

Agnieszka Ostalecka *

COMPARATIVE ANALYSIS OF BANKING CRISES IN ARGENTINA AND PARAGUAY IN THE MID-1990S

Changes in financial systems, which occurred in the early 1990s, resulted in many profits, which improved their functioning. However, the scale and pace of changes, which took place in the financial systems environment, contribute to their greater vulnerability to shocks and financial crises. The aim of the article is a presentation of comparative analysis of two banking crises, which broke out in the mid-1990s in Latin America, i.e. in Argentina in 1994 and Paraguay in 1995. This analysis consists of 4 parts. Firstly, the article discusses the situation before the banking crises outbreak in two countries, referring to both the situation in the banking system and the whole economy as well. The second part of the article constitutes an identification of the main causes of the banking crises eruption. Following that, there is a presentation of the banking crises development and the authorities' response to it including detailed measures, which were introduced to mitigate and resolve the crises in Argentina and Paraguay. The final part discusses the consequences to the banking system and the economy in both countries caused by the crises.

Keywords: banking crises, source of crisis, crisis management, causes of crisis.

1. INTRODUCTION

In the last two decades significant changes have been observed in the international financial market, sometimes even called financial revolution. It resulted in far-reaching, fundamental changes in conditions of banks' functioning.

The most important sources of these changes are as follows: globalization, financial deregulation and liberalization, rapid development of technology, Internet, and financial innovations. The scale and the pace of these changes contribute to the international financial markets' instability and their vulnerability to systemic risk and financial crises. As a result, nowadays financial crises have become more common, causing a negative impact on the banking sector and economy performance as well as huge costs of restoring banking system stability.

* Department of Finance and Accountancy, Faculty of Regional Economy and Tourism,
Wroclaw University of Economics

Banking crises have particularly adverse implications for emerging market economies, which are types of countries experiencing rapid economic growth and undergoing substantial changes in their financial systems. However, despite these changes the banking sector still plays a dominant role and remain the main source of capital. It is estimated that in Latin American countries, banks still account for more than 80% of financial intermediation. Thus, domestic financial sector problems in these countries have been located primarily in the banking sector.

Apart from banking sector problems, crises can also stem from macroeconomic weaknesses or external shocks. According to IMF and World Bank Report (IMF-World Bank, 1997) emerging market economies are more prone to boom-bust cycles and to sudden corrections in asset prices, partly because of their tendency to be less diversified and less capable of absorbing shocks than more mature industrial economies. This resulted in increased vulnerability of emerging markets to banking crises emergence (Table 1).

Table 1
Number of crises in 1975-1997

Type of crises and country	Number of crises
Banking crises	54
Industrial economies	12
Emerging markets	42
Currency and banking crises¹	32
Industrial economies	6
Emerging markets	26

¹Identified when a banking crisis occurred within a year of a currency crisis.

Source: International Monetary Fund, 1998, *Financial Crises: Characteristics and Indicators of Vulnerability*, "World Economic Outlook", May, p. 79

As can be seen in Table 1, banking crises occur more frequently in emerging markets than in industrial economies. Almost 78% of banking crises in the years 1975-1997 took place in emerging markets. This fact seems to confirm the theory that emerging market economies are less stable and have more fragile financial systems which mean that they are more prone and vulnerable to a banking crisis outbreak. What is more, in general, the resolution costs of banking crises have been higher in emerging market countries than in industrial ones.

According to P. Martin and H. Rey (Martin P., Rey H., 2002, p. 3) most emerging markets experience an increase in the frequency of financial crises, including banking crises, once they liberalize their financial systems (Table 2).

Table 2
Influence of financial liberalization on financial crises occurrence

Frequency of crises	developed countries	emerging countries
closed countries	8.8%	25.1%
open countries	9.7%	61.6%

Source: Martin P., Rey H., 2002, *Financial Globalization and Emerging Markets: With or Without Crash?*, NBER Working Paper Series No. 9288, p. 3.

The table gives the average annual frequency of crises for developed and emerging countries. It strongly suggests that opening to capital movements has a much more dramatic effect on the frequency of crises in emerging markets than in developed ones. In connection with this threat there has been conducted numerous research focused on the link between capital flows liberalization and the risk of financial crises. The results of research conducted by G. Mehrez from Georgetown University and D. Kaufmann from World Bank (Mehrez G, Kaufmann D., 2000) on a group of 56 countries in the years 1977-1997 point out that “the probability of a crisis is higher in the period following financial liberalization, significantly so in countries with poor transparency”. Also research done by A. Demirgüç-Kunt, E. Detragiache from World Bank and IMF, respectively (Demirgüç-Kunt A., Detragiache E., 1998), conducted on a panel of 53 countries for the period 1980-95, confirm the standpoint that “banking crises are more likely to occur in liberalized financial systems. However, the impact of financial liberalization on banking sector fragility is weaker where the institutional environment is strong. In particular, respect for the rule of law, a low level of corruption, and good contract enforcement are relevant institutional characteristics”.

Although the scale of international capital flows into emerging markets, which has increased substantially in recent years, have a beneficial influence on emerging market countries in terms of increasing effectiveness of institutions’ functioning, the quality of their financial services, and creating opportunity of economic growth, it should be remembered that it also has adverse consequences. The increased scale of these flows and growth of international linkages contributes to vulnerability to banking crises outbreak as well as greater possibility of its spreading. What is more, dependence on such large capital flows results in higher exposition of emerging market economies to changes in investors’ sentiments and their perception of country risk compared to mature economies. Sudden changes in their

perceptions connected with cutting off external sources of financing may create recession and severe debt service problems.

