#### EPISODES OF SYSTEMIC AND BORDERLINE FINANCIAL CRISES

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The following table presents information on 113 systemic banking crises (defined as much or all of bank capital being exhausted) that have occurred in 93 countries since the late 1970s. The table also provides information on 50 borderline and smaller (nonsystemic) banking crises in 44 countries during that period. Some judgment has gone into the compilation of this list, not only for countries lacking data on the size of the losses but also for countries where official estimates understate the problem. For instance, at some point in the 1990s nearly every transition economy experienced a banking crisis, but not all of these were excluded to limit the number of countries with missing information.

Moreover, it is difficult to identify the timeframes of banking insolvencies. Overt crises—such as those involving a run on banks, on a country's currency, or both—are fairly easy to date, but these are only a subset of the cases listed here. Financial distress, in which the banking system has negative net worth, can occur over a period of time. Indeed, a crisis may persist for some time 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. In countries that have experienced multiple crises, later events may just be a continuation of earlier events.

As the table shows, the costs of banking crises vary widely. But the data on losses and costs should be treated with caution. Some of the data include corporate restructuring, while others relate only to the restructuring and recapitalization of the financial system. Moreover, we are not able to include the burden borne by depositors and borrowers in the form of wider interest rate spreads resulting from bad loans left on banks' balance sheets. Finally, most of the data on costs do not include costs resulting from indirect methods of bailing out banks. For example, a government may subsidize a borrower by granting it monopoly privilege or other means to improve profits and so repay loans.

Scope of crisis

Region/economy

Africa		
<b>Algeria</b> 1990–92	Share of nonperforming loans in the banking system reached 50 percent.	
<b>Benin</b> 1988–90	All three commercial banks collapsed; 80 percent of banks' loan portfolios were nonperforming.	CFA 95 billion, equivalent to 17 percent of GDP.
<b>Burkina Faso</b> 1988–94	Banking system nonperforming loans estimated at 34 percent.	
<b>Burundi</b> 1994–?	Banking system nonperforming loans estimated at 25 percent in 1995; one bank was liquidated.	
<b>Cameroon</b> 1987–93	In 1989 banking system nonperforming loans reached 60–70 percent. Five commercial banks were closed and three banks were restructured.	
1995–98	At the end of 1996 nonperforming loans accounted for 30 percent of total loans. Three banks were restructured and two were closed.	
Cape Verde 1993–?	At the end of 1995 commercial banks' nonperforming loans reached 30 percent.	
<b>Chad</b> 1980s	Banking sector experienced solvency problems.	
1992	Private sector nonperforming loans reached 35 percent.	
Central African Rep. 1976–92	Four banks were liquidated.	
1988–99	The two largest banks, accounting for 90 percent of assets, were restructured. Banking system nonperforming loans reached 40 percent.	
Congo, Rep. of 1992–present	Two large banks were liquidated. The three remaining banks are insolvent. Situation aggravated by the civil war.	
Congo, Dem. Rep. of (former Zaire) 1980s	Banking sector experienced solvency problems.	
1991–92	Four state-owned banks were insolvent; a fifth bank was to be recapitalized with private participation.	

Estimated losses or costs

Region/economy	Scope of crisis	Estimated losses or costs
1994–present	Nonperforming loans to the private sector reached 75 percent. Two state-owned banks have been liquidated and two other state banks privatized. In 1997, 12 banks were having serious financial difficulties.	
<b>Côte d'Ivoire</b> 1988–91	Four large banks affected, accounting for 90 percent of banking system loans; three definitely and one possibly insolvent. Six government banks closed.	Government costs estimated at CFA 677 billion, equivalent to 25 percent of GDP.
<b>Djibouti</b> 1991–93	Two of six commercial banks ceased operations in 1991–92; other banks experienced difficulties.	
<b>Equatorial Guinea</b> 1983–85	Two of the country's largest banks were liquidated.	
Eritrea 1993	Most of the banking system was insolvent.	
<b>Ghana</b> 1982–89	Seven of eleven audited banks insolvent; rural banking sector affected.	Restructuring costs estimated at 6 percent of GNP.
Guinea 1985	Six banks—accounting for 99 percent of system deposits—deemed insolvent.	Repayment of deposits amounted to 3 percent of 1986 GDP.
1993–94	Two banks deemed insolvent; one other bank had serious financial difficulties. Together these three banks accounted for 45 percent of the market.	
Guinea-Bissau 1995–?	At the end of 1995 nonperforming loans accounted for 45 percent of commercial banks' loan portfolio.	
<b>Kenya</b> 1985–89	Four banks and twenty-four nonbank financial institutions—accounting for 15 percent of financial system liabilities—faced liquidity and solvency problems.	
1992	Intervention in two local banks.	
1993–95	Serious solvency problems with banks accounting for more than 30 percent of financial system assets.	
<b>Liberia</b> 1991–95	Seven of eleven banks not operational; in mid-1995 their assets accounted for 60 percent of bank assets.	
Madagascar 1988	25 percent of bank loans deemed unrecoverable.	
<b>Mali</b> 1987–89	Nonperforming loans of largest bank reached 75 percent.	

