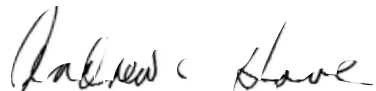


Foreword

Shortly after her confirmation, then-Chairman Ricki R. Helfer directed the FDIC's staff to undertake this study. She strongly believed that a careful examination and analysis of the banking crises of the 1980s and early 1990s would provide information that would allow the FDIC to better fulfill its mission.

The banking problems of the period were of a magnitude not seen since the Great Depression and the advent of federal deposit insurance and therefore provide a unique window through which we can study the causes of, and the regulatory and supervisory response to, sharply increased numbers of bank failures in a modern economic and banking environment. There have, of course, been significant changes since the early 1990s in the performance and structure of the banking industry. Moreover, in the wake of the banking crises and subsequent legislative reforms, changes in the supervisory process have attempted to ensure improved monitoring of bank risk and more timely intervention in, and closure of, troubled banks. But not all the issues raised by the problems of the 1980–1994 period have been laid to rest. Moreover, the current improved condition of the industry and the supervisory changes of the late 1980s and early 1990s do not mean that banking problems cannot return sometime in the future. Although it is clear that the problems of the past are unlikely to be precisely repeated in the future, the study of these recent crises is nevertheless instructive. At the very least, the history of the turbulent time in banking should teach us that we cannot afford to be complacent, and the FDIC hopes this study that glances backward will be helpful as we look forward.

This study was prepared by the FDIC's Division of Research and Statistics. Every effort was made to ensure the accuracy of the information it contains and to provide an impartial assessment of what occurred. As is the case with any history, however, the interpretations made by those who have written it are important to its structure and conclusions, and these interpretations are not necessarily those of the Federal Deposit Insurance Corporation.

A handwritten signature in black ink, reading "Andrew C. Hove, Jr." in a cursive script.

Andrew C. Hove, Jr.
Chairman
December 1997

Acknowledgments

As Chairman Hove has indicated in his foreword, in 1995 the Division of Research and Statistics was directed by then-Chairman Helfer to undertake an examination of the history of the banking crises of the 1980s and early 1990s. The study was initiated in the belief that with the banking industry recovering, it was important to look back at the crises that had just passed and to assess what had taken place. The study would serve to identify areas where the agency's mission could be better accomplished in the future, and to learn from the unique experience that the 1980s and early 1990s provided to the regulators and bankers alike.

This study was conducted under the direction of George Hanc, Associate Director, Division of Research and Statistics. Lee Davison was responsible for day-to-day management of the study and provided expertise on historical research methods. Jack Reidhill was integral to the process of planning and executing the study. John O'Keefe made many important contributions concerning analytical methodology in all areas of the study.

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Chapter 2. **Banking Legislation and Regulation** _____ Lee Davison

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Chapter 11. Banking Problems in California _____	Victor Saulsbury and Timothy Curry
Chapter 12. Bank Examination and Enforcement _____	Timothy Curry, with contributions by George Hanc, John O’Keefe, Lee Davison, and Jack Reidhill
Chapter 13. Off-Site Surveillance Systems _____	Jack Reidhill and John O’Keefe

Many others on the staff of the Division of Research and Statistics provided extremely valuable research assistance, analyzed large quantities of complex data, and helped in other ways, both with production of the study and with the organization of the FDIC symposium on the study held in January 1997. Especially important research and analytical support were provided by Cynthia Angell, Jane Coburn, Joseph Colantuoni, Steven Guggenmos, James Heath, Robin Heider, Matthew Klena, Sandra Meyer, Lynne Montgomery, Lynn Shibut, Tara Sorensen, and Kenneth Walsh. Additional work was done by Joseph Bauer, Daniel Bean, Richard Brown, Timothy Critchfield, James Curtis, Jay Golter, Ronnie Kidd, Laura Kittleman, Rose Kushmeider, James McFadyen, Erin Robbins, Martha Solt, Mark Taylor, Ross Waldrop, Katie Wehner, Thomas Yeatts, and Jennifer Zanini.

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William R. Watson, Director
Division of Research and Statistics

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A Note on the Study's Organization and Data

The study is divided into three main sections. Part 1 contains four chapters, the first of which presents a detailed summary of the study's findings as well as an exploration of the implications of those findings. The other three chapters deal with what might be viewed as issues that were "national" in scope: developments in banking legislation and regulation, the role of commercial real estate, and the relationship of the savings and loan crisis to the problems in banking. The seven chapters in Part 2 look at the sectoral and regional banking crises of the 1980s and early 1990s. These are presented chronologically (although since the discrete problems in banking often overlapped one another, the periods covered within chapters frequently coincide). In turn, the chapters in this section examine the LDC debt crisis and mutual savings bank problems of the early 1980s, the crisis surrounding Continental Illinois in 1982–84, banking and the agricultural problems of the mid-1980s, and then the rolling regional recessions from the mid-1980s to the early 1990s in the Southwest, Northeast, and California. Finally, the two chapters in Part 3 present an analysis of the supervisory tools used by the banking agencies during the period, dealing first with bank examination and enforcement, and then with off-site surveillance systems.

Readers should note that if no source is given for data, the source for that data is the FDIC. Unless otherwise defined, "banks" in this study should be assumed to include commercial banks (national, state member and state nonmember institutions) and FDIC-insured mutual savings banks. Unless otherwise indicated, this study treats open-bank assistance transactions as bank failures.

Chapter 1

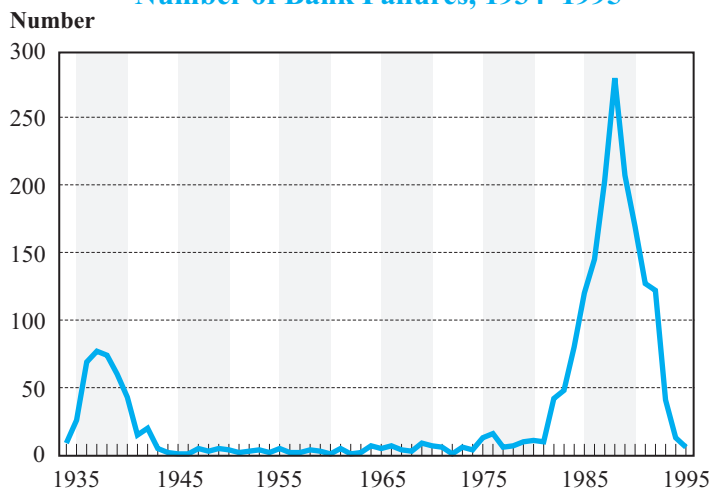
The Banking Crises of the 1980s and Early 1990s: Summary and Implications

Introduction

The distinguishing feature of the history of banking in the 1980s was the extraordinary upsurge in the number of bank failures. Between 1980 and 1994 more than 1,600 banks insured by the Federal Deposit Insurance Corporation (FDIC) were closed or received FDIC financial assistance—far more than in any other period since the advent of federal deposit insurance in the 1930s (see figure 1.1). The magnitude of bank failures dur-

Figure 1.1

Number of Bank Failures, 1934–1995



Note: Data refer to FDIC-insured commercial and savings banks that were closed or received FDIC assistance.

ing the 1980s put severe, though temporary, strains on the FDIC insurance fund; raised basic questions about the effectiveness of the bank regulatory and deposit insurance systems; and led to far-reaching legislative and regulatory actions.¹

This chapter summarizes the findings and implications of *History of the Eighties—Lessons for the Future: An Examination of the Banking Crises of the 1980s and Early 1990s*, a study conducted by the FDIC's Division of Research and Statistics to analyze various aspects of the 1980–94 experience. The four sections of this summary deal with (1) the factors underlying the rapid rise in the number of bank failures; (2) the regulatory issues raised by this experience; (3) questions that remain open despite the legislative and regulatory remedies adopted between 1980 and 1994; and (4) concluding comments.

The Rise in the Number of Bank Failures in the 1980s: The Economic, Legislative, and Regulatory Background

The rise in the number of bank failures in the 1980s had no single cause or short list of causes. Rather, it resulted from a concurrence of various forces working together to produce a decade of banking crises. First, broad national forces—economic, financial, legislative, and regulatory—established the preconditions for the increased number of bank failures. Second, a series of severe regional and sectoral recessions hit banks in a number of banking markets and led to a majority of the failures. Third, some of the banks in these markets assumed excessive risks and were insufficiently restrained by supervisory authorities, with the result that they failed in disproportionate numbers.

Economic and Financial Market Environment

During most of the 1980s, the performance of the national economy, as measured by broad economic aggregates, seemed favorable for banking. After the 1980–82 recession the national economy continued to grow, the rate of inflation slowed, and unemployment and interest rates declined. However, in the 1970s a number of factors, both national and international, had injected greater instability into the environment for banking, and these earlier developments were directly or indirectly generating challenges to which not all banks would be able to adapt successfully. In the 1970s, exchange rates among the world's major currencies became volatile after they were allowed to float; price levels underwent major increases in response to oil embargoes and other external shocks; and interest rates varied widely in response to inflation, inflationary expectations, and anti-inflationary Federal Reserve monetary policy actions.

¹ Although this study is devoted to banking, it is appropriate to recall that the thrift industry suffered an even greater catastrophe. In 1980 there were 4,039 savings institutions; approximately 1,300 savings institutions failed during the 1980–94 period. This high proportion of failures led to the demise of the fund that insured savings institution deposits, and imposed heavy costs on surviving institutions and on taxpayers.

Developments in the financial markets in the late 1970s and 1980s also tested the banking industry. Intrastate banking restrictions were lifted, allowing new players to enter once-sheltered markets; regional banking compacts were established; and direct credit markets expanded.² In an environment of high market rates, the development of money market funds and the deregulation of deposit interest rates exerted upward pressures on interest expenses—particularly for smaller institutions that were heavily dependent on deposit funding. Competition increased from several directions: within the U.S. banking industry itself and from thrift institutions, foreign banks, and the commercial paper and junk bond markets. The banking industry's share of the market for loans to large business borrowers declined, partly because of technological innovations and innovations in financial products.³ As a result, many banks shifted funds to commercial real estate lending—an area involving greater risk. Some large banks also shifted funds to less-developed countries and leveraged buyouts, and increased their off-balance-sheet activities.

Condition of Banking on the Eve of the 1980s

Yet on the eve of the 1980s most banks gave few obvious signs that the competitive environment was becoming more demanding or that serious troubles lay ahead. At banks with less than \$100 million in assets (the vast majority of banks), net returns on assets (ROA) rose during the late 1970s and averaged approximately 1.1 percent in 1980—a level that would not be reached again until 1993, after the wave of bank failures had receded (see figure 1.2).⁴ For this group of banks, net returns on equity (ROE) in 1980 were also high by historical standards, equity/asset ratios were moving gradually upward, and charge-offs on loans averaged approximately what they would again in the early 1990s. The fact that key performance ratios in 1980 compared favorably with those in 1993–94—a period of extraordinary health and profitability in banking that has continued to the present (mid-1997)—emphasizes the absence of obvious problems at most banks at the beginning of the eighties.

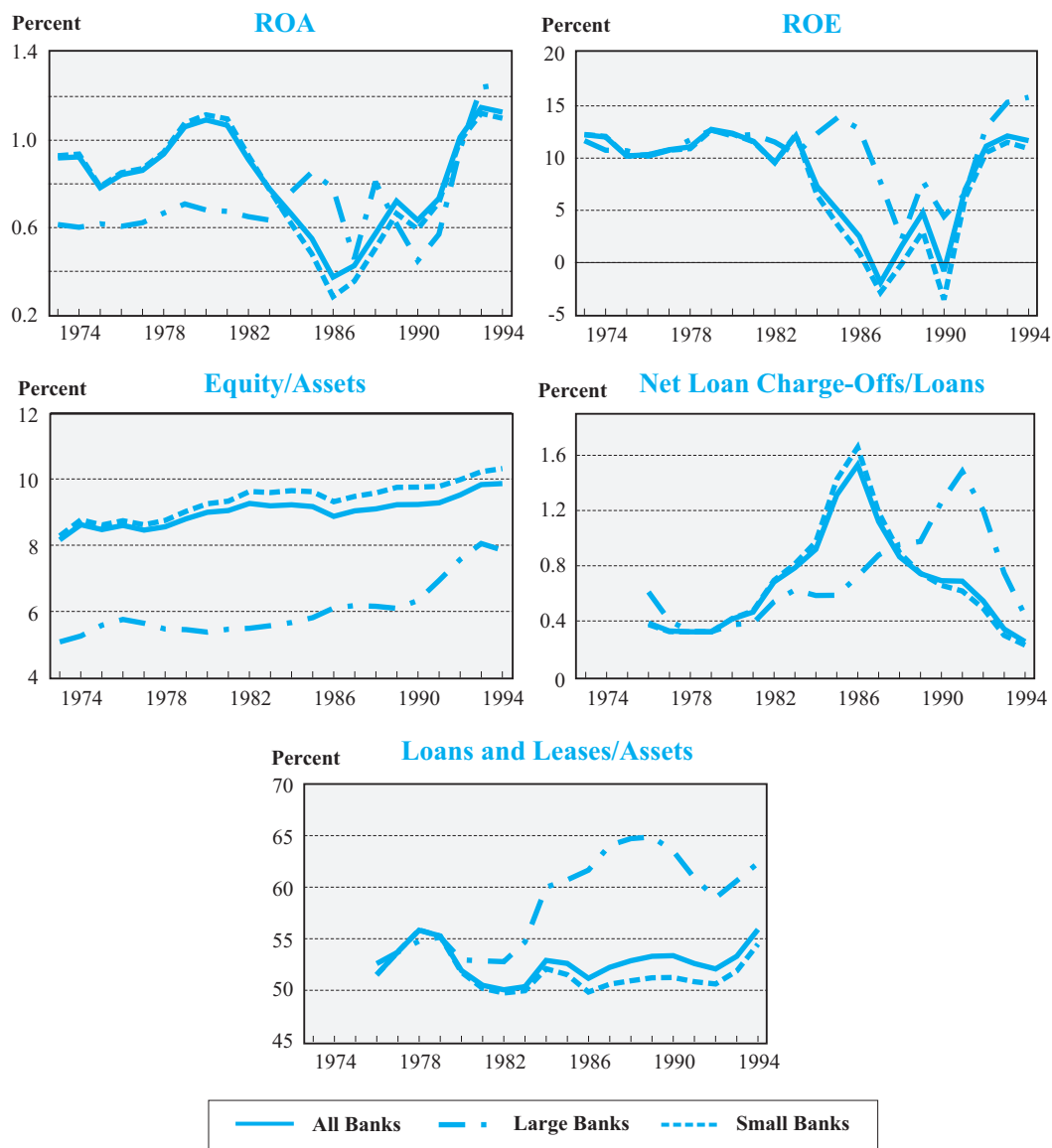
Large banks, however, showed clearer signs of weakness. In 1980 ROA and equity/assets ratios were much lower for banks with more than \$1 billion in assets than for small

² Many of these developments are discussed in Allen N. Berger, Anil K. Kashyap, and Joseph M. Scalise, “The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It’s Been,” *Brookings Papers on Economic Activity* 2 (1995).

³ Between 1980 and 1990, commercial paper outstanding increased from 7 percent of bank commercial and industrial loans (C&I) to 19 percent.

⁴ Data in figure 1.2 are unweighted averages of individual bank ratios. Use of median values or averages weighted by assets reveals broadly similar trends, except that medians are less affected by extreme values and tend to be less volatile than unweighted averages, while weighted averages are dominated by larger banks in each size group. The data in figure 1.2 are for banks with assets greater than \$1 billion (large banks) or less than \$100 million (small banks) in each year; thus, the number of banks included in the two size groups varies from year to year. In 1980, there were 192 banks with assets greater than \$1 billion and 12,735 banks with assets less than \$100 million. In 1994, the comparable figures were 392 banks and 7,259 banks. Asset data are not adjusted for inflation.

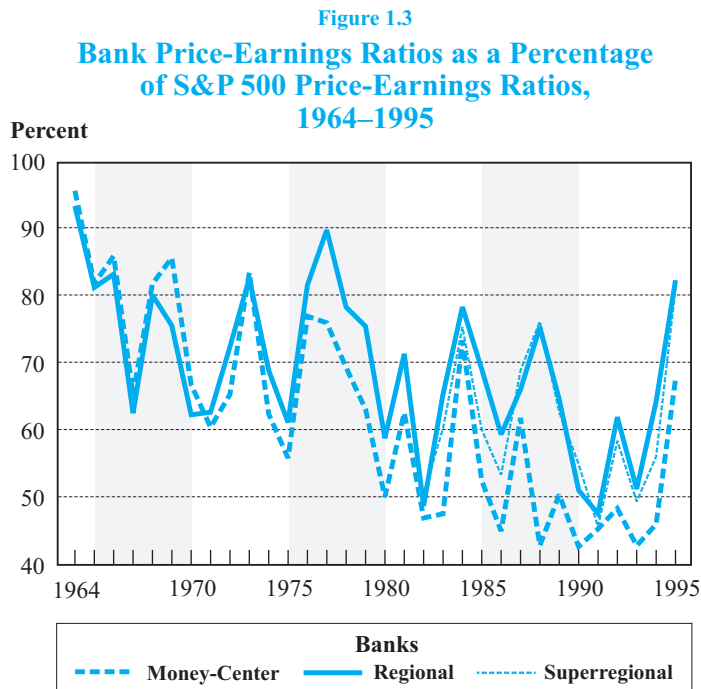
Figure 1.2
Bank Performance Ratios, 1973–1994



Note: Data are unweighted averages of individual FDIC-insured commercial and savings bank ratios. Large banks are those with assets greater than \$1 billion in any given year. Small banks are those with assets less than \$100 million in any given year.

banks and were also well below the large-bank levels they would reach in the early 1990s. Market data for large, publicly traded banking organizations suggest that investors were valuing these institutions with reduced favor. During the 1960s and 1970s price-earnings ratios for money-center banks trended generally downward relative to S&P 500 price-earnings ratios, although for regional banks the decline was much less pronounced (see figure 1.3). For the 25 largest bank holding companies in the late 1970s and early 1980s, the market value of capital decreased relative to—and fell below—its book value, suggesting that to investors, the franchise value of large banks was declining.⁵

Differences in performance between large and small banks in 1980 are not surprising. At that time, because of branching restrictions and deposit interest-rate controls, many small institutions operated in still-protected markets. Accordingly, they were affected more slowly by external forces such as increased competition and increased market volatility.



Source: Salomon Brothers, *Bank Annual*, 1992 and 1996 editions.

Note: Data for superregional bank price-earnings ratios begin in 1982.

⁵ Michael C. Keeley, “Deposit Insurance, Risk, and Market Power in Banking,” *American Economic Review* (December 1990): 1185. Data are for the 25 largest bank holding companies as of 1985.

During the 1980s, of course, performance ratios of banks of all sizes weakened and exhibited increased risk. Profitability declined and became more volatile, while loan charge-offs rose dramatically.⁶ Large banks assumed greater risk in order to boost profits, as is indicated by the sharp rise in the ratio of loans and leases to total assets for these banks. In contrast, equity ratios increased over the period, particularly for large banks, in line with increased regulatory capital requirements and perhaps also in response to market concerns about distress in the banking system.

Then in the 1990s the performance of banking improved markedly. This is apparent not only from the accounting data presented in figure 1.2 but also from the market data presented in figures 1.3 and 1.4, which suggest that to investors, the value of publicly traded banks improved greatly in the 1990s. From 1993 to 1995, bank price-earnings ratios rose relative to S&P 500 price-earnings ratios, although the movements in this measure were extremely volatile. After the early 1980s market prices per share of money-center and regional banks increased from below book value per share to well above book value, except for a sharp and temporary drop in 1990 (figure 1.4). The major improvement in the performance and investor perceptions of banking in the 1990s, albeit of limited duration so far, does not support earlier concerns that banking was a declining industry or the view that banking was characterized by widespread and persistent overcapacity that would lead to increased failures.⁷

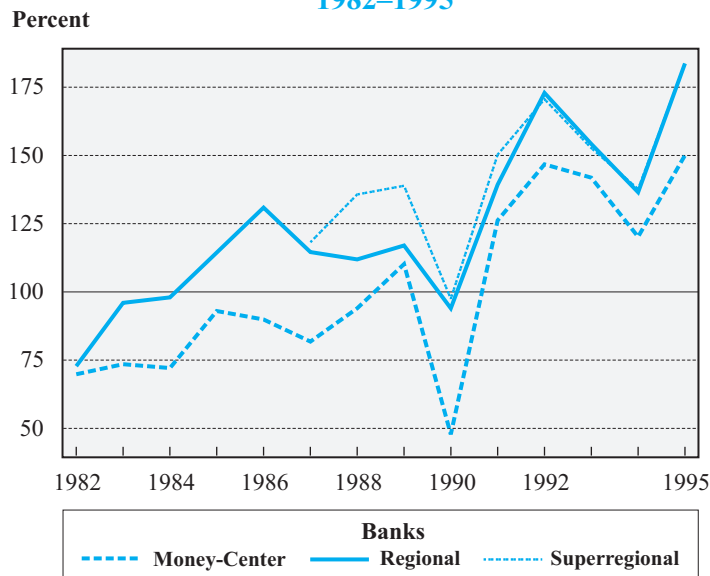
Although the overall performance of the banking industry varied greatly during the 1980–94 period, in its structure the industry showed a strong trend in one direction—toward consolidation into fewer banking organizations. This trend was partly due to the relaxation of branching restrictions.⁸ From the end of 1983 through the end of 1994, the number of insured commercial banks declined by 28 percent, from 14,461 to 10,451. The number of separate corporate units—bank holding companies plus independent commercial banks—

⁶ The 1986 peak in net loan charge-offs for small banks was associated with the agricultural, energy, and real estate problems of the Southwest; the 1991 peak for large banks was associated with the real estate problems in the Northeast.

⁷ The issue of whether banking is a declining industry and the related question of overcapacity in banking are explored in Federal Reserve Bank of Chicago, *The (Declining?) Role of Banking, Proceedings of the 30th Annual Conference on Bank Structure and Competition* (May 1994). In the *Proceedings*, see particularly Alan Greenspan, “Optimal Bank Supervision in a Changing World,” 1–8; John H. Boyd and Mark Gertler, “Are Banks Dead? Or, Are the Reports Greatly Exaggerated?” 85–117; and Sherrill Shaffer, “Inferring Viability of the U.S. Banking Industry from Shifts in Conduct and Excess Capacity,” 130–144. Shaffer concludes that a small amount of excess capacity in bank loans was eliminated in the mid-1980s.

⁸ Some observers have argued that bank failures in the 1980s were partly due to restrictions on bank ownership (geographic restrictions within the banking industry, and prohibition of acquisitions by nonbank organizations), which prevented weak or inefficient banks from being taken over before they failed. Although such restrictions on ownership probably contributed to the rise in the number of bank failures, particularly in the early 1980s, the large number of voluntary mergers and consolidations within the industry may have averted some other failures by eliminating weaker institutions while they still had some value.

Figure 1.4
Price-to-Book Value per Share,
1982–1995



Source: Salomon Brothers, *Bank Annual*, 1992 and 1996 editions.

Note: Values are industry composite medians. Data for superregional bank price-to-book ratios begin in 1987.

decreased somewhat more, by 31 percent. The 4,010 reduction in the number of insured commercial banks was due primarily to the consolidation of bank affiliates of multibank holding companies and to unassisted mergers of unaffiliated banks (4,803). The net effect of failures, new charters, conversions, and other changes was an addition of 793 banks.

Legislative Developments

Banking legislation also played a large role in the bank-failure experience of the 1980s and early 1990s.⁹ This legislation was largely shaped by two broad factors: widespread recognition that banking statutes should be modernized and adapted to new marketplace realities, and the need to respond to the outbreak of bank and thrift failures. In the early 1980s the focus was on the attempt to modernize, and congressional activity was dominated by actions to deregulate the product and service powers of thrifts and to a lesser extent of banks.

⁹ See Chapter 2, “Banking Legislation and Regulation.” Tax legislation was also a significant influence. After-tax yields on real estate investment were enhanced by the Economic Recovery Act of 1981 and then reduced by the Tax Reform Act of 1986 (see the appendix to Chapter 3).

These deregulatory actions were generally unaccompanied by actions to restrict the increased risk taking they made possible, and so they contributed to bank and thrift failures. As the number of failures mounted, the legislative emphasis then shifted to recapitalizing the depleted deposit insurance funds and providing regulators with stronger tools, while at the same time restricting their discretion. As a group, the various legislative actions addressed a variety of issues, but only the provisions most relevant to the increased number of bank failures are discussed here.

The Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) phased out deposit interest-rate ceilings, broadened the powers of thrift institutions, and raised the deposit insurance limit from \$40,000 to \$100,000. Two years later the most pressing problem was the crisis of thrift institutions in an environment of high interest rates. Accordingly, the **Garn–St Germain Depository Institutions Act of 1982** (1) authorized money market deposit accounts for banks and thrifts to stem disintermediation, (2) authorized net worth certificates to implement capital forbearance for thrifts facing insolvency in the short term, and (3) increased the authority of thrifts to invest in commercial loans to strengthen the institutions’ viability over the long term. In the case of national banks, Garn–St Germain removed statutory restrictions on real estate lending, and relaxed loans-to-one-borrower limits. With respect to commercial mortgage markets, this legislation set the stage for a rapid expansion of lending, an increase in competition between thrifts and banks, overbuilding, and the subsequent commercial real estate market collapse in many regions.

As the thrift crisis deepened and commercial bank problems were developing, Congress passed the **Competitive Equality Banking Act of 1987 (CEBA)**. It provided for recapitalizing the fund of the Federal Savings and Loan Insurance Corporation (FSLIC) through the Financing Corporation (FICO), authorized a forbearance program for farm banks, extended the full-faith-and-credit protection of the U.S. government to federally insured deposits, and authorized bridge banks. Two years later, again grappling with the thrift debacle, Congress passed the **Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA)**, which authorized the use of taxpayer funds to resolve failed thrifts. Other provisions reflected congressional dissatisfaction with the regulation of thrifts: the act abolished the existing thrift regulatory structure, moved thrift deposit insurance to the FDIC, and mandated that bank and thrift insurance fund reserves be increased to 1.25 percent of insured deposits.

The belief that regulators had not acted promptly to head off problems was again evident in the **Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA)**. This act was aimed largely at limiting regulatory discretion in monitoring and resolving industry problems. It prescribed a series of specific “prompt corrective actions” to be taken as capital ratios of banks and thrifts declined to certain levels; mandated annual

examinations and audits; prohibited the use of brokered deposits by undercapitalized institutions; restricted state bank activities; tightened least-cost standards for failure resolutions; and mandated a risk-based deposit insurance assessment system.

Two years after the enactment of FDICIA, the **Omnibus Budget Reconciliation Act of 1993** included a national depositor preference provision, which provided that a failed bank's depositors (and the FDIC standing in the place of insured depositors it has already paid) have priority over nondepositors' claims. It was believed that national depositor preference would make failure transactions simpler and less expensive to the insurance fund and would encourage nondeposit creditors to monitor bank risk more closely.

The final chapter of the savings and loan emergency legislation was completed in October 1996 with the enactment of the **Deposit Insurance Funds Act**, which provided for the capitalization of the Savings Association Insurance Fund, phased in pro rata bank and thrift payments of interest on FICO bonds, and required merger of the bank and thrift insurance funds in 1999 if no savings associations are in existence at that time. Given Congress's past reluctance to address promptly the need to fund thrift deposit insurance, enactment of this legislation at a time when no major thrift failure was on the horizon suggests the extent to which safety-and-soundness considerations had come to dominate banking legislation.¹⁰

Legislation addressed not only the thrift and banking crises of the 1980s but also, after those crises had ended, the question of interstate banking. By the end of the 1980s the risks posed by geographic lending concentrations were well understood, so attempts were made to eliminate the remaining legal impediments to full interstate banking. Already state action had enabled many banking firms to use bank holding company affiliations to circumvent geographic restrictions. Interstate banking was enacted in the **Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994**, which enables banks to diversify loan portfolios more effectively. (As noted below, it also requires existing regulatory risk-monitoring systems to adapt to the changing nature of individual bank loan portfolios.)

Regulation

The tension between the two objectives of deregulating depository institutions and preventing or containing failures was manifest not only in legislative activity but also in policy differences among the federal bank regulators.¹¹ Of course, all three agencies were sensitive to issues of safety and soundness as well as to the importance of modernizing bank powers. On specific issues, however, the Office of the Comptroller of the Currency (OCC)

¹⁰ Passage of the Deposit Insurance Funds Act was helped along by (1) the possibility of a FICO default if deposits were to shift from the Savings Association Insurance Fund, with higher assessment rates, to the Bank Insurance Fund, with lower assessment rates, and (2) the budgetary treatment of deposit insurance assessments, \$3 billion of which was to be counted as revenue to "pay" for nonbanking spending programs.

¹¹ See Chapter 2, "Banking Legislation and Regulation."

tended to emphasize the need to allow banks more freedom to compete and seek profit opportunities, the FDIC leaned toward protecting the deposit insurance fund, and the Federal Reserve often took a middle-of-the-road position.

Differences between the FDIC and the OCC reflected the different responsibilities of an insurer and a chartering agency. They also reflected a problem that may potentially arise in bank regulation regardless of the agency involved: how to strike the correct balance between encouraging increased competition and preserving stability and safety. To be sure, no such conflict is likely to exist in the long run: depository institutions must be able to compete and to participate in market innovations if they are to be viable in the long term. At any particular time, however, a short-term conflict may arise. The classic case is that of the savings and loan industry. Broadened nonmortgage powers were deemed essential to the long-term viability of thrift institutions, but the very act of providing these powers (without appropriate safeguards and at a time when thrifts were undercapitalized) contributed to the collapse of many thrift institutions and the weakening of many banks in the 1980s.¹²

In varying degree, differences among regulators were evident in the development of policies relating to chartering new banks, the use of brokered funds, and capital requirements. With respect to the entry of new banks, both the OCC and the states sharply increased chartering in the 1980s. (Texas—where branching was restricted—accounted for particularly large shares of total new state and national bank charters.) In 1980, when the OCC sought to foster increased competition by allowing new entrants into banking markets, the agency revised its requirements for approving new charters. But when a disproportionate number of new banks became troubled and failed, the FDIC expressed its concern about the OCC's policy. A basic issue was the FDIC's ability to deny insurance coverage to newly chartered institutions. FDIC approval of insurance was, for all practical purposes, necessary before a state would grant a new charter, but national banks and Federal Reserve member banks received insurance upon being chartered as a matter of law. Congress settled this issue in FDICIA by requiring that all institutions seeking insurance formally apply to the FDIC, thereby assuring the deposit insurer a role in new bank chartering. Meanwhile, the number of new commercial bank charters reached a peak in 1984, then gradually declined until 1994.¹³

¹² With respect to the potential short-term conflict between pro-competitive and safety-and-soundness objectives, the following statement on S&L deregulation, made by the National Commission on Financial Institution Reform, Recovery and Enforcement, is instructive: “[C]ommon sense and prudence should have dictated that the industry be required to wait out the high interest rates, regain net worth, and then gradually shift into new activities. This is what well-managed and responsible S&Ls did on their own, and they were largely successful” (*Origins and Causes of the S&L Debacle: A Blueprint for Reform* [1993], 32).

¹³ In 1984, 356 new commercial banks were chartered. By 1994 the number had declined to 47, but it then increased to 97 in 1995 and 140 in 1996.

The regulators also differed on the appropriate treatment of brokered deposits. (Brokered deposits had a largely indirect influence on bank failures in that many weak savings institutions used them to fund rapid loan expansion in competition with healthier banks and thrift institutions.) In 1984, the FDIC and the Federal Home Loan Bank Board proposed that brokered deposits be insured only up to \$100,000 per broker per bank, whereas the OCC favored a less-stringent approach. Safety-and-soundness considerations seemed to be pitted against the objective of permitting evolution to proceed in the financial markets. In the end Congress stepped in, and both FIRREA and FDICIA limited the use of brokered deposits by troubled institutions.

A third instance of regulatory disagreement concerned the adoption of formal capital requirements with uniform standards for minimum capital levels. In view of the relatively low capital ratios at many large banks and the rise in the number of failures, all of the agencies favored the objective of explicit capital standards, but initially they differed on the specifics; the FDIC generally favored higher capital requirements than the OCC, and the Federal Reserve offered a compromise in at least one instance. In 1985, with congressional encouragement, the regulators agreed on a uniform system covering all banks. In 1990 a further, major change came with the adoption of interim risk-based capital requirements, supplemented by leverage requirements. Capital standards became part of the triggering mechanism for the Prompt Corrective Action (PCA) prescribed by FDICIA in 1991. Final risk-based requirements took effect in 1992.

Geographic Pattern of Bank Failures

The national economic, legislative, and regulatory factors discussed above affected potentially all banks. A variety of other factors affected banks differently in particular regions of the country, as indicated by the geographic pattern of bank failures. During the 1980–94 period, 1,617 FDIC-insured commercial and savings banks were closed or received FDIC financial assistance (see table 1.1). This number was 9.14 percent of the sum of all banks existing at the end of 1979 plus all banks chartered during the subsequent 15 years. The comparable figure for the preceding 15-year period (1965–79) was 0.3 percent.

The geographic pattern of bank failures can be expressed in a number of ways—by number of failed banks, amount of failed-bank assets, proportion of failed banks and failed-bank assets relative to all banks in individual states, or particular states' shares in national totals for bank failures and failed-bank assets. But by any of these measures, it is evident that bank failures during the 1980–94 period were highly concentrated in relatively few regions—which, however, included some of the country's largest banking markets in terms of number of institutions and dollar resources. Thus, geographically confined crises were translated into a national problem. At one end of the scale, in 7 states the number of bank

Table 1.1
Bank Failures by State, 1980–1994

	Number of Bank Failures	Percent of Total Number of Banks	Assets of Failed Banks (\$Thousands)	Percent of Total Bank Assets
Alabama	9	2.47	\$ 215,589	1.18
Alaska	8	44.44	1,083,417	41.58
Arizona	17	26.15	331,059	1.66
Arkansas	11	4.03	160,797	1.47
California	87	15.26	4,222,302	1.69
Colorado	59	12.39	1,035,553	5.24
Connecticut	32	18.39	6,818,223	22.17
Delaware	1	1.61	582,350	0.74
District of Columbia	5	17.86	1,135,066	13.39
Florida	39	4.56	4,524,461	4.30
Georgia	3	0.53	60,922	0.17
Hawaii	2	20.00	13,941	0.29
Idaho	1	3.13	42,931	0.84
Illinois	33	2.52	35,031,196	25.75
Indiana	10	2.40	241,463	0.76
Iowa	40	6.07	652,681	3.25
Kansas	69	10.71	1,233,874	7.26
Kentucky	7	1.91	97,742	0.48
Louisiana	70	22.44	4,105,621	17.39
Maine	2	2.63	875,303	13.51
Maryland	2	1.45	43,827	0.06
Massachusetts	44	10.63	10,240,719	12.90
Michigan	3	0.75	159,917	0.29
Minnesota	38	4.87	1,491,250	4.95
Mississippi	3	1.63	338,680	3.18
Missouri	41	5.24	1,043,379	2.25
Montana	10	5.75	172,739	3.32
Nebraska	33	6.88	323,646	2.91
Nevada	1	4.17	18,036	0.10
New Hampshire	16	12.60	3,320,916	31.98
New Jersey	14	5.71	4,695,156	9.49
New Mexico	11	11.00	568,326	9.47
New York	34	8.79	31,701,442	6.22
North Carolina	2	1.59	74,553	0.27
North Dakota	9	5.00	77,565	1.76
Ohio	5	1.14	171,765	0.29
Oklahoma	122	22.02	5,838,273	23.85
Oregon	17	17.00	599,703	4.34
Pennsylvania	5	1.19	17,454,150	16.99
Puerto Rico	5	33.33	527,375	8.94

Table 1.1 (continued)
Bank Failures by State, 1980–1994

	Number of Bank Failures	Percent of Total Number of Banks	Assets of Failed Banks (\$Thousands)	Percent of Total Bank Assets
Rhode Island	2	8.33	323,861	3.29
South Carolina	1	0.87	64,629	0.67
South Dakota	8	4.73	711,345	4.04
Tennessee	36	9.05	1,730,076	6.34
Texas	599	29.41	60,192,424	43.84
Utah	11	11.58	339,237	4.04
Vermont	2	5.41	93,802	2.94
Virginia	7	2.45	133,529	0.47
Washington	4	2.63	713,803	2.42
West Virginia	5	1.98	123,829	1.25
Wisconsin	2	0.30	50,882	0.19
Wyoming	20	16.67	375,332	10.30
U.S.	1,617	9.14%	\$206,178,657	8.98%

Note: Data refer to FDIC-insured commercial and savings banks that were closed or received FDIC assistance. Total number of banks is the number of banks on December 31, 1979, plus banks newly chartered in 1980–94. Asset data are assets of banks existing on December 31, 1979, plus assets of newly chartered banks as of date of failure, merger, or December 31, 1994, whichever is applicable, and first available assets for Massachusetts banks that became FDIC-insured in the mid-1980s. Data exclude 13 newly chartered banks that reported no asset figures and 4 banks in U.S. territories.

failures constituted at least 20 percent of the total number of existing and new banks (Alaska, Arizona, Hawaii, Louisiana, Oklahoma, Puerto Rico, and Texas). At the other end of the scale, in 24 states bank failures represented less than 5 percent of the total number of existing and new banks. Of the total 1,617 failures during the entire 1980–94 period, nearly 60 percent were in only 5 states: California, Kansas, Louisiana, Oklahoma, and Texas. Included in these numbers are failures of bank holding company subsidiaries; in Texas and other states with branching restrictions, these were more like branches than independent institutions.

An alternative measure of the severity of bank failures is based on assets. Assets of banks failing in 1980–94 constituted 8.98 percent of the sum of total bank assets at the end of 1979 plus the assets of banks chartered during the 1980–94 period.¹⁴ In 6 states (Alaska, Connecticut, Illinois, New Hampshire, Oklahoma, and Texas), failed-bank assets consti-

¹⁴ The 8.98 percent figure refers to the failed-bank portion of the following: assets of all banks existing as of December 31, 1979, plus assets of banks chartered in 1980–94 as of the date of merger, failure, or December 31, 1994, whichever is applicable, and first available assets for Massachusetts banks that became FDIC-insured in the mid-1980s. Data are not adjusted for inflation.

tuted at least 20 percent of total assets at year-end 1979 plus new-bank assets. On the other hand, in 33 states the failed-bank share was less than 5 percent. Of all banks that failed during the 1980–94 period, 59 percent of assets at the quarter before failure were accounted for by 3 states: Illinois, New York, and Texas. (See table 1.2.)¹⁵

Although widespread bank failures were limited to a few areas of the country, even a relatively “small” number of failures could cause serious strains on the deposit insurance fund. In 1988, for example, the number of failures and the amount of failed-bank assets reached post-Depression records of 279 and \$54 billion (nominal dollars), respectively, but still represented in each case less than 2 percent of the total number of banks and total bank assets at the beginning of the year. Nevertheless, in that year the FDIC sustained the first operating loss in its history, and operating losses continued through 1991, after which, provisions for insurance losses were sharply reduced. And even the smaller number of failures before 1988 had an evident effect on the FDIC’s income and expense position. Beginning in 1984, provisions for insurance losses exceeded annual deposit insurance assessments, and this shortfall continued through 1990.¹⁶

The figures by state illustrate some of the factors associated with bank failures. The incidence of failure was particularly high in states characterized by

- severe economic downturns related to the collapse in energy prices (Alaska, Louisiana, Oklahoma, Texas, and Wyoming);
- real estate–related downturns (California, the Northeast, and the Southwest);
- the agricultural recession of the early 1980s (Iowa, Kansas, Nebraska, Oklahoma, and Texas);
- an influx of banks chartered in the 1980s (California and Texas) and the parallel phenomenon of mutual-to-stock conversions (Massachusetts);
- prohibitions against branching that limited banks’ ability to diversify their loan portfolios geographically and to fund growth through core deposits (Colorado, Illinois, Kansas, Texas, and Wyoming);¹⁷
- the failure of a single large bank (Illinois) or of a small number of relatively large banks (New York and Pennsylvania).

¹⁵ Comparisons based on assets of failed banks are subject to distortion because of the effect of inflation, differences in the timing of failures among the states, and differences in asset dates between new banks and banks existing at year-end 1979.

¹⁶ Beginning in 1989, data refer to the Bank Insurance Fund (FDIC, *Annual Report*, various years).

¹⁷ Information on state branching provisions is as of September 30, 1985, as compiled by the Conference of State Bank Supervisors. CSBS listed 7 states as having unit banking as of September 30, 1985, 6 as a result of legal prohibitions (Colorado, Illinois, Kansas, Montana, North Dakota, and Texas). One (Wyoming) had no statute, but unit banking was prevalent.

Table 1.2
Assets of Failed Banks at the Quarter before Failure, by State, 1980–1994

State	Assets of Failed Banks (\$Thousands)	Percent Distribution
Alabama	\$ 266,443	0.08
Alaska	3,049,573	0.96
Arizona	453,522	0.14
Arkansas	229,700	0.07
California	6,018,036	1.90
Colorado	1,072,556	0.34
Connecticut	17,717,959	5.59
Delaware	582,350	0.18
District of Columbia	2,189,658	0.69
Florida	15,471,515	4.88
Georgia	104,607	0.03
Hawaii	11,486	0.00
Idaho	55,867	0.02
Illinois	40,765,430	12.87
Indiana	311,825	0.10
Iowa	809,089	0.26
Kansas	1,697,588	0.54
Kentucky	114,931	0.04
Louisiana	4,616,370	1.46
Maine	2,228,177	0.70
Maryland	57,000	0.02
Massachusetts	26,632,401	8.41
Michigan	160,300	0.05
Minnesota	1,669,974	0.53
Mississippi	288,949	0.09
Missouri	3,096,719	0.98
Montana	212,896	0.07
Nebraska	402,185	0.13
Nevada	18,036	0.01
New Hampshire	5,393,842	1.70
New Jersey	6,919,198	2.18
New Mexico	723,576	0.23
New York	51,577,291	16.28
North Carolina	74,553	0.02
North Dakota	120,109	0.04
Ohio	152,254	0.05
Oklahoma	6,712,651	2.12
Oregon	622,091	0.20
Pennsylvania	14,265,742	4.50

(continued)

Table 1.2 (continued)
Assets of Failed Banks at the Quarter before Failure, by State, 1980–1994

State	Assets of Failed Banks (\$Thousands)	Percent Distribution
Puerto Rico	543,748	0.17
Rhode Island	600,706	0.19
South Carolina	64,629	0.02
South Dakota	743,698	0.23
Tennessee	2,446,083	0.77
Texas	93,061,510	29.37
Utah	469,637	0.15
Vermont	329,478	0.10
Virginia	296,368	0.09
Washington	769,109	0.24
West Virginia	123,139	0.04
Wisconsin	70,757	0.02
Wyoming	428,606	0.14
U.S.	\$316,813,917	100.00%

Note: Failed-bank assets are assets as of the quarter before failure or assistance, or assets as of the last available Call Report before failure or assistance.

In some states bank failures were affected by more than one of these factors. For example, the particularly high incidence of failures in Texas reflected the rapid rise and subsequent collapse in oil prices, the commercial real estate boom and bust, the effects of the agricultural recession, the large number of new banks chartered in the state during the 1980s, and state prohibitions against branching. (The high proportion of bank failures in Texas also reflected supervisory developments. As noted below, declines in the number and frequency of on-site examinations in the 1983–86 period were particularly pronounced in Texas; earlier identification of troubled banks might have prevented some failures.)¹⁸ By the same token, some states that exhibited only one or two of the factors associated with bank failures had relatively few failures. Montana and North Dakota, for example, had prohibitions against branching, but their failure rates were below the national average, whether measured by number of institutions or by assets. Differences among the states in failure rates and in the presence or absence of factors associated with failures illustrate the conclusion that the rise in the number of bank failures cannot be ascribed to any single cause.

¹⁸ Texas was also a leading state for S&L failures. Texas S&Ls accounted for 18 percent of all of the failures resolved by the Resolution Trust Corporation (RTC), 14 percent of S&L assets at time of takeover, and 29 percent of total estimated RTC resolution costs. See RTC, *Statistical Abstract* (August 1989/September 1995).

Regional and Sectoral Recessions

Although the interplay of broad economic, legislative, and regulatory forces helped make the environment for banking increasingly demanding, the more immediate cause of bank failures was a series of regional and sectoral recessions. Because most U.S. banks served relatively narrow geographic markets, these regional and sectoral recessions had a severe impact on local banks. It should be noted, however, that not all regional recessions of the magnitude experienced during the 1980–94 period resulted in a major increase in the number of bank failures. Rather, bank failures were generally associated with regional recessions that had been preceded by rapid regional expansions—that is, they were associated with “boom-and-bust” patterns of economic activity. Bank loans helped to fuel the boom phase of the cycle, and when economic activity turned down, some of these loans went sour, with the result that banks holding these loans were weakened. By contrast, recessions that were preceded by relatively slow economic activity, such as those in the Rust Belt, generally did not lead to widespread bank failures.

This relationship between the number of bank failures and regional boom-and-bust patterns of economic activity is illustrated by the data in tables 1.3 and 1.4, which show that bank failure rates were generally high in states where, in the five years preceding state recessions, real personal income grew faster than it did for the nation as a whole. Conversely, bank failure rates were relatively low in states where, in the five years preceding state recessions, real personal income grew more slowly than it did for the nation as a whole.¹⁹

There were four major regional and sectoral economic recessions that were associated with widespread bank failures during the 1980–94 period. The first accompanied the downturn in farm prices in the early and middle 1980s after years of rapid increases during the late 1970s (see figure 1.5). The downturn in prices led to reductions in net farm income and farm real estate values and a rise in the number of failures of banks with heavy concentrations of agricultural loans. The second recession occurred in Texas and other energy-producing southwestern states, where gross state product dropped after oil prices turned down in 1981 and again in 1985 (see figure 1.6). The 1981 oil price reduction was followed by a regional boom and bust in commercial real estate activity. The third recession was in the northeastern states, which experienced negative growth in gross state product in 1990–91. The final episode was a recession in California, as growth in gross state product turned negative in 1991–92.

Of the 1,617 bank failure and assistance cases from 1980 to 1994, 78 percent were located in the regions suffering these economic downturns—the Southwest, the Northeast,

¹⁹ In some high-growth states the number of bank failures rose sharply after the states’ recessions, but the increase fell outside the three-year periods shown in table 1.3. For example, Arizona experienced especially rapid growth before the state’s 1982 recession and also saw a high rate of bank failures (tables 1.1 and 1.2), but most of them occurred in 1989–90.

Table 1.3
Bank Failures and Growth Rates of Real Personal Income, by State,
1980–1994 (Percent)

State*	Recession Years†	Growth Rates of Real Personal Income			Percent of Banks Failing in Recession and Next 2 Years‡
		State Growth Rate, Recession Years	Five Years before Recession		
			State Growth Rate	State Minus U.S. Growth Rate	
Wyoming	1982–87	–3.03	8.26	5.05	18.52
Nevada	1982	–0.17	7.83	4.62	8.33
Oklahoma	1983–87	–1.42	6.05	3.78	20.83
Alaska	1986–87	–5.46	6.63	3.75	50.00
Arizona	1982	–0.18	6.69	3.49	0.00
New Hampshire	1990–91	–0.43	5.69	2.50	19.51
Louisiana	1983–87	–0.75	4.69	2.41	21.22
Washington	1982	–0.24	4.97	1.76	0.93
Maryland	1991	–0.33	4.49	1.61	1.92
Texas	1986–87	–0.98	4.43	1.55	20.45
Maine	1991	–2.15	4.42	1.54	5.13
Vermont	1991	–1.45	4.32	1.44	6.25
Connecticut	1991	–1.94	4.30	1.42	22.05
California	1991	–1.04	4.20	1.32	7.26
Oregon	1981–82	–2.40	5.03	1.21	14.63
New Jersey	1991	–1.13	3.89	1.01	6.00
Rhode Island	1991	–1.82	3.79	0.91	13.33
Massachusetts	1991	–1.87	3.79	0.91	9.77
New York	1991	–0.88	3.71	0.83	3.86
Mississippi	1980	–1.09	4.15	0.42	0.00
Arkansas	1980–82	0.27	4.14	0.42	2.33
Kentucky	1980–83	0.17	4.08	0.36	0.58
Tennessee	1982	–0.05	3.12	–0.09	7.41
West Virginia	1981–83	–0.73	3.63	–0.19	0.84
Illinois	1991	–0.09	2.64	–0.24	0.55
Missouri	1980–82	0.55	3.41	–0.32	0.69
Wisconsin	1981–82	–0.22	3.49	–0.33	0.00
North Dakota	1985–88	–3.54	2.28	–0.38	4.52
Kansas	1980	–0.30	3.32	–0.41	0.49
Idaho	1982	–1.91	2.79	–0.41	0.00
Michigan	1991	–0.58	2.41	–0.47	0.00
Alabama	1982	–0.24	2.72	–0.48	0.97
Michigan	1980–82	–2.73	3.12	–0.60	0.54
Hawaii	1981	–0.63	3.20	–0.62	0.00
Indiana	1980–82	–1.39	3.03	–0.69	0.49
Iowa	1979–85	–0.31	1.83	–0.79	4.92
Iowa	1991	–0.39	2.04	–0.84	0.18

Table 1.3 (continued)
**Bank Failures and Growth Rates of Real Personal Income, by State,
 1980–1994 (Percent)**

State*	Recession Years†	Growth Rates of Real Personal Income			Percent of Banks Failing in Recession and Next 2 Years‡
		State Growth Rate, Recession Years	Five Years before Recession		
			State Growth Rate	State Minus U.S. Growth Rate	
Montana	1980–82	1.21	2.87	−0.86	0.62
Nebraska	1979–83	0.24	1.67	−0.96	4.20
Montana	1985–88	−0.17	1.39	−1.28	4.79
Ohio	1980–82	−0.73	2.41	−1.31	0.00
Illinois	1980–82	−0.28	2.34	−1.38	1.60
South Dakota	1980–82	−1.38	2.09	−1.63	1.30
West Virginia	1987	−1.33	0.51	−2.65	0.47
North Dakota	1991	−2.50	0.08	−2.80	0.00
Iowa	1988	−1.11	1.01	−3.09	1.17
District of Columbia	1980	−2.94	−0.08	−3.80	0.00
North Dakota	1979–80	−3.54	−1.59	−4.21	0.58

Note: Data refer to all states that experienced a decrease in real personal income in any year from 1980 to 1992.

*States are ranked according to the magnitude of the difference between state growth rates and the U.S. growth rate in real personal income during the five years before state recessions.

†Recessions are defined as years in which personal income deflated by GDP deflator decreased. Recoveries are counted as having at least two consecutive years of growth in real personal income. In some states, therefore, personal income increased during a single year sufficiently to produce positive growth for the recession as a whole.

‡Percent of banks failing is based on the number of banks existing as of December of the year preceding the recession.

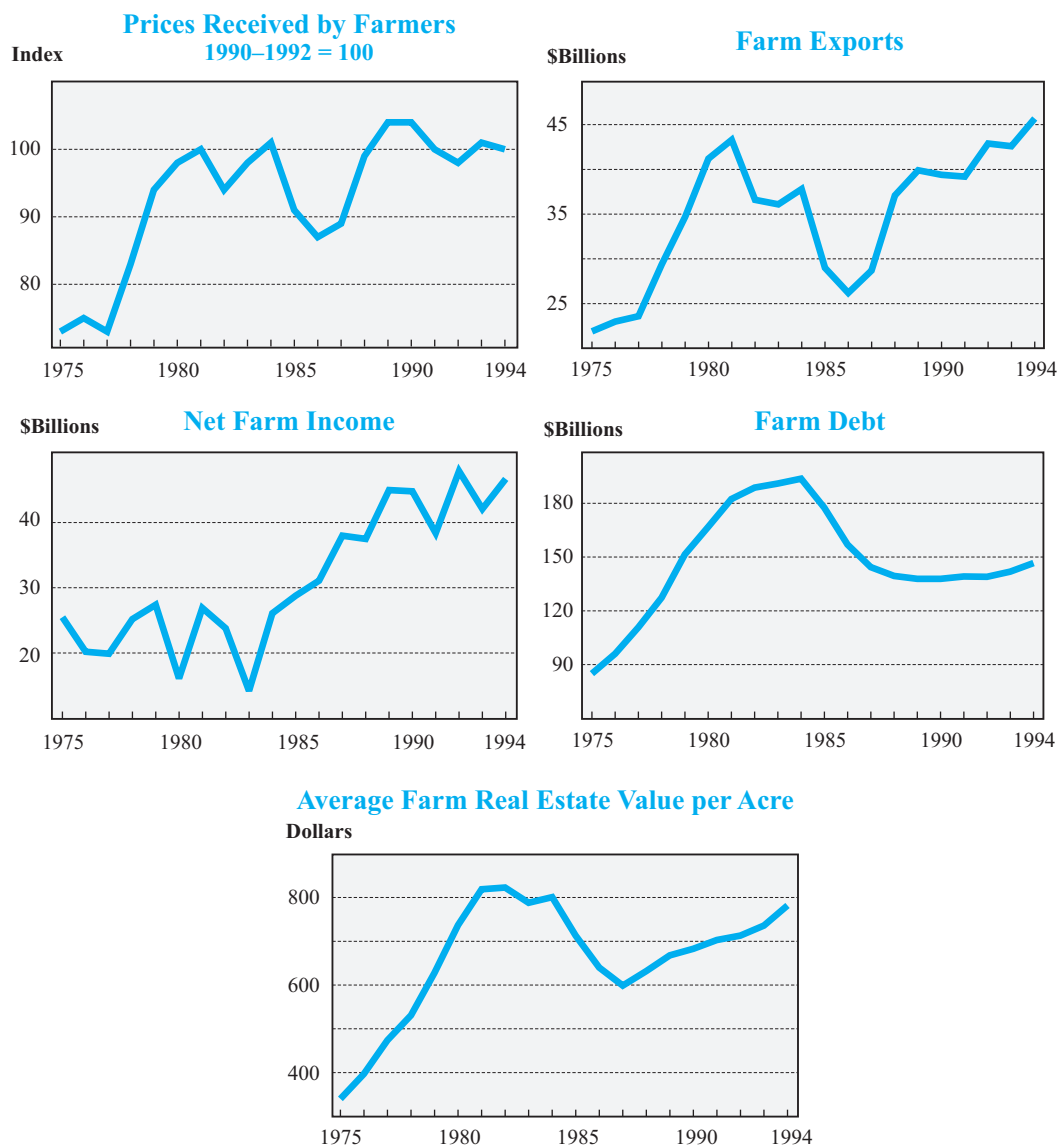
Table 1.4
**Bank Failures and Growth Rates of Real Personal Income,
 by State Recession Quartile
 (Percent)**

State Recession Quartile*	Average Difference between State Growth Rate and U.S. Growth Rate, 5 Years before Recession†	Average State Bank Failure Rate in Recession and Next 2 Years
1	2.79	14.42
2	0.71	7.34
3	−0.48	1.06
4	−2.07	1.28

*State recessions are grouped in quartiles according to the magnitude of the difference between state growth rate and U.S. growth rate in real personal income from table 1.3.

†Data are unweighted averages of individual state data.

