of the banks negatively, the managements of Hisarbank, Istanbul Bankası and Ortadoğu Bankası were taken over between 1982 and 1984, and then, they were transferred to Ziraat Bankası. In this period, Isci Kredi Bankası, Bagbank and Istanbul Emniyet Sandigi were sold out and Tobank was nationalized in 1987 and then, it was transferred to Halk Bankası (Colak, 2001; Catalca et al., 2008).

After the financial crisis that was experienced in 1982, The Central Bank of the Republic of Turkey (CBRT) restarted to specify interest rates and this practice lasted until 1988. Decree law number 70 was put into force on July 22, 1983 and Saving Deposits Insurance Fund (SDIF) was founded under representation and management of CBRT. It was understood because of the crisis experienced that new arrangements relating to auditing and supervision were required. The capital adequacy ratio was accepted by the banks code with a number of 3182 that was put into force in 1985. Uniform accounting plan practice was brought. The arrangements were done relating to depositing adequate provision for over-due receivable and auditing the banks by independent institutions was made compulsory (Uyar, 2003). A way was prepared for convertibility of Turkish Lira (TRL) by the resolutions that were put into effect in 1989. It was mentioned about liberalization for acquiring funds from international markets for especially private sector and currency markets were founded. Resolution with the number of 32 freeing completely foreign exchange regime was put into effect on August 11, 1989. Then, investors started to leave Turkish Lira and were directed toward foreign currency. However, the Treasury and CBRT failed to arrange for completing this new development and the banking sector, which was caught on the wrong foot. Then, it could not display an effective Asste/Liability management (ALM) complying with the new arrangement. The banks ignored basic principles of liquidity management and were directed toward the funds in foreign currency (Erdogan, 2002).

By 1990s, it was seen that, the banking sector was subjected to more risky elements. The first crisis that was encountered by Turkish economy due to external reasons is the Gulf Crisis occurred on August 2, 1990. The crisis began upon that Iraq invaded Kuwait and caused increase in oil prices as well as inflation started to rise. Financial sector also was affected negatively by this crisis as a result of increase in interests in money markets and loan interests of the Treasury beside mainly affected tourism sector. Intervention of United Nations (UN) to Iraq brought the crisis in country to maximum level and caused a liquidity crisis in the financial sector. Deposits as currency corresponding to 2.5 billion of US dollars and Turkish Liras approximately in the same amount were drawn back from the banks within the period from the beginning of the crisis until March. CBRT had to import currency in large amounts for satisfying currency demands of people. Although liquidity shortage was experienced in that period as a result of rushing to the banks, we cannot say that a banking crisis was experienced affecting deeply all banking sector and the whole economy (Uyar, 2003; Erdogan, 2002).

The first important banking crisis in quality and quantity experienced by Turkey was the 1994 crisis. Afsar (2004) reported that excessive appreciation of TRL in the last quarter of 1993 caused sharp increases in current account deficit (6% of gross national product between 1990 and 1993) and this situation caused stagnation and decrease in production capacity triggered by short-term portfolio investments considering the situation as not sustainable in January 1994. Excess liquidity in the market was directed toward currency due to the expectations for devaluation and consequently, this caused a rapid increase in exchange rates. In fact, TRL continued to depreciate against foreign currencies until April. This depreciation of TRL against USD rose to 172% nominally within this period. On the other hand, the angle between exchange rate and interest decreased because of the increase in the national currency depreciation. Then, CBRT reserves were consumed rapidly after the banks made attacks for compensating their short positions. The activities of Marmara Bank, TYT Bank and Impex Bank, which had high open positions, and failed to balance well between the maturities of their assets and liabilities, were ceased in this period.

It can be seen that, some part of troubles and risks was tried to be reduced through certain measures taken in April 1994 (Parasiz, 2005). Some of those measures were as follows:

- reducing risk of exchange rate caused by TRL and especially short positions of the banks;
- making currency obligations subject to legal provision;
- making arrangements relating to Repo and Reverse Repo;
- specifying new principles relating to establishment, activity, equity and auditing of banks;
- making short-term advance use subject to certain criteria.