Region/economy	Scope of crisis	Estimated losses or costs
Mauritania 1984–93	In 1984 five major banks had nonperforming assets ranging from 45–70 percent of their portfolios.	Cost of rehabilitation estimated at 15 percent of GDP in 1988.
Mozambique 1987–95?	Main commercial bank experienced solvency problems that became apparent after 1992.	
<b>Niger</b> 1983-	In the mid-1980s banking system nonperforming loans reached 50 percent. Four banks were liquidated and three restructured in the late 1980s.	
<b>Nigeria</b> 1990s	In 1993 insolvent banks accounted for 20 percent of banking system assets and 22 percent of deposits. In 1995 almost half the banks reported being in financial distress.	
<b>São Tomé and Principe</b> 1980s and 1990s	At the end of 1992, 90 percent of the monobank's loans were nonperforming. In 1993 the commercial and development departments of the former monobank were liquidated, as was the only financial institution. At the same time, two new banks were licensed that took over many of the assets of their predecessors. The credit operations of one new bank have been suspended since late 1994.	
<b>Senegal</b> 1988–91	In 1988, 50 percent of banking system loans were nonperforming. Six commercial banks and one development bank closed, accounting for 20–30 percent of financial system assets.	\$830 million, equivalent to 17 percent of GDP.
Sierra Leone 1990–present	In 1995, 40–50 percent of banking system loans were nonperforming. One bank's license was suspended in 1994. Bank recapitalization and restructuring are ongoing	
Swaziland 1995	Meridien BIAO Swaziland was taken over by the Central Bank. The Central Bank also took over the Swaziland Development and Savings Bank, which faced severe portfolio problems.	
Tanzania Late 1980s; 1990s	In 1987 the main financial institutions had arrears amounting to half their portfolios. In 1995 it was determined that the National Bank of Commerce, which accounted for 95 percent of banking system assets, has been insolvent since at least 1990.	In 1987 implied losses amount to nearly 10 percent of GNP.
<b>Togo</b> 1993, 1994, 1995	Banking sector experienced solvency problems.	
<b>Uganda</b> 1994–present	Half of banking system facing solvency problems.	

Region/economy	Scope of crisis	Estimated losses or costs
<b>Zambia</b> 1995	Meridian Bank, which accounted for 13 percent of commercial bank assets, became insolvent.	\$50 million (1.4 percent of GDP).
<b>Zimbabwe</b> 1995–present	Two of five commercial banks have high nonperforming loans.	
Asia		
Bangladesh Late 1980s–96	In 1987 four banks accounting for 70 percent of credit had nonperforming loans of 20 percent. From the late 1980s the entire private and public banking system was technically insolvent.	
<b>China</b> 1990s	At the end of 1998 China's four large state-owned commercial banks, accounting for 68 percent of banking system assets, were deemed insolvent. Banking system nonperforming loans were estimated at 50 percent.	Net losses estimated to reach \$428 billion, or 47 percent of GDP in 1999.
<b>Indonesia</b> 1997–present	By March 1999 Bank Indonesia had closed 61 banks and nationalized 54, of a total of 240. Nonperforming loans for the banking system estimated at 65–75 percent of total loans.	Fiscal costs estimated at 50–55 percent of GDP.
Korea, Rep. of 1997–present	In March 1999, 2 of 26 commercial banks—accounting for 12 percent of banking system assets—were nationalized. Five banks—accounting for 8 percent of banking system assets—were closed. Seven banks—accounting for 38 percent of banking system assets—were placed under special supervision. Banking system nonperforming loans are expected to peak at 30–40 percent.	Net losses estimated at \$68 billion, or 20 percent of GDP in 1999.
<b>Malaysia</b> 1997–present	Finance company sector is being restructured, and number of finance companies is to be reduced from 39 to 16 through mergers. Two finance companies were taken over by the Central Bank, including the largest independent finance company. Two banks deemed insolvent—accounting for 14 percent of financial system assets—will be merged with other banks. At the end of 1998 nonperforming loans estimated at 25–35 percent of banking system assets.	Net losses estimated at \$15 billion, or 21 percent of GDP in 1999.
<b>Nepal</b> 1988	In early 1988 the reported arrears of three banks accounting for 95 percent of the financial system averaged 29 percent of assets.	

