WPS1620

Public Disclosure Authorized

POLICY RESEARCH WORKING PAPER 1620

Bank Insolvencies

Cross-country Experience

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A useful new database on episodes of bank insolvency since the late 1970s

The World Bank
Policy Research Department
Finance and Private Sector Development Division
July 1996

Summary findings

Few areas of the world have escaped significant losses from episodes of bank insolvency. Bank insolvency is more costly in the developing world, where losses represent a greater share of income than in industrial economies and where it is therefore doubly important to prevent these episodes.

Caprio and Klingebiel present data on episodes of bank insolvency since the late 1970s. This new database can be used in conjunction with readily available data (for example, on GDP, inflation, fiscal balances, monetary growth, and trade balances). Information and insights are presented in seven tables on:

- Episodes of major bank insolvencies and systemic banking crises (country, scope of crisis, and estimate of losses).
- Main characteristics of banking crises (magnitude, cost of resolution, mechanism of resolution, growth in new loans, and GDP).
- Terms of trade in crisis countries.
- Characteristics of restructuring.
- Financial analysis of crisis countries (financial deepening, real credit/GDP, real deposit interest rates, and recurrent problems).
- Outcome of restructuring in crisis countries.

In a companion paper (Caprio and Klingebiel, "Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking?" in Michael Bruno and Boris Pleskovic, eds., *Annual World Bank Conference on Development Economics 1996*, Washington, DC: World Bank, forthcoming) the authors discuss possible preventatives and the tradeoffs between safety and soundness, on the one hand, and efficiency, on the other. (How high should capital reserves be, for example?) Meanwhile, this initial database suggests further avenues for research.

There is a dearth of widely available indicators on bank performance. This might have been understandable in the early 1980s but not today, considering the number of episodes of bank insolvency. The damage done to Mexico's economy during the 1994–95 crisis and the estimates of enormous losses from some Brazilian banks dramatize the significance of the problem. More attention should be focused on developing indicators that might predict bank insolvency for individual banks and systems as a whole.

Caprio and Klingebiel devise criteria for assessing how governments deal with insolvency and find that countries handle it well. The companion paper makes recommendations for addressing this failure.

This paper — a product of the Finance and Private Sector Development Division, Policy Research Department — is part of a larger effort in the department to study the causes and consequences of bank insolvency. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Bill Moore, room N9-038, telephone 202-473-8526, fax 202-522-1155, Internet address bmoore@worldbank.org. July 1996. (52 pages)

Bank Insolvencies: Cross Country Experience

by

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The authors are, respectively, Lead Economist, Policy Research Department, and Consultant, Western African Department. This paper, and its companion paper, benefitted from comments by Phil Brock, Charles Calomiris, Elena Folkerts-Landau, Philip Keefer, Homi Kharas, Ross Levine, Millard Long, Herminia Martinez, Patrick Honohan, Boris Pleskovic, Andrew Sheng, Mary Shirley, and Shahid Yusuf. Alexander Tanzi supplied competant research assistance, and colleagues in various regions of the World Bank provided helpful information on individual country cases. Given the difficulty in securing accurate and standardized information on the banking systems, data contained herein should be used with caution.

Episodes of bank insolvency have increased in recent years and few areas of the world have escaped without significant losses. Although the losses per se may be belittled as being "just a transfer," they signal a misallocation of resources, since if banks had selected profitable projects, more than likely loans would have been repaid. Moreover, the transfer payments entailed as a result of banking losses often are huge, in many cases 10-20% of GDP and occasionally as much as 40-55% of GDP, if the higher estimates of losses in Chile and Argentina are correct. Large scale transfers of this magnitude cannot be easily handled by most governments and can be expected to derail stabilization programs, as authorities will prefer to rely on less conspicuous taxes, including inflation.

This paper reproduces the data gathered in the last year on episodes of bank insolvency that have occurred since the late-1970s for the benefit of researchers and others interested in this area. It is the first such effort and necessarily contains a number of flaws. First and foremost, it relies upon the assessment of a variety of finance professionals in pulling together characterizations of factors that have caused crises, as we will henceforth dub insolvency episodes, and for information on their resolution. Only published sources or interviews with experts familiar with individual episodes were employed. In the future, as greater attention is focused on banking problems, there is the hope that more systematic and quantitative sources will be available. Second, for many countries there are no published, comparable data for banks which would permit outsiders to know with great precision the solvency of the institution. Marking bank portfolios to market is treacherous in industrial countries, where many loans are not traded, and it is doubly so in developing and transitional economies. Third, it is difficult to time these episodes of bank insolvency. Overt crises, such as those involving a run on banks and/or on a country's currency, are relatively easy to date, but these are only a subset of the episodes reviewed here. Financial distress, in which the banking system has negative net worth, can occur over a period of time and indeed even persist before being detected. The dates attached to the crises reviewed here are those generally accepted by finance experts familiar with the countries, but their accuracy is difficult to determine in the absence of the means to mark portfolios to market values. Similarly, it is not always clear when a crisis is over, and in the case of countries in which there are multiple episodes, it may well be that later events are merely a continuation of those occurring earlier. Lastly, it should be noted that there are no policy conclusions presented here, as they are contained in a companion paper (Caprio and Klingebiel, 1996).

The Data

Table 1 presents the entire sample of 69 countries for which information was available, with those countries in which the episode appeared to be systemic, in the sense of much or all of bank capital being exhausted in the first part of the table, and the smaller or more borderline episodes in the second part.[1] As noted in Caprio and Klingebiel (1996), some judgment has gone into the compilation of this list, not only for the countries in which data are absent on the size of the losses but also in that in many cases the official estimates understate the size of the problem. There likely were countries not shown which had smaller crises since the late 1970s, but about which relatively little was written, and hence they have been omitted from the table. Moreover, virtually every transitional economy (TE) at some stage in the transition process belongs on the (systemic) list; however, in the interest of limiting the number of countries with missing information these were excluded. Including all the TEs would bring the number of countries covered to about 90 and the episodes to well over 100.

Table 2 turns to a subset of 26 countries (29 cases) for which more detailed information was available and reviews the factors cited as important causes of the crisis, its size and the resolution cost, a brief note on the approach taken in this resolution process, and the real credit and real GDP growth leading up to the episode. A closer look at this subset of banking system insolvencies further shows that a variety of factors (column 1) can be cited as causes of the banking crisis. Macro factors were at least a contributing factor in all of the banking crises in our subset.[2] But a weak incentive system for banks also figured prominently (Caprio and Klingebiel). Whereas the former tended to be more proximate and obvious once the banking crisis was brought to public attention (either by bank runs or by the government issuing a guarantee on deposits), weaknesses in the latter tended to exacerbate the magnitude of the crisis. With respect to the accounting framework, in many countries it was mostly left to the banks' discretion when to list a loan as non-performing and whether to show accrued interest as paid -- in other words, existing regulations were lax. If they existed at all, prescribed capital to asset ratios were generally set at low levels, single borrower and other exposure limits were mostly non-existent or very lenient. Poor lending decisions, lack of managerial skills, and fraud were in some of the cases (e. g. in Benin, Ghana, Guinea, Thailand, Colombia) additional contributing factors to the crisis, as well as lending to related parties and politically motivated loans (Benin, Chile, Philippines, Ghana, Indonesia, Turkey, Brazil). Better supervision might have revealed and halted these problems earlier, if political forces were conducive to allowing supervisors to take prompt corrective action.

The magnitude of the crisis episodes of our subset ranged from affecting banks controlling around 70-90% of banking system assets (Benin 1988-90, Guinea 1985, Ivory Coast 1988-91, Poland 1991) to banks accounting for around 40-60% of banking system assets (Philippines, Argentina 89/90, Chile, Estonia). A relatively smaller but still very large share of the banking sector was affected in Uruguay (30% of financial system deposits), Senegal (20-30% of financial system assets), Colombia (25% of banking system assets) and Spain (20% of total deposits). The Malaysian banking crisis appears relatively minor compared to these episodes; institutions which accounted for only 3.3% of financial system deposits were found to be insolvent with another 4.4% of marginally solvent institutions.

Table 3 shows the change in the terms of trade in the years leading up to the crisis. Volatile terms of trade are particularly troublesome for economies that are highly concentrated, and Table 4 reveals that many developing countries tend to be much more concentrated, as proxied by the importance of top 3-4 items in exports. Export concentration typically was substantially greater in the countries experiencing systemic problems from those with only borderline episodes. With concentrated economies, domestic banks often cannot protect themselves from volatility if they are constrained to domestic investments which, as a result of capital controls, often is the case.

Turning to the resolution of bank insolvency, Table 5 attempts to characterize the steps taken, including changes in macro policies and a variety of variables meant to capture changes in different aspects of the incentive system confronting bankers. Note here that we sought to identify instances where countries adopted a resolution mechanism that included among other measures a recapitalization of the banking system, in order to illustrate the importance of addressing incentives and getting the message across that poor performance is costly. Also, in arriving at our sample we were influenced by the availability of information.

The resolution of bank insolvency proved to be very expensive in our subset, placing a heaven burden on the country and on the government's budget, though a caveat is important here as we have not been able to include that part of the burden born by depositors and borrowers in the form of widened spreads for bad loans that were left on banks' balance sheets.[3] Among the episodes with available data, Argentina's banking crisis in the early 1980s proved to be the most expensive restructuring exercise, amounting to 55.3% of GDP, followed by the Chile with a price tag of over 40% of GDP, Côte d'Ivoire 25% and Benin and Senegal costing 17% of GDP. Up to March 1995, Venezuela has spent 13% of GDP on the resolution of its banking crisis, and more recent numbers in the press put the cost at 18% of GDP or higher. Less expensive but still a heavy burden on the country placed the ongoing restructuring in Hungary, amounting to about 10% of GDP and the restructuring in Uruguay and Ghana, costing 7% and 6% of GDP, respectively. All of these cases, were characterized by large interest rate spreads, as often is the case when insolvency is a problem (Brock, 1995). And although the banking crisis reportedly only affected a small fraction of the banking system in Malaysia, estimated losses of all financial institutions added up to 4.7% of GNP.

All of these numbers deserve some suspicion, as governments can bail out banks in a variety of ways, such as by giving a subsidy to a borrower, granting the borrower some monopoly privilege or other means to improve its profits and thereby repay loans, or by directly injecting funds to banks. Not surprisingly, the cost of indirect methods can be difficult to estimate.

Although some of the episodes of banking system insolvencies are still being resolved, a few preliminary observations can be made. Governments were successful in dealing with macro imbalances -- that is to lower their budget deficit, to bring down inflation and/or to devalue its currency to address external imbalances -- in only six cases (Chile, Estonia, Finland, Malaysia, Spain and Thailand); a relatively stable policy regime was already in place in the United States; in Benin, Côte dIvoire and Senegal, inflation declined but it was not until several years later that currency overvaluation was corrected. In 16 other cases, macro imbalances either were addressed inadequately or only partly resolved, resulting in a continuation of the volatile macro environment.

The strengthening of the regulatory and accounting framework and the enforcement thereof constitute the other important components of the external incentive system within which banks operate. Some changes were introduced in all of the cases of our subset. However, only in sixteen cases can these changes be considered to be substantial encompassing the introduction or strengthening of capital/asset ratios, single borrower as well as other risk exposure limits, the prohibition of connected lending and limits to lending to bank officers and board members as well as the implementation of standardized rules for asset valuation and loan provisioning.[4] Argentina and Brazil implemented a satisfactory accounting and regulatory framework for their private banks but only recently started to extend these frameworks to the public banking system. For the rest of the cases the changes made cannot be considered to be satisfactory. Only eight of the 16 cases (Benin, Chile, Côte d'Ivoire, Finland, Malaysia, Colombia, Spain and the United States) in which the regulatory and accounting framework was substantially strengthened also saw significant improvements in the enforcement of improved regulations.

Regarding the internal incentive framework, shown in the last four columns of Table 5, we also observe notable differences in whether governments implemented performance monitoring programs for banks, put measures into place that halted lending to borrowers in default, made attempts to collect on written off loans, and changed senior bank management. All of these measures are important, in that they reduce the scope for "evergreening" loans (make bad loans look good by lending more funds) and send a clear signal that debts need to be repaid and that losses will be penalized. In ten cases, annual performance monitoring programs by reputable outside auditors were put into place, while in two cases (Uruguay, Poland), this measure was only adopted for a subset of the banks in the system. In at least four cases of our subset (Côte d'Ivoire, Guinea, Nigeria, and Senegal), no such program was implemented. Banks stopped lending to borrowers in default in nine of the cases for which information was available; in at least four cases lending to borrowers in default was <u>not</u> halted. Poor legal frameworks often proved to be an important hindrance in attempts of banks or institutions that took over bad loans to collect on written off loans. Government failure to improve the legislative framework for banks to enforce their loan contracts also proved to become a hindrance for extension of new loans in the aftermath of the crisis (e.g., banks in Côte d'Ivoire cite an inefficient legal framework as a major reason for their unwillingness to lend). It also drives up the risk premiums banks charge, thus leading to higher overall lending rates that adversely affects the private sector. In fifteen instances the affected banks or agencies appeared to make serious attempts to collect on written off loans. Finally, in the majority of cases (12) for which such information was available did the government change the senior bank management of the restructured banks. In addition, in Poland twinning arrangements with foreign banks were set up and bank managers of state-owned banks received part of their compensation in the form of stock options, which have become valuable in light of the credible privatization process there. This improved incentive system and clear progress towards private ownership likely influenced incentives for prudent risk taking. On the contrary, in Hungary senior bank management was not let go, muting any signal regarding performance. Several Ghanaian bank managers merely appear to have rotated assignments, muting any signal regarding performance.