Figure 1.5
Farm Prices, Exports, Income, Debt, and Real Estate Value, 1975–1994

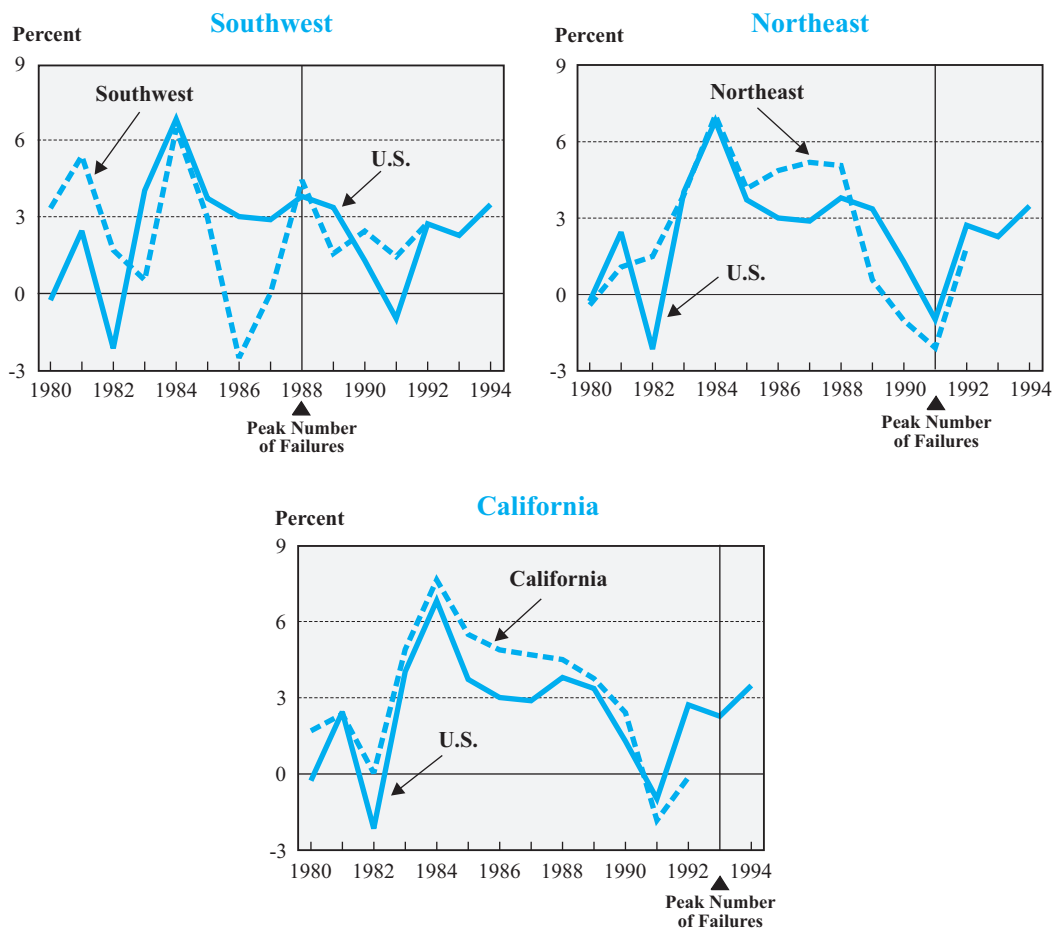


Source: *Economic Report of the President*, 1986, 1996.

and California—or were agricultural banks outside of these three regions.²⁰ These failures accounted for 71 percent of the assets of failed banks over the period. Although all four of

Figure 1.6

Changes in Gross State Product and Gross Domestic Product, 1980–1994



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

²⁰ Agricultural banks are defined as banks with 25 percent or more of total loans in agricultural loans. Data on assets of failed banks are as of the quarter before the date of failure. The Southwest includes Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. The Northeast includes New Jersey, New York, and the six New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont). The bulk of the agricultural bank failures, other than those in the two southwestern states of Oklahoma and Texas, were in Iowa, Kansas, Minnesota, Missouri, and Nebraska.

the recessions associated with bank failures were partly shaped by their own distinct circumstances, certain common elements were present:

1. **Each followed a period of rapid expansion; in most cases, cyclical forces were accentuated by external factors.**
2. **In all four recessions, speculative activity was evident. “Expert” opinion often gave support to overly optimistic expectations.**
3. **In all four cases there were wide swings in real estate activity, and these contributed to the severity of the regional recessions.**
4. **Commercial real estate markets in particular deserve attention because boom and bust activity in these markets was one of the main causes of losses at both failed and surviving banks.**

Rapid expansion. In the agricultural belt, increased farm production and purchases of farmland were stimulated by rapid inflation during the 1970s in the prices of farm products, a sharp run-up in farm exports, and widespread expectations of strong worldwide demand in the 1980s. But as farm exports declined and higher interest rates increased farm costs, the expansion gave way to a downturn.²¹ Similarly, in the Southwest (as well as other oil-producing areas around the world) strong worldwide demand for oil plus OPEC restrictions on supply led to a major rise in oil prices and strong economic expansion—but the weakening in oil prices after 1981 and their rapid drop in 1985 (brought on partly by the collapse of discipline in the international oil cartel) resulted in two economic downturns during the 1980s in the Southwest.²² California enjoyed a rate of economic growth above the national average during the 1980s but was hit particularly hard during the 1991–92 national recession, partly because of cutbacks in defense spending.²³ In the Northeast, growth rates in overall production were above the national average during 1982–88; the subsequent decline came about mainly because a local economic slowdown was followed—and aggravated—by the 1991–92 national economic recession and by a boom and bust in northeastern residential and commercial real estate activity.²⁴

Speculative activity with “expert” support. Speculative activity was reflected in a number of developments. Farm real estate values showed an uninterrupted rise in the late 1970s and early 1980s, even though gross returns per acre for major crops were tracing a

²¹ See Chapter 8, “Banking and the Agricultural Problems of the 1980s.”

²² See John O’Keefe, “The Texas Banking Crisis: Causes and Consequences, 1980–1989,” *FDIC Banking Review* 3, no. 2 (1990); and Chapter 9, “Banking Problems in the Southwest.”

²³ See Chapter 11, “Banking Problems in California.”

²⁴ See Chapter 10, “Banking Problems in the Northeast.”

highly variable and generally downward trend.²⁵ In the Southwest, commercial construction and lending activity continued in major markets after vacancy rates began to soar. In many commercial real estate mortgage markets, underwriting standards were relaxed.²⁶ The presence of speculative activity was frequently mentioned in interviews conducted in 1995 by staff of the FDIC's Division of Research and Statistics as part of the research for this study.²⁷ (In all, approximately 150 bankers and regulators were interviewed in Atlanta, Boston, Dallas, Kansas City, New York, San Francisco, and Washington). Numerous interviewees cited a belief common in the 1980s that the boom economies of this period had unlimited viability. They also noted that in many cases bankers were engaged in asset-based lending, relying on collateral values supported by inflationary expectations rather than by cash flows.

Examples of "expert" opinion that supported optimism included statements attributed to two secretaries of agriculture²⁸ and comments by many observers in the Northeast that the area's economy was diversified, mature, and largely immune to Texas-style real estate problems.²⁹ Another example is provided by economists and other analysts, who as late as 1990 and 1991 were discounting the prospect of a bust in California home prices.³⁰

Wide swings in real estate activity. In the agricultural belt, prices of farmland were bid up during the 1970s by farmers and investors, who were responding to increases in the prices of farm products as well as expectations of continued strong foreign demand. Farmland values continued to rise until 1982, remained at high levels until 1984, and then collapsed (figure 1.5). In the Southwest, both residential and nonresidential construction rose sharply during the early 1980s before falling precipitously later in the decade; these wide real estate swings followed the earlier oil-generated cycle and contributed to the second Southwest recession in the 1980s. In both the northeastern states and California, boom-and-bust real estate activity aggravated general state recessions in the early 1990s.

²⁵ In 1982, when land values reached their zenith, gross rates of return for corn and soybeans were less than two-thirds their 1970 levels and approximately one-third their 1973 levels. See Chapter 8, "Banking and the Agricultural Problems of the 1980s."

²⁶ See Chapter 3, "Commercial Real Estate and the Banking Crises"; and O'Keefe, "The Texas Banking Crisis."

²⁷ "Speculative activity" in this context is synonymous with economic "bubbles" defined as follows: "if the reason that the price is high today is *only* because investors believe that the selling price will be high tomorrow—when "fundamental" factors do not seem to justify such a price—then a bubble exists." See Joseph E. Stiglitz, "Symposium on Bubbles," *Journal of Economic Perspectives* 4, no. 2 (spring 1990): 13.

²⁸ Robert Bergland, secretary of agriculture in 1980, said, "The era of chronic overproduction...is over." In 1972, then-Secretary of Agriculture Earl Butz is said to have advised farmers to plant "from fencerow to fencerow." (Both quotations are from Gregg Easterbrook, "Making Sense of Agriculture: A Revisionist Look at Farm Policy," *The Atlantic* 256 (July 1985): 63. See Chapter 8, "Banking and the Agricultural Problems of the 1980s."

²⁹ Interviews with regulators and bankers. See Chapter 10, "Banking Problems in the Northeast."

³⁰ See citations in Chapter 11, "Banking Problems in California."

Commercial real estate markets and bank losses. Commercial real estate development is inherently risky, partly because of the long gestation period of many commercial construction projects. When completed projects finally come to market, demand conditions may have changed considerably from what they were at the time of conception. Another cause of risk is that many firms seeking commercial floor space are geographically mobile, so developers are affected by economic events not only in the project's proximity but in far-distant areas as well. In addition, commercial real estate projects tend to be highly leveraged, a condition that increases the volatility of returns. Relevant data on commercial real estate are often difficult to obtain because these markets are not highly organized and because transactions are often "private deals" whose crucial elements may not be publicly available. Finally, commercial loan contracts usually have nonrecourse provisions prohibiting lenders from satisfying losses from other borrower assets.

In the early 1980s, booming activity in commercial construction was supported by rapidly increased bank and thrift commercial mortgage lending. A major stimulus for this activity was provided by public policy actions: tax breaks enacted as part of the Economic Recovery Act of 1981 greatly enhanced the after-tax returns on real estate investment, and the Garn–St Germain Act expanded the nonresidential lending powers of savings associations. Competitive pressures, including those reflected in the reduced bank share of the market for business loans to large companies, also provided an important stimulus.

Many banks and thrifts moved aggressively into commercial real estate lending. During the 1980s, when total real estate loans of banks more than tripled, commercial real estate loans nearly quadrupled. As a percentage of total bank assets, total real estate loans rose from 18 to 27 percent between 1980 and 1990, while the ratio for nonresidential and construction loans nearly doubled, from 6 to 11 percent. A pervasive relaxation of underwriting standards took place, unchecked either by the real estate appraisal system or by supervisory restraints. Overly optimistic appraisals, together with the relaxation of debt coverage, of maximum loan-to-value ratios, and of other underwriting constraints, meant that borrowers frequently had no equity at stake, and lenders bore all of the risk.³¹

Overbuilding occurred in many markets, and when the bubble burst, real estate values collapsed. (The downturn was aggravated by the Tax Reform Act of 1986, which removed tax breaks for real estate investment and caused a reduction in after-tax returns on such investment.) At many financial institutions loan quality deteriorated significantly, and the deterioration caused serious problems. As discussed in detail below, banks that failed in the 1980s had higher ratios of commercial real estate loans to total assets than surviving banks.

³¹ These observations on underwriting practices, taken from Chapter 3, reflect the comments of, and have been reviewed by, a number of FDIC examiners and supervisory personnel who were actively engaged in bank examination and supervision during the 1980s.

Failing banks also had higher ratios of commercial real estate loans to total real estate loans, of real estate charge-offs to total charge-offs, and of nonperforming real estate assets to total nonperforming assets.

Bank Performance in Regional and Sectoral Recessions

The behavior of banks in the regions and sectors that suffered recessions during the 1980s also exhibited some common elements:

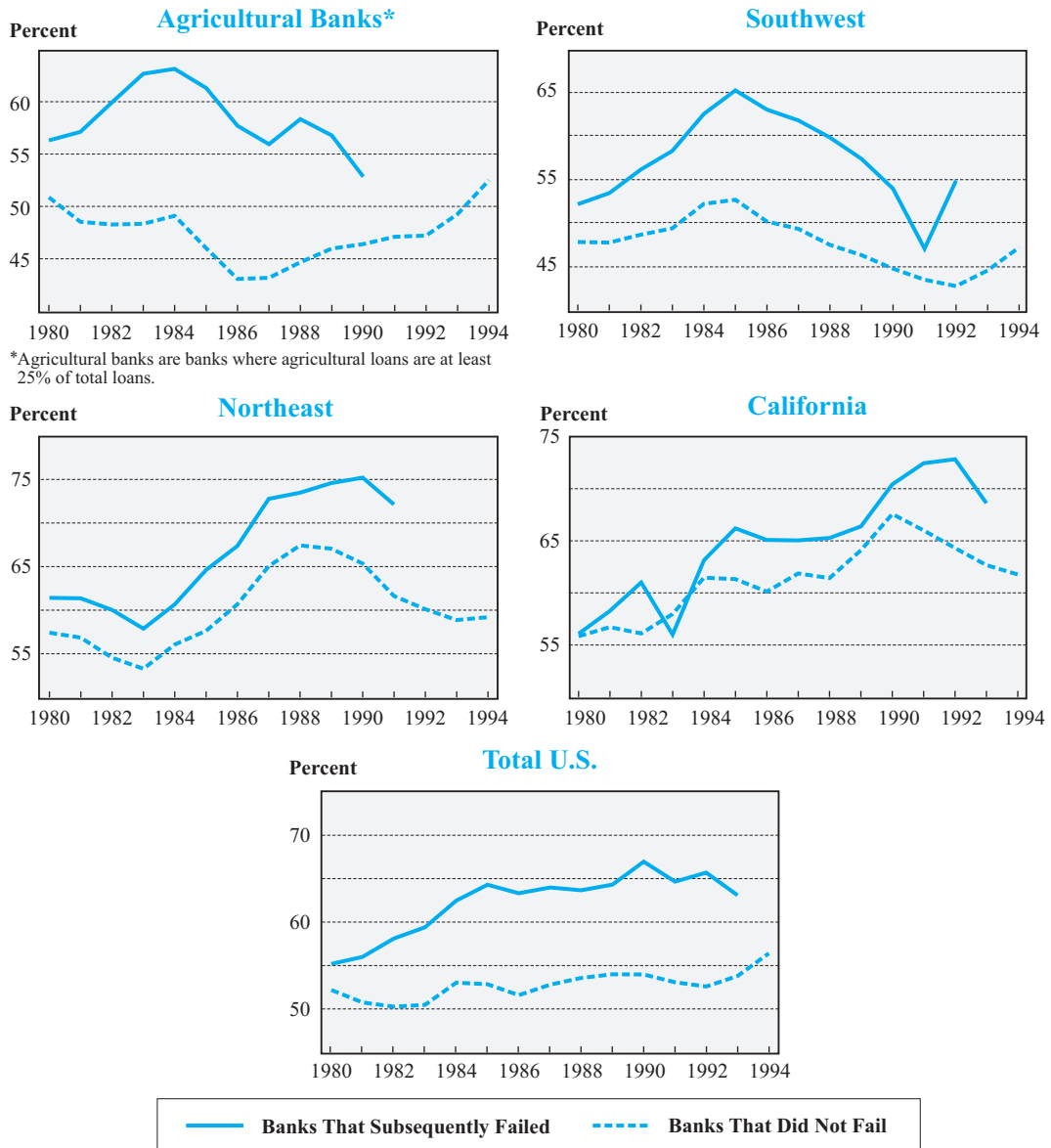
1. In the economic expansions that preceded these recessions, banks generally responded aggressively to rising credit demands.
2. Banks that failed during the regional recessions generally had assumed greater risks, on average, than those that survived, as measured by ratios of total loans and commercial real estate loans to total assets. Banks that failed had generally not been in a seriously weak condition (as measured by equity-to-assets ratios) in the years preceding the regional recessions.
3. Banks chartered in the 1980s and mutual institutions converting to the stock form of ownership failed with greater frequency than comparable banks.

Aggressive response. In the case of agricultural banks, aggressive response is evident in the growth of farm loans, which increased rapidly and reached a peak in 1984, after the 1981 highs in prices received by farmers and net farm income and the 1982 high in farmland values. In Texas, banks responded to the rise in oil prices by rapidly increasing not only their commercial and industrial loans (including loans to oil and gas producers) but also the share of commercial and industrial loans in total bank assets. In most of the regions that underwent recessions, the aggressiveness of bank lending is evident as well in the rapid expansion in nonresidential mortgage lending and in the increased share of commercial mortgages in total bank assets.

Risk taking and failure. Banks that would fail during the 1980–94 period generally had higher ratios of total loans to assets and commercial real estate loans to assets throughout most of the period (see figures 1.7 and 1.8). (In this context, commercial real estate loans include construction loans, nonfarm nonresidential loans, and multifamily mortgages.) This was true for banks in the agricultural belt, the Southwest, the Northeast, California, and the total United States. In the agricultural belt, the Southwest, and the Northeast, banks that would fail during the regional recessions had significantly higher loans-to-assets ratios in the year before the recessions began (see table 1.5).³² In the Northeast and Southwest, com-

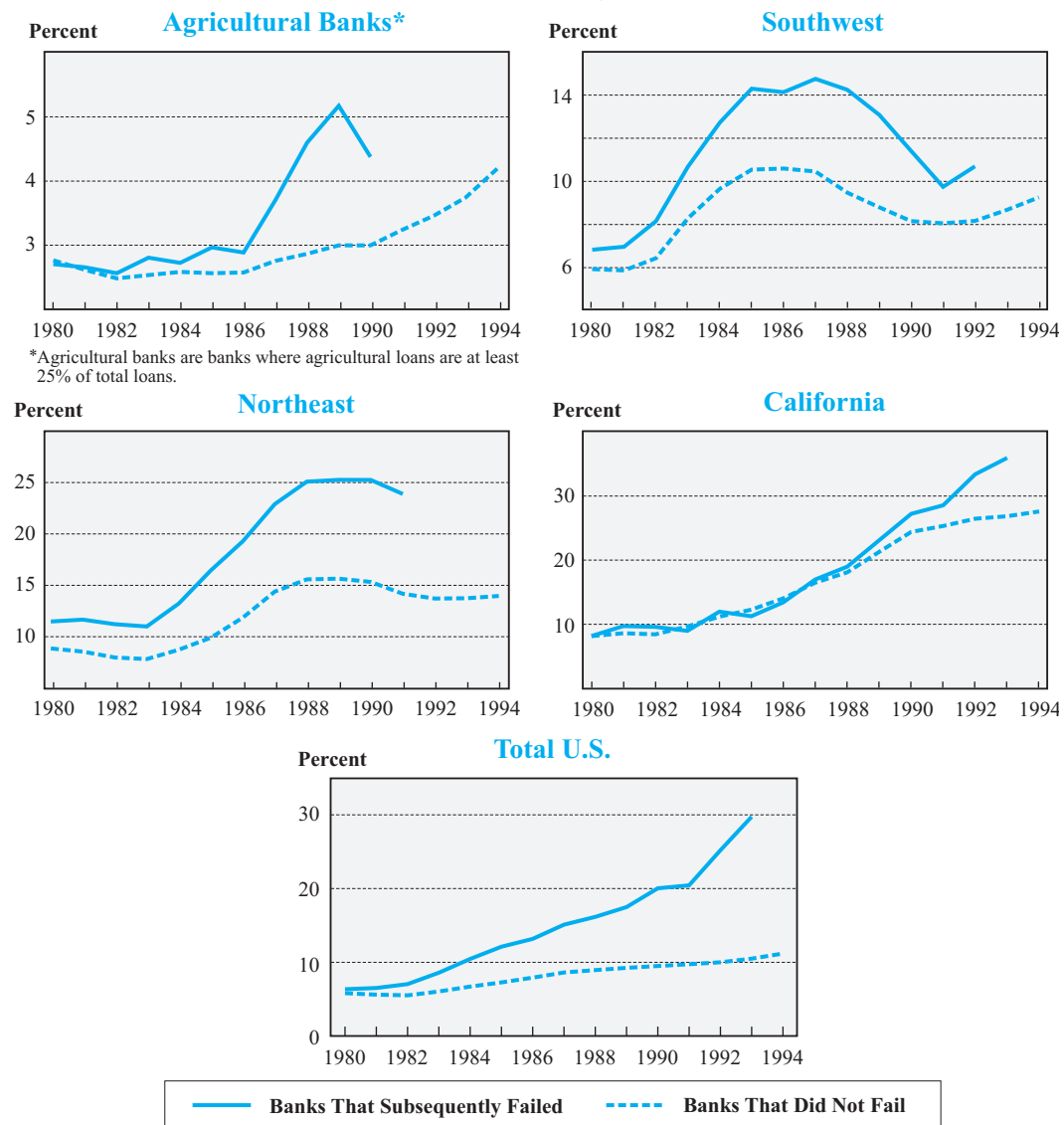
³² Regional recessions are considered to have begun in the agricultural belt in 1982 (following the 1981 high in prices received by farmers), in the Southwest in 1982 (after oil prices reached a peak in 1981), and in the Northeast and California in the first year of negative gross state product (figure 1.6).

Figure 1.7
Ratio of Gross Loans to Total Assets, Failed and Nonfailed Banks, 1980–1994



Note: Data are unweighted averages of individual bank ratios. Data for banks that subsequently failed are not shown for years when there were fewer than ten banks that would fail in subsequent years. Open-bank assistance cases are not counted as failures.

Figure 1.8
Ratio of Commercial Real Estate Loans to Total Assets, Failed
and Nonfailed Banks, 1980–1994



Note: Commercial real estate loans = construction loans + multifamily loans + nonfarm, nonresidential loans. Data are unweighted averages of individual bank ratios of commercial real estate loans to total assets. Data for banks that subsequently failed are not shown for years when there were fewer than ten banks that would fail in subsequent years. Open-bank assistance cases are not counted as failures.

mercial mortgages were higher relative to total assets for failed banks. Banks that would fail also had lower equity-to-assets ratios than survivors in the year before the recession.³³

Table 1.5
Selected Financial Ratios

A. Failed and Nonfailed Banks 1 Year before Regional Recession

Ratio	1981				1989		1990	
	Agricultural Banks		Southwest Banks		Northeast Banks		California Banks	
	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed
Equity/Assets	7.91%	8.30%*	7.00%	7.63%*	6.67%	9.21%*	5.71%	10.47%*
Eq.+Loss Res./Assets	9.11	9.77*	8.64	9.25*	8.34	9.93	7.20	11.46*
Nonprfm Lns/Tot Lns	NA	NA	NA	NA	8.60	2.95*	6.23	2.39*
ROA	1.26	1.33	1.22	1.38*	-1.68	0.67*	-0.63	0.36
ROE	16.90	16.44	18.98	18.99	-23.65	6.73*	-7.78	9.88*
Loans/Assets	56.30	48.48*	53.94	47.72*	75.16	68.05*	73.12	69.63
Comm. Mtgs/Assets	2.08	2.19	3.92	3.42*	13.91	9.44*	10.79	11.91

B. Failed and Nonfailed Banks 3 Years before Regional Recession

Ratio	1979				1987		1988	
	Agricultural Banks		Southwest Banks		Northeast Banks		California Banks	
	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed
Equity/Assets	7.39%	7.87%*	6.94%	7.45%*	7.96%	8.86%*	6.95%	9.58%
Eq.+Loss Res./Assets	8.85	9.45*	8.45	9.08*	8.53	9.37	8.02	10.52
Nonprfm Lns/Tot Lns	NA	NA	NA	NA	1.70	1.14*	4.86	2.28*
ROA	1.15	1.28*	1.00	1.28*	0.62	1.04*	0.08	0.78*
ROE	16.10	16.64	15.55	17.80*	11.66	14.32	2.29	10.85
Loans/Assets	58.40	55.56*	53.42	50.02*	74.31	66.33*	68.72	63.01*
Comm. Mtgs/Assets	2.13	2.42*	3.99	3.71	13.08	8.25*	7.78	8.76

Note: Data are unweighted averages of individual bank ratios. Asset and loan figures are year-end values of the given year, and equity figures are year-end of the previous year. Excluded were banks chartered within the specified year, banks that failed before the recession, and banks participating in the Net Worth Certificate Program. Nonperforming loans were not reported before 1982.

*Significant at 95 percent level

³³ The comparison in California is between failing and surviving banks with assets below \$300 million. All but one of the state's bank failures were in that asset-size group, while the total state data are dominated by California's four megabanks (see Chapter 11).

Three years before the onset of the regional recessions, banks that would fail likewise had significantly higher ratios of loans to assets, but these banks' equity-to-assets ratios—although somewhat lower than those of banks that would survive—were in the generally healthy range of nearly 7 percent to nearly 8 percent (table 1.5).

These results are generally consistent with the findings on measures of risk and condition summarized below in the section on off-site surveillance. As noted in that section, five years before their failure, banks that would subsequently fail differed little from banks that would survive in terms of equity-to-assets ratios and other measures of current condition. On the other hand, banks that would fail had higher loans-to-assets ratios than survivors, and high loans-to-assets ratios were the risk factor with the strongest statistical relationship to incidence of failure five years later.

Although high loan volumes were a prominent feature of failing banks from 1980 to 1994, they obviously were not an automatic route to failure. Banks earn income by managing risk, including risk of loan defaults. The averages of individual bank ratios discussed above obscure the fact that some banks that survived also had high concentrations of assets in total loans and/or commercial mortgages. Similarly, as noted below in the section on off-site surveillance, only a fraction of the banks with high loans-to-assets ratios would fail five years later. The conditions enabling many banks with high-risk financial characteristics to survive the recessions and avoid failure may include the following, among others: strong equity and reserve positions to absorb losses, more-favorable risk/return trade-offs, superior lending and risk-management skills, changes in policies before high risk was translated into severe losses, improvements in local economic conditions, and timely supervisory actions. High lending volumes may lead to trouble if a bank achieves them by relaxing credit standards, entering markets where management lacks expertise, or making large loans to single borrowers, or if loan growth strains the bank's internal control systems or back-office operations. That such factors were present at many banks that failed from 1980 to 1994 has been suggested by numerous observers, including those interviewed during the research for this study.

New and converted banks. Approximately 2,800 new banks were chartered in the period covered by this study, 39 percent of them in the Southwest (notably Texas) and California. Of all the institutions chartered in 1980–90,³⁴ 16.2 percent failed through 1994, compared with a 7.6 percent failure rate for banks that were already in existence on De-

³⁴ The 1980–90 period was selected in this comparison to compensate roughly for the fact that banks chartered between 1991 and 1994 did not have as much chance to fail during the period through 1994.

cember 31, 1979 (see table 1.6).³⁵ Although the data are dominated by the Texas experience, in most areas banks chartered in the 1980s generally had a higher failure rate than banks existing at the beginning of the 1980s.³⁶

In the Northeast, mutual savings banks that converted to the stock form of ownership represented a somewhat comparable phenomenon.³⁷ Of the mutuals that converted in the middle and late 1980s after state legislation permitted such action, 21 percent of the institutions existing at the end of 1989 failed in 1990–94. This compared with 8 percent of the

Table 1.6
Failure Rates, Newly Chartered and Existing Banks

Banks Chartered, 1980–1990		
Region	Number Failed	Percent Failed
	1980–1994	1980–1994
Southwest	248	33.3
Southeast	26	4.3
Northeast	38	19.3
California	41	13.1
U.S.	420	16.2

Banks Existing on December 31, 1979		
Region	Number Failed	Percent Failed
	1980–1994	1980–1994
Southwest	538	21.4
Southeast	77	3.1
Northeast	89	8.5
California	31	12.8
U.S.	1,114	7.6

³⁵ A study of the Texas experience concluded that “the relatively high failure rate for newly established Texas banks can be explained by high-risk financial policies” (Jeffery W. Gunther, “Financial Strategies and Performance of Newly Established Texas Banks,” Federal Reserve Bank of Dallas *Financial Industry Studies* [December 1990]: 13).

³⁶ In the Southwest and Northeast, newly chartered banks failed with greater frequency than preexisting banks, whether “newly chartered” includes all banks chartered during the 1980–90 period or only those that were in existence for five years or less. In Southern California, however, failure rates for banks in existence for five years or less were lower than those for preexisting banks, whereas failure rates for all banks chartered in the entire 1980–90 period were higher.

³⁷ Jennifer L. Eccles and John P. O’Keefe, “Understanding the Experience of Converted New England Savings Banks,” *FDIC Banking Review* 8, no. 1 (1995): 1–18.

mutuals that existed as of the end of 1989 and had not converted, and 11 percent of the region's commercial banks (see table 1.7). New banks and converted mutuals highlighted in extreme fashion the problems confronting many other banks in the 1980s. These institutions had strong incentives to expand loan portfolios rapidly in order to leverage high initial capital positions, increase earnings per share, and meet stockholder expectations.³⁸ In so doing, these institutions rapidly increased their lending in markets already experiencing vigorous competition and deteriorating credit standards. They combined powerful competitive pressures to assume greater risk with relative inexperience in a demanding new environment. Newly chartered banks began operations at a time when inexperience was a distinct liability, while many converted mutuals responded to internal and external pressures by entering unfamiliar markets or geographic areas. As a result, a disproportionate number of new and converted banks failed.

Table 1.7
Failure Rates of Converted Mutual Savings Banks and Other Banks,
Northeastern States

	Commercial Banks	Savings Banks		Cooperative Banks*	Total
		Stock	Mutual		
Number Existing 12/31/89	588	149	211	101	1,049
Number of Failures, 1990–94	65	32	16	5	118
Percent Failed	11	21	8	5	11

Note: Data are for Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

* “Cooperative banks” is the term used for state-chartered savings and loan associations in Massachusetts.

Fraud and Financial Misconduct

The precise role of fraud and financial misconduct as a cause of bank failures is difficult to assess. The consensus of a number of studies is that fraud and financial misconduct (1) were present in a large proportion of bank and thrift failures in the 1980–94 period, (2) contributed significantly to some of these failures, and (3) were able to take root because of the same managerial deficiencies and inadequate internal controls that contributed to the financial problems of many failed and problem institutions (apparently internal weaknesses left some institutions vulnerable not only to adverse economic developments but also to

³⁸ Managers of savings banks that converted may also have been willing to take greater risks with their personal compensation than managers of banks that retained the mutual form.

abuse and fraud). The studies also agree that the dollar impact of such activity is extremely difficult to estimate.

A 1988 OCC study of 162 national bank failures between 1979 and 1987 concluded that insider abuse was a significant contributing factor in 35 percent of the failures, and fraud in 11 percent.³⁹ As for problem banks that recovered and survived, the OCC found that 24 percent of these banks had suffered from significant insider abuse, while none had significant problems with fraud. Another study, which drew on a number of analyses and reports prepared by Congress and the regulators, concluded that fraud and insider abuse contributed to between 33 and 50 percent of commercial bank failures and from 25 to 75 percent of thrift failures in 1980–88.⁴⁰ A 1993 U.S. General Accounting Office (GAO) report pointed to the difficulties of quantifying the effects of fraud and to the wide variations in estimates of its impact.⁴¹ Whereas the OCC study found that fraud played a significant role in 11 percent of national bank failures, the FDIC found that fraud and insider abuse were present in 25 percent of 1989 bank failures; and the Resolution Trust Corporation (RTC) reported in 1992 that potential criminal abuses by insiders contributed to 33 percent of RTC failed thrift cases. Finally, a 1994 GAO report indicated that FDIC investigators had found insider fraud to be a major cause of failure in 26 percent of a sample of 286 banks that failed in 1990–91 and insider “problems” (fraud, noncriminal abuses, and loan losses on insider loans) to be present in 61 percent.⁴²

A number of factors make it difficult to measure the effect of fraud and abuse. First, some cases of fraud go undetected. Second, sometimes the line between poor business judgment and fraud is difficult to draw, as is the line between criminal and noncriminal activities. Third, the regulators and the Federal Bureau of Investigation do not maintain complete or consistent records on fraud convictions, reported incidents of fraud, and financial misconduct. Fourth, new legislation had effects that make comparisons over time difficult to draw: FIRREA and the Crime Control Act of 1990 increased the resources for detecting and reporting fraud and broadened the agencies’ powers to deal with bank and thrift fraud. For all of these reasons, any attempt at precision would be unwarranted. However, it seems reasonable to infer that fraud and abuse not only were present in a large number of bank and thrift failures in the 1980–94 period but also contributed to some of them.

³⁹ Office of the Comptroller of the Currency, *Bank Failure: An Evaluation of the Factors Contributing to the Failure of National Banks* (1988).

⁴⁰ Benton E. Gup, *Bank Fraud: Exposing the Hidden Threat to Financial Institutions* (1990).

⁴¹ U.S. General Accounting Office, *Bank and Thrift Criminal Fraud: The Federal Commitment Could Be Broadened* (GAO/GGD-93-48, January 1993).

⁴² U.S. General Accounting Office, *Bank Insider Activities: Insider Problems and Violations Indicate Broader Management Deficiencies* (GAO/GGD-94-88, March 1994).

Factors Associated with Bank Failures: Conclusion

The preceding discussion points to a variety of factors—economic, financial, legislative, regulatory, supervisory, managerial—that contributed to bank failures during the 1980s. Not all observers subscribe to a multiple-cause interpretation of bank-failure history or to the particular set of multiple causes described in this study. Some place particular emphasis on one or two specific causes that they believe were especially influential. For example, bank regulators tend to place heavy weight on deficiencies in bank management.⁴³ Bankers tend to blame government policy and adverse changes in the economy. Journalists point to cases of malfeasance. Academic writers have placed special emphasis on the financial incentives facing bank owners and managers.

With respect to these last, a considerable body of academic literature has stressed the effect that flat-rate deposit insurance (whose cost is unrelated to the level of risk assumed by individual institutions) had in encouraging moral-hazard risk taking and leading to depository-institution failures.⁴⁴ There seems little question that excessive risk taking by then-solvent banks contributed to bank failures and that flat-rate deposit insurance contributed to risk taking. However, singling out deposit insurance pricing as the principal explanation of bank failures seems unwarranted. Deposit insurance was available at fixed rates throughout most of the FDIC's history, but before the 1980s bank failures were few in number and were often caused by fraud rather than by financial risk taking. It was changes in the marketplace (increased competition, downward pressure on profits, lifting of legal restraints, and so forth) that created the environment in which increased risk taking (including exploitation of flat-rate deposit insurance) became advantageous or necessary for many banks.

Furthermore, as mentioned above, although banks that failed had generally assumed greater risk before their failure, many other banks with similar risk profiles did not fail. In the case of these surviving banks, the effects of risk taking, including risk taking stimulated by underpriced deposit insurance, were apparently offset by other factors, including superior risk-management skills. The absence of these offsetting factors should therefore be considered more important causes of bank failures. Moral-hazard risks appear to have had greater significance in the savings and loan industry than in the banking industry; this was mainly because thrift regulators permitted (or were forced by a depleted insurance fund to permit) a large number of thrifts to operate for lengthy periods with little or no equity, a situation that produced extraordinary incentives for risk taking.

⁴³ See OCC, *Bank Failure*, 5, 10: "The study showed that deficiencies within boards of directors and management were the primary internal problems of problem and failed banks . . . The evidence from healthy and rehabilitated banks also supports our hypothesis that economic conditions are rarely the primary factor in determining a bank's condition." See also Richard Duwe and James Harvey, "Problem Banks: Their Characteristics and Possible Causes of Deterioration," Federal Reserve Bank of Kansas City *Banking Studies* (1988): 3–11.

⁴⁴ See discussion below of moral hazard ("Role of Deposit Insurance").

The academic literature has also produced a second, alternative explanation of the incentives facing solvent banks, focusing on issues related to the control of banks exercised by owners and managers.⁴⁵ According to this view, managers rather than owners make lending decisions. If managers are entrenched (imperfectly controlled by owners), they may make decisions that are at odds with the interests of stockholders. According to this view, in periods (such as the 1980s) when the lending opportunities for banks were reduced as a result of the loss of market share in financing large businesses, some managers sought to preserve their perquisites by shifting lending to risky loans—a shift that led to loan losses and reductions in capital. Focusing on the sometimes different incentives of managers and owners is useful for understanding variations in the behavior of different institutions. However, it is not clear that such differences played a leading role in the increased number of bank failures. Many managers may have believed that maintaining their reputations and future employment prospects would best be served by risk-averse policies that avoided the failure of their institution. Furthermore, some “entrenched” managers of solvent institutions (for example, managers of savings banks that retained the mutual form) seem to have operated their institutions relatively conservatively in the late 1980s.⁴⁶

A third view of the role of incentives in explaining risk taking by banks draws an analogy between federal deposit insurance and a trilateral performance bond in which the insurance agency provides a bond that protects depositors against poor performance by the bank.⁴⁷ This view emphasizes incentive conflicts between various parties: for example, bank owners and managers, stakeholders in insured institutions and managers of the insurance agency, insurance agency managers and elected government officials, elected government officials and taxpayers. In this setting, regulators lack the incentives to enforce effective loss-control measures (capital requirements, monitoring, etc.) that are opposed by the regulated industry or “threaten a regulator’s ability to mask poor performance.”⁴⁸

⁴⁵ Gary Gorton and Richard Rosen, “Corporate Control, Portfolio Choice, and the Decline of Banking,” *Journal of Finance* (December 1995): 1377–410. Gorton and Rosen conclude that issues of corporate control are more important than moral hazard in determining the behavior of solvent institutions. In the case of insolvent institutions, managers and owners have identical interests and behave in the manner suggested by the moral-hazard principle. Another study, based on experience in the 1990s, concluded that the relationship between corporate structure and risk is significant only at low-franchise-value banks where moral hazard problems are most severe and conflicts between owner and manager risk preferences are therefore the strongest. See Rebecca S. Demsetz, Marc R. Saldenberg, and Philip E. Strahan, “Agency Problems and Risk Taking at Banks,” Staff Report, Federal Reserve Bank of New York, September 1997.

⁴⁶ As noted before, mutual savings banks that converted to the stock form failed with greater frequency in the late 1980s and early 1990s than mutuals that retained the mutual form. Mutual savings banks had no stockholders and were governed by self-perpetuating boards of trustees or directors, which in some cases were dominated by their chief executive officers; managers of such institutions might reasonably be considered entrenched in the sense of being imperfectly controlled.

⁴⁷ Edward J. Kane, “Three Paradigms for the Role of Capitalization Requirements in Insured Financial Institutions,” *Journal of Banking and Finance* 19 (1995): 431–59.

⁴⁸ *Ibid.*, 447.

These academic views share an emphasis on the sometimes conflicting incentives of bank owners, managers, regulators, and others as the principal explanation of insufficiently restrained bank risk taking. They also share the view that bank risk is essentially endogenous, arising from factors internal to the banking and regulatory systems, including mispriced deposit insurance, inadequate owner-control of bank managers, or more general principal-agent problems among various parties involved in or affected by deposit insurance and bank regulation. The importance of exogenous factors (the economy, financial markets, etc.) is correspondingly diminished in explaining bank risk taking and failures.

Ultimately, the role of financial incentives in bank failures is inseparable from the role of broader economic, financial, legislative, and regulatory factors; the extent to which flat-rate deposit insurance pricing, for example, led to excessive risk taking and widespread failures apparently depended on the circumstances. The multiple-cause explanation appears to be a more plausible reading of the history of the 1980s. According to this view, the rise in the number of bank failures was caused by a variety of factors internal and external to the industry.⁴⁹ This is not to say that failures were due merely to “bad luck,” with everything going wrong at the same time. More realistically, the preconditions for a rise in the number of bank failures were present well before the 1980s. These preconditions included, among others, a structure of banking laws that inhibited competition, geographic diversification of risks, and consolidation of units. They also included managerial attitudes and regulatory provisions that reflected the relatively benign pre-1980 environment for banking when failures were rare, and a system of flat-rate deposit insurance premiums that was tenable when other incentives and opportunities for risk taking were weak. The localized nature of many banks and a lack of experience with hard times left them vulnerable to external shocks and regional and sectoral recessions. Under the pressure of increased competition, many banks assumed greater risks, and as long as they remained solvent and profitable they were insufficiently restrained by the supervisory authorities. When the economic, financial-market, and competitive environment turned markedly less favorable for banks and some government policy actions (principally ill-timed deregulation and tax changes) exacerbated the situation, the preconditions were translated into increased numbers of bank failures. Which banks failed and which banks survived in an increasingly demanding environment was largely determined by an individual bank’s circumstances, particularly variations in the levels of risk it assumed, its success (or lack thereof) in operating with high risk levels, the

⁴⁹ A study by the FDIC Office of Inspector General (OIG) of the 13 bank failures in 1994, when conditions for banking were much different from in the 1980s, concluded that in a majority of cases problems were evident in loan underwriting, credit concentrations, high overhead, imprudent management, and external economic factors. Less common or critical factors were financial derivatives, volatile deposits, cross-guarantee assessments, and newly chartered banks. See FDIC Office of Inspector General, *1994 Failed Banks Trend Analysis* (1995), 2. Similar results were found for 6 failures in the OIG’s *1995 Failed Banks Trend Analysis* (1996).

overall strength of its management, good or bad fortune, and (in some cases) the presence or absence of fraud and misconduct.

Regulatory and Supervisory Issues Raised by the Experience of the 1980s

The principal regulatory and supervisory issues arising from the experience of the 1980s include the role of deposit insurance, the treatment of large-bank failures, the use of forbearance, the impact of Prompt Corrective Action, and the effectiveness of supervisory tools—examination, enforcement, and off-site surveillance.

Role of Deposit Insurance

Deposit insurance has often been described as involving a trade-off between stability and moral hazard.⁵⁰ On the one hand, by protecting depositors against loss, deposit insurance virtually eliminates the risk of bank runs and disruptive breakdowns in bank lending. On the other hand, by assuming the risk of losses that would otherwise be borne by depositors, deposit insurance eliminates any incentive for insured depositors to monitor bank risk and permits bank managements to take increased risks. Because of deposit insurance, banks are able to raise funds for risky projects at costs that are not commensurate with the risk of the projects, a situation that may lead to the misallocation of resources and to failures.⁵¹ Moral hazard is a particularly serious concern if the bank is insolvent or close to insolvency, in which case the owners have strong incentives to make risky investments because profits accrue to the owners, whereas losses fall on the insurer. (On the other hand, risk taking may be restricted if the bank has sufficient franchise value, defined as the present value of future income expected to be earned by the bank as a going concern.) In principle, the insuring agency can protect itself by requiring deductibles (equity positions) so that owners have their own funds at risk and by charging premiums commensurate with the risk assumed by the various banks. However, because it is difficult to identify indicators that give accurate advance warning of future distress, moral-hazard problems are inherent in deposit insurance, as in other types of insurance.⁵² Deposit insurance suffers from the additional prob-

⁵⁰ Arthur J. Murton, "Bank Intermediation, Bank Runs, and Deposit Insurance," *FDIC Banking Review* 2, no. 1 (1989): 1–10. The term "moral hazard" has been defined as "a description of the incentive created by insurance that induces those insured to undertake greater risk than if they were uninsured because the negative consequences are passed through to the insurer" (Congressional Budget Office, *Reforming Federal Deposit Insurance* [September 1990], 163).

⁵¹ In principle, owners of marginally solvent nonbank firms may also have incentives to take greater risk, but they are generally constrained by uninsured creditors.

⁵² The unreliability of ex ante risk measures has been attributed to information asymmetries between the insured and the insurer, whereby the former is seen to be better informed about his or her risky behavior.

lem that it insures against losses that are not independent but are interrelated through the effects of cyclical economic activity and the possibility of contagious bank runs.

During the 1980s, the balance in this trade-off was generally tipped in favor of stability. In this respect, regulatory policy was eminently successful; despite an unprecedented number of bank and thrift failures, there was no evidence of serious runs or credit-flow disruption at federally insured institutions. Stability was achieved, it should be noted, at substantial cost to surviving institutions and to their customers (assuming the institutions passed on at least part of the burden of increased assessments). In the case of thrift-institution failures, some of the costs were borne by taxpayers as well. The estimated total cost of FDIC failed-bank resolutions in 1980–94 is \$36.3 billion. The estimated cost of the savings and loan debacle is \$160.1 billion, of which an estimated \$132.1 billion was borne by taxpayers.⁵³

In contrast, the record of regulators with respect to controlling risk taking was mixed—and in the case of still-profitable and solvent banks, often unfavorable. Here a distinction must be made between controlling the risky behavior of profitable, solvent banks and controlling risk taking by problem banks that already face the near-term prospect of insolvency and failure. The record of the 1980s seems clear on this point. The regulators were reasonably successful in modifying the behavior of officially designated problem banks so as to reduce the prospects of their failure or the cost to the insurance fund if failure occurred. The regulators were less successful in constraining risk taking by still-profitable and healthy banks, partly because there were no reliable, generally accepted, forward-looking measures of risk.

There are three traditional means of controlling moral hazard: (1) examination and supervision; (2) regulatory capital requirements and risk-based deposit insurance premiums; and (3) uninsured depositor and creditor discipline.⁵⁴ In varying degrees and at various times, all three of these means were operating imperfectly in the 1980s. As discussed below, examination of many banks was infrequent in the early and middle 1980s, with the result that the consequences of risky behavior and other problems were not always identified on a

⁵³ The savings and loan cost figure includes the costs of the FSLIC and the RTC plus tax benefits under FSLIC assistance agreements, but excludes potential costs from supervisory goodwill claims. See U.S. General Accounting Office, *Resolution Trust Corporation's 1995 and 1994 Financial Statements* (July 1996), 13.

⁵⁴ See Murton, "Bank Intermediation." A study of Texas banks concluded that "the propensity to engage in risky activities depends on more than just changes in capital. A bank's current risk influences the response of bank lending to changes in capital. As long as banks possessed the ability to expand their lending, lower growth rates of capital were associated with larger increases in lending, as moral hazard would suggest. However, once banks were more exposed to risk, those institutions with lower capital growth recorded statistically insignificant differences in lending compared to those banks with greater increases in capital. While this latter finding is inconsistent with moral hazard, it points out the potential importance of both regulatory and liquidity constraints at work" (Jeffery W. Gunther and Kenneth J. Robinson, "Moral Hazard and Texas Banking in the 1980s," Federal Reserve Bank of Dallas *Financial Industry Studies* [December 1990]: 6).

timely basis. Although for some time regulators had been using capital standards to assess the condition of banks, uniform minimum capital requirements covering all banks were not adopted until 1985, and risk-based capital requirements not until 1990. Most bank failures were resolved through purchase-and-assumption transactions or open-bank assistance agreements that protected uninsured depositors and nondeposit creditors and therefore fostered the belief that all deposits of large banks were 100 percent insured. This belief severely limited the discipline that depositors might otherwise have exerted on the behavior of banks.

More specifically, supervisory restraints did not prevent the speculative binge of commercial real estate and other risky lending by solvent banks in many regions of the country in the 1980s. Regulators apparently believed that as long as risky behavior was profitable, they had limited leverage to restrain such behavior. Examiners interviewed for this study stated that as long as the banks were profitable, it was difficult to persuade bank management or their own superiors in the regulatory agencies that problems could lie ahead. When risky behavior resulted in actual losses, regulators were more effective, but often by that time the damage had been done.

Part of the problem was the absence of explicit penalties or costs to make risky behavior less attractive—penalties and costs such as risk-based premiums and capital requirements that, as stated, were not adopted until late in the period. Earlier adoption of uniform capital requirements and risk-based premiums would have improved the position of the bank regulators but might still have been insufficient to curb the excessive risk taking in the 1980s. As noted, capital regulation is a principal means of restraining risky behavior, but equity-to-assets positions are lagging indicators of a bank's risk profile and therefore poor indicators of the risk of failure several years before the fact. Current risk-based capital standards, which differentiate among broad asset categories, permit considerable shifting toward riskier lending within categories without requiring additional capital, while higher risk-based premiums are charged to banks whose condition has already deteriorated.⁵⁵ In short, regulators' ability to restrain the risky behavior of currently profitable banks was limited by the absence of penalties or costs based on reliable and generally accepted early-warning signals.⁵⁶

⁵⁵ The shift in bank lending from business loans to commercial mortgages during the 1980s would not have required increased capital under present risk-based capital standards. Risk-based premiums vary according to capital positions and supervisory ratings.

⁵⁶ Some would argue that problems of controlling risky behavior would be solved by the adoption of market value accounting. This argument assumes that market participants, utilizing publicly available data, would be better able than regulators to correctly recognize advance warning signs of risk, even though regulators have access to information developed through on-site examinations. This assumption remains unproven. See section below on "Treatment of Big Banks: Systemic Risk and Market Discipline."

The problems faced by regulators in controlling the risky behavior of profitable banks as compared with troubled banks illustrate differences between ex ante and ex post measures of risk. Common measures of ex ante risk (for example, loans-to-assets and other asset-composition ratios) measure risk taking independent of the current condition of the bank. They tend to be limited in their reliability—for example, many banks with high-risk profiles were able to avoid failure in the 1980s. Thus, regulators may be reluctant to apply stringent restraints and penalties on the basis of ex ante risk measures. On the other hand, ex post measures of risk (for example, capital-to-assets ratios) are the most proximate measures of risk to the insurance fund and measure the consequences of risk taking after it has materially weakened the condition of the bank. Supervisory restraints and penalties can be more confidently applied on the basis of ex post risk measures, but they may be less effective than those based on reliable ex ante measures in curbing risk taking before it weakens the condition of the bank. Moreover, the weakened condition of banks identified on the basis of ex post risk limits the magnitude of penalties that can actually be applied.⁵⁷

Whereas bank regulators may have lacked the tools to restrain solvent banks from excessive risk taking, thrift regulators were in a far different position. The Federal Home Loan Bank Board was not confronted by the problem of limiting risk taking by healthy institutions but by a large number of savings and loan associations that were insolvent or barely solvent in the early 1980s. The course that thrift regulators followed may in retrospect be termed high risk, featuring reduced capital standards, liberalized ownership restrictions for stockholder-owned thrifts, and capital and accounting forbearance that allowed savings and loan associations to operate with minimal or no equity while their true condition was obscured.⁵⁸ This course was followed partly because the financial resources of the FSLIC fund were inadequate. It was apparently motivated by the belief (or hope) that thrifts could grow out of their problems by acquiring new assets, that external capital could be attracted to shore up the industry, and that thrift institutions should be permitted to operate with minimal capital until they were able to improve earnings by using new asset powers. In contrast to banks, in the first half of the 1980s undercapitalized thrifts were allowed and even encouraged to grow.⁵⁹ Apart from differences in regulatory philosophy, FHLBB policies reflected the depleted state of the FSLIC insurance fund. The closure of all thrifts as they reached or approached insolvency was not a viable option. One obvious conclusion from the experience of the 1980s is that an adequate insurance fund is a prerequisite for any attempt to control moral hazard.

⁵⁷ For discussions of this topic, see two FDIC studies: *Deposit Insurance for the Nineties: Meeting the Challenge* (1989) and *A Study of the Desirability and Feasibility of a Risk-Based Deposit Insurance System* (1990).

⁵⁸ See Chapter 4, “The Savings and Loan Crisis and Its Relationship to Banking.”

⁵⁹ See “Use of Forbearance” below.

Treatment of Large Banks

Regulators' preference for solutions that promoted stability rather than market discipline is apparent in the treatment of large banks (mutual savings banks, money-center banks, and Continental Illinois). At various times and for various reasons, regulators generally concluded that good public policy required that big banks in trouble be shielded from the full impact of market forces and that their uninsured depositors be protected. This policy contributed to the overall record of stability achieved by the deposit insurance system in the 1980s. At the same time, however, it weakened any incentive for uninsured depositors to monitor and restrain risk taking by the banks. The first big bank to fail in the 1980s was First Pennsylvania Bank, N.A., of Philadelphia, with \$8 billion in assets in early 1980.⁶⁰ In this case the FDIC provided open-bank assistance, and the agency's determination of the bank's "essentiality" was based mainly on First Pennsylvania's size as the city's largest bank and on the possibility that its failure would have local and national repercussions.

Large mutual savings banks. The issue of systemic risk was raised more explicitly by the threatened insolvency of mutual savings banks. Located mainly in New York and other northeastern states, these institutions suffered a severe earnings squeeze because of the rapid rise in interest rates in the late 1970s and early 1980s, pushing interest costs on short-term deposits above interest rates on the institutions' long-term, fixed-rate mortgage loans and bond holdings. Earnings were also held down by usury ceilings applicable to residential mortgage loans in New York. Although asset quality was not generally a problem at this time, the net worth shortfall at market values was so large, according to one estimate, that if the banks had failed, the liability facing the FDIC would have exceeded the size of the insurance fund.⁶¹

The first savings bank to fail was the Greenwich Savings Bank with \$2.5 billion in assets—at the time, the third-largest bank failure in the FDIC's history. The initial estimated cost of the Greenwich failure was more than the recorded total cost of all previous failures of insured banks. Federal action was precipitated by the bank's inability to roll over foreign borrowings. Among the FDIC's first acts was to announce that no depositors, insured or uninsured, would lose any principal or interest, a move designed to preserve confidence in other savings banks that were also suffering severe interest-rate pressures. The bank was resolved through an FDIC-assisted merger transaction with another savings bank, a transaction assisted through an Income Maintenance Agreement, and this became the prototype for

⁶⁰ FDIC, *The First Fifty Years: A History of the FDIC, 1933–1983* (1984), 95.

⁶¹ See Chapter 6, "The Mutual Savings Bank Crisis."

other savings bank transactions. In all, 17 mutual savings banks with \$24 billion in assets were resolved through assisted mergers during 1981–85.⁶²

Money-center banks with LDC (less-developed-country) loans. The case of money-center banks with large concentrations of loans to developing countries also illustrates the regulators' preference for stability (as well as other public policy objectives) over market discipline.⁶³ Between year-end 1978 and year-end 1982, total LDC debt held by the eight largest money-center banks expanded from \$36 billion to \$55 billion. Total LDC portfolios held by these banks averaged more than double the banks' aggregate capital and reserves at the end of 1982, a ratio that put some of the largest banks at risk. Bank regulators made some attempt to curtail LDC lending activity and ensure diversification of foreign lending risk, doing this partly through the Interagency Country Exposure Review Committee, composed of officials of the OCC, the FDIC, and the Federal Reserve. These efforts apparently had little effect on the growth of LDC loans. Conversely, LDC lending may have been encouraged by the OCC's 1979 interpretation of the loans-to-one-borrower rule, an interpretation according to which public sector borrowers that met certain conditions did not have to be counted as parts of a single entity. On balance, it may be said that government policy supported LDC lending activity by the banks.

In August 1982, the government of Mexico announced it could no longer meet interest payments, and by the end of the year 40 nations were in arrears. By the end of 1983, 27 countries were in negotiations to restructure their existing loans. Following the Mexican default, U.S. banking officials did not require that large reserves be immediately set aside for the restructured LDC loans, apparently believing that some large banks might have been deemed insolvent and that an economic and political crisis might have been precipitated.⁶⁴ Although loss reserves did increase, at the end of 1986 they still averaged only approximately 13 percent of the total LDC exposure of the money-center banks. Starting in 1987, however, the money-center banks began to recognize massive losses on LDC loans that in some instances had been carried on the banks' books at par for more than a decade. By the

⁶² The assisted merger transaction was chosen over a purchase and assumption or a deposit payoff so that the FDIC could avoid the immediate outlays necessary to offset the full amount of asset depreciation and because these institutions had no stockholders to benefit from the transactions (and, in most cases, few uninsured depositors to share the cost with the FDIC). Most of the transactions were accomplished before the Net Worth Certificate Program was adopted as part of the Garn–St Germain Act (see the section below on forbearance).

⁶³ See Chapter 5, "The LDC Debt Crisis."

⁶⁴ L. William Seidman, *Full Faith and Credit: The Great S&L Debacle and Other Washington Sagas* (1993), 127. According to former FDIC Chairman Seidman, "U.S. bank regulators, given the choice between creating panic in the banking system or going easy on requiring our banks to set aside reserves for Latin American debt, had chosen the latter course. It would appear that the regulators made the right choice."

end of 1989, total reserves at the money-center banks were nearly 50 percent of total LDC loans.

The LDC experience illustrates the high priority given to maintaining financial market stability in the treatment of large banks. It also represents a case of regulatory forbearance. The OCC's 1979 interpretation of the loans-to-one-borrower rule permitted banks to continue lending in the face of signs that Latin American nations were having increasing difficulty meeting their obligations. Regulatory forbearance also enabled money-center banks to delay recognizing the losses and thereby avoid repercussions that might have threatened their solvency. In time, loss reserves and charge-offs were greatly increased, and no money-center bank failed because of LDC loans.⁶⁵ The creation of the Brady Plan in 1989 reflected recognition that banks would not recover the full principal value of existing loans and turned international efforts from debt rescheduling to debt relief. As part of the process, substantial funds were raised from the International Monetary Fund and the World Bank to facilitate debt reduction. Ultimately, the shareholders of the world's largest banks assumed the losses under the Brady Plan, which brought the crisis to an end.