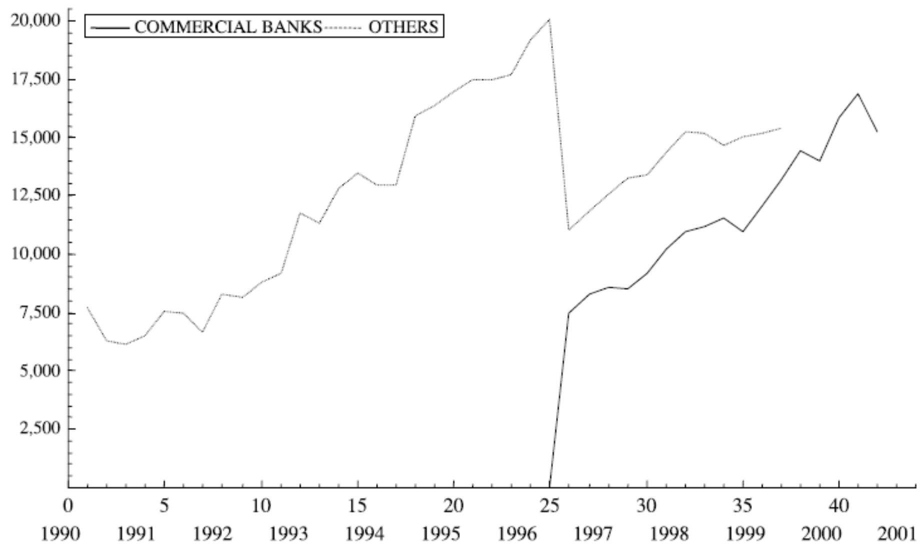
The crisis was prevented from enhancing by trying to inspire confidence in the depositors and the banks through 100% warranty practice for saving deposits on May 5, 1994 like other countries experiencing the crisis in the same period. However, the cost of the crisis occurred was very high. Gross domestic product declined to 5.5%, inflation increased to 106% and real wages reduced to 36% in manufacturing sector in the same year. Export was increased again by cost advantage re-obtained upon devaluation and decline in wages after the crises. Upon the indicators had turned to positive, short-term portfolio investments returned and the current account deposit was financed (Afsar, 2004).

According to the comparison of the 1994 crisis and Asia crisis as well as Mexico crises, it is seen that, the common issues of these countries are the options caused by over appreciated currency, short-term capital introductions and the variations between domestic and foreign interest rates.

By 2000, the most important events changing view of commercial banks are the advantages in cost and profitability provided by alternative distribution channels as well as technological innovations such as telephone banking, ATM and internet banking services and products by various ways, technological developments facilitating transactions in money and capital markets and new financial tools developed by taking model from foreign banks (Sahozkan, 2003). However, according to Colak (2001), the increase in the number of the banks making wholesale banking with fewer branches introduced into the sector from 1986 and operation way of SDIF after the 1994 crisis and relatively easier bank establishment caused increase of fragility in financial system and brought the fluctuations into a crisis size by causing financial fluctuation process experienced between 1998 and 1999. On the other hand, Erdogan (2002) emphasized that the banks having weak capital already were funded themselves through short-term currency credits and intensive exchange rate and interest risks accrued to their balance sheets in the late 1990s as seen in Figure 2.

Furthermore, due to increase in problem loans depending on high interests and economic contraction, caused deterioration of assets quality as a result, returns of banks and profitability decreased and liquidity problem occurred. Developments in the holding banking and the funds transferred to the affiliates caused that, the banks failed to fulfil their basic obligations and made them susceptible to crises by reducing their liquid assets.