Banking crises have recently become an issue of significant meaning because they create immense adverse consequences both to the banking sector and the whole economy. Banking crises disrupt the flow of credit to households and enterprises, reduce investment and consumption, possibly forcing viable firms into bankruptcy. They may also jeopardize the payments system functioning and, by undermining confidence in domestic financial institutions, they may cause a decline in domestic savings and/or a large scale capital outflow. Finally, a systemic crisis may force sound banks to close their doors (Demirgüç-Kunt A., Detragiache E., 1998a, p. 81). With reference to economy banking crises contribute to heightening macroeconomic instability, reducing economic growth, less efficient allocation of savings and investments and foreign capital outflow caused by loss of confidence in an economy afflicted by a crisis.

The main aim of this article is a presentation in comparative layout of two banking crises which took place in the mid-1990s in Latin American emerging market countries, i.e. Argentina and Paraguay. It is divided into 4 parts: the situation before the crises, main causes of its outbreak, crises development including introduced remedies and its consequences both to the banking sector and the whole economy.

2. BANKING CRISES IN ARGENTINA AND PARAGUAY IN THE 1990s

2.1. Situation before the crises

The situation of both countries underwent fundamental changes in the early 1990s, when deep economic reforms started to be introduced in order to create better development conditions.

In Paraguay in this period there were introduced such reforms as: exchange rate unification, guaraní floating, interest rates liberalization in 1990-91, introducing market monetary instruments and relaxation of restrictions imposed on foreign currency denominated loans. The changes introduced were aimed at improvement of resources allocation and enabled better adjustment of financial transactions to market conditions.

As part of the financial sector reforms and competition enhancement within a sector that had been restricted and over-regulated for many years, the authorities eased minimum capital and other requirements for entry into

the banking system. The growth of financial resource intermediation fostered by the reforms and the easing of entry into the financial sector resulted in the creation of a large number of banks and financial companies between 1990 and 1994. The large number of participants in a small – even if rapidly growing – market limited the scope of achievable economies of scale and made supervision of the banking sector more difficult (IMF, 1999a, p. 15). The banking sector in Paraguay was clearly overextended – at the end of 1994 there were almost 90 financial intermediaries, which caused dispersion of capital (Table 3).

Table 3
Financial sector growth in Paraguay (1980-1995)

Detailed list	1980	1990	1991	1992	1993	1994	1995	1998
Number of banks including:	17	25	26	29	29	34	31	30
- foreign banks	12	12	12	13	13	13	13	17
- local banks	3	11	12	14	14	19	16	11
- public banks	2	2	2	2	2	2	2	2
Non-bank financial institutions (<i>financieras</i>)	17	30	31	40	41	54	59	48

Source: World Bank, 1999, *Paraguay – Country Economic Memorandum: Macroeconomic Policies to Reactivate Growth*, Report No. 18392-PA, p. 24

However, the legal framework as well as bank supervision were not strengthened at the same time so as to facilitate the exit of distressed financial institutions (Garcia-Herrero A., 1997, p. 36). In addition, newly created banks were seriously undercapitalized with not enough qualified human resources and without suitable experience in modern banking. One of the significant problems concerning banking system was undertaking excessive risk in banking activity. The main source of this problem was the lack of ability of risk estimation and management, as well as moral hazard derived from awareness of implicit deposit insurance existence. Many banks were functioning under excessive risk expecting the government's financial support in case of insolvency or bankruptcy. Supervisory forbearance resulted in excessive risk-taking as well as developing an informal financial intermediary, which constituted another serious problem of the Paraguayan banking system.

With regard to Argentina, in 1991 the then Minister of Economy, D.F. Cavallo started introducing radical economic reforms by means of

Convertibility Law – a consistent and complex economic program of reforms concerning monetary and fiscal system, the state, trade and social security system (Latin America and the Caribbean Regional Office, 1996). This daring and innovative plan was aimed at economy restructuring and creating the conditions to ensure achieving long-term financial stability. One of the most important changes introduced by Convertibility System was basing the monetary system on currency board-like one, under which the lender of the last resort function had been limited with reference to central bank. The fixed exchange rate regime was established, linking the peso to the U.S. dollar at the rate 1:1.

Introducing the Convertibility System was the turning point in Argentinian history – it was the initial sign of deep monetary and fiscal reforms, deregulation of domestic market, privatization of state-owned companies, trade liberalization and limitation of capital control, creating a favourable investment environment. It also enabled overcoming hyperinflation, which in 1989 reached more than 3,000% and stimulated economic activity.

The evolution of gross domestic product and rate of inflation in Argentina and Paraguay in the years following the economic reform are presented in Figure 1 and in Table 4, respectively.

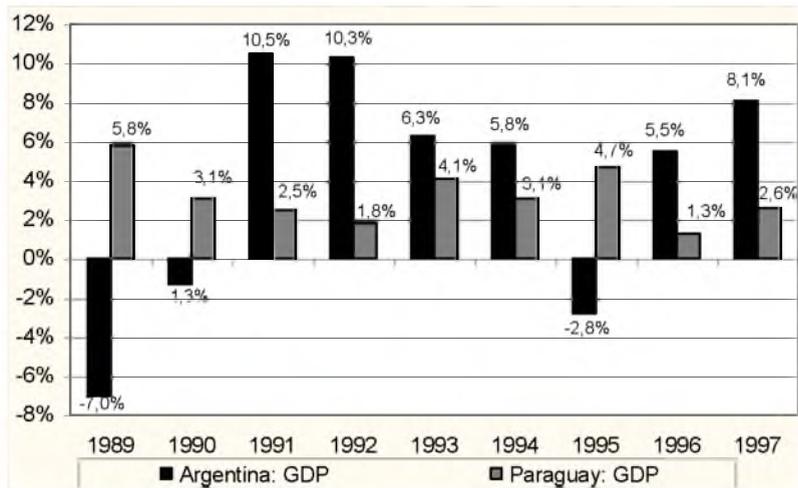


Figure 1. The evolution of GDP in Argentina and Paraguay in the years 1989-1997

Source: International Monetary Fund, World Economic Outlook Database

Table 4

The evolution of inflation rate (%) in Argentina and Paraguay in the years 1989-1997