Continental Illinois. The failure of Continental Illinois—a bank with \$45 billion in assets in 1981 and one of the ten largest in the nation—was the large-bank transaction that set the terms for the ensuing “too-big-to-fail” debate.⁶⁶ The \$4.5 billion rescue package devised by the regulators in May 1984 was prompted by a high-speed electronic bank run that followed a period of deteriorating performance. Problems in Continental's loan portfolio had been highlighted in July 1982, when Penn Square Bank failed; Continental Illinois had had a heavy concentration of loan participations with Penn Square. The rescue package included the promise to protect uninsured depositors fully, and it brought to an end the FDIC's modified payoff program, in which only a portion of the amount owed to uninsured depositors was paid; that portion was based on the estimated recovery value of the failed institution's assets. The reversal in FDIC policy reflected concerns that other large banks might be subject to bank runs and that Continental's correspondent banks would suffer losses if the FDIC resolved the bank through a deposit payoff or otherwise failed to protect uninsured deposits.

The justification for the Continental Illinois transaction has been debated at length. For example, a 1993 article criticizing the transaction and its rationale concluded that in

⁶⁵ One analysis concluded that “had these institutions been required to mark their sometimes substantial holdings of under-water debt to market or to increase loan-loss reserves to levels close to the expected losses on this debt (as measured by secondary market prices), then institutions such as Manufacturers Hanover, Bank of America, and perhaps Citicorp would have been insolvent” (Robert A. Eisenbeis and Paul M. Horvitz, “The Role of Forbearance and Its Costs in Handling Troubled and Failed Depository Institutions,” in *Reforming Financial Institutions in the United States*, ed. George G. Kaufman [1993], 60).

⁶⁶ See Chapter 7, “Continental Illinois and ‘Too Big to Fail.’”

most cases losses on deposits held by correspondent banks at Continental would have been relatively small and that these banks probably would have been able to meet any liquidity strains through the Federal Reserve's discount window.⁶⁷ As for the possibility that problems at Continental Illinois might have caused contagious runs on otherwise viable banks, the essential question is whether the market would have been able to distinguish between viable and nonviable banks (so that it would be able to end quickly any run on the former). Uncertainties on this point have made decisions on the resolution of large-bank failures difficult and will continue to make them difficult in the future. (See "Open Questions" below.)

* * *

These transactions in the early 1980s involving mutual savings banks, money-center banks, and Continental Illinois generally set the pattern for the treatment of large banks throughout the rest of the decade. In large-bank resolutions in the Southwest and Northeast as well as in other regions, the FDIC used purchase-and-assumption transactions, bridge banks, and open-bank assistance agreements that provided full protection for uninsured depositors. These methods eliminated the need for uninsured depositors to monitor the performance of large banks and raised questions of fairness, since numerous small-bank failures were resolved through deposit payoffs, in which uninsured depositors suffered losses.⁶⁸

The treatment of some large-bank failures has also been criticized on the ground that regulators were not assertive or prompt enough in curbing the risky behavior that led to the failures. It is clear that some years before its failure in May 1984, Continental Illinois had embarked on a rapid-growth strategy built on decentralized loan management that was unconstrained by an adequate system of internal controls and was heavily reliant on volatile funds. It is also clear that supervisory restraints were insufficient to modify the bank's behavior. A House subcommittee report in 1985 criticized a lack of "decisive action" on the part of the OCC and also found fault with the Federal Reserve's supervision of the parent holding company. Some of the regulators who participated in the Continental Illinois transaction have indicated that while the bank was profitable, regulators were reluctant to take early action in opposition to the bank's board of directors.

⁶⁷ Larry D. Wall, "Too-Big-to-Fail after FDICIA," Federal Reserve Bank of Atlanta *Economic Review* (January/February 1993): 1–14.

⁶⁸ It is likely that even without the too-big-to-fail policy, large banks would have been resolved less frequently through deposit payoffs because they tended to have greater franchise value and marketability. The greater marketability of large banks may have been due to their greater flexibility in seeking new markets and offering new product lines, their location in states where the absence of restrictions on geographic expansion meant a greater number of qualified bidders, and the earlier resolution action (to the extent that disclosure requirements applicable to publicly traded companies alerted regulators to problems at an earlier stage).

Criticism has also been leveled against the supervisory treatment of the Bank of New England in the years before its failure in January 1991.⁶⁹ According to the General Accounting Office, problems in the bank's operations were identified through the examination process several years before its failure. The firm grew rapidly from 1985 to 1989, primarily through acquisitions and aggressive real estate lending. During this high-growth period, OCC examiners repeatedly identified and reported problems with the bank's controls over lending operations and strategies. However, not until 1989 were any enforcement actions taken against the bank to compel corrective measures. The GAO concluded that the OCC relied on management's assurances that it would address the problems; it also concluded that more vigilant supervision could have reduced losses.

Use of Forbearance

Forbearance has taken on such pejorative connotations that various uses of the term need to be distinguished.⁷⁰ At one extreme, forbearance may be said to occur when supervisory authorities permit an insured depository institution to operate without meeting established safety-and-soundness standards for a limited period of time while taking remedial actions to reduce risk exposure and correct other weaknesses. Forbearance in this sense has often been applied by bank regulators on a case-by-case basis. As an example, problem banks that face near-term insolvency and closure frequently attempt, under pressure from regulators, to acquire additional capital. The success or failure of such efforts often determines whether the bank survives or is closed. Decisions as to whether, and for how long, to allow these efforts to continue are in fact decisions as to whether, and for how long, forbearance of this limited type should be granted. Whether regulators make the correct decisions in these situations cannot be tested with any precision. However, such limited, case-by-case forbearance seems to be an integral part of the overall supervision of problem banks, and its usefulness is best judged by the degree of success of such supervisory efforts.⁷¹

At the other extreme is the type of forbearance practiced by the FSLIC, as a result of which a large number of insolvent or marginally solvent savings and loan associations were permitted to operate as open institutions for lengthy periods.⁷² The difference between the extremes is more than a difference of degree. Limited, case-by-case forbearance is designed to provide an opportunity to reduce risk exposure and correct weaknesses. Longer-term,

⁶⁹ See Chapter 10, "Banking Problems in the Northeast."

⁷⁰ Bank forbearance programs are discussed by Dean Forrester Cobos, "Forbearance: Practices and Proposed Standards," *FDIC Banking Review* 2, no. 1 (1989): 20–28.

⁷¹ See "Effectiveness of Supervisory Tools: Examination and Enforcement" below.

⁷² In 1984, 687 FSLIC-insured thrifts with \$358 billion in assets, constituting 22 percent of the number of thrifts and 37 percent of total industry assets, were insolvent on the basis of tangible net worth. See Lawrence J. White, *The S&L Debacle: Public Policy Lessons for Bank and Thrift Regulation* (1991), 114.

wholesale forbearance as practiced by the FSLIC was a high-risk regulatory policy whose main chances of success were that the economic environment for thrifts would improve before their condition deteriorated beyond repair or that the new, riskier investment powers they had been granted would pay off. The latter type of forbearance, which the FSLIC adopted against the background of a depleted insurance fund, is widely judged to have increased the cost of thrift failures.⁷³ Because of the state of the FSLIC fund, forbearance became a necessity for the thrift regulators rather than a matter of choice⁷⁴ and continued to be widely granted after interest-rate reductions in the early and middle 1980s had alleviated maturity mismatches in thrift portfolios, and poor-quality assets had become the chief problem of S&Ls. Generally, the bank regulators did not practice such wholesale, protracted, and risky forbearance.

The bank regulators did, however, allow several large banks that subsequently failed to operate for long periods with minimal capital (see “Impact of Prompt Corrective Action” below). As noted above, bank regulators also eased the problems of money-center banks with large holdings of LDC loans by not requiring prompt establishment of reserves against such loans. This was a form of temporary forbearance; eventually money-center banks substantially increased their reserves.⁷⁵ Finally, bank regulators administered three forbearance programs that were applied to classes of banks rather than to individual institutions (see table 1.8). These programs were initiated or inspired by Congress rather than by the bank regulators.

The first such program was the Net Worth Certificate Program for thrifts that was adopted, despite FDIC reservations, as part of the Garn–St Germain Act.⁷⁶ This program was applied mainly to FDIC-insured mutual savings banks in New York and other north-eastern states that were suffering extreme earnings pressures in a period of high and rising

⁷³ See, for example, Edward J. Kane, *The S&L Insurance Mess: How Did It Happen?* (1989); Eisenbeis and Horvitz, “Forbearance and Its Costs,” 49–68; Edward J. Kane and Min-Teh Yu, “Opportunity Cost of Capital Forbearance during the Final Years of the FSLIC Mess,” *Quarterly Review of Economics and Finance* 36, no. 3 (fall 1996): 271–90; and Ramon P. DeGennaro and James B. Thompson, “Capital Forbearance and Thrifts: An Ex Post Examination of Regulatory Gambling,” in *Proceedings of the 29th Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, May 1993, 406–20. However, one analysis concluded that “[F]orbearance was not a major culprit in the taxpayer bill for the thrift crisis.” See George J. Benston and Mike Carhill, “FSLIC Forbearance and the Thrift Debacle” in *Credit Markets in Transition, Proceedings of the 28th Annual Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, 1992: 131.

⁷⁴ One analysis concluded that the FSLIC’s ability to dispose of insolvent thrifts was constrained by S&L industry pressures, by the extent of past cover-ups of thrift insolvencies, and by the actions of elected officials (Kane, *The S&L Mess*, 97, 98).

⁷⁵ According to some authors, the case for forbearance rests on the existence of market imperfections (such as legal impediments to diversification), deadweight bankruptcy costs, inefficient markets for bank assets, information asymmetries whereby assets have greater value when managed by the banks that originated them than when managed by FDIC liquidators, and macroeconomic considerations (Eisenbeis and Horvitz, “Forbearance and Its Costs,” 52, 64, 65).

⁷⁶ FDIC, *The First Fifty Years*, 102.

Table 1.8
Results of Bank Forbearance Programs

	Mutual Savings Banks, Net Worth Certificates	Agricultural and Energy Sector Banks
Number of banks in program	29	301
Assets of banks in program (\$billions)	40	13
Number of banks that survived	22	236
Number of banks that failed	7	65
Losses as percent of assets at failure		
Banks in forbearance program	4	21*
Comparable banks not in program	12	22*

* Data refer to banks with less than \$100 million in assets.

interest rates. Between 1982 and 1986, 29 mutual savings banks with approximately \$40 billion in assets participated. Of these, 22 banks were restored to profitability as falling interest rates in the early and middle 1980s enabled these institutions to improve equity positions and retire their net worth certificates. Seven savings banks that participated in the program failed as a result of interest-rate pressures and were resolved at a cost of \$420 million, or approximately 4 percent of total assets at the time they entered the program.⁷⁷ This loss rate was substantially less than the average loss rate of 12 percent for savings banks resolved before the Net Worth Certificate Program was adopted.⁷⁸

The effectiveness of the Net Worth Certificate Program was due largely to the drop in interest rates after 1981. In effect, Congress required that action against insolvent savings banks be deferred until after interest rates had come down, by which time, it was thought, profitability and equity positions would be restored, and in fact in most cases they were.⁷⁹ Also important was the fact that the FDIC was generally able to contain moral-hazard risks associated with the continued operation of banks having little or no equity. Most of the sav-

⁷⁷ See Chapter 6, “The Mutual Savings Bank Crisis.” Two of the 22 savings banks failed subsequently, four to six years after having retired their net worth certificates. These failures were probably the result of actions taken after the two banks left the program.

⁷⁸ The lower loss rate of banks that failed while in the Net Worth Certificate Program was probably due in part to the fact that after the program was introduced, interest rates were generally declining. In addition, the first savings banks to fail might have been in a more serious condition than those that failed later.

⁷⁹ By comparison, many insolvent savings and loan associations did not recover as a result of the drop in interest rates. At the end of 1982, there were 222 GAAP-insolvent FSLIC-insured thrifts. In September 1986, despite a nearly 500 basis-point drop in 90-day Treasury bill rates from 1982 to 1986, only 29 percent of these institutions were now GAAP-solvent, whereas 36 percent were still GAAP-insolvent and 35 percent had ceased to exist. See U.S. General Accounting Office, *Thrift Industry: Forbearance for Troubled Institutions, 1982–1986* (GAO/GGD-87-78BR, May 1987), appendix 1.

ings banks were free of serious credit-quality problems (as mutual institutions, they might have had less incentive than stockholder-owned institutions to make risky investments), and the relatively small number of savings banks in the program simplified supervision and facilitated control of risky behavior.

The second instance of class-of-bank forbearance was the 1986 temporary capital forbearance program for banks that were weakened as a result of lending to the troubled agricultural and energy sectors; this program was later extended to all banks that were experiencing difficulties because of economic factors beyond their control. Bank regulators developed the program at a time when support for forbearance was building in Congress. By developing their own program, bank regulators sought to include a strong safety-and-soundness focus and to avoid being required to use measures like the Net Worth Certificate Program or those the thrift regulators employed.⁸⁰ Of the 301 banks in the capital forbearance program, 201 were operating as independent institutions one year after leaving the program, another 35 had been merged without FDIC assistance, while 65 had failed. As these results indicate, after a period of forbearance a large majority of the institutions in the program either were able to recover as independent institutions or had sufficient value to be acquired by merger partners without FDIC assistance. Losses of the 65 banks that failed were similar to those of comparable failed banks, a fact suggesting that the period of forbearance did not result in serious deterioration. Of the 65 failed banks in the program, 59 were under \$100 million in assets and had losses of 21 percent of assets. In comparison, 965 banks with assets less than \$100 million that were not in the forbearance program and failed during 1986–94 had a 22 percent loss rate. As in the case of the Net Worth Certificate Program, the effectiveness of the 1986 regulators' program was largely due to its temporary nature and to cyclical economic forces, in this case, a recovery in the agricultural sector.

A third instance of class-of-bank forbearance was the Agricultural Loan-Loss Amortization Program adopted by Congress in 1987 as part of CEBA, apparently because Congress concluded that the regulators' program was inadequate. Of 33 banks in the program, 27 survived as independent institutions one year after leaving it, another 2 had merged, while 4 had failed.⁸¹ Essentially the same conclusions apply to this program as to the 1986 regulators' agricultural and energy forbearance program.

In assessing the effectiveness of class-of-bank forbearance programs, one needs to consider how banks are chosen to participate when the regulators are allowed to exercise discretion. Ideally, the regulators must be able to distinguish between institutions that will recover after a period of forbearance and those that will not recover and should therefore

⁸⁰ See Chapter 2, "Banking Legislation and Regulation"; and Cobos, "Forbearance: Practices and Proposed Standards," 23.

⁸¹ Data exclude banks that were in both the CEBA and the 1986 regulators' programs. These banks are included only in data for the latter program.

not be granted forbearance. The ability to make such distinctions accurately is important for reasons of fairness and because of moral hazard. In making such distinctions, the regulators have the benefit of information derived from examination reports—information that is not available in financial reports or other public records. Nevertheless, picking winners and losers is difficult, and some writers have concluded that regulators were unsuccessful in their attempts.⁸²

Furthermore, applying forbearance to a group of banks may have adverse competitive effects on institutions outside the program. Unless restrained by the supervisory authorities, insolvent banks may offer above-market deposit rates and submarket loan rates, thereby weakening healthy competitors. Such behavior by many thrift institutions during the 1980s generated frequent complaints, but it was apparently less of a problem in the bank forbearance programs because a smaller number of institutions were involved and the participants were closely monitored and supervised. In other words, while forbearance may provide an opportunity to correct weaknesses, without effective oversight it may also permit further deterioration. As noted below (“The Impact of Prompt Corrective Action”), allowing unprofitable banks to continue operating can increase resolution costs as operating losses accumulate. Even if it is successfully applied to some banks, forbearance may have undesirable effects if it encourages other banks to expect similar treatment. Moreover, if forbearance is granted to a large number of institutions, it may have adverse effects on the economy.⁸³

Thus, forbearance programs may have a number of disadvantages—and, when practiced on the scale and with the purposes of the FSLIC program, they can be a disaster. While survival of the institution is not the only criterion for the success of forbearance programs, it remains significant that most of the banks in class-of-bank forbearance programs survived,⁸⁴ and the minority that failed had losses comparable to, or lower than, those of failed banks not included in the programs. The more favorable results of bank forbearance programs as compared with the FSLIC strategy reflect the smaller number of banks involved, the closer monitoring of banks, the fact that the problems addressed by bank forbearance programs were temporary and cyclical in nature,⁸⁵ and (most important) the fact that bank

⁸² See, for example, Emile J. Brinkmann, Paul M. Horvitz, and Ying-Lin Huang, “Forbearance: An Empirical Analysis,” *Journal of Financial Services Research* (1996): 39–40.

⁸³ See the discussion in Congressional Budget Office, *The Economic Effects of the Savings and Loan Crisis* (1992).

⁸⁴ One analysis states that “the cost to taxpayers of FDIC gambling lies in offering the equivalent of dividend-free equity capital to undercapitalized banks. The success of *these* gambles must not be measured by whether assisted banks recovered, but by whether societal returns on taxpayer funding proved high enough to justify the waiver of dividends.” See Kane, “Three Paradigms,” 444.

⁸⁵ One view of S&L forbearance programs is that as a result of deregulation, these institutions were undergoing a permanent change that could not be addressed by an essentially temporary measure. See Congressional Budget Office, *Reforming Federal Deposit Insurance*, xiv.

regulators sought to control risk taking by participating institutions rather than encourage it.⁸⁶ In the absence of the class-of-bank forbearance programs, more of the banks that actually survived might have been closed: for example, as shown in the next section, if the provisions of Prompt Corrective Action had been in effect throughout the 1980s, 12 of the 22 mutual savings banks that participated in the Net Worth Certificate Program and recovered would have faced the prospect of closure, while 50 of the 236 surviving farm and energy banks in the regulators' 1986 temporary program might also have been closed.

Impact of Prompt Corrective Action

The Prompt Corrective Action (PCA) provisions of FDICIA were designed to limit regulatory forbearance by requiring more-timely and less-discretionary intervention, with the objective of reducing failure costs. FDICIA mandated that the regulatory authorities adopt five capitalization categories, ranging from "well capitalized" to "critically undercapitalized," to serve as the basis for Prompt Corrective Action. As an institution's capital position declines, the appropriate regulator is required to increase the severity of its actions. These actions range from restricting asset growth (for undercapitalized institutions) to closing banks (those that are critically undercapitalized for a prescribed period). The top four capital categories are defined in terms of risk-based capital and leverage ratios. Critically undercapitalized institutions are those with tangible capital ratios of 2 percent or less. In general, a receiver must be appointed for any institution that is critically undercapitalized for up to 270 days.⁸⁷

It is difficult to judge what would have happened if PCA had been in effect during the 1980s, for the behavior of both banks and bank regulators would have been altered. However, it appears that some banks that failed might have been closed earlier than they actually were, whereas some banks that survived might have faced the prospect of being

⁸⁶ The difference between the FDIC forbearance program for mutual savings banks and the FSLIC program for savings and loan associations has been described as follows: "[A]ccounting gimmicks were limited—and the mutual savings banks were not allowed to grow. With a conservative policy of temporary forbearance in place, many mutual savings banks recovered, and those ultimately shut down or merged did not put an intolerable burden on the FDIC . . . the S&Ls that followed the incentives and implicit advice of government policy to enter new areas rapidly and grow their way out of the problems became part of the S&L debacle" (National Commission on Financial Institution Reform, Recovery and Enforcement, *Origins and Causes*, 32–33).

⁸⁷ Under FDICIA, when an institution is critically undercapitalized for 90 days a receiver or conservator must be appointed or some other action must be taken to achieve the purpose of the provision. The 90-day delay may be extended, provided that the regulator and the FDIC concur and document why extension would better serve the purposes of the provision. After the institution has been critically undercapitalized for 270 days, a receiver or conservator must be appointed unless the regulator and the FDIC certify that the institution is viable and not expected to fail. Under the conditions existing in the 1980s when failures were bunched and the market for failed institutions was often saturated, it seems reasonable to suppose that taking more than 90 days to spread out marketing efforts for failed banks would have been an acceptable reason for delay up to the 270-day limit.

unnecessarily or erroneously closed. Alternatively, banks in the latter group might have been compelled to try either to recapitalize earlier than they actually did or to merge with healthier banks. A large majority of banks that failed were closed within the time frame specified by FDICIA for critically undercapitalized banks. However, 343 banks that failed (21 percent of all failures from 1980 to 1992) with \$88 billion in assets would have faced earlier closure because they were critically undercapitalized for more than 270 days.⁸⁸ For the same reason, 143 problem banks (those with CAMEL ratings of 4 or 5) with \$11 billion in assets that did not fail would have faced the possibility of unnecessary closure because of the 2 percent rule.

Of the 343 failed banks that would have been closed earlier under the PCA rule, 201 (59 percent) were national banks, 131 (38 percent) were state nonmember banks, and 11 (3 percent) were state member banks. In the case of national banks, closure is the responsibility of the OCC; in the case of state-chartered institutions, of state banking departments. In the states that had the most closings and the most late closings, the state authorities closed problem banks more quickly than the OCC did.⁸⁹ The difference was especially apparent in Texas and Oklahoma, which accounted for a disproportionate number of bank failures. Part of the difference was due to the fact that state banking authorities had greater flexibility under applicable law. The OCC had statutory authority to close a national bank “whenever the Comptroller shall become satisfied of the insolvency of the bank” (12 U.S.C. 191). Thus, the OCC had to wait until the bank was insolvent before being able to close it. On the other hand, the six states had the authority to close banks when capital was “impaired,” when the bank faced “imminent insolvency” or was in an “unsafe” or “unsound” condition. These more flexible standards made it possible for the states to close banks earlier.⁹⁰ However, although the OCC’s closing policy was constrained by the statutory-insolvency rule, the agency had wide latitude to define insolvency and presumably could have adopted a more flexible standard than was actually in effect during most of the 1980s. Until December 1989, the OCC’s definition of insolvency was the exhaustion of primary capital (equity plus loan-loss reserves). In December 1989, after approximately a year of study, the OCC shifted to equity capital alone, without loss reserves, and the new definition permitted more expeditious closing of national banks.⁹¹ This change was made after most of the failures of the 1980s had already been resolved.

⁸⁸ Excluded from this analysis are banks that participated in forbearance programs mandated or inspired by Congress.

⁸⁹ In six states (California, Colorado, Louisiana, New York, Oklahoma, and Texas) the OCC closed 473 banks during the 1980–92 period, 38 percent of which were closed later than would have been required under PCA. The state authorities closed 459 banks, 17 percent of which were closed later than would have been required under PCA.

⁹⁰ Information on the statutory authority of the six state banking departments is based on conversations with representatives of each of the six departments.

⁹¹ OCC, *Bulletin BB-89-39* (December 13, 1989).

Estimates of the cost savings that would have resulted from the earlier closure of failed institutions are necessarily very rough.⁹² For most of the 343 banks that would have faced earlier closure if PCA had been in effect, the interval between the date that closure would have been required by PCA and the actual closure date was approximately two quarters.⁹³ During this interval, these banks experienced a reduction in equity from \$220 million to a negative \$1.6 billion. But a large part of this reduction was due to the recognition of losses that were already embedded in loan portfolios and would not have been affected by more-timely closure. Another portion—chiefly operating losses associated with higher private-sector funding costs and the cost of operating retail bank branch systems—could have been avoided by earlier closure. This avoidable cost for the 343 banks is estimated to be on the order of \$825 million and constituted 8 percent of the actual estimated resolution costs of the 343 banks and approximately 2 percent of the cost of all bank failures during the 1980–92 period.⁹⁴ Approximately 60 percent of the \$825 million estimated cost savings is attributable to six large banks.

An alternative estimate of the avoidable cost, based on net operating losses, produced essentially the same aggregate result. For the 343 banks, net operating losses before loan-loss provisions, gains/losses on asset transactions, taxes, and extraordinary items totaled \$815 million for the intervals between closure dates required by PCA and actual closure dates. As with the previous estimate, these losses were concentrated in a few large banks.

A number of caveats are in order when one considers these estimates. Regulators' bank closure policies would have been different if PCA had been in effect in the 1980s, and such policy changes might have reduced projected cost savings. For example, for the large number of banks that were allowed to operate with tangible capital below the 2 percent level for only a few months beyond the interval allowed by PCA, earlier closure might have

⁹² The calculations are described in note 94. R. Alton Gilbert concluded, contrary to the implications of this study, that FDIC resolution costs were not positively related to the length of time that banks operated with relatively low capital ratios before their failure. See "The Effects of Legislating Prompt Corrective Action on the Bank Insurance Fund," *Federal Reserve Bank of St. Louis Review* 74, no. 4 (July/August 1992): 3–22.

⁹³ The unweighted average interval was two quarters. Weighted by assets, the average interval was three quarters, reflecting the especially long intervals for a few large banks.

⁹⁴ The avoidable cost is estimated as the sum of (1) the actual funding costs of these banks minus the one-year Treasury rate and (2) the operating expenses of transactions and nontransactions deposit accounts as estimated by the 1990 Functional Cost Analysis of the Federal Reserve Board. The avoidable cost was computed for the period of time beyond 270 days that the bank's tangible capital ratio was below 2 percent. In cases where the tangible capital ratio fluctuated below and above 2 percent, the bank was considered to be critically undercapitalized for the entire period after the ratio first fell below 2 percent, except when the ratio subsequently rose above 3 percent. In the latter case, that bank was counted as critically undercapitalized only for the period it was below 2 percent subsequent to having reached the 3 percent level. Two large savings banks that had entered into Income Maintenance Agreements with the FDIC in connection with the acquisition of other failed institutions were counted as critically undercapitalized from the time the bank's agreement was terminated (in one case) and (in the other case) from the date the FDIC formally permitted the bank to miss capital targets prescribed in its agreement.

meant that, because of insufficient time to market the institutions among potential acquirers, more institutions would have been resolved through insured-deposit payoffs.⁹⁵ This likelihood would have been greatest in periods when failures were bunched, temporarily saturating the market for failed bank and thrift deposit franchises and assets. Spreading closings over a longer period of time might have attracted better bids and offset some of the additional costs resulting from delayed closings. Thus for many of the 343 banks, the cost savings resulting from earlier implementation of PCA might have been smaller than the estimates set forth above suggest. For the six large banks that operated for extended periods of time with minimal capital, earlier closure would probably have achieved cost savings. For some of these banks, fairly lengthy marketing periods might have been needed and, because of PCA, regulators might have had to start the marketing process while the banks had capital above the 2 percent tangible level. In any event, whatever savings might have been achieved through earlier closure would apparently have been concentrated largely in a few large banks that were permitted to operate with little or no equity for relatively long periods of time.

During the interval between the actual and the PCA-required closure dates, problem institutions were generally under close supervision and many of them were subjects of enforcement actions aimed at reducing losses to the insurance fund. Of the 343 failed banks that would have faced earlier closure under PCA, 127 were FDIC-supervised state non-member banks for which enforcement data are available. Of the 127 banks, 101 (approximately 80 percent) had been issued formal enforcement actions before the closure date required by PCA—in fact, an average of 14 months before—and the remaining 26 banks might have had informal enforcement actions.⁹⁶

The consequences of unnecessarily closing some of the 143 problem banks that were below the 2 percent level but did not fail must be weighed against the cost savings of closing failed banks earlier. As noted above, some of these banks would have recapitalized or would have merged sooner to avoid closure.⁹⁷ However, any unnecessary or erroneous closure of these institutions would be difficult to justify and might have involved unnecessary

⁹⁵ This possibility was pointed out by R. Alton Gilbert. See his comments in volume 2 of this study.

⁹⁶ Data on formal enforcement actions (such as cease-and-desist orders and terminations of insurance) are presented here only for FDIC-supervised state nonmember banks. Comparable data are not available for OCC-supervised banks; relatively few banks were supervised by the Federal Reserve. Systematic data on informal enforcement actions are unavailable for the FDIC and the OCC.

⁹⁷ The cost of unnecessary or erroneous closure of banks that would otherwise have survived is likely to be large if bankruptcy costs are high and if investors undervalue the assets of the banks. As noted by Stanley C. Silverberg in volume 2 of this study, “Early resolution works very well when the market places reasonable or high valuations on bank franchises. However, in, say, 1990, the stock prices of several of the most conservatively run banks were well below book value. Investors and other banks were reluctant to pay positive prices for troubled banks without FDIC assistance. That has changed considerably during the past several years.”

deadweight bankruptcy costs. In any future period of widespread failures, balancing the benefits of earlier closure against the consequences of closing some banks that otherwise would have survived may be difficult. Presumably banks will strive to avoid becoming subject to the 2 percent rule, or to any other similarly binding rule, by maintaining capital levels higher than they otherwise would or by seeking merger partners while they still have value. However, the history of the 1980s shows that capital levels may decline quickly in the face of external shocks or other unforeseen events. Or at times the market may temporarily undervalue a bank franchise, making it difficult for some banks to secure external capital when they are in danger of failing the 2 percent rule. Thus, in some future period of widespread depository-institution failures, the issue of erroneously closing salvageable institutions may be unavoidable and critical in implementing statutory closure rules.

The computations that produced the estimates that 343 failing banks would have been closed earlier and 143 banks might have been unnecessarily closed as a result of the application of PCA in the 1980s did not include banks in the class-of-bank forbearance programs, because the assumptions underlying these programs were obviously at variance with the later views of Congress as expressed by the PCA provision of FDICIA. However, for the sake of completeness, separate calculations using the same methodology were made for the banks that participated in these forbearance programs. The results show that (1) 48 banks with \$11 billion in assets that actually failed would have been closed earlier as a result of PCA, and (2) 66 banks with \$16 billion in assets that actually survived would have been closed.

In addition to the closure of critically undercapitalized banks, FDICIA requires specific regulatory intervention geared to capital positions of open banks. For example, in the case of undercapitalized banks, FDICIA requires regulators to have the bank submit a capital restoration plan, restrict asset growth, and get prior approval for expansion. For significantly undercapitalized banks, more-stringent actions are prescribed. In this regard, a study of the New England banking crisis, which occurred before the adoption of FDICIA in 1991, found that regulators were already imposing formal actions on banks before they became undercapitalized as defined by PCA. Moreover, according to the study, the regulators imposed restrictions more comprehensive than those prescribed in the PCA legislation.⁹⁸ The reason given for this result is that capital ratios prescribed in PCA are lagging indicators of the health of the institution and will trigger enforcement action well after problems are identified in examinations. Examiners analyze considerably more information than capital ratios to determine a bank's likelihood of failure. Therefore, more-timely intervention would

⁹⁸ Joe Peek and Eric S. Rosengren, "The Use of Capital Ratios to Trigger Intervention in Problem Banks: Too Little, Too Late," Federal Reserve Bank of Boston *New England Economic Review* (September/October 1996). See also Peek and Rosengren, "Will Legislated Early Intervention Prevent the Next Banking Crisis?" working paper series no. 96-5, Federal Reserve Bank of Boston, September 1996.

result from triggers that mimic the timing of problem-bank identification by examiners. This view of the lagging nature of capital ratios is consistent with the findings summarized below in the section on off-site monitoring.

Effectiveness of Supervisory Tools: Examination and Enforcement

The increased number of bank failures in the 1980s raised questions about the effectiveness of bank regulators' systems of identifying problem banks and then influencing their behavior in order to prevent failures and reduce insurance losses. The evidence suggests that bank examination ratings provided a reasonably accurate indication of the prospect of failure *if* the ratings were based on recent examinations. But in the early and middle 1980s many banks were not examined frequently, and the ratings available for them at any point tended to be obsolete. Troubled banks that were properly identified, however, were generally subject to enforcement actions that appear to have been effective in reducing insurance losses. The critical issues, therefore, are the frequency and use of examinations, the effectiveness and limitations of CAMEL ratings, and the effectiveness of follow-up enforcement actions.⁹⁹

Evolution in the frequency and use of examinations. In the late 1970s and early 1980s, the bank examination process was affected by two key policy changes embraced particularly by the OCC and the FDIC: (1) relatively more reliance was placed on off-site monitoring and relatively less on on-site examination, and (2) examination resources were concentrated on those institutions that posed the greatest threat to the insurance fund and to the stability of the financial system. These changes were made partly because it was believed that comprehensive Call Report data and the use of computer technology would enhance off-site surveillance and enable the agencies to reduce the examination burdens on banks and on their own staffs. Further, the decision to concentrate resources on the larger and the more-troubled banks was seen as an efficient allocation of resources. (Both the FDIC and the Federal Reserve also made increasing use of state bank examinations for non-problem institutions.) Another important change took place at the OCC, where the traditional emphasis on a detailed audit and verification system was replaced by a focus on the quality of management and internal policies. The OCC also placed increased weight on targeted examinations, which focused on a particular aspect of a bank's operations, rather than full-scope examinations.

These policy changes implied that fewer examiners would be needed. In addition, both the Carter and Reagan administrations restricted federal hiring in an attempt to reduce the size of the federal government. In this climate, the FDIC and the OCC froze examiner staffing levels in 1981. As a result, between 1979 and 1984 the total number of examiners

⁹⁹ This section is based on Chapter 12, "Bank Examination and Enforcement."

in federal and state banking agencies declined by 14 percent (see table 1.9). Among the agencies, the reductions varied in size: examiner staffing at the FDIC declined by 19 percent, at the OCC by 20 percent, and at state agencies by 12 percent. At the Federal Reserve, examiner staffing was largely unchanged. While examination forces were being reduced, the total number of troubled banks was increasing from 217 in 1980 to 1,140 in 1985. In the mid-1980s, therefore, the FDIC and the OCC began to rebuild examiner staffs—but several years of training are required to produce qualified examiners, so it was not until the late 1980s that the examiner forces at those two agencies were restored to 1980 levels in number and experience.¹⁰⁰

Table 1.9
Number of Bank Examiners, Federal and State Banking Agencies, 1979–1994

Year	FDIC	FRS	OCC	States	Total
1979	1,713	805	2,151	2,496	7,165
1984*	1,389	820	1,722	2,201	6,132
1990	2,645	1,025	1,907	2,470	8,047
1994	2,547	1,529	2,376	2,564	9,016

Source: Compiled by FDIC on the basis of information from FRS, OCC, and Conference of State Bank Supervisors.

*Trough in total number of examiners.

These trends in examiner staffing contributed to marked changes in the number and frequency of examinations. Between 1981 and the low point of 1985, the number of examinations declined from approximately 12,300 to 8,300. The decline was particularly sharp for state nonmember banks; for national banks and state member banks it was less severe. In 1979, the average length of time between examinations was 379 days, or 13 months (see table 1.10). By 1986, the average interval had increased to 609 days, or 20 months. The greatest change was for CAMEL 1-rated banks, whose average interval increased from 392 days to 845, or from 13 to 28 months. The increase in examination intervals was greatest at the OCC and the FDIC and smallest at the Federal Reserve. As the agencies built up their examination staffs in the late 1980s, intervals between examinations shortened once again, and by 1990, the average interval was 411 days (14 months) for all banks; for all banks with CAMEL ratings below 2, it was one year or less. In 1991 FDICIA reinforced the return to greater frequency of examinations by requiring annual full-scope examinations for all

¹⁰⁰ The demands on the shrunken examiner staffs extended to training new hires and taking on duties related to settlement and asset liquidation for failed banks.

Table 1.10
Mean Examination Interval, by Initial Composite CAMEL Rating (in days)

Year	1	2	3	4	5	All Banks
1979	392	396	338	285	257	379
1986*	845	656	407	363	313	609
1990	463	436	331	303	270	411
1994	380	357	296	279	245	354

Source: FDIC, FRS, and OCC.

*Peak of mean intervals.

banks, except that for small banks with satisfactory ratings an 18-month interval could be substituted.¹⁰¹

For some banks during the mid-1980s, these changes meant that CAMEL ratings and other information derived from examinations were sometimes obsolete and unrepresentative. CAMEL ratings are a measure of the condition of a bank essentially at the time it is examined; as a bank's condition changes, old ratings become increasingly inaccurate as indicators of its current health.¹⁰² Problems developing at some banks in the 1980s were not identified on a timely basis; this view is supported by examiners interviewed for this study, who indicated that extended examination intervals and increased demands on staff resources meant that some banks received insufficient attention. For example, banks that were well rated but deteriorating might not receive attention until it was too late to prevent serious losses. In Texas, which had the largest concentration of bank failures and losses to the insurance fund, the problem of extended examination intervals was particularly acute. The severe problems of some Texas banks might have been recognized sooner if examinations had been more frequent.¹⁰³

The reduced frequency of examinations limited the usefulness not only of information derived from the examinations but also of the financial reports used in off-site monitoring. On-site examiners are able to evaluate the quality of the loan portfolio and verify the data

¹⁰¹ John O'Keefe and Drew Dahl, "The Scheduling and Reliability of Bank Examinations: The Effects of FDICIA" (unpublished paper presented at the Financial Management Association conference, October 1995).

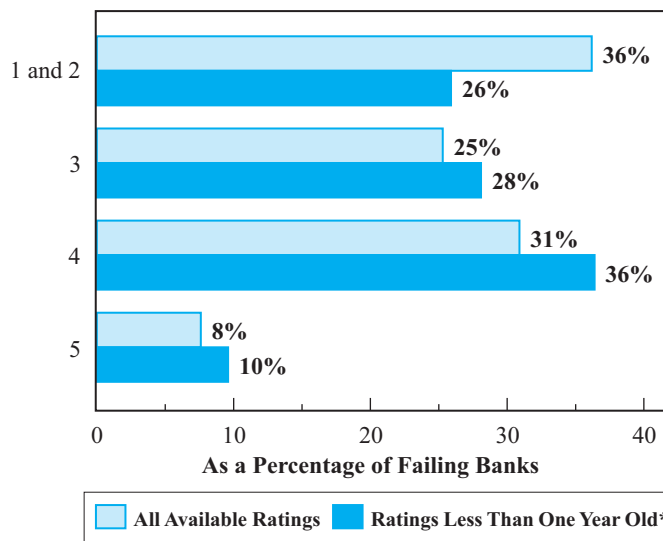
¹⁰² Rebel A. Cole and Jeffery W. Gunther, "A CAMEL Rating's Shelf Life," Federal Reserve Bank of Dallas *Financial Industry Studies* (December 1995). Cole and Gunther concluded that the information content of CAMEL ratings decays rapidly; examination ratings indicate bank survivability more accurately than off-site monitoring does for two quarters after examinations; for periods longer than two quarters, examinations are less accurate than off-site monitoring.

¹⁰³ O'Keefe, "The Texas Banking Crisis."

on nonperforming loans and loan charge-offs that banks report in Call Reports.¹⁰⁴ In other words, on-site examinations are needed to ensure the accuracy of bank financial reports. If examinations are less frequent, the accuracy of off-site monitoring systems using Call Report data suffers.

Effectiveness of CAMEL ratings. When examination ratings were up-to-date, they generally identified most of the banks that required increased supervisory attention well before the banks actually failed. As shown in figure 1.9, of the more than 1,600 banks that failed in 1980–94, 36 percent had CAMEL 1 and 2 ratings two years before failure; 25 percent had ratings of 3, 31 percent had ratings of 4, and 8 percent had ratings of 5. But these

Figure 1.9
Composite CAMEL Ratings Two Years before
Failure for Banks Failing between 1980 and 1994



* Ratings that were less than one year old as of the two-years-before-failure date; that is, ratings based on examinations dated between two and three years before failure.

¹⁰⁴ R. Alton Gilbert, "Implications of Annual Examinations for the Bank Insurance Fund," *Federal Reserve Bank of St. Louis Review* 75, no. 1 (January/February 1993); and Drew Dahl, Gerald A. Hanweck, and John O'Keefe, "The Influence of Auditors and Examiners on Accounting Discretion in the Banking Industry," unpublished paper presented at Academy of Financial Services conference (October 1995).

data refer to examination ratings *available* two years before failure, whereas some of the examinations had actually been conducted considerably more than two years before failure. Also included in these data are banks that failed for types of reasons that cannot be anticipated well in advance by safety-and-soundness examinations: cross-guarantee failures; failures due to fraud; and failures of affiliates of certain Texas holding companies that were essentially operating as branches of the parent institution, were tracked outside the CAMEL system, and were resolved through procedures that had much the same effect as cross-guarantees.¹⁰⁵ If we exclude examinations for these banks as well as examinations that are more than one year old,¹⁰⁶ the percentage of failed banks that had CAMEL 1 and 2 ratings two years before failure drops to 16 percent of the total number of failures (see table 1.11).¹⁰⁷ In other words, the proportion of failed banks that were not identified as requiring increased scrutiny two years before their failure was 16 percent.¹⁰⁸

Table 1.11
**Failing Banks with CAMEL Ratings of 1 or 2 Two Years before Failure,
1980–1994**

	Number	Percent of Total Failures
Total 1- and 2-rated future failures	565	35%
Specific types:		
Cross-guarantee cases	25	
Failures associated with fraud	24	
First City Bancorporation affiliates	36	
First RepublicBank Corporation affiliates	26	
CAMEL ratings more than one year old*	194	
Total of above	305	19
Remaining 1- and 2-rated future failures	260	16

* Failures of banks with ratings more than one year old (two years before failure) do not include cross-guarantee cases, failures associated with fraud, First City Bancorporation affiliates, or First RepublicBank Corporation affiliates.

¹⁰⁵ In the case of First RepublicBank Corporation, the FDIC's demand that affiliate banks honor their pledge to back the agency's assistance to the lead bank caused the affiliates to fail. In the case of First City Bancorporation, the FDIC provided assistance to the holding company and required that it be downstreamed to the affiliates. One may argue that examiners should consider what the condition of the lead bank implies for the condition of affiliated banks in the holding company. However, examiners could not have known two years in advance the nature of the resolution arrangements that would be adopted in these two cases and in post-FIRREA cross-guarantee cases and their effects on other banks in the company.

¹⁰⁶ Exclusion of banks with ratings that were more than one year old two years before failure means, in effect, that the data refer to examinations conducted between two and three years before failure.

¹⁰⁷ Banks with CAMEL 1 and 2 ratings are treated here as a separate category from banks with worse ratings. CAMEL 1- and 2-rated banks are defined as "basically sound in every respect" or "fundamentally sound, but may reflect modest weaknesses correctable in the normal course of business." Banks with a CAMEL 3 rating "give cause for supervisory concern and require more than normal supervision," while CAMEL 4 and 5 ratings are reserved for progressively weaker banks.

¹⁰⁸ For banks with assets of more than \$250 million, the proportion was 15 percent. This suggests that the effectiveness of CAMEL ratings in anticipating failures was about the same for large and small banks.

Over the course of the 1980–94 period, the record of CAMEL ratings in anticipating failures improved as the frequency of examinations increased and problems were apparently better identified. From the period 1980–86 to the period 1987–94, the proportion of failed banks that had CAMEL 1 and 2 ratings two years before failure declined from 28 to 12 percent. Similarly, the proportion of failed banks that had CAMEL 4 and 5 ratings two years before failure rose from 25 to 46 percent.¹⁰⁹

Limitations of examination ratings. Although CAMEL ratings were reasonably successful in identifying banks that required greater supervisory attention, they also had limitations. First, they did not necessarily capture the severity of the situation of the banks that subsequently failed. Second, they are based on the internal operations of the bank and therefore do not take into account local economic developments that may pose future problems and are not yet reflected in the bank's condition. Third, as noted above, they are generally a measure of the condition of the bank at the time it is examined. They do not systematically track risk factors that may produce future losses.¹¹⁰ Fourth, frequent use of on-site examinations imposes a burden on depository institutions. Examinations may seem particularly burdensome during good economic times, when the condition of most banks is healthy and examination ratings change relatively little. An average of 85 percent of all banks examined each year during the 1980–94 period experienced either no change or an improvement in ratings; only 15 percent, on average, experienced ratings downgrades. However, examination ratings changed considerably more often in particular regions of the country and during periods of regional recessions.

Most banks that are designated as troubled banks (rated CAMEL 4 and 5) do not fail. This may be regarded as a deficiency of CAMEL ratings. On the other hand, examination ratings trigger the supervisory responses that may prevent troubled banks from failing or may reduce failure costs when the banks have to be closed. From this perspective, when supervisory efforts to cure bank problems as revealed by examinations have been successful, the failure forecasts based on these examinations will necessarily prove to have been inaccurate. Either way, the large number of troubled banks that do not fail and the large number of banks whose ratings do not change through repeated examinations are unavoidable consequences of frequent use of on-site examinations. However, on-site examinations provide

¹⁰⁹ Data are the numbers of failed banks that had the indicated CAMEL ratings two years before failure in each year, weighted by the total number of failures in that year. The data are based on 260 banks after exclusion of examinations more than one year old, failures due to fraud, cross-guarantees, and the subsidiaries of two Texas bank holding companies (table 1.11).

¹¹⁰ A possible exception is the management rating, which encompasses technical competence, leadership qualities, adequacy of internal controls, and other factors that may determine the bank's ability to weather future adversity. However, examiners appear to be reluctant to rate management much below capital, asset quality, and other CAMEL components. In this regard, in only 6 percent of failed banks were the management ratings of two years before failure one full number worse than the average of other components.

information to the regulators that is otherwise unavailable,¹¹¹ and they also help ensure the accuracy of financial reports issued by the banks.¹¹² As a result, the burdens of frequent examinations must be borne if the condition of insured banks is to be monitored effectively. Recognizing these burdens, the FDIC has sought to reduce the time examiners spend in banks and is developing a program designed to allow individual loan files to be examined off-site.

Number, kinds, and effectiveness of enforcement actions. After troubled institutions were identified during the 1980–94 period, they were subject to supervisory and enforcement actions that appear to have been effective in reducing failures and losses to the insurance fund. This conclusion is based on evidence concerning the behavior of banks with respect to asset growth rates, dividend payouts, and equity infusions when the banks had been designated as problem institutions and been made subject to informal and formal enforcement actions.¹¹³

The FDIC used formal enforcement actions (for example, cease-and-desist orders) sparingly in the 1970s but more frequently in the early 1980s, as the number of troubled banks increased. Formal enforcement actions are legally enforceable in court, and noncompliance with such actions may lead to heavy fines. Most FDIC formal enforcement actions in the 1980s were issued against 4-rated banks, which are troubled but salvageable; most of the remainder were issued against 5-rated banks, which face a high probability of imminent or near-term failure. About one-half of all banks rated 4 and 5 by the FDIC in the 1980s were the subject of formal enforcement actions; many of the remaining banks received informal enforcement actions (for example, memoranda of understanding).¹¹⁴ Enforcement actions require banks to take corrective actions in various areas: compliance with regulations, improvement in operating procedures, the raising of new capital, the cutting of dividend payments, replacement of managers, and so forth.

That supervisory and enforcement actions were effective in reducing failures and losses to the insurance fund is suggested by the following:

- Of all banks that were rated 4 and 5 sometime during the 1980–94 period, 73 percent recovered, while 27 percent failed. As noted above, one-half of the FDIC-supervised problem

¹¹¹ The view that examinations yield unique information is largely based on the belief that banks specialize in evaluating and monitoring idiosyncratic borrowers who do not have practical access to the capital markets. This view suggests that the best way to secure the private information banks have gathered about borrowers is by examining individual loan files.

¹¹² See Drew Dahl, Gerald A. Hanweck, and John O’Keefe, “The Influence of Auditors and Examiners on Accounting Discretion in the Banking Industry,” and Gilbert, “Implications of Annual Examinations.”

¹¹³ Data on enforcement actions are available for FDIC- and Federal Reserve-supervised banks only.

¹¹⁴ In a sample of 307 FDIC-supervised problem banks there were 209 with formal actions, 83 with informal actions only, and merely 15 with neither formal nor informal actions.

banks were the subject of formal enforcement actions, and many others received informal actions.

- For all insured banks rated 4 and 5, in the three years before failure or recovery their asset growth and dividend payout rates declined (see table 1.12).¹¹⁵ (Recovery was defined as either a CAMEL rating upgrade to 1, 2, or 3 or merger without FDIC financial assistance.) Capital injections generally increased over the three years before recovery for the banks that recovered, and from the third to the second year before failure for the banks that failed.

Table 1.12
Asset Growth Rates, Dividend Payments, and Capital Injections,
All Banks with CAMEL Ratings of 4 and 5, 1980–1994

Years before Failure, Recovery, or Merger	Failed Banks			Surviving Banks			Total Banks (Failed and Surviving)		
	1980–85	Years of Failure 1986–91	1992–94	1980–85	Years of Recovery* or Merger 1986–91	1992–94	1980–85	Years of Failure, Recovery,* or Merger 1986–91	1992–94
Asset Growth Rate (Percent)									
3	14.60	15.65	18.77	10.39	13.38	4.42	11.91	14.09	5.93
2	10.72	1.71	–3.53	3.67	1.25	–0.61	6.21	1.40	–0.92
1	0.91	–10.17	–13.39	1.96	0.96	–0.64	1.58	–2.51	–1.98
Dividends to Average Assets (Percent)									
3	0.34	0.42	0.09	0.20	0.21	0.13	0.25	0.21	0.13
2	0.32	0.52	0.06	0.16	0.14	0.09	0.22	0.15	0.09
1	0.16	0.39	0.02	0.13	0.13	0.08	0.14	0.11	0.07
Capital Injections to Average Assets (Percent)									
3	0.18	0.42	0.45	0.19	0.46	0.42	0.19	0.45	0.42
2	0.22	0.52	0.54	0.39	0.56	0.42	0.33	0.55	0.43
1	0.65	0.39	0.40	0.44	0.45	0.49	0.51	0.43	0.48

Note: Data are unweighted averages of individual bank percentages.

*Recovery is either the date of a bank's unassisted merger, or if the bank survived as an independent institution, the date it received a CAMEL rating of 1, 2, or 3.

¹¹⁵ For dividends, similar results are produced whether dividends are expressed as a percentage of net income or as a percentage of assets. Capital injections include stock transactions, capital contributed through merger, and capital transactions with parent holding companies.

- The data in table 1.12 suggest that in the later years of the banking crisis, supervisory efforts to reduce risk taking and insurance losses became increasingly aggressive. During 1992–94, for both failed banks and survivors, the levels to which asset growth rates and dividend payouts dropped in the final year before failure or recovery were considerably lower than had been the case during the 1980–85 period.¹¹⁶

Table 1.12 and the preceding pages summarize an analysis of the behavior of problem banks in relation to the dates of their failure or recovery. Problem-bank behavior was also analyzed in relation to the dates of regulatory intervention. For purposes of this second analysis, the dates of regulatory intervention were taken to be the dates of on-site examinations that led to either formal enforcement actions or downgrades in CAMEL ratings without such actions.¹¹⁷ The purpose was to test more directly the effects of formal and informal enforcement actions on problem-bank behavior. (As noted before, most problem banks that did not receive formal enforcement actions received informal ones.) As shown in figure 1.10, at FDIC- and Federal Reserve-supervised banks with CAMEL ratings of 4, median quarterly asset growth rates declined before the date of regulatory intervention and generally remained negative in the four quarters immediately following the intervention.¹¹⁸ This was true both for banks that were downgraded to a CAMEL 4 rating and had no formal enforcement action taken against them and for 4-rated banks that eventually did receive formal actions. Growth rates of banks with formal enforcement actions showed greater changes, on average, from before intervention to after intervention than growth rates of banks without such actions.¹¹⁹ Similar results were produced by other measures of bank be-

¹¹⁶ R. Alton Gilbert found that undercapitalized banks during the 1985–89 period generally did not grow rapidly, pay dividends, or make loans to insiders. See his “Supervision of Under-Capitalized Banks: Is There a Case for Change,” *Federal Reserve Bank of St. Louis Review* 74, no. 4 (1992): 3–20.

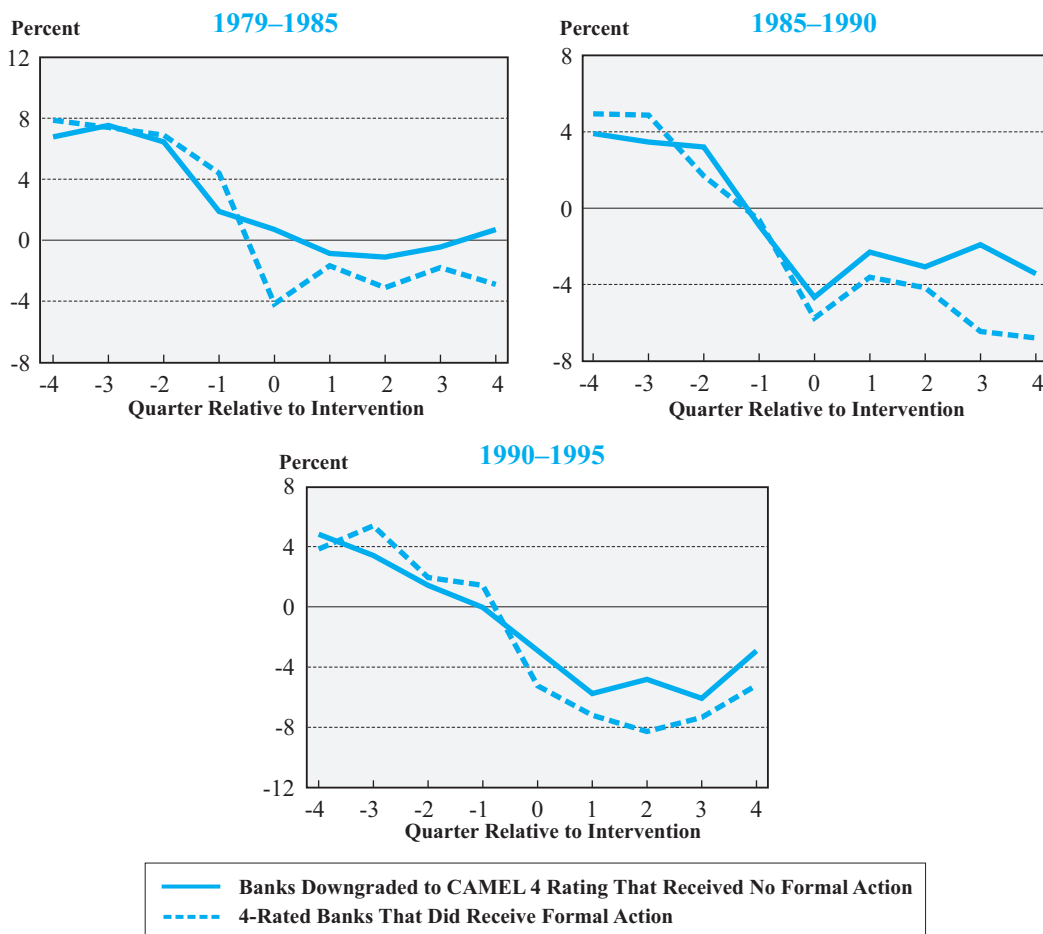
¹¹⁷ Enforcement data in this analysis are based on 2,398 formal actions issued by the FDIC and 362 by the Federal Reserve. Comparable data are not available for the OCC. Intervention dates are (1) the date of the examination that resulted in a downgrading of the bank to a CAMEL 3, 4, or 5 rating for the first time without a formal enforcement action or (2) the date of the last examination before the issuance of a formal enforcement action for banks receiving such actions. At the end of the examination the bank would normally be informed of conditions that were likely to result in such downgrades or of the likelihood of formal enforcement actions. Actual issuance of the formal enforcement actions would not take place until six to nine months after the examination. For FDIC-supervised banks, the median interval between the date of formal enforcement actions and the last examination before such actions was 261 days for 4-rated banks and 176 days for 5-rated banks.

¹¹⁸ It is not clear that the remedial actions taken by management before regulatory intervention were purely voluntary and would have been undertaken even if such intervention had not been expected. See also George E. French, “Early Action for Troubled Banks,” *FDIC Banking Review* 4, no. 2 (1991): 1–12.

¹¹⁹ Similar patterns in growth rates were found for banks with CAMEL 5 ratings. For banks with CAMEL ratings of 3 that were subject to formal enforcement actions, however, growth rates were highly variable, perhaps because for these banks the number of such actions was relatively small.

Figure 1.10

Median Asset Growth Rates of CAMEL 4-Rated Banks before and after Regulatory Intervention (Annualized)



Note: Data are median asset growth rates of FDIC- and Federal Reserve-supervised banks before and after regulatory intervention. For this analysis, the intervention dates were dates of:

- (1) examinations that resulted in the downgrading of the bank's CAMEL rating to 4 but did not result in a formal enforcement action, or
- (2) the last examination before the issuance of a formal enforcement action against a bank with a CAMEL 4 rating.