Turning to an evaluation of the restructuring attempts, Table 6 shows how countries scored on the criteria developed elsewhere (Caprio and Klingebiel) for assessing the success of responses to insolvency. Briefly, countries received a mark if financial depth rose after the crisis to levels above that seen in the pre-crisis period; if real interest rates on deposits were neither excessively negative (below -5%) nor excessively positive (+10%); if real credit growth to the nongovernment sector was positive but not well above (2.5 times) real GDP growth; and if there was no recurrence of a significant episode of bank insolvency. As seen in the Table, only Chile and Malaysia received the highest rating (4) among those in the developing world. Table 7 presents the detailed data on the measures.

Conclusions

This brief paper has laid out a new information base on bank insolvency and can be complemented by more readily available macro data, such as GDP, inflation, fiscal balances, monetary growth, trade balances, etc.[5] Three issues stand out with great clarity. First, there is a dearth of widely available indicators on bank performance. Although this absence was understandable at the start of the 1980s, it is hardly so today, given the number of episodes and the absent of any convincing signs that they are receding in significance. Indeed, the damage done to Mexico's economy during the 1994-95 crisis and the enormous cost estimates for losses in some Brazilian banks underline the significance of the problem. Greater attention should focus on correcting this lacuna, including the development of indicators that might predict the occurrence of these problems, both at the individual bank level but especially for the banking system as a whole.

Second, relatively few countries scored well on handling bank insolvency. To be sure, for several countries insufficient time has passed, and the criteria are not above reproach -- though the authors' priors were that they were excessively lenient. If few governments handle crises well, then this suggests that an analysis of the political economy of bank insolvency would potentially pay a high return. Third, and related to the prevalence of bank insolvency, is the fact that they are more costly in the developing world -- losses have tended to be larger relative to income than in industrial economies. Large losses would increase the importance of preventing these episodes. The companion paper to the present one summarizes different possible preventatives, all of which involve increasing the stake of bank owners and managers in ensuring the safety and soundness of their institutions. These solutions all may entail less competition in banking, and a variety of issues then arise for research. For example, more analysis of how high capital levels should be to prevent bank insolvency in the developing world would make an important contribution to welfare, as would some consideration of the tradeoffs between safety and soundness, on the one hand, and efficiency on the other. Lastly, the experiments of country's such as New Zealand, with more market-based monitoring, and of the United States, with its attempts to tie the hands of supervisors, cry out for future research.

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Notes

1 In cases in which net capital was positive according to official data but likely negative based on statements of experts, we sided with the latter. Decisions on when one crisis ends and another begins are necessarily arbitrary, hence it is possible to differ on whether some cases represent multiple crises or a continuation of the preceding one. Although it would be possible to apply the indicators of success (noted in the next section) and use them to note the end of a crisis, that would mean that many cases would involve ongoing crisis.

2 Except for three cases (Poland 1990s, Brazil 1994, and Turkey 1994) in our subset, all countries experienced a terms of trade (ToT) decline of at least 10% prior to the crisis. Ghana (-60%), Ivory Coast (-47%) and Nigeria (-50%) experienced a very sharp fall in the ToT in the period before banking problems came to the forefront. Moreover, the period prior the crisis was characterized by fast and sometimes explosive loan growth. In 9 cases real loans grew significantly (2.5 times or more) faster than real GDP.

3 Loss allocation is an important part of the restructuring mechanism which also determines the future monitoring of banks by their depositors. Potential bearers of losses include shareholders, healthy banks, depositors and borrowers of the insolvent institutions, and the government. Losses to depositors can be allocated through a write-down of their uninsured deposits, through the conversion of their deposits into bank equity, or both. They also incur losses if the government imposes interest rates that are below their "market rates". If uninsured depositors are completely bailed out, that raises their expectations of a future bailout and lowers their incentive to monitor bank behavior in the future. Losses can be distributed to the government through central bank assistance, guarantee of bank deposits, tax write off of bad loans, or direct intervention. Losses are then passed on to the tax payer or, if they lead to budget deficits which are financed through monetary expansion, to the currency holding public.

4 Admittedly, this is a judgment, based on conversations with bank supervisors and financial economists, as well as various country reports. It also needs to be noted, that even within this subgroup substantial differences in the prudential regulatory framework still exists including different capital to asset ratio (currently 4% in Benin and Côte d'Ivoire but 8% in Colombia) and different single borrower limits (100% in Benin and Côte d'Ivoire and 30% in Malaysia).

5 This information is readily available through the IMF's International Financial Statistics.

Annex Table 1
Episodes of Major Bank Insolvencies
I. Episodes of Systemic Banking Crises

Country	Scope of Crisis [illegible]	[illegible]
Countries: [illegible] *Africa*		
Benin 1988-1990	80% of banks loan portfolio was non-performing.	CFA95bn (17% of GDP).
Burkina Faso late 1980s		
Cameroon 1987-		
Congo 1980s & 1991		
Central African Rep 1980s & 1994.		
Chad 1980s & 1990s		
Côte d'Ivoire 1988-1991	4 big banks affected accounted for 90% of banking system loans; 3 definitely and one perhaps insolvent.	Government costs estimated at CFA677 bn (25% of GDP).
Eritrea 1993	Most of the banking system is insolvent.	
Ghana 1982-1989	7 audited banks (out of 11) insolvent; rural banking sector affected.	Restructuring costs estimated at 6% of GNP.
Guinea 1985	6 banks accounting for 99% of total system deposits.	Repayment of deposits amounted to 3% of 1986 GDP.
1993-94	2 banks insolvent accounting for 22.4 % of financial system assets; one other bank in serious trouble; 3 banks together account for 45% of the market.	
Kenya 1985-89	4 banks and 24 non-bank financial institutions faced liquidity and solvency problems together accounting for 15% of total liabilities of financial system.	
1992	Intervention into two local banks.	
1993-95	Serious systemic problems with banks accounting for more than 30% of assets of the financial system facing solvency problems.	

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Country	Scope of Crisis	Estimate of Total Losses/Costs
Madagascar 1988	25% of loans deemed irrecoverable.	
Mauritania 1984 - 1993	1984: 5 major banks had non-performing assets ranging from 45%-70% of their portfolio.	Cost of rehabilitation estimated at 15% of GDP in 1988.
Mozambique 1987 - present	BCM, main commercial bank, experiences solvency problems which become apparent after 1992.	
Nigeria 1990s	1993: insolvent banks account for 20% of total assets and 22% of banking system deposits; 1995: almost half of the banks are reported to be in financial distress.	
Senegal 1988 to 1991	6 commercial banks and 1 development bank closed accounting for roughly 20 - 30% of financial system assets.	US$830 million which is equivalent to 17% of GDP.
South Africa 1977	Trust Bank	
Tanzania 1987; 1995	1987: the main financial institutions had arrears amounting to half of their portfolio; 1995: NBC, which accounts for 95% of the assets of the banking system has been insolvent for the last 3 to 5 years possibly longer.	1987: implied losses amount to nearly 10% of GNP.
Togo 1993, 1994, 1995		
Uganda 1994	50% of banking system is facing solvency problems.	
Zaire 1991-92		
Zambia 1995	Meridian Bank became insolvent which accounted for 13% of commercial bank assets.	Rough estimate of US$50 million (1.4% of GDP).
Asia		
Bangladesh late 1980s-present	In 1987, 4 banks account. for 70% of total credit had estimated 20% of NPLs; late 1980s up to now, entire private/public banking system is technically insolvent.	

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Country	Scope of Crisis	Estimate of Total Losses/Costs
India 1994/95		
Nepal 1988	In early 1988 the reported arrears of 3 banks (95% of financial system) averaged 29% of all assets.	
Philippines 1981-1987	2 public banks accounting for 50% of banking system assets, 6 private banks accounting for 12% of banking system assets, 32 thrifts accounting for 53.2% of thrift banking assets and 128 rural banks.	At its peak, central bank assistance to financial institutions amounted to 19.1 bn pesos (3% of GDP).
Sri Lanka 1989-93	State-owned banks comprising 70% of banking system have estimated non-performing loans of about 35% of total loan portfolio.	Restructuring cost amounted to 25 bn rupees (5% of GDP).
Thailand 1983-87	Authorities intervened in 50 finance and security firms & 5 commercial banks or about 25% of total financial system assets; 3 commercial banks judged insolvent (14.1% of commercial banking assets).	Government cost for 50 finance companies estimated at 0.5% of GNP; government cost for subsidized loans amounted to about 0.2% of GDP annually.
Central America		
Costa Rica Several instances	1987: public banks accounting for 90% of total credit considered 32% of loans uncollectible.	Implied losses of at least twice the capital plus reserves.
Mexico 1981/82 (perhaps until reprivatized 1990/91)		
Mexico **1995**	Commercial banks past due to gross loan ratio reaches 9.3% in February 1995.	Accumulated losses are estimated at 12-15% of GDP.
Latin America		
Argentina 1980-82	1980-82: more than 70 institutions were liquidated or subject to central bank intervention accounting for 16% of assets of commercial banks and 35% of total assets of finance companies.	55.3% of GDP.
Argentina 1989/90	All banks or 50% of deposits.	
1995	Suspension of eight banks and collapse of three banks.	
Bolivia 1986-87	5 banks were liquidated; total NPLs of banking system reached 29.8% in 1987; in mid-1988 reported arrears stood at 92% of commercial banks' net worth.	

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Country	Scope of Crisis	Estimate of Total Losses/Costs
Brazil (1990)	(deposit to bond conversion)	
1994/95	2 large state banks insolvent, as well as the seventh largest private bank; licenses of 11 small banks revoked.	Estimate: negative net worth of selected state and federal banks estimated at 5-10% of GDP; recent estimates put Banespa's losses alone at US$ 15-20 bn., the largest failure as of early 1996.
Chile 1976	entire mortgage system insolvent.	
1981-83	1983: 7 banks and 1 financiera accounting for 45% of total assets.	1982 - 1985: government spent 41.2% of GDP.
Colombia 1982-87	Central Bank intervened in 6 banks accounting for 25% of banking system assets.	rough estimate: 5% of GDP.
Ecuador early 1980s	Implementation of exchange program (domestic for foreign debt) to bail out banking system	
Paraguay 1995	Government superintendency intervened in two inter connected commercial banks, 2 other banks and 6 related finance houses, accounting for 10% of financial system deposits.	
Uruguay 1981-84	affected institutions accounted for 30% of financial system assets; insolvent banks accounted for 20% of financial system deposits.	Estimated costs of recapitalizing banks estimated at US$350 million (7% of GNP); Central Bank's quasi-fiscal losses associated with subsidized credit operations and purchase of loan portfolios amounted to 24.2% of GDP during 1982-85.
Venezuela 1980?	Banco Nacional de Descuento; Banco de Commercio; Banco de los Trabajuderos;	
1994/95	insolvent banks accounted for 30% of financial system deposits.	Estimated losses put at over 18% of GDP.
Middle Eastern Countries		
Egypt early 1980s	Government closed several large investment companies.	
1990-91		

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Country	Scope of Crisis	Estimate of Total Losses/Costs
Israel **1977-83**	Virtually the entire banking sector affected, representing 60% of stock market capitalization. Stock exchange closed for 18 days; bank share prices fell over 40%.	About 30% of GDP in 1983.
Kuwait 1980s	An estimated 40% of loans were non-performing by 1986.	
Morocco early 1980s		
Europe/Central Asia		
Turkey 1982-85	Five banks were rescued; since 1985, 2 large banks were restructured.	1982-85: rescue cost equivalent to 2.5% of GNP.
Transitional Socialist Economies		
Bulgaria 1990s	1995: an estimated 75% of all loans in banking system were substandard; banking systems run in early 1996.	the banking sector's losses may have amounted to as much as 14% of GDP.
Estonia 1992	insolvent banks: 41% of financial system assets.	recapitalization outlays for new entity 300 million EEK (1.4% of GDP).
1994	Social Bank which controlled 10% of financial system assets.	
Hungary 1991-95	2nd half of 1993: 8 banks (25% of financial system assets) insolvent.	Overall resolution cost is estimated to amount to 10% of GDP.
Latvia 1995	largest bank and nine other banks together accounting for 40% of total banking system assets.	
Lithuania 1995 - 1996	In December 1995, Central Bank suspended of countries largest private bank and one mid-size private bank; these actions followed interventions in two smaller banks earlier in the year.	
Poland 1990s	7 of 9 treasury owned banks with 90% share of total credit market in 1991; Bank for Food Economy and cooperative banking sector.	1993: recap. costs of US$ 750 million for seven commercial banks; recap. costs for Bank for Food Economy and cooperative banking sector amounted to US$900 million.
Romania 1990-93	Many loans to SOEs doubtful.	Agricultural bank recapitalized with wide interest margins.
Russia 1995	On August 24, 1995, interbank loan market stopped working; concern about connected lending in many new banks.	