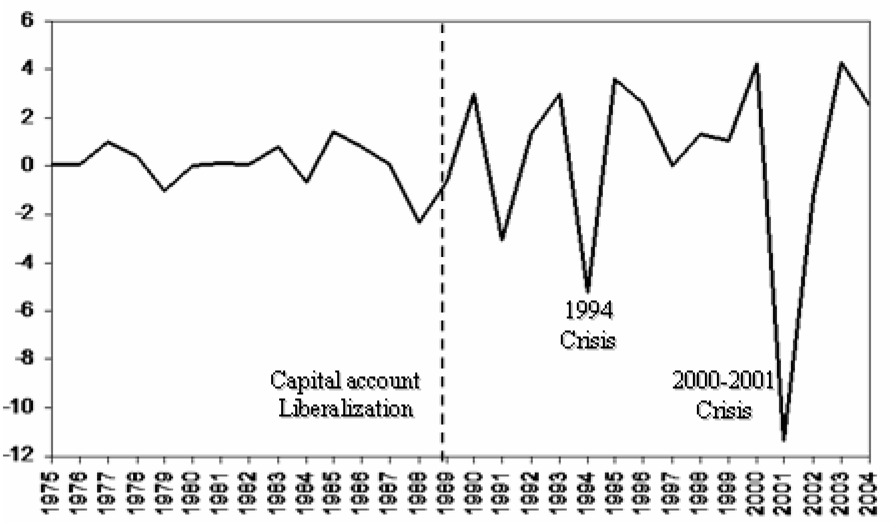
Naturally, the crisis, which emerged in such period in November 2000 in which banking risks relatively increased, and reflected completely as a liquidity crisis, occurred because state-owned and SDIF banks failed to make their activities liquid, the banks having excess funds closed their reserves to these banks and the risks seen on balance sheets of some banks were realized (Parasiz, 2005).



Source: Ozkan (2005), "Currency and Financial Crises in Turkey, 2000-2001: Bad Fundamentals or Bad Luck?", *The World Economy*, Vol. 28, p. 553.

Fig. 2. Short-term foreign debt composition (million USD)

As seen in Mexico (1995) and Asia crises (1997), great increase in foreign capital transactions with mainly short-term portfolio investments in which international financial institutions withdrew their funds from all developing markets and consequently, made the crisis global were observed before the crisis in Turkey as well (see Figure 3).



Source: Kibritcioglu (2004), "An Analysis of Early Warning Signals of Currency Crises in Turkey, 1986-2004". Oesterreichische Nationalbank and Wiener Institut für Internationale Wirtschaftsvergleiche, November 8, Vienna.

Fig. 3. Erratic nature of net short-term capital inflows (billion USD)

CBRT tried to manage the intensive speculative attack targeting currency in November 2000 through high losses in interest and foreign money reserves and probably the most important one, with an additional short-term IMF credit with high cost corresponding to 7.5 billion dollars. However, its defensive power reduced significantly against potential crises (Karabıyık, 2004). Turkbank, Interbank, Bank Express, Egebank, Yurtbank, Sumerbank, Yasarbank, Esbank, Bank Kapital, Etibank and Demirbank were also transferred to SDIF between 1998 and 2000.

IMF support provided after the period mentioned above and other measures taken assisted to cope with the problems in the financial markets – not completely but partially. Then, market interest rates decreased and the markets were made relax for a certain period. However, in February 2001, the events similar to those experienced in November 2001 were experienced again due to the political stress occurred before the payments in high amounts to be done in the second half of the month. Then, the sensitive balance in the financial markets mentioned above was disturbed on

February 19, 2001 and transformed into a systemic risk. As a result, TRL was left for fluctuating on February 19, 2001 and the 'twin crises' process was started therein banking crisis was experienced along with money crisis. The most important issue here is that, unlike November 2000 crisis, February 2001 crisis became systemic because CBRT tried to control liquidity against high level of foreign money demand; however, liquidity shortage occurred blocked the payment system due to excessively high daily liquidity demands of especially state banks (Parasiz, 2005).

In fact, Ozkan (2005) found three factors triggering financial crises by making Turkish economy vulnerable as the following in his study in which he examined the crises experienced in Turkey in 2001 and 2001: i) *weak external position caused by excessive loan combining with losing competition ability,* ii) *weak fiscal position caused by extremely high internal loan payments and the most important one*, iii) *weakness in financial and banking sectors*. In correlation with this, Parasiz (2005) made the following conclusions by the occasion of banking crises experienced in the country:

- Equity inadequacy appeared in the banking system.
- Liquidity and interest risk increased due to the short-term fund nature.
- Maturity mismatches on the balance sheets of the banks increased more depending on liquidity and interest risk.
- High interest rates caused increase in fund cost. Furthermore, it causes high losses in value of securities of the banks depending on the increase in interest rates.
- High interest rate atmosphere made the existing short-term fund demands of state and SDIF banks more expensive.
- In addition, the changes made in exchange rate policy in February 2001 and erosion caused on TRL through exchange rates freed for fluctuating caused losses for especially, the banks with private capital due to the exchange rate risk existing in the banking system.
- Deterioration in the active quality of the system became more serious.
- Significant increases occurred in problematic credits in credit portfolios for which provisions were not allocated.
- Decline was experienced in profitability performance depending on small size and partial banking nature reducing affectivity.
- Insufficiency in internal auditing and risk management systems appeared.