Normally, a bank is informed at the time of the examination of the prospect of a CAMEL rating downgrade or a formal enforcement action. Data were run on a constant population sample for each period. The number of observations ranged from 200 to almost 500 for the different periods for banks downgraded to CAMEL 4 rating that did not receive formal enforcement actions, and from 200 to 300 for 4-rated banks that did receive formal enforcement actions.

havior (see figure 1.11). Dividend rate reductions and increases in external capital injections began before regulatory intervention and generally continued in the first year after intervention, and banks that became the subject of formal enforcement actions showed the greatest dividend cuts and capital injections.¹²⁰ Comparable behavior was also exhibited by loan-loss provisions (not shown in figure 1.11).

The foregoing analysis indicates that bank managements took remedial actions even before the examinations that triggered reductions in CAMEL ratings or led to formal enforcement actions. Whether these remedial actions were driven by market forces, by management's own objectives, or by expectations of future regulatory action cannot be readily ascertained. In any event, regulatory intervention apparently had the effect of reinforcing and accelerating these remedial actions. Changes in the behavior of problem banks were greater for banks that later received formal enforcement actions as compared with banks subject only to informal actions. However, it is not clear whether these differences in behavioral change were due primarily to the more demanding nature of formal actions or to the condition and behavior of the banks that received them. Formal actions are frequently taken when banks fail to comply with informal ones. Such failure may be due to the existence of more severe problems at the banks receiving formal actions or to less willingness on the part of their management to cure them.¹²¹

In general, the reduction in asset growth was an indication that moral hazard was being contained—that troubled banks were not attempting, or were not being allowed, to “grow out of their problems”; indeed, in many cases their assets were shrinking. In the case of the surviving banks, reduced dividend payouts and increased capital injections helped restore equity positions and were instrumental in facilitating recovery. In the case of the failing banks, dividend cuts and new capital had the direct effect of reducing failure costs.¹²² These favorable results, no matter what the immediate stimulus, were consistent with the regulators' objectives of preventing the failure of troubled banks and reducing the insurance costs of banks that did fail.

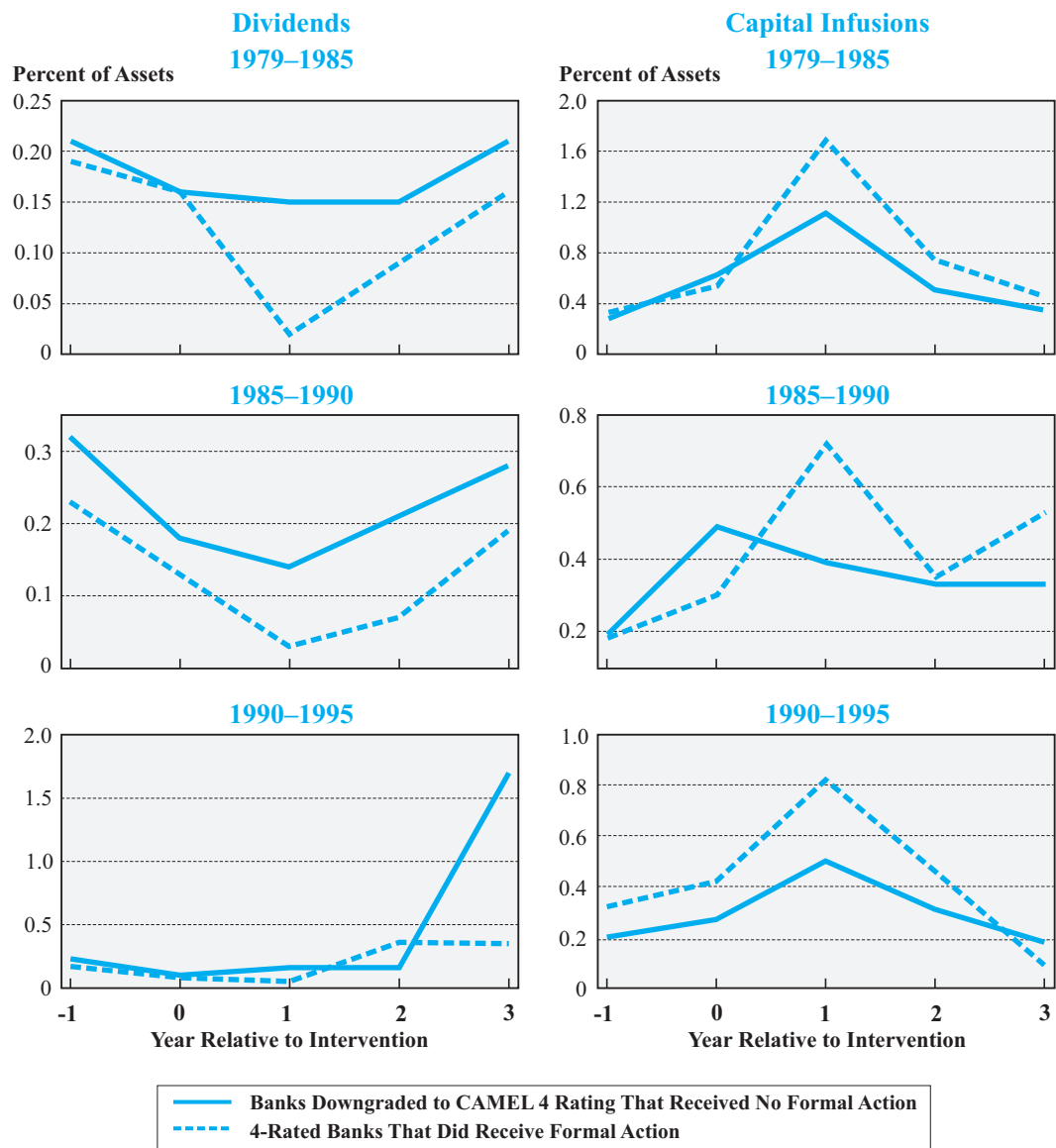
The policy of encouraging or forcing problem banks to retrench and shrink has been criticized by some observers for inhibiting the banks' recovery and, in the context of the 1990s, for contributing to the “credit crunch.” For example, it is sometimes argued that restrictions on asset growth may have deprived problem banks of attractive investment op-

¹²⁰ Data for capital injections are annual in figure 1.11 because small banks do not report capital injections quarterly. The analysis was confined to 4-rated banks in order to have large samples of banks with similar conditions.

¹²¹ As noted in Chapter 12, 71 percent of problem banks that failed had received formal enforcement actions, compared with 41 percent of problem banks that survived. This is consistent with the view that formal actions were taken against the most unhealthy banks.

¹²² Although dividend payout ratios declined for troubled banks, a significant number of undercapitalized banks did pay dividends. See David K. Horne, “Bank Dividend Patterns,” *FDIC Banking Review* 4, no. 2 (1991): 13–24.

Figure 1.11
**Dividend Rates and Capital Infusions of CAMEL 4-Rated Banks
 before and after Regulatory Intervention**



Note: Data are averages of individual bank ratios. See note to figure 1.10.

portunities and required them to sell high-quality assets they already owned.¹²³ Similarly, it is sometimes argued that cuts in dividends may have retarded the growth of external capital infusions. It should be remembered, however, that the range of choices available to regulators in dealing with problem banks was limited and permeated by uncertainty. Many problem banks had exhibited a tendency toward excessive risk taking and/or managerial and other weaknesses. A more relaxed supervisory posture might have resulted in the resumption of risk taking and an increase in losses when an institution failed. Continued dividend payments would also have increased insurance losses if failure occurred. It is not surprising that bank regulators generally chose the surer course of reducing risk-taking opportunities and insurance losses by seeking the retrenchment and shrinkage of problem banks.

Effectiveness of Supervisory Tools: Off-Site Surveillance

Off-site monitoring based on financial reports submitted by banks evolved during the 1980s in response to earlier developments in computer technology and to fundamental changes in the OCC's examination policies after two large national banks failed in the 1970s.¹²⁴ The evolution of off-site monitoring appeared to justify reductions in examination staffing and frequency. As the number of failures mounted during the 1980s, however, it became clear that off-site monitoring was not a substitute for, but potentially a useful complement to, on-site examinations. Compared with on-site examinations, off-site monitoring systems have a number of advantages: they are less intrusive and costly, they can be updated frequently when new information is received through quarterly Call Reports, they can provide the basis for a financial evaluation of the bank between examinations, and they are potentially able to isolate risk factors that may lead to future problems, whereas examinations are essentially a measure of the bank's current condition. Furthermore, Call Report data on which off-site monitoring systems are based are largely available to the public and can be used by investors and others as the basis for imposing market discipline on the banks. By identifying those banks that appear to have deteriorated since their last examinations, the systems can help regulators allocate examiner resources.

The disadvantages of off-site monitoring systems are that they provide no direct evaluation of management, of individual loan characteristics, of underwriting practices, or of internal controls and procedures. Moreover, the accuracy of the financial reports on which they are based, particularly the quality of loan portfolios, is dependent on periodic on-site examinations.

Off-site surveillance systems, despite their distinct advantages, did not play a very helpful role in the 1980s. On the contrary, belief in their usefulness and their potential

¹²³ See comments by Joe Peek in volume 2 of this study.

¹²⁴ This section is based on Chapter 13, "Off-Site Surveillance Systems." See also Jesse Stiller, *OCC Bank Examination: A Historical Overview*, (1995).

helped reinforce the idea that fewer on-site examinations were necessary. In addition, with the large number of failed and troubled banks already straining supervisory resources, targeting banks for additional examinations was not a high priority (staff limitations meant that resources were unavailable to examine any additional banks targeted by off-site systems). Off-site systems appear to have worked best when the number of problem institutions and failures was not large and when examination resources were sufficient for identified banks to be examined.

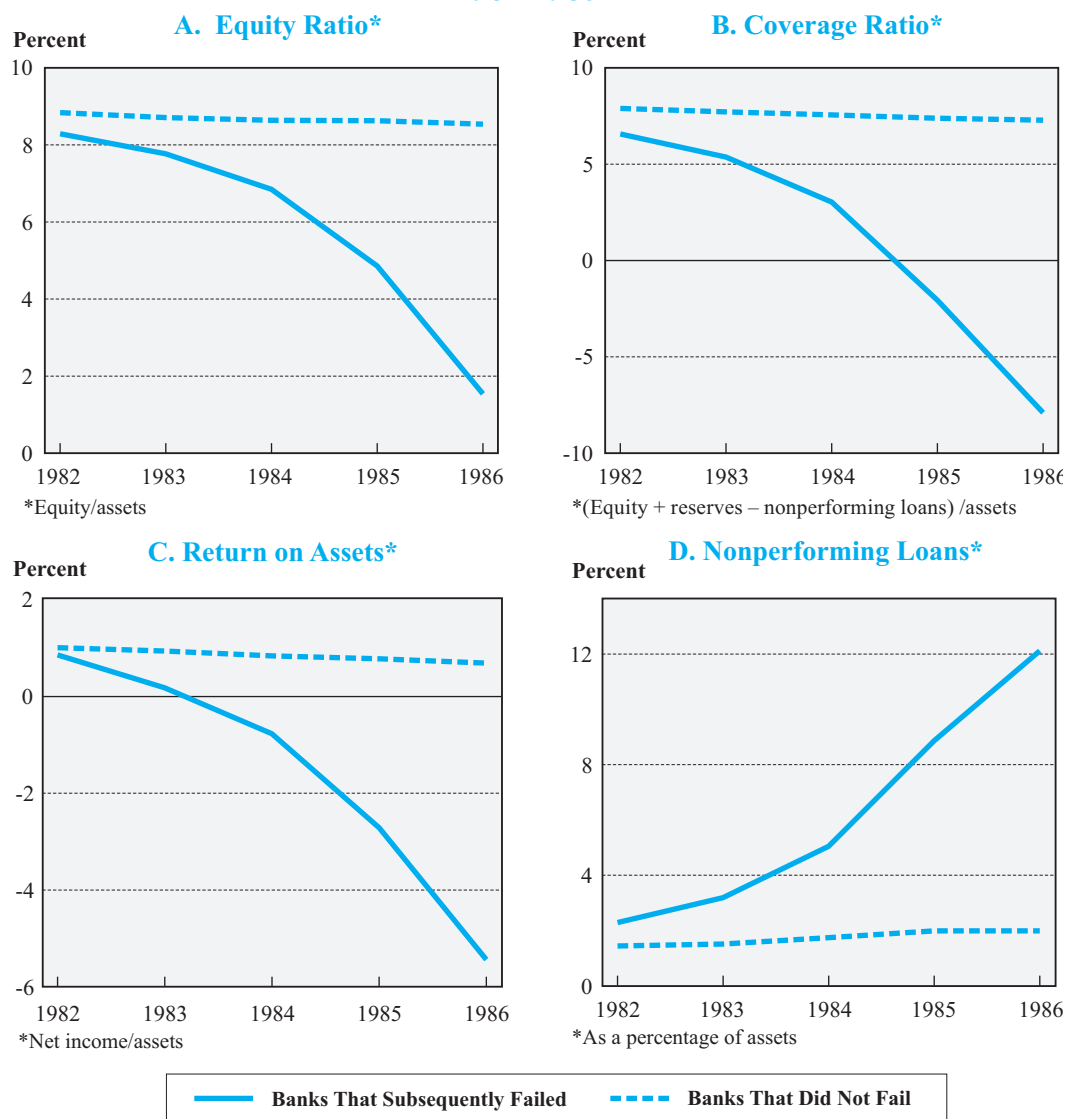
Condition and risk factors. Call Report data can be used to provide an indication of the condition of a bank and the level of risk it has undertaken. In this context, condition variables are indicators of the current strength or weakness of a bank. A bank in a weak condition would typically have low capital and net-income ratios and high nonperforming-loan ratios. Such a bank would face insolvency and failure in the near term. Risk factors, on the other hand, are indicators of a longer-term problem. A bank may be pursuing risky policies but still be in a currently healthy condition, with strong earnings and capital. In time, however, the risky policies could result in loan losses, reduced income, deterioration in capital, and eventual failure. (The distinction between condition and risk in this context is essentially the same as the distinction between ex post and ex ante risk measures discussed above.)

The possibilities of isolating condition and risk factors by analyzing banks' financial data are illustrated in figures 1.12 and 1.13. Figure 1.12 shows various measures of the current condition of banks—ratios to assets of equity, of equity plus reserves minus nonperforming loans (coverage), of net income, and of nonperforming loans—as of 1982 for banks that failed four to five years later (in 1986–87) and for banks that existed throughout the period and never failed. On the basis solely of these condition variables, there was little as of 1982 to distinguish banks that subsequently failed from those that did not.¹²⁵ Although the condition ratios for the future failures were slightly below those for the future survivors, they were nonetheless at levels that would normally be considered healthy; for example, in 1982 the average equity/assets ratio of banks that failed in 1986–87 was over 8 percent. As the banks that failed approached their dates of failure, their condition ratios deteriorated markedly compared with those of the nonfailures.

Comparisons of long-run risk factors show a considerably different picture (figure 1.13). In 1982 and throughout the subsequent four to five years, the risk profile of banks

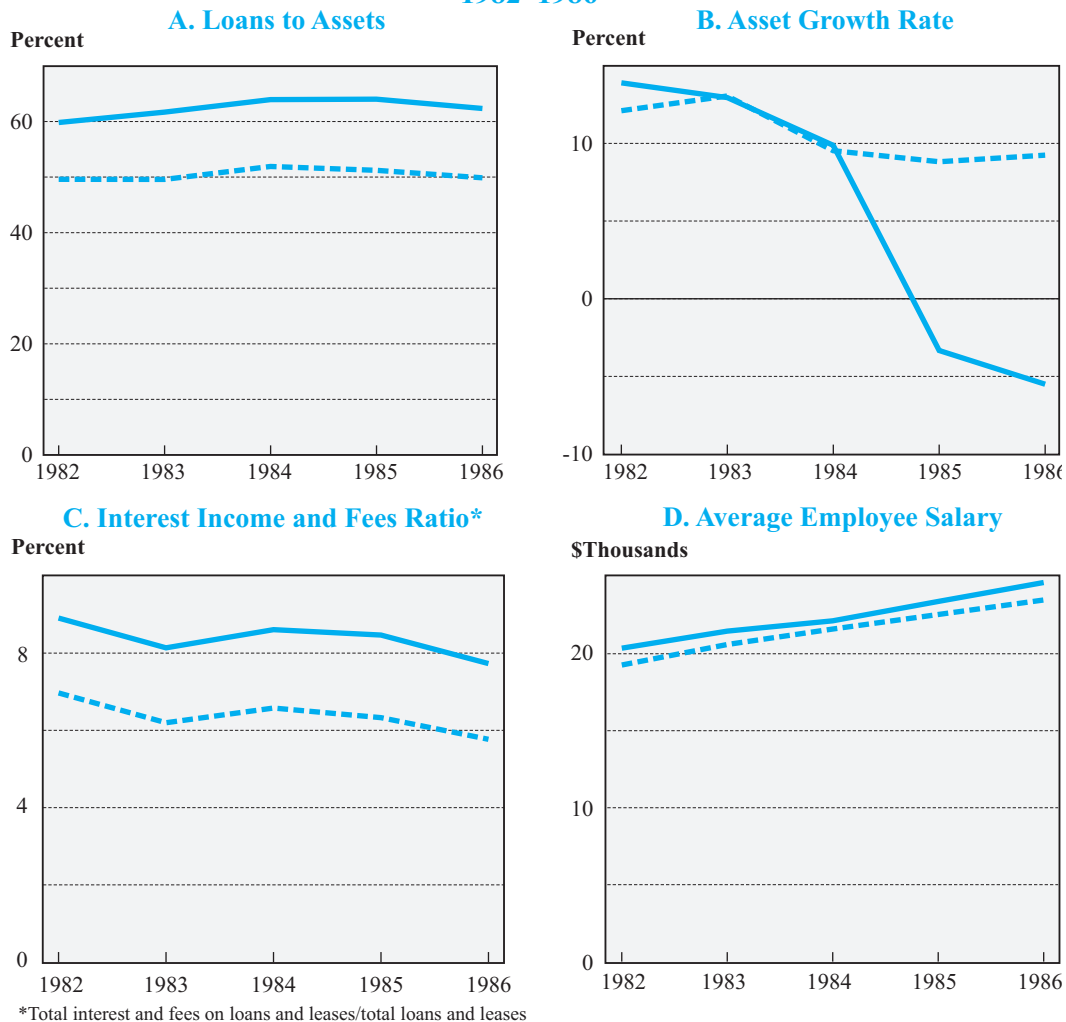
¹²⁵ The data in figures 1.12 and 1.13 include, for 1982, all banks that existed in 1982 and failed in 1986–87 and all banks that existed throughout the 1982–87 period and did not fail after 1987. Certain failures are excluded: those due primarily to fraud, cross-guarantee failures subsequent to FIRREA, and bank affiliates of two Texas bank holding companies with CAMEL ratings of 1 and 2 that were essentially branches of the lead bank and were resolved through transactions whose effects were similar to cross-guarantees.

Figure 1.12
Bank Condition Ratios for Failed and Nonfailed Banks
1982–1986



Note: “Failed” means banks that existed in 1982 and failed in 1986 or 1987; “nonfailed” means banks that existed during the entire period and never failed.

Figure 1.13
Bank Risk Ratios for Failed and Nonfailed Banks
1982–1986



— **Banks That Subsequently Failed**
 - - - **Banks That Did Not Fail**

Note: “Failed” means banks that existed in 1982 and failed in 1986 or 1987; “nonfailed” means banks that existed during the entire period and never failed.

that failed in 1986–87 was distinctly higher than that of banks that did not fail. Banks that would fail had substantially higher loans-to-assets ratios than survivors did. They also had substantially higher ratios of interest and fee income on their loan and lease portfolios, which suggests that their loans were riskier. Finally, banks that subsequently failed had higher growth rates in 1982 than the banks that did not fail, but as the banks approached failure these growth rates were sharply cut back in a manner consistent with the findings cited above on FDIC enforcement actions.

Many prediction models constructed for the purpose of predicting bank failures use measures of current condition (or ex post risk) as independent variables. Thus, the accuracy of failure predictions falls off considerably for predictions of failures more than one year ahead. As part of the research for this book, an attempt was made to use ex ante risk measurements to identify groups of banks that had a high *long-term* risk of failure. For this purpose, nine risk ratios were tested: loans to assets, deposits over \$100,000 to liabilities, ROA, asset growth rate, loan growth rate, operating expenses to total expenses, salary expenses per employee, interest yield on loans and leases, interest and fee income on loans and leases. The banks were divided into quintiles according to these ratios. The periods of analysis were four and five years from 1980, 1982, 1984, 1986, and 1988. In each period the risk ratio with the strongest statistical relationship to failures turned out to be the ratio of loans to assets.¹²⁶ For example, 8.20 percent of the banks that were in the highest loans-to-assets ratio quintile in 1984 failed in 1988–89, compared with 2.89 percent of all banks in the sample, for an increase of 184 percent in the incidence of failure (see table 1.13).¹²⁷

The same statistical procedure was applied to the “low-risk” group (the lowest four quintiles) as measured by the loans-to-assets ratio, and different risk factors proved to be the best predictors of failure in four to five years (see table 1.14). ROA was the best predictor of failure for the “low-risk” group in 1984; of the “low-risk” loans-to-assets group in 1984, 3.96 percent of the banks in the highest-risk ROA quintile failed in 1988–89.

A number of observations are in order. First, the risk factors do not predict which individual banks will fail; rather, they identify a group of banks with the highest incidence of failure. Second, the risk group encompassing the highest loans-to-assets ratio quintile plus

¹²⁶ Logit regressions were performed on each of the risk variables where the dependent variable was whether the bank failed or not. The risk variable with the highest predictive power for failure was determined by a Chi-Square test score for each regression. The coefficients for each quintile of the variable were then compared, and a Chi-Square test was performed to determine which quintile or group of quintiles was the best predictor of failure. The analysis was then repeated on the high- and low-risk quintiles to determine which was the next-best predictor of failure in both groups. See Chapter 13, “Off-Site Surveillance Systems.”

¹²⁷ In an initial inquiry, the ratio of large deposits to total liabilities was found to be the best predictor of failures in 1984 and 1986. However, this ratio was found to be essentially a proxy for location in Texas, where large-scale use of large deposits occurred in part because of restrictions on branching. Once the large-deposit ratio was excluded, the loans-to-assets ratio was the best predictor of failure in all years.

the high-risk ROA group in the remainder of the banks in 1984 accounted for 76 percent of all failures in the entire sample.¹²⁸ Third, to capture 76 percent of the total number of failures in 1988–89, the two risk groups “flagged” a large proportion (34 percent) of the total

Table 1.13
Probability of Failure
Banks in the Highest Loans-to-Assets Quintile

Beginning Year	All Sample Banks		Highest Loans-to-Assets Quintile			Increase in Probability of Failure
	Probability of Failure	Number of Failures	Probability of Failure	Number of Failures	Percent of Total Failures	
1980	1.51%	184	3.62%	88	47.8%	140%
1982	2.45	291	6.75	160	55.0	175
1984	2.89	332	8.20	188	56.6	184
1986	2.25	253	6.46	145	57.3	187
1988	1.24	133	3.36	72	54.1	171

Table 1.14
Probability of Failure for “Low-Risk” Banks
(Banks Not in the Highest Loans-to-Assets Quintile)

Beginning Year	Highest-Risk Indicator for “Low-Risk” Group	Failures in Highest-Risk Group of “Low-Risk” Banks		
		Probability of Failure*	Number of Failures	Percent of Total Failures in “Low-Risk” Group†
1980	Loan Growth	2.32%	40	41.7%
1982	Interest Yield	3.76	53	40.4
1984	ROA	3.96	65	45.1
1986	ROA	3.74	62	57.4
1988	ROA	2.12	35	57.4

* This is the probability of failure in the 80 percent of banks that are not in the high-risk loans-to-assets quintile.

† Excludes failures in the high-risk loans-to-assets quintile.

¹²⁸ The 76 percent was derived as follows: 188 failures in the high-risk loans-to-assets ratio quintile plus 65 failures in the high-risk ROA group in the four “low-risk” loans-to-assets quintiles, for a total of 253, or 76 percent of all the 332 failures in the sample. See Chapter 13, table 13-A.3.

number of banks in the sample.¹²⁹ Fourth, most banks in the high-risk groups did not fail. For example, nearly 92 percent of the banks in the high-risk loans-to-assets ratio quintile in 1984 did not fail four to five years later, in 1988–89.

These findings suggest that failing banks shared a common characteristic: they followed a relatively high-risk strategy, as indicated particularly by the ratio of loans to assets, and could be identified well in advance of their failure dates. The findings also indicate that many other banks had similar risk characteristics but were able to avoid failure. As indicated above, the success or failure of banks depends on many factors, so predicting failures far in advance on the basis of the institutions' risk characteristics is difficult.

Specific off-site surveillance systems. The original off-site surveillance systems used in the 1970s were a collection of commonly used financial ratios. The OCC's system eventually evolved into the Uniform Bank Surveillance System, whose best-known product is the Uniform Bank Performance Report (UBPR). The UBPR is a bank-specific report that allows an analyst to compare the financial characteristics of an individual bank with the characteristics of comparable (peer) banks. The Federal Reserve and the FDIC developed similar systems. In 1985 the FDIC developed the CAEL system (Capital, Assets, Earnings, Liquidity—Management is not modeled). This was designed to replicate the examination rating that an "expert examiner" would give an institution solely on the basis of Call Report data. Banks were flagged for attention if their CAMEL rating was 2 or worse and their CAEL rating was more than one rating worse than their current CAMEL rating.¹³⁰

The CAEL system was adopted in the mid-1980s and has been used to help achieve and maintain efficient allocation of supervisory resources, primarily by detecting at an early date banks that appear to have a high probability of receiving a CAMEL downgrade at their next on-site examination. CAEL uses 19 financial ratios by which a bank is matched against its peer group. From 1987 to 1994, the CAEL system was reasonably correct in its predictions; approximately one-half of all CAMEL downgrades predicted by the system actually occurred within six months. The CAEL system identified approximately 25 percent of total rating downgrades in the relevant group (banks downgraded from CAMEL 2 or worse). By design, CAEL misses a large number of actual downgrades in order to avoid targeting many banks that are in fact in a stable condition. This appears to be appropriate in a regime of frequent on-site examinations, for banks whose conditions have deteriorated since their last examinations but that were not identified by the CAEL system will in any event be examined without too much delay.

¹²⁹ The 34 percent figure refers to the highest loans-to-assets quintile plus the highest ROA group of the "low-risk" loans-to-assets quintiles, or 3,935 (2,292 + 1,643) banks. This was 34 percent of the 11,479 banks in the sample. See Chapter 13, table 13-A.3.

¹³⁰ The various systems of off-site surveillance are treated in detail in Chapter 13.

In the mid-1980s the FDIC also developed the Growth Monitoring System (GMS). Banks flagged by GMS as rapid-growth institutions are identified for off-site review and may receive increased supervisory attention. The system is based on the levels and quarterly trends of five summary measures: asset growth rate, growth rate of loans and leases, and ratios to assets of equity capital, volatile liabilities, and loans and leases plus securities with maturities of five years or more. The system's premise is that rapid growth in total assets or loans represents a risky activity. Through the 1980s banks that generated high growth scores in the model had a higher-than-average incidence of failure up to four years later.

In the years since the CAEL and GMS systems were developed, there has been a substantial body of economic research related to modeling bank failures and financial distress. The Federal Reserve has based its off-site surveillance methods on statistical modeling techniques, beginning with the Financial Institutions Monitoring System (FIMS), which was adopted in 1993 and predicted CAEL-like ratings and bank failures. As of mid-1997 the FDIC was considering substantial modifications in GMS and adoption of a statistical model for predicting CAMEL rating downgrades for banks and thrifts.

Open Questions

Many of the weaknesses revealed in bank statutes, regulations, and supervisory practices in the 1980s were subsequently addressed and corrected. However, some issues remain open—two in particular: the potential impact of resolving large-bank failures in accordance with FDICIA, and the adequacy of present systems of identifying and pricing risk.

Treatment of Large Banks: Systemic Risk and Market Discipline

FDICIA shifted the balance between stability and market discipline toward market discipline. It accomplished this by requiring that the methods used to resolve bank failures produce the least cost to the FDIC and by prohibiting the protection of uninsured deposits when such action would increase the cost to the insurance fund. Under the pre-FDICIA cost test, either the FDIC could choose to sell the failed bank if the estimated resolution cost was less than that of a deposit payoff or the FDIC could provide open-bank assistance, regardless of cost considerations, if the bank's services were determined to be "essential" to the community. Failures of big banks were generally resolved in ways that protected all deposits against loss because of fears of depositor runs on other banks, systemwide crises through correspondent accounts, or disruption of the payments system.

FDICIA also limits the ability of the Federal Reserve to provide liquidity to problem banks (defined in terms of capital position) through its discount window. For critically undercapitalized banks, repayment must be demanded within no more than 5 days, and if that limit is violated, the Federal Reserve is liable to the FDIC for any additional cost. In the

case of undercapitalized banks, Federal Reserve advances can remain outstanding for no more than 60 days in any 120-day period.¹³¹

FDICIA increases the likelihood that large banks will be resolved with losses to uninsured depositors and reduces the likelihood that open-bank assistance will be used to deal with large troubled banks. An exception to the least-cost test is allowed in cases of systemic risk: two-thirds of the FDIC Board and two-thirds of the Federal Reserve Board would have to recommend that an exception be made, with the final decision in the hands of the secretary of the treasury in consultation with the president. Any loss incurred by the FDIC as a result of using the systemic-risk exception would have to be made up by a special assessment on all institutions insured by the same fund. These provisions were designed to discourage use of the exception and to increase accountability.

The 1980–94 experience provides only limited guidance as to how the rules prescribed by FDICIA will affect future large-bank resolutions. On the one hand, there are the well-known troubles of Continental Illinois, which in 1984 sustained enormous withdrawals of foreign deposits through high-speed electronic transfers. At the time there was concern that if uninsured deposits were not protected, Continental’s correspondent banks would sustain serious losses, possibly with “ripple” effects on other major banks that were perceived to be vulnerable. Action by the regulators in assisting Continental Illinois forestalled the possibility of such effects on other major banks.

On the other hand, in numerous cases the FDIC resolved banks through methods that left uninsured depositors unprotected yet had no serious repercussions.¹³² These were generally smaller banks that did not pose problems of systemic risk.¹³³ Another instance was the modified payoff method used to resolve 13 banks in 1983–84, a method that caused uninsured depositors to suffer losses: at closure uninsured depositors were paid a portion of their money based on the value of the bank’s assets that it was estimated would be recovered in liquidation. At the time of these resolutions there were no flights of deposits from other institutions. Similarly, in the period since FDICIA, resolutions with losses to uninsured depositors have not produced large-scale withdrawals at other institutions. From 1992

¹³¹ A decision by the FDIC to act in the Federal Reserve’s stead by providing open-bank assistance might have rendered this provision less substantial. However, this avenue was essentially closed by the Resolution Trust Corporation Completion Act of 1993, which effectively prohibited—unless the systemic-risk exception had been invoked—the use of BIF or SAIF funds to benefit the shareholders of insured depository institutions, a likely outcome of FDIC open-bank assistance.

¹³² From 1986 through 1991, 199 banks (representing 19 percent of all bank failures) were resolved through means that did not protect uninsured depositors. Average assets of these banks amounted to \$57 million. See FDIC, *Failed Bank Cost Analysis, 1986–1995*.

¹³³ A possible exception was Penn Square Bank, which was closed through a deposit payoff in 1982. Because of Penn Square, “Some banks had difficulty rolling over large CDs. The business of brokers, who divide up large deposits and participate them to several banks, was significantly boosted. Depositors generally became more selective in their choice of banks” (FDIC, *The First Fifty Years*, 98).

to 1995, uninsured depositors were unprotected in 63 percent of all failures, compared with 19 percent in 1986–91. The experience since the adoption of FDICIA is, of course, hardly a rigorous test. In this period bank profits have increased to record levels, failures have slowed to a trickle, and no major bank has been threatened.

Some studies, published mostly in the post-FDICIA period, present evidence suggesting that investors recognize the risk of loss on uninsured deposits and that the market responds appropriately to new information about risk in banking firms. For example, one study found that when banks' subordinated debt claims were downgraded by Moody's rating service, the stock prices of banks with larger proportions of insured deposits declined less, and downgraded banks then increased their reliance on insured deposits.¹³⁴ Another study found that stock prices reacted negatively after a downgrade in a bank's CAMEL rating, and suggested that such information may be transmitted to the market through the bank's Call Reports.¹³⁵ A study of subordinated debt concluded that yields on such instruments rationally reflected changes in the government's policy toward protecting large bank holding company creditors.¹³⁶ Still another concluded that bond rating agencies convey new information to the market and thereby enhance market discipline, since banks that experience downgrades suffer negative stock returns.¹³⁷

Studies have also been done to compare the accuracy of "inside" information developed through on-site examinations with that of "outside" information available to market participants. For example, one study of problem banks concluded that stock returns had failed to anticipate downgrades in CAMEL ratings; neither the market nor the banks' managements seemed to have been aware of the banks' problems before the examinations took place.¹³⁸ Another study concluded that both regulators and market participants price credit risk, but only regulators price capital strength; the results seem to reflect, on the one hand, the supervisors' concern with preventing bank failures and protecting the deposit insurance fund and, on the other hand, the market's emphasis on risk/return trade-offs.¹³⁹ But a third study concluded that CAMEL ratings are primarily proxies for available market informa-

¹³⁴ Matthew T. Billet, Jon A. Garfinkel, and Edward S. O'Neill, "Insured Deposits, Market Discipline, and the Price of Risk in Banking," unpublished paper (November 28, 1995).

¹³⁵ Allen N. Berger and Sally M. Davies, "The Information Content of Bank Examinations," working paper 94-24, Wharton Financial Institutions Center, 1994.

¹³⁶ Mark J. Flannery and Sorin M. Sorescu, "Evidence of Bank Market Discipline in Subordinated Debenture Yields: 1983–1991," *Journal of Finance* 51, no. 4 (September 1996): 1347–77.

¹³⁷ Robert Schweitzer, Samuel H. Szewczyk, and Raj Varma, "Bond Rating Agencies and Their Role in Bank Market Discipline," *Journal of Financial Services Research* 6 (1992): 249–63.

¹³⁸ Katerina Simons and Stephen Cross, "Do Capital Markets Predict Problems in Large Commercial Banks?" Federal Reserve Bank of Boston *New England Economic Review* (May/June 1991): 51–56.

¹³⁹ John R. Hall, Andrew P. Meyer, and Mark D. Vaughan, "Do Markets and Regulators View Bank Risk Similarly?" Federal Reserve Bank of St. Louis, supervisory policy analysis working paper no. 1-97, February 1997.

tion about the condition of banks; the additional informational content of CAMEL ratings did not appear large.¹⁴⁰

These studies often address the issue of whether, in monitoring large, publicly traded banks, market discipline and supervision are interchangeable. However, their results also have a bearing on the issue of the future treatment of large problem banks. If it appears that the market exercises appropriate discipline and readily obtains relevant information, then there are grounds for optimism that, in the future, major surprises at large banks may be avoided because weaknesses will become public knowledge at an early stage, the market will have sufficient information to make realistic assessments of bank risk, and investors will be able to distinguish accurately between viable and nonviable banks. Under these conditions, the likelihood that contagious runs will cause systemic problems would be reduced. There would be fewer grounds for optimism if it appeared that the market had inadequate or obsolete information (as compared, for example, with information produced by examinations) about a bank's condition.

With respect to contagious runs, the evidence is not clear; some failures apparently have not affected other banks, whereas others seemingly have.¹⁴¹ Testing for contagious runs on large banks is obviously problematic: federal deposit insurance and the practice of protecting uninsured depositors of large banks eliminated the possibility of such runs during the 1980s, and an environment highly favorable to banking has minimized their likelihood in the 1990s. Experience from the pre-FDIC era or from countries that have no formal deposit insurance system is not always consistent or clearly applicable to present-day U.S. conditions.¹⁴²

The most likely scenario in the event of a future large-bank problem is that the FDIC, the Federal Reserve, and the administration will have to make difficult judgment calls on whether use of the systemic-risk exception is justified. Such decisions will probably have

¹⁴⁰ Thomas F. Cargill, "CAMEL Ratings and the CD Market," *Journal of Financial Services Research* 3, no. 4 (September 1989): 347–58.

¹⁴¹ However, one study concluded that "analysis suggests that bank contagion is largely firm-specific and rational, as it appears to be in other industries, and that the costs are not as great as they are perceived to be" (George G. Kaufman, "Bank Contagion: A Review of the Theory and Evidence," *Journal of Financial Services Research* 8, no. 2 [April 1994]: 123–50).

¹⁴² Among the studies of this issue are Charles W. Calomiris and Joseph R. Mason, "Contagion and Bank Failures during the Great Depression: The June 1932 Chicago Banking Panic," 110–22; and Fred R. Kaen and Dag Michalsen, "The Effects of the Norwegian Banking Crisis on Norwegian Bank and Nonbank Stocks," both in *Proceedings of the 31st Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, May 1995, 123–61; Gerald D. Gay, Stephen G. Timme, and Kenneth Yung, "Bank Failure and Contagion Effects: Evidence from Hong Kong," *Journal of Financial Research* (summer 1991): 153–65; George G. Kaufman, "Bank Contagion: A Review of the Theory and the Evidence," *Journal of Financial Services Research* 8, no. 2 (April 1994): 123–50; Charles W. Calomiris and Gary Gorton, "The Origin of Banking Panics: Models, Facts and Bank Regulation," in *Financial Markets and Financial Crises*, ed. R. Glenn Hubbard (1991), 109–74; and Wall, "Too-Big-to-Fail after FDICIA," 7–9.

to be made more quickly than were decisions relating to large-bank failures in the 1980s. In any event, the combination of least-cost resolutions, PCA, and limitations on Federal Reserve advances will no doubt increase market discipline and reduce regulatory discretion. These, of course, are what the supporters of these measures sought to achieve. Additional and unintended effects of the new requirements may be that some regulatory decisions will have to be made in haste and that the range of potential solutions to large-bank problems will be narrowed.

Adequacy of Present Systems for Identifying and Pricing Risk

Banking operations became more complex during the 1980s and deviated increasingly from the traditional loan and deposit-taking model (the increase in various types of off-balance-sheet activity is one example). These developments pose new risks and have required adaptations in capital standards and reporting requirements to ensure that major types of risk are addressed.¹⁴³

Another development that has important implications for assessing risk is the continued geographic diversification of the banking industry through consolidation. As more banks spread their activities across state boundaries, they will have increased opportunities to diversify their loan portfolios. But as a result of consolidation of multibank holding companies into out-of-state branch systems, financial reports under current reporting procedures will provide increasingly uncertain indications of the geographic concentrations of credit risk.¹⁴⁴ For example, if multibank holding companies were to consolidate all their bank and thrift affiliates into a single lead bank, 38 states would show an apparent decline in bank loans outstanding, whereas a few states would show substantial gains.¹⁴⁵ Currently (as of mid-1997) a number of efforts are being made to ensure that meaningful data on geographic concentrations of lending risk are available.

As these remarks suggest, bank regulators are attempting to adapt systems for identifying and pricing risk in order to keep up with developments in the banking industry, and one of the principal tools for restraining risk is capital requirements that also serve to trigger increasingly severe regulatory action under PCA. As emphasized repeatedly in this chapter,

¹⁴³ The revisions in risk-based capital rules are discussed and evaluated in U.S. General Accounting Office, *Financial Derivatives: Actions Taken or Proposed since May 1994* (November 1996).

¹⁴⁴ "Minimum Data Needs in an Interstate Banking Environment," FDIC staff analysis, September 16, 1996.

¹⁴⁵ To the extent that out-of-state affiliates were consolidated into a local lead bank, a particular state would show an increase in loans. To the extent that locally based affiliates were consolidated into an out-of-state lead bank, a particular state would show a decrease in loans.

however, bank capital positions are poor predictors of failure several years before the fact. If regulatory action were based solely on capital positions, in many cases such action might come too late to do much good. Yet a policy of basing costs or penalties on more-forward-looking measures would have its own problems. Although *ex ante* measures of risk—such as the ratio of loans to assets—correctly flagged a large majority of the institutions that failed several years later, they also flagged a much larger number of banks that did not fail. The latter group of banks was presumably being compensated—by earning higher returns, at least for a time—for the greater risk it was assuming. Imposing restrictions on this group of banks might unnecessarily restrain potentially profitable activities. Basing penalties on *ex ante* measures of long-term risk might also expose the regulators to charges of credit allocation, since they might be restraining banks' efforts to meet rising credit demands in particular regions or sectors of the economy. And basing regulatory restraints on unreliable *ex ante* risk measures might increase the prospect of a regulator-induced "credit crunch." All these difficulties may make regulators loath to base supervisory restraints on, or levy penalties on the basis of, *ex ante* risk measures, a situation raising the possibility that some future episode of high-risk activity will go unrestrained until the risky behavior is translated into actual losses and erosion of capital positions. In other words, identifying and restraining risky bank behavior on a timely basis will continue to be a difficult task for bank regulators.

Some observers would address the issue by placing greater reliance on bank owners and the marketplace, and less on regulators, to monitor and restrain risky behavior. Thus, raising regulatory capital requirements considerably above present standards would increase stockholders' stake in the banks, increase their incentive to enforce conservative policies, and provide greater protection for the deposit insurance fund, taxpayers, and the economy against the risk of bank failures. However, if capital requirements are set too high, entry into the industry will be discouraged, competition within the industry will be weakened, and credit flows through bank and thrift intermediation will be reduced. A trade-off exists between the objective of restraining risk through regulatory capital requirements and the consequences of reduced competition among, and credit flows through, depository institutions.

Market value accounting has been proposed as a means of substituting the judgment of the marketplace for that of regulators in assessing bank risk. This assumes that market participants are better able (or willing) to evaluate the risk characteristics of depository institutions on the basis of publicly available data than regulators who have access to internal information gained through examination of loan files. As has been frequently pointed out, there are serious problems in assigning market values to bank loans that have no secondary markets and have little or no inherent marketability because of the difficulty of assessing information developed by the banks on the characteristics and behavior of their borrowers. Aside from implementation problems, market value accounting may reduce longer-term

bank lending, restrict credit flows during periods of falling asset prices, and inject greater instability in the banking system as a result of fluctuations in net worth positions of depository institutions. In short, whether risky behavior is monitored by regulators, bank owners, or the market, the objective of greater ex ante restraints on risky behavior may conflict with other public policy objectives.¹⁴⁶

Concluding Comment

An eminent philosopher once offered this discouraging view of the lessons policymakers learn from history: “[P]eople and governments never have learned anything from history, or acted on principles deduced from it.”¹⁴⁷ The present study is based on the view that history can be used constructively by policy makers. The lessons to be learned from this history concern the effectiveness of the federal bank regulatory and deposit insurance systems during a period of extraordinary stress. How well did they perform in the 1980s, and how can a study of their performance benefit future policymakers?

Despite bank and thrift failures in numbers not seen since the Great Depression, the government’s promise to protect insured depositors was fully honored: no depositor lost a penny on federally insured deposits, there was no significant disruption of the financial intermediation process, and a high degree of financial market stability was maintained. These results did not come cheap, but the financial cost for the banking industry was borne by the banks themselves and by their customers rather than by taxpayers, who ended up bearing most of the much greater cost of the S&L debacle. There were also other, less-quantifiable costs, particularly those associated with the moral-hazard risk taking inherent in deposit insurance. A chief example was the misallocation of resources when banks and thrifts poured funds into high-risk commercial real estate lending, although other factors besides moral hazard contributed to this outcome, including poorly conceived deregulation and disruptive tax-law changes. In view of these overall results, several lessons can be drawn about the performance of bank regulators in the 1980s.

1. Problems in the operations of depository institutions must be identified at an early stage if serious deterioration in the institutions’ condition is to be prevented, and early identification requires continuous and sometimes burdensome monitoring of the institutions’ activities. Partly to support the objective of reducing the federal work force and partly because of presumed efficacy of off-site monitoring, the number of bank exam-

¹⁴⁶ See Allen N. Berger, Kathleen Kuester King, and James M. O’Brien, “The Limitations of Market Value Accounting and a More Realistic Alternative,” *Journal of Banking and Finance* 15 (1991): 753–83; and Allen N. Berger, Richard J. Herring, and Giorgio P. Szego, “The Role of Capital in Financial Institutions,” *Journal of Banking and Finance* 19 (1995): 393–430.

¹⁴⁷ Georg Wilhelm Friedrich Hegel, *Philosophy of History* (1832), quoted in John Bartlett, *Familiar Quotations*, 14th edition.

iners and the frequency of on-site examinations were reduced in the first half of the 1980s, at the very time when the number of troubled banks and bank failures began to rise rapidly. As a result, emerging problems were not always identified on a timely basis, some failures occurred that might have been averted, and losses to the insurance fund were probably increased. Examination forces were rebuilt and the frequency of examinations was increased in the second half of the 1980s, even before legislation requiring such action was passed by Congress in 1991. Up-to-date, on-site examination results appear to yield information on banks not available through other means, and they help maintain the integrity of Call Report and other publicly available bank data. In the 1980s, they provided reasonably accurate advance warning of future banking problems, and their accuracy increased during the period.

2. Adequate funding of the deposit insurance agency is essential to effective regulatory control of risk taking by insured institutions. The FSLIC suffered from a number of defects, but among the most serious was the lack of funding (and the reluctance of the S&L industry and Congress to provide it). As a result, the FSLIC was unable to close large numbers of insolvent S&Ls, which were allowed to continue operating in the hope that higher-risk investments would pay off. FDIC resources, although strained during the late 1980s, were sufficient to close failed banks. Bank regulators generally forced or encouraged problem banks to cut asset growth, reduce dividend payments, and attract external capital. Problem banks were generally not permitted to “throw the long bomb,” and most of them survived as independent institutions or were merged without FDIC financial assistance. With some significant exceptions, most problem banks that failed were closed within the time frame later prescribed by the PCA provisions of FDICIA for critically undercapitalized banks. Forbearance programs mandated or inspired by Congress were administered in a generally effective manner by the bank regulators, in contrast to the unfavorable S&L experience with forbearance. Although other factors obviously affected the quality of regulation, the availability of the financial resources needed to close insolvent institutions was central to the bank regulators’ ability to control bank risk and moral-hazard problems and reduce losses to the insurance fund when failure occurred.

3. The treatment of large-bank failures had undesirable side effects, but it is unclear whether alternative resolution methods would have been successful in the environment of the 1980s. Protecting uninsured depositors of large failed banks weakened market discipline and exposed regulators to charges of treating small banks unfairly. Imposing losses on uninsured depositors and liquidating a few large banks might have had salutary effects on market discipline, and some observers suggest that the regulators should have been more willing to take the risk involved in such actions. However, no such experi-

ment was undertaken, and therefore the experience of the 1980s provides little guidance on whether these actions would have led to runs on other large banks and to more-general financial market instability.

In other respects, it is clear that the treatment of large banks could have been improved. While still profitable and solvent, some large banks that eventually failed were engaging in risky behavior that was not sufficiently restrained by bank regulators. In addition, a few large banks continued to operate with little equity for extended periods before being closed; these banks generated avoidable losses that increased total resolution costs. In these instances, more-effective regulatory action was feasible and could have reduced losses to the insurance fund.

4. Statutory rules limiting regulatory discretion may help prevent a repetition of the regulatory lapses that occurred in the 1980s, but it remains to be seen whether such rules will be maintained in a future period of widespread banking distress. Limits on the discretionary authority of bank regulators were adopted as part of FDICIA after the banking crisis had largely passed, and they have raised few problems in the benign banking climate that has since prevailed. However, the tension between rules and discretion in bank regulation may reappear in some future period of widespread banking problems. In the early 1980s, Congress responded to the concerns of the banking and thrift industries and limited the ability of regulators to close weakened institutions. In that instance, Congress mandated forbearance for thrifts and some banks, delayed recapitalization of the FSLIC's insurance fund, and then declined to provide the amount requested by the Reagan administration.¹⁴⁸ Given this experience, it is difficult to predict the effect of current statutory rules in some future banking crisis, or the willingness of legislators to retain them. In such a crisis, numerous banks might be suffering substantial operating losses and capital reductions resulting from external shocks and other unforeseen developments. Will it then be politically feasible, for example, to liquidate a significant number of large banks in accordance with least-cost resolution requirements or to close many small and large banks because they fail a statutory solvency test? If so, will such actions be compatible with the objective of maintaining financial market stability? Experience in the 1980s provides little basis for confident answers to these questions.

5. Bank regulation can limit the scope and cost of bank failures but is unlikely to prevent failures that have systemic causes. The rise in the number of bank failures in the

¹⁴⁸ National Commission on Financial Institution Reform, Recovery and Enforcement, *Origins and Causes*, 73.

1980s had many causes that were beyond the regulators' power to influence or offset. These included broad economic and financial market changes, ill-considered government policy actions, and structural weaknesses that inhibited geographic diversification and made many banks vulnerable to regional and sectoral recessions. Earlier implementation of uniform capital standards and other improvements in regulation might have reduced the number of failures in the 1980s, but it could not have prevented a great many of them. Legislation permitting geographic consolidation was a major step toward correcting existing structural weaknesses in the banking system. However, if significant new structural weaknesses or serious economic problems are allowed to develop in the future, bank regulation alone will not be able to prevent a major increase in the number of bank failures.

6. The ability of regulators to curb excessive risk taking on the part of currently healthy banks was (and continues to be) limited by the problem of identifying risky activities before they produce serious losses and by competing public policy objectives. As noted, bank regulators were reasonably successful in curbing risk taking on the part of officially designated problem banks whose condition had already deteriorated. However, in dealing with ostensibly healthy banks, regulators had difficulty restricting risky behavior before the fact, while the banks were still solvent and the risky behavior was widely practiced and currently profitable. It was (and remains) hard to distinguish such behavior from acceptable risk/return trade-offs, innovation, and other appropriate activity, or to modify the behavior of banks while they were (and are) still apparently healthy. Current risk-based capital requirements are forward-looking in the sense that they apply different weights to different asset categories, but the categories are so broad that they permit major increases in high-risk loans without requiring more capital. On the other hand, current risk-based premium schedules penalize banks after the fact, when losses have already weakened their condition. In addition to problems of identification, conflicting public policy objectives are also a limiting factor; this was evident during the "credit crunch" of the early 1990s, when bank regulators were criticized by legislators and administration officials for retarding economic recovery through their excessive zeal in applying the very supervisory restraints they had previously been urged to implement.

An alternative approach, proposed mainly by academic writers, would be to rely more heavily on bank owners and investors, rather than on regulators, to restrain risky behavior on the part of profitable banks; this would be done by raising overall capital standards to considerably higher levels than at present in order to increase shareholders' stake or by adopting market value accounting. Aside from problems of implementation, the potential efficacy of this alternative is also limited by conflicts with other public policy objectives, such as maintaining financial stability and meeting private sector credit demands.

7. Differences in perspective among federal bank regulators may have delayed recognition of the nature of the problems of the 1980s. Differences among the regulators are to be expected, given their various primary responsibilities, and the resulting checks and balances are frequently cited as one of the main advantages of the present regulatory structure. However, conflicts among regulators on the issue of brokered funds persisted until 1985, and on new bank charters until 1989. Arguably, it should have been clear before then that bank failures were the most pressing problem, outweighing such considerations as encouraging innovations in deposit gathering and easing the entry of new institutions into banking markets. While the present system of divided regulatory responsibilities is believed to have important advantages, in the early 1980s it may have delayed recognition of the seriousness of a new crisis.

* * *

Finally, it is appropriate to emphasize that the lessons of the 1980s need to be applied to future problems judiciously. As noted by one of the participants in the FDIC's symposium at which an earlier version of this chapter was presented, the problems of the past may bear little or no resemblance to those of the future.¹⁴⁹ Therefore, it is important to keep in mind those lessons of the 1980s that appear to be relevant while remaining alert to emerging problems that have few or no precedents in the past.

¹⁴⁹ See comments by Carter H. Golembe in volume 2 of this study.

Chapter 2

Banking Legislation and Regulation

Introduction

The period between 1980 and 1994 saw more legislative and regulatory change affecting the financial services industry than any other since the 1930s. This is hardly surprising, for the legislative and regulatory landscape was inextricably bound up with the profound transformation that took place within the industry. The structure of banking legislation and regulation might be compared to a stratified but active geologic formation: clearly identifiable separate levels are present, but these come into contact at various points, and sometimes collide. At the legislative level, Congress passed five major laws between 1980 and 1991, and significant bills were considered, if not passed, in nearly every session.¹ Regulatory change during the period was equally extensive, much of it stemming from these new laws. But because the federal banking agencies have authority to protect the safety and soundness of the banking system,² they often proposed and implemented new regulations under authority granted by earlier statutes. In addition, the existence of the dual banking system gave state legislatures and state banking authorities a significant role in the regulation of state-chartered institutions—and they played this role frequently. The constant interaction among all of these legislative and regulatory bodies was made even more complex by their occasional differences in viewpoint—and by the often-fragmented voice of a banking industry in which competing needs shaped conflicting responses to regulatory proposals.

¹ These five laws were the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA); the Garn–St Germain Depository Institutions Act of 1982 (Garn–St Germain); the Competitive Equality Banking Act of 1987 (CEBA); the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA); and the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA).

² The Office of the Comptroller of the Currency is the primary federal regulator of national banks, as well as their chartering authority; the Federal Reserve Board is the primary federal regulator of (a) state-chartered banks that are members of the Federal Reserve System and (b) bank holding companies. The FDIC is the primary regulator of state-chartered banks that are not members of the Federal Reserve System.

With such a multiplicity of actors, it would be overly simplistic to identify the period 1980–94 with a single trend in policy. The early 1980s, after at least a decade of debate about restructuring the financial services industry, was dominated by movement toward deregulation: both DIDMCA and Garn–St Germain readily fall under that heading. Moreover, proponents of continued deregulation did not see 1982 as the end of that process, and continued to press for congressional action; their main objectives were to repeal Glass-Steagall and expand the powers of banks. Nevertheless, in Congress the momentum of deregulation slowed markedly, and certainly by 1989–91 the environment had become far more favorable to stringent bank regulation. By 1994, however, with the thrift and banking crises in the past, the climate in Congress and the industry was again conducive to at least some deregulation.

After 1982, none of the bills introduced in the 1980s to extend deregulation became law, and the main objectives of CEBA, passed in 1987, were to clean up various problems in the banking and thrift industries. As originally written, CEBA would have granted banks additional powers in securities, insurance, and real estate, but in its final form it created a comprehensive—albeit temporary—moratorium on federal regulators’ ability to grant those powers. The attempt to legislate expanded bank powers continued, but FIRREA, passed in 1989 and described as “supervisory *reregulation*,” concentrated on reforming the thrift industry and providing regulators with greater enforcement powers.³ In 1991 FDI-CIA, like CEBA four years before, began as an ambitious attempt to repeal Glass-Steagall, expand bank powers, and restructure the banking industry but, again, ended much more narrowly, recapitalizing the Bank Insurance Fund and providing for banks what FIRREA had provided for thrifts: more supervisory regulation and oversight. So in Congress, although deregulation remained an undercurrent, the laws actually passed during the latter part of the period were aimed at recapitalizing the depleted deposit insurance funds and equipping regulators with a stronger—and, indeed, less flexible—hand in supervising depository institutions.

National legislative developments, however, form only part of the story. A great deal of regulatory activity took place within the federal banking agencies, although often congressional and agency strands would meet. For example, frequently the agencies asked Congress for legislative action, particularly with regard to supervision, enforcement, and dealing with failed and failing institutions. At the same time, the agencies were responsible for drafting regulations to implement statutory changes, and the agencies’ interpretations of

³ Daniel Gail and Joseph Norton, “A Decade’s Journey from ‘Deregulation’ to ‘Supervisory Reregulation’: The Financial Institutions Reform, Recovery, and Enforcement Act of 1989,” *Business Lawyer* 45, no. 3 (1990): 1103–228. It should be noted that only two years before passing DIDMCA, Congress had passed the Financial Institutions Regulatory and Interest Rate Control Act (FIRIRCA), which gave regulators a wide range of authority to enforce penalties in supervising depository institutions—thus, significant increases in supervisory regulation occurred nearly simultaneously with deregulation.

congressional intent were significant. The agencies also had the authority under previous laws to make new regulations that required no additional action from legislators. An important example of such authority, and one that had implications for the banking crises of the 1980s, was the Office of the Comptroller of the Currency's (OCC) procompetitive policy for chartering new banks, inaugurated in 1980 partly at congressional urging.