Country	1989	1990	1991	1992	1993	1994	1995	1996	1997
Argentina	3079.5	2314.0	171.7	24.9	63.9	4.2	3.4	0.2	0.5
Paraguay	26.4	38.2	24.3	15.1	18.3	20.6	13.4	9.8	7.0

Source: International Monetary Fund, World Economic Outlook Database

However, despite the favourable changes in the Argentinian economy, which resulted mainly from introducing the Convertibility System, on the eve of banking crisis outbreak the economic condition of the country was not stabilized. There existed macroeconomic imbalances derived from a growing budget deficit and deficit of current account.

2.2. Causes of banking crises outbreak

While analyzing the main causes of the banking crisis outbreak in Argentina it can be observed that the banking crisis, which erupted in 1994 and went hand in hand with the currency crisis, was the effect, to some extent, of three groups of reasons:

1. external shock,
2. financial system weakness,
3. Argentinian economy weaknesses.

December 1994 marked the end of four years of extraordinary economic expansion of the Argentina's economy under the Convertibility Plan. One of the most important events, which undoubtedly contributed to the banking crisis, was the external shock, mentioned above, derived from the Mexican crisis connected with a sharp devaluation of its currency. According to the Tequila Effect (or Contagion Effect) hypothesis, the financial and economic crises that followed had their roots in the collapse of the Mexican peso which undermined foreign investors' confidence about the prospects for sustained stability and growth in Argentina and other Latin American countries and led to massive capital outflows (Uribe M., 1996, p. 14). However, this external shock spread more rapidly and to a greater extent in Argentina compared to other countries in this region. Its influence was so strong because Argentina was more vulnerable which resulted from existing macroeconomic imbalances and the distressed situation of provincial banks. Among the macroeconomic imbalances, Argentina suffered from a persistent current account deficit, a low level of domestic savings, and a deteriorating

fiscal position just before the crisis began. Also, the distressed situation of provincial banks, which had continued to finance the provinces' fiscal deficit, increased the public mistrust of the Argentinian banking system (Garcia-Herrero A., 1997, p. 7). The distressed and deteriorating situation of provincial banks, the bankruptcy of Extrader and financial problems of other banks, which had a high share of bonds and other papers in their portfolios as well as poor transparency of banking system and lack of deposit insurance scheme were the other factors which also contributed to the banking crisis.

The Mexican crisis had a negative impact on Argentina's situation in many ways. Firstly, this negative influence derived from investors' conviction about the overvaluation of the Argentinian peso and their increasing doubts concerning the possibility of Argentinean currency devaluation (Iwanicz-Drozdowska M., 2002, p. 319). Secondly, it changed the investor's perception about Argentina and adversely influenced the assessment of the country risk, which was the first signal for foreign capital outflow. The capital withdrawal could have been very dangerous for Argentina, because due to the existing deficit, it could have posed a threat to servicing its foreign debt in a fixed time.

While the banking crisis in Argentina erupted in the aftermath of both macroeconomic and bank-specific causes, its outbreak in Paraguay stemmed mainly from reasons concerning the financial sector such as conducting financial liberalization and deregulation without strengthening supervision. Underdeveloped and heavily regulated financial sector was suddenly deregulated in an environment characterized by implicit deposit insurance and relatively good but weakly-enforced prudential regulations. Other important causes were as follows: too low minimum capital requirements, which contributed to the undercapitalization of financial system and insufficient competence of personnel and their mismanagement, misuse of funds and frauds. These all resulted in an increasing share of low-quality credit (e.g. non-performing loans), liquidity problems and eventually emerging of banking insolvency.

The financial condition of the Paraguayan banking system was poor even before the crisis, which was confirmed by The World Bank Report published in 1994. This Report said that according to the Paraguayan Central Bank authorities, the solvency of the system was below standard. G\$300 billion (US\$200 million) would be required to fulfill existing regulations on minimum capital, a regulation which should have been enforced starting from early 1993. Fulfillment of other regulations regarding portfolio risk

classification, which should also become operational in 1993, was expected to demand additional resources from bank owners. Central Bank Authorities also complained that credit concentration is exceedingly high, meaning that the financial problems of a couple of creditors might endanger the whole system (World Bank, 1994, p. 75).

2.3. Banking crises development and introduced remedies

The banking crisis in Argentina erupted in December 1994 in the direct aftermath of events in Mexico. Its development can be divided into 4 phases (Ramos A.M., 1998, p. 26), which are illustrated in Figure 2.