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Country	Scope of Crisis	Estimate of Total Losses/Costs
Slovenia 1990s		Recap. costs of US$1.3 bn.
Industrialized Countries		
Finland 1991-1993	Savings banking sector badly affected; Government took over control of Skopbank in August 1991; several banks also suffered losses due to bad loans and share investments.	Recap. costs amounted to 8% of GDP.
Japan 1990s	Banks are suffering from sharp decline in stock market and real estate prices; official estimate of NPLs: 40 trillion Yen (US$469 bn) in 1995 (10% of GDP); unofficial estimates reach 1 trillion or 25% of GDP; for some of bad loans banks have already made provisions.	Rescue costs probably higher than US$100 bn.
Norway 1987-89	Central Bank provided special loans to six banks, suffering from post-oil recession of 1985-86 and from problem real estate loans; state took control of 3 largest banks, partly through a Government Bank Investment Fund (Nkr 5 bn) and the state-backed Bank Insurance Fund had to increase capital to Nkr 11 bn.	Recap. costs amounted to 4% of GDP.
Spain 1977-85	1978-83: 51 institutions holding 1/5 of all deposits were rescued; 1983: government nationalized 20 small/medium sized banks.	Estimated losses of banks were equivalent to approximately 16.8% of GNP.
Sweden 1991	1991: government injected Skr 5 bn (US$800 million) into state controlled Nordbanken, and guaranteed US$609 million loan to save largest savings banks.	Cost of recap. amounted to 6.4 % of GDP.

Annex Table 1
Episodes of Major Bank Insolvencies
I. Episodes of Systemic Banking Crises

Country	Scope of Crisis	Estimate of Total Losses/Costs
Asia		
Hong Kong 1982-83	9 Deposit Taking Companies failed.	
1983-86	7 banks or Deposit Taking Institutions were either liquidated or taken over.	
Indonesia 1994	Classified assets equal to over 14% of banking system assets with over 70% in the state banks.	Recapitalization cost for five state banks expected to amount to 1.8% of GDP.
Malaysia 1985-88	Insolvent institutions account for 3.4% of financial system deposits; marginally capitalized and perhaps insolvent institutions account for another 4.4% of financial system deposits.	Reported losses equivalent to 4.7% of GNP.
Singapore 1982	Domestic commercial banks' non-performing loans rose to about $ 200 million or 0.63% of GDP.	
Taiwan 1983-84	4 trust companies and 11 cooperatives failed.	
1995	Failure of credit cooperative Changua Fourth in late July which sparks runs on other credit unions in central and southern Taiwan.	
Industrialized Countries		
Australia 1989/90	2 large banks received capital from government to cover losses.	
France 1994/95	Credit Lyonnais.	Unofficial estimates of losses put at about $10 billion, the largest single bank failure up to that time.
Germany late 1970s	So called Giroinstitutions faced problems.	
Great Britain 1974-1976	"Secondary Banking Crisis".	
New Zealand 1987-90		

Annex Table 1
Episodes of Major Bank Insolvencies
I. Episodes of Systemic Banking Crises

Country	Scope of Crisis	Estimate of Total Losses/Costs
The United States 1984-91	More than 1,400 savings & loans and 1,300 banks failed.	Cost of savings & loan clean up amounted to an estimated US$ 180 billion equivalent to 3.2% of GDP.

Sources: World Bank Financial Sector Reviews and Country Economic Memoranda, interviews with Bank Financial Sector Specialists, and: Sheng, 1995; World Bank, 1990, p.53; IMF, 1995; Baer/Klingebiel, 1994; Vittas, 1992; V. Sundararajan, V. Thomas, J.T. Balino, 1991; The Banker, 1995; Jorge Marshall & K. Schmidt-Hebbel, 1994; Rodriguez, 1994; World Bank, 1989; Felipe Morris/ Mark Dorfman/ Jose Pedro Ortiz & Maria Claudio Franco, 1990; Blass and Grossman, 1995; Fleming and Talley, 1996; The Economist, 1995-96; Financial Times, 1995; Borish, Long , and Noel, 1994.