As was the case in Congress, deregulation and the reaction against it were crucial components of the regulators' policies. In general, all of the federal banking agencies endorsed deregulation, although they often differed as to its extent and the manner of accomplishing it. Of the three federal agencies, the OCC was generally the first to push for deregulation and did so most actively; both the Federal Reserve Board (FRB) and the FDIC were less sanguine about some proposals. Still, by the mid-1980s, regulators at all three agencies were increasingly allowing banks to enter new product areas.⁴ At the same time, however, deregulation hardly meant an end to new regulation. Instead, it became one of the most important forces behind stricter regulatory developments in the 1980s and early 1990s. One of the most significant and comprehensive of these was the imposition of more-stringent capital requirements for banks: the regulators imposed mandatory capital-to-assets ratios in 1980–81, refined and made them more uniform in 1984–85, and then moved to a combination of risk-based and leverage capital ratios by 1988–92.⁵ After the implementation of prompt corrective action (PCA) under FDICIA, capital ratios became key regulatory measures of bank soundness. The definition and redefinition of capital standards was one of the most pervasive regulatory stories of the 1980s and early 1990s.

The federal banking agencies also were active in responding to downturns in specific sections of the financial services industry. For example, when thrifts, including savings banks, were struggling with the interest-rate conditions of the early 1980s, the agencies adopted forbearance policies that would allow institutions to continue to operate even when failing to meet regulatory standards. The first formal use of forbearance in banking during the period was the Net Worth Certificate Program implemented under Garn–St Germain. The second was several years later, in 1986, when all three agencies responded to sectoral problems in agriculture and then energy by inaugurating capital forbearance programs for banks in the affected sectors.⁶ By the end of the 1980s the broad use of regulatory forbear-

⁴ See Wolfgang H. Reinicke, *Banking, Politics and Global Finance: American Commercial Banks and Regulatory Change, 1980–1990* (1994); and George Kaufman and Larry Mote, "Glass-Steagall: Repeal by Regulatory and Judicial Reinterpretation," *Banking Law Journal* 107, no. 5 (1990): 388–421.

⁵ Most of this was accomplished without congressional action, though it is important to note that in response to the less-developed-country crisis, the International Lending Supervision Act in 1983 mandated that the regulators impose capital regulations on banks. Capital ratios would also form the heart of FDICIA's PCA provisions. For an explanation of PCA, see section on FDICIA below; and for an analysis of PCA, see Chapter 12.

⁶ Agricultural interests, especially, believed the regulators applied the capital forbearance program too restrictively, and this belief resulted in CEBA's mandating the agricultural loan-loss amortization program.

ance had been roundly condemned for contributing to the S&L crisis; its role in banking, however, had been much more limited. Nevertheless, by 1991 and the passage of FDICIA, lawmakers—having previously urged such programs—were now unwilling to allow the agencies to exercise discretion in keeping banks afloat.

Another regulatory issue involved the use of brokered deposits. Again, even as deregulation was the watchword in the industry and in Congress, some of the regulators—in the wake first of Penn Square’s failure and then of the failures of other banks and thrifts—moved in 1983–85 to restrict the perceived risk that such deposits created for the deposit insurance funds.⁷ Although the initial regulatory attempts were invalidated by the courts, this so-called hot money became one of the bêtes noires of those seeking causes for the thrift crisis. Eventually, both FIRREA and FDICIA placed limits on the use of brokered deposits by troubled institutions.

Although after 1982 Congress failed to grant banks new powers, from the early 1980s state legislatures and state banking authorities were increasingly allowing their state-chartered banks to enter securities, insurance, and real estate activities not permitted by federal statutes.⁸ As has already been noted, regulatory decisions were also allowing banks into new areas. But although many of the new powers granted by the states were not thought to add significant dangers to the banking system, others—notably in real estate investment and development—were perceived as risky by the FDIC and the FRB, both of which proposed regulations in the middle to late 1980s to control them. The result was conflict not only among the agencies but also between the agencies, the states, and the industry. Neither of the proposed regulations was adopted, but this episode illustrates how the question of banking regulation could be played out beyond Congress.

FDICIA and its requirements mark the legislative boundary to the banking crisis, although in 1993 Congress did pass legislation that at least partly was a residual reaction to the crisis: a national depositor preference law. This law established a uniform order for distributing the assets of failed insured depository institutions. Although designed as part of a deficit reduction plan, the law was also intended to reduce the FDIC’s losses from bank failures.

By 1994 the banking crisis was clearly over, and Congress sought to pull back from what it now perceived as the imposition of overly onerous regulatory requirements on banks. The beginning of this trend was embodied in the Riegle Community Development and Regulatory Improvement Act of 1994. Also in 1994, Congress returned to the more

⁷ On this issue, the regulators disagreed considerably among themselves (see below).

⁸ Victor Saulsbury’s article (“State Banking Powers: Where Are We Now?” *FDIC Regulatory Review* [April/March 1987]: 1–17) reviews state banking powers as of 1987; see also the annual publication of the Conference of State Bank Supervisors, *The State of State Banking* (1988–92); and Advisory Commission on Intergovernmental Relations, *State Regulation of Banks in an Era of Deregulation* (1988).

structural industry issues that had become less critical during the immediate crisis. The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 addressed the long-standing question of geographic expansion within the banking industry, but other structural issues, such as the separation between banking and commerce, have not been resolved even yet (though at this writing, a financial modernization bill is again under consideration). If FDICIA can be viewed as the end of the immediate legislative response to the banking crisis, a law passed five years later, the Deposit Insurance Funds Act of 1996, provided for the capitalization of the Savings Association Insurance Fund (SAIF) and thereby effectively closed the chapter on the troubled period of the 1980s and early 1990s.

Legislation, 1980–1991

After 1980, Congress was particularly active, attempting to legislate numerous reforms to the financial services industry and its regulatory structure. DIDMCA in 1980 was hailed as the first sweeping change in industry structure in half a century, and it was followed by significant legislation in 1982, 1987, 1989, and 1991. Moreover, few years passed without the presence of substantial banking bills on the legislative calendar.

In the past, major changes in banking legislation (notably the Federal Reserve Act of 1913 and the Banking Act of 1933) were direct responses to financial crises. Legislation is generally a reactive process, and banking legislation is no exception. In the case of banking, however, Congress has had difficulty not only anticipating problems but also addressing issues that legislators and others have recognized as requiring legislative action. Changes had been occurring in the financial services industry since the 1960s, for example, and had greatly accelerated starting in the 1970s, but these changes had not been addressed in legislation. The often-complex laws enacted in and after 1980 were therefore not only a reaction to crises in both the thrift and then the banking industry but also a response to the changes of the previous 20 years.

Deregulation: The Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn–St Germain Depository Institutions Act of 1982

In 1980 the problems in the thrift industry were already becoming apparent, and some provisions of DIDMCA were certainly an attempt to alleviate them. Nevertheless, this wide-ranging law can best be described as a response both to a high-interest-rate climate and to evolutionary change in the financial services industry. Many of the law's provisions had in fact been anticipated during the 1970s by the Hunt Commission and the FINE Study. The Hunt Commission (1971) had argued for the removal of regulatory restraints and the provision of additional powers under an umbrella of competitive equality among financial institutions. Its recommendations included the gradual removal of interest-rate ceilings on time and savings accounts, the addition of new lending and investment powers for financial

institutions, removal of restrictions on statewide branching, and elimination of differential reserve requirements for different types of financial institutions.⁹ The FINE Study (1975) echoed many of these recommendations.¹⁰

DIDMCA established phased-in uniform reserve requirements for all depository institutions to ensure the Federal Reserve's ability to conduct monetary policy, to stem the spate of industry withdrawals of member banks from the Federal Reserve System, and to equalize the positions of commercial banks and thrifts.¹¹ In addition, DIDMCA required the Federal Reserve to provide services (including access to the discount window) to all depository institutions for set fees. In response to the disintermediation caused since 1979 by the combination of deposit interest-rate ceilings and the sharp rise in interest rates, the law also provided for the gradual removal by 1986 of Regulation Q ceilings on maximum allowable rates on deposit accounts.¹² The removal of the ceilings was meant particularly to increase depository institutions' ability to compete against money market mutual funds, but the ceilings were also attacked for penalizing small savers who did not have access to instruments through which they could obtain market rates. The bill was therefore also proclaimed pro-consumer. The phaseout of the ceilings was to be achieved by March 31, 1986, and was to be overseen by the Depository Institutions Deregulation Committee (DIDC), which was created by the law.¹³ In keeping with the general aim of increasing competition and remov-

⁹ U.S. President, *The Report of the President's Commission on Financial Structure and Regulation* (1971). See pt. 2, pp. 23–112, for recommendations. The commission also advocated uniform federal income tax requirements for depository institutions, and consolidation of the regulatory and insurance agencies.

¹⁰ See U.S. House Committee on Banking, Currency and Housing, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, *Financial Institutions in the Nation's Economy (FINE)*, "Discussion Principles": Hearings, 94th Cong., 1st sess., 1975. See also "Symposium on the FINE Study," *Journal of Money, Credit and Banking* 9, no. 4 (1977): 605–61.

¹¹ Public Law 96-221. This discussion is based on the detailed description in Kerry Cooper and Donald Fraser, *Banking Deregulation and the New Competition in Financial Services* (1986), 105–25. See also Charles McNeill, "The Depository Institutions Deregulation and Monetary Control Act of 1980," *Federal Reserve Bulletin* 66, no. 6 (June 1980): 444–53; and Thomas McCord, "The Depository Institutions Deregulation and Monetary Control Act of 1980," *Issues in Bank Regulation* 3, no. 4 (1980): 3–7. The costs of the reserves required by Federal Reserve System membership were driving institutions to leave the System. One article noted that 60 banks withdrew during the first nine months of 1979; and in January 1980, Equibank (\$1.9 billion in assets) announced its intention to leave the System—it would have been the largest such defection ever (John Yoch, "Fed Pullouts Seen Spur to Member Bill," *American Banker* [January 28, 1980], 14; also *American Banker* [January 20, 1980], 7). Legislative action to stem the withdrawals was endorsed both by the Carter administration and by Federal Reserve Board Chairman Paul Volcker.

¹² Disintermediation is "an excess of withdrawals from a depository institution's interest-bearing accounts over its deposits in such accounts" (*Encyclopedia of Banking and Finance*, ed. Charles J. Woelfel, 10th ed. [1994], 306). This occurs when rates on competing investments, such as Treasury bills or money market mutual funds, offer the investor a higher return.

¹³ The DIDC consisted of the secretary of the treasury, and the chairmen of the FRB, FDIC, FHLBB, and National Credit Union Association (NCUA) as voting members, and the Comptroller of the Currency as a nonvoting member. For a discussion of Regulation Q and a detailed survey of DIDC actions, see R. Alton Gilbert, "Requiem for Regulation Q: What It Did and Why It Passed Away," *Federal Reserve Bank of St. Louis Review* 68, no. 2 (February 1986): 22–37.

ing regulatory differences among depository institutions, all such institutions were authorized to provide checking account services and NOW accounts or their equivalent. Moreover, thrifts were granted many powers that had been available only to commercial banks. For example, S&Ls could enter consumer loan and credit card businesses, and mutual savings banks could make business loans and accept demand deposits. Finally, the act preempted state usury laws concerning several kinds of loans, and made changes to the Truth in Lending Act.

One aspect of the law that received little attention during the debate over passage but would come to be viewed as crucial to the S&L crisis and to the brokered-deposits issue was the raising of the deposit insurance limit from \$40,000 to \$100,000. In the Senate, the first proposal was to increase the limit to \$50,000 as an adjustment for inflation. But there was clear sentiment in Congress for a greater increase that would help draw deposits into the thrifts.¹⁴ It has been argued that the S&Ls were the driving force behind the increase in insurance, and after the provision passed, the U.S. League of Savings Associations did state that it was “particularly helpful.” Some of the bill’s sponsors also believed that the increase would strengthen depository institutions’ ability to compete with money market funds.¹⁵ FDIC Chairman Irvine Sprague noted in testimony before Congress that an accurate adjustment for inflation would mean an insurance level of approximately \$60,000, but he said nothing about a higher increase.¹⁶ The Federal Reserve supported the proposed increase to \$50,000 but was “inclined to favor an increase to \$100,000.”¹⁷ The lower figure remained in the bill, however, until it was replaced by the \$100,000 limit at a late-night House-Senate conference. The decision, scarcely remarked at the time, would come to be viewed by many as having weighty consequences.

¹⁴ *Congressional Record*, S. 15278 (October 29, 1979). Senator Alan Cranston proposed the increase to \$50,000; Senators William Proxmire and Jake Garn both supported the proposal but suggested a further increase was needed.

¹⁵ Joseph Hutnyan and Jay Rosenstein, “Conferees Forge Financial Modernization,” *American Banker* (March 7, 1980), 1; *Washington Financial Reports* (March 10, 1980), A-29; and Joseph D. Hutnyan, *The S&L Lobby: An Exercise in Customer Service*, consultant study no. 3, National Commission on Financial Institution Reform, Recovery and Enforcement, 1992, 22–23. See also L. William Seidman, *Full Faith and Credit: The Great S&L Debacle and Other Washington Sagas* (1993), 178–79.

¹⁶ Testifying before Congress four years later, Chairman William Isaac (who succeeded Irvine Sprague in 1981) noted that he believed Congress had passed the \$100,000 limit over the objections of the FDIC. House Banking Committee Chairman Fernand St Germain replied that he had agreed with the FDIC at the time but that “it was one of the things we had to compromise on . . . I thought it was a mistake” (U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, *Inquiry into Continental Illinois Corp. and Continental Illinois National Bank: Hearings*, 98th Cong., 2d sess., 1984, 559). See also U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Deposit Insurance Reform and Related Supervisory Issues: Hearings*, 99th Cong., 1st sess., 1984, pt. 1, 7.

¹⁷ U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, *Regulation Q and Related Matters: Hearings*, 96th Cong., 2d sess., 1980, 783, 836. The \$100,000 limit had been written into H.R. 6216. Sprague noted that any increase in the insurance limit should be accompanied by a decrease in assessment refunds to maintain the ratio of the insurance fund to insured deposits.

Two years later, Garn–St Germain was largely an attempt to rescue the thrift industry, which by this time, due to earnings problems, was generally perceived to be in crisis.¹⁸ The thrift lobby was strongly in favor of the provisions in the bill. Sources of funds were broadened: the act mandated creation of money market deposit accounts that could compete directly with money market mutual funds. The act also allowed federal, state, and local governments to hold NOW accounts; allowed federally chartered S&Ls to offer demand deposits; and required the DIDC to abolish by 1984 any remaining Regulation Q differentials (on maximum allowable rates on deposit accounts) between banks and thrifts. Federally chartered S&Ls and savings banks were given additional powers—most significantly, the power to invest up to 5 percent of their assets in commercial loans. S&Ls were also permitted to invest up to 30 percent of their assets in consumer loans, and were allowed to invest in state and local government revenue bonds.

Another significant element of the legislation, one promoted by the OCC, was revision of the rules on lending and borrowing by national banks.¹⁹ With respect to regulations on loans to one borrower, national banks perceived themselves to be at a competitive disadvantage, for almost all state banking regulations provided more liberal rules than did national bank regulations.²⁰ (Smaller rural banks claimed that the existing 10 percent limit had forced them to turn down many loan applications, and in general an increase in the limit was seen as a necessary tool in the increasingly competitive banking environment.)²¹ Garn–St Germain increased the limit on loans to one borrower from 10 percent of a bank’s capital to 15 percent (for unsecured loans). The limit could be extended another 10 percent if the additional loans were secured by readily marketable capital.²²

¹⁸ Public Law 97-320. For discussions of Garn–St Germain, see Cooper and Fraser, *Banking Deregulation*, 127–43; and Gillian Garcia et al., “The Garn–St Germain Depository Institutions Act of 1982,” *Federal Reserve Bank of Chicago Economic Perspectives* 7, no. 2 (1983): 1–31.

¹⁹ See the statement of Comptroller of the Currency John Heimann before the Senate Committee on Banking, Housing and Urban Affairs, April 28, 1981, reprinted in OCC *Quarterly Journal, Special Anniversary Issue 1981–1991* (September 1992): 59. Heimann noted that the rigid loan-to-value ratios, the 30-year amortization requirement, and aggregate limitations on total real estate lending, construction lending, and second-lien real estate lending were at variance with evolving market realities, and deterred national banks from engaging in prudent and profitable loans.

²⁰ See Conference of State Bank Supervisors, *A Profile of State-Chartered Banking* (1981), 128–31.

²¹ Charles Lord before Senate Banking Committee, October 30, 1981, reprinted in OCC *Quarterly Journal* 1, no. 1 (1981): 58.

²² There was some concern among bankers that the OCC’s regulation interpreting the law would be overly restrictive in its definitions of loan aggregation, but when the final rules were issued, banks were not forced to automatically aggregate loans to individuals with loans to corporations and affiliated subsidiaries in which the individual owned a majority interest, unless a “common-enterprise” test was met. For discussion of these issues, see Jay Rosenstein, “Banks Say Easing of Loan Limits Being Frustrated,” *American Banker* (January 26, 1983), 2; Jay Rosenstein, “Comptroller Expected to Ease Proposed Loan Limit Formula,” *American Banker* (March 15, 1983), 1; and Lisa J. McCue, “Comptroller Eases Rules on Loan Limits,” *American Banker* (April 13, 1983), 1.

Garn–St Germain also removed statutory restrictions on real estate lending by national banks, and gave the OCC the authority to set such rules in the future. The more significant of these restrictions had imposed maximum loan-to-value ratios for real estate loans under certain conditions, had required that certain kinds of real estate loans provide for amortization of the entire principal within 30 years, and had set aggregate limits on real estate loans.²³ In response to the removal of statutory restrictions, the OCC proposed a regulation that imposed no limitations on real estate loans. The agency believed the regulations had hampered national banks' ability to respond to changes in real estate markets, and believed also that decisions concerning national-bank lending were the responsibility of bank management. National banks responded very positively to the proposed removal of the regulations, and the new rules became effective in September 1983.²⁴ Many state laws continued to impose limits on commercial bank real estate loans; for national banks the new regulation preempted such limits, which still applied to state-chartered banks.

At the strong urging of the regulatory agencies, the law also enhanced the powers of the FDIC and the Federal Savings and Loan Insurance Corporation (FSLIC) to provide aid to troubled institutions. The legislation gave regulators the authority to make a loan to a failing institution, make a deposit in such an institution, purchase its assets, purchase securities it had issued, and assume its liabilities. One aspect of this authority provided for the purchase of net worth certificates from troubled institutions; these certificates would be counted as capital by the regulators and would therefore allow the institutions to continue operating until they could return to a sound condition. This authority was to last for three years. In addition, the law sought to address problems (stemming from geographic barriers to mergers and acquisitions) associated with locating acquirers for failing institutions. The FDIC could now authorize emergency interstate acquisitions of closed commercial banks or savings banks with assets over \$500 million, as well as interstate mergers or takeovers of mutual savings banks of that same size which were in danger of closing. The asset size restrictions, which did not apply to the FSLIC, stemmed from a desire to placate those who saw the provision as an attack on the McFadden Act and Douglas Amendment, an attack designed (in their view) to lead to nationwide interstate banking.²⁵

²³ The regulations had also placed restrictions on loans secured by leaseholds and had set limitations on forest tract loans. See 12 CFR 7.2000–7.2700 (1983).

²⁴ See *Federal Register* 48 (March 10, 1983), 10068, and *Federal Register* 48 (September 9, 1983), 40698. See also Laura L. Mulcahy, "Key Restrictions Dropped on Real Estate Lending," *American Banker* (September 12, 1983), 3; and Comptroller C. T. Conover's statement on liberalization of real estate lending rules (OCC *Quarterly Journal* 1, no. 3 [1982]: 23).

²⁵ Regulators also had to adhere to a set of priorities that, while keeping the insurance funds' losses to a minimum, sought to guarantee precedence in bidding to in-state institutions and same-type institutions. See Cooper and Fraser, *Banking Deregulation*, 132–33.

Legislative Stalemate, 1982–1986

One element that had had to be dropped from Garn–St Germain as too controversial was a provision to grant banks new powers to underwrite securities and deal in mutual funds. The battle over new bank powers would dominate the legislative agenda for the next five years. The contest over expanded powers involved all the varied interests attached to the industry: individual institutions, industry associations, state banking agencies, and federal banking agencies. Fernand St Germain, chairman of the House Banking Committee—perhaps forgetting that congressional opinion was hardly united—compared the debate surrounding these issues to a “Tower of Babel–like cacophony of voices.”²⁶ A recent analyst of the politics of the period succinctly described the process as gridlock.²⁷

The Reagan administration strongly believed that product deregulation was necessary if the banking industry was to be reformed, and Senator Jake Garn, who had become head of the Senate Banking Committee by virtue of Republican control of the Senate, made expanded powers a priority during (and beyond) his tenure as chairman. Even so, congressional supporters of expanded powers and the administration did not always speak with one voice.²⁸ Moreover, there were powerful forces militating against such change. The securities, insurance, and real estate industries all objected to bank entry into their businesses and mounted a considerable effort to thwart legislation that would permit it.²⁹ In addition, the banking industry itself was not united on these issues—the large money-center banks tended to be more interested in acquiring new powers than smaller institutions were, a state of affairs that made lobbying by bank trade associations rather complicated. Within Congress, some influential voices, arguing that new powers would inject too much risk into the system, resisted tampering with Glass-Steagall’s separation between banking and com-

²⁶ William S. Moorhead, “Issues in Coming Revolution in Banking Legislation,” *American Banker* (July 29, 1983), 4.

²⁷ Reinicke, *Banking, Politics and Global Finance*, 57–90. Reinicke provides a detailed discussion of legislative attempts to reform Glass-Steagall and argues that the period from 1980 to 1986 was one of mobilization but little effective action.

²⁸ In 1982–84, for example, the Treasury wanted to insulate banks from risk by requiring that expanded powers be conducted in subsidiaries of bank holding companies. See *Banking Expansion Reporter* 1, no. 8 (May 3, 1982): 2. Senator Garn, at least initially, did not. This debate fed into one between the regulators: the FDIC thought that new powers ought to be conducted in bona fide subsidiaries of the banks, whereas the Federal Reserve was happier with the administration’s proposal—except that that proposal initially called for the Securities and Exchange Commission to regulate securities subsidiaries of the holding companies, a plan the Federal Reserve resisted.

²⁹ The associations representing these industries also frequently pursued judicial remedies against regulatory decisions that went against their interests. The Securities Industry Association, for example, attempted to overturn the FDIC ruling (see note 31) that state nonmember banks were not bound by Glass-Steagall restrictions, but the attempt was ultimately unsuccessful.

merce.³⁰ Finally, the banking agencies, too, had differing ideas about how new powers ought to be regulated, and this was all bound up with discussions about major reform of the financial regulatory structure.³¹ Perhaps the best chance to legislate expanded powers occurred in 1984, when Garn piloted a somewhat less-ambitious bill through the Senate. The collapse of Continental Illinois in that year, however, furnished ample ammunition to opponents of the legislation and ensured that the bill did not move through the House Banking Committee.³² All told, the situation was hardly conducive to decisive action, and a comprehensive solution was never reached during the period through 1994.

The Competitive Equality Banking Act of 1987

Legislative inaction ended in 1987 with the passage of CEBA.³³ The primary motive behind passage was to aid the deteriorating FSLIC. CEBA provided \$10.875 billion toward recapitalization of the fund and created a forbearance program for certain “well-managed” thrifts, as well as providing for stricter accounting, appraisal, reserve, and capital standards for the thrift industry. Originally the bill was another piece of omnibus legislation that included expanded powers for commercial banks as a key provision. However, the continuing inability to find consensus on that issue resulted not only in the dropping of expanded powers from the bill but also in the adoption of a six-month moratorium on the granting of new powers in securities, insurance, and real estate by any of the federal banking agencies. The short time limit was ostensibly to allow Congress to reconsider the issue and come to a speedy decision. After the moratorium ended, both the Federal Reserve and the OCC would increasingly grant banks entry into new areas. At the legislative level, however, the thrift and bank crises would combine to make expanded powers a secondary matter for the remainder of the period.

³⁰ The most notable defenders of Glass-Steagall were Senators John Heinz and William Proxmire and Representatives St Germain and John Dingell. Heinz tried to push for a moratorium on new powers in 1983; Proxmire was also against repeal of Glass-Steagall for much of the period, although he had a change of heart and promoted such legislation in 1988. St Germain frequently tried to tie consumer provisions to new bank powers, and Dingell, chairman of the committee responsible for the securities industry (the Energy and Commerce Committee), strongly opposed allowing banks to enter that business.

³¹ The FDIC, for example, ruled that state nonmember banks were not included within Glass-Steagall’s prohibitions, and allowed such banks to establish securities subsidiaries in 1982; it expanded those powers in subsequent rulings in May 1983 to allow banks to underwrite corporate securities. This ruling produced tensions between the FDIC and the Federal Reserve. Consolidation of the federal agencies had been discussed for many years and returned to the fore in 1984 with the Bush Task Force. See *Blueprint for Reform: The Report of the Task Group on Regulation of Financial Services* (1984).

³² David S. Holland, “A Broad Banking Bill This Year? A Prediction,” *Banking Expansion Reporter* 3, no. 17 (September 3, 1984): 1.

³³ Public Law 100-86. For a discussion of the law, see Stephen K. Huber, “The Competitive Equality Banking Act of 1987: An Analysis and Critical Commentary,” *Banking Law Journal* 105, no. 4 (1988): 284–324.

CEBA did resolve one of the main points of contention that had dogged the debate over expanded powers, the “nonbank-bank” loophole. In 1970, under amendments made to the Bank Holding Company Act, banks had been defined as entities that both accepted demand deposits and engaged in commercial lending.³⁴ If the “bank” did only one or the other, it was not a bank and so not subject to the applicable Federal Reserve regulation. The OCC chartered the first nonbank bank in 1982 and was soon flooded with applications. Contemporary observers widely held that the loophole should be closed, although this view was not shared by firms attempting to use nonbank banks as a vehicle for entering banking. The nonbank banks were perfectly legal, however, and the Comptroller of the Currency, C. T. Conover, sought to use the issue to push for wider deregulation of the industry.³⁵ After a self-imposed moratorium from April 1983 to November 1984, the OCC resumed chartering nonbank banks and received more than 250 new applications within a few months.³⁶ However, as we have seen, Congress was unable to come to a consensus on further deregulation. The nonbank-bank issue might have languished in 1987 as well, but the needs of the FSLIC, which had already been frustrated in 1986, helped carry CEBA through Congress. The law created a new definition closing the loophole and placing restrictions on the activities of the 55 “grandfathered” nonbank banks.³⁷

Most of the other provisions of CEBA can be summed up as efforts to encourage the revival or acquisition of failed or failing institutions, whose numbers were by then reaching truly alarming levels: 145 banks had failed in 1986, and in 1987 there promised to be many more. The new law made permanent, and expanded, the emergency interstate acquisition provisions originally adopted in Garn–St Germain.³⁸ Significantly, not only failed banks but also those in danger of failing became eligible for interstate acquisition. CEBA originated a new category of troubled institution: a bank “in danger of closing.” When an insured bank’s chartering agent made this determination, the bank became eligible for interstate acquisi-

³⁴ Public Law 91-607.

³⁵ Ross M. Robertson, *The Comptroller and Bank Supervision* (1995), 221.

³⁶ David S. Holland, “Nonbank Banks: An Update,” *Banking Expansion Reporter* 5, no. 11 (June 2, 1986): 9.

³⁷ Firms that owned nonbank banks that had been chartered before March 5, 1987, were allowed to continue operating them without becoming bank holding companies, though they were not allowed to engage in expanded activities, offer products or services of an affiliate not permitted under the Bank Holding Company Act, or increase their assets at an annual rate greater than 7 percent. The new definition of bank included any institution insured by the FDIC, as well as any institution that both accepted transaction accounts and made commercial loans. The definition excluded federally insured thrifts, credit unions, certain trust companies, credit card banks under certain circumstances, and certain industrial banks. See Title I of CEBA. The Federal Reserve proposed regulations in 1988 under CEBA that were very harsh; in response to protests from the firms involved, changes were made easing the way in which asset growth would be calculated and removing required divestiture as a penalty for regulatory violations. Strict limits on cross-marketing and product expansion remained. See Barbara A. Rehm, “Fed Relaxes Restrictions on Nonbanks,” *American Banker* (September 7, 1988), 1; and *Banking Expansion Reporter* 7, no. 21 (November 7, 1988): 15–17.

³⁸ These had been scheduled to end in 1985, but Congress had renewed them several times until July 15, 1986, when they expired. The FDIC had pushed for further liberalization, notably the halving of the \$500 million asset figure.

tion. The FDIC's authority to permit and assist large emergency interstate acquisitions was expanded—either an entire bank holding company or a portion of it could be part of an interstate acquisition if a large bank subsidiary was in danger of closing. To facilitate such acquisitions, some state restrictions on subsequent branching by an out-of-state acquirer of a failing bank were eliminated. The law also allowed the FDIC to create “bridge banks,” or temporary national banks, for up to three years in order to deal with situations in which an immediate acquisition could not be arranged but liquidation was problematic.³⁹ The Net Worth Certificate Program of Garn–St Germain was extended for five years.⁴⁰

CEBA also provided a loan-loss amortization program for agricultural banks that had assets of \$100 million or less, that adopted a capital restoration plan, and that maintained their percentage of agricultural lending. Such banks could amortize agricultural loan losses incurred after December 31, 1983. As early as 1985, the Independent Bankers Association of America had called for loan-loss deferrals for agricultural banks. Legislation proposed during that year failed in the Senate and was superseded in 1986 by the regulatory capital forbearance plans, but both bankers and some members of Congress questioned whether regulators were genuinely seeking to grant that forbearance. All three federal banking agencies opposed loan-loss deferrals in 1987, likening them to “cooking the books” and legislating “water to run up hill,” but the program received enough support to pass.⁴¹

CEBA also contained consumer provisions dealing with expedited funds availability, changed the laws governing the operation and regulation of credit unions, exempted the federal banking agencies from certain provisions of the Anti-Deficiency and Gramm-Rudman-Hollings laws, and mandated a number of studies by the General Accounting Office and the banking agencies. CEBA also stated that insured deposits were backed by the full faith and credit of the United States. This had previously been articulated but never as part of a statute, and therefore it had never been made binding on the United States.⁴²

³⁹ The notion of creating such entities was not new; it was included in FDIC-suggested legislation in 1983 (FDIC, *Annual Report* [1983], xi). The bridge-bank provisions were broadened under FIRREA in 1989. Under CEBA the FDIC could not establish a bridge bank until an insured bank was closed, but under FIRREA, a bridge bank could also be established in anticipation of a failure. In 1989 there were other revisions to the bridge-bank provisions as well (see Gail and Norton, “A Decade’s Journey,” 1148–49, and FIRREA §214).

⁴⁰ Huber, “CEBA,” 303–8.

⁴¹ See Bartlett Naylor, “Senators Pledge Farm Bank Aid Hearings in ’86,” *American Banker* (December 5, 1985), 1; Jay Rosenstein, “Banking Groups Appeal for Farm Lending Relief,” *American Banker* (February 7, 1986), 3; Paul Tosto, “Bills Seek to Help Plight of Agricultural Banks,” *American Banker*, (February 4, 1987), 6; and Jay Rosenstein, “Federal Regulators Oppose Allowing Stretchout of Bad Farm Loans,” *American Banker* (April 3, 1987), 14. Relatively few banks were enrolled in the program—never more than 50 at any one time. All of these banks were small, with average assets of approximately \$25 million.

⁴² Huber, “CEBA,” 318.

Although CEBA's moratorium on new bank powers had been intended to provide time to construct a legislative solution to that issue, Congress failed to act on new powers before the moratorium ended. Not surprisingly, Glass-Steagall quickly returned to the fore in 1988 when a dramatic shift occurred in Congress: Senator Proxmire, who had long been reluctant even to discuss repeal, now supported it. His bill to provide additional securities powers to banks swiftly passed the Senate. In the House, St Germain eventually responded with a more limited bill, but Dingell proposed an even more restrictive bill, and the combined squabbles over provisions and turf meant that no legislation emerged from the House. These developments pushed the decision-making process on Glass-Steagall issues from the legislative to the regulatory and judicial arenas.⁴³

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989

The S&L crisis absorbed congressional energies throughout 1989 and resulted in passage of a law—FIRREA—that significantly restructured the regulation of thrifts.⁴⁴ The statute abolished the FSLIC and replaced it with the Savings Association Insurance Fund (SAIF), under separate FDIC management from the Bank Insurance Fund (BIF), also created by the law. Financial institutions' ability to transfer from one insurance fund to the other was restricted for five years, and was made subject to FDIC approval. The law also created the FSLIC Resolution Fund and the Resolution Trust Corporation (RTC), under the sole management of the FDIC, to handle former FSLIC institutions that were insolvent. (An organizational restructuring in 1991 removed the RTC from FDIC management.)⁴⁵ The Federal Home Loan Bank Board (FHLBB) was abolished and a new thrift regulator, the Office of Thrift Supervision (OTS), was created within the Department of the Treasury to oversee the industry.

FIRREA also imposed stricter accounting and other standards on thrifts: thrift capital standards were required to be at least as stringent as those for national banks; thrifts were required to adhere to national-bank limits on loans to one borrower and on transactions with

⁴³ For a summary of S. 1886, the Proxmire Financial Modernization Act of 1988, see *Banking Expansion Reporter* 7, no. 8 (April 18, 1988): 8–10. Reinicke argues that beginning in 1987, even though Congress had failed to act, legislators increasingly believed that U.S. banks required new powers in order to compete in the globalized financial industry. Banking regulators came to hold the same view, with Alan Greenspan replacing Paul Volcker as chairman of the Federal Reserve Board. See Reinicke, *Banking, Politics and Global Finance*, 91–133.

⁴⁴ Public Law 101-73. For a full discussion of the S&L crisis, see Chapter 4.

⁴⁵ A provision in the Resolution Trust Corporation Refinancing, Restructuring and Improvement Act of 1991 displaced the FDIC as sole manager of the RTC, abolished the RTC Board of Directors, and created the office of CEO of the RTC as well as an executive committee made up of four senior vice presidents. See RTC, *Annual Report* (1991), 2.

affiliates; limits were imposed on the activities of state-chartered thrifts; the use of brokered deposits was restricted; and investments in junk bonds were prohibited.⁴⁶

In addition, some significant aspects of FIRREA applied to commercial banks. The Deposit Insurance Fund was dissolved and its assets and liabilities transferred to the Bank Insurance Fund under FDIC management. The law mandated that BIF levels had to be increased until the ratio of the fund to total insured deposits reached 1.25 percent. The reserve ratio was to be maintained at that level thereafter unless the FDIC Board of Directors determined that potential risks required a higher level, to a maximum of 1.5 percent. FIRREA enacted a schedule of rising BIF assessment rates that would move assessments from 8.3 basis points to 15 basis points by January 1, 1991. The FDIC Board of Directors could not raise the assessment rate above 15 basis points before 1995 unless either the reserve ratio failed to rise during any given year or the agency projected that the BIF would first reach the designated reserve ratio at some time before 1995. After that time, the Board could raise assessment rates above the statutory rate if the reserve ratio was expected to drop below 1.25 percent.⁴⁷

An important element of FIRREA was its cross-guarantee provisions. These were intended to protect the deposit insurance funds by establishing that insured financial institutions were liable for losses incurred by the FDIC (and for losses that the FDIC reasonably anticipates incurring) in connection with either (1) the default of a commonly controlled insured depository institution or (2) any assistance provided by the FDIC to any commonly controlled depository institution in danger of default. For example, healthy affiliates of a bank holding company (BHC) that controlled a failed institution could be required to pay a share of the loss incurred by the FDIC in resolving the failed institution. The cross-guarantee provisions applied to institutions controlled by the same BHC, or to one depository institution controlled by another. The FDIC could waive this liability if it determined that waiver was in the best interest of the BIF or the SAIF.⁴⁸

FIRREA significantly expanded the enforcement authority of banking regulators. The FDIC was given authority to terminate insured banks' insurance coverage more quickly, and to suspend temporarily the deposit insurance of a bank with no tangible capital. Regulators' cease-and-desist (C&D) authority was extended to cover specific bank activities. Temporary C&Ds could be issued to restrict an insured bank's growth. Temporary C&Ds could also be issued if regulators concluded an activity would result in "significant" damage

⁴⁶ Boston University School of Law, *Annual Review of Banking Law* 9 (1990): 2–31. FIRREA, of course, had many other elements. For a guide to monographs and articles discussing the law, see Office of Thrift Supervision, *Financial Institutions Reform, Recovery, and Enforcement Act of 1989: Bibliography* (1993).

⁴⁷ See FIRREA, §208.

⁴⁸ See FIRREA, §206.

to bank assets or earnings, or if bank records were too incomplete to allow determination of its financial condition. The law also greatly increased the civil money penalties that could be imposed on federally insured banks. The statute also required banks that could not meet capital adequacy requirements to obtain FDIC approval before accepting brokered deposits. Finally, FIRREA required each federal banking agency and the RTC to establish real estate appraisal standards and created an Appraisal Subcommittee (under the Federal Financial Institutions Examination Council) to set those standards.⁴⁹

The Federal Deposit Insurance Corporation Improvement Act of 1991

As Congress dealt with the thrift crisis, the number of bank failures remained at a high level and put increasing strain on the BIF. By 1990 it was clear that the fund needed to be replenished. In the aftermath of the S&L disaster, the political climate was such that Congress was intent on finding ways to make the U.S. financial system more stable. In 1991 the Bush administration put forward a wide-ranging plan that would reform the deposit insurance system, provide for increased supervision of and intervention in undercapitalized banks, limit states' ability to authorize banking powers, consolidate the regulatory structure, allow nationwide interstate banking, give new powers to commercial banks, and permit cross-ownership in the financial industry.⁵⁰ Many of these supervisory and regulatory issues were endorsed in bills sponsored by the House and Senate Banking Committee chairmen, Henry Gonzalez and Donald Riegle.⁵¹ However, the idea of giving banks new powers was not met with great enthusiasm. Gonzalez said that given the problems with the BIF, he did not believe new powers had the same priority as reform of deposit insurance. The S&L bailout was embedded in political memory. Gonzalez noted, "People would say, 'That's what you did with the S&Ls.'" In the midst of the debate, one lobbyist remarked that members of Congress were concerned that any banking legislation with the word "deregulation" attached to it would "come back . . . to bite them."⁵²

The combination of the specter of the S&L debacle plus the usual disputes that accompanied banking legislation doomed much of the administration's plan as well as the alternatives offered by Congress. None of the more drastic proposals for limits on deposit

⁴⁹ KPMG Peat Marwick, *Financial Institutions Reform, Recovery, and Enforcement Act of 1989: Implications for the Industry* (1989), 1-7ff, 21-3. Many of these provisions also applied to savings banks (see chapter 3 in same).

⁵⁰ Robert M. Garsson, "Treasury Treads Easy on 'Too Big to Fail,'" *American Banker* (February 6, 1991), 1.

⁵¹ Robert M. Garsson, "Gonzalez Unveils Insurance Plan," *American Banker*, (January 4, 1991), 2; and Robert Trigaux, "Early Rescues Gaining Favor But Banks Wary," *American Banker* (January 25, 1991), 1. The Gonzalez bill called for a new independent bank regulator, early intervention into troubled banks, limits on deposit insurance to \$100,000 in all accounts, the end of the regulators' "too-big-to-fail" policy, limits on state powers, and risk-based deposit insurance premiums. Riegle's bill had similar components and advocated strong and early regulatory intervention into institutions that fell below minimum capital requirements.

⁵² Robert M. Garsson, "Bush Bill Passes Test, But Margin Only 3 to 2," *American Banker* (July 1, 1991), 1.

insurance for individuals proved politically viable.⁵³ It remained difficult to get agreement on the creation of a new regulatory structure. And many of the other provisions in the Treasury plan (including expanded powers and removal of the separation between banking and commerce) were opposed by one interest group or another. After several months of legislative bargaining, the banking lobby began to fear passage of a law that would repeal Glass-Steagall but simultaneously take away securities and insurance powers that banks already had. After the administration plan was rejected, the lack of consensus coupled with the need to recapitalize the BIF led Congress to abandon attempts to achieve structural reform of the industry. Nevertheless, FDICIA⁵⁴ resulted in significant regulatory change.

FDICIA increased sixfold the FDIC's authority to borrow from the Treasury to cover insurance losses, raising it from \$5 billion to \$30 billion. Any borrowing was to be repaid through deposit insurance assessments. The FDIC was also authorized to borrow funds on a short-term basis for working capital, the borrowing to be repaid by sales of assets acquired from failing institutions. In addition, the law provided that the BIF was to achieve its designated reserve ratio of \$1.25 per \$100 of insured deposits within 15 years, and that the SAIF's capitalization was to occur within a "reasonable" period of time.

Aside from providing for the necessary recapitalization, FDICIA was above all a supervisory law, created in a climate shaped by the S&L bailout, the ongoing crisis in commercial banking, and a belief that both had occurred because the supervisory system had failed to act swiftly enough to head off problems. The provision of FDICIA that most reflected this belief was prompt corrective action. The law required the federal banking agencies to develop five categories of capitalization for institutions, with a ladder extending from "well capitalized" to "critically undercapitalized." As an institution's capital ratio dropped down the ladder, the regulator was required to take increasingly severe action, ranging from restricting certain activities to closing institutions that remained critically undercapitalized.

In response to the belief that on-site examinations were an integral part of ensuring safe operation, federal regulators were required to conduct annual safety-and-soundness examinations of all insured institutions.⁵⁵ In addition, FDICIA required each institution with more than \$150 million in assets to provide its regulator with an annual financial statement audited by an independent public accountant. The federal bank and thrift agencies were required to create safety-and-soundness standards in three areas: operations and management;

⁵³ Measures that would have limited insurance to \$100,000 per individual per institution, and that would have limited insurance to \$100,000 per individual per institution with another \$100,000 coverage on an Individual Retirement Account, were both defeated. A move to end pass-through insurance coverage for large accounts opened by pension funds also failed. See Garsson, "Bush Bill Passes Test," 1.

⁵⁴ Public Law 102-242.

⁵⁵ Healthy institutions with less than \$100 million in assets could be examined every 18 months. Federal regulators were permitted to alternate their examinations with those of state regulators.

asset quality, earnings, and stock valuation; and employee compensation. The agencies were also required to revise their risk-based capital standards to account for interest-rate risk.

In a reaction to the obvious fact that real estate had been causing banks problems since the mid-1980s, the law mandated the adoption of uniform standards for real estate lending by insured depository institutions. The law also addressed the issue of states granting powers to banks: insured state-chartered banks could no longer engage in activities not permitted to national banks unless the bank met regulatory capital standards and the FDIC determined that the activity would not pose a risk to the insurance fund. FDICIA also placed new restrictions on the use of brokered deposits. These restrictions built on the ones in FIRREA but now were based on the capital position of institutions. Undercapitalized institutions were no longer allowed to accept brokered deposits and were subject to interest-rate limits on deposits solicited directly from the public. Adequately capitalized institutions could accept brokered deposits but only with FDIC permission; they, too, were subject to interest-rate limits. Well-capitalized institutions could operate without restriction.

Deposit insurance reform was enacted as well. Most significantly, the long-discussed system of risk-based premiums was required to be in place by 1994.⁵⁶ Although the more draconian attempts to roll back deposit insurance for individuals were removed before the bill was passed, the law did require the FDIC to aggregate an individual's interests in all IRAs, Keogh Plans, and some other pension accounts and insure only the total up to \$100,000. FDICIA therefore contained some reduction in deposit insurance coverage.

FDICIA had many other provisions, and one of the most important of these sought to limit the "too-big-to-fail" policy. The FDIC was now made to use the least-cost alternative in resolutions unless it was decided—with the agreement of a two-thirds majority each of the FDIC Board of Directors and the Board of Governors of the Federal Reserve, and the agreement of the secretary of the treasury (in consultation with the president)—that the failure of an institution constituted systemic risk. In addition, FDICIA established a relationship between a bank's capitalization and the Federal Reserve's ability to provide assistance through the discount window: for critically undercapitalized banks, the Federal Reserve would have to demand repayment within no more than five days, and if that limit were vio-

⁵⁶ The use of risk-based premiums had been discussed for many years, but regulators were faced with finding a system that accurately assessed risk (see FDIC, *Deposit Insurance in a Changing Environment* [1983], appendix A). In 1984 the Bush Task Force endorsed their use provided this could be done, and in 1984–85 the FDIC supported their use, but they were not adopted. See *Blueprint for Reform* (1984), 83; FDIC, *Annual Report* (1984), xvi, and *Annual Report* (1985), xvi; and Bartlett Naylor, "Risk-Based Deposit Insurance Idea Comes under Fire at Senate Hearing," *American Banker* (July 24, 1985), 1. As an alternative, the FDIC (in a 1984 bill sent to Congress) suggested that assessment rebates be related to risk. See the Federal Deposit Insurance Improvements Act of 1984, reproduced in *Washington Financial Reports* 42, no. 22 (May 28, 1984): 932.

lated the Federal Reserve would be liable for increased costs to the FDIC.⁵⁷ A decision by the FDIC to act in the Federal Reserve's stead by providing open-bank assistance might have rendered this provision less substantial. However, this avenue was essentially closed by the Resolution Trust Corporation Completion Act of 1993, which effectively prohibited—unless the systemic-risk exception had been invoked—the use of BIF or SAIF funds to benefit the shareholders of insured depository institutions, a likely outcome of FDIC open-bank assistance.⁵⁸

Banking legislation traveled a long road between 1980 and 1991. Deregulation marked the beginning of that road and was perceived as a way to create a more stable and profitable banking system. Deregulation continued to stretch across the entire period. In 1991, the Bush administration's plan sought to address issues the legislative process had left unanswered since the early 1980s. But the climate in 1991, instead of leading to another stalemate over new powers, compelled Congress to mandate a less-discretionary system of supervision. Deregulation was by no means dead, but many feared that the banking crisis would continue. Thus, the notion that deregulation did not mean “de-supervision” was—at least at that time—very powerful.

Regulation

Regulatory policies set by the federal banking agencies, often but not always in conjunction with legislative changes, were also important to the banking environment from 1980 to 1994. Five of the most significant issues were entry, capital adequacy, regulatory forbearance, brokered deposits, and expanded powers.⁵⁹ Although very different in nature, the regulations and proposed regulations in these areas for the most part reflected the need to support the safety and soundness of both individual institutions and the industry as a whole in the changing financial environment. (Regulatory forbearance does not readily fit this description but was an important corollary to the imposition of capital adequacy standards—and it illustrates how regulatory policy could pursue conflicting strategies at the same time.) Most of the regulations issued or proposed in all these areas can be viewed as a regulatory response to deregulation. The fact that the restrictions on brokered deposits and on expanded powers were ultimately not adopted by the agencies but were later incorpo-

⁵⁷ Larry D. Wall, “Too-Big-to-Fail after FDICIA,” *Federal Reserve Bank of Atlanta Economic Review* 78, no. 1 (January/February 1993): 1–2. See also Chapters 1 and 7.

⁵⁸ Public Law 103-204, §11.

⁵⁹ This discussion surveys only some of the most important regulatory issues and is not meant to provide a comprehensive history of the large volume of regulation from 1980 through 1994.

rated in FIRREA and FDICIA illustrates the changing times: deregulation remained strong in the mid-1980s but by the end of the decade that strength was considerably diminished.

Regulators, of course, acted on many other fronts, such as insider transactions and management interlocks. They responded to innovations in banking practice; for example, they created a regulatory definition of highly leveraged transactions and implemented guidelines for examiners in their evaluations of leveraged-buyout loan portfolios.⁶⁰ As Congress intended when it created the Federal Financial Institutions Examination Council (FFIEC) in 1978, regulators used this organization as a vehicle for developing uniform regulatory changes across the various agencies.⁶¹ The FFIEC, whose membership includes all the banking regulators, facilitated major revisions to Call Reports (the information banks were asked to provide grew steadily in both volume and complexity). Moreover, the regulators often responded to industry concerns about regulatory burden by abolishing and simplifying many regulatory requirements and streamlining the various application processes.

Entry

Regulation begins at an institution's point of entry into commercial banking. Among the federal regulators, only the OCC serves as a chartering agent, setting entry policy for all national banks. All other commercial banks, whether they become members of the Federal Reserve System or not, are chartered by the individual state banking authorities. Chartering authorities at both national and state levels seek to determine a proposed bank's potential for successful operation. Making this assessment generally involves examining the bank's capital adequacy, the character and experience of its proposed management, its ability to attain a certain level of profitability, and the role of the bank in its community. There were, however, variations among state requirements, and there were also differences between states and the OCC.

The most striking policy shift in chartering occurred at the very beginning of the period under consideration. In 1980 the OCC, partly in response to congressional criticism, significantly changed its chartering policy, focusing more on the organizing group and its operating plan and less on the ability of a community to support another bank. The new policy stated that a competitive marketplace would promote a more sound banking system that better served the consumer. The OCC would therefore "foster competition through the chartering of national banks."⁶² This led to an immediate and substantial increase in new na-

⁶⁰ FDIC, *Annual Report* (1990), 22.

⁶¹ The FFIEC was created by Title X of FIRIRCA and came into existence on March 10, 1979. See Robert J. Lawrence, *Origin and Development of the Examination Council* (1992), 15.

⁶² 12 CFR 5.20(c).

tional bank charters, an increase that lasted into the mid-1980s (see figure 2.1).⁶³ During the 1970s the OCC had approved an average of 58 percent of new bank applications each year. In the 1980s this rose to 89 percent.⁶⁴ In addition, the previous policy on applications had provided for much of the application material to be available to the public, for public comment and, potentially, for a hearing on the application; after 1980 this no longer obtained.⁶⁵

National bank chartering decreased in 1985 as economic decline and bank failures began to plague the Southwest, and rolling regional banking problems continued for the remainder of the period. Chartering at the state level showed no real trend during most of the 1980s but fluctuated within a fairly narrow range. State bank charters did decline steadily after 1988 and were especially low from 1992 through 1994 (figure 2.1).

The boom in Texas in the early 1980s had led to a situation in which, as one Houston banker noted, “Everyone who has two nickels to rub together is opening a bank or trying to.”⁶⁶ Most of the new banks in Texas were national banks chartered under the new policy, and this aroused some concern. A national-bank president remarked in 1983 that the OCC policy “needs to be looked at . . . with the changes brought about by deregulation, I don’t think everybody’s going to survive. There are going to be fatalities.”⁶⁷ Later that year it was reported in the press that the OCC, after finding that many newly chartered banks had quickly become problem institutions, was planning to tighten its chartering policy. Michael Mancusi, senior deputy comptroller for national operations, noted that more than a third of the national banks chartered in California in the previous two years were “receiving a high degree of attention” from the agency.⁶⁸

In 1985 the OCC began to require of most groups applying to form a new bank that they designate their CEO before charter approval; in the following year, the agency required statements on formal lending policies and funds-management strategies. Even so, the OCC chartering policy continued to generate criticism, with some observers suggesting that the agency would approve applications regardless of ability, capital, or the community’s eco-

⁶³ Eugene N. White, *The Comptroller and the Transformation of American Banking, 1960–1990* (1992), 53–54. For congressional criticism of the previous policy, see U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Majority Staff Study on Chartering of National Banks: 1970–1977*, 96th Cong., 2d sess., 1980, 4. Even before the Senate document was released, however, the agency was considering a new policy to provide greater freedom of entry (*Majority Staff Study*, 73). In 1978–79, before the formal policy change, the proportion of approvals of new bank applications rose significantly (White, 88). For a discussion of chartering policy at the OCC, see OCC, *Major Issues Affecting the Financial Services Industry* (1988), 157–60. See also Bernard Shull, “Interstate Banking and Antitrust Laws: History of Public Policies to Promote Banking Competition,” *Contemporary Policy Issues* 6, no. 2 (1988): 34–37.

⁶⁴ White, *Comptroller*, 88.

⁶⁵ See 12 CFR 5.3 (1979).

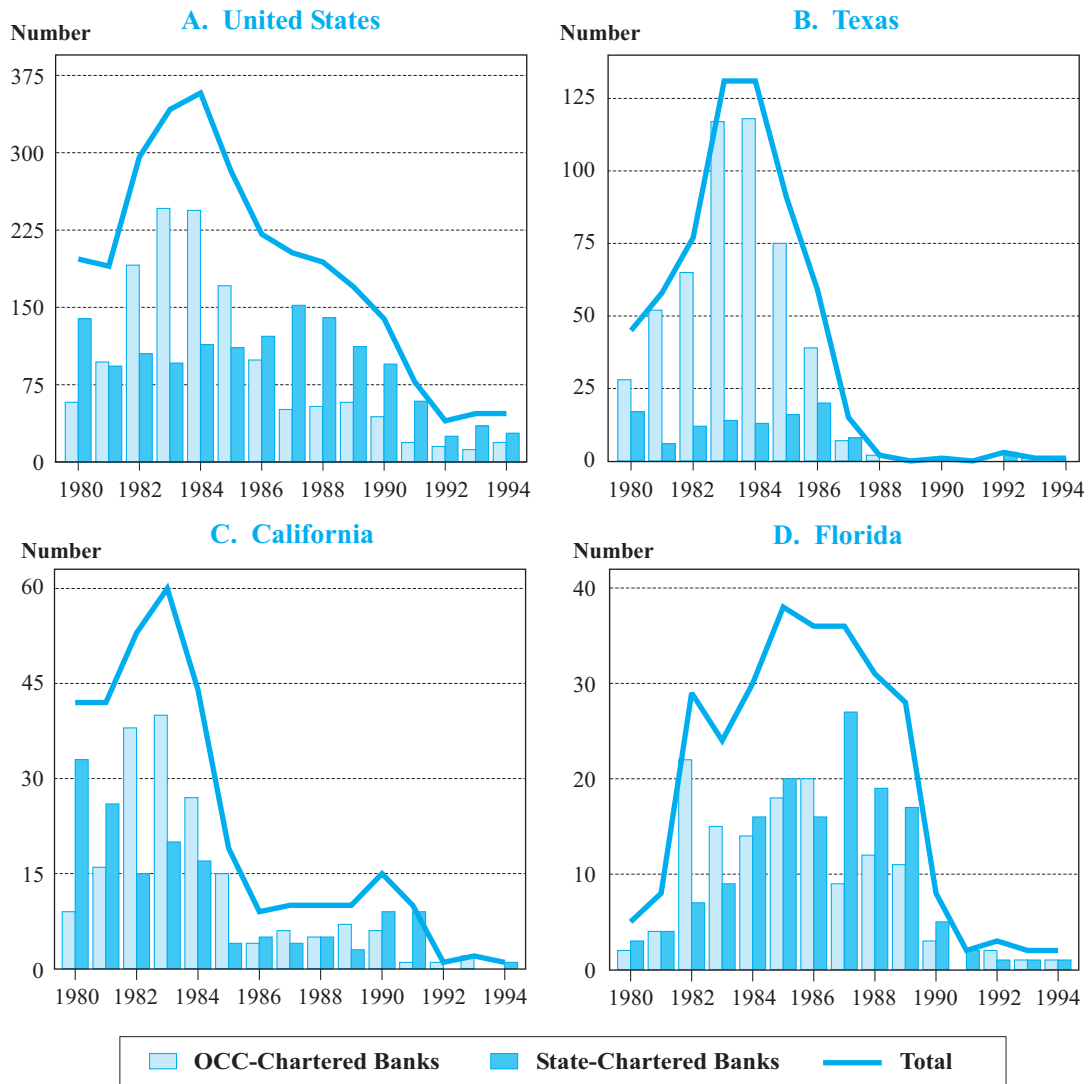
⁶⁶ Phillip L. Zweig, “37 Bank Openings in Texas This Month to Set Record,” *American Banker* (January 4, 1983), 1.

⁶⁷ *Ibid.*, 6.