Region/economy	Scope of crisis	Estimated losses or costs
Philippines 1981–87	Problems in two public banks accounting for 50 percent of banking system assets, six private banks accounting for 12 percent of banking system assets, 32 thrifts accounting for 53 percent of thrift banking assets, and 128 rural banks.	At its peak, central bank assistance to financial institutions amounted to 19 billion pesos (3 percent of GDP).
1998–present	Since January 1998 one commercial bank, 7 of 88 thrifts, and 40 of 750 rural banks have been placed under receivership. Banking system nonperforming loans reached 12 percent by November 1998, and were expected to reach 20 percent in 1999.	Net losses estimated at \$4 billion, or 7 percent of GDP in 1999.
<b>Sri Lanka</b> 1989–93	State-owned banks comprising 70 percent of banking system estimated to have nonperforming loans of about 35 percent.	Restructuring cost amounted to 25 billion rupees (5 percent of GDP).
Taiwan, China 1997-98	Banking system nonperforming loans estimated at 15 percent at the end of 1998.	In 1999 net losses estimated at \$26.7 billion, or 11.5 percent of GDP.
<b>Thailand</b> 1983–87	Authorities intervened in 50 finance and security firms and 5 commercial banks, or about 25 percent of financial system assets; 3 commercial banks deemed insolvent (accounting for 14 percent of commercial bank assets).	Government cost for 50 finance companies estimated at 0.5 percent of GNP; government cost for subsidized loans amounted to about 0.2 percent of GDP a year.
1997–present	Through March 1999 the Bank of Thailand intervened in 70 (of 91) finance companies that together accounted for 13 percent of financial system assets and 72 percent of finance company assets. It also intervened in six banks that together had a market share of 12 percent. At the end of 1998 banking system nonperforming loans reached 46 percent.	Net losses estimated at \$60 billion, or 42 percent of GDP in 1999.
Vietnam 1997–present	Two of four large state-owned commercial banks—accounting for 51 percent of banking system loans—deemed insolvent; the other two experience significant solvency problems. Several joint stocks banks are in severe financial distress. Banking system nonperforming loans reached 18 percent in late 1998.	
Central America and t	the Caribbean	
Costa Rica Several instances	In 1987 public banks accounting for 90 percent of banking system loans were in financial distress, with 32 percent of their loans considered uncollectable.	Implied losses of at least twice the capital plus reserves.
<b>El Salvador</b> 1989	Nine state-owned commercial banks had nonperforming loans averaging 37 percent.	

Region/economy	Scope of crisis	Estimated losses or costs
<b>Jamaica</b> 1994–present	In 1994 a merchant banking group was closed. In 1995 a medium-size bank received financial support. In 1997 the Financial Credit Adjustment Company effectively nationalized five of six commercial banks as a result of a sharp deterioration in their asset quality and the erosion of their capital base.	
<b>Mexico</b> 1981–91	Government took over troubled banking system.	
1995–present	Of 34 commercial banks in 1994, 9 were intervened in and 11 participated in the loan/purchase recapitalization program. The 9 intervened banks accounted for 19 percent of financial system assets and were deemed insolvent.	Bank rescue estimated to cost \$65 billion by early 1998, or nearly 15 percent of GDP.
<b>Nicaragua</b> Late 1980s–96	Banking system nonperforming loans reached 50 percent in 1996.	
<b>Panama</b> 1988–89	In 1988 Panama's banking system experienced a nine-week banking holiday. The financial position of most state-owned and private commercial banks was weak. As a result 15 banks ceased operations.	