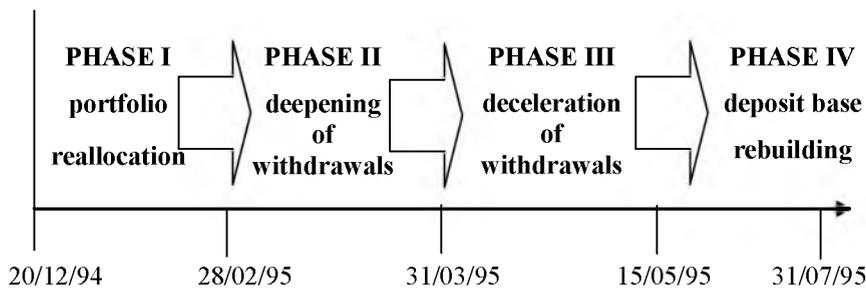


Figure 2. Phases of banking crisis in Argentina

Source: own study based on: Ramos A.M., 1998, *Capital Structures and Portfolio Composition During Banking Crises: Lessons from Argentina 1995*, „IMF Working Paper” nr 121, p. 26

During phase I rapid conversion of assets in investors' portfolios could be observed, which resulted in escaping from peso-denominated deposits into U.S. dollar ones as a consequence of a loss of confidence in the domestic currency and a growing awareness of its devaluation risk. Another way of reallocation consisted in moving deposits to bigger, stronger and safer banks.

Phase II was characterized by accelerating the pace of deposit withdrawals, which derived from the awareness of the deposit insurance system absence and worsening of banks financial condition. In this period there occurred an intensive bank panic, which resulted in a drop of the deposit base by more than 4.2 billion dollars.

In Phase III the pace of deposit withdrawals decreased. Such alleviating of the deposits drainage was possible owing to the promise concerning financial support made by International Monetary Fund.

In the last, Phase IV, gradually restoring confidence in the banking system was observed, which manifested itself in deposit base rebuilding.

From the beginning of the banking crisis outbreak the authorities decided to create additional liquidity. Sources of this liquidity were reserves' levels reduction and increasing central banks facilities to provide financial support to distressed banks (Table 5). It became possible, owing to the extension of the central bank's lender of last resort function and allowing the repurchase agreements and granting loans to commercial banks. The next step was to establish trust funds which were to assist the banking system restructuring.

Table 5
Sources of financing deposit outflow in Argentina in millions of pesos

Time period	Central bank creation of new liquidity				Other sources
	Repos	Loans to banks	Reserve requirements reduction	Total	
20/12/94 – 28/02/95	369	256	2,400	3,025	916
01/03/95 – 31/03/95	436	842	1,000	2,278	244
01/04/95 – 14/05/95	15	439	0	454	12
Total 20/12/94 – 15/05/95	820	1,537	3,400	5,757	1,172

Source: Dabós M., Gómez Mera L., 1998, *The Tequila Banking Crisis in Argentina*, Universidad de San Andrés, Argentina, p. 15

Simultaneously, the government passed a bill increasing budget discipline, which resulted in International Monetary Fund's decision to grant financial support to Argentina. Reaching agreement with the IMF is considered an unquestionable breakthrough in restoring public confidence both in the banking system and the whole economy as well. This goal was supported later by introducing a deposit insurance system.

Thus, measures which were taken in Argentina were concentrated not only on providing liquidity to the banking system but also on rebuilding public confidence in it (Table 6).

Table 6

Detailed measures undertaken to manage the banking crisis in Argentina

Date	Measures
Facilities providing liquidity to the banking system	
01/95	Arg\$250 million safety net from top 5 banks' funds in exchange for lower reserve requirements
01/95	Arg\$750 million safety net from the transfer of 3% of their pre-crisis deposit base of the top 25 banks to Banco de la Nation
01/95	Trading of excess legal reserve position between banks allowed
2/95	Swaps and rediscounts allowed at longer maturities and in amounts exceeding the net worth of the borrowing bank
3/95	Banks with insufficient credit balance in their account at the central bank allowed to cover themselves by presenting the documents drawn on them up to the amount necessary to achieve a positive balance in that account
Long-term measures to enhance confidence in the banking system	
4/95	Trust Fund for the privatization of provincial banks amounting to US\$1.95 billion
4/95	Trust Fund for the restructuring of private banks amounting to US\$2.5 billion
4/95	Creation of a limited private deposit insurance
4/95	Amendment to the Financial Institution Act, increasing the CBRA's involvement in bank restructuring
1/97	US\$6 billion medium-term line of credit for banks in need of liquidity

Source: Garcia-Herrero A., 1997, *Banking Crises in Latin America in the 1990s: Lessons from Argentina, Paraguay and Venezuela*, „IMF Working Paper” nr 140, pp. 25, 28

Owing to the introduced remedies, the authorities managed to overcome bank panic and deposit withdrawals as well as restore public confidence.

However, in Paraguay the banking crisis erupted at the same time as Argentina was starting to getting out of trouble in its banking system, i.e. in May 1995. One of the direct incentives to the banking crisis outbreak was information about a discrepancy of about US\$4 million worth of guaraní in central bank's vault, which led to the resignation of its president and board of directors. This event shook public confidence and created huge uncertainty.

This information emerged when the situation in the Paraguayan banking system wasn't good in terms of liquidity. Some of the banks in 1994 were signaling their liquidity problems following which they were granted

financial help from the central bank. However, their problems turned out to be more serious than previously presumed.

When the authorities became aware of the fact that banks, which suffered financial problems (especially liquidity problems), would not be able to overcome these problems themselves in such an unstable environment, the central bank was given authority to design and implement a strategy to mitigate the negative impact on the rest of the financial sector. The strategy was to (World Bank, 1999, p. 27):

- intervene in and take over the management of troubled banks,
- provide the intervened banks with the financial resources necessary to comply with their payment obligations, and
- isolate these banks from the rest of the financial sector.