⁶⁸ Jay Rosenstein, “Comptroller May Tighten Chartering Process,” *American Banker* (October 12, 1983), 3.

nomic need. In 1988 FDIC Chairman L. William Seidman called the policy “shortsighted” because many of the new banks were failing at significant cost. The OCC defended its policy, saying it required the agency to “strike a proper balance between procompetitive entry

Figure 2.1
Newly Chartered Banks:
United States, Texas, California, and Florida, 1980–1994



and ‘a reasonable likelihood of a proposed bank’s success.’ ” The agency did note in 1989 that a disproportionate number of new national banks had come under special supervision, but it attributed this largely to the economic downturn in the Southwest, where more than 51 percent of national banks chartered between 1980 and 1987 were located. Comptroller Robert Clarke argued that any attempt to revise chartering standards to make them less “procompetitive” would be harmful.⁶⁹

The criteria by which state banking authorities evaluated charter applications were very similar to those used by the OCC, except that state banking codes often contained an additional element. In Texas, for example, applicants had to establish the existence of a public necessity for the proposed bank, and a public hearing on the application was normally held. In both California and Florida the “public convenience and advantage” were to be assessed, as well as the community’s ability to support the bank.⁷⁰ Such additional elements did not necessarily mean a huge gulf between national and state chartering standards. The criteria were subjective, and state banking authorities had a good deal of discretion. Nevertheless, it was remarked that the OCC’s new policy made Texas state charters seem relatively harder to obtain.⁷¹ The volume of national versus state charters in that state during the early 1980s appears to bear this out (figure 2.1). California presented a somewhat different picture. Whereas state charters accounted for approximately two-thirds of the charters in California during 1980–81, during the next four years national bank charters dominated, with state charters reduced to approximately one-third of all charters in the state (figure 2.1). Florida provided yet another pattern. Again, national bank charters increased during the early 1980s, but state charters rose as well, surpassing national charters by 1984 (figure 2.1). These three states are not necessarily representative, but from 1980 to 1994 they did account for 29 percent of all state charters and 59 percent of all national bank charters. It is clear that the OCC’s change in policy had a very significant effect on national bank chartering during the 1980s, but national charters certainly did not uniformly replace state charters as the vehicle of choice for new banks.

The FDIC had no direct role in chartering; however, in its role as insurer it had a significant effect on *state* chartering decisions. New institutions were seldom deemed viable without federal deposit insurance, and a state was extremely unlikely to grant a commercial bank charter without the FDIC’s approval of the bank’s application for insurance.⁷² The

⁶⁹ Barbara A. Rehm, “Charter Curbs Seen Hurting Competition,” *American Banker* (April 11, 1989), 2. OCC, Major Issues (1989), 157–60.

⁷⁰ See TEX. REV. CIV. STAT. ANN. Banks and Banking §342–305 (West, 1991); CAL. Financial Code §361(2–5) (West, 1992); and FLA. STAT. ANN. §658.20–21 (West, 1986, 1991).

⁷¹ Zweig, “37 Bank Openings,” 5.

⁷² The requirement for FDIC insurance was sometimes a legal one—see, for example, FLA. STAT. ANN. Title 38, §658.22. Almost no uninsured commercial banks were chartered during the period considered by this study.

FDIC's evaluation of deposit insurance applications for state nonmember banks, like the charterers' evaluation of charter applications, covered capital structure, future earnings prospects, management, and the needs of the community to be served. In 1980, the FDIC adopted a policy stating that initial capitalization should be sufficient to provide a ratio of unimpaired capital to total estimated assets of 10 percent after three years; applicants with less than \$750,000 in initial capital were discouraged. This minimum initial net capital requirement was later raised to \$1 million and then, in 1992, to \$2 million. Starting in 1992, initial capital was to be sufficient to provide a ratio of Tier 1 capital⁷³ to total estimated assets of at least 8 percent after three years.⁷⁴ These requirements would have effectively superseded any more-lenient state regulations on capital.⁷⁵ National banks and state member banks received insurance as a matter of law, upon FDIC receipt of certification by either the OCC or the Federal Reserve. FIRREA in 1989 authorized the FDIC to comment on applications to the other federal banking agencies, and FDICIA in 1991 required all institutions seeking federal deposit insurance to apply formally to the FDIC for coverage.⁷⁶

Capital Adequacy

The trend toward deregulation in the 1980s reinforced regulators' belief that some level of capital was necessary to maintain the safety and soundness of banking. Capital was variously viewed as a cushion against unforeseen losses, a means to enhance public confidence in banking institutions, a way to foster prudent growth, and a protection for depositors. There was, however, much debate over what the level should be and what mechanism should be used in setting it.⁷⁷ During the 1970s the federal banking agencies' approach to evaluating capital adequacy had been to create bank peer groups, set target capital ratios for

⁷³ For the definition of Tier 1 capital, see discussion of capital adequacy below.

⁷⁴ FDIC Statement of Policy, March 31, 1980; *Federal Register* 57 (April 13, 1992), 12882. The FDIC clarified the guidelines for granting insurance to operating institutions in 1987 (see FDIC Statement of Policy, May 28, 1987; *Federal Register* 52 [June 9, 1987], 21736).

⁷⁵ State requirements on minimum capital varied widely and often depended on the population of the area being served. In addition, state banking authorities often had the discretion to set whatever capital levels were deemed appropriate. In 1985, statutory state capital requirements ranged from \$25,000 in some states (for banks in rural areas) to \$1.5 million. By 1989, the range was from \$25,000 to \$4 million (Conference of State Bank Supervisors, *A Profile of State-Chartered Banking* [1986], 107–8, and [1990], 137–41).

⁷⁶ See 12 U.S. Code 1814; FIRREA, §205 (2)(b)(A), states: "Any application or notice for membership or to commence or resume business shall be promptly provided by the appropriate Federal banking agency to the Corporation and the Corporation shall have a reasonable period of time to provide comments on such application or notice. Any comments submitted by the Corporation . . . shall be considered by such agency." For the requirement to apply for insurance, see FDICIA §115, which amends §5 of the Federal Deposit Insurance Act [12 U. S. Code 1815(a)].

⁷⁷ For a more detailed discussion of the politics of the debate over capital adequacy during the 1980s, see Reinicke, *Banking, Politics and Global Finance*, 134–57.

each group, and then adjust those targets according to the situations of individual institutions.⁷⁸ There were no specific minimum capital requirements. But bank capital levels steadily declined during the decade, mostly because of decreased capital at the nation's largest banks.⁷⁹ In addition, several large banks failed, with attendant costs to the FDIC. The combination of declining capital levels and large-bank failures exacerbated both regulatory and congressional anxiety, and prompted the regulators to explore new approaches to capital adequacy. First and foremost was the need to create a mandatory capital ratio. This need was formalized by the establishment, in 1979, of an FFIEC task force to study the issues and move toward a uniform legal definition of capital.⁸⁰ But the banking industry resisted moves to raise and codify capital requirements, and—partly as a result—in 1980 the OCC backed away from deciding to tighten its own legal definition of capital.⁸¹

One of the most contentious issues was the role of subordinated debt, which banks had increasingly used from the late 1960s onward to prop up declining capital levels.⁸² The FFIEC proposed guidelines dividing capital into primary capital, which was characterized by its permanence, and secondary capital, which included subordinated debt. Primary capital would include common and perpetual preferred stock, surplus, undivided profits, contingency and other capital reserves, mandatory convertible instruments, and loan-loss reserves. Secondary capital would include limited-life preferred stock, and subordinated notes and debentures.⁸³ The FFIEC eventually decided to include secondary capital in the definition of what would constitute regulatory capital, but average maturities would have to be at least seven years, and secondary capital would be limited (for regulatory purposes) to 50 percent of primary capital. For determining capital adequacy, banks would be placed into one of three groups, depending on their size. The FDIC, however, held that since subordinated debt cannot be used to absorb unanticipated losses, it ought to be excluded, and

⁷⁸ Each agency used its own categories and measurements, however. See Arnold A. Heggstad and B. Frank King, "Regulation of Bank Capital: An Evaluation," Federal Reserve Bank of Atlanta *Economic Review* 67, no. 3 (1982): 38–39.

⁷⁹ See FFIEC, *Capital Trends in Federally Regulated Financial Institutions* (1980), 2–5.

⁸⁰ FFIEC, *Annual Report* (1979), 12.

⁸¹ The most significant change being contemplated by the OCC was the removal of subordinated debt and loan-loss reserves from the statutory definition of capital. See Teresa Carson, "CofC May Trim Definition of Capital, Lift Loan Limits," *American Banker* (July 24, 1980), 1; and Jay Rosenstein, "Comptroller's New Definition of Capital Is Viewed by Banks as Too Restrictive," *American Banker* (September 28, 1980), 3. In fact, the OCC announced that it would ease capital requirements for small banks and would count 100 percent of loan-loss reserves as capital for all national banks, as opposed to 50 percent (James Rubenstein, "Comptroller Eases Capital Rules for Small, Well-Managed Banks," *American Banker* [March 26, 1981], 1).

⁸² James G. Ehlen, "A Review of Bank Capital and Its Adequacy," Federal Reserve Bank of Atlanta *Economic Review* 68, no. 11 (1983): 54.

⁸³ *Federal Register* 46 (June 23, 1981), 32498.

voted against sending the proposal to the agencies. Its Board of Directors eventually rejected both the proposal and, for the time being, uniform capital guidelines.⁸⁴

In 1981 the Federal Reserve Board and the Comptroller of the Currency adopted a set of guidelines on capital ratios that mirrored most of the FFIEC proposals. Banks were divided into three groups on the basis of asset size: multinational, regional, and community. The multinationals—the 17 largest banks—would be treated individually and had no mandated capital requirements but were expected to reverse the decline in their capital positions. The implication was that if multinationals did not significantly better their capital levels, regulators would establish numerical standards.⁸⁵ For regional banks (assets between \$1 billion and \$15 billion), explicit ratio guidelines were set: these banks were expected to operate above a primary-capital-to-assets ratio of 5 percent. Community banks (assets below \$1 billion) were expected to maintain a ratio of at least 6 percent. In addition, banks were divided into three supervisory zones according to their total-capital-to-assets ratios. Multinational and regional banks with a ratio of 6.5 percent were designated “adequately capitalized,” those between 5.5 and 6.5 percent were “possibly undercapitalized,” and those below 5.5 percent were “presumed undercapitalized.” Community banks were ranked similarly, but with ratios set half a percentage higher. Banks that fell into the two lower zones would receive increasingly greater supervisory attention and would have to submit plans to rebuild their capital positions.⁸⁶

The FDIC, still stressing the importance of equity capital, adopted more-stringent guidelines on capital adequacy. It used a single measure—the ratio of adjusted equity capital to adjusted total assets—and set a 6 percent threshold for all state nonmember banks regardless of size. Chairman William Isaac noted that the agency’s position against counting limited-life instruments toward capital adequacy had long been known and that it was unfair to vary requirements depending on size, as smaller banks had urged for some time.⁸⁷ For all banks, the FDIC also set a minimum acceptable ratio of 5 percent. Any institution falling below this level was to initiate a specific program to remedy the capital deficiency.⁸⁸ Since most FDIC-supervised institutions had assets under \$1 billion, capital adequacy regulation was in fact more consistent than might have appeared on the surface. Thus, a sub-

⁸⁴ Lawrence, *Examination Council*, 17; Jay Rosenstein, “Exam Council Gives Views on Capital,” *American Banker* (November 12, 1981), 1; and Phil Battey, “Regulators Fail on Uniform Bank Capital Policy,” *American Banker* (December 18, 1981), 1.

⁸⁵ Reinicke, *Banking, Politics and Global Finance*, 140.

⁸⁶ Heggstad and King, “Regulation of Bank Capital,” 39. For the OCC’s view on capital adequacy at this time, see statement of Comptroller John Heimann before the Senate Banking Committee in April 1981, reproduced in *OCC Quarterly Journal*, pilot issue (1981): 37.

⁸⁷ Battey, “Regulators Fail,” 20.

⁸⁸ See FDIC Statement of Policy on Capital, PR-86-81 (December 17, 1981).

stantial amount of codification had been achieved, even though significant differences remained.

The less-developed-country debt crisis provoked the next significant change in capital regulation in 1983.⁸⁹ The crisis had created great anxiety about the condition of both U.S. money-center banks and the banking system as a whole.⁹⁰ During the debate over how to deal with the situation, many in Congress came to believe that the adverse effects on the U.S. economy would have been mitigated if the regulators had imposed more rigorous capital standards on multinational banks. Initially neither the OCC nor the Federal Reserve had indicated a desire to change its capital regulation, and the joint program that the three agencies presented to enhance the supervision of international lending did not address capital adequacy.⁹¹ Legislators held not only the regulators but also the banks responsible for the crisis, and the industry's resistance to increased supervision of international lending only strengthened the legislators' resolve to stiffen capital standards.

In 1983 the OCC's authority to impose explicit capital requirements was challenged in court; the case helped overcome the agencies' reluctance to accept stronger capital standards. Eventually, the International Lending Supervision Act of 1983 directed each agency to ensure that all banking institutions maintained adequate capital levels, and failure to do so was made an unsafe and unsound practice.⁹² Even before the law passed, the Federal Reserve and the OCC set minimum capital levels for multinational banks at the same level as for regionals.⁹³

The agencies had also committed themselves to working toward uniform capital standards, and in 1984 each agency published new proposals. The FDIC and OCC plans were very similar, and set the minimum primary-capital-to-assets ratio for all well-run banks at 5.5 percent, and the minimum total capital ratio at 6 percent. The Federal Reserve Board's proposal retained the then-current zone concept with regard to total capital levels but set the same minimum primary-capital ratio for all institutions—5.5 percent. Even as these proposals were being discussed, the FDIC was pressing to phase in a much higher total capital ratio of 9 percent, in a combination of a minimum 6 percent equity and up to 3 percent subordinated debt. Chairman Isaac argued not only that this would provide greater cushions for institutions but also that sophisticated debt holders would impose greater discipline on

⁸⁹ This discussion is based on Reinicke, *Banking, Politics and Global Finance*, 142–49.

⁹⁰ On the LDC crisis, see Chapter 5.

⁹¹ For the proposed program, see *Banking Expansion Reporter* 2, no. 9 (May 2, 1983): 5.

⁹² For a detailed discussion of the law, see Cynthia C. Lichtenstein, "The U.S. Response to the International Debt Crisis: The International Lending Supervision Act of 1983," *Virginia Journal of International Law* 25, no. 2 (1985): 401–35.

⁹³ Whereas the OCC imposed regulations, the Federal Reserve Board continued its approach of issuing only guidelines (*Banking Expansion Reporter* 2, no. 12 [June 20, 1983]: 11).

banks. Federal Reserve Board Chairman Paul Volcker endorsed the plan, as did a Treasury Department proposal, but it was never acted upon.⁹⁴ When the final rules were announced in 1985, the FDIC and OCC regulations were based largely on their proposals, and the Federal Reserve, while keeping the capital zones for supervisory use, also implemented minimums of 5.5 percent primary- and 6 percent total-capital ratios.⁹⁵ All the agencies also issued regulations concerning capital directives. Substantial uniformity had been achieved not only between the agencies but also with respect to banking institutions regardless of asset size.

Even as the banking agencies were making the new rules final, all the regulators were pronouncing them insufficient.⁹⁶ The imposition of enforceable capital ratios had motivated banks to expand off-balance-sheet activities, such as letters of credit, loan commitments, and interest-rate and currency swaps: such activities incurred risk but did not have to be backed by capital. One study noted that during the first half of 1985, the inclusion of standby letters of credit into bank assets would have decreased the primary-capital ratio among 12 money-center banks by approximately 11 percent.⁹⁷ Regulators were concerned that these activities could injure liquidity and undermine safety and soundness, and they quickly undertook development of risk-based capital standards. These focused on credit risk, and would link capital requirements to the riskiness of bank activities.⁹⁸ Off-balance-

⁹⁴ Robert Trigaux, "Isaac, in a Shift, Warns Convention on Nationalization," *American Banker* (October 23, 1984), 45; William Isaac, "Brief Comment," *American Banker* (January 17, 1985), 4; Bartlett Naylor, "Volcker to Propose Risk-Based Capital Rule," *American Banker* (September 12, 1985), 1; and Maggie McComas, "More Capital Won't Cure What Ails Banks," *Fortune* (January 7, 1985), available: LEXIS, Library: NEWS, File: FORTUN. Industry observers viewed the proposal as a "fishing-expedition" move toward some form of stricter capital standards (Richard S. Vokey and Kevin L. Kearns, "Issues in Capital Adequacy Regulation," *Bankers Magazine* 168, no. 5 [1985]: 40).

⁹⁵ *Banking Expansion Reporter* 4, no. 7 (April 1, 1985): 16–17; and *Federal Reserve Bulletin* (June 1985): 440–41. For a summary of the new regulations, see R. Alton Gilbert, Courtenay C. Stone, and Michael E. Trebling, "The New Capital Adequacy Standards," *Federal Reserve Bank of St. Louis Economic Review* 67, no. 5 (1985): 12–20.

⁹⁶ See statements by William Isaac of the FDIC, Michael Patriarca of the OCC, and Paul Volcker of the Federal Reserve Board in, respectively, Jay Rosenstein, "FDIC Raises Capital Ratio Requirements," *American Banker* (February 12, 1985), 30; John P. Forde, "Capital Guidelines Revision Foreseen," *American Banker* (March 29, 1985), 1; and Naylor, "Volcker to Propose," 1.

⁹⁷ Reinicke, *Banking, Politics and Global Finance*, 151. The Federal Reserve stated that between year-end 1981 and midyear 1985, letters of credit at multinational banks had increased from 5.8 percent of aggregate assets to 11.5 percent (*Banking Expansion Reporter* 5, no. 3 [February 3, 1986]: 3). It was reported that by early 1987 the decision to impose risk-based capital standards had decreased the use of standby letters of credit (Lisabeth Weiner, "Some Banks Turn More Cautious in Issuing Standby Credit," *American Banker* [February 5, 1987], 1).

⁹⁸ Risk-based capital was not new in the 1980s; in the 1950s the Federal Reserve Board had used a risk-based system called ABC (Paul M. Horvitz, "Warming Over the ABC Idea," *American Banker* [February 26, 1986], 24; and William R. Keeton, "The New Risk-Based Capital Plan for Commercial Banks," *Federal Reserve Bank of Kansas City Economic Review* 74, no. 10 [1989], 42, note 2).

sheet items would be converted into on-balance-sheet credit equivalents and assigned a risk weight. All three agencies issued preliminary risk-based capital proposals by mid-1986. The agency approaches differed somewhat, although they were basically very similar, and the agencies were confident they could reach uniform standards. Both the FDIC and the Federal Reserve Board favored making risk-based capital a supplement to current capital standards, whereas the OCC advocated making it a replacement for them.⁹⁹ In addition, as of mid-1987, the OCC's definition of what would become Tier 1 capital included loan-loss reserves, while the Federal Reserve's did not. There was also some disagreement on the appropriate risk weighting for longer-term government securities.

Initially larger banks in particular did not favor the risk-based proposals, fearing they would place U.S. banks at a competitive disadvantage in pricing fee-generating financial services.¹⁰⁰ These objections had less force after U.S. regulators joined their international counterparts in 1986 in working to create a common set of risk-based requirements.

The Basle Committee on Banking Regulations and Supervisory Practices reached agreement on a general set of principles in June 1988.¹⁰¹ The standards defined capital and set risk weights and credit conversions for off-balance-sheet items; the standards were then implemented by each nation's banking regulators.¹⁰² Capital was defined as consisting of two tiers: Tier 1 capital included fully paid common stock and perpetual noncumulative preferred shares; Tier 2 capital included undisclosed reserves, revaluation reserves, general loan-loss reserves (limited in amount, generally up to 1.25 percent), hybrid debt/equity capital instruments, and subordinated debt (limited to a maximum amount of 50 percent of Tier 1). U.S. regulators had previously counted loan-loss reserves as primary capital, but an increasingly strong belief that capital should consist primarily of equity and the need to find common ground among the international regulators combined to help change that. Banks were to have a minimum of 4 percent Tier 1 capital and 8 percent total risk-based capital by

⁹⁹ "Risk-Based Capital Plan," *American Banker* (February 26, 1986), 3; Robert Trigaux, "Comptroller Unveils Risk-Based Plan," *American Banker* (March 26, 1986), 1; and *Banking Expansion Reporter* 5, no. 8 (April 21, 1986): 6–8.

¹⁰⁰ Robert M. Garsson, "Comptroller Says Regulators May Issue One Risk-Based Capital Proposal by Fall," *American Banker* (July 11, 1986), 10. The Independent Bankers Association of America (IBAA), which represented smaller banks, was more receptive, believing that such institutions would benefit from lower capital requirements. See also Robert M. Garsson, "US, British Join in Bank Capital Rules," *American Banker* (January 9, 1987), 1; and Bart Fraust, "At Banking Conference, There Was Bad News—And Worse News," *American Banker* (April 3, 1987), 8.

¹⁰¹ The committee was made up of representatives of bank regulatory agencies in Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland, the United Kingdom, and the United States.

¹⁰² For further details on capital definition and risk weights, see the text of the Basle agreement, which is reproduced in *BNA's Banking Report* 51, no. 4 (July 25, 1988): 143–55. Earlier Basle proposals had limited Tier 1 capital only to common equity; see *Banking Expansion Reporter* 7, no. 3 (February 1, 1988): 18.

the end of 1992. By the end of 1988, the U.S. regulators had set final risk-based capital rules in a process that involved making further refinements and compromises.¹⁰³

Debate continued, however, over what ought to become of the old capital standards. The FDIC rules retained the old total-capital-to-assets ratio (the leverage ratio), stating that banks would have to maintain the higher of 6 percent capital or the amount determined by the risk weighting of assets. The Federal Reserve Board also held to the 6 percent minimum but suggested it might be lowered in the future. The OCC, which had originally argued for complete removal of the old ratio, now pressed for a 3 percent minimum capital requirement. Comptroller Clarke argued that maintaining the old ratio would destroy incentives for banks to retain low-risk assets under the new risk-based rules, and suggested that the OCC would strengthen the 3 percent standard by excluding loan-loss reserves and incorporating interest-rate risk.¹⁰⁴ The differences between the two agencies persisted because of their different orientations: the FDIC was primarily concerned with protecting the deposit insurance fund, whereas the OCC wanted banks to be freer to expand profitability. The impasse was eventually ended with a compromise offered by the Federal Reserve Board which set the minimum leverage ratio at 3 percent—but only for banks with CAMEL ratings of 1.¹⁰⁵ Banks with lower ratings would have to hold between 100 and 200 basis points in additional capital (and, for the most troubled institutions, possibly more). Most banks would therefore need to maintain ratios of between 4 and 5 percent, midway between the FDIC and OCC recommendations.¹⁰⁶ In 1991, when FDICIA used both risk-based capital levels and the leverage ratio to define capital category standards and those categories became the triggers for PCA, regulatory capital levels acquired even greater importance. Although bank regulators have continued to amend capital standards to better reflect bank risk, as of this writing the dual system of risk-based and leverage capital standards remains in place.

¹⁰³ For example, the Federal Reserve had pushed for a risk weighting of 100 percent for home mortgages but eventually went along with 50 percent. The Federal Reserve also believed that longer-term government securities, by virtue of interest-rate risk, ought to be assigned a risk weight higher than zero, but the final rules placed all Treasury securities, regardless of maturity, in the zero-risk category. See Barbara A. Rehm, "Fed Compromises on Final Risk-Based Capital Rules," *American Banker* (August 4, 1988), 2; and Bart Fraust, "Impact of Risk-Based Capital Rules to be Eased," *American Banker* (October 12, 1988), 3.

¹⁰⁴ Jim McTague, "FDIC Set to Adopt 6% Capital Minimum," *American Banker* (March 14, 1989), 2; and Barbara A. Rehm, "Comptroller Favors 3% Capital to Back Low-Risk Assets," *American Banker* (April 5, 1989), 3.

¹⁰⁵ The CAMEL rating system refers to capital, assets, management, earnings, and liquidity. In addition to a rating (from 1 to 5) for each of these individual components, an overall or "composite" rating is given for the condition of the individual bank. The CAMEL rating system is discussed in detail in Chapter 12.

¹⁰⁶ Barbara A. Rehm, "Fed Seeks to Close Gap in Proposal on Capital Ratios," *American Banker* (October 26, 1989), 1, 23; Barbara A. Rehm, "Fed Mulls 3% Capital Minimum for Banks in Best Condition," *American Banker* (November 24, 1989), 1; and Barbara A. Rehm, "A Magic Number from Fed Brings Accord on Capital," *American Banker* (November 28, 1989), 1.

Formal Regulatory Forbearance

The formal practice of forbearance was inaugurated with Garn–St Germain’s Net Worth Certificate Program for savings banks. Qualifying institutions and the insurers exchanged notes that created “regulatory capital,” allowing institutions to meet regulatory requirements and continue to operate.¹⁰⁷ Commercial banks were not included then, but soon afterward weakness in the agricultural and energy sectors began to exact its toll on those institutions. As early as 1983, it was reported that the banking agencies were instructing their examiners to be lenient in criticizing farm-bank managements that were trying to cope with increasing credit problems.¹⁰⁸ Nevertheless, although cognizant of sectoral economic problems, the FDIC believed that mismanagement contributed significantly to agricultural-bank failures, and the agency resisted attempts to provide it with authority to allow banks to renegotiate loans with farmers and then write off the losses over a period of years.¹⁰⁹ All of the banking agencies did, however, encourage banks to work with borrowers who were experiencing difficulties, provided the institutions’ practices were generally consistent with safety and soundness; and all of the agencies also instructed examiners to handle credit problems “with understanding.”¹¹⁰

But as increasing numbers of agricultural banks continued to fail, congressional and industry sentiment prompted the regulators to formulate plans to further assist troubled banks in 1986.¹¹¹ The three banking agencies opposed proposals that would have either created a new net worth certificate program or permitted loan-loss deferrals; they said they were reluctant to engage in “accounting gimmicks” that would undermine the integrity of the banking system.¹¹² The agencies did, however, issue a joint statement reaffirming their policies not to discourage banks from implementing work-out plans with their agricultural borrowers when appropriate. The agencies also encouraged banks to take advantage of the fact that they would not be required to automatically charge-off loans that had been re-

¹⁰⁷ See Chapter 6 for a discussion of the Net Worth Certificate Program, and Chapter 1 for an analysis of the use of forbearance.

¹⁰⁸ Lisa J. Mc Cue, “Farm Bankers Urged to Show Forbearance,” *American Banker* (August 4, 1983), 3.

¹⁰⁹ Kim Kaplan and Bartlett Naylor, “FDIC Snubs Bill to Help Farm Banks Cope with Bad Loans,” *American Banker* (July 25, 1985), 3.

¹¹⁰ The regulators’ response was the subject of a joint policy statement issued on April 3, 1985. See OCC *Quarterly Journal* 4, no. 2 (1985): 16.

¹¹¹ The executive director of the Kansas Bankers Association noted in 1985 that, despite claims to the contrary, the banking agencies were not exercising forbearance (Kaplan and Naylor, “FDIC Snubs Bill,” 7). Another midwestern banker suggested in early 1986 that legislative action might not be necessary, “but the regulators need to give us as much forbearance as possible to help us take our losses without closing everybody down” (“Severe Problems in the Midwest,” *Bankers Magazine* 169, no. 1 [1986]: 25).

¹¹² Jay Rosenstein and Bartlett Naylor, “Regulator Says 300 Farm Banks May Fail by ’88,” *American Banker* (February 24, 1986), 1, 21; and “Comptroller’s Letter on Agricultural Banks,” *American Banker* (March 6, 1986), 4. For a contemporary discussion of the issues, see FDIC, “Farm Bank Problems and Related Policy Options” (February 1986).

structured, as long as future payments of principal and interest at least equaled the face amount of the loan.¹¹³ Most significantly, the regulators agreed on a capital forbearance program not only for the agricultural banks but also for troubled banks involved in the increasingly distressed energy sector. The agencies resolved not to take enforcement action against banks whose capital-to-assets ratios failed to meet regulatory minimums but were at least 4 percent. Banks also had to meet the regulatory definition of an “agriculture” or “oil-and-gas” bank, and their weakened capital position had to stem from external economic factors, not mismanagement. Banks were required to submit acceptable plans for capital restoration, which was to occur within seven years, as well as annual progress reports. The deadline to apply for forbearance was year-end 1987.¹¹⁴

Banks did not seek to enter the program in large numbers. The OCC noted that by early June 1986, it had received only 14 applications and had admitted 4 banks. By the end of that year, 52 banks had been admitted to the program. In early 1987, some legislators complained that few banks applied to the program because too many hurdles had been placed in the way of approval. In any case, they believed the program afforded banks insufficient relief.¹¹⁵ In response to industry and congressional pressure and with the growing realization that banking conditions were still worsening, in mid-1987 the regulators expanded the capital forbearance program considerably by allowing any bank to apply if the bank could demonstrate that its difficulties resulted primarily from economic problems beyond the control of management. Moreover, the fixed minimum capital ratio of 4 percent was eliminated, and the program—originally set to expire at the end of 1987—was extended for two additional years.¹¹⁶ After these changes were made, more banks participated in the program: 156 banks were admitted in 1987, and 93 more were admitted in the program’s final two years, bringing the total admitted to 301. Of this total, one year after leaving the program 201 were operating as independent institutions, while 35 had been merged without FDIC assistance and 65 had failed. The expanded program was not, however, sufficient to halt congressional moves for a loan-loss amortization program for farm banks,

¹¹³ See FRB, *Annual Report* (1986), 192. Banks were instructed to account for debt restructurings in accordance with GAAP principles, specifically FASB 15, “Accounting by Debtors and Creditors for Troubled Debt Restructurings.” See also FDIC Bank Letter BL-15-86, April 11, 1986; and OCC *Quarterly Journal* 5, no. 2 (1986): 51.

¹¹⁴ See FDIC Bank Letter, BL-12-86, March 27, 1986; and OCC Banking Circular no. 212, March 28, 1986, in OCC *Quarterly Journal* 5, no. 2 (1986): 48–54. The OCC also announced that it would temporarily increase national-bank lending limits on loans to one borrower for banks that had experienced losses in the two sectors. See Jay Rosenstein, “Comptroller Says Rule Easing Loan Limits for Some Is Final,” *American Banker* (November 20, 1986), 14. See also *Federal Reserve Bulletin* 72, no. 6 (June 1986): 392.

¹¹⁵ OCC *Quarterly Journal* 5, no. 3 (1986): 61; and Paul Tosto, “Bills Seek to Help Plight of Agricultural Banks,” *American Banker* (February 4, 1987), 6. In response, two senators, Alan Dixon and Nancy Kassebaum, renewed attempts to pass loan-loss amortization plans for farm banks. This would become part of CEBA, as discussed below.

¹¹⁶ See John C. Rasmus, “Capital Forbearance for Commercial Banks,” *Journal of Agricultural Lending* 1, no. 4 (1988): 28–30; FDIC Bank Letter BL-24-87, July 9, 1987; and OCC *Quarterly Journal* 6, no. 3 (1987): 37.

which was enacted under the Competitive Equality Banking Act of 1987.¹¹⁷ This program was substantially smaller in scope. A total of 33 banks were admitted; 27 of these survived as independent institutions one year after leaving the program, while 2 had merged and 4 had failed.¹¹⁸

Brokered Deposits

Penn Square's demise in 1982 not only helped the regulators obtain new powers to deal with failing institutions but also focused attention on another regulatory issue: the increasing use of brokered deposits.¹¹⁹ Starting in the early 1970s, brokered CDs had come to be used increasingly as funding sources, first by money-center banks and then by regional and smaller institutions.¹²⁰ The brokered CD market was divided into two parts: the wholesale institutional market, where CDs were issued in denominations of \$100,000 or more, and the retail market, where CDs were in denominations not exceeding \$100,000.¹²¹

The potential abuses of brokered deposits received relatively little attention until the failure of Penn Square, where the amount of brokered funds had risen from less than \$20 million to \$282 million just before the bank failed.¹²² By early 1983, the FDIC was expressing concern about deposit brokers that were dividing money into packages of \$100,000 without necessarily conducting any credit analysis to ascertain the conditions of the offering institutions.¹²³ The deposit insurers feared that brokers were singling out institutions known to have problems in order to earn higher fees. Later that year Representative St Germain asked the banking regulators for a detailed plan for supervising money brokers in the wake of Penn Square. By early 1984, both the FDIC and the Federal Home Loan Bank Board (FHLBB) proposed that brokered deposits be insured only up to \$100,000 per broker per bank.¹²⁴

¹¹⁷ For a discussion of the program under CEBA, see the section above on that law.

¹¹⁸ These loan-loss amortization program totals exclude banks that were in both the capital forbearance and loan-loss amortization programs; those banks are included in the totals for the capital forbearance program.

¹¹⁹ See Chapter 9 for a discussion of Penn Square's failure.

¹²⁰ Brokered deposits are certificates of deposit issued by a financial institution and purchased by an investor through a third-party intermediary; the third party receives a fee or commission from the issuing institution.

¹²¹ See Caroline T. Harless, "Brokered Deposits: Issues and Alternatives," Federal Reserve Bank of Atlanta *Economic Review* 69, no. 3 (1984): 14–25.

¹²² Phillip L. Zweig, "Brokered Penn Square Funds Soared Just before Collapse," *American Banker* (November 19, 1982), 3.

¹²³ Money brokers disputed this. In 1984 Merrill Lynch said it performed credit reviews on banks and had not marketed CDs issued by any of the banks that failed in that year. See Jay Rosenstein, "Merrill Lynch Challenges Isaac's Remarks," *American Banker* (December 14, 1984), 3. However, in 1983 Kominz Co., a California broker, said it had "returned" to the practice of analyzing Call Report data from institutions before brokering funds. The company said competitive pressures had forced it to drop the practice some time before, and agreed that the unregulated money-brokerage business had "gotten out of hand" (Richard Ringer, "CD Broker Proposes Self-Regulation," *American Banker* [August 9, 1983], 1).

¹²⁴ Lisa J. Mc Cue, "St Germain Asks Regulators to Supervise Money Brokers," *American Banker* (September 9, 1983), 1; and Jay Rosenstein, "Insurance Limits Considered on Pensions, Custody Deposits," *American Banker* (October 25, 1983), 1.

Many observers agreed that some form of regulation was required, but some viewed the proposal as an overreaction. The CD brokerage industry was obviously concerned, and argued that this regulation would effectively destroy a business that provided real benefits to financial institutions. Comptroller C. T. Conover (as a member of the FDIC Board of Directors) had voted against the FDIC proposal, saying it was “like shooting ants with elephant guns.” The Treasury agreed that the proposed regulation was much stronger than necessary.¹²⁵ Members of Congress also expressed concern about the proposed regulation, and the House Committee on Government Operations held extensive hearings on the subject in March. The OCC argued for a supervisory approach that would allow an institution to accept up to twice its capital in brokered deposits as long as brokered deposits did not exceed 15 percent of total deposits. No institution with a capital ratio under 3 percent would be allowed to accept any brokered deposits. The Federal Reserve Board shared FDIC and FHLBB concerns and was willing to support their proposal but urged that a less-sweeping approach be mandated by legislation. Those testifying on behalf of money brokerage agreed that the misuse of such funds should be prevented, but they argued that the proposed regulations would restrict the legitimate and generally helpful use of brokered funds by depository institutions.¹²⁶

Despite the obviously divided opinion, both the FDIC and the FHLBB decided to press on with their rule, which was to become effective in October. This prompted one of the larger money brokers, FAIC Securities, to sue, arguing that the agencies had overstepped their authority. The Securities Industry Association soon followed with another lawsuit, claiming that the two agencies had “heavy-handedly slammed the door shut on a mechanism that provides a real service to the nation’s savers and deposit-taking institutions.”¹²⁷ The situation changed dramatically in June, when the U.S. District Court in Washington, D.C., ruled that the agencies had overstepped their authority, maintaining that the statutes creating deposit insurance focused on ownership of deposited funds and not on the manner in which deposits were arranged.¹²⁸

The FDIC announced its determination to appeal and, in response to the ruling, put a temporary regulation in place requiring institutions that relied heavily on brokered deposits to file detailed monthly reports on brokered deposit amounts. The regulatory dynamic became somewhat fractured and uncertain, as did the fate of money brokers and the institu-

¹²⁵ Lisa J. Mc Cue, “Agencies Propose Broker Limits,” *American Banker* (January 17, 1984), 1.

¹²⁶ U.S. House Committee on Government Operations, *Proposed Restrictions on Money Brokers: Hearing*, 98th Cong., 2d sess., 1984.

¹²⁷ Andrew Albert, “Broker Sues, Shakeout Seen,” and Richard Ringer, “Isaac Vows Close Supervision,” both in *American Banker* (March 28, 1984), 1; and Andrew Albert, “Securities Industry Sues to Void Broker Rules,” *American Banker* (April 13, 1984), 1.

¹²⁸ Lisa J. Mc Cue, “Brokered Funds Issue Seen Likely to Go to Congress,” *American Banker* (June 22, 1984), 1.

tions that used them. Congress continued to debate the issue, but the possibility existed that the FDIC might win its appeal before legislation could be enacted. Congress was considering three bills on the use of brokered deposits, all of which limited the amount of short-term insured brokered funds to 15 percent of deposits or 200 percent of unimpaired capital and surplus, whichever was less. In September a House subcommittee released a report claiming that (a) brokered deposits were not a significant source of deposit growth for most rapidly growing problem institutions, (b) “forceful use of . . . existing supervisory powers on a case-by-case basis” would be the most effective regulatory policy, and (c) elimination of insurance coverage would probably not achieve increased market discipline.¹²⁹

The agencies that were pressing for regulation insisted that brokered deposits continued to be a growing problem. FDIC Chairman Isaac noted near the end of 1984 that of the approximately \$22 billion in brokered deposits in FDIC-insured banks, more than 40 percent of that amount was in banks with CAMEL ratings of 3, 4, or 5. At the same time, the Federal Reserve Bank of New York published a research study supporting both the contention that a relationship existed between brokered deposits and weak financial institutions and the contention that banks with high levels of brokered deposits raised FDIC costs and were therefore a threat to the insurance fund.¹³⁰ The study did not, however, completely endorse the FDIC/FHLBB proposal but suggested that a regulatory cap, to be enforced by the banking agencies in the same manner as capital adequacy, would be a way to address abuses while not eliminating the benefits of such deposits.

Early in 1985 the court of appeals upheld the decision barring federal regulators from ending deposit insurance on brokered deposits. The FDIC vowed to appeal further, but clearly congressional opposition to the proposed regulation remained strong.¹³¹ By mid-1985 the brokerage industry was willing to accept a bill put forward by Representative Garcia similar to those proposed in 1984. The FDIC reluctantly expressed its willingness to

¹²⁹ In H.R. 5913, sponsored by Representatives Robert Garcia and Charles Schumer, institutions that failed to meet certain minimum capital requirements would not be able to accept any new brokered deposits. In Title VIII of S. 2851, sponsored by Senator Garn, they would not be able to accept any new insured brokered deposits. In S. 2679, sponsored by Senators D’Amato, Mattingly, Hawkins, and Cranston, they would not be able to hold any insured brokered funds. H.R. 5913 also contained (a) a requirement that brokers report to the deposit insuring agencies, (b) a provision that deposit insurance coverage be denied for any funds placed through a broker for an agency of the U.S. government or for a depository institution, and (c) “a general limit on deposit insurance benefits payable on the funds placed by any one person through any one broker to no more than \$100,000 in any 4-year period.” See U.S. House Committee on Government Operations, *Federal Regulation of Brokered Deposits in Problem Banks and Savings Institutions: Report*, 98th Cong., 2d sess., 1984, 8–11.

¹³⁰ Sherrill Shaffer and Catherine Piché, “Brokered Deposits and Bank Soundness: Evidence and Regulatory Implications,” Federal Reserve Bank of New York research paper no. 8405 (1984). A study done for Merrill Lynch by Cates Consulting Analysts argued that brokered CDs did not significantly contribute to bank failure (Sanford Rose, “Refocusing on Brokered Deposits,” *American Banker* [February 26, 1985], 1).

¹³¹ Representative Barnard’s Government Operations Subcommittee prepared another report in April 1985 with conclusions similar to those of 1984.

compromise. William Isaac said the cap should be placed at 100 percent rather than 200 percent of net worth but that although “we do not like it, we can accept such a bill.” At the same time, however, the FDIC kept up its efforts by proposing a new regulation to require banks to keep records of individuals and institutions that placed money through brokers.

The debate over the proposed regulation ended suddenly in October 1985 when the court of appeals rejected the two agencies’ request for a rehearing on the court’s decision and, at the same time, L. William Seidman became chairman of the FDIC. He viewed brokered deposits in a more favorable light and said the proposed insurance limit would have “eliminated the benefits of the evolution of the financial marketplace.”¹³² The FDIC decided not to appeal further, and in December it withdrew the proposed insurance-limit regulation. The following June it also abandoned the proposed record-keeping rule. This decision was doubtless made easier by the fact that from 1984 to 1985 brokered deposits in commercial banks had dropped significantly. The issue would, however, return to the legislative agenda in the aftermath of the thrift crisis, and both FIRREA in 1989 and FDICIA in 1991 would mandate limitations on the use of brokered deposits by troubled institutions.

Expanded Powers

As is discussed above, federal legislation during the 1980s provided commercial banks with few new powers, but congressional action was by no means the only route banks could take to get them. Action by state legislatures and state banking authorities, as well as decisions by the federal regulators, could and did fill the vacuum created by the gridlock in Congress. States, both in response to congressional inaction and as a perceived means to encourage economic growth, were particularly active in providing new powers to their banks during the 1980s. The states’ ability to do so derived from the fact of the dual banking system, which was the product of a long history reaching back to the beginnings of banking in the United States. Although the creation of the Federal Reserve System in 1913 and the FDIC in 1933 had imposed increasing federal regulation on state-chartered banks, the states were quite deliberately allowed considerable regulatory autonomy, a situation Congress had refrained from altering. State-chartered nonmember banks, for example, had always been exempt from Glass-Steagall, and states exercised control over the availability of interstate banking within their borders.

Some observers credit the dual banking system with stimulating innovation in banking, to the benefit of both the industry and consumers. Notable examples of state-level innovations in the 1970s that were eventually adopted nationwide included NOW accounts

¹³² For William Isaac’s remarks, see *American Banker* (July 17, 1985), 2. Seidman’s statement was made at the convention of the U.S. Savings League. See Mark Basch, “Seidman Takes a Conciliatory Stance on Brokered Deposits, But Plans Curbs,” *American Banker* (November 6, 1985), 1.

and ARMs, the former developed in Massachusetts and the latter in California. Moreover, although Congress did not enact nationwide interstate banking until 1994, during the 1980s many states gradually created a de facto system of interstate banking. Other observers, however, hold that the dual banking system fostered a dangerous “competition in laxity” between the states and the chartering authority of national banks, the OCC, with each outbidding the other in making powers available.¹³³

But the determining factor behind the federal regulators’ decisions to permit banks entry into new areas was not necessarily regulatory competition. As has been noted, to varying degrees all three agencies endorsed additional powers for commercial banks. All three also favored a congressional resolution of the debate, but in the absence of federal legislation, the regulators had the ability to act and were under a great deal of pressure to do so. The OCC, with its strong support of deregulation, was often the most aggressive in this respect. In 1982 Comptroller C. T. Conover stated the OCC position on bank applications for new activities: “Very simply, if a bank can make a strong case that a proposed activity is legal, our inclination is to approve it.”¹³⁴ During the early 1980s, for example, the OCC authorized national banks to offer discount brokerage and investment advisory services, operate futures-commission merchant subsidiaries, and underwrite credit life insurance.¹³⁵ By the late 1980s the Federal Reserve Board was increasingly allowing bank holding companies to enter many new areas.¹³⁶ The FDIC did not have authority to permit state banks to engage in new activities, but it did rule in 1984 that insured nonmember banks could establish or acquire subsidiaries that were engaged in securities activities.¹³⁷

The FDIC ruling was, of course, an acknowledgment that states could allow banks into such businesses and were in fact doing so. Indeed, from the mid-1980s on, many states began allowing state-chartered banks to enter not only securities underwriting and brokerage but also real estate development, equity participation, and insurance underwriting and brokerage. By the end of the decade 29 states permitted state-chartered banks to engage in some form of securities underwriting, and only 7 barred banks from the securities brokerage business. Half the states allowed banks into some type of real estate development, and

¹³³ See Kenneth E. Scott, “The Dual Banking System: A Model of Competition in Regulation,” *Stanford Law Review* 30, no. 1 (1977): 1–49; Arthur E. Wilmarth, “The Expansion of State Bank Powers, the Federal Response, and the Case for Preserving the Dual Banking System,” *Fordham Law Review* 58, no. 6 (1990): 1132–256; and Advisory Commission on Intergovernmental Relations, *State Regulation of Banks*.

¹³⁴ C. T. Conover, speech to the American Bankers Association on October 19, 1982, reprinted in OCC *Quarterly Journal* 2, no. 1 (1983): 40.

¹³⁵ *Ibid.* 3, no. 3 (1984): 19–20.

¹³⁶ Reinicke, *Banking, Politics and Global Finance*, 102–13; and Helen Garten, *Why Bank Regulation Failed* (1991), chap. 4.

¹³⁷ FDIC, *Annual Report* (1984), 39.

23 allowed some form of equity participation. Six states permitted their banks to engage in insurance underwriting beyond credit life insurance.¹³⁸

The states' moves to expand commercial bank powers were not unanimously applauded. Some critics suggested that state legislators were being lured into passing laws by the specious promise of economic growth. The vice president of the Conference of State Bank Supervisors, a group that generally supported expanded powers, noted in 1983 that some proposals were "competitive knee-jerk activities conceived without a hell of a lot of thought."¹³⁹ Nor were federal banking regulators completely sanguine about states' expansion of bank activities. Federal Reserve Board Chairman Volcker worried that states were rushing ahead with "little conscious sense of some of the broad public interests at stake" and said the federal government should impose limits on the power of states to authorize activities that Congress decided were a threat to safety and soundness.¹⁴⁰ The FDIC also expressed concern about bank involvement in historically "nonbank" activities, sought comment in 1983 on the need to regulate such activities, and issued a proposed rule in 1984. In 1985 the agency proposed an amended rule that FDIC-insured banks be required to place insurance underwriting and real estate investment or development activities in separately capitalized subsidiaries to insulate the bank from potential increased risk.¹⁴¹

The FDIC proposal proved controversial. The agency maintained that, as insurer, it ought to be able to set some guidelines, but state banking authorities, state-chartered banks, and industry associations all opposed the rule, protesting that it arbitrarily and indiscriminately assigned risks that often did not exist. The agency was accused of overstepping its authority, violating states' rights by preempting state legislation, and damaging the dual banking system. Moreover, the combination of then-current Federal Reserve Board policy and the proposed FDIC rule would have meant that only state nonmember banks would be allowed to engage in real estate development at all.¹⁴²

The other federal regulators had misgivings as well. The OCC opposed the regulation because it asserted potential FDIC jurisdiction over national banks.¹⁴³ The Federal Reserve

¹³⁸ FDIC, "State Bank Powers Study" (1991). See also Saulsbury, "State Banking Powers."

¹³⁹ Richard Ringer, "States Rush to Deregulate," *American Banker* (May 9, 1983), 7.

¹⁴⁰ Richard Ringer, "Volcker Urges Care on Deregulation," *American Banker* (May 10, 1983), 1; and Lisa J. Mc Cue, "Volcker Supports Powers Bill to Give Banks Market Parity," *American Banker* (March 28, 1984), 3.

¹⁴¹ FDIC, *Annual Report* (1984), 41, and (1985), 57. The first rule had also covered travel agency activities and insurance and real estate brokerage, but the FDIC decided those activities could be adequately dealt with on a case-by-case basis. In January 1985 the FHLBB passed a rule restricting direct investments by S&Ls.

¹⁴² Regulation Y permitted bank subsidiaries of bank holding companies to establish a nonbanking subsidiary only if the parent bank was allowed to engage in the activities directly. Since real estate activities were viewed as inherently risky, some Federal Reserve Board staff saw this "regulatory squeeze" as a positive situation. Bankers and state bank regulators did not share this view. See *Washington Financial Reports* 44, no. 3 (January 21, 1985): 75.

¹⁴³ FDIC, comment letter received from Acting Comptroller of the Currency H. Joe Selby (July 22, 1985).

Board, given its preference for limiting state powers, was broadly sympathetic to the concept behind the proposed rule and was even soliciting comment itself on ways to curtail real estate activities,¹⁴⁴ yet it was leaning toward restricting such activity to nonbank subsidiaries of bank holding companies rather than permitting it in direct subsidiaries of banks themselves. The Federal Reserve Board was also concerned about the legal issues involved in the FDIC's regulating state member banks and bank holding companies and their non-bank affiliates. So while urging coordination between the two agencies, the Board said that if the FDIC decided to proceed with the rule as proposed, FRB-regulated institutions should be excluded.¹⁴⁵ The FDIC postponed implementing the regulation, and by late 1986 the FRB proposed its own regulation: not only state member banks but also state-chartered bank subsidiaries of bank holding companies would be prohibited from direct investment in real estate, which would be allowed only through a separately incorporated real estate subsidiary of a bank holding company that met certain capital requirements. Banking industry groups opposed the FRB's proposal much as they had the FDIC's.¹⁴⁶

The FDIC and the FRB were unable to reach consensus about their respective regulations and in late 1987 the FDIC withdrew its proposed regulation, stating that there was not yet sufficient evidence about the degree of risk the activities posed to the insurance fund.¹⁴⁷ At about the same time, however, the FRB was considering (a) imposing higher capital requirements on holding companies of state-chartered banks that conducted real estate investment through a subsidiary and (b) tightening the regulation of transactions between banks and real estate subsidiaries.¹⁴⁸ The FRB's proposed real estate rules attracted congressional reaction to the extent that a bill was sponsored in 1989 to prevent the Federal Reserve from exercising control over subsidiaries of state banks within holding companies. One commentator claimed that the agency allowed the rules to remain as proposals while it engaged in "de facto rulemaking" by procuring certain commitments from applicants seeking to form or expand holding companies within which a bank subsidiary planned to use its state-granted real estate powers. It was suggested that the Federal Reserve actually preferred not to implement the rule but, rather, to continue demanding higher capital levels of institutions that were unwilling to refrain from real estate activities.¹⁴⁹ In any case, the FRB proposal never became a regulation.

¹⁴⁴ *Washington Financial Reports* 44, no. 3 (January 21, 1985): 75.

¹⁴⁵ FDIC, comment letter received from Secretary of the FRB William W. Wiles (February 26, 1985).

¹⁴⁶ *Washington Financial Reports* 47, no. 21 (December 1, 1986): 851–52.

¹⁴⁷ FDIC, *Annual Report* (1987), 30. The Board of Directors indicated that the agency intended to "reevaluate whether a broad-based regulation for real estate investments . . . [was] necessary."

¹⁴⁸ Barbara A. Rehm, "Fed Weighs Restrictions on Real Estate," *American Banker* (November 3, 1987), 1.

¹⁴⁹ Barbara A. Rehm, "House Measure May Foil Fed Efforts to Gain Control of State Bank Limits," *American Banker* (April 10, 1989), 1; and John D. Hawke, "Fed Needs New Approach to Real Estate," *American Banker* (August 16, 1989), 4.

In early 1991, the FDIC again announced plans to limit the authority of state-chartered banks to invest in real estate and sell insurance. The issue of powers available to state-chartered banks, however, was settled later in that year under FDICIA. That law prohibited insured state-chartered banks from engaging in an activity not permitted for a national bank unless the FDIC decided that the activity posed no significant risk to the Bank Insurance Fund and the bank met agency capital standards. The dual banking system was not swept away and flexibility was not abolished, yet regulatory concerns were addressed.

After the Crisis: Legislation, 1992–1994

FDICIA marks a natural endpoint to a discussion of legislation during the banking crisis of the 1980s and early 1990s, but later legislation usefully places the crisis in context, for as it became apparent that the banking industry had recovered, attitudes toward regulation changed. As has been noted, deregulation had never left the legislative and policy agenda, even when the thrift and banking industries were in greatest difficulty. Not surprisingly, this held true as times grew better. Two laws enacted in 1994, although they do not reflect an abandonment of the “reregulatory” provisions of FIRREA and FDICIA, suggest a changed legislative and regulatory climate: the Riegle Community Development and Regulatory Improvement Act (the CDRI Act) and the Riegle-Neal Interstate Banking and Branching Efficiency Act.¹⁵⁰ The first covered a wide variety of issues, including review and elimination of outmoded and duplicative regulations as well as some change in examination policies. The second authorized interstate banking and branching for U.S. and foreign banks over a three-year period. Neither the notion of decreasing the regulatory burden on banks nor that of removing restrictions on geographic expansion was new,¹⁵¹ but their enactment into law is a measure of the banking industry’s recovery compared with its condition in 1989–91.

First, however, a year before Congress passed the two laws just mentioned, it enacted (as part of the Omnibus Budget Reconciliation Act of 1993) a national depositor preference statute, which established a uniform order for distributing the assets of failed insured depository institutions.¹⁵² Under depositor preference, a failed bank’s depositors (and the FDIC, as subrogee in the place of insured depositors it has already paid) have priority over nondepositors’ claims. Without depositor preference, under a receivership depositors (and the FDIC as subrogee) are treated as general creditors and, along with other general credi-

¹⁵⁰ Public Laws 103-325 and 103-328.

¹⁵¹ For example, the Treasury had issued a report on geographic constraints in 1981, and legislation that attempted to reform the banking laws was introduced in Congress in 1985, 1987, and 1991. See Mark D. Rollinger, “Interstate Banking and Branching under the Riegle-Neal Act of 1994,” *Harvard Journal on Legislation* 33, no. 1 (1996): 195–98.

¹⁵² Public Law 103-66. During 1993 Congress also passed the Resolution Trust Corporation Completion Act, which provided further funding for the RTC, restructured SAIF funding, and set an earlier date for RTC termination in addition to providing for the transfer of its operations and assets to the FDIC.

tors, receive a pro rata share of the proceeds. Depositor preference statutes were already in force in 28 states and therefore applied to some state-chartered institutions, but not to any national banks.

The FDIC had recommended national depositor preference in 1983 and had suggested a national depositor preference statute in the mid-1980s.¹⁵³ The lack of such a law had implications both for the way in which the FDIC handled bank failures and for the insurance fund. Most failures were handled through purchase-and-assumption transactions (P&As) in which general creditors usually received the same treatment as depositors and so were often fully protected. Moreover, contingent liabilities that might later be included among creditors' claims, such as letters of credit, could complicate matters even more. The presence of such liabilities made it difficult to estimate the transaction's cost and might even make a P&A unworkable, as had been the case with Penn Square in 1982. Depositor preference, it was believed, would not only result in a smaller cash outlay by the FDIC but also make transactions simpler, more predictable, and significantly less expensive to the insurance fund. In addition, it was believed that depositor preference would restrain bank risk, since nondepositor creditors would have to be more concerned about the bank's manner of doing business. One potential problem was that hitherto-unsecured nondepositors might seek to become secured creditors, thereby evading the effects of depositor preference and possibly even increasing resolution costs for the FDIC.¹⁵⁴ FDIC savings might also be lessened by shifts from unsecured claims to deposits.

The main impetus for the reemergence of depositor preference was not, however, debate about these issues but, rather, the pursuit of deficit reduction. As one means toward this end, the Clinton administration had proposed increasing examination fees for state-chartered banks. But industry groups representing those institutions opposed that move, and the search for alternative sources of deficit reduction quickly led to depositor preference as a potential substitute for increased examination fees.¹⁵⁵ Since BIF losses are counted as budget outlays, the estimated reduction in costs to the FDIC would have the effect of lowering the deficit. National depositor preference was also intended to reduce the FDIC's losses from bank failures, but it is not yet clear whether shifts in the liability structure of troubled institutions will actually have that effect, or how great those savings will be.

¹⁵³ FDIC, *Deposit Insurance in a Changing Environment* (1983), III-9-10; FDIC, *Annual Report* (1985), xv; and *American Banker* (March 14, 1986), 3.

¹⁵⁴ This discussion is based on Stanley C. Silverberg, "A Case for Depositor Preference," *FDIC Banking and Economic Review* (May 1986): 7-9. See also Eric Hirschhorn and David Zervos, "Policies to Change the Priority of Claimants: The Case of Depositor Preference Laws," *Journal of Financial Services Research* 4 (1990): 111-25.

¹⁵⁵ One of the most important forces behind this substitute was the Conference of State Bank Supervisors. See Bill Atkinson, "States Push Alternatives to Hitting Their Banks with Higher Fees," *American Banker* (March 30, 1993), 7.