As a conclusion, the crises experienced in November 2000 and February 2001 caused increase in fragility of financial system, accordingly, showed the problems existing on the balance sheets of the banks, and consequently, evidenced clearly the need for the banking system reconstruction.

3. The US in big trouble

In the wake of the Bretton Woods breakdown in the early 1970s, businesses have become more global so too have investors who have sought the benefits of international diversification. Later, the terms "globalization", "financial integration", "liberalization", "financial innovation", "deregulation" and "short-term capital flow so called hot money" have come on the countries' agenda. The 1980s witnessed the development of information technologies. Deregulation and destructive competition in the financial industry had the effect of increasing both the range and quality of financial products offered, for instance, new types of options and future contracts, swaps, warrants and secondary markets in third-world debt. Information flows greatly improved and this led clients to demand products enabling them to cope with fast changing forces. The 1990s seen the rise of internet and the ability of investors to trade, access financial information, perform their banking online. During this period, the financial world like the global economy has experienced major changes as well as crises and, of course, many further changes should be expected in the future.

As previously seen, different financial crises and bank failures occur due to different reasons. The origins of the current credit crisis, which started in the US and then spread to Europe, Asia and the rest of the world, lie in a loose monetary policy, deregulation, and excessive capital flows that were fuelled by financial derivative products utilized by banks.

Following the September 11, 2001, FED embarked on a series of interest rate cuts that ended with the federal funds rate, hitting a low of 1% in June 2004. The result of this monetary policy was that the economy boomed, fuelled by the availability of too cheap credit, which the real estate market benefited from these conditions with homeowner seeing sharp increases in houses prices all over the country. Naturally, this encouraged the most people some of whom were lower-income borrowers, in the real estate market in the search for capital growth, which brought about the birth of the sub-prime lending market in the US. However, this situation soon gave way to bust since the FED's policy went into reverse with a significant tightening in monetary policy. Then, it started to raise the interest rate from 1% to 5.25% in June 2006 with the resulting rise in mortgage rates as well causing many homeowners to be forced into defaults on their loans. In the wake of record repossessions, the housing market crashed and the sub-prime crisis was born.

The problem was that these mortgages had been pooled and sold as mortgage-backed securities to international banks around the world. In other words, real estate loans were spread throughout the financial system in the form of collaterized debt obligations (CDOs) and other complex derivatives in order to lessen risk; yet, when home values failed to rise and home owners failed to fulfill their obligations, banks were forced to acknowledge huge write downs and write offs on these products. These developments, in 2008, required unprecedented government interventions not only in developed countries but also in emerging ones.

Conclusion and implications

The world of finance has undergone major changes over the last three decades and many further changes may be expected in the near future. Financial innovations are often blamed as an increase in systemic risk that the US crisis being the latest case in point as well as earlier Asian and Latin American crises. However, financial innovation in the form of different types of derivatives products provides low-cost and very efficient methods to lessen the risks faced in the markets.

Key messages coming from this review are as follows:

(i) *financial innovations that overwhelmed the capacity of both supervisors and banks to evaluate risk in the markets can readily cause a systemic risk,* (ii) *the lack of efficient and effective regulations are the basic reasons behind most financial crises,* (iii) *the globalization of finance and the integration of financial markets have led to macroeconomic imbalances*, and (iv) as also highlighted by Jiang Jianqing, Chairman of Industrial and Commercial Bank of China, frankly *effective risk management* and *moral values and responsibilities of both individual and institutional investors are the real guard of the finance world* (Newsweek, 2008, p. 66). Finally, not only flourishing the risk perceptions but also avoiding greediness is exactly crucial for the safer world of finance.

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