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Africa					
Benin 1988-90	• public banks lending to parastatal enterprises which were facing severe liquidity/solvency problems due to inappropriate financial and economic policies and tight central control on the economy; • terms of trade deterioration and post 1982 slump in regional trade contributed to dismal financial situation of public sector enterprises; ▪ crisis became apparent when government's decision to sequester the bank accounts of tax delinquent prompted large outflow of funds, which coupled with large share of NPLs, resulted in liquidity crisis in last quarter of 1987.	▪ 80% of entire banking system's loan portfolio was non-performing.	• losses amounted to 95bn CFA franc which was equivalent to 17% of GDP.	• all existing banks were liquidated and four private banks with an initial capital of CFA 1 billion each were established during the period 1988-90.	-25.0, 2.7 (1985-87)
Côte d'Ivoire 1988-91	• ToT deterioration of 40%, led to public sector arrears at commercial banks; • excessive and distorted taxation, real appreciation of foreign exchange rate rendered corporate sector increasingly uncompetitive and reduced its ability to service debt; • shortcomings in regulatory and accounting framework as well as inadequate banking supervision; banking sector also suffered from high operating costs, inadequate loan monitoring and politically motivated loans.	• 4 big banks of which 3 definitely and 1 perhaps insolvent = 90% of banking system loans or 65-70% of banking system assets.	• 25% of GDP	• 2 public housing development banks and 2 industrial development banks were liquidated in 1988 and 89; • the agricultural development (BNDA) with liabilities of CFA 48.7bn was liquidated in 1991 after recapitalization efforts proved fruitless; • 4 large banks accounting for 65-70% of financial system assets were recapitalized; • recapitalization involved three steps: (i) settlement of government direct and indirect arrears; (ii) absorption of past losses by existing public and private shareholders on a pro rata basis; (iii) recapitalization by main private shareholders, with government reducing its stake to maximum of 20%; (iv) (iv) settlement of government arrears to domestic creditors other than banking sector.	-3.0, 2.3 (1985 - 87)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Ghana 1982-89	• serious shortcomings in regulatory and accounting framework, inadequate banking supervision and inappropriate sector policies; • deficient bank management and internal controls; • massive devaluation and dismantling of protectionist barriers reduced corporate sector's ability to repay its debt.	• 7 audited banks (out of 11) insolvent • rural banking sector affected.	• 6% of GDP; • depositors did not bear any losses in nominal terms, but had borne significant losses in earlier years due to financial repression and inflation tax.	• commercial banking sector: restructuring of 9 banks was achieved by removing from banks' loan portfolio part of their non-perf. loans to a recover agency; • part of non-perform. private sector loans was replaced by government bonds; public sector loans were replaced by converting into equity government loans or other claims; • injection of additional capital where necessary to meet prudential framework;	-25.4, -1.7 (1979-81) 7.6, 5.2 (1986-88)
Guinea 1985	• bank loans granted on basis of development plan; • insolvent state and private sector enterprises; • gross mismanagement, fraud and irregularities in banks, deficient bank management, lack of internal controls serious shortcomings in regulatory and accounting framework as well as inadequate banking supervision; • weak functioning of judicial system.	• 6 banks accounting for 99% of total system deposits.	• repayment of deposits amounted to 3% of 1986 GDP.	• 6 public banks were liquidated while the only bank in private ownership was allowed to stay in market with promise of foreign shareholders to inject new capital; • government offered generous incentive packages in order to overcome foreign banks reluctance to come into Guinea.	
Guinea 1993/4	• deficient bank management, lack of internal controls, lack of loan monitoring; • serious shortcomings in regulatory and accounting framework as well as inadequate banking supervision; banking sector also suffered from high operating costs; • weak functioning of judicial system.	• 2 banks = 22.4% of financial system assets; • one other in serious trouble; • 3 banks together = 45% of market.		• government's restructuring plan only dealt with two technically insolvent banks; • on private bank's past losses were absorbed by major private shareholder and government; government participation in form of subordinated loan with 3 year maturity; in event of insufficient loan recovery, loan will be forgiven; • other bank's losses were completely absorbed by government as negotiations with foreign shareholder failed and recapitalized to fulfill minimum capital standards; was then placed under interim administration while long term solution is sought;	7.3, 3.4 (1991-93)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Kenya 1986-89	• ToT shock and drought; • relaxation of licensing requirements resulted in rapid growth of financial institutions; • many of new non-bank financial institutions operated without sufficient capital base, were subject to less stringent controls and were often poorly managed; • political motivated loans; • inadequate prudential framework and inadequate supervisory agency which enforcement capacity was severely hindered by lack of qualified staff and inadequate information;	• 4 banks and 24 non-bank financial institutions faced liquidity and solvency problems together accounting for 15% of total liabilities of financial system;		• restructuring measures put into place dealt with institutions accounting for 2% of banking system; • eight banks and one housing companies (2% of financial system assets) were liquidated and their respective assets and liability transferred to a newly created institution; • newly created institution was then recapitalized by converting parastatal deposits into equity and an injection of equity by the deposit insurance fund. • in another restructuring phase, government liquidated 9 institutions and merged one other institution with newly created institution; together institution accounted for another 2% of financial system assets.	-7.4, 1.4 (1990-93)
Madagascar 1984-89	• political interference • loans to SOEs • deficient bank management	• all 3 public banks insolvent, about 40% of loans doubtful or loss • 2 banks later partially privatized	• about FMG 19 billion	• 3 state-owned banks cleaned portfolios using reserves and interest-free government loans; about FMG 112 billion loans cleared. 2 of the banks partially privatized in 1991	4.3, 1.4 (1985-87)
Nigeria 1990s	• large overhang of uncollectible loans; • political interference; • macro instability; • deficient bank management, insider lending, fraud, etc.; • lack of strong regulatory and supervisory enforcement and lack of political will; • inaction towards insolvent banks.	• 1993: 24 banks insolvent = 20% of banking system assets; • 1995: almost half of banks are reported to be in distress.		• so far, 4 banks have seen their licenses revoked and 6 public banks, owned by state government, have been taken over by Central Bank;	-17.8, 5.6 (1987-89)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Senegal 1988-91	• deteriorating ToT, drought; • inappropriate financial sector policies (artificially low interest rates, preferential rates to selected sectors); • a lack of fiscal discipline; • virtual absence of bank supervision: • banks plagued by poor management. government interference, and lack of internal controls on lending decisions.	• 7 banks were liquidated accounting for 20 to 30% of financial system assets.	• US$ 830 million, equivalent to 17% of GDP.	• 6 banks were liquidated; their assets and liabilities were transferred to the national recovery agency; • 2 banks (all of which had less than 25% of government ownership) were restructured and recapitalized: another banks was recapitalized with financial contributions from shareholders, the BCEAO, and the Government; • finally, sound assets of one other banks were separated out and used to create a new bank.	-1.9, 4.1 (1985-87)
Asia					
Indonesia 1992-94	• boom and bust cycle; liberalization of banking sector followed by credit growth; tight monetary policy adopted in 1990/1 resulted in sharp rise in real interest rates that caused many borrowers to default on their loans; • deregulation of banking sector began 5 years before improvements in supervision were made and 8 years before capital requirements raised; • lending to related parties; • deficiencies in bank management and lack of internal controls; • public bank problems attributed to political loans/connected lending/ fraudulent loans and bad credit decisions.	• classified assets equal to over 14% of banking system assets with over 70% in the state banks.	• resolution cost for private banks: NA; • recapitalization cost of five public banks expected to amount to US $ 2.7 bn or 1.8% in 1993 GDP.	• preferred resolution mechanism for private banks are to either merge insolvent institution with healthy bank providing new entity with Central Bank assistance or to extend soft loans; • one bank was liquidated; • five state commercial banks were recapitalized by turning liquidity credit into equity; • in general, Central Banks tries to avoid to liquidate banks because of legal difficulties (no bankruptcy code).	30.9, 7.2 (1989-1991)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Malaysia 1985-88	• economic recession brought on by a sharp decline in commodity prices worldwide; • sharp fall in asset prices (bursting of bubble); • weak export and poor domestic demand lead to large financial losses for corporations which in turn reduced their ability to service their debt; shortcomings in regulatory and accounting framework for Deposit Taking Cooperatives sector as well as inadequate supervision for DTC sector.	• 24 DTCs = 3.3% of financial system deposits; and • 4 insolvent banks = 4.4% of financial system deposits.	• reported losses equivalent to 4.7% of GNP; • depositors of DTCs exposed to possible losses.	• commercial banking sector: high interest rates spread; • in case of 4 marginally solvent commercial banks existing shareholders were required to inject new capital through rights issue while Central Bank supplemented proceeds with enough capital to meet minimum capital adequacy requirements; • Deposit Taking Cooperatives sector: 11 with relatively small capital deficiencies received loans at concessional rates and were taken over by appointed bank or finance company (f. c.); 12 DTCs with moderate to heavy losses were absorbed into one singlelicensed f. c.; 1 large DTC was taken over by a publicly listed company and its finance company subsidiary.	13.8, 6.7 (1982-84)
Philippines 1981-87	• increase in oil prices and international interest rates, coupled with deterioration of ToT; external debt crisis and recession; • lending to related parties and politically motivated loans; shortcomings in regulatory and accounting framework as well as inadequate banking supervision; • deficient bank management, lack of internal controls, high operating costs, and exchange rate losses.	• 2 public banks (50% of banking system assets) • 6 private banks (12% of banking system assets); • 32 thrifts equivalent to 53.2% of thrift banking assets; • and 128 rural banks.	• at its peak, central bank assistance amounted to 19.1 billion pesos or 3% of GDP; • depositors bore losses equivalent to 5.2% of total deposits or 0.6% of GNP in 1987.	• Central Bank provided liquidity loans to ailing banks under oversight of central bank conservator; • unviable and insolvent institutions were liquidated and depositors paid off; • during crisis, authorities arranged for government financial institutions to take over 6 private commercial banks; 2 government banks that together accounted for 50% of banking assets transferred their non-performing assets to a government recovery agency; government then recapitalized banks and assumed deposit liabilities equal in amount to book value of non-performing assets transferred minus capital infusion; • all in all between 1981 and mid 1987, 3 commercial banks, 128 rural banks, and 32 thrift institutions failed;	10.21, 5.66 (1978-80)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Thailand 1983-87	• oil shock in 1979/80 led to sharp decline in growth in early 1980s and devaluation of exchange rate, tight monetary policy and high international interest rates reduced corporate sector's ability to service its debt; • deficient bank management, lack of internal control and fraud & real estate and exchange rate transactions; • shortcomings in regulatory and accounting framework as well as inadequate supervision.	• financial institutions, intervened in, accounted for 25% of all financial system assets: • 3 commercial banks considered to be insolvent accounted for 14.1% of commercial bank assets.	• government cost for 50 finance companies estimated at 0.5% of GNP; • government cost for subsidized loans amounted to about 0.2% of GDP annually; • depositors of finance companies bore approximately up to 50% of losses in real terms.	• 24 finance companies were closed; • 9 finance companies were merged into 2 new companies; • for commercial banks: creation of joint government/commercial bank "lifeboat fund to provide liquidity, emergency loans and soft capital; participating institutions were required to inject new capital or surrender 25% of their shares to government to be resold to original owners at predetermined rates within five years. • finance and securities companies: also creation of lifeboat fund; participating institutions had to fulfill certain conditions to join scheme; • 13 finance and 8 commercial banks received support including financial subsidies in form of soft loans.	3.6, 5.3 (1980-82)
America					
Argentina 1980-82	• high real interest rates, overvaluation of the exchange rate, and higher real wages reduced private enterprise sector's ability to service its debt; • liberalization of financial sector without adequate strengthening of regulatory framework and bank supervision; weak bank supervision and enforcement was coupled with 100% state guarantee on bank deposits which led to moral hazard.	• 1980 - 83: 72 institutions were liquidated.	• 55.3% of GDP.	• between 1980-82 liquidation was main failure resolution device: 72 institutions were liquidated; • in 1982, central bank put in place measures to assist insolvent borrowers and banks by following two basic policies: it subjected interest rates to a ceiling that permitted banks to reduce interest rates to borrowers to manageable levels, and it increased reserve requirements that, in turn, provided central bank with resources to lend to most troubled institutions; • furthermore, interest rate controls produced negative real interest rates transferring wealth from depositors to borrowers.	20.2, 3.4 (1977-79)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Argentina 1989-90	• public sector debt distress coupled with loss of access to international credit markets; ▪ immediate trigger of 1989 crisis was government's decision to free foreign exchange market and remove all price controls which provoked a sudden price increase and led to bank deposit withdrawals.	• all banks or 50% of deposits.	• conversion of time deposits into government bonds imposed losses on time deposit holders, since Bonex bonds traded immediately at a 2/3 discount and did not carry any interest for 24 months.	• implementation of BONEX plan that forced conversion of virtually all domestic commercial bank 7-day time deposits in private and public banks into a combination of cash (up to equivalent of Us $ 500) and US $ 3.5 billion of BONES (external) government bonds; dollar denominated bonds had a maturity of 10 years, carried a 2 year grace period, and paid interest of LIBOR plus small spread; • technically conversion worked as follows: treasury purchased commercial banks' voluntary holdings of seven day interest bearing central bank and treasury obligations in return for BONEX bonds; these were then used by banks too make the conversion.	8.8, 2.7 (1986-88)
Argentina 1995	• crisis unfolded with December 20, 1994, devaluation in Mexico which was followed by a withdrawal of foreign investors from Latin American countries; events weakened position of wholesale banks that had significant inventories of government securities on which they were incurring capital losses due to the increase in interest rates; • crisis uncovered inefficiencies in the Argentine banking system which is in period of consolidation; ▪ non-financial firms affected by downturn.	• suspension of eight banks and collapse of three banks.	• N/A	• Central Bank provided liquidity assistance through different mechanism; • implementation of Deposit Insurance Scheme in April 1995 to boost confidence in financial sector;	16.7, 7.4 (1992-94)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Brazil 1994	• dissipation of inflation tax which brought weaknesses (high operating costs, poor portfolio, excessive loan concentration) in public banking system to surface; • deficiencies in regulatory and accounting framework as well as inadequate bank supervision in public banking system; • directed credit programs and lending to SOEs.	• Banespa with assets of R 17.5 billion of assets equivalent to 5% of total banking assets; • Banerj with assets of R 2.7 billion; • both banks account for roughly 20% of financial system assets; • Banco Economico • 4 smaller banks.	• estimate: negative net worth of selected state and federal banks 5-10% of GDP.	• 2 big state banks - Banespa, Banerj - that account for roughly 20% of financial system assets were taken over by Central Bank; as well as Banco Economico and 4 other smaller banks that account for 1-2% of financial system assets; • plan for Banespan is to recapitalize bank with state and federal funds; exercise will cost about US $ 7.5 bn or 1% of GDP; however, plan still needs to be approved by respective state and federal parliament; • unclear at this moment whether and how state and federal government will share in cost for recapitalizing bank; in the meantime, management consultancy group has taken over management of bank and has been streamlining its operation by letting go off people and shutting down branches; • 2 of the smaller private banks were liquidated; Banco Economico will most probably be recapitalized with government funds.	6.3, 1.2 (1991-93)
Chile 1981-83	• high levels of domestic and international interest rates reduced corporate sector's ability to repay debt; • deterioration of ToT due to a sharp decline in the price of copper; • overvalued exchange rate coupled with wage rigidity; • speculation in shares and properties and the bursting of the bubble; inadequate strengthening of regulatory and accounting framework and banking supervision.	• 1983: 7 banks & 1 financiera accounting for 45% of total assets.	• total costs estimated at 41.2% of GDP; (average of 10.3% of GDP from 1982-85).	• two successive waves of government interventions: November 1981 and January 1983; • 1981-1982: authorities considered banking problems as temporary; measures were adopted providing institutions with increased accounting flexibility to reflect their losses; • end of 1982: change of policy towards efforts to recognize and allocate losses; • recapitalization efforts involved direct purchase of substandard loans from the portfolio of banks with repurchase agreement at face value.	41.6., 8.1 (1978-80)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Colombia 1982-87	• loan concentration and fraud; • financial system liberalization without strengthening of regulatory and accounting framework as well as bank supervision; • deficient bank management; • overvaluation of currency, excessive private external borrowing, indebtedness and mismatched exchange risk; ▪ private sector also hurt by sharp slowdown in growth.	• crisis affected institutions that controlled 25% of banking system assets.	• rough estimate: 5% of GDP.	• one small bank (accounting for 2.3% of all banking system assets was liquidated; • 5 banks were nationalized accounting for roughly 23% of financial system assets.	10.9, 3.9 (1979-81)
Uruguay 1981-84	• fall in beef prices (main export), collapse of real estate boom, and reduced Argentine demand coupled with steep rising real interest rates reduced highly leveraged corporate sector's ability to service its debt; • deficient bank management; ▪ shortcomings in regulatory and accounting framework and inadequate bank supervision.	• affected institutions = 30% of financial system deposits; • insolvent banks = 20% of financial system dep..	• estimated at $ 350 million or 7% of GNP; • Central Bank's quasi-fiscal losses associated with subsidized credit operations and purchase of loan portfolios amounted to 24.2% of GDP during 1982 to 1985.	• 2 banks were liquidated; • 7 banks, among them the largest private bank were taken over by government owned banks; as a result, 75% of deposits ended in government owned banks; • 5 banks were taken over by foreign banks with the Central Bank buying the bad loan portfolio of these banks in exchange for bonds and promissory notes.	21.6, 5.8 (1978-80)
Venezuela 1994/95	• liberalization of financial system without adequate strengthening of regulatory and accounting framework as well as bank supervision; • poor lending decisions, deficient bank management; • collapse of bolivar; ▪ overbanked system.	• insolvent banks accounted for 30% of financial system deposits.	• up to March 1995, government has spent $ 7 billion equivalent to 13% of GDP; • total estimated losses put at over 18% of GDP.	• government provided financial assistance by state run guarantee fund to over 15 institutions; • Banco Latino was reopened after a 313 bn bolivar government bailout.	-6.0, 2.8 (1992-93)
United States 1984-91	• deficient bank management • inadequate supervision and poor regulation • macro volatility, regional recessions	• More than 1,400 savings & loans and 1,300 banks failed.	3-5% of GDP	• For S&Ls, Resolution Trust Corporation created to resolve all insolvent thrifts, using government funds and assessments on remaining thrifts. Parts of borderline or insolvent banks sold off. Commercial banks handled by various regulators, relying on mergers	1.6, 1.2 (1981-83)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Europe and Central Asia					
Estonia 1992 - 94	• implementation of currency board brought growing bad debt problem of some banks to surface which could no longer earn large profits from foreign exchange trading, or by onlending central bank credit at high spreads; • deficient bank management and inappropriate lending policies; • frozen deposits in Russia; • collapse of Social Bank caused by bad loans and fraud..	• insolvent banks = 41% of banking system assets; • Social bank which controlled about 10% of financial system assets.	• recapitalization outlays for new entity 300 mill; EEK or 1.4% of GDP; • in case of social bank, government might incur losses on not recovering its funds deposited at bank; • some depositor losses at selected banks.	• 12 banks were liquidated among them Tartu Bank (accounting for 15% of commercial bank assets) and Social Bank (at point in time it experienced problems was 3rd largest bank); • 2 other insolvent banks were merged and new entity was to be recapitalized; at the same time frozen assets and deposits of two banks were to be moved to Central Bank and placed in fund known as VEB fund; former depositors of two banks received tradeable certificate of this fund; • in order to restore public confidence in banking system, wholesale banks were required to apply for relicensing.	-41.2, -16.8 (1992-93)
Finland 1991-1993	• deregulation of financial system without adequate strengthening of regulatory and supervisory framework; • boom and bust cycle; • collapse in soviet trade, deterioration of ToT; • rise in real interest rates adversely affected repayment capacity of banks' borrowers; • depreciation of marka also adversely affected repayment capacity of private sector indebted in foreign exchange; • excessive risk taking in lending, poor decisions, lack of internal controls.	• savings banking sector badly affected; • government took control of Skopbank (Apex bank for Finnish savings banks) in August 1991	• recap. costs amounted to 8% of GDP	• the Government Guarantee Fund (GGF) has supported the banking system in two ways: (i) a big commercial bank was acquired from Central bank (C. B. had taken control of bank in 1991, it then recapitalized institution and bought its largest risk exposures); (ii) GGF supported 41 savings bank that were later amalgated to form the Savings Bank of Finland (SBF); this was done by means of a capital injection and the granting of guarantees.	11.9, 3.5 (1988-90)
Hungary 1990s	• inheritance of largely non-performing portfolio from former monobanks; • impact of recession of real sector on economy; demise of CMEA; • lack of banking expertise and poor lending policies; • moral hazard due to repetitive bank bailouts.	• 2nd half of 1993: 8 banks were found to be insolvent = 25% of financial system assets.	• cost of repeated recapitalization efforts estimated at 10% of GDP so far.	• government has implemented so far 4 different recapitalization schemes.	14.8, -4.9 (1989-91)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Latvia 1994-	• deficient bank management • inadequate supervision and regulation • fraud	• affected banks accounted for 40% of total banking system assets.	• not yet clear	• Bank Baltija taken over by government, with $260 million in losses as of July 1995. 3 other banks in the process of being closed	-66.5, -25.5 (1992-93)
Poland 1992-94	• severe economic shocks that Polish enterprises suffered in 1990 and 1991 (e.g. demise of CMEA trade); • poor lending decisions and lack of banking expertise.	• 7 of 9 treasury-owned commercial banks that accounted roughly for 25% of total financial system assets; • Bank for Food economy and cooperative banking sector accounting for roughly 20% of financial system assets;	• treasury-owned banks: US$ 750 millions = % of 1993 GDP; • Bank for Food Economy and cooperative banking sector: US $ 900 millions;	• inflation; • 9 treasury owned banks: in late 1991, MoF required banks to undergo audit from independent outside auditors; one bank was privatized; seven banks were recapitalized under condition that their clean up their balance sheet or run the risk of losing control to Central Bank; each bank was required to establish a work out department and assign special management teams to run and monitor portfolios; • Bank for Food Economy has been recapitalized twice but it still insolvent; • cooperative banking sector: in 1994, NBP suspended activities of 50 cooperative banks, and 30 were declared bankrupt.	-23.8,-2.4 (1988-1990) -21.2, -5.3 (1990-1992)
Spain 1977-1985	• combination of oil shock 73/74 and inappropriate policy responses to shock; • rapid liberalization of banking sector without adequate strengthening of regulatory and accounting framework as well as bank supervision; deficient bank management and concentration of loans to related parties.	• banks affected held 20% of deposits.	• 5.6% of 1985 GDP.	• 3 small institutions were liquidated; • 21 Non-RUMSA banking institutions were capitalized before they were resold; • 20 RUMSA banking institutions were nationalized and later privatized.	4.4, 2.3 (1974-76)