Scope of crisis

Region/economy

South America		
Argentina 1980–82	More than 70 institutions—accounting for 16 percent of commercial bank assets and 35 percent of finance company assets—were liquidated or subjected to central bank intervention.	55 percent of GDP.
1989–90	Nonperforming assets accounted for 27 percent of the aggregate portfolio and 37 percent of the portfolios of state banks. Failed banks held 40 percent of financial system assets.	
1995	Eight banks suspended and three banks collapsed. Through the end of 1997, 63 of 205 banking institutions were closed or merged.	Direct and indirect costs to public estimated at 2 percent of GDP.
<b>Bolivia</b> 1986–88	Five banks were liquidated. Banking system nonperforming loans reached 30 percent in 1987; in mid-1988 reported arrears stood at 92 percent of commercial banks' net worth.	
1994-	Two banks with 11 percent of banking system assets were closed in 1994. In 1995, 4 of 15 domestic banks, accounting for 30 percent of banking system assets, experienced liquidity problems and suffered high nonperforming loans.	
Brazil 1990	Deposits converted to bonds.	
1994–present	By the end of 1997 the Central Bank had intervened in or put under temporary administration 43 financial institutions, and banking system nonperforming loans reached 15 percent.	In 1996 the negative net worth of selected state and federal banks was 5–10 percent of GDP. By the end of 1997 bank recapitalizations had cost \$3 billion for Banco Economico, \$3 billion for Bamerindus, \$8 billion for Banco do Brazil, and \$5 billion for Unibanco. In 1998 public support to private banks cost 1–2 percent of GDP.
Chile 1976	Entire mortgage system insolvent.	
1981–83	In 1981 the authorities intervened in four banks and four nonbank financial institutions accounting for 33 percent of outstanding loans. In 1983 the authorities intervened in seven banks and one <i>financiera</i> accounting for 45 percent of financial system assets. By the end of 1983, 19 percent of loans were nonperforming.	In 1982–85 the government spent 42 percent of GDP to resolve the banking crisis.

Estimated losses or costs

Region/economy	Scope of crisis	Estimated losses or costs	
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Colombia 1982–87	The Central Bank intervened in six banks accounting for 25 percent of banking system assets.	Restructuring costs were estimated to be about 5 percent of GDP.	
<b>Ecuador</b> Early 1980s	Program exchanging domestic for foreign debt implemented to bail out banking system.		
1996–present	The authorities intervened in several small financial institutions in late 1995 and early 1996 and in the fifth largest commercial bank in 1996. Seven financial institutions, accounting for 25–30 percent of commercial banking assets, were closed in 1998–99. In March 1999 the authorities declared a one-week bank holiday.		
Paraguay 1995–present	The Government Superintendency intervened in two connected commercial banks, two other banks, and six related finance houses accounting for 10 percent of financial system deposits. By 1998 the government had intervened in six other financial institutions, including the country's largest public bank and the largest savings and loan institution. By the end of 1998 the government had intervened in most remaining domestic private and public banks and a number of finance companies.	By May 1998 the government had spent \$500 million, or 5 percent of GDP.	
<b>Peru</b> 1983–90	Two large banks failed. The rest of the system suffered from high nonperforming loans and financial disintermediation following the nationalization of the banking system in 1987.		
<b>Uruguay</b> 1981–84	Affected institutions accounted for 30 percent of financial system assets; insolvent banks accounted for 20 percent of financial system deposits.	The costs of recapitalizing banks were estimated at \$350 million, or 7 percent of GNP. In 1982–85 the Central Bank's quasi-fiscal losses associated with subsidized credit operations and loan portfolio purchases amounted to 24 percent of GDP.	
<b>Venezuela</b> 1994–present	Insolvent banks accounted for 30 percent of financial system deposits. In 1994 the authorities intervened in 13 of 47 banks that held 50 percent of deposits, and in 1995 in five additional banks.	Losses were estimated at more than 18 percent of GDP.	
Middle East and North Africa			

Egypt	The government closed several large investment
Early 1980s	companies.

Region/economy	Scope of crisis	Estimated losses or costs
<b>Israel</b> 1977–83	Almost the entire banking sector was affected, representing 60 percent of stock market capitalization. The stock exchange closed for 18 days, and bank share prices fell more than 40 percent.	About 30 percent of GDP in 1983.
Kuwait 1980s	An estimated 40 percent of loans were nonperforming by 1986.	
<b>Lebanon</b> 1988–90	Four banks became insolvent. Eleven had to resort to Central Bank lending.	
<b>Morocco</b> Early 1980s	Banking sector experienced solvency problems.	
<b>Yemen</b> 1996-	Banks suffered from extensive nonperforming loans and heavy foreign currency exposure.	
Europe and Central Asia		
<b>Turkey</b> 1982–85	Three banks were merged with the state-owned Agriculture Bank and then liquidated; two large banks were restructured.	Rescue costs totaled 2.5 percent of GNP.
Transition economies		
Albania 1992-	After the July 1992 cleanup, 31 percent of "new" banking system loans were nonperforming. Some banks faced liquidity problems due to a logjam of inter-bank liabilities.	
<b>Armenia</b> 1994–96	Starting in August 1994, the Central Bank closed half of active banks. Large banks continued to suffer from high nonperforming loans. The savings bank was financially weak.	
<b>Azerbaijan</b> 1995-	Twelve private banks closed; three large state- owned banks deemed insolvent; one large state- owned bank faced serious liquidity problems.	
<b>Bosnia and Herzegovina</b> 1992–present	Banking system suffers from high nonperforming loans due to the breakup of the former Yugoslavia and the civil war.	
<b>Bulgaria</b> 1990s	In 1995 an estimated 75 percent of banking system loans were substandard. The banking system experienced a run in early 1996. The government	By early 1996 the sector had a negative net worth equal to 13 percent of GDP.