During the period from May to July 1995, the central bank had intervened in 4 cases of insolvent banks, 3 financial institutions and savings and loans associations because of their inability to clear overdrafts at the central bank. Altogether the intervened banks and financial institutions had a 15% share of financial system deposits, out of which 12% constituted banks. After the next 4 months, in November 1995, three more finance companies were intervened. All intervened banks were locally owned.

The intervention carried out in the banks revealed a number of illegal practices and violations of law, which were commonly used in Paraguayan banking system. Many of the assets recorded in these institutions' books were nonexistent, more than half of their loans were made to related parties, and only a fraction of the banks' liabilities had been registered as such (Garcia-Herrero A., 1997, p. 41). These informal or "black" transactions on the deposit side were done simply by issuing a different certificate of deposit. Much of the illegal deposits were channeled as loans to bank-connected enterprises. This is a feature uncommon in other countries, but which nonetheless suited Paraguay's particular "informal" business culture (World Bank, 1999, p. 23). Because of detected illegal practices, the Paraguayan government assumed ownership of the intervened banks. All these events adversely influenced public confidence and resulted in deposit withdrawals from intervened institutions.

Table 7 shows the most important measures taken by Paraguayan authorities during banking crisis.

Table 7

Detailed measures undertaken to manage the banking crisis in Paraguay

Date	Measures
Facilities providing liquidity to the banking system	
mid-95	Creation of a special lender of last resort facility, the "Bank Safety Net", to provide the banking system with liquidity
6/96	Expansion of the CBP's lender of last resort facility to longer-term credits linked to the rehabilitation of distressed financial institutions
11/96	CBP's purchase of bad loans to distressed banks
Measures to enhance confidence in the banking system	
4-7/95	Intervention of 4 banks, 6 finance companies and saving and loan associations, but maintaining them open so that all registered deposits could be honoured
7/95	BCP announcement of full implicit guarantee of all deposits in the financial system
mid-95	Congressional Law granting the restitution of unrecorded deposits as well, but thereafter appealed by the President
6/96	Passage of a new Banking Law, making deposit insurance compulsory for all banks. An amount of US\$2,500 guaranteed per account
12/96	Adoption of the Congressional Law granting the restitution of unrecorded deposits up to US\$1,500 per account

Source: Garcia-Herrero A., 1997, *Banking Crises in Latin America in the 1990s: Lessons from Argentina, Paraguay and Venezuela*, „IMF Working Paper” nr 140, p. 46

In order to restore the already undermined confidence in banking system, the central bank assured it would take the responsibility for deposits and other banks' liabilities. Although the intention at the beginning was to honour only recorded deposits in full, holders of unrecorded deposits put pressure on the government to have their deposits covered as well (Garcia-Herrero A., 1997, p. 44). As a result, despite a Presidential veto, the Supreme Court upheld a law, requiring the BCP to retribute up to 30 millions of guaraní per account (around US\$14,000) to holders of off-balance sheet deposits in intervened banks (IMF, 1998a, p. 6).

Other measures undertaken by the central bank regarding crisis management, focused mainly on creating facilities to provide liquidity to distressed banks. One of these measures, called Bank Safety Net, consisted in creating possibility to transfer liquidity from banks experiencing deposit increases to those that were losing deposits. Under such a mechanism, distressed banks would use loans as collateral to obtain funds from banks of excess liquidity. In June 1996, CBP offered longer-term credit (for a maximum 6 years), provided banks complied with a rehabilitation plan. In

the event of their inability to comply with it, the central bank started a program of repurchasing bad loans (Garcia-Herrero A., 1997, p. 44).

The value of central bank loans granted to banks and financial institutions is presented in Table 8.

Table 8
Balance of central bank loans to the financial sector (millions of US\$)

	Jun-95	Dec-95	Jun-96	Dec-96	Apr-97	May-98
Intervened financial institutions	187.3	282.9	286.5	286.5	286.5	na
Safety net loans	-	44.8	43.1	30.9	27.2	31.9
Rehabilitation loans	-	-	6.5	57.7	98.4	108.1
Overdraft facility	0.9	0.3	6.5	39.8	21.2	25.3
Other	-	-	7.2	41.3	41.3	na
Total	188.2	327.9	349.8	456.1	472.0	514

Source: World Bank 1999, *Paraguay – Country Economic Memorandum: Macroeconomic Policies to Reactivate Growth*, “Economic Report” No. 18392-PA, p. 30

The amount of financial support was increasing along with the banking crisis development. Although part of this increase could result from normal operations between central bank and banks or financial institutions, most of this increase is connected with liquidity support to distressed financial intermediaries. Part of this support is unlikely to be repaid, which increases the cost of the banking crisis in Paraguay.

Summing up the remedies undertaken during the banking crisis in Paraguay, it could be observed that initially the authorities – instead of undertaking preventive measures aiming at solving problems in banking system – preferred for the sake of political reasons to grant massive financial support to distressed banks or supervisory forbearance in enforcing prudential regulations. According to the World Bank “Economic Report” (World Bank, 1999, p. 26) the main reason why the Central Bank did not intervene earlier was partly because the legal framework did not provide an adequate mechanism for financial entities to exit the system and the authorities did not possess the power to enforce prudential regulations.

Although remedies introduced in Paraguay managed to overcome the bank run, they turned out to be very costly. Additionally, they only alleviated the consequences of the crisis and did not solve the sources of problems like weak and forbearing supervision, excessive risk undertaken in banking

activity, incompetence of banks' management and high share of loans to related parties.