The two 1994 acts (the CDRI Act and Riegle-Neal) emerged from congressional consideration, in 1993, of several different banking policy issues that were drawn together into a loose package of banking reforms that would wend their separate ways through the legislative process.¹⁵⁶ Together these constituted attempts to satisfy competing interest groups, such as community development advocates and those who were pressing for financial modernization and regulatory relief. One of the bills included a community banking development proposal; another was a reaction to the regulatory regime that had been instituted in 1989–91 (particularly to its perceived effect on the so-called credit crunch); and a third addressed geographic expansion, which had failed to be enacted in 1991–92.¹⁵⁷ All these concerns would be reflected in the two laws passed in 1994.

In 1993 the Clinton administration had put forward a plan that was to provide grants and other subsidies to community development lenders. One means of gaining support for that bill was simultaneously to address concerns over regulatory burden. Well before the 1993 legislative session, the banking industry had been pushing for regulatory change. In May 1992, the American Bankers Association (ABA) and state bankers associations had announced that approximately 20 provisions of FDICIA and other statutes ought to be repealed or modified. ABA President Alan R. Tubbs noted that “there has been a strong impulse to tar banks with the same brush as the S&Ls” and that undue regulation made “credit less available to those who need it.”¹⁵⁸ The trade groups noted that they were already in discussions with legislators who might introduce the desired legislation; many of their concerns were covered in the bill entitled the Economic Growth and Financial Institutions Paperwork Reduction Act of 1993 (H.R. 962).¹⁵⁹

Clearly congressional support for addressing the regulatory issue was substantial, and the banking agencies had already begun working toward reforms.¹⁶⁰ Perceptions differed,

¹⁵⁶ Indeed, for a brief period all were combined in a single bill. See *Congressional Quarterly Almanac* 50 (1994), 101–2.

¹⁵⁷ The interstate branching issue and concern over the credit crunch were not entirely separate from each other. The Bush administration, in a 1992 reform package that included regulatory relief, noted that interstate branching would “ultimately improve . . . the quantity of credit available” (*BNA’s Banking Report* 58, no. 14 [April, 6, 1992]: 579).

¹⁵⁸ *BNA’s Banking Report* 58, no. 18 (May 4, 1992): 769–70.

¹⁵⁹ A few regulatory reform proposals had already been passed as attachments to a housing bill in 1992. See *Congressional Quarterly Almanac* 48 (1992), 120. The credit crunch received considerable attention in Congress, with numerous hearings held from 1990 to 1993. See, for example, U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Credit Availability: The Availability of Credit in Our Economy and to Try to Determine Whether or Not There Is Currently a Credit Crunch*, 101st Cong., 2d sess., 1990; U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Domestic Monetary Policy, *The Credit Crunch: Hearings*, 102d Cong., 1st. sess., 1991; and U.S. House Committee on Government Operations, Subcommittee on Commerce, Consumer, and Monetary Affairs, I, 103d Cong., 1st sess., 1993.

¹⁶⁰ For actions that the banking agencies took before 1993, for example, see FFIEC, *Study on Regulatory Burden* (1992), appendix D. See also U.S. General Accounting Office, *Regulatory Burden: Recent Studies, Industry Issues and Agency Initiatives* (GAO/GGD-94-28, 1993), appendix 3.

however, as to which regulatory changes could be made without affecting safety and soundness.¹⁶¹ When the bill (H.R. 962) was incorporated into what would become the CDRI Act in 1994, many provisions had been altered. Much of the final legislation dealt with paperwork reduction (removing duplicative filings, streamlining regulations, simplifying Call Reports, etc.).¹⁶² The law also required the banking agencies both to establish a process whereby financial institutions could appeal regulatory decisions and to create an ombudsman's office. The provisions that most directly affected safety-and-soundness supervision were a modification to FDICIA's exception to annual examinations: the asset ceiling that enabled banks to qualify for an 18-month examination cycle was raised from \$100 million to \$250 million; in addition, banks with \$100 million or less in assets could qualify for the extended interval if their composite ratings were outstanding or good, whereas under FDICIA, only an outstanding rating made a bank eligible.¹⁶³ Over the next two years, as a result of the regulatory improvement provisions of the CDRI Act, many agency regulations were abolished or altered.¹⁶⁴

The other significant piece of banking legislation passed in 1994 was the Riegle-Neal Interstate Banking and Branching Efficiency Act. Like the reform of Glass-Steagall, the removal of restrictions on interstate banking and branching had frequently appeared on the policy agenda during the 1980s and early 1990s but had never been enacted.¹⁶⁵ Restrictions on interstate banking and branching had long been enshrined in the U.S. banking system and stemmed from deep-seated mistrust of financial concentration, the belief that a bank should be tied to its community, and strong notions about states' rights. All of these had combined to produce essentially a unit banking industry,¹⁶⁶ until economic expansion in the late 19th century and the increased distances involved in commerce led to a need for more sophisticated financial networks. By the early 20th century, therefore, branching had become increasingly common at the state level, although some banking interests still resisted it.

¹⁶¹ For discussion of these issues, see U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Deposit Insurance, H.R. 962, *The Economic Growth and Financial Institutions Regulatory Paperwork Reduction Act of 1993: Hearings*, 103d Cong., 1st sess., 1993.

¹⁶² This discussion covers only a part of the CDRI Act, which, in addition to community development and paperwork, dealt with small-business capital formation, money laundering, and national flood insurance.

¹⁶³ The CDRI Act also gave the banking agencies the power to raise this ceiling by regulation to \$175 million two years after the law had been in effect, as long as the raised ceiling was deemed consistent with safety and soundness.

¹⁶⁴ For the response of the banking agencies to the law's requirements on regulatory reform, see Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, *Joint Report: Streamlining of Regulatory Requirements* (September 23, 1996).

¹⁶⁵ Congress considered legislation on interstate banking in 1985, 1987, and 1991.

¹⁶⁶ Branch banking was not completely absent. In the early years of the republic, both the First and Second Banks of the United States had branches, and some branch banking systems were present before the Civil War, but when the National Bank System was established in 1867, it consisted of unit banks only. See David L. Mengle, "The Case for Interstate Branch Banking," *Federal Reserve Bank of Richmond Economic Review* 76, no. 6 (1990): 5.

During the early decades of the 20th century, debate over the desirability of expanding branching continued; but with state banks able to branch, national banks were at a competitive disadvantage. The 1927 Pepper-McFadden Act somewhat remedied this: if state banks could branch, national banks were allowed to branch within the city in which they were located. The Banking Act of 1933 went somewhat further, allowing national banks a power to branch equal to the power accorded state-chartered institutions. No bank that was a member of the Federal Reserve System, however, could branch across state lines, and this remained the case until 1994.¹⁶⁷ It should be noted that intrastate branching became increasingly common. In 1977, for example, statewide branch banking was prevalent in 20 states, whereas unit banking was prevalent in 12. By 1990, those numbers had changed to 33 and 3, respectively.¹⁶⁸

In addition to restricting branching, federal laws had placed limits on creating interstate banking through acquisitions. The Douglas Amendment to the Bank Holding Company Act of 1956 prohibited a bank holding company (BHC) from acquiring a bank in another state unless that other state's laws authorized such out-of-state acquisitions; thus, control of such expansion was left to the states. Not until 1975 did Maine become the first state to allow entry by out-of-state bank holding companies.¹⁶⁹ The limitations imposed by the Douglas Amendment were liberalized somewhat in 1982 and 1987, but only to allow emergency acquisitions in the case of failed, and then of failing, institutions. Aside from these exceptions, federal law on interstate acquisitions remained unchanged until 1994. The situation on the ground, however, had changed considerably. By January 1986, 28 states permitted some form of acquisition by an out-of-state BHC; by May 1990, 46 states did; by the time Riegle-Neal was passed, only Hawaii did not have such a law, and two-thirds of the states permitted entry from BHCs in any state.¹⁷⁰

Such developments certainly helped to broaden support for legislation allowing interstate banking. As has already been noted, the matter had been under discussion for some time, but legislation had failed to get through Congress. By 1993, however, with the banking crisis over, a consensus developed that change was required. In 1993 the Clinton administration came out in favor of interstate banking and branching legislation, with Treasury Secretary Lloyd Bentsen noting that the country already had a de facto system of

¹⁶⁷ State nonmember banks could establish interstate branch networks in a state in which such networks were permitted by law. Several states did permit them; by 1994 and before Riegle-Neal, these included Alaska, Nevada, New York, North Carolina, Oregon, and Rhode Island. All of these states, however, required reciprocity by the state where the bank seeking entry was headquartered. See *Banking Policy Report* 13, no. 16 (September 5, 1994): 10.

¹⁶⁸ CSBS, *Profile* (1977), 95, and (1990), 111.

¹⁶⁹ Rollinger, "Interstate Banking and Branching," 185.

¹⁷⁰ See CSBS, *Profile* (1986), 99–104, and (1990), 127ff; and Rollinger, "Interstate Banking and Branching," 194. These statutes varied greatly; some states authorized de novo entry, some allowed acquisitions by any BHC in any state, and some allowed entry only by BHCs in certain regions. The overall trend was certainly toward nationwide interstate banking.

interstate banking, albeit a patchwork, and that the United States was operating “with laws and regulations made for another time in America.”¹⁷¹ Such sentiments were echoed by many as the Riegle-Neal bill went through Congress in 1994. To an extent, therefore, the legislation was viewed as simply making federal law consistent with reality.

What was still debated, however, was whether such deregulation would lead to over-concentration and how credit availability would be affected, particularly in less-affluent communities. (Significantly, the community development banking provisions of the CDRI Act were moving through Congress during the same session.)¹⁷² The regional banking crises that had just passed were a strong argument in favor of allowing geographic expansion: banks would no longer necessarily be tied to the economic well-being of a specific region and would thereby have protection against just the sort of regional downturns that had occurred in the 1980s and early 1990s.¹⁷³ One lobbyist for NationsBank believed that the earlier conflict between large and small banks over interstate expansion had evaporated because small banks had come to believe that they would be able to prosper in the new environment. Moreover, the bill addressed the concerns of state banking authorities about control of the expansion process.¹⁷⁴ As one analyst stated, “Federalism is a key component of Riegle-Neal.”¹⁷⁵

Under Riegle-Neal, adequately capitalized and managed bank holding companies were allowed to acquire a bank in any state beginning on September 29, 1995; the provisions of the Douglas Amendment were thereby effectively repealed. The law did establish limits on deposit concentration. Interstate acquisitions would be prohibited if the resultant BHC would control either (a) more than 10 percent of U.S. bank and thrift deposits or (b) more than 30 percent of the deposits in the home state of the bank to be acquired (except for initial entries into a state). However, host states could waive the limit; and state deposit-concentration limits, whether higher or lower, would supersede the Riegle-Neal state concentration limit. Acquisitions remained subject to state laws that set a minimum period during which a target bank had to have been in existence before acquisition, up to a maximum of five years. Compliance with the Community Reinvestment Act and state community reinvestment laws was required. The acquisition of a failed or failing bank by an out-of-state BHC was not subject to any of the conditions otherwise applicable to the acquisition of an out-of-state bank.

¹⁷¹ *Congressional Quarterly Almanac* 49 (1993), 161.

¹⁷² *Ibid.* 50 (1994), 94.

¹⁷³ For a discussion of these issues, see Rollinger, “Interstate Banking and Branching,” 210–38.

¹⁷⁴ For a discussion of the politics surrounding the bill, see Joseph D. Hutnyan, “Interstate Banking Politics,” *Banking Policy Report* 13, no. 11 (June 6–20, 1994): 4–6.

¹⁷⁵ Carey C. Chern, “Interstate Banking Issues after the Riegle-Neal Act of 1994,” *BNA’s Banking Report* 65 (September 11, 1995): 415.

The other main provision of the law allowed adequately capitalized and managed banks to merge across state lines beginning June 1, 1997; this provision effectively repealed the restrictions of the McFadden Act. The same U.S. and state concentration limits applied to this provision, and again the statewide limits did not apply to initial entries into a state and the limit could be waived by the host state. Neither limit applied to a merger involving only affiliated banks. Compliance with state minimum-age laws and community reinvestment laws was required, and an exception was provided for mergers involving failed or failing banks. Foreign banks were permitted to establish and operate interstate branches, either *de novo* or by acquisition and merger, to the same extent that a bank chartered in the foreign bank's home state could, and parallel provision was made for foreign banks to establish and operate national bank branches.

As noted above, the states were given a great deal of control over the pace and scope of the expansion of interstate branching. Under the law, states were permitted to "opt out" of interstate branching by passing, before June 1, 1997, an explicit law prohibiting it. Conversely, states were also allowed to "opt in," or permit interstate branching, by enacting appropriate legislation before June 1, 1997.¹⁷⁶ By enactment of appropriate legislation, states could also permit interstate bank mergers involving the acquisition of a branch, but without the acquisition of the bank.¹⁷⁷

Given the gradual moves that had been made at the state level, the Riegle-Neal Act was not as revolutionary as it would have been if it had been enacted in 1985. Still, nationwide interstate banking and branching are likely to shape—and may accelerate—existing trends toward increased consolidation and concentration within the banking industry. However (as a recent study has noted), passage of the act does not mean its provisions will be used by most, let alone all, of the industry. The law "only increases the structural alternatives available . . . Neither it nor the marketplace mandates that all banking organizations select an identical structure."¹⁷⁸

One additional post-FDICIA statute, rooted in the solutions adopted to deal with the S&L debacle, was the Deposit Insurance Funds Act of 1996.¹⁷⁹ It effectively closed the

¹⁷⁶ For a discussion of the "opt-in/opt-out" debate, see Edward J. Kane, "De Jure Interstate Banking: Why Only Now?" *Journal of Money, Credit and Banking* 28, no. 2 (1996): 141–61.

¹⁷⁷ This overview of Riegle-Neal is drawn from a summary of the law prepared by the FDIC (unpublished FDIC document, April 1995). The law includes other provisions not discussed here. A detailed summary of Riegle-Neal appears in Chern, "Interstate Banking Issues."

¹⁷⁸ David Holland et al., "Interstate Banking—The Past, the Present and Future," *FDIC Banking Review* 9, no. 1 (1996): 10.

¹⁷⁹ Public Law 104-208. See Title II, Economic Growth and Regulatory Paperwork Reduction, Subtitle G, §2701 et seq. Some of this discussion on the SAIF is drawn from material in an unpublished FDIC briefing document compiled by Christine Blair and James McFadyen (January 1997).

chapter on the S&L crisis. As noted above, in 1989 FIRREA had created two deposit insurance funds, the BIF and the SAIF, the latter replacing the insolvent FSLIC fund. Both insurance funds were required to be capitalized at a reserve ratio of 1.25 percent of insured deposits. The BIF reached this goal in May 1995. The SAIF, however, remained undercapitalized, and as of March 31, 1995, had a reserve ratio of just 0.31 percent. Eighteen months later the SAIF had a reserve ratio of 0.59 percent, approximately \$4.5 billion short of full capitalization.¹⁸⁰ The reason the SAIF failed to reach the reserve ratio was that by statutory requirements SAIF premiums were diverted to other purposes, notably the payment of interest on bonds issued by the Financing Corporation (FICO) created in 1987 under CEBA.¹⁸¹

By 1994, the SAIF's condition began to generate serious concern.¹⁸² Deposits in savings associations had been expected to grow but instead were declining, and the decline raised the possibility of default on payments due on the FICO bonds.¹⁸³ In addition, on July 1, 1995, the SAIF would assume the Resolution Trust Corporation's responsibility for the resolution of failed member institutions; in its then-undercapitalized condition, the fund might have been rendered insolvent by a single large failure. Moreover, as the BIF drew closer to its designated reserve ratio, the assumption was that the FDIC would respond by reducing BIF assessment rates, putting SAIF-insured institutions at a long-term competitive

¹⁸⁰ For insurance-fund reserve ratios during this period, see FDIC, *Quarterly Banking Profile* (1995 and 1996).

¹⁸¹ The FICO was created as the vehicle for recapitalizing the FSLIC. The law authorized the FICO to raise funds for the FSLIC by selling bonds to the public (Huber, "CEBA," 293–4). The FICO had an annual draw of up to \$793 billion against SAIF assessments until the year 2019. But not all SAIF assessment revenue could be used to meet interest on the FICO obligations. The assessment revenue that could not be used was that from "Oakar" and "Sasser" institutions. (Oakar institutions are BIF-member banks that have acquired SAIF-insured deposits and pay deposit insurance premiums to both the BIF and the SAIF. Sasser institutions are commercial banks or state savings banks that have changed charter from a savings association to a bank but remain members of the SAIF.) In addition, under FIRREA, SAIF assessments were diverted not only to the FICO but also to payments to the FSLIC Resolution Fund and the Resolution Funding Corporation (a quasi-private agency which was created under FIRREA to raise \$30 billion for the RTC by selling 30-year bonds). See U.S. House Committee on Banking, Housing and Urban Affairs, *The Condition of the Savings Association Insurance Fund* [SAIF], 104th Cong., 1st sess., July 28, 1995, 85.

¹⁸² See U.S. General Accounting Office, *Deposit Insurance Funds: Analysis of Insurance Premium Disparity between Banks and Thrifts* (GAO/AIMD-95-94, 1995). This report was prepared in response to a June 10, 1994, request by Congress. For some time, however, the FDIC had been concerned about the condition of the SAIF and about the disparity between BIF members and SAIF members. See, for example, the January 1992 letter from FDIC Chairman William Taylor to Richard G. Darman, director, Office of Management and Budget, and the September 1993 letter from Acting FDIC Chairman Andrew C. Hove, Jr., to Representative James Leach, both of which are reproduced in U.S. House Committee on Banking and Financial Services, Subcommittee on Financial Institutions and Consumer Credit, *Condition of the Deposit Insurance Funds and the Impact of the Proposed Deposit Insurance Premium Reduction on the Bank and Thrift Industries: Hearings*, 104th Cong., 1st sess., 1995, 222–25.

¹⁸³ Jim McTague, "Thrift Crisis, The Sequel," *Barrons* (August 29, 1984): 34.

disadvantage. (This did occur in 1995.)¹⁸⁴ Such a situation would create an incentive for institutions to shift deposits from SAIF to BIF insurance, and although the attendant shrinkage in the SAIF assessment base would mean the fund would become capitalized more swiftly, the stronger SAIF members would most likely be the ones able to succeed in moving deposits to the BIF, leaving weaker institutions covered by an insurance fund with a higher risk profile.¹⁸⁵ Moreover, the migration of deposits would end up diluting the BIF.

Movement toward a legislative solution began in earnest in 1995 but was not uncontested. Many bankers felt that SAIF-insured institutions were attempting to shirk their responsibility for capitalizing the SAIF and were hoping to push Congress into having the banks help pay for the S&L debacle. In June 1995, the position of the ABA president was that Congress should not act, but watch and wait.¹⁸⁶ By contrast, the bank regulatory agencies, the Treasury, the GAO, and many in Congress believed that a swift solution was necessary. The FDIC, the Office of Thrift Supervision, and the Treasury worked together to create a plan for presentation to Congress that would be acceptable to the diverse elements within the banking and thrift industries. By July 1995, the main elements in this framework had been developed: to capitalize the SAIF fully, there would be a special assessment on institutions with SAIF-insured deposits; FICO payments would be spread over all FDIC-insured institutions; and there would be a call for the merger of the deposit insurance funds. The 1995 version of the bill failed to become law when President Clinton vetoed the Budget Reconciliation Bill, of which it was a part. The plan was eventually enacted as part of the Budget Act for fiscal 1997.

The law imposed a one-time special assessment on SAIF-assessable deposits, payable within 60 days of enactment. (On October 8, 1996, the FDIC Board of Directors set the assessment at 65.7 basis points, payable on November 27, 1996, thereby raising \$4.5 billion and fully capitalizing the fund.)¹⁸⁷ In addition, the law expanded the FICO's assessment au-

¹⁸⁴ The FDIC's Board of Directors lowered BIF assessment rates after the fund reached its reserve ratio. Effective in May 1995, the average rate fell from 23.2 basis points to 4.4 basis points, with the risk-based assessment range between 4 and 31 basis points. BIF assessment rates were lowered again in November 1995, effective January 1, 1996, with a range of 0 to 27 basis points. By contrast, as of September 1996, SAIF assessment rates remained at the much higher level of 23 to 31 basis points, with an average assessment rate of 23.4 basis points. Even after full capitalization of the SAIF, the FICO payments were expected to keep SAIF rates significantly higher until 2019, when the last of the FICO bonds will mature.

¹⁸⁵ By mid-March 1995, six SAIF-insured thrifts with \$80 billion in deposits had announced their intention to form banking affiliates (see Steve Cocheo, "Is It a Bank? Is It a Thrift? It's a Colossal Flanking Maneuver," *ABA Banking Journal* 87, no. 5 [May 1995]: 7).

¹⁸⁶ Howard McMillan, Jr., "What SAIF Crisis?" *ABA Banking Journal* 81 (June 1995): 13.

¹⁸⁷ "Weak" institutions and certain other ones [see §2702(f)(1–3)] were exempted from paying the assessment. Exempted institutions were to continue to pay SAIF assessments at rates of 23 to 31 basis points per year for up to three years. For purposes of the special assessment, the SAIF deposits of certain BIF-member Oaker institutions and converted savings associations were decreased by 20 percent. These Oaker institutions also received a permanent 20 percent reduction in their SAIF-assessable deposits for future regular assessments.

thority to all FDIC-insured institutions and separated the FICO rate-setting process from that of deposit insurance. The law provided that the FICO assessment on BIF-assessable deposits was to be set at one-fifth the assessment imposed on SAIF-assessable deposits. Beginning either on January 1, 2000, or on the date when there are no longer any savings associations (whichever is earlier), all insured institutions will pay equal FICO premiums. The law also required that before January 1, 1999, SAIF assessment rates not be lower than BIF rates; and it eliminated the previous minimum semiannual assessment of \$1,000.¹⁸⁸ Finally, the law called for the merger of the BIF and the SAIF on January 1, 1999, but only “if no insured depository institution was a savings association on that date.”

Conclusion

Between 1980 and 1994 there was clearly a tremendous amount of legislative and regulatory change. In Congress, in the federal regulatory agencies, and in the states, many processes were taking place simultaneously. For example, at the same time that legislation sought to provide new powers for banks, the banking agencies (pushed by Congress) were also moving toward uniform capital requirements. But despite the many overlapping and contrasting movements, the pattern that clearly emerges, particularly in legislation, is this: at the beginning of the 1980s, with passage of both DIDMCA and Garn–St Germain, deregulation of the financial services industry, and especially thrifts, was dominant. Then as the S&L crisis deepened and the banking crisis evolved, the emphasis turned to what has been described as reregulation. This development was most evident in FIRREA and FDICIA, both of which produced a great deal of change in the regulatory area. By 1994, with the banking industry’s evident return to good health, deregulation was more acceptable—but when and how far the pendulum will swing back are questions for the future.

¹⁸⁸ On December 11, 1996, because the SAIF was fully capitalized, the FDIC Board of Directors lowered SAIF assessments to a range of 0 to 31 basis points and adopted a rule, identical to that already in place for the BIF, that would allow further adjustments within a 5-basis-point range without notice and comment; the Board then immediately reduced SAIF assessment rates to a range of 0 to 27 basis points.

Chapter 3

Commercial Real Estate and the Banking Crises of the 1980s and Early 1990s

Introduction

In the era of federal deposit insurance, the 1980s and early 1990s were unique periods for the commercial banking industry: both the number of banks that failed and the volume of losses they suffered were unprecedented. Behind banking's problems lay large-scale changes in the economic and regulatory environment. In addition, banks greatly increased their exposure to commercial real estate markets during this era, only to have those markets develop substantial problems.¹

The demand for commercial real estate projects boomed during the early 1980s and reached a speculative pitch in many markets. Real estate financing by commercial banks and other institutions grew to meet the demand, because deregulation and other factors had created an environment in which commercial real estate lending was lucrative for lenders, especially with its large up-front fees. As a consequence, after 1980 commercial banks dramatically increased the volume of such credits.

But historically the commercial real estate industry had been cyclical, and that, combined with the banks' aggressive lending, made it likely that lenders would eventually suffer financial losses when markets turned. When the bust did arrive in the late 1980s and continued into the early 1990s, the banking industry recorded heavy losses, many banks failed, and the bank insurance fund suffered accordingly. Compounding the magnitude of these losses was the fact that many banking organizations active in real estate lending had weakened their underwriting standards on commercial loan contracts during the 1980s.

¹ For the discussion of market activity in this chapter, "commercial real estate" refers to office, retail, and industrial properties.

This chapter presents an account of the boom and bust in commercial real estate markets in the 1980s and highlights the role commercial banks played in this process. The first two sections discuss the risks associated with commercial real estate investments and the ways in which tax-law changes during the 1980s influenced the climate for commercial real estate investing. (The appendix to the chapter illustrates how specific tax-law changes affected the viability of commercial real estate investments.) The third section surveys trends in supply, demand, and asset prices during the boom and bust. The following section highlights the involvement of commercial banks in the commercial lending boom, and is followed by a section on the changing underwriting standards and another on the changing appraisal policies of lenders during this period (an account of the reforms subsequently enacted is also included). The final section discusses the relationship between bank failures and losses on commercial real estate.

Risks Inherent in Commercial Real Estate Markets

Investments in commercial real estate (for example, office buildings, retail centers, and industrial facilities)—at any stage of the development process—have traditionally been quite risky. Real estate markets as a whole are traditionally cyclical, so that even the most well-conceived and soundly underwritten commercial real estate project can become troubled during the periodic overbuilding cycles that characterize these markets. For this reason, historically federal bank regulators have supervised the terms of loans made to commercial real estate ventures and have prohibited federally chartered banks from investing directly in such ventures.²

The riskiness of investments in commercial real estate has a number of aspects. First, the demand for commercial real estate is affected not only by local economic factors and regional developments but also by national economic trends. This is because firms seeking commercial floor space typically can choose between a number of locations in different parts of the country. Thus, the developer of an industrial park in New Jersey, for example, would have to be concerned not only about how both existing and future developments in that state might affect demand for the project but also about how market conditions in competing locations—for example, Florida or Texas—might affect the northeastern developer's ability to attract and keep tenants.

Another factor complicating investments in commercial real estate is that information about specific projects and markets is often difficult to obtain. These are not highly organized markets, so data on market developments cannot be easily gathered. Moreover, many

² However, while not involved in direct equity investing, banks own and manage substantial amounts of commercial real estate acquired through loan foreclosures.

transactions are private, and the major terms of the investments may not be available to the public. (Construction costs, for example, are a private matter between the developer and the contractor.) In addition, widespread statistical data are not available on transaction prices as they are for single-family structures, so gauging selling prices or rental income is difficult—and even if the statistical data were available, it would be difficult to account for the many complex financing techniques (such as tenant improvements and rent “discounting”) involved in commercial sales and rents.

Other risks are also associated with the financing aspects of most commercial real estate investments, which adds to the volatility of the markets and the prices of commercial properties. Most real estate projects are highly leveraged—that is, they are funded primarily by debt as opposed to equity capital by the investor. The effect that leverage has on both the borrower’s and lender’s risk helps add to the volatility of the commercial real estate markets. Generally, leveraged investments will be highly sensitive to changes in interest rates and overall credit conditions. For this reason, the prices of commercial real estate can decline precipitously during periods of rising interest rates, and vice versa.

Risk in commercial real estate also derives from government tax and other policies. Since World War II, depreciation allowances and tax rates have changed periodically, and these changes have affected the demand for and the profitability of real estate investments. During the 1980s, changes in the federal tax code were important factors influencing both the boom and to some extent the bust conditions in commercial markets (tax issues are discussed in the next section). In addition, federal mandates requiring cleanup of existing environmental hazards may impose unforeseen costs on investors. Changes in state and local laws governing environmental restrictions on new construction may add unexpected costs to a project, or may even bar its intended use. Similarly, an unanticipated zoning change can have a positive or negative effect on the prospects of an investment.

Also contributing to the challenges of these investments is the nature of the production process itself when construction lending is involved. Real estate construction projects, and especially large commercial development projects, typically have long gestation periods, and these are superimposed on the traditional cyclicity of the economy and of real estate markets. Thus, the economic prospects for a real estate construction project can change considerably between inception and completion.

Other risks associated with commercial real estate investing are related to macroeconomic changes in the economy. The value of commercial property is highly sensitive to changes in the availability of credit. When financial institutions cut back or restrict funding for these types of investments over the business cycle, prices of existing properties can fluctuate widely and the volume of new investments can be severely affected. In part, this produces the well-known feast-or-famine cycle in commercial real estate markets. An extreme

example of this scenario is the “credit crunch” in the early 1990s, which diminished access to credit and restricted demand for commercial real estate investments across the nation, thereby eliminating some potential investors from the market. Consequently, during this period the demand for and prices of commercial real estate declined significantly.³

Finally, the structure of most commercial loans involves unique risks for the lender. Commercial loans are complex legal documents that usually have “nonrecourse” provisions prohibiting lenders from satisfying losses from other borrower assets. Nonrecourse provisions provide borrowers with extra bargaining power to force lenders to accept modifications in the event of problems. Moreover, commercial borrowers are usually sophisticated and possess the resources to contest lender actions. Furthermore, in the event of foreclosure, banks often have little specialized in-house expertise for dealing with the unique problems of commercial REO (foreclosed real estate) sale and management. All of these factors can make investing in commercial real estate projects a risky business for all parties involved in the transaction.

The Effect of Major Tax Legislation

Two major pieces of tax legislation—the Economic Recovery Tax Act of 1981 (ERTA) and the Tax Reform Act of 1986—had unusually strong effects on commercial real estate markets during the 1980s.⁴ ERTA included several provisions that improved the rate of return on commercial real estate and increased demand for these investments. Five years later, the Tax Reform Act repealed many of these same benefits. (A numerical example of the effect that both sets of tax-law changes had on commercial real estate investment returns is presented in the appendix to this chapter.) Among ERTA’s most important provisions were a lowering of ordinary income tax rates (the rate for the highest earners, for example, fell from 70 percent to 50 percent) and a lowering of the capital gains tax rate from 28 percent to 20 percent. However, what distinguished this tax act from earlier ones was the change in depreciation rules for commercial real estate. Specifically, an “Accelerated Cost Recovery System” (ACRS) was introduced. ACRS allowed investors in commercial property to depreciate a building over 15 years—a period considerably shorter than its economic life. Under earlier tax legislation, 40 years was the standard. Moreover, this new cost recovery system also permitted the use of a 175 percent declining-balance method rather than

³ The dramatic reduction in bank lending in the early 1990s for the purchase and development of commercial real estate was brought on by many factors, including the 1990–91 national recession, the closing of insolvent thrift institutions, the implementation of new risk-based capital standards for commercial banks, and the generally closer supervision of financial institutions after passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989. These issues are discussed below.

⁴ Investments in residential real estate are also affected by federal tax laws, but this chapter focuses primarily on investments in commercial real estate properties.

simple, straight-line depreciation, and thereby increased, or “accelerated,” the tax deductions available in the early years of a property’s holding period. These new provisions had the effect of increasing the after-tax return on commercial real estate investments relative to other classes of assets. This was accomplished by deferring taxes and later, upon sale of the property, “recapturing” much of the earlier depreciation at a lower tax rate than the rate that had applied to the previous depreciation deductions. These provisions were a major reason for the accelerated production cycle of commercial real estate during the first half of the 1980s.

The Tax Reform Act of 1986 further lowered all marginal tax rates, including the rate for the highest earners (from 50 percent to 38.5 percent), but it countered that change by eliminating not only the ACRS but also the ability of taxpayers to offset other income with “tax losses” from “passive” investments in commercial real estate. Deductions and losses from one business or rental activity had generally been allowed to offset income from other business activities and investments. After 1986, losses from passive activities (generally defined as those activities in which the taxpayer does not materially participate, and any rental activity) were allowed to offset only income from other passive activities, and credits from passive activities were applicable only to the tax attributable to income from such activities. The consequences of these provisions was to dampen the demand for commercial real estate investments during the late 1980s and early 1990s, and the dampening of demand helped soften real estate prices.

The importance of these tax considerations is reflected in the rise and fall of real estate limited partnerships during the 1980s. According to data from the Roulac Group (a real estate consulting unit of Deloitte & Touche), the market for this investment vehicle had grown fivefold between 1981 and 1985. After reaching a high point of attracting \$16 billion in new capital in 1985, real estate limited partnership sales fell precipitously over the next four years, gathering only \$1.5 billion in new capital in 1989.

Boom and Bust: Trends in Commercial Real Estate Supply, Demand, and Asset Prices

As the nation’s commercial real estate markets entered the 1980s, supply and demand for commercial real estate were in relative balance and investment returns were attractive.⁵ Heavy demand in the late 1970s had absorbed much of the excess space remaining from the burst in construction activity of the early 1970s and had trimmed vacancy rates in most markets to below 10 percent.⁶ In the late 1970s sharp, unanticipated inflation set off a wave of

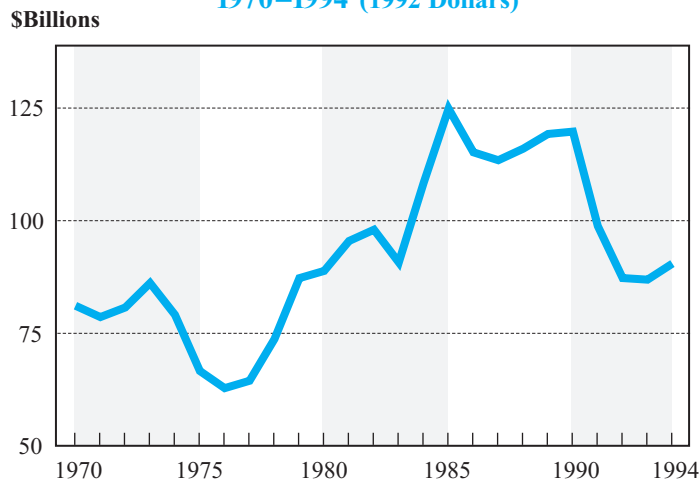
⁵ According to data from the National Council of Real Estate Investment Fiduciaries and the Frank Russell Company (these two groups together produced the Russell-NCREIF report), returns on the office properties owned by institutional investors in the late 1970s and early 1980s averaged 21.9 percent; returns on warehouse/industrial and retail properties were 16.5 percent and 11.7 percent, respectively. In 1995 the Russell-NCREIF Report ceased publication.

⁶ CB Commercial Torto/Wheaton Research.

speculative demand for real estate—and commercial real estate markets experienced an unprecedented building boom (particularly in the office sector) that lasted in one region of the country or another throughout the 1980s. From 1980 to 1990, the annual average value of new nonresidential construction put in place was \$108 billion (in 1992 dollars)—up from approximately \$71 billion during the period 1975–79 (see figure 3.1).⁷ The boom collapsed starting in the late 1980s, however, and the decade of the 1980s closed with many markets across the nation severely depressed, affected by historically high vacancy rates and falling prices and rents. Construction activity on commercial properties declined to about the levels of the early 1980s.

The regions where the boom-and-bust scenario played out included the Southwest, Alaska, Arizona, the Northeast, and California. In Texas, major markets such as Austin, Dallas, and Houston experienced the building cycle early, spurred in part by robust local economic growth during the late 1970s and early 1980s which significantly increased office vacancy rates (see figure 3.2); it was followed by the bust in the late 1980s. More or less simultaneously, markets in Louisiana and Oklahoma had similar boom-and-bust experiences,

Figure 3.1
Total Nonresidential Construction Put in Place,
1970–1994 (1992 Dollars)

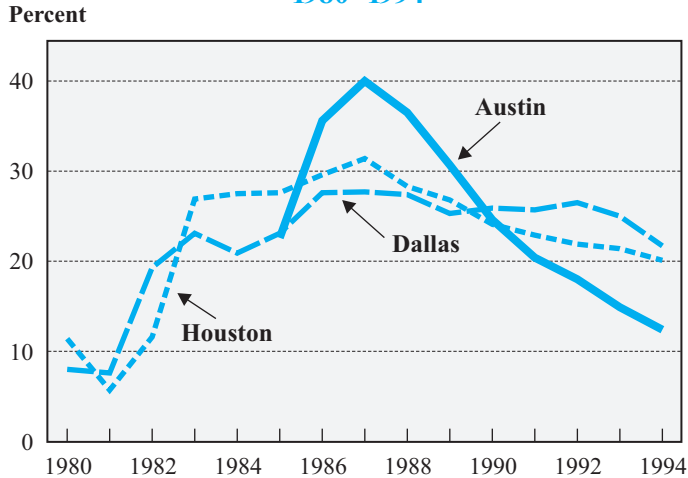


Source: U.S. Department of Commerce, Bureau of the Census, *Current Construction Reports*, series C30, monthly.

Note: "Put in place" refers to the dollar value of new construction completed.

⁷ "Put in place" refers to the dollar value of new construction completed.

Figure 3.2
Office Vacancy Rates in Major Texas Cities,
1980–1994



Source: CB Commercial/Torto Wheaton Research.

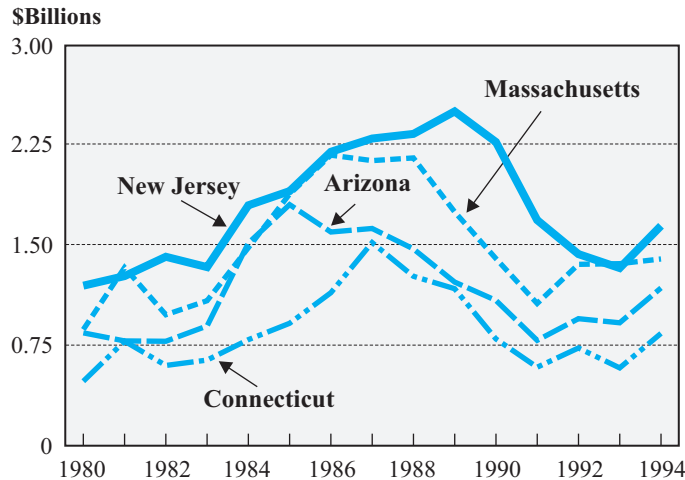
Note: Data for Austin are not available before 1985.

to be followed by Alaska. In Arizona, commercial real estate activity (as measured by the value of new permits issued) more than doubled between 1983 and 1985, then declined 56 percent during the next six years. In New England and other northeastern states, commercial construction boomed in the mid-1980s. New permit activity was up 100 percent in Massachusetts between 1983 and 1986, 137 percent in Connecticut between 1983 and 1987, and 87 percent in New Jersey between 1983 and 1989. In all cases, severe overbuilding was followed by high vacancy rates and then by sharp declines in new construction activity, as evidenced by the decline in new building permits (see figure 3.3). In California the value of newly issued commercial permits increased by almost 50 percent from 1983 to 1988 before plunging 31 percent between 1988 and 1991.⁸

Although overbuilding and a subsequent run-up in vacancy rates characterized most of the major commercial property types (office and retail), nationally the office sector was particularly affected (see figure 3.4). After surging 221 percent between 1977 and 1984, office construction put in place was pared back somewhat during the second half of the decade before declining rapidly during the early 1990s. Because the production process is generally much longer for office buildings than for retail or industrial properties, the adjustment to

⁸ Chapters 9–11 describe the events in the Southwest, the Northeast, and California, respectively.

Figure 3.3
Commercial Real Estate Cycles in Selected States,
1980–1994
 (Value of Newly Issued Nonresidential Permits)



Source: U.S. Department of Commerce, Bureau of the Census, Building Permits Division.

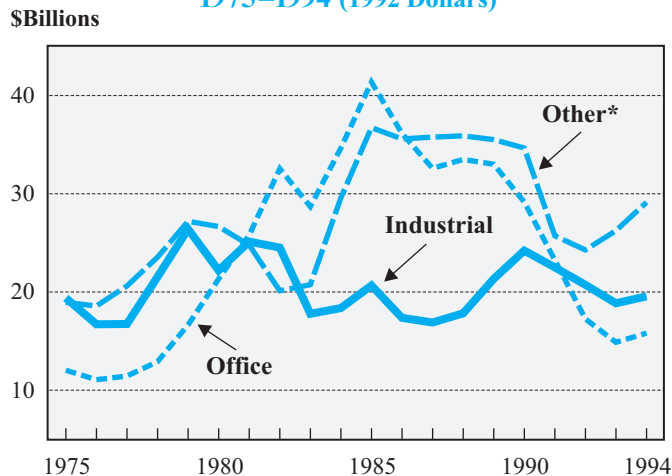
market conditions is correspondingly slower. As a result, the office sector remained out of balance during the entire decade.

In both dollars and square feet, the magnitude of the 1980s office boom was extraordinary. In dollars, the nationwide upswing in new construction that began in 1977 with \$11 billion worth of office construction put in place peaked eight years later with \$41 billion worth of space produced (figure 3.4). In terms of floor space, during the five-year period 1975–79, in the 31 largest office markets around the country, an annual average of 33.6 million square feet per year were completed (see table 3.1). In the next five-year period, completions of new floor space almost tripled, reaching an annual average of 97.8 million square feet. From 1985 to 1989, the pace of completions remained at about the same level; then starting in 1990, it plunged to an average of 28.1 million square feet per year over the next four years.

The demand for new office space tracked the conditions in the office job market. During the late 1970s, office job growth exceeded 4 percent annually (see figure 3.5).⁹ Office

⁹ Office employment is defined as the finance, insurance, and real estate sectors as well as office-using services, such as accounting, advertising, personnel services, mailing, and computer processing.

Figure 3.4
**Nonresidential Construction Put in Place,
 1975–1994 (1992 Dollars)**



Source: U.S. Department of Commerce, Bureau of the Census, *Current Construction Reports*, series C30, monthly.

* "Other" includes retail construction.

Table 3.1
**Production of New Office Space,
 31 Major Markets, 1975–1994**

Period	New Completions* (Millions of sq. ft.)	Absorptions† (Millions of sq. ft.)
1975–1979	33.6	44.3
1980–1984	97.8	64.2
1985–1989	100.7	73.6
1990–1994	28.1	33.3

Source: CB Commercial/Torto Wheaton Research.

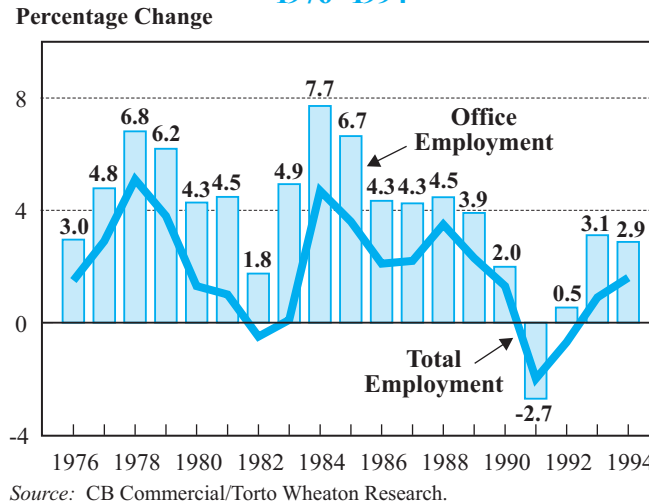
*Annual average during the period.

† "Absorptions" refers to the net change in occupied space over a defined period.

employment continued to exceed 4 percent annually from 1980 through 1989 with the exception of the recession-related respite in 1982. As a consequence, the absorption of new office space increased sharply during most of the decade as well.

However, even though demand as measured by absorption rates increased substantially during the 1980s, it was outpaced by the booming construction (supply) of new office

Figure 3.5
Office and Total Employment Growth,
1976–1994



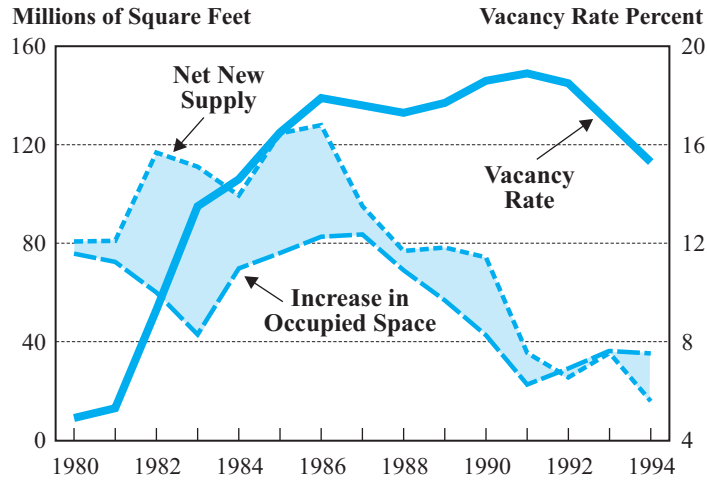
space. In major markets, new completions exceeded absorptions every year from 1980 to 1992 (see figure 3.6). As a result, vacancy rates in major markets rose to unprecedented levels, nearly quadrupling between 1980 and 1991 from 4.9 percent to a peak of 18.9 percent. Office job growth diminished after 1989, as corporate downsizing, mergers, and consolidations became commonplace in the service sector, reducing the demand for office space (figures 3.5 and 3.6).

Like the office sector, the retail sector also boomed nationwide during the 1980s. Favorable underlying demographics and economic growth led to gains in retail sales that averaged 6.8 percent per year between 1982 and 1987—far above long-run trends.¹⁰ That growth provided the stimulus for retail development. “Other” construction activity, which is dominated by the retail sector, rose sharply during 1984–85 and then remained steady during the second half of the 1980s, averaging about \$35 billion in construction put in place annually (figure 3.4). This level was up from an annual average of approximately \$24 billion during the first half of the decade.

Estimates of aggregate supply and demand for retail properties for 56 major markets across the country are presented in figure 3.7. Between 1984 and 1990, construction of new

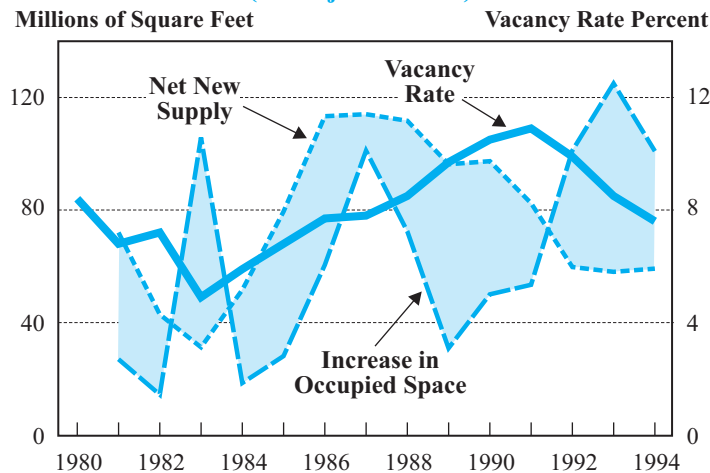
¹⁰ U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*.

Figure 3.6
Office Market Conditions, 1980–1994
(31 Major Markets)



Source: CB Commercial/Torto Wheaton Research.

Figure 3.7
Retail Market Conditions, 1980–1994
(56 Major Markets)



Source: CB Commercial/Torto Wheaton Research.

retail space is estimated to have averaged 94.8 million square feet annually in these markets. During the same period new demand for retail space also increased strongly, averaging 51.6 million square feet, but failed to keep pace with the supply of new product. As a result, retail vacancy rates are estimated to have risen from 4.9 percent in 1983 to 10.8 percent in 1991. From 1991 to 1994, completions of new retail space fell 28 percent to 64.8 million square feet—well below the demand for new space. As a consequence, retail vacancies retreated to 7.6 percent by 1994.¹¹

Unlike the office and retail sectors of the commercial real estate market, the industrial real estate sector did not experience a boom during the 1980s (figure 3.4). Industrial construction surged nationwide in the late 1970s, reaching a peak of about \$26 billion in 1979 (measured in 1992 dollars). During much of the 1980s activity trended downward before leveling off in the early 1990s. Because of adjustments in production, the balance between supply and demand for industrial space in the 1980s was relatively good for several years during the decade. Nevertheless, as in the other sectors, net new supply still exceeded demand for most of the decade, and vacancy rates rose.

Data on supply and demand conditions in 31 major markets illustrate that pattern (see figure 3.8). The supply of new industrial floor space peaked in 1978–79, then trended downward during the early part of the 1980s before leveling off during the remainder of the decade. On average, 133 million square feet of new supply came to market each year during the decade. At the same time, demand for industrial floor space averaged only 104 million square feet annually. As a result, the overall vacancy rate in these 31 major markets rose from 4.6 percent in 1979 to 10.7 percent in 1991.

Starting in the late 1980s and continuing into the early 1990s, the condition of real estate markets changed dramatically. “Boom” conditions turned into “bust” conditions for all types of commercial properties.¹² A number of factors accounted for this sharp deterioration. The closing of hundreds of insolvent thrift institutions by the Resolution Trust Corporation starting in 1989 dried up an important source of financing for real estate ventures. At the same time, risk-based capital standards were being phased in for the banking industry; these standards required higher capital levels behind commercial real estate loans and helped reduce the supply of new loans at that time.¹³ Regulatory officials were also sub-

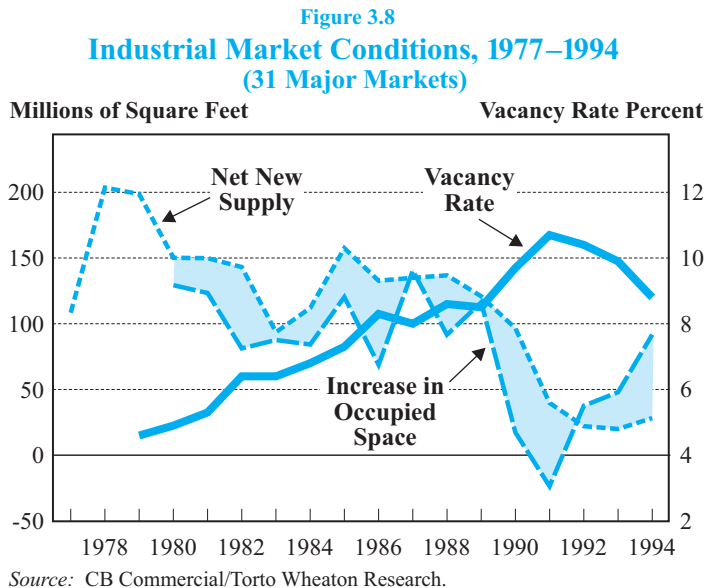
¹¹ Commercial activity in the form of hotel/motel construction (not discussed above) was also volatile during this period, tracing a pattern similar to the retail sector, rising 315 percent between 1975 and 1985, leveling off, and declining 64 percent between 1990 and 1992.

¹² For a good discussion of the issues associated with the boom-and-bust conditions of real estate markets during the 1980s, see Patric H. Hendershott and Edward J. Kane, “Causes and Consequences of the 1980s Commercial Construction Boom,” *Journal of Applied Corporate Finance* (spring 1992): 61–70.

¹³ See, for example, Diana Hancock and J. A. Wilcox, “Bank Capital and the Credit Crunch: The Roles of Risk-Weighted and Unweighted Capital Regulations,” *AREUEA* 22 (January 1993): 59–94.

jecting commercial banks to more frequent examinations and closer supervisory scrutiny, given passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) and the increasing number of bank and thrift failures. The national recession of 1990–91 reduced the demand for commercial space, and the combination of reduced demand and the overbuilding of the 1980s produced significant declines in rents, prices, and returns for commercial real estate properties. As a consequence, credit quality for outstanding real estate loans on the books of surviving institutions was also declining rapidly. This induced many real estate lenders to cut back on the origination of new commercial real estate loans and to tighten underwriting standards.¹⁴ Primarily for these reasons, new commercial real estate construction plunged during the 1990s.

In the office sector, new construction activity almost came to a halt. In the 31 major markets tracked by CB Torto/Wheaton Research, only 1.7 million square feet were completed in 1994. The pace of both retail and industrial construction similarly slackened, having peaked in the mid-1980s. By 1994, completions of new retail space had fallen almost 50 percent (figure 3.7), while construction of new industrial buildings was only a small portion of its previous peak (figure 3.8). Furthermore, bank lending for construction and land de-



¹⁴ It is generally recognized that industry-wide underwriting standards for most types of commercial real estate loans declined during the 1980s and, in the face of mounting real estate losses during the 1990s, were revised upward. These issues are discussed below.

velopment, which peaked in 1989 at almost \$136 billion, by 1993 fell to a ten-year low of just over \$66 billion.

The drop-off in new construction activity allowed the existing overhang for all types of commercial properties to be absorbed. By the early 1990s, the demand for commercial properties exceeded the new supply for the first time since the commercial real estate boom had begun. Demand has continued to outpace supply since that time, with vacancy rates falling (figures 3.6, 3.7, and 3.8).

As mentioned above, the overbuilding in the commercial real estate markets during the 1980s resulted in declining rental rates, falling property values, and decreasing returns to investors. Although no comprehensive data are available on rents, asset prices, and returns for commercial real estate, the National Real Estate Index (NREI) and the Russell-NCREIF index provide information on limited sets of commercial properties. As such, these data may not be representative of the entire market.

According to the NREI, in 51 major metropolitan markets both the mean prices and rents per square foot and the mean sale prices per square foot of office, industrial, and retail properties began to slide between mid-1989 and mid-1990. Although all three types of commercial properties experienced declines, the drop in rents and prices was most pronounced for office properties. For example, from the middle of 1989 through the first quarter of 1994, the average sale price per square foot of commercial office property declined from \$182 to \$133, a drop of approximately 27 percent. Office rents declined a more modest 17 percent, from approximately \$24 to \$20 per square foot.¹⁵

At the same time that rent levels were restrained by rising vacancy rates and leasing concessions, operating expenses climbed. According to the Russell-NCREIF index, which tracks prime-quality office properties, between 1982 and 1991 net operating income (NOI) for these properties declined by an average annual rate of 0.9 percent (the rate was weighted by the 3.4 percent rate of average annual decline in NOI between 1986 and 1990). In addition, on the basis of appraisal and sales data, the same properties lost just over 26 percent in value from 1987 to 1993.¹⁶ Falling NOI and property values resulted in negative overall returns. The NCREIF data show that overall returns on all of these commercial real estate properties plummeted from a total return of 18.1 percent in 1980 to a negative 6.1 percent in 1991.¹⁷ Returns continued to be negative or close to zero until 1994.

A 1993 study involving FDIC receivership assets provides additional empirical evidence of the dramatic change in commercial real estate prices during this period. The study

¹⁵ National Real Estate Index, *Market Monitor* (1989–1994).

¹⁶ *The Russell-NCREIF Real Estate Performance Report* (fourth quarter 1994).

¹⁷ *Ibid.*

analyzed changes in collateral values on a loan-by-loan basis, using data on assets that the FDIC's Division of Liquidation managed after obtaining them from failed banks.¹⁸ Approximately 224 loans were reviewed from a random sample of 400 loans, evenly distributed regionally and selected from a population of the approximately 6,000 nonperforming commercial real estate loans held by the FDIC receiverships as of mid-1992. Because the loans analyzed were obtained from failed banks, they may not be representative of the changes in value for the commercial real estate market as a whole during the 1980s.

The results indicate that the average decline in collateral value for the 224 loans reviewed was 54 percent. Furthermore, for three-quarters of the loans the 1992 collateral value was at least 25 percent below the original evaluation; and for almost one-half, the collateral lost at least 50 percent of its former assigned value. In contrast, less than one-tenth of the collateral had appreciated in value after the loan was originated. As expected, these losses varied according to region. For example, one-half of the loans reviewed from Connecticut lost 63 percent or more of their original valuation, and one-half of the loans from Texas and Louisiana lost 58 percent or more of their original valuation. Loans from states affected less severely by commercial real estate problems, such as California and Florida, lost about 30 percent and 34 percent, respectively, of original appraised value.

The Involvement of Banks

During the 1980s, as the levels of total loans to total assets on the balance sheets of U.S. commercial banks increased, bank loan portfolios also became relatively riskier. Banks reallocated resources toward more real estate loans, emphasizing commercial real estate loans.¹⁹ The increases in total loans, in real estate loans, and in commercial real estate loans eventually had implications for the number of bank failures and the size of losses to the bank insurance fund.