Region/economy	Scope of crisis	Estimated losses or costs
Croatia 1996	Five banks accounting for about half of banking system loans were deemed insolvent and taken over by the Bank Rehabilitation Agency.	
Czech Republic 1991–?	Several banks have closed since 1993. In 1994–95, 38 percent of banking system loans were nonperforming.	Through 1994, 12 percent of GDP was spent on bank support.
<b>Estonia</b> 1992–95	Insolvent banks accounted for 41 percent of financial system assets. Five banks' licenses were revoked, and two major banks were merged and nationalized. Two other large banks were merged and converted to a loan recovery agency.	Recapitalization outlays for new entity totaled 300 million kroon, or 1.4 percent of 1993 GDP.
1994	The Social Bank, which controlled 10 percent of financial system assets, failed.	
<b>Georgia</b> 1991–?	Most large banks virtually insolvent. About one- third of banking system loans were nonperforming.	
<b>Hungary</b> 1991–95	In the second half of 1993 eight banks—accounting for 25 percent of financial system assets—were deemed insolvent.	Resolution costs estimated to total 10 percent of GDP.
<b>Kyrgyz Republic</b> 1990s	Some 80–90 percent of banking system loans doubtful. Four small commercial banks closed in 1995.	
<b>Latvia</b> 1995–present	Between 1994 and 1999, 35 banks saw their license revoked, were closed, or ceased operations.	In 1995 the negative net worth of the banking system was estimated at \$320 million, or 7 percent of 1995 GDP.  Aggregate banking system losses in 1998 estimated at 100 million lats (\$172 million), about 3 percent of GDP.
Lithuania 1995–96	In 1995, of 25 banks, 12 small banks were liquidated, 3 private banks (accounting for 29 percent of banking system deposits) failed, and 3 state-owned banks were deemed insolvent.	minion, about 3 percent of GDI.
Macedonia 1993–94	About 70 percent of banking system loans were nonperforming. The government took over banks' foreign debt and closed the second largest bank.	Costs of banking system rehabilitation, obligations from assumption of external debt, liabilities regarding frozen foreign exchange, and contingent liabilities in banks together estimated at 32 percent of GDP.
<b>Poland</b> 1990s	In 1991 seven of nine treasury-owned commercial banks—accounting for 90 percent of credit—the Bank for Food Economy, and the cooperative banking sector experienced solvency problems.	In 1993 recapitalization costs were \$750 million for the seven commercial banks and \$900 million for the Bank for Food Economy and the cooperative banking sector, for a total equivalent to 2 percent of GDP.

Region/economy	Scope of crisis	Estimated losses or costs
Romania 1990–present	In 1998 nonperforming loans reached 25–30 percent in the six main state-owned banks.	The Agricultural Bank was recapitalized on a flow basis. In 1998 the Central Bank injected \$210 million in Bancorex (0.6 percent of GDP), the largest state bank, and in 1999 another \$60 million.
Russia 1995	In August 1995 the interbank loan market stopped working due to concerns about connected lending in many new banks.	
1998-99	Nearly 720 banks, or half of those now operating, were deemed insolvent. These banks accounted for 4 percent of sector assets and 32 percent of retail deposits. According to the Central Bank, 18 banks holding 40 percent of sector assets and 41 percent of household deposits are in serious difficulties and will require rescue by the state.	In 1999 bailout costs were estimated at \$15 billion, or 5–7 percent of GDP.
<b>Slovakia</b> 1991–present	In 1997 unrecoverable loans were estimated at 101 billion crowns, or about 31 percent of loans and 15 percent of GDP.	
<b>Slovenia</b> 1992–94	Three banks—accounting for two-thirds of banking system assets—were restructured.	Recapitalizations cost \$1.3 billion.
<b>Ukraine</b> 1997-98	By 1997, 32 of 195 banks were being liquidated, while 25 others were undergoing financial rehabilitation. Bad loans accounted for 50–65 percent of assets even in some leading banks. In 1998 banks were further hit by the government's decision to restructure government debt.	
Industrial countries		
<b>Finland</b> 1991–94	Savings banks badly affected; government took control of three banks that together accounted for 31 percent of system deposits.	Recapitalization costs amounted to 11 percent of GDP.