Table 2: The Main Characteristics of the Banking Crises

Country	Causes of the Crisis	Magnitude of the Crisis	Resolution Costs	Resolution Mechanism of Crisis chosen by Government	Real Loan Growth, Real GDP Growth (yrs covered)
Turkey 1982-85	• 79/80 Turkey slid into a recession brought on by tight monetary policy; reduced sharply corporate sector's ability to service its debt which in turn adversely affected banks; • liberalization of banking system without adequate strengthening of regulatory and accounting framework and bank supervision; • lending to related parties.	• 5 small banks were closed down after 1983; • 2 banks after 1985.	• restructuring of 5 banks = 2.5% of GNP; • government bore also cost of restructuring other two banks.	• initially Central Bank provided liquidity assistance; • later it intervened in five small private banks, removed their management and declared them bankrupt; liabilities of 4 banks were transferred to state owned banks; those of fifth bank were taken over by largest private bank; • a large development bank which was owned by local banks was recapitalized by its shareholders and received support from government via long-term loans; • another bank was taken over by government because current shareholders did not recapitalize it.	3.8, .95 (1979-81)

Sources: World Bank Financial Sector Reviews and Country Economic Memoranda, interviews with Bank Financial Sector Specialists, and: Sheng, 1995; World Bank, 1990, p.53; IMF, 1995; Baer/Klingebiel, 1994; Vittas, 1992; V. Sundararajan, V. Thomas, J.T. Balino, 1991; The Banker, 1995; Jorge Marshall & K. Schmidt-Hebbel, 1994; Rodriguez, 1994; World Bank, 1989; Felipe Morris/ Mark Dorfman/ Jose Pedro Ortiz & Maria Claudio Franco, 1990; Blass and Grossman, 1995; Fleming and Talley, 1996; The Economist, 1995-96; Financial Times, 1995; Boris, Long , and Noel, 1994.

Table 3: Terms of Trade in Crisis Countries

Countries	Crisis TOT/ TOT peak (% Change)	Years covered	1980-94 Volatility
Argentina, 1980-82	-12.08	1975-79	0.07
Argentina, 1989	-10.92	1983-88	0.07
Bangladesh, late 1980s-	-11.20	1975-86	0.07
Bangladesh, late 1980s-	-20.00	1975-87	0.07
Benin, 1988-90	-42.20	1975-87	0.16
Benin, 1988-90	-53.18	1975-88	0.16
Bolivia, 1986-87	-15.66	1975-85	0.39
Bolivia, 1986-87	-38.89	1975-86	0.39
Brazil, 1995 (1990)	-3.54	1975-89	0.07
Bulgaria**, 1990s	8.33	1985-89	0.18
Cameroon, 1987-	-55.86	1975-86	0.28
CAR, 1980s & 1994	-10.64	1975-79	0.22
Chad, 1980s & 1990s	-28.57	1975-79	0.10
Chad, 1980s & 1990s	-15.97	1975-80	0.10
Chile, 1981-83	-9.22	1977-80	0.09
Chile, 1981-83	-21.28	1977-81	0.09
Colombia**, 1982-87	-42.80	1975-81	0.15
Congo, 1980s & 1991	0.89	1975-79	0.29
Congo, 1980s & 1991	37.50	1975-80	0.29
Costa Rica, 1987	-24.69	1975-86	0.11
Costa Rica, 1987	-38.27	1975-87	0.11
Cote d'Ivoire, 1988-91	-39.76	1975-87	0.20
Cote d'Ivoire, 1988-91	-46.39	1975-88	0.20
Ecuador, early 1980s	15.60	1975-80	0.29
Egypt, 1990-92	-38.71	1984-89	0.26
Egypt, early 1980s,	-17.73	1975-79	0.26
Egypt, early 1980s,	11.35	1975-80	0.26
Finland, 1991	-1.89	1975-90	0.09
Ghana** 1982-89	-53.62	1975-81	0.24
Ghana** 1982-89	-59.59	1975-82	0.24
Ghana**, 1995	9.90	1990-93	0.24
Guinea 1985, 1994-95	-24.55	1975-84	0.19
Hungary, 1991-95	-11.76	1975-89	0.05
India, 1994-95	-8.00	1975-92	0.23
Japan**, 1990s	-4.50	1975-89	0.22
Kenya**, 1985-89	-39.03	1975-84	0.16
Kenya**, 1985-89	-49.19	1975-85	0.16
Kenya**, 1992, 1993-96	14.80	1990-91	0.16
Kuwait, 1980s	6.67	1975-79	0.37
Kuwait, 1980s	53.33	1975-80	0.37
Madagascar, 1988	-33.33	1975-87	0.14
Madagascar, 1988	-27.33	1975-88	0.14
Mauritania, 1984	-24.11	1975-83	0.08
Mauritania, 1988-94	-15.97	1985-87	0.08
Mauritania, 1988-94	-25.21	1985-88	0.08
Mexico, 1981-91	-4.86	1975-80	0.14
Mexico, 1981-91	1.39	1975-81	0.14
Morocco, early 1980s	-31.03	1975-80	0.07
Mozambique, 1987-	-20.09	1975-86	0.07
Nepal, 1988	-27.54	1975-87	0.05
Nigeria, 1990s	-58.33	1975-89	0.39
Nigeria, 1990s	-49.51	1975-90	0.39
Norway**, 1987-89	-26.62	1975-86	0.16
Philippines, 1981-87	-11.30	1975-80	0.07
Philippines, 1981-87	-20.87	1975-81	0.07
Poland**, 1990s	16.55	1975-89	0.07
Poland**, 1990s	0.30	1975-90	0.07
Romania, 1990s	-4.85	1975-90	0.21

Table 3: Terms of Trade in Crisis Countries

Countries	Crisis TOT/ TOT peak (% Change)	Years covered	1980-94 Volatility
Senegal, 1988-91	-20.63	1975-87	0.05
Spain**, 1977-85	1.16	1975-79	0.15
Spain**, 1977-85	-11.58	1975-80	0.15
Sri Lanka, 1989-93	-40.72	1975-88	0.11
Sweden**, 1991-	0.00	1975-90	0.06
Taiwan**, 1983-84	-15.38	1975-82	0.12
Tanzania, 1987, 1995	-26.11	1975-86	0.14
Tanzania, 1987, 1995	-36.31	1975-87	0.14
Thailand, 1983-87	-33.10	1975-82	0.09
Togo, 1993-	-52.36	1975-92	0.13
Turkey, 1982-85	-25.00	1975-81	0.13
Turkey, 1994	-2.63	1986-92	0.13
Uganda, 1994	-86.79	1975-92	0.40
Uruguay, 1981-84	-18.25	1975-80	0.05
Venezuela**, 1980	22.04	1975-79	0.27
Venezuela**, 1994-95	-35.56	1981-93	0.27
Zaire	-34.01	1975-90	0.12
Australia**, 1989-90	-24.22	1975-88	0.07
France**, 1994-95	2.97	1975-93	0.07
Germany**, 1989	0.00	1980-88	0.09
Germany**, late 1970's	-4.50	1975-76	0.09
Hong Kong, 1982-83	-15.45	1975-81	0.03
Indonesia, 1994	-39.07	1975-92	0.21
Malaysia, 1985-88	-5.93	1975-84	0.14
Malaysia, 1985-88	-13.33	1975-85	0.14
New Zealand**, 1987-90	-16.24	1975-86	0.08
New Zealand**, 1987-90	-7.05	1975-87	0.08
Singapore**, 1982	2.09	1979-81	0.06
USA**, 1981-91	-18.07	1975-80	0.05
OECD			
Austria	No crisis		0.06
Belgium	No crisis		0.05
Canada**	No crisis		0.04
Denmark**	No crisis		0.05
Greece	No crisis		0.03
Iceland	No crisis		0.04
Ireland**	No crisis		0.04
Italy	No crisis		0.11
Netherlands**	No crisis		0.02
Portugal	No crisis		0.10

Source: using latest available data
World Tables
**IFS

Table 4: Major Bank Insolvencies- Trade Concentration, Exports year prior to crisis

	Exports/ GDP latest available	Year of Exports	Principal exports in year prior to crisis (% of country total)	%		%		%		%
ARGENTINA	6.6	1993	Vegetable products	20.6	Food products	17.2	Live animals	9.7	Minerals	9.5
ARGENTINA		1988	Animal Feed	14.9	Veg. oil	8.7	Wheat	5.4	Meat	4.5
ARGENTINA		1985	Wheat	12.7	Oil seeds	10.2	Veg. oil	10.1	Maize	9.2
ARGENTINA		1980	Wheat	10.2	Meat	8.6	Oil seeds	8.3	Maize	6.4
ARGENTINA		1979	Maize	9.2	Oil seeds	8.8	Meat	8.4	Cereals	6.6
BANGLADESH	10.4	1994	Clothing	60.0	Fisheries	10.8	Jute products	10.2	Leather	6.7
BANGLADESH		1982	Textiles	24.3	Woven textiles	18.6	Jute	14.9	Fish	8.4
BENIN	23.4	1985	Cotton	31.5	Cocoa	26.8	Veg. oil	8.3	Coffee	7.1
BOLIVIA		1982	Metals	31.9	Natural gas	27.4	Tin	22.3	Wood	3.2
BRAZIL	10.0	1994	Metallurgical prod.	13.9	Transport equip.	9.7	Soya products	7.1	Chemical prod.	5.9
BRAZIL		1993	Metallurgical prod.	15.8	Transport equip.	10.9	Soya products	8.0	Chemical prod.	6.7
BRAZIL		1990	Coffee	8.4	Iron	7.2	Animal feed	5.6	Footwear	4.2
BULGARIA	48.9	1994	Min., fuels & chem.	26.2	Agric. & food prod.	21.9	Metals & ores	19.7	Textiles	14.0
CAMEROON	20.0	1994	Crude Petro.	54.3	Cocoa	6.3	Coffee	5.0	Cotton	4.3
CAMEROON		1982	Crude Petro.	46.8	Coffee	15.6	Cocoa	14.2	Wood	4.4
CAR	12.4	1994	Diamonds	47.3	Timber	5.3				
CAR		1990	Perals	49.0	Coffee	18.6	Cotton	6.9	Wood	6.7
CAR		1980	Coffee	28.4	Pearl	26.0	Wood	24.6	Cotton	7.8
CHAD	17.2	1994	Cotton	35.0	Coffee		Timber		Mining (diamonds)	
CHAD		1982	Cotton	79.6	Cotton woven	17.2	Animal feed	2.8		
CHAD		1980	Live animals	60.9	Cotton	35.6	Meat	1.9	Fish	1.6
CHILE	30.9	1994	Mining products of which Copper	44.8 36.6	Industrial prod.	44.1	Agri. & fishing	10.6		
CHILE		1980	Copper	45.7	Plastic	5.3	Animal feed	5.1	Metal	4.8
COLOMBIA	19.3	1994	Coffee	24.6	Oil & derivatives	13.7	Coal	6.3	Flowers	5.0
COLOMBIA		1981	Coffee	49.5	Fruit	4.3	Clothing	4.0	Veg.	3.8
COLOMBIA		1980	Coffee	60.1	Sugar	4.9	Clothing	3.0	Petro. prod.	2.6
CONGO	36.9	1989	Crude Petro.	72.7	Wood	10.0	Pearls	4.7	Plywood	2.6
COSTA RICA	39.2	1982	Fruit	28.0	Coffee	27.6	Meat	6.1	Medicinal prod.	3.2
COTE D'IVOIRE	33.6	1994	Cocoa beans	30.5	Timber	10.4	Coffee & products	6.9	Canned fish	4.0
COTE D'IVOIRE		1987	Cocoa beans	35.6	Coffee	18.8	Fruit	8.3	Wood	7.4
ECUADOR	31.0	1980	Crude Petro.	49.2	Coffee	13.1	Cocoa	13.0	Fruit	7.5
EGYPT	26.8	1989	Crude Petro.	21.4	Textiles	17.6	Aluminium	11.0	Cotton	9.3
EGYPT		1980	Crude Petro.	57.8	Cotton	14.6	Textiles	6.4	Petro prod.	6.4
ERITREA (ETHIOPIA)	8.0	1989	Coffee	61.5	Hides	13.2	Live Animals	3.3	Veg.	3.3
[illegible]		1992	Textiles	13.8	Base Metals	13.1	Minerals & Electricity	11.2	Live animals	10.2