Moreover, a financial system clean-up required in the aftermath of this first wave of crisis was not completed, and institutions with significant deficiencies were allowed to remain in operation (IMF, 1998a, p. 6). Because the interventions did not fully address problems in banking system, as a consequence it was left unstable and vulnerable to future crisis. Due to such an unstable environment, in a short time bank difficulties emerged once again.

The second wave of banking crisis appeared in mid-1997 and entailed central bank interventions in ailing banks and other financial institutions. There occurred a run on national banks (both private and public) and their deposits fell by nearly 15 percent. In 1997 three banks and the largest saving and loans association were intervened in. The situation deteriorated further after December and four more banks and three more finance companies were intervened in until mid-1998 (World Bank, 1999, p. 29).

The program implemented in Argentina is assessed as a more comprehensive program of managing banking crisis, although the banking crisis in Argentina was much more severe and intensive. Set of measures introduced there were focused not only on providing liquidity support to ailing banks but also on undertaking actions directed to rebuilding confidence in banking system and the whole economy. What is more, in contrast to Paraguay, Argentina managed to solve problems connected with weaknesses in its banking system by strengthening supervisory and conducting consolidation processes.

2.4. Consequences of banking crises

As mentioned above, a more severe crisis in terms of its consequences was the banking crisis which took place in Argentina. According to A. Garcia-Herrero (Garcia-Herrero A., 1997, p. 7) the crises that resulted from both macroeconomic and bank-specific causes had the largest negative macroeconomic consequences while these which arose from only banking problems had a more alleviated development. Events in Argentina and Paraguay seem to confirm this theory. Crisis in Argentina stemmed from both macroeconomic and banking sector weaknesses so its impact on the banking sector and the whole economy was much more severe.

In Argentina adverse consequences could be observed not only in the banking sector but for the whole economy as well. As regards the banking

sector, bank panic in Argentina was so strong that deposit outflow constituted almost 19% of deposit base (Table 9). During this time central bank reserves had decreased by more than 27% (D'Amato L. Grubisic E., Powell A., 1997, p. 5).

Table 9
Percentage changes in deposit base in different types of banks in Argentina

Types of bank	Time period			
	20/12/94 – 28/02/95	01/03/95 – 22/03/95	23/03/95 – 05/05/05	20/12/94 – 05/05/05
Public banks:				
• national public banks	0.05	-10.32	1.61	-10.95
• provincial public banks	-13.22	-6.23	-3.66	-21.96
Private banks:				
• domestic private banks:				
▪ private wholesale banks	-55.21	-19.12	-6.84	-66.91
▪ private retail banks:				
- large retail banks	0.68	-8.06	-1.86	-9.04
- small retail banks	-21.34	-13.64	-7.78	-37.58
- interior banks	-17.73	-13.42	-13.64	-40.0
• foreign private banks	1.08	-3.79	-0.76	-3.57
• cooperative banks	-19.37	-12.53	-13.66	-39.41
Entire system:	-7.41	-8.60	-3.16	-18.73

Source: based on: D'Amato L. Grubisic E., Powell A., 1997, *Contagion, Banks Fundamentals or Macroeconomic Shock? An Empirical Analysis of the Argentine 1995 Banking Problems*, „Central Bank of Argentina Working Paper”, nr 2, p. 6

As we can see in Table 9, banks which were particularly affected by deposit withdrawals in Argentina were private merchant banks, cooperative banks and private retail banks. There could be observed a clear retreat from smaller banks to bigger ones, as well as from domestic to foreign, which were considered safer by depositors.

The banking crisis in Argentina connected mainly with deposit run and liquidity problems led to a decrease in the number of functioning banks – 51 banks closed their activity (12 of which were liquidated and 39 merged with others), 2 banks were suspended but later in 1996 they also merged with other banks.

Table 10 presents the consequences of the Argentinean crisis, called Tequila one, to the banking system, while Table 11 shows changes in banks number and deposits held by them in 1995 as compared to the previous year.

Table 10

The influence of Tequila crisis on the banking system

Detailed list	Number of institutions
Number of institutions (December 1994)	205
Institutions liquidated	12
Number of mergers	39
New institutions	4
Number of institutions (December 1995)	156
Institutions suspended and then merged	2

Source: Calomiris Ch.W., Powell A., 2000, *Can Emerging Market Bank Regulators Establish Credible Discipline? The Case of Argentina, 1992-1999*, "NBER Working Paper" No 14, p. 13

Table 11

Number of institutions in financial system and their percentage share in deposits

Types of banks	December 1994		December 1995	
	Number of banks	Deposits %	Number of banks	Deposits %
State-owned banks, including:	33	39	22	40
- national	6	15	6	15
- municipal	27	24	16	25
Private banks, including:	135	60	105	60
- domestic	66	33	68	36
- foreign	31	16	31	19
- cooperative	38	10	6	5
Total banks	168	99	127	99
Non-banking	37	1	29	1
Total system	205	100	156	100

Source: Ministry of Economy and Production, Argentina, 1995 „Economic Report” Fourth Quarter 1995, No 16

The banking crisis in Argentina not only affected the banking system but it also had an adverse influence on the whole economy – it resulted in the contraction of real output and a sharp increase in interest rates, which reflected the loss of confidence in the Argentinian economy. Gross domestic product dropped from 5.8% in 1994 to –2.8% a year later. This drop of economic activity was not a long-lasting one because Argentina

managed to overcome this slump and achieve economic growth of 5.5% in 1996.