Region/economy	Scope of crisis	Estimated losses or costs
<b>Japan</b> 1990s	Banks suffered from sharp decline in stock market and real estate prices. In 1995 the official estimate of nonperforming loans was 40 trillion yen (\$469 billion, or 10 percent of GDP). An unofficial estimate put nonperforming loans at \$1 trillion, equivalent to 25 percent of GDP. Banks made provisions for some bad loans. At the end of 1998 banking system nonperforming loans were estimated at 88 trillion yen (\$725 billion, or 18 percent of GDP). In 1999 Hakkaido Takushodu bank was closed, the Long Term Credit Bank was nationalized, Yatsuda Trust was merged with Fuji Bank, and Mitsui Trust was merged with Chuo Trust.	In 1996 rescue costs were estimated at more than \$100 billion. In 1998 the government announced the Obuchi Plan, which provided 60 trillion yen (\$500 billion, or 12 percent of GDP) in public funds for loan losses, bank recapitalizations, and depositor protection.
<b>Norway</b> 1987–93	The Central Bank provided special loans to six banks suffering from the recession of 1985–86 and from problem real estate loans. The state took control of the three largest banks (with 85 percent of banking system assets, whose loan losses had wiped out capital), partly through a Government Bank Investment Fund (5 billion kroner), and the state-backed Bank Insurance Fund had to increase capital to 11 billion kroner.	Recapitalization costs totaled 8 percent of GDP.
<b>Spain</b> 1977–85	In 1978–83, 24 institutions were rescued, 4 were liquidated, 4 were merged, and 20 small and medium-size banks were nationalized. These 52 banks (of 110), representing 20 percent of banking system deposits, were experiencing solvency problems.	Estimated bank losses were equivalent to about 17 percent of GNP.
<b>Sweden</b> 1991	Nordbanken and Gota Bank, accounting for 22 percent of banking system assets, were insolvent. Sparbanken Foresta, accounting for 24 percent of banking system assets, intervened. Overall, five of the six largest banks, accounting for more than 70 percent of banking system assets, experienced difficulties.	Recapitalization costs totaled 4 percent of GDP.

Region/economy	Scope of crisis	Estimated losses or costs
Africa		
<b>Angola</b> 1991–present	Two state-owned commercial banks have experienced solvency problems.	
<b>Botswana</b> 1994–95	One problem bank was merged in 1994, a small bank was liquidated in 1995, and the state-owned National Development Bank was recapitalized.	Recapitalizing the National Development Bank cost 0.6 percent of GDP.
<b>Ethiopia</b> 1994–95	A government-owned bank was restructured, and its nonperforming loans were taken over by the government.	
<b>Gabon</b> 1995-	One bank was temporarily closed in 1995.	
<b>Gambia, The</b> 1985–92	In 1992 a government bank was restructured and privatized.	
<b>Ghana</b> 1997–present	Nonperforming loans increased sharply in 1997, from 16 percent to 27 percent. Two state-owned commercial banks—accounting for 34 percent of the market—are in bad shape. Three banks, accounting for 4 percent of deposits, are insolvent.	
<b>Kenya</b> 1996-	At the end of 1996 nonperforming loans reached 19 percent.	
<b>Lesotho</b> 1988-	One of four commercial banks suffered from large nonperforming loans.	
<b>Mauritius</b> 1996	The Central Bank closed 2 of 12 commercial banks for fraud and other irregularities.	
<b>Nigeria</b> 1997	Distressed banks accounted for 4 percent of banking system assets.	
<b>Rwanda</b> 1991–?	One bank, with a well-established network, closed.	
<b>South Africa</b> 1977	Trust Bank experienced problems	
1989–? <b>Tunisia</b> 1991–95	Some banks are experiencing problems.  In 1991 most commercial banks were undercapitalized.	During 1991–94 the banking system raised equity equivalent to 1.5 percent of GDP and made provisions equivalent to another 1.5 percent. Thus recapitalization through 1994 required at least 3 percent of GDP.