Table 4: Major Bank Insolvencies- Trade Concentration, Exports year prior to crisis

	Exports/ GDP latest available	Year of Exports	Principal exports in year prior to crisis (% of country total)	%		%		%		%
ESTONIA		1990	Machinery	28.3	Food Prod.	16.0	Light industry	15.4	Chemicals	12.1
GHANA	16.0	1994	Gold	45.0	Cocoa beans	25.0	Timber	13.5		
GHANA		1985	Cocoa	66.1	Aluminium	5.7	Fish	4.0	Wood & prod.	3.8
GHANA		1980	Cocoa	73.7	Aluminium	18.3	Metal	1.9		
GUINEA	13.8	1992	Mining	89.7	Coffee	6.6	Cocoa	1.4		
GUINEA		1989	Mining	90.9	Coffee	3.8	Cocoa	1.1	Gold	0.8
HONG KONG	143.8	1989	Outerwear	24.8	Watches	7.5	Telecom equip.	5.2	Toys	3.9
HONG KONG		1980	Clothing	32.7	Watches	9.2	Toys	8.8	Telecom. equip.	6.7
HUNGARY	33.3	1994	Raw materials	30.1	Consumer goods	21.1	Food products	17.6	Capital equip.	11.6
HUNGARY		1989	Buses	3.4	Steel	3.0	Meat	2.9	Oil products	2.6
INDIA	9.9	1990	Pearls	18.7	Women's clothing	5.2	Cotton fabrics	3.7	Leather	3.6
JAPAN	10.2	1990	Cars	15.1	Telecom equip.	5.6	Computers	4.2	Transistors	4.2
KENYA	26.8	1989	Coffee	23.8	Tea	22.7	Petro. prod.	12.1	Veg. materials	4.9
KENYA		1982	Petro.	27.4	Coffee	26.5	Tea	14.2	Cement	3.7
KUWAIT	35.8	1982	Crude petro.	73.1	Petro prod.	18.5	Gas	4.8		
LATVIA	35.2	1994	Wood	21.3	Textiles	13.2	Foodstuffs	12.8	Metals	10.1
MADAGASCAR	16.7	1985	Coffee	39.1	Spices	28.5	Fish	7.3	Cotton fabrics	3.8
MAURITANIA	38.8	1989	Frozen Shellfish	42.9	Iron ore	39.0	Fish	10.1	Petro. prod.	3.5
MEXICO	12.6	1990	Crude Petro	38.4	Engines	6.9	Buses	6.5	Coffee	2.6
MEXICO		1980	Crude Petro	61.6	Gas	3.3	Coffee	2.9	Petro prod.	2.8
MOROCCO	22.6	1980	Fertilizer	31.2	Fruit	12.3	Inorganic elements	8.2	Metal	5.7
MOZAMBIQUE	28.9	1982	Maize	17.9	Sugar	17.3	Fruit	12.4	Iron	8.8
NEPAL	19.5	1985	Rugs	14.5	Clothing	12.1	Rice	7.4	Veg.	6.5
NIGERIA	39.1	1994	Crude Petro.	87.5	Cocoa beans	7.5	Rubber	3.8		
NIGERIA		1989	Crude Petro.	91.5	Cocoa beans	3.1	Petro. products	1.1	Rubber	0.8
NORWAY	43.2	1982	Crude Petro.	28.2	Gas	19.2	Ships	7.1	Aluminium	4.4
PARAGUAY	22.2	1990	Cotton	36.0	Seeds	33.0	Meat	5.5	Animal feed	4.8
PHILIPPINES	29.0	1994	Electrical equip.	26.4	Garments	16.9	Copper	2.8	Coconut oil	2.7
PHILIPPINES		1980	Metals	15.7	Sugar	11.7	Veg. oil	9.8	Clothing	4.9
POLAND	19.9	1994	Machinery & equip	23.6	Chemicals	11.8	Food	9.5	Coal	6.8
POLAND		1991	Coal	6.7	Copper	4.6	Ships	2.3	Iron	2.3
RUSSIA	28.1	1993	Oil & gas	50.0	Minerals & metal	20.0	Machinery	7.0	Chem. prod.	6.0
SENEGAL	22.6	1985	Fish	14.4	Veg. oil	13.4	Fertilizer	11.6	Canned Fish	11.6
SLOVENIA	59.7									
SPAIN	17.6	1994	Raw materials	34.5	Consumer dur.	16.3	Capital goods	11.4	Foodstuffs	10.8
SPAIN		1976-77	Motor Vech.	8.8	Fruit	5.2	Footwear	4.7	Iron & Steel	4.4
	31.0	1989	Tea	25.6	Women's Outerwear	13.0	Pearl	8.9	Rubber	6.8

Table 4: Major Bank Insolvencies- Trade Concentration, Exports year prior to crisis

	Exports/ GDP latest available	Year of Exports	Principal exports in year prior to crisis (% of country total)	%		%		%		%
TANZANIA	21.1	1987	Coffee	26.1	Cotton	23.8	Manf.	19.0	Minerals	4.3
THAILAND	35.7	1994	Textiles & garments	10.1	Comp. & parts	5.5	Elect. appliances	5.0	Precious stones	3.9
THAILAND		1990	Rice	8.2	Rubber	6.8	Veg.	6.1	Fish	5.0
THAILAND		1982	Rice	17.7	Veg.	11.5	Rubber	7.3	Sugar & Honey	6.9
THAILAND		1980	Rice	15.0	Veg.	11.7	Rubber	9.5	Tin	8.7
TOGO	32.4	1990	Fertilizer	47.8	Cotton	14.6	Coffee	10.9	Cocoa	10.2
TURKEY	20.8	1994	Clothing	25.4	Iron & steel	12.8	Textiles & carpets	4.7	Synthetic fibers	3.8
TURKEY		1980	Fruit	18.0	Cotton	11.3	Tobacco	8.0	Textiles	6.9
UGANDA	6.4	1989	Coffee	96.1	Cotton	1.3	Tea	1.0	Fruit	0.3
URUGUAY	21.5	1994	Meat & products	25.6	Textiles	20.4	Processed rice	7.9	Hides	7.0
URUGUAY		1980	Wool	20.9	Meat	17.2	Clothing	6.9	Rice	6.1
VENEZUELA		1993	Petroleum & prods.	90.5	Aluminium	4.3	Iron ore	2.1	Steel	2.0
VENEZUELA		1990	Petroleum	51.4	Petro. prod.	32.5	Aluminium	6.3	Gold	1.2
VENEZUELA		1980	Petroleum	63.0	Petro. prod.	28.6	Aluminium	2.1	Iron ore	1.5
ZAIRE	21.6	1989	Copper	38.1	Coffee	15.2	Crude petro.	12.7		
AUSTRALIA	18.7	1994	Metals & Minerals	21.4	Coal & Petroleum	17.6	Gold	9.0	Wool	8.8
AUSTRALIA		1985	Coal	15.9	Wheat	9.4	Wool	8.3	Iron ore	6.4
FRANCE	23.1	1990	Cars	6.0	Motor veh. parts	4.0	Alcoholic bev.	3.2	Aircraft	2.5
GERMANY	33.5	1985	Cars	15.3	Machines	8.0	Organic chem.	3.6	Plastic	3.4
INDONESIA	29.3	1994	Crude oil & prod.	15.5	Textiles	15.3	Wood & prod.	14.1	Natural gas	9.4
INDONESIA		1991	Crude oil & prod.	27.8	Gas	13.2	Plywood	10.8	Textiles	6.7
MALAYSIA	78.4	1994	Electronics	51.3	Petroleum & LNG	6.0	Palm oil	5.6	Logs & timber	4.6
MALAYSIA		1984	Crude Petro	23.3	Veg. oil	12.8	Electronics	12.6	Rubber	10.3
NEW ZEALAND	30.8	1982	Meat	23.5	Wool	13.2	Butter	9.8	Milk	6.7
SINGAPORE	173.5	1986	Machinery	38.6	Min. fuels	20.7	Manf. goods	7.4	Chem.	5.8
TAIWAN		1983	Crops	47.5	Livestock	30.0	Fisheries	21.0	Forestry	1.5
UNITED STATES	10.6	1980	Cars	6.7	Machines	6.0	Aircraft	6.0	Maize	4.0
AUSTRIA	39.6	1994	Machinery		Inter. Manf.		Consumer Goods		Chem. products	
CANADA	26.7	1994	Motor Veh. & parts	35.4	Mach. & Equip.	26.3	Other indust. prod.	23.8	Forest products	13.9
LUXEMBOURG	89.1	1994	Machinery		Chemicals		Metals		Food	

Source: 1994 data was obtained from the Economist Intelligence Unit, all other years obtained from UNCTAD- Handbook of Inter. Trade and Dev.

Table 5: Characterization of Restructuring Exercises

Country	Overall change in macro policies	Strengthening of regulatory and accounting framework	Were attempts made to improve the enforcement capacity of supervisors?	Implementation of performance monitoring in banks	Was lending halted to borrowers in default?	Were attempts made to collect on written off loans?	Change in senior bank management in restructured banks
Africa							
Benin 1988-90	• during 1989-91, government implemented financial and economic reforms aimed at mitigating external and internal imbalances; • program encompassed reform of the current budget, general public sector management and public enterprise sector reform; despite implementation problems, macro environment relatively favorable today.	• regulatory framework: introduction of new prudential ratios: a risk-weighted capital-to-asset ratio (initially set at 4%, to be raised to 8%), minimum ratio of 75% of long-term resources to long-term credit, loans and commitment to one single borrower limited to 100% of a bank's capital base, minimum liquidity ratio set at 60%; • accounting framework: NA.	• banks fall under supranational regional banking commission established in 1990; • commission has full responsibility to undertake off- and on-site supervision, power to issue cease and desist orders, remove management and withdraw bank's license to operate.	• NA	• yes	• set up of Recovery Trust Fund; • until July 1995, recovered 17 bn CFA or 15.4%; • debt recovery is hampered by legal environment.	• yes; • two of the bank managers went to prison.
Côte d'Ivoire 1988-91	• in aftermath, pursuit of tight fiscal and monetary policy; • devaluation of currency (CFA franc).	• also member of BCEAO therefore, see Benin.	• also member of BCEAO therefore, see Benin.	• no	• not clear; • some rescheduling of short term debt into long term loans.	• set up of a Recovery Trust Fund; • but recoveries were disappointing and hampered by deficient legal environment for enforcement of loan contracts.	• yes
Ghana 1982-89	• since 1992, macroeconomic control has been slipping with monetary and fiscal control problems.	• yes	• yes.	• yes; yearly audits by external auditors.	• NA	• yes (NPART) • banks: NA	• some changes in bank management were made; • twinning arrangement with foreign experts.
Guinea 1985	• large devaluation of Guinean currency; successful in bringing down inflation but less so in cutting budget deficit (still running at 7 - 8% of GDP).	• some changes made but major deficiencies not addressed.	• yes, but unsuccessful (connected lending).	• no	• NA	• first five years after closure 3% of loan portfolio was recov..	• banks were liquidated; • no information what happened to senior managers.