Massive deposit withdrawals, which were particularly intensive in phases I and II, led to serious liquidity problems and a sharp increase in interest rates, especially interest rates on credit in peso, which rose from 9% in January 1994 to 24% a year later (Figure 3). However, the banking crisis left the level of inflation more or less unchanged.

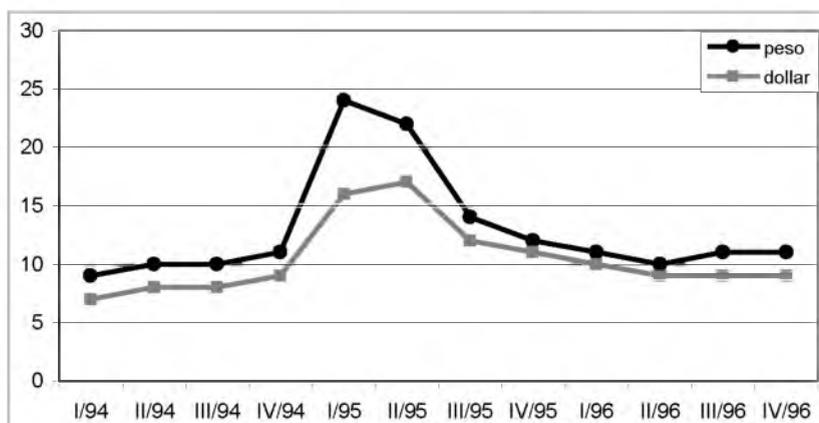


Figure 3. The evolution of interest rates of 30-days credit in peso and dollar

Source: own study based on: International Monetary Fund, 1998, *International Financial Statistics*, March 1998

With regard to Paraguay the bank run and deposit withdrawals were not as spectacular as in Argentina. Deposit outflow could be observed only from private domestic banks, but a bank run on the entire banking system was fortunately avoided. This was possible due to two reasons. First, the massive liquidity support from central banks to ailing ones. Second, the presence of other banks, especially foreign ones, which were perceived as safer and to which depositors might transfer their savings. In Paraguay almost only the phenomenon “*flight to quality*” occurred, which consisted in transferring savings from ailing banks to safer ones, rather than withdrawing deposits outside the banking system. Depositors included foreign and public banks to safe ones, because they were perceived as having guarantees from mother entities or the government, respectively. So the banking crisis in Paraguay had a different influence on different types of banks – the most affected were private domestic banks. Due to these

reasons by the end of 1995 deposits withdrawals constituted only 2% of the deposit base.

Much more severe deposits outflows took place during the second wave of banking crisis in mid-1997. As distinct from “*flight to quality*” in the first wave of the Paraguayan banking crisis, when depositors were moving their savings to others banks but keeping them within the banking sector, in the second wave of the banking crisis some of deposits were transferred beyond the banking sector or even abroad.

During the second wave of the banking crisis, nearly 4 percent of total private sector deposits exited the Paraguayan banking system in just six weeks, between mid-June and end-July 1997. All national banks incurred a deposit outflow and at least half of them suffered declines in excess of 15 percent (World Bank, 1999, p. 31). Because of such serious deposit withdrawals, the situation of local banks in terms of liquidity deteriorated and some of them had to be liquidated. In comparison to the time before the banking crisis erupted, i.e. 1995, the number of local banks decreased by 5 by 1998 (see Table 3).

Additionally, the banking crisis in Paraguay led to financial market share changes. As a result foreign banks, which were perceived as the most solvent institutions, constituted 66% of the banking sector in terms of deposits and almost 61% of the whole financial system including 48 finance companies (Table 12).

Table 12
Financial system structure

Types of banks:	Foreign banks	Local banks	Intervened/ insolvent local banks	State banks	Total banks	Finance companies
Number	17	5	6	2	30	48
Assets						
% of banking sector	62	8	11	18	100	
% of financial sector	57	7	10	17	91	9
Deposits						
% of banking sector	66	9	11	14	100	
% of financial sector	61	8	10	13	92	8
Loans						
% of banking sector	62	9	10	19	100	
% of financial sector	56	8	9	17	89	11

Source: World Bank, 1999, *Paraguay – Country Economic Memorandum: Macroeconomic Policies to Reactivate Growth*, “Economic Report” No. 18392-PA, Annex II

One of the adverse consequences of the banking crisis in Paraguay was the increase of non-performing loans share in bank portfolios. The ratio of reported non-performing loans to total loans amounted to 6% in foreign banks, 7% in local ones, but reached 24% in the group of intervened local banks and 40% in state banks.

While analyzing the impact of the Paraguayan banking crises on the economy, it could be observed that events from the first wave of the banking crisis in 1995 did not have such a strong influence compared to its second wave in 1997. As a result of the first wave of crisis, GDP declined from 4.7% in 1995 to 1.3% in 1996. After a brief recovery in 1997, when GDP amounted to 2.6%, the second wave of banking crisis contributed to an economic activity contraction with GDP equal to -0.4%.

However, the banking crises in Paraguay did not have a big influence on the level of interest rates, which were running on average 30-35% on credit in domestic currency and about 15% on credit denominated in foreign currency (Figure 4).