Region/economy	Scope of crisis	Estimated losses or costs
<b>Brunei</b> Mid-1980s	Several financial firms failed. The second largest bank failed in 1986. In 1991, 9 percent of loans were past due.	
Hong Kong, China 1982–83	Nine deposit-taking companies failed.	
1983–86	Seven banks or deposit-taking institutions were liquidated or taken over.	
1998	One large investment bank failed.	
<b>India</b> 1993–present	Nonperforming assets of the 27 public banks estimated at 20 percent in 1995. Nonperforming assets reached 11 percent in 1993–94. At the end of 1998 nonperforming loans estimated at 16 percent.	
<b>Indonesia</b> 1994	Non-performing assets equal to more than 14 percent of banking system assets, with more than 70 percent in state banks.	Recapitalization costs for five state banks amounted to nearly 2 percent of GDP.
<b>Lao People's Democratic</b> <b>Republic</b> Early 1990s	Some banks experienced problems.	Recapitalization of state-owned commercial banks amounted to 1.5 percent of GDP.
<b>Malaysia</b> 1985–88	Insolvent institutions accounted for 3 percent of financial system deposits; marginally capitalized and possibly insolvent institutions accounted for another 4 percent.	Reported losses equivalent to 5 percent of GNP.
<b>Myanmar</b> 1996—?	The largest state-owned commercial bank reported to have large nonperforming loans.	
Papua New Guinea 1989–?	Some 85 percent of savings and loan associations have ceased operations.	
Singapore 1982	Commercial banks' nonperforming loans rose to about \$200 million, or 0.6 percent of GDP.	
<b>Taiwan, China</b> 1983–84	Four trust companies and eleven cooperatives failed.	
1995	Failure of credit cooperative Changua Fourth in late July sparked runs on other credit unions in central and southern Taiwan.	

#### Central America and the Caribbean

Region/economy	Scope of crisis	Estimated losses or costs
Costa Rica 1994–	One large state-owned commercial bank was closed in December 1994. The ratio of overdue loans (net of provisions) to net worth in state commercial banks exceeded 100 percent in June 1995.	
<b>Guatemala</b> 1990s	Two small state-owned banks had high nonperforming assets; these banks discontinued operations in the early 1990s.	
<b>Trinidad and Tobago</b> 1982–93	In the early 1980s several financial institutions experienced solvency problems, resulting in the merging of three government-owned banks in 1993.	
South America		
Venezuela Late 1970s and 1980s	Notable bank failures included Banco Nacional de Descuento (1978), BANDAGRO (1981), Banco de los Trabajadores de Venezuela (1982), Banco de Comercio (1985), BHCU (1985), BHCO (1985), and Banco Lara (1986).	
Transition economies		
<b>Belarus</b> 1995–	Many banks undercapitalized; forced mergers burdened some banks with poor loan portfolios.	
Estonia 1998	Three banks failed in 1998: Maapank (Agricultural Bank), which accounted for 3 percent of banking system assets, and two smaller banks: EVEA and ERA.	Maapank's losses reached \$500 million.

Region/economy	Scope of crisis	Estimated losses or costs
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<b>Tajikistan</b> 1996–	One of the largest banks is insolvent, one small bank has been closed, and another (out of 17) is in the process of liquidation.	
Europe and Central Asia		
<b>Turkey</b> 1994	Three banks failed in April 1994.	Through June 1994, the authorities spent 1 percent of GDP.
Middle East and North A	frica	
<b>Egypt</b> 1991–95	Four public banks were given capital assistance.	
<b>Jordan</b> 1989–90	The third largest bank failed in August 1989.	The central bank provided overdrafts equivalent to 10 percent of GDP to meet a run on deposits and allowed banks to settle foreign obligations.
Industrial countries		
Australia 1989–92	Two large banks received capital from the government to cover losses. Nonperforming loans rose to 6 percent of assets in 1991–92.	Rescuing state-owned banks was estimated to cost 2 percent of GDP.
<b>Canada</b> 1983–85	Fifteen members of the Canadian Deposit Insurance Corporation, including two banks, failed.	
<b>Denmark</b> 1987–92	Cumulative loan losses over 1990–92 were 9 percent of loans; 40 of the 60 problem banks were merged.	
<b>France</b> 1994–95	Credit Lyonnais experienced serious solvency problems	According to unofficial estimates, losses totaled about \$10 billion, making it the largest bank failure up to that time.
<b>Germany</b> Late 1970s	So-called Giroinstitutions faced problems.	
<b>Greece</b> 1991–95	Localized problems required significant injections of public funds into specialized lending institutions.	
<b>Iceland</b> 1985–86	One of three state-owned banks became insolvent and was eventually privatized in a merger with three private banks.	