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Guinea 1994-95	• successful in bringing down government deficit moderately.	• some changes were made but still inefficient.	• yes, but still not adequate supervising banks and enforcing regulations.	• NA	• NA; publishing of central registry of defaulting borrowers.	• poor legal framework proved to be a hindrance in recovery of loans.	• yes
Kenya 1985-1989	• government embarked on major stabilization and adjustment program in late 1986 to correct renewed macro-imbalances resulting from loss of fiscal discipline and adverse external developments; • however, during the early 1990s, increases in public sector employment pushed up budget deficit and monetary expansion fueled inflation; • moreover, with declining terms of trade and slow growth in non-traditional exports, the current account deficit remained high;	• the revision of the Banking Act in 1989 reporting, audit and loan loss provisioning requirements, the stipulation of capital adequacy requirements and exposure limits; • however, new Banking Act also included a provision under which Central Bank could grant exemptions from prudential framework.	• new reporting formats and revised examination procedures were developed, a computerized off-site surveillance data system was installed and the frequency of on-site supervision examinations was increased; • however, central bank was not willing to enforce regulatory framework;	• yes	• yes in case of consolidated bank; • no in case of other banks in system.	• yes in case of consolidated bank for the first 2 years; • no in case of other banks.	• yes; • 15% of management was later rehired after examination process showed that they were neither involved in fraudulent activities nor responsible for mismanagement in former banks.
Madagascar 1984-89		• 1988 Banking Act covered capital, entry, single borrower exposure, though capital requirement not risk-weighted, weak provisioning policy, and no general accounting framework.	• off-site supervision capacity improved; • still no on-site supervision	• no	• no	• none, but not very effective; better collection from losses in the mid-1990s	• yes, some managers lost their jobs

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Senegal 1988-1991	• in the aftermath of the crisis, government implemented structural adjustment program; • however, country experienced some serious setbacks with fiscal policy expanding precipitously; • CFA franc was only devalued in 1994.	• member of BCEAO, therefore see Benin.	• member of BCEAO, therefore see Benin.	• no	• yes	• set up of Recovery Trust Fund; • recoveries were disappointing and hampered by deficient legal environment for enforcement of loan contracts.	• yes
Nigeria 1990-	• NA	• no	• no	• no	• NA	• NA (mostly • government arrears).	• no
Asia							
Indonesia 1992-94	• government pursued tight fiscal policy in the aftermath of crisis; • government loosened monetary policy in the immediate aftermath of the crisis and then tightened again.	• yes	• yes, but skilled supervisors in short supply; imposition of sanctions politically difficult.	• NA	• yes	• yes, but inadequate bankruptcy laws limit ability of banks to act against delinquent debtors.	• yes, heads of banks were removed but not senior management.
Malaysia 1985-88	• tight fiscal policy and accommodative monetary policy.	• regulatory framework: • introduction of minimum adequacy requirements, single exposure limit of 30% of bank equity, prohibition of lending to directors and staff of banks and finance companies; • introduction of maximum ownership limit for an individual-family to 10% and company or cooperative 20%; accounting framework: ▪ introduction of guidelines on suspension of interest on NPLs and provisions on bad and doubtful debt	• on-site supervision: improved reporting to central bank, includes size of NPLs, exposure to share and property financing, loan margins, and bank productivity; • strengthening of bank examination staff force and more frequent bank exams; ▪ establishment of central credit bureau to monitor and improve credit information.	• NA;	• yes	• yes	• yes

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Philippines 1981-87	• tightening of monetary policy and adoption of tax reform to improve revenue side of budget; ▪ but central bank continued to experience financial problems stemming from quasi-fiscal activities and substantial Fx liabilities.	• yes but there are still no standardized rules for asset valuation and loan provisioning;	• yes	• yes	• yes	• yes; • set up of government agency to administer and dispose of NPLs with bank involvement and of special task- forces.	• yes
Thailand 1983-87	• devaluation of exchange rate and tight monetary policy; • tightening of fiscal policy led to a budget surplus.	• yes but regulations to loss provisions and interest accrual can be improved.	• yes	• NA	• NA	• banks faced legal problems in recovering delinquent debt; • finance & securities companies joining lifeboat scheme strengthened collection procedures.	• in most cases CEOs of troubled institutions removed but other managers at senior levels retained.
America							
Argentina 1980-82	• implementation of several stabilization plans which proved to be unsuccessful.	• yes, but shortcomings remained; ▪ insufficient accounting practices: banks were allowed to exercise their own judgment for accruing interests on loans; requirements for loan provisions treated leniently; system for loan classification missing.	• lack of personnel and resources negatively affected frequency and quality of audits.	• NA	• NA	• debt relief measures were put into place to help insolvent borrow..	• NA

Table 5: Characterization of Restructuring Exercises

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Argentina 1989-90	• fiscal reform but overall public expenditure has not fallen, mainly due to increases in transfer to provinces and expenditures at provincial level; ▪ introduction of Law of Convertibility; de-indexation of contracts.	• yes public banking system came under purview of supervisory agency and subjected to the same regulations as private banks; • regulations strengthened with regard to reserve, capital, provisioning and risk diversification requirements.	• structure, staffing and technology of agency has improved.	• NA	• NA	• NA	• NA
Brazil	▪ implementation of Real Plan; attempt by government to de-index, wages, contracts etc..	• implementation of Basle capital rules.	• good enforcement of regulation with regard to private banks.	• NA	• yes	• legal system hampers loan collection efforts.	• yes
Chile 1981-83	• introduction of crawling peg; • government tried to use monetary policy actively to moderate increases in interest rates; ▪ structural adjustment program was implemented.	• yes, capital adequacy standards and compliance ratio were strengthened; banks required to publish information on nature and quality of their assets at least three times a year; • accounting rules were strengthened.	• yes, but had already started before crisis.	• market-based monitoring.	• halt of rollover of group loans.	• debt relief measures for borrowers were put in place.	• yes
Colombia 1982-87	• fiscal adjustment during 1985 - 87, due to structural changes in fiscal policy; • sharp devaluation.	• yes, strengthening of prudential regulations, loan classification requirements and procedures, interest accrual etc.; ▪ code of conduct for bankers was introduced.	• yes, now have means to supervise system.	• yes	• yes	• yes; and central bank netted companies' bad debt and deposits; • debt relief measures were put into place.	• yes

Table 5: Characterization of Restructuring Exercises

Country	Overall change in macro policies	Strengthening of regulatory and accounting framework	Were attempts made to improve the enforcement capacity of supervisors?	Implementation of performance monitoring in banks	Was lending halted to borrowers in default?	Were attempts made to collect on written off loans?	Change in senior bank management in restructured banks
Uruguay 1981-84	• government launched stabilization program in 1985 which was aimed at reducing fiscal deficit and monetary growth rates; • resolution of crisis imposed heavy burden on budget with limited collection on loans becoming major source of losses.	• yes, new accounting procedures were introduced which covered classification of new loans and reserves for potential losses; • introduction (1989) of regulations for classifying assets, provisioning of NPLs, accounting of interest and exchange gains and minimum capital requirements.	• yes: number of supervisors increased; • external auditors are required to follow stricter guidelines.	• yes, for national banks but not for local banks.	• until 1984, loans were rolled over; • 1985: debt moratorium and debt relief measures.	• yes, central bank tried to recover NPLs it took over from banks; but recovery rate remained dismal.	• yes
United States 1981-91	• relatively stable policy regime already in place	• easier rules (RAP) for S&Ls dropped; • FIDICIA included carrots and sticks for banks, with 10% the minimum capital ratio for full banking powers.	• FSLIC replaced • FIDICIA mandated supervisory actions	• yes	• yes	• yes, and relatively effective	• yes
Europe/Central Asia							
Estonia 1992-94	• monetary policy continues to be governed by currency board arrangement and fiscal policy remains tight.	• yes, regulation was strengthened (more detailed reporting and stricter prudential requirements for banks) and accounting standards were gradually moved towards international standards.	• small agency, personnel still being trained • issue of political independence and capacity.	• all banks required to be externally audited at year-end.	• no	• yes, NEB set up department which just dealt with loan recovery.	• yes
Finland 1991-93	• fiscal restructuring aimed at cutting budget deficit; • continuation of floating of marka that was begun in 1992.	• yes, implementation of BIS capital adequacy standards combined with a significant tightening of maximum risk exposure limits.	• yes, substantial strengthening of enforcement capacity of supervisory authority.	• yes	• this was not a condition for injection of government's funds into private banks;	• yes	• yes

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Country	Overall change in macro policies	Strengthening of regulatory and accounting framework	Were attempts made to improve the enforcement capacity of supervisory?	Implementation of performance monitoring in banks	Was lending halted to borrowers in default?	Were attempts made to collect on written off loans?	Change in senior bank management in restructured banks
Hungary 1990s	• large macroeconomic disequilibria remain; main causes of deficit are government's failure to reduce its role in resource allocation and to streamline social programs; costs of bank bailouts are straining budget; • overvalued exchange rate.	• no substantial improvements.	• yes	• NA	• no	• flawed bankruptcy laws.	• no
Latvia 1994-	• fiscal reform aimed at tighter policy.	• tighter limits on connected lending, stiffer licensing.	• central bank given enhanced enforcement powers, significant TA	• yes: external audits by major firms required, and must be published	• yes	• yes, though success not clear	• yes
Poland 1992-94	• governments made attempts to bring public sector deficits under control; public sector deficit shrank between 1992-94 but widened again with large SOEs continuing to generate losses and widening external balance. • change to crawling peg in exchange rate policy;	• tightening of accounting standards by imposing uniform standards for provisioning against loan losses.	• some progress made towards a more effective regime of bank supervision.	• yes, for Treasury owned banks.	• some evidence support this change.	• yes; in order to qualify for recapitalization banks had to take actions against delinquent borrowers.	• yes and twinning with foreign expert was arranged.
Spain 1977-1985	• more stable in run-up to EMS membership.	• yes	• improvement in information disclosure; ▪ design and implementation of early warning system.	• NA	• NA	• NA	• yes

Table 5: Characterization of Restructuring Exercises

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Turkey 1982-85	• government reregulated interest rates; • in general, macro policies pursued by government resulted in poor macro-setting, characterized by high public sector deficits, large foreign debt service payments, high inflation and high real interest rates.	• yes, but regulations did not contain loan exposure limit to single borrowers and groups; other exposure limits were wrought with exemptions.	• auditing techniques were improved, but still too few auditors.	• NA	• no; • banks continued to provide loans to SOEs.	• NA	• yes

Sources: World Bank Financial Sector Reviews and Country Economic Memoranda, interviews with Bank Financial Sector Specialists, and: Sheng, 1995; World Bank, 1990, p.53; IMF, 1995; Baer/Klingebiel, 1994; Vittas, 1992; V. Sundararajan, V. Thomas, J.T. Balino, 1991; The Banker, 1995; Jorge Marshall & K. Schmidt-Hebbel, 1994; Rodriguez, 1994; World Bank, 1989; Felipe Morris/ Mark Dorfman/ Jose Pedro Ortiz & Maria Claudio Franco, 1990; Blass and Grossman, 1995; Fleming and Talley, 1996; The Economist, 1995-96; Financial Times, 1995; Boris, Long , and Noel, 1994.

Table 6: Analysis of Crisis Countries

	Crisis Episode	Financial Deepening		Real Credit/GDP	Real Deposit Interest Rate	Recurrent Problems	Overall Score
		(increasing = 1)		(between 0-2.5% = 1)	(-5 to 10% = 1)	(yes = 0, no = 1)	
Africa							
BENIN	1988-90	increased in early 1990s	1	0	1	1	3
CAMEROON	1987-	recovered from 1987 dip, but fell again in 1992-93	0	0	1	ongoing	1
CAR	1980s & 1991-	slowly dips during the 1980s, increased in 1993	0	0	0	0	0
CHAD	1980s & 1990s	has decreased ever since 1987	0	1	0	0	1
CONGO	1980s & 1991-	peaked from 1986-88 and 1992, now falling from these marks	0	0	1	0	1
COTE D'IVOIRE	1988-91	decreased in 1989 fairly steady ever since	0	1	0	1	2
ERITREA	1993		NA			1	1
GHANA	1982-89	decreased from late 1970s to 1984, increased from 1985-89 fell again in 1990, increased in 1992, slight drop in 1993	0	0	1	0	1
GUINEA	1985, 1994-95	fairly steady	0	0	0	0	0
KENYA	1985-89, 1992-95	increased in 1990s	1	0	0	0	1
MADAGASCAR	1988	dipped from 1984-88, increased since then	1	1	0	0	2
MAURITANIA	1984, 1988-93	steady, slight increase	1	0	1	0	2
MOZAMBIQUE	1987-	falling from mid-1980s to early 1990s	0	1	0	ongoing	1
NIGERIA	1990s	decreased during the 1980s, increasing slightly since 1990	1	0	0	ongoing	1
SENEGAL	1988-91	gradually falling since late 1970s, early 1980s	0	0	1	1	2
TANZANIA	1987, 1995	increasing since 1989	1	0	0	0	1
TOGO	1993-	steady during early 1980s, falling since 1986	0		1	ongoing	1
UGANDA	1994	increased from 1992 to 1993, lack data	0	1	1	ongoing	2
ZAIRE	1991-92	increased during 1990s	1	0	NA	1	2
Transition							
BULGARIA	-	increased in 1980s, but decreased in early 1990s	0		0	ongoing	0
ESTONIA	1992	decreasing	0	1	0	ongoing	1
HUNGARY	1991-95	dipped from 1988-90, increased and steady since then	1	1	1	ongoing	3
LATVIA	1995	increased in 1993-94	1	0	1	ongoing	2
POLAND	1990s	increased sharply in 1989, then fell sharply in 1990- fairly steady, increasing since	1	0	1	ongoing	2
ROMANIA	1990s	peaked in 1990, falling since then	0	1	0	1	2
RUSSIA	1995	Falling from 1991-94	0	0	0	ongoing	0
SLOVENIA	1990s	increasing from 1992-95	1		0	ongoing	1
Asia							
BANGLADESH	late 1980s-	increased throughout the 1980s early 90s	1	0	1	0	2
INDIA	1994-95	increasing	1	1	0	ongoing	2
INDONESIA	1994	increasing	1	1	0	ongoing	2
MALAYSIA	1985-88	increased in early 1990s	1	1	1	1	4
NEPAL	1988	increasing	1	1	1	0	3