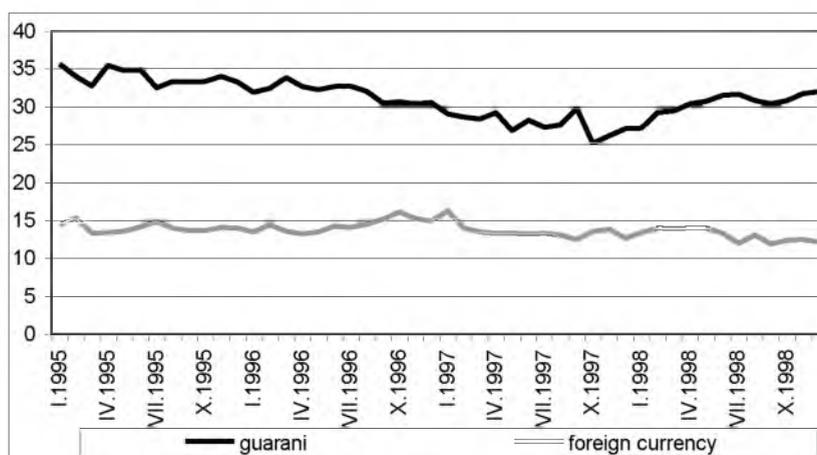


Figure 4. Evolution of 30-days credit interest rates in domestic and foreign currency

Source: own study based on: International Monetary Fund, *International Financial Statistics*

By the end of May 1998, the government liabilities on account of the banking crisis had risen to US\$500 million, equivalent to 5.1 percent of GDP. The gross cost includes all credits extended to insolvent banks which were unlikely to have been repaid, as well as selected deposit guarantee payments (World Bank, 1999, p. 30). According to IMF estimations the

banking crisis cumulative cost during the period 1995-98 is estimated at a maximum 13% of 1998 GDP. In December 1997, after reserves had declined by close to 40% from their peak in 1996, the central bank temporarily abandoned its support for the guaraní, which was depreciated by some 20 percent (IMF, 1999).

3. CONCLUSIONS

Domestic financial markets have become much more liberalized in the last few years, and international linkages have also grown remarkably. This creates better development opportunities to emerging markets but on the other hand it increases their vulnerability to shocks and financial crises.

Summing up the main reasons of the Argentinian and Paraguayan banking crises outbreak, there should be distinguished crises which stem from both bank-specific and macroeconomic causes and those arising from only bank-specific reasons. This is important because the origin of the crisis is essential in understanding the scope of the crisis, in terms of the number of banks and share of deposits affected, as well as the crisis' macroeconomic impact.

The banking crisis in Argentina resulted from external shock but it also exposes the weakness of the financial system and the Argentinian economy, so the reasons for its outbreak were connected both with the banking sector and the whole economy. Whereas the crisis in Paraguay stemmed from mainly bank-specific reasons like conducting financial liberalization and deregulation without strengthening supervision, which resulted in undercapitalization of banking sector.

With regard to the crises development and measures introduced in order to mitigate the distressed situation in the banking systems of Argentina and Paraguay, the Argentinian authorities reacted without delay introducing rapid and consistent set of remedies focused on both liquidity management and restoring public confidence in the banking system. In Paraguay the authorities reacted with delay, replacing "real" remedies with supervisory forbearance, which resulted, among other things, in problems in the payment system. But besides the authorities reaction to the crisis there are some other factors influencing the crisis development and its scope. One of these factors is past experience with the distressed situation. Negative experience with banking crises like adverse consequences of introduced remedies in the past (e.g. deposit freeze) contributes to limited confidence in the banking sector

and the government. Whereas a tradition of honoring deposits strengthens public confidence and reduces the extent of bank panic. In Argentina, negative past experience played an important role by causing a bank run at the first signs of a banking crisis outbreak, while in Paraguay the general perception was that government would guarantee all kinds of deposits in all banks, which had a positive impact on public confidence and resulted in a decrease of intensity of bank panic.

In the process of overcoming the crisis, both countries did not manage to avoid inaccurate decisions, which not only didn't help to stabilize the situation but sometimes even worsened it. In Argentina one of the introduced remedies which complicated the process of stabilization was the decision of freezing deposits. This controversial measure, which was used in order to alleviate deposit outflows, had many adverse consequences like a serious perturbation in the payment system, payment gridlock and loss of confidence to the banking system, the whole economy, law and the government. In Paraguay, one of the introduced measures which did not bring intended results was the creation of a banking safety net. This was created in order to provide liquidity for distressed banks, but in the light of reluctance on the part of the solvent banks to offer liquidity support for insolvent banks, Central Bank became the one and only to provide liquidity.

In banking crises analysis there is also an important factor like share of foreign banks and level of "dollarization" in the country afflicted by the crisis. In the reviewed countries, where both the level of dollarization and share of foreign banks remained high, depositors could transfer their savings from domestic banks to foreign ones instead of withdrawing them outside the banking system. As a result, foreign banks experienced in a lesser extent a decrease of their deposit base compared to domestic ones, or in some cases they even managed to increase it, like in Argentina at the beginning of the crisis. So the existence of a large share of foreign capital in Argentinian and Paraguayan banking systems, perceived to have a full guarantee from their overseas headquarters, acted as a buffer (particularly in Paraguay) and fostered *flight to quality* rather than *capital flight*, and thus helped to stabilize the deposit base.

Because the development of the banking crisis in Argentina was much more severe, the consequences are also more serious in terms of the banks affected, the scale of deposits outflow, economic activity contraction and increase of interest rates. What is more, six years later, i.e. in 2001, Argentina was again afflicted by a banking crisis, which this time was much more severe. The phenomenon of relapse of the crisis can be partly

explained by the fact that Argentina was touched by three banking crises in the period of 1980-1995, which caused their higher vulnerability to similar shocks in the future. Both investors and depositors were much more circumspect and sensitive to the first symptoms of crisis, reacting by capital withdrawals, which exacerbated the situation and increased the probability of a renewed crisis outbreak.

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