Region/economy	Scope of crisis	Estimated losses or costs
1993	The government was forced to inject capital into one of the largest state-owned commercial bank	
	after it suffered serious loan losses.	
<b>Italy</b> 1990–95	During 1990–94, 58 banks (accounting for 11 percent of lending) were merged with other institutions.	
New Zealand 1987–90	One large state-owned bank accounting for one- quarter of banking assets experienced serious solvency problems due to high nonperforming loans.	The bank required a capital injection equal to 1 percent of GDP.
<b>United Kingdom</b> 1974–76	"Secondary Banking Crisis."	
1980s and 1990s	Notable bank failures included Johnson Matthey (1984), Bank of Credit and Commerce International (1991), and Barings (1995).	
United States 1984–91	More than 1,400 savings and loan institutions and 1,300 banks failed.	Cleaning up savings and loan institutions cost \$180 billion, or 3 percent of GDP.

*Source*: World Bank data and staff; Caprio and Klingebiel 1995; Sheng 1995; World Bank 1989; Baer and Klingebiel 1995; Vittas 1992; Sundararajan and Balino 1991; Rodriguez 1994; Morris and others 1990; Blass and Grossman 1995; Fleming and Talley 1996; Lindgren, Garcia, and Saal 1996; Caprio and Dooley 1996; Fleming, Chu, and Bakker 1996.

#### References

- Baer, Herbert, and Daniela Klingebiel. 1995. "Systemic Risk When Depositors Bear Losses: Five Case Studies." In G. G. Kaufman, ed., *Research in Financial Services: Private and Public Policy*. vol. 7. Greenwich, Conn.: JAI Press.
- Blass, Asher A., and Richard S. Grossman. 1995. "A Costly Guarantee? The 1983 Israel Bank Shares

  Crisis Revisited." Discussion Paper 95.05. Maurice Falk Institute for Economic Research in Israel,

  Jerusalem.
- Caprio, Gerard, and Daniela Klingebiel. 1995. "Episodes of Systemic and Borderline Financial Crises." World Bank, Mimeo.
- Caprio, Gerard, and Daniela Klingebiel. 1996. "Bank Insolvencies: Cross-country Experience." Policy Research Working Paper 1620. World Bank, Washington, D.C.
- ——. 1997. "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, D.C.: World Bank.
- Fleming, Alex, and Samuel Talley. 1996. "The Latvian Banking Crisis: Lessons Learned." Policy Research Working Paper 1590. World Bank, Washington, D.C.
- Fleming, Alex, Lily Chu, and Marie-Renée Bakker. 1996. "The Baltics—Banking Crises Observed." Policy Research Working Paper 1647. World Bank, Washington, D.C.
- Lindgren, Carl-Johan, Gillian Garcia, and Matthew I. Saal. 1996. *Bank Soundness and Macroeconomic Policy*. Washington, D.C.: International Monetary Fund.
- Morris, Felipe, Mark Dorfman, Jose Pedro Ortiz, and Maria Claudio Franco. 1990. *Latin America's Banking Systems in the 1980s*. World Bank Discussion Paper 81. Washington, D.C.
- Rodriguez, Carlos Alfredo. 1994. "Argentina: Fiscal Disequilibria Leading to Hyperinflation." In William Easterly, Carlos Alfredo Rodriguez, and Klaus Schmidt-Hebbel, eds., *Public Sector Deficits and Macroeconomic Performance*. New York: Oxford University Press.

#### Region/economy Scope of crisis Estimated losses or costs

- Rojas-Suarez, Liliana, and Steven Weisbrod. 1995. "Banking Crises in Latin America: Experiences and Issues." In Ricardo Hausmann and Liliana Rojas-Suarez, eds., *Banking Crises in Latin America*. Baltimore, Md.: The Johns Hopkins University Press.
- Sheng, Andrew, ed. 1996. Bank Restructuring: Lessons from the 1980s. Washington, D.C.: World Bank.
- Sundarajan, Vasudevan, and Tomas Jose T. Balino, eds. 1991. *Banking Crises: Structural Weaknesses, Support Operations, and Economic Consequences*. Washington, D.C: International Monetary Fund.
- Vittas, Dimitri, ed. 1992. *Financial Regulation: Changing the Rules of the Game*. EDI Development Studies. Washington, D.C.: World Bank Economic Development Institute.
- World Bank. 1989. World Development Report 1989: Financial Systems and Development. New York: Oxford University Press.