Table 6: Analysis of Crisis Countries

	Crisis Episode	Financial Deepening		Real Credit/GDP	Real Deposit Interest Rate	Recurrent Problems	Overall Score
		(increasing = 1)		(between 0-2.5% = 1)	(-5 to 10% = 1)	(yes = 0, no = 1)	
PHILIPPINES	1981-87	increasing since 1986	1	0	1	1	3
SINGAPORE	1982	increasing since late 1970s, but fell in 1993	0	1	1	1	3
SRI LANKA	1989-93	steady, increasing trend for the last couple of years.	1	1	1	0	3
TAIWAN, CHINA	1983-84	increasing	1	1	1	1	4
THAILAND	1983-87	increasing since late 1970s	1	0	1	1	3
Industrial/OECD							
AUSTRALIA	1989-90	increases in late 1980s	1	1	1	1	4
FINLAND	1991	increased during the 1980s, plateau from 1991-93, fell in 1994	0	0	1	1	2
FRANCE	1994-95	dips in early 1990s	0	0	1	0	1
GERMANY	late 1970s, 1989	steady, increases in early 1990s	1	1	1	1	4
JAPAN	1990s	dipped in 1991, increasing since then	1	0	1	ongoing	2
NEW ZEALAND	1987-90	increasing since mid 1980s	1	0	1	1	3
NORWAY	1987-89	steady, slight decrease from 1992-94	0	0	1	1	2
SPAIN	1977-85, 1994	steady	0	1	1	0	2
SWEDEN	1991-	gradually falling from early 1980s	0	0	1	ongoing	1
UK	1974-76	increases in late 1980s	1	1	1	1	4
USA	1984-91	steady, or increasing	1	1	1	1	4
Latin America							
ARGENTINA	1980-82, 1989-90, 1995	falling, then rising,	0	1	1	0	2
BOLIVIA	1986-87	increased strongly in early 1990s	1	0	1	0	2
BRAZIL	1994-95	increased in 1980s, recovered strongly from dip in 1990	1	0	0	ongoing	
CHILE	1976, 1981-83	increased between 1981 and 1982, fairly steady ever since	1	1	1	1	4
COLOMBIA	1982-87	fairly steady, increasing slightly	1	1	1	0	3
COSTA RICA	several instances	decreased during the 1980s from a peak in 1981, plateau from 1988-91 has been falling since	0	0	1	0	1
ECUADOR	early 1980s	has been falling since 1988	0	0	1	0	1
MEXICO	1981-91, 1994	dipped sharply in 1988, increased since then	1	0	1	0	2
PARAGUAY	1995	dipped in 1988, increasing since then	1	0	1	0	2
URUGUAY	1981-84	falling	0	1	0	1	2
VENEZUELA	1980, 1994-95	decreasing from early-mid 1980s	0	0	0	ongoing	0
Middle East & North Africa (MNA							
EGYPT	early 1980s, 1990-91	dropped in 1991, but steady since then	0	1	1	0	2
KUWAIT	1980s	dipped in 1992, increased in 1993-94	1	1	1	0	3
MOROCCO	early 1980s	increased in late 1980s, early 1990s	1	1	1	0	3
TURKEY	1982-85, 1994	mixed, increased from 1993 to 1994	1	1	0	0	2

Table 7: Evaluating the Outcome of the Restructuring Exercises

Country	Financial Depth (%) Pre-Crisis	Nadir	Post-Crisis	NPLs /total loans crisis level	NPLs/total loans - post crisis level	Post Crisis Growth of real credit [real GDP]	Real interest rates - post crisis (demand deposits)	Recurrent problems	Successful or unsuccessful exercise / reasons
Africa									
Benin 1988-90	21.0	20.2	28.6	78.8% (1988)		-53.5 (1991) [-9.0 (1991)]	3.74% (1992) 7.61% (1993)	• no	
Côte d'Ivoire 1988-91	30.9	27.9	28.6		12.2% (1992) 6.2% (1994)	- 14.9% (1992) - 8% (1993) -29% (1994) - 8.7% (Sep. 1995) [-0.6% (1993), 1.7% (1994), and 6.5% (1995)]	negative in 1994 and 1995	• no	• questionable: despite favorable macro-environment, banks hesitant to lend because of still deficient legal environment that hampers contract enforcement.
Ghana 1982-89	24.5	13.4	16.9	72.5 % (1989 - 6 of seven restructured banks)	28.5% (1993- 6 of seven restructured banks)	4.2% (90-93) [4.4%]	- 1.38% (1994)	• no	• no: lack of real sector restructuring, poor macro-environment.
Guinea 1985	8.9		9.6	80%	20%	26% (87-90) [4.6%]	5.5% (1992)	• 1993/4	• no: due to failure of government to improve accounting, regulatory framework as well as enforcement by supervisory authority.
Guinea 1993-94	10.4	9.2		20% (1992)	17% (1994) 24% (June 1995)	21% (1994) [4.0%]	13.3% (1994)	• crisis is still being resolved.	• questionable: since government did not address non-performing loan problems of banks that were not restructured and did not improve regulatory and accounting framework as well as enforcement thereof significantly; finally, macro-imbalances remain.
Kenya 1985-89	30.4	26.7	38.6			1.8% (1991) [1.4%]	-1.6% (1990)	• yes, in 1992 and 1995	• no
Madagascar 1988	17	15	18			16.4% (1990) [3.1%]	-28.0% (1994)		• no: recurrent problems, unclear incentives
Nigeria 1990s	33.4	19.3	23.3	77% (1991) 65% (1992)		- 6.5% (1991) - 5.9% (1992)	-19.8% (1993)	• crisis is still being resolved.	• inaction towards insolvent banks exacerbates problems.

Table 7: Evaluating the Outcome of the Restructuring Exercises

Country	Financial Depth (%) Pre-Crisis	Nadir	Post-Crisis	NPLs/total loans crisis level	NPLs/total loans - post crisis level	Post Crisis Growth of real credit [real GDP]	Real interest rates - post crisis (demand deposits)	Recurrent problems	Successful or unsuccessful exercise / reasons
Senegal 1988-91	28.7	23.2	22.1	50% (1988)		5.5% (1992)	7.8% (1992)	• no	• unclear;
Asia									
Indonesia 1992-94	43.3	45.8		14.2% (all banks) 20% (public banks) 1993			6.5% (1995)	• still resolving problems.	• some actions have been taken on public banks.
Malaysia 1985-88	75.8	66.2	89.1	27% (1987) 32.9 (1988)	10.2 (1994)	- 14.6% (1989-92) [8.9 %]	2.7 (1991)	• no	• yes
Philippines 1981-87	33.7	26.7	45.8	23% (1985 - commercial banks)	3.9% (1994 - commercial banks)	5.7 (88-91); 12% (88-94); [3.9%,. 3.2]	1.36 (1994)		• unclear: rapid growth of real credit in recent years; shortcomings in regulatory and accounting framework not completely addressed; not clear whether supervisory enforcement problems resolved.
Thailand 1983-87	54.4	59.1	78.6			22.7% (88-91) [11.3%]	6% (1990)	• no, but a number of banks continue to require close central bank attention.	
America									
Argentina 1980-82	35.1	21.0	26.2	16.9% (1983)	27% (1988)	-15.5% (83-86) 6.8% (83-89) [1.6%, 0.1%]	6.6% (1988) 445% (1989)	• yes, between 1980-1988: 215 banks were closed; • crisis of 89-90.	• no: macro-imbalances were not resolved; number of shortcomings in regulatory and accounting framework were not dealt with.

Table 7: Evaluating the Outcome of the Restructuring Exercises

Country	Financial Depth (%) Pre-Crisis	Nadir	Post-Crisis	NPLs /total loans crisis level	NPLs/total loans - post crisis level	Post Crisis Growth of real credit [real GDP]	Real interest rates - post crisis (demand deposits)	Recurrent problems	Successful or unsuccessful exercise / reasons
Argentina 1989-90	25.1	11.5	12.8	27% (1989)		4.2% (1990-93) [5.9%]	3.7% (1994)	• yes (1995) • public sector banks problems were not resolved.	• questionable: since Argentine government did only take gradual action on distressed public banks; although fiscal reform was successful on federal level, overall public expenditures have not fallen; and public provincial banks fragile.
Brazil 1994	79.4			< 1% (private banks) 14.8% (public banks)		[5.7% (1994)	20 - 25% (1994)	• crisis is still being resolved.	• large provincial bank problems.
Chile 1981-83	39.1	37.8	39.0	4.1% (1982)	1% (1994)	1.6% (84-87) 3.5 % (84-93) [4.1%, 5.9%]	3.3% (1994)	• no	• yes
Colombia 1982-87	21.9	18.0	27.0	9.6% (1983) 14.7% (1985)	2.1 (1991)	7.9% (91-93) [3.7%]	4.5% (1994)	• no	• questionable: government did not manage to cut large budget deficit; • accounting system not sufficiently transparent to detect banking problems early on; and new financial companies not under central bank purview; real estate lending boom.
Uruguay 1981-84	56.3	42.2	61.2	30.4% (1982)	25.2% (1987)	4.1% (1985-88) -1.9% (1985-93) [4.6%, 3.7%]	- 5.4%	• no	• questionable
Venezuela 1994-95	33.9	27.8	31.7	N/A		-38% (1994) [-3.7]	-13.5% (1994)	• crisis is still being. resolved.	

Table 7: Evaluating the Outcome of the Restructuring Exercises

Country	Financial Depth (%) Pre-Crisis	Nadir	Post-Crisis	NPLs /total loans crisis level	NPLs/total loans - post crisis level	Post Crisis Growth of real credit [real GDP]	Re. 1 interest rates - post crisis (demand deposits)	Recurrent problems	Successful or unsuccessful exercise / reasons
United States 1981-91	62.4	60.9	63.3-68.3	4.1%		2.0% (1992-94) [3.4%]		None significant	• yes; main structural weakness (limitation on national branching) being corrected; • structured, early intervention limits scope for regulatory delay
Europe/Central Asia									
Estonia 1992-94	15.0	10.0		6.1% (1992) 4% (1994)		- 25.1% (1993) - 10.9% (1994)	-24.5% (1994)	• crisis is still being resolved.	
Finland 1991-93	55	61	59	10% (1992) 5.2% (1993)	6.7% (1994)	-10.6% (1994) [4.0% (1994)]	2.2% (1995)	• no	• unclear, banks still relatively weak.
Hungary 1990s	53.7					3.2% (1993) 0.1% (1994) [-2.3% (1993)] [2.6% (1994)]	1.2% (1994)	• crisis is still being resolved.	• no: for recapitalizations did not address bad loan problems at banks, or stop bank lending to borrowers in default; also shortcomings in the regulatory and accounting framework and resp. enforcement were not addressed.
Latvia 1994-	36.	n.a.	n.a.	n.a.	too soon	• too soon	• too soon	• not yet	• promising changes on supervision, but too soon to tell. One of the better TA programs on bank supervision in the FSU.
Poland 1992-94	32.2		35.9	15.5% (1991) 28.8% (1992) 25.7% (1994)		- 2.3% (1993) -5.5% (1994)	-2.0% (1994)	• still resolving crisis.	
Spain 1977-85	80.0	66.0	82.0			10.5% (86-89) 5.4% (86-94) [4.7%, 2.9%]	1.9 (1994)	• collapse of Banesto in 1994.	

Table 7: Evaluating the Outcome of the Restructuring Exercises

Country	Financial Depth (%)			NPLs /total loans crisis level	NPLs/total loans - post crisis level	Post Crisis Growth of real credit [real GDP]	Real interest rates - post crisis (demand deposits)	Recurrent problems	Successful or unsuccessful exercise / reasons
	Pre-Crisis	Nadir	Post-Crisis						
Turkey 1982-85	30.2	23.9	29.5	6% (net of loss provisions) (1986)	1.24% (net of loss provisions) (1990)	4 9% (1989-89)	-6.0% (1989) -7.9% (1990)	• yes (1994)	• no: banks continued to lend to borrowers in default because of interconnections; regulatory and accounting frameworks for banks continued to be deficient; macro-imbalances remain problematic.

Sources: World Bank Financial Sector Reviews and Country Economic Memoranda, interviews with Bank Financial Sector Specialists, and: Sheng, 1995; World Bank, 1990, p.53; IMF, 1995; Baer/Klingebiel, 1994; Vittas, 1992; V. Sundararajan, V. Thomas, J.T. Balino, 1991; The Banker, 1995; Jorge Marshall & K. Schmidt-Hebbel, 1994; Rodriguez, 1994; World Bank, 1989; Felipe Morris/ Mark Dorfman/ Jose Pedro Ortiz & Maria Claudio Franco, 1990; Blass and Grossman, 1995; Fleming and Talley, 1996; The Economist, 1995-96; Financial Times, 1995; Boris, Long , and Noel, 1994.

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