These trends are presented in table 3.2. Between 1980 and 1990, total loans and leases increased from 55 to 63 percent of total assets—a record high. Total real estate loans increased sharply as well, going from approximately 18 to over 27 percent of total assets, whereas total consumer loans grew only slightly, from approximately 10 percent to 11 percent, and total commercial and industrial loans declined, dropping from approximately 20 percent to 17 percent of total assets.

¹⁸ James L. Freund and Steven A. Seelig, "Commercial Real-Estate Problems: A Note on Changes in Collateral Values Backing Real-Estate Loans Being Managed by the Federal Deposit Insurance Corporation," *FDIC Banking Review* 6, no. 1 (spring/summer 1993): 26–30.

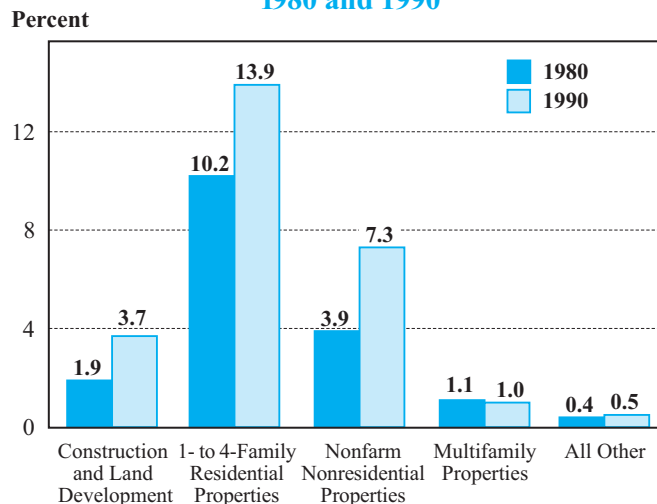
¹⁹ Commercial real estate loans consist of loans for construction and land development, loans secured by nonfarm nonresidential properties, and loans secured by multifamily properties.

The changes in the composition of banks' real estate loan portfolios over this period are presented in figure 3.9. Construction and land development loans increased from nearly 2 to 4 percent; loans secured by 1- to 4-family properties rose from 10 to 14 percent of assets; nonfarm nonresidential real estate loans increased from approximately 4 to over 7 percent. Finally, loans originated on multifamily properties were relatively unchanged over the period. In dollar terms, between year-end 1980 and year-end 1990 total loans and leases held by banks more than doubled, from \$1.0 trillion to \$2.1 trillion (not shown). During the

Table 3.2
Major Loan Categories of U.S. Banks as a Percentage of Total Assets, 1980 and 1990

	1980 (Percent)	1990 (Percent)
Real estate loans	17.8	27.1
Commercial and industrial loans	19.5	17.1
Consumer loans	9.6	11.3
Total loans and leases	55.4	62.8

Figure 3.9
Real Estate Loan Portfolio of U.S. Banks as a Percentage of Total Assets, 1980 and 1990



same period, total real estate lending more than *tripled*, from \$269 billion to \$830 billion; and commercial real estate loans almost *quadrupled*, from \$64 billion to \$238 billion.

In the wake of the significant loan-portfolio expansion during the 1980s, the overall quality of the banks' loans deteriorated. Between 1984 and 1991, nonperforming loans rose from 3.1 percent to 5.2 percent, while net loan charge-offs jumped from 0.7 percent to a peak of 1.6 percent (see table 3.3). The loss experience with commercial real estate credits, however, was more pronounced than the loss experience for the overall portfolio. Although data are not available until 1991, in that year the proportion of commercial real estate loans that were nonperforming or foreclosed stood at 8.2 percent, and in the following year net charge-offs for commercial real estate loans peaked at 2.1 percent.

Loan Underwriting Standards

The amount of the commercial real estate–related losses recorded by the banking industry was compounded somewhat by the loosening of underwriting standards on commercial loan contracts. It is generally recognized that many banks, under intense competitive pressure from other banks, thrifts, and other financial institutions, relaxed contract terms

Table 3.3
Real Estate Loan Portfolio Quality,
U.S. Banks, 1984–1994

Year	Nonperforming Loans/Total Loans*	Net Charge-offs/ Total Loans	Noncurrent Commercial Real Estate Loans/Total Commercial Real Estate Loans†	Charge-offs on Commercial Real Estate Loans/Total Commercial Real Estate Loans
1984	3.1%	0.7%	NA	NA
1985	2.9	0.8	NA	NA
1986	3.1	0.9	NA	NA
1987	3.7	0.8	NA	NA
1988	3.3	0.9	NA	NA
1989	3.6	1.1	NA	NA
1990	4.8	1.4	NA	NA
1991	5.2	1.6	8.2%	2.0%
1992	4.4	1.3	7.0	2.1
1993	2.8	0.8	4.7	1.4
1994	1.8	0.5	1.4	0.8

Note: Data are not available for years before 1984.

*Nonperforming loans include loans 90 days past due, non-accruing loans, and repossessed real estate.

†Noncurrent commercial real estate loans include non-accruing loans and repossessed real estate.

during the 1980s and therefore assumed more credit risk.²⁰ However, because little empirical evidence exists to document these trends, the discussion in this section is based primarily upon information gathered directly from interviews with a variety of sources, including (1) field examiners of the federal bank regulatory agencies who had direct experience reviewing real estate loans in the 1980s, (2) other federal bank regulatory staff who tracked these issues during the period, and (3) commercial bankers who had knowledge of banking practices during this decade.²¹

The heightened competition banks faced during the 1980s was a result of many factors, including the removal of deposit interest-rate ceilings, which significantly increased the cost of doing business; the granting of expanded lending and investment powers to thrift institutions; the increase in the number of newly chartered banks (approximately 2,800 new charters were granted during the 1980s); pressure from bank stockholders to improve earnings; the large-scale conversion of savings banks from mutual to stock ownership, a conversion that increased demand for new investments; and the loss of a sizable portion of the commercial and industrial lending business to the commercial paper market. Under these circumstances, many banks adopted riskier loan policies in an attempt to increase revenue and to maintain market share vis-à-vis other lending institutions. Both examiners and commercial bankers themselves who were familiar with the issues of that time suggested that banks had increasing difficulty coping with the new environment and that many conservatively managed institutions assumed greater risks because of the general belief that “if we don’t make the loan, the institution across the street will.”

In this environment, commercial real estate lending was attractive to many institutions. These credits brought large up-front fees, which generated immediate income (particularly from construction loans). Such fee income became essential to many struggling institutions. The experts who were interviewed observed that as commercial real estate lending expanded, underwriting standards for the major types of commercial real estate loans (land, construction, and mortgage) were loosened significantly. The key changes noted dealt with two fundamental areas of risk control: (1) ensuring that the income gener-

²⁰ For a discussion of these issues, see Hendershott and Kane, “Causes and Consequences,” 65–67.

²¹ From April to June 1995, FDIC staff conducted a series of interviews with regulatory officials from the FDIC, the Federal Reserve System, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision, some of whom were located in the six cities listed below and some of whom were senior officials at the agencies’ headquarters in Washington, D.C. Also interviewed were commercial bankers in the six locations: Atlanta, Boston, Dallas, Kansas City, New York, and San Francisco. Altogether approximately 150 regulatory officials and bankers were interviewed for this analysis.

ated by a project is sufficient to cover the interest and principal payments on borrowed funds, and (2) establishing adequate loan-to-value guidelines.²²

Traditionally, decisions to extend loans that are collateralized by commercial real estate property are evaluated by lenders primarily on the borrower's ability to generate earnings from the investment sufficient to cover the existing debt payments. This is a fundamental tenet of the lending function. As a backup source of security, lenders evaluate the worth of the investment property as potential collateral to cover the loan value in the case of default by the borrower. Starting in the late 1970s and continuing for most of the following decade, examiners observed that lenders loosened loan terms relating to debt-service coverage and placed relatively more emphasis on the value of the collateral in making funding decisions. This change in loan procedures was based primarily on the assumption that real estate values (collateral values) would continue to rise in the future as they had in the recent past. In this respect, many lenders mistakenly anticipated that the demand for commercial space (office, retail, and industrial) would remain strong and would keep pace with construction activity. When the real estate markets collapsed starting in the late 1980s, many lenders discovered that collateral values were often insufficient to cover existing loan losses.

Also with respect to debt-service issues, lenders often liberalized the frequency and timing of principal payments. In some situations, examiners found credits in which the lender allowed the principal payments to be renewed repeatedly.²³ Or when interest payments fell into arrears, the unpaid interest was frequently added back to the unpaid principal, or "capitalized." According to experts, this practice of capitalizing interest payments had been relatively uncommon before the 1980s.

Examiners also noted important changes in the loan-to-value criteria adopted by banks during the 1980s. To maintain market share, many banks chose to raise their maximum loan-to-value ratios, thereby decreasing the amount of borrower's equity at risk and increasing the risk to the lender. Moreover, appraised property values, which constitute the denominator in the loan-to-value ratio, frequently provided overly favorable collateral values and/or were often based on speculative premises.²⁴ In addition to standards on debt-service capacity and loan-to-value ratios, other basic underwriting standards were also relaxed in many regions of the country. For example, secondary repayment sources—the re-

²² Sound underwriting policies in lending institutions require that borrowers invest some percentage of their own funds into a project, with the balance being placed by the lender. This standard provision is referred to as the loan-to-value ratio (the total amount financed by the lender as a percentage of the total investment or value of the collateral). The lower the amount of borrower's funds as a percentage of the total investment, generally the larger the credit risk for the lending institution.

²³ Whether this principal "workout" provision was more common in the real estate transactions of the 1980s than in other decades is not known.

²⁴ Appraisal policies on commercial properties during the 1980s are discussed in the next section.

course, or the guarantors of the original loan amount—often were not actively scrutinized by the lender. In contrast, the traditional practice usually involves a detailed analysis of the recourse party's repayment capacity.

According to examiners and bankers, during the 1980s many banks also abandoned their traditional reluctance to lend outside their local areas and often became involved in lending on real estate projects for which they had little or no direct experience. Lenders either provided direct funding to out-of-area projects or purchased loan participations from out-of-area institutions, and often the bank acquiring the loan participation had only a limited relationship with the out-of-area financial institution. Moreover, in their eagerness to participate in the burgeoning commercial development market, many institutions became involved in real estate transactions without having had adequate experience in structuring, monitoring, or administering specialized commercial real estate credits. As a consequence, many of these projects later ended up in default.

The Role of Appraisers and Subsequent Reforms

Current federal regulations require that federally insured depository institutions obtain an “outside” or independent opinion on the collateral value for most real estate loans before committing funds. The premise underlying the rule is that the real estate appraiser is the only “independent” or “neutral” party involved in the transaction, whereas both borrowers and lenders have vested interests. An experienced appraiser is assumed to bring specialized knowledge of local real estate markets to the transaction and, if conservative loan-to-value rules are followed, is expected to serve as a potential check on the amount of funds being committed to a project. Thus, the appraisal is expected to be an integral part of the loan decision and to provide another perspective from which to evaluate the viability of the project.

Evidence about appraisal policies during the 1980s shows that flawed and fraudulent appraisals were often used by federally insured financial institutions, especially thrift institutions, and that these practices were associated with most depository-institution failures during the period.²⁵ The paragraphs that follow summarize the comments of the bank ex-

²⁵ See Patric H. Hendershott and Edward J. Kane, “U.S. Office Market Values during the Past Decade: How Distorted Have Appraisals Been? *Real Estate Economics* 23 (1995): 101–116. The U.S. House Committee on Government Operations, which investigated depository institutions' appraisal policies during the 1980s and early 1990s, found widespread evidence of incompetence and fraud associated with appraisal practices, primarily at thrift institutions but to some extent at commercial banks. It was noted in the public record that these appraisal policies caused or were associated with most depository-institution failures. As a consequence of the investigations, major reforms in the area of appraisals were enacted in FIRREA in 1989 (these reforms are discussed below). See the U.S. House Committee on Government Operations, *Impact*

aminers and commercial bankers interviewed about the appraisal process during the 1980s (see footnote 21). They are followed by a brief description of the reforms legislated in 1989.

In the 1980s, appraisals ceased to be as useful a part of the commercial loan process as they had been in previous years. During the early to middle years of the decade, when many markets experienced unprecedented boom conditions and both borrowers and lenders believed the conditions would continue for some time, appraisers generally went along with the prevailing inflationary expectations and reflected them in their cash-flow assumptions and analyses. Thus, appraisals often failed to check or slow down the amount of funds being committed to specific projects.

The quality of appraisals became less rigorous during the 1980s as rapid expansion in real estate development led to the hiring of many new and inexperienced appraisers. Entry into the field required few credentials in the form of academic requirements, training, or on-the-job experience. Thus, many people with only marginal experience in such complex matters were writing opinions on these subjects. In addition, the appraisal industry was fragmented into numerous associations and membership designations, with no general uniformity in performance standards. Finally, real estate appraisers were mostly unregulated during the 1980s: state licensing requirements were nearly nonexistent, and the federal bank regulators provided little oversight of appraisal procedures or practices at insured institutions.

In some instances the ethical standards of the appraisal process were reported to have been compromised by fraudulent activity. Appraisers would often fail to render unbiased, independent opinions. And except in the most egregious cases, appraisers were generally not held accountable for deficient and/or overstated appraisals. The existence of malpractice and fraud resulted in major reforms in appraisal procedures involving federal insured institutions in 1989. (See discussion of FIRREA below.)

On the regulatory side, bank examiners had little formal training in evaluating appraisals and were not in a position to challenge their accuracy. Although examiners routinely reviewed and evaluated credit-file appraisals and periodically questioned them, in most instances they deferred to the judgment of the “qualified” appraiser. Moreover, with the use of increasingly sophisticated discounted-cash-flow models, appraisal reports were becoming more complicated and thus more difficult for examiners to evaluate.

of Faulty and Fraudulent Real Estate Appraisals on Federally Insured Financial Institutions and Regulated Agencies of the Federal Government: Hearings, 99th Cong., 1st sess., December 11 and 12, 1985; and House Committee on Government Operations, Subcommittee on Commerce, Consumer, and Monetary Affairs, *Implementation of Title XI, The Appraisal Reform Amendments of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA): Hearings*, 101st Cong., 2d sess., May 17, 1990. See also the House Committee on Government Operations, *Status of the Implementation of Title XI, The Appraisal Reform Amendments of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA)*, 28th report, 101st Cong., 2d sess., November 14, 1990.

In 1987, after Congress investigated the appraisal practices of the 1980s, the federal bank-regulatory agencies issued interagency guidelines addressing appraisal policies, standards, and procedures for depository institutions.²⁶ In 1989, the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) became law, requiring bank regulatory officials to establish licensing and certification standards for anyone who conducts appraisals for federally insured depositories. Licensing and certification are state functions that would be overseen by the Appraisal Subcommittee of the Federal Financial Institutions Examination Council (FFIEC).²⁷

The legislation assigned four primary responsibilities to the FFIEC Appraisal Subcommittee: (1) monitoring the adequacy of state requirements for certification and licensing as well as standards of professional conduct; (2) monitoring the regulations of the banking agencies, the Resolution Trust Corporation,²⁸ and the National Credit Union Administration; (3) monitoring the activities of the appraisal foundation;²⁹ and (4) maintaining a national registry of state-certified and licensed appraisers.

Commercial Real Estate Lending and Bank Failures

Many of the banks that failed during the 1980s and early 1990s were active participants in the regional real estate market booms, particularly the booms in commercial real estate. The connection between participation in the real estate booms and bank failure can be seen if one compares the commercial real estate loan concentrations of banks that subsequently failed with those of banks that did not fail.³⁰ In all years between 1980 and 1993, the concentrations of commercial real estate loans relative to total assets were higher for

²⁶ FDIC Bank Letter 40-87 dated December 14, 1987, details specific guidelines for real estate appraisal policies and review procedures. These guidelines were adopted jointly by the FDIC, the Federal Reserve Board, and the Office of the Comptroller of the Currency. Before 1987 only the Federal Home Loan Bank Board had promulgated regulations regarding appraisal policies, practices, and procedures involving federally insured thrift institutions.

²⁷ The Appraisal Subcommittee consists of officials from the Federal Deposit Insurance Corporation, the Federal Reserve Board, the National Credit Union Administration, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the U.S. Department of Housing and Urban Affairs. The Appraisal Subcommittee is responsible for monitoring certification and licensing requirements, banking agency regulations, and appraisal organizations.

²⁸ The Resolution Trust Corporation ceased its activities at year-end 1995.

²⁹ The appraisal foundation is a private sector organization that has established an Appraiser Qualification and Standards Board. The purpose of the board is to professionalize the appraisal industry and establish coordination between the industry and federal and state officials in developing a national system of qualification and supervision.

³⁰ As stated above, commercial real estate loans are defined as loans for construction and land development, loans secured by nonfarm, nonresidential properties, and loans on multifamily properties.

banks that subsequently failed than for nonfailed banks. In 1980, commercial real estate loans of banks that subsequently failed constituted approximately 6 percent of their total assets; in 1993, almost 30 percent (see figure 3.10). Among nonfailed banks, commercial real estate loans also constituted approximately 6 percent of total assets in 1980, but in 1993 the figure had risen only to 11 percent. A similar pattern is observed for commercial real estate loans relative to total real estate loans (see figure 3.11). In 1980, banks that subsequently failed had 43 percent of their total real estate loan portfolio in commercial real estate loans; by 1993 this had increased to about 69 percent. In contrast, nonfailed banks were more conservatively invested: in 1980, 32 percent of their total real estate loan portfolio was invested in commercial real estate loans, and by 1993 the percentage was still approximately the same.

Figure 3.10
Commercial Real Estate Loans
as a Percentage of Total Assets,
Failed and Nonfailed Banks, 1980–1994

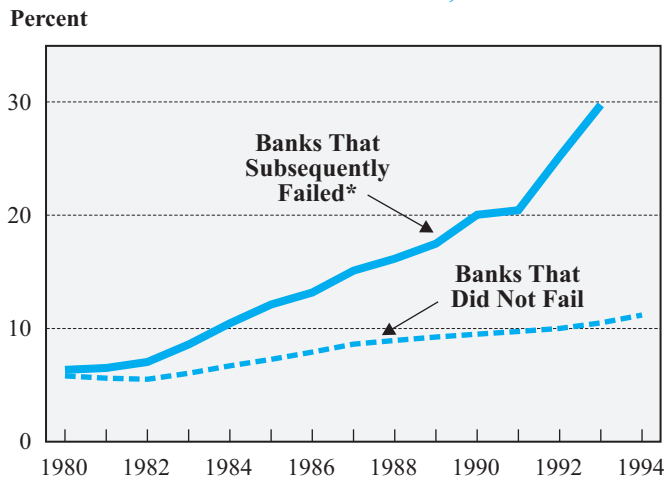
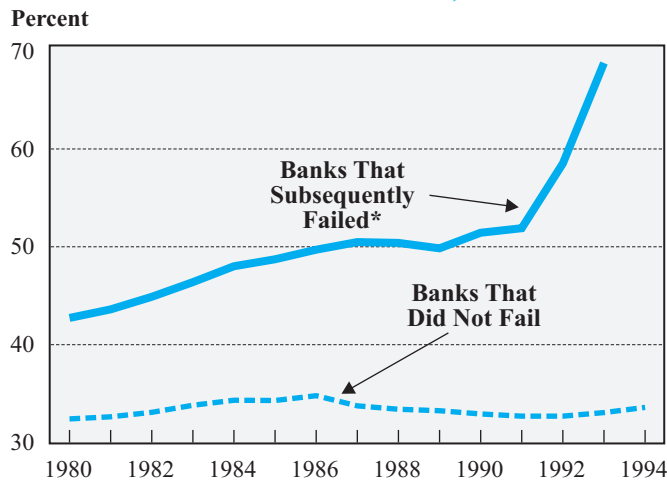


Figure 3.11
Commercial Real Estate Loans
as a Percentage of Total Real Estate Loans,
Failed and Nonfailed Banks, 1980–1994



Note: Ratios are unweighted averages. Open-bank assistance cases are not counted as failures.

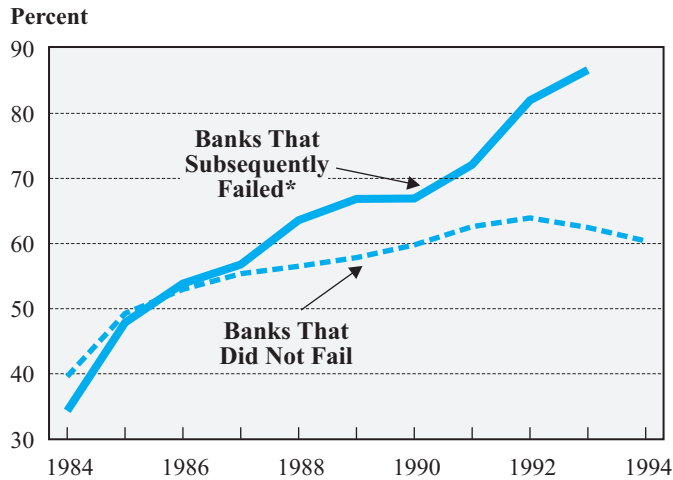
* Banks that failed in 1994 did not report year-end financials.

These exposures to volatile commercial real estate markets contributed to the asset-quality problems of many banks. Although data on nonperforming commercial real estate loans were not available before 1991, data on nonperforming real estate assets were available beginning in 1984. Nonperforming real estate assets of banks that subsequently failed constituted 34 percent of their nonperforming assets in 1984 but rose to 87 percent by 1993.³¹ Nonfailed banks' nonperforming real estate assets rose as well but not nearly as much, from almost 40 percent of total nonperforming assets in 1984 to more than 62 percent by 1993 (see figure 3.12).

Finally, the high concentrations in the volatile commercial real estate market contributed to overall losses. For subsequently failed banks, gross charge-offs on real estate loans constituted only 8 percent of total charge-offs in 1984 but rose to 43 percent by 1993. Nonfailed banks' real estate charge-offs constituted 12 percent of total charge-offs in 1984 and rose to only approximately 20 percent in 1993 (see figure 3.13). These statistics indicate no bank was totally immune to the real estate market conditions of the period.

³¹ Nonperforming real estate assets were defined as the sum of real estate loans past due 90 days or more, non-accrual real estate loans, and repossessed real estate (excluding direct investments in real estate).

Figure 3.12
Nonperforming Real Estate Assets
as a Percentage of Total Nonperforming Assets,
Failed and Nonfailed Banks, 1984–1994



Note: Ratios are unweighted averages. Open-bank assistance cases are not counted as failures.

* Banks that failed in 1994 did not report year-end financials.

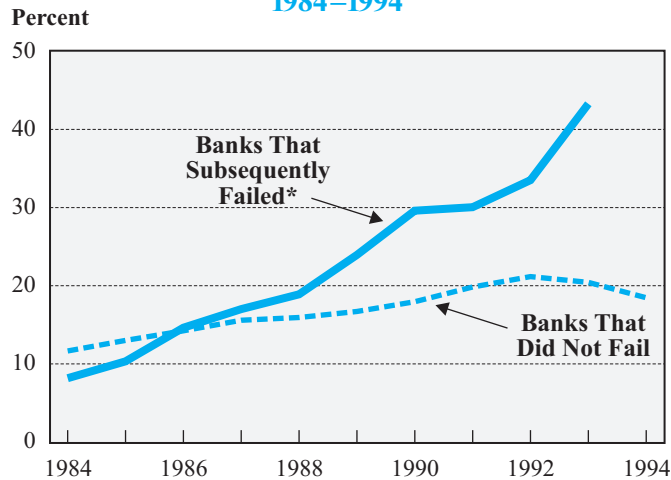
Conclusion

In the early 1980s, a large demand for real estate investments produced a boom in commercial construction activity. Public policy actions further stimulated the boom: tax breaks enacted as part of the Economic Recovery Act of 1981 greatly enhanced the after-tax returns on real estate investment, and the Garn–St Germain Act of 1982 expanded the nonresidential-lending powers of savings associations.

In pursuit of the construction boom, many banks moved aggressively into commercial real estate lending. Total real estate loans of banks more than tripled, and commercial real estate loans nearly quadrupled. Generally, bank underwriting standards were loosened, often unchecked either by the real estate appraisal system or by supervisory restraints. In addition, overly optimistic appraisals, together with the relaxation of debt coverage, the reduction in the maximum loan-to-value ratios, and the loosening of other underwriting constraints, often meant that borrowers frequently had little or no equity at stake, and in some cases lenders bore most or all of the risk.

As a result, overbuilding occurred in many markets, and when the bubble burst starting in the late 1980s, real estate values collapsed. At institutions heavily exposed to real es-

Figure 3.13
Real Estate Charge-offs as a Percentage of
Total Charge-Offs, Failed and Nonfailed Banks,
1984–1994



Note: Ratios are unweighted averages. Open-bank assistance cases are not counted as failures.

* Banks that failed in 1994 did not report year-end financials.

tate lending, loan quality deteriorated significantly. This deterioration eventually caused many banks to fail. Compared with surviving banks, banks that subsequently failed in the 1980s had higher ratios of (1) commercial real estate loans to total assets, (2) commercial real estate loans to total real estate loans, (3) noncurrent commercial real estate loans to total commercial real estate loans, and (4) real estate charge-offs to total charge-offs.

Appendix

Illustration of the Effects of Major Tax Legislation

To illustrate how commercial real estate investment returns were affected by the changes in tax law during the 1980s (see table 3-A.1), an example is presented here (see table 3-A.2) that compares the after-tax internal rate of return on a hypothetical income-producing commercial real estate property acquired in three different years: 1980 (before passage of the Economic Recovery Tax Act of 1981 [ERTA]); 1982 (after passage of ERTA); and 1987 (after passage of the Tax Reform Act of 1986).

The example assumes that the real estate investor was in the highest tax bracket and that 75 percent of the purchase price was financed. The property had a pre-tax operating net income of \$100,000 for the first year (approximately 10 percent of the purchase price), inflating at a rate of 5 percent per annum thereafter. The holding period for the property was seven years. The example also assumes that the investor had other sources of income to which he or she could apply the tax losses generated by the subject investment.

In this example, the difference in the pre- and post-ERTA after-tax rates of return was significant (14.1 percent versus 21.5 percent). Much of this difference results from the aggressive depreciation deductions allowable under ERTA in the early years of the property's holding period. Specifically, \$521,651 in depreciation deductions were taken against tax-

Table 3-A.1
Major Tax Law Provisions Affecting Returns on
Commercial Real Estate Investment

	Pre-Economic Recovery Tax Act of 1981	Post-Economic Recovery Tax Act of 1981	Post-Tax Reform Act of 1986
Allowable depreciation life, commercial real estate	40 years	15 years	31.5 years
Allowable depreciation method	Straight-line	175% Declining balance	Straight-line
Passive losses deductible?	Yes	Yes	No
Max. ordinary income tax rate	70%	50%	38.5%
Capital gains tax rate	28%	20%	28%

Table 3-A.2
Hypothetical Investment Illustrating the Economic Effects of Major Tax Legislation on Commercial Real Estate Investment

	Pre-Economic Recovery Tax Act of 1981	Post-Economic Recovery Tax Act of 1981	Post-Tax Reform Act of 1986
Initial price of property (loan amt. \$820,000)	\$1,094,745	\$1,094,745	\$1,094,745
Cumulative net operating income (before depreciation, debt service, and taxes)	809,342	809,342	809,342
Cumulative depreciation	153,258	521,651	194,621
Cumulative taxable income (loss) (net of property depreciation and mortgage interest)	45,317	(323,076)	3,954
Cumulative income tax liability (credit)	31,722	(161,538)	1,502
Cumulative after-tax income (net of annual income taxes and mortgage payments)	147,550	340,810	177,770
Gross sale proceeds	1,399,916	1,399,916	1,399,916
Gross taxes due upon sale	128,359	199,249	139,941
Ordinary income taxes on excess accelerated depreciation over straight-line	0	56,475	0
Capital gains taxes on straight-line depreciation recapture	42,912	81,740	54,494
Capital gains taxes on difference between property purchase and sale price	85,447	61,034	85,447
Net sale proceeds (net of recapture, taxes, and loan payoff)	470,872	399,983	459,290
After-tax internal rate of return	14.1%	21.5%	14.5%

Note: The analysis in this table is based on the following assumptions:

1. Real estate investor is in the highest tax bracket; 75 percent of the purchase price is financed.
2. Property has a pre-tax net operating income of \$100,000 in the first year, inflating at a rate of 5 percent per annum thereafter.
3. Property has a seven-year holding period.
4. Investor has other sources of income against which to apply tax losses generated by the property.

able income over the seven-year holding period (with \$272,226 taken in the first three years alone). At the highest ordinary income tax rate of 50 percent, this allowed for tax deferral of \$260,825. A \$161,538 tax loss was generated that was used to offset other taxable income. This benefit far outweighed the \$138,215 tax liability for “recaptured depreciation” due upon sale of the property.

These differences are even more stark when we account for the positive time preference of money. The \$260,825 in cumulative tax savings taken during the life of the project had a net present value of \$188,548 (assuming a discount rate of 10 percent per year). The net present value of the \$138,215 tax liability due at termination of the investment, assuming the same discount rate, was \$70,926. Thus, on a discounted basis the investor had to repay only \$0.38 for each dollar of taxes deferred under the Accelerated Cost Recovery System.

In the post-1986 tax regime, the same example shows that the after-tax rate of return becomes nearly exactly what it had been pre-ERTA (14.1 percent before ERTA, 21.5 percent under ERTA, 14.5 percent post-1986). This happened largely because the accelerated depreciation methods were eliminated and straight-line was reinstated, with a lengthening of the depreciable life of commercial real estate from 15 years to 31.5 years. Other significant changes were that passive losses could no longer offset nonpassive income, and the capital gains tax rate increased from 20 percent to 28 percent.

Chapter 4

The Savings and Loan Crisis and Its Relationship to Banking

Introduction

No history of banking in the 1980s would be complete without a discussion of the concurrent crisis in the savings and loan (S&L) industry. A review of the S&L debacle (as it is commonly known today) provides several important lessons for financial-institution regulators. Moreover, legislation enacted in response to the crisis substantially reformed both bank and thrift regulation and dramatically altered the FDIC's operations.

The causes of this debacle and the events surrounding its resolution have been documented and analyzed in great detail by academics, governmental bodies, former bank and thrift regulators, and journalists. Although the FDIC had a role in monitoring events as they unfolded and, indeed, played an important part in the eventual cleanup, until 1989 S&Ls were regulated by the Federal Home Loan Bank Board (FHLBB, or Bank Board) and insured by the Federal Savings and Loan Insurance Corporation (FSLIC) within a legislative and historical framework separate from the one that surrounded commercial banks. This chapter provides only an overview of the savings and loan crisis during the 1980s, with an emphasis on its relationship to the banking crises of the decade. The discussion also highlights the differences in the regulatory structures and practices of the two industries that affected how, and how well, failing institutions were handled by their respective deposit insurers.

A brief overview of insolvencies in the S&L industry between 1980 and 1982, caused by historically high interest rates, is followed by a review of the federal regulatory structure and supervisory environment for S&Ls. The government's response to the early S&L crisis is then examined in greater detail, as are the dramatic developments that succeeded this response. The corresponding competitive effects on commercial banks during the middle to late 1980s are outlined. Finally, the resolution and lessons learned are summarized.

The S&L Industry, 1980–1982

In 1980, the FSLIC insured approximately 4,000 state- and federally chartered savings and loan institutions with total assets of \$604 billion. The vast majority of these assets were held in traditional S&L mortgage-related investments. Another 590 S&Ls with assets of \$12.2 billion were insured by state-sponsored insurance programs in Maryland, Massachusetts, North Carolina, Ohio, and Pennsylvania.¹ One-fifth of the federally insured S&Ls, controlling 27 percent of total assets, were permanent stock associations, while the remaining institutions in the industry were mutually owned. Like mutual savings banks, S&Ls were losing money because of upwardly spiraling interest rates and asset/liability mismatch.² Net S&L income, which totaled \$781 million in 1980, fell to *negative* \$4.6 billion and \$4.1 billion in 1981 and 1982 (see table 4.1).

During the first three years of the decade, 118 S&Ls with \$43 billion in assets failed, costing the FSLIC an estimated \$3.5 billion to resolve. In comparison, during the previous 45 years, only 143 S&Ls with \$4.5 billion in assets had failed, costing the agency \$306 million. From 1980 to 1982 there were also 493 voluntary mergers and 259 supervisory mergers of savings and loan institutions (see table 4.2). The latter were technical failures but

Table 4.1
Selected Statistics, FSLIC-Insured Savings and Loans, 1980–1989
(\$Billions)

Year	Number of S&Ls	Total Assets	Net Income	Tangible Capital	Tangible Capital/Total Assets	No. Insolvent S&Ls*	Assets in Insolvent S&Ls*	FSLIC Reserves
1980	3,993	\$ 604	\$ 0.8	\$32	5.3%	43	\$ 0.4	\$ 6.5
1981	3,751	640	−4.6	25	4.0	112	28.5	6.2
1982	3,287	686	−4.1	4	0.5	415	220.0	6.3
1983	3,146	814	1.9	4	0.4	515	284.6	6.4
1984	3,136	976	1.0	3	0.3	695	360.2	5.6
1985	3,246	1,068	3.7	8	0.8	705	358.3	4.6
1986	3,220	1,162	0.1	14	1.2	672	343.1	−6.3
1987	3,147	1,249	−7.8	9	0.7	672	353.8	−13.7
1988	2,949	1,349	−13.4	22	1.6	508	297.3	−75.0
1989	2,878	1,252	−17.6	10	0.8	516	290.8	NA

* Based on tangible-capital-to-assets ratio.

¹ U.S. League of Savings Institutions, *Savings and Loan Sourcebook*, (1982), 37. It should be noted that during the 1980s, the state-sponsored insurance programs either collapsed or were abandoned.

² For a discussion of these issues, see Chapter 6.

Table 4.2
S&L Failures, 1980–1988
(\$Thousands)

Year	Number of Failures	Total Assets	Estimated Cost	Supervisory Mergers	Voluntary Mergers
1980	11	\$ 1,348,908	\$ 158,193	21	63
1981	34	19,590,802	1,887,709	54	215
1982	73	22,161,187	1,499,584	184	215
1983	51	13,202,823	418,425	34	83
1984	26	5,567,036	886,518	14	31
1985	54	22,573,962	7,420,153	10	47
1986	65	17,566,995	9,130,022	5	45
1987	59	15,045,096	5,666,729	5	74
1988	190	98,082,879	46,688,466	6	25

Sources: FDIC; and Barth, *The Great Savings and Loan Debacle*, 32–33.

resulted in no cost to the FSLIC. Despite this heightened resolution activity, at year-end 1982 there were still 415 S&Ls, with total assets of \$220 billion, that were insolvent based on the book value of their tangible net worth.³ In fact, tangible net worth for the entire S&L industry was virtually zero, having fallen from 5.3 percent of assets in 1980 to only 0.5 percent of assets in 1982. The National Commission on Financial Institution Reform, Recovery and Enforcement estimated in 1993 that it would have cost the FSLIC approximately \$25 billion to close these insolvent institutions in early 1983.⁴ Although this is far less than the ultimate cost of the savings and loan crisis—currently estimated at approximately \$160 billion—it was nonetheless about four times the \$6.3 billion in reserves held by the FSLIC at year-end 1982.⁵

³ Tangible net worth is defined as net worth excluding goodwill and other intangible assets. In an accounting framework, goodwill is an intangible asset created when one firm acquires another. It represents the difference between the purchase price and the market value of the acquired firm's assets. The treatment of goodwill in supervisory mergers of S&Ls is discussed in more detail below.

⁴ This estimate is based on the assumption that the liabilities of insolvent institutions exceeded their tangible assets by 10 percent. National Commission on Financial Institution Reform, Recovery and Enforcement, *Origin and Causes of the S&L Debacle: A Blueprint for Reform: A Report to the President and Congress of the United States* (1993), 44, 79.

⁵ In its audit of the Resolution Trust Corporation's 1994 and 1995 financial statements, the U.S. General Accounting Office estimated the total direct and indirect cost of resolving the savings and loan crisis at \$160.1 billion. This figure includes funds provided by both taxpayers and private sources. See U.S. General Accounting Office, *Financial Audit: Resolution Trust Corporation's 1995 and 1994 Financial Statements* (1996), 13.

Federal Regulatory Structure and Supervisory Environment

Federal regulation of the savings and loan industry developed under a legislative framework separate from that for commercial banks and mutual savings banks. Legislation for S&Ls was driven by the public policy goal of encouraging home ownership. It began with the Federal Home Loan Bank Act of 1932, which established the Federal Home Loan Bank System as a source of liquidity and low-cost financing for S&Ls. This system comprised 12 regional Home Loan Banks under the supervision of the FHLBB. The regional Banks were federally sponsored but were owned by their thrift-institution members through stock holdings. The following year, the Home Owners' Loan Act of 1933 empowered the FHLBB to charter and regulate federal savings and loan associations. Historically, the Bank Board promoted expansion of the S&L industry to ensure the availability of home mortgage loans. Finally, the National Housing Act of 1934 created the FSLIC to provide federal deposit insurance for S&Ls similar to what the FDIC provided for commercial banks and mutual savings banks. However, in contrast to the FDIC, which was established as an independent agency, the FSLIC was placed under the authority of the FHLBB. Therefore, for commercial banks and mutual savings banks the chartering and insurance functions were kept separate, whereas for federally chartered S&Ls the two functions were housed within the same agency.

For a variety of reasons, the FHLBB's examination, supervision, and enforcement practices were traditionally weaker than those of the federal banking agencies. Before the 1980s, savings and loan associations had limited powers and relatively few failures, and the FHLBB was a small agency overseeing an industry that performed a type of public service. Moreover, FHLBB examiners "were subject, unlike their counterparts at sister agencies, to stringent OMB and OPM limits on allowable personnel and compensation."⁶ It should be noted that the S&L examination process and staff were adequate to supervise the traditional S&L operation, but they were not designed to function in the complex new environment of the 1980s in which the industry had a whole new array of powers. Accordingly, when much of the S&L industry faced insolvency in the early 1980s, the FHLBB's examination force was understaffed, poorly trained for the new environment, and limited in its responsibilities and resources.⁷ Qualified examiners had been hard to hire and hard to retain (a government-wide hiring freeze in 1980–81 had compounded these problems). The banking agencies generally recruited the highest-quality candidates at all levels because they paid salaries 20

⁶ William K. Black, *Examination/Supervision/Enforcement of S&Ls, 1979–1992* (1993), 2.

⁷ James R. Adams referred to the FSLIC and the Bank Board as "the doormats of financial regulation" (*The Big Fix: Inside the S&L Scandal: How an Unholy Alliance of Politics and Money Destroyed America's Banking System* [1990], 40). See also Martin E. Lowy, *High Rollers: Inside the Savings and Loan Debacle* (1991), 111–12; Norman Strunk and Fred Case, *Where Deregulation Went Wrong: A Look at the Causes behind Savings and Loan Failures in the 1980s* (1988), 120–45; and Black, *Examination/Supervision/Enforcement*.

to 30 percent higher than those the FHLBB could offer. In 1984, the average FHLBB examiner's salary was \$24,775; this figure was \$30,764, \$32,505, and \$37,900 at the Office of the Comptroller of the Currency, the FDIC, and the Federal Reserve Board, respectively.⁸ And retention was a problem because experienced examiners were regularly recruited by the S&L industry, which offered far greater remuneration than the FHLBB could. Furthermore, FHLBB training resources were constrained by budget limitations and by a lack of seasoned examiners available to instruct less-experienced ones.

The Bank Board's examination and supervision functions were organized differently from those in the banking agencies. The examinations of S&Ls were conducted completely separately from the supervisory function. Examiners were hired by and reported to the Office of Examination and Supervision of the Bank Board (OES). The supervisory personnel, with authority for the System, resided within the Federal Home Loan Bank System and, in effect, reported only to the president of the local FHLB. Thus, in contrast to the banking agencies, no agency had a single, direct line of responsibility for a troubled institution.

Regulators interviewed for this study noted that the examination philosophy was to identify adherence to rules and regulations, not adherence to general principles of safety and soundness. Because most S&L assets were fixed-rate home mortgages, credit-quality problems were rare. Loan evaluations were appraisal driven, and in the past the value of collateral had consistently appreciated. Thus, losses on home mortgages were rare, even in the event of foreclosure. Nevertheless, not until 1987 did S&L examiners have the authority either to classify assets according to likelihood of repayment or to force institutions to reserve for losses on a timely basis. Moreover, examiner recommendations were often not followed up by supervisory personnel.

Supervisory oversight of the S&L industry was both decentralized and split from the examination function. The FHLBB designated each regional Federal Home Loan Bank president as the Principal Supervisory Agent (PSA) for that region; senior Bank staff acted as supervisory agents. However, field examiners reported to the FHLBB in Washington rather than to the regional PSA, and the regional PSA effectively reported to no one. In fact, according to one insider, the regional Federal Home Loan Banks "operated like independent duchies."⁹ Because the regional Banks were owned by the institutions they supervised, the potential for conflicts of interest was quite strong. In any event, supervisory agents did not receive exam reports until after they had undergone multiple layers of review—sometimes months after the "as of" date.

⁸ Black, *Examination/Supervision/Enforcement*, 2.

⁹ *Ibid.*, 11.

This system generated mistrust and disrespect between the S&L examiners, who were federal employees, and the supervisory agents, who were employees of the privately owned regional Banks. Supervisory agents and PSAs were compensated at levels far above those of the FHLBB staff, and while examiners suspected the supervisors of being overpaid industry friends, supervisory agents and PSAs viewed the Bank Board examiners as “low paid, heavy drinking specialists in trivial details.”¹⁰ Clearly, even the most diligent S&L examiner faced considerable difficulties in reporting negative findings and in seeing those findings acted upon.

Although the FHLBB legally had enforcement powers similar to those of the banking agencies, it used these powers much less frequently.¹¹ The S&L supervisory environment simply was not conducive to prompt corrective enforcement actions. As indicated above, S&Ls were traditionally highly regulated institutions, and before the 1980s the industry had exhibited few problems of mismanagement. The industry’s significant involvement in its own supervision stemmed from its favorable image and protected status with lawmakers. As one S&L lobbyist later wrote: “When we [the U.S. League of Savings Institutions] participated in the writing of the supervisory law, hindsight shows that we probably gave the business too much protection against *unwarranted supervisory action*” (emphasis added).¹²

Because enforcement was a lengthy process if contested by the institution, the Bank Board preferred either to use voluntary supervisory agreements or to rely on the states to use their powers. More important, the lack of resources and the limited number of enforcement attorneys (generally only five through 1984) led the FHLBB to adopt policies that made it unlikely an institution would contest a case. For example, enforcement staff would compromise on the terms of a cease-and-desist order, pursue only the strongest cases, and generally—because of lack of precedents—avoid cases alleging unsafe and unsound practices. Unfortunately, these policies undermined the effectiveness of both contemporary and future enforcement actions.

Government Response to Early Crisis: Deregulation

The vast number of actual and threatened insolvencies of savings and loan associations in the early 1980s was predictable because of the interest-rate mismatch of the institutions’ balance sheets. What followed, however, was a patchwork of misguided policies that set the stage for massive taxpayer losses to come. In hindsight, the “government proved

¹⁰ Ibid., 12.

¹¹ They included the power to issue a cease-and-desist order (C&D) requiring an institution to cease unsafe and unsound practices or other rules violations, and the power to issue a removal-and-prohibition order (R&P) against an employee, officer, or director, permanently removing the person from employment in the S&L industry.

¹² Quoted from p. 2 of Norman Strunk’s memorandum to Bill O’Connell, attached as exhibit 3 in Black, *Examination/Supervision/Enforcement*.

singularly ill-prepared to deal with the S&L crisis.”¹³ The primary problem was the lack of real FSLIC resources available to close insolvent S&Ls. In addition, many government officials believed that the insolvencies were only “on paper,” caused by unprecedented interest-rate levels that would soon be corrected. This line of reasoning complemented the view that as long as an institution had the cash to continue to operate, it should not be closed. Former Assistant Secretary of the Treasury Roger Mehle even testified to that effect when a failed savings and loan sued the Bank Board.¹⁴ Although Mehle maintained he was testifying “as a private citizen,” on other occasions he did take the position that thrifts did not have a serious problem, because their income came in the form of mortgage payments whereas most of their expenses were in the form of interest credited to savings accounts but not withdrawn. Mehle stated, “I wish my income was in cash and my expenses in the form of bookkeeping entries.”¹⁵

Most political, legislative, and regulatory decisions in the early 1980s were imbued with a spirit of deregulation. The prevailing view was that S&Ls should be granted regulatory forbearance until interest rates returned to normal levels, when thrifts would be able to restructure their portfolios with new asset powers. To forestall actual insolvency, therefore, the FHLBB lowered net worth requirements for federally insured savings and loan associations from 5 percent of insured accounts to 4 percent in November 1980 and to 3 percent in January 1982.¹⁶ At the same time, the existing 20-year phase-in rule for meeting the net worth requirement, and the 5-year-averaging rule for computing the deposit base, were retained. The phase-in rule meant that S&Ls less than 20 years old had capital requirements even lower than 3 percent. This made chartering de novo federal stock institutions very attractive because the required \$2.0 million initial capital investment could be leveraged into \$1.3 billion in assets by the end of the first year in operation.¹⁷ The 5-year-averaging rule, too, encouraged rapid deposit growth at S&Ls, because the net worth requirement was based not on the institution’s existing deposits but on the average of the previous five years.¹⁸

Reported capital was further augmented by the use of regulatory accounting principles (RAP) that were considerably more lax than generally accepted accounting principles (GAAP). However, where GAAP was more lenient than RAP, the Bank Board adopted the

¹³ National Commission, *Origins and Causes of the S&L Debacle*, 32.

¹⁴ Mehle’s action has been described as a “remarkable step” (Kathleen Day, *S&L Hell: The People and the Politics behind the \$1 Trillion Savings and Loan Scandal* [1993], 93).

¹⁵ Sanford Rose, “The Fruits of Canalization,” *American Banker* (November 2, 1981), 1.

¹⁶ In contrast, commercial banks were required to have a percentage of assets, a larger base than insured deposits, as a capital cushion. For the bank capital requirements, see section on capital adequacy in Chapter 2.

¹⁷ James R. Barth, *The Great Savings and Loan Debacle* (1991), 54.

¹⁸ National Commission, *Origins and Causes of the S&L Debacle*, 35–36.

former. As of September 1981, troubled S&Ls could issue income capital certificates that the FSLIC purchased with cash, or more likely with notes, and they were included in net worth calculations. That same month, the FHLBB began permitting deferred losses on the sale of assets when the loss resulted from adverse changes in interest rates. Thrifts were allowed to spread the recognition of the loss over a ten-year period, while the unamortized portion of the loss was carried as an “asset.” Then in late 1982, the FHLBB began counting appraised equity capital as a part of reserves. Appraised equity capital allowed S&Ls to recognize an increase in the market value of their premises.

Perhaps the most far-reaching regulatory change affecting net worth was the liberalization of the accounting rules for supervisory goodwill.¹⁹ Effective in July 1982, the Bank Board eliminated the existing ten-year amortization restriction on goodwill, thereby allowing S&Ls to use the general GAAP standard of “no more than 40 years” in effect at the time. This change was intended to encourage healthy S&Ls to take over insolvent institutions, whose liabilities far exceeded the market value of their assets, without the FSLIC’s having to compensate the acquirer for the entire negative net worth of the insolvent institution.²⁰ Not surprisingly, between June 1982 and December 1983 goodwill rose from a total of \$7.9 billion to \$22 billion, the latter amount representing 67 percent of total RAP capital. The FHLBB also actively encouraged use of this accounting treatment as a low-cost method of

¹⁹ Supervisory goodwill was created when a healthy S&L acquired an insolvent one, with or without financial assistance from the FSLIC. It is known as “supervisory” goodwill because the FHLBB allowed it to be included as an asset for capital purposes. For a more in-depth discussion of goodwill accounting, see National Commission, *Origins and Causes of the S&L Debacle*, 38–39, and Lowy, *High Rollers*, 38–41.

²⁰ An example of a typical transaction will help to explain the relevance of this change. The assets and liabilities of the thrift would be “marked-to-market,” and since interest rates were very high, this usually resulted in the mortgage assets of the thrift being valued at a discount. For example, a \$100,000 loan paying 8 percent might have been marked down to \$80,000 so that it was paying a market rate. However, the liabilities of the institution were generally valued at near book, so a \$100,000 deposit was still worth \$100,000. Even if the acquirer paid nothing for the thrift, the acquirer was taking on an asset worth \$80,000 and a liability of \$100,000, a \$20,000 shortfall. This would be recorded as an asset called goodwill with a value of \$20,000. One should note that the borrower would still have a \$100,000 loan outstanding and would be expected to pay back the entire loan balance. The \$20,000 would be booked as an off-balance-sheet item called a “discount.” The accounting profession considered the goodwill and the discount two independent entries.

After the merger, the goodwill would be amortized as an expense over a set period. The discount would be “accreted” to income over the life of the loan, usually around 10 years. Under RAP accounting, before June 1982, goodwill was amortized over the same 10-year period. Afterward, the accounting picture changed dramatically. Under GAAP, the goodwill could be amortized over as many as 40 years. The expenses for the amortization of goodwill would be much lower than the income from the accretion of the discount for many years. This “allowed thrift institutions to literally ‘manufacture’ earnings and capital by acquiring other thrift institutions” (Office of Thrift Supervision Director Timothy Ryan, testifying before the U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on General Oversight and Investigations, *Capital Requirements for Thrifts As They Apply to Supervisory Goodwill: Hearing*, 102d Cong., 1st sess., 1991, 31).

resolving troubled institutions. Unfortunately, like other Bank Board policies that resulted in the overstatement of capital, the liberal treatment of supervisory goodwill restricted the FHLBB's ability to crack down on thinly capitalized or insolvent institutions, because enforcement actions were based on regulatory and not tangible capital.²¹

The Bank Board also attempted to attract new capital to the industry, and it did so by liberalizing ownership restrictions for stock-held institutions in April 1982. That change proved to have a dramatic effect on the S&L industry.²² Traditionally, federally chartered stock associations were required to have a minimum of 400 stockholders. No individual could own more than 10 percent of an institution's outstanding stock, and no controlling group more than 25 percent. Moreover, 75 percent of stockholders had to reside or do business in the S&L's market area. The elimination of these restrictions, coupled with the relaxed capital requirements and the ability to acquire an institution by contributing "in-kind capital" (stock, land, or other real estate), invited new owners into the industry. With a minimal amount of capital, an S&L could be owned and operated with a high leverage ratio and in that way could generate a high return on capital.

Legislative actions in the early 1980s were designed to aid the S&L industry but in fact increased the eventual cost of the crisis. The two principal laws passed were the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) and the Garn–St Germain Depository Institutions Act of 1982 (Garn–St Germain).²³ DIDMCA reduced net worth requirements and Garn–St Germain wrote capital forbearance into law. DIDMCA replaced the previous statutory net worth requirement of 5 percent of insured accounts with a range of 3–6 percent of insured accounts, the exact percentage to be determined by the Bank Board. Garn–St Germain went even further in loosening capital requirements for thrifts by stating simply that S&Ls "will provide adequate reserves in a form satisfactory to the Corporation [FSLIC], to be established in regulation made by the Corporation."²⁴ Garn–St Germain also authorized the FHLBB to implement a Net Worth

²¹ Recognizing that the use of supervisory goodwill had contributed to the magnitude of the thrift crisis, Congress legislated a five-year phaseout of goodwill that had been created on or before April 12, 1989. This change, and tighter capital requirements for thrifts, rapidly forced a number of S&Ls into insolvency or near-insolvency. Many of these institutions sued the federal government, and on July 1, 1996, the Supreme Court ruled in favor of three of them in *United States v. Winstar Corp.* See, for example, Linda Greenhouse, "High Court Finds Rule Shift by U.S. Did Harm to S&Ls," *The New York Times* (July 2, 1996), A3; and Paul M. Barrett, "High Court Backs S&Ls on Accounting, Declines to Hear Affirmative-Action Case," *The Wall Street Journal* (July 2, 1996), 1.

²² National Commission, *Origins and Causes of the S&L Debacle*, 37.

²³ In addition, the Economic Recovery Tax Act of 1981 contributed to the boom in commercial real estate projects. For a detailed description of all of these laws, see Chapters 2 and 3.

²⁴ Public Law 97-320, § 202(d).

Certificate Program for S&Ls. (Ironically, this form of capital forbearance was used more extensively and more effectively by the FDIC for mutual savings banks.)²⁵

These two laws also made a number of other significant changes affecting thrift institutions, including giving them new and expanded investment powers and eliminating deposit interest-rate ceilings. But although such deregulation had been recommended since the early 1970s,²⁶ when finally enacted it failed to give attention to corresponding recommendations for deposit insurance reform and stronger supervision. Particularly dangerous in view of these omissions were the expanded authority of federally chartered S&Ls to make acquisition, development, and construction (ADC) loans, enacted in DIDMCA, and the subsequent elimination in Garn–St Germain of the previous statutory limit on loan-to-value ratios. These changes allowed S&Ls to make high-risk loans to developers for 100 percent of a project’s appraised value.

DIDMCA also increased federal deposit insurance to \$100,000 per account, a major adjustment from the previous limit of \$40,000 per account. The increase in the federal deposit insurance level and the phaseout of deposit interest-rate controls were designed to alleviate disintermediation, or the flow of deposits out of financial institutions into money market mutual funds and other investments. However, the increase in insured liabilities added substantially to the potential costs of resolving failed financial institutions, and has been cited as exacerbating the “moral-hazard” problem much discussed throughout the 1980s.²⁷

Deregulation of asset powers at the federal level prompted a number of states to enact similar, or even more liberal, legislation. This “competition in laxity” has been attributed to a conscious effort by state legislatures to retain and attract state-chartered institutions that otherwise might apply for federal charters, thereby reducing the states’ regulatory roles and fee collections.²⁸ An oft-cited example is California’s Nolan bill, enacted in 1982 after

²⁵ The National Commission attributed the greater success of the FDIC’s forbearance policy to several factors, including a more limited use of accounting gimmicks and growth restrictions for savings banks (National Commission, *Origins and Causes of the S&L Debacle*, 32, 37). For a comparison of the two Net Worth Certificate Programs, see U.S. General Accounting Office, *Net Worth Certificate Programs: Their Design, Major Differences, and Early Implementation* (1984).

²⁶ For details on the debate over deregulation, see Chapter 6.

²⁷ “Moral hazard” refers to the incentives that insured institutions have to engage in higher-risk activities than they would without deposit insurance; deposit insurance means, as well, that insured depositors have no compelling reason to monitor the institution’s operations. The National Commission on Financial Institution Reform, Recovery and Enforcement concluded that federal deposit insurance at institutions with substantial risk was a “fundamental condition necessary for collapse” and that “[r]aising the insurance limit from \$40,000 to \$100,000 exacerbated the problem” (National Commission, *Origins and Causes of the S&L Debacle*, 5–6). For further discussion of the increase in the deposit insurance limit, see Chapter 2.

²⁸ Lawrence J. White, *The S&L Debacle: Public Policy Lessons for Bank and Thrift Regulation* (1991), 73.

many of the state's largest thrifts converted to federal charters.²⁹ Effective January 1, 1983, state-chartered S&Ls in California had unlimited authority to invest in service corporations and in real estate. Another state notable for its liberalizing legislation was Florida, whose state-chartered thrift industry was "virtually nonexistent" before the enactment of a series of liberal laws between 1980 and 1984.³⁰ Supervision of these institutions remained under the state's controller and remained weak. California and Florida, along with Texas, had some of the nation's most liberal state laws for thrifts. Unfortunately, as is detailed below, the more liberal powers afforded by some states to their S&Ls added significantly to the losses that eventually had to be made good by the federal government.

Finally, it should be noted that the Reagan administration was more directly involved with the regulation of S&Ls than with the regulation of the banking industry. In other words, the FDIC and the Federal Reserve System traditionally had more political independence than the FHLBB (and therefore than the FSLIC). During the early years of the administration, responsibility for the unfolding thrift crisis lay with the Cabinet Council on Economic Affairs, chaired by Treasury Secretary Donald Regan. Its members included senior officials from OMB and the White House. Firm believers in "Reaganomics," this group crafted the policies of deregulation and forbearance and adamantly opposed any governmental cash expenditures to resolve the S&L problem.³¹ Furthermore, the administration did not want to alarm the public unduly by closing a large number of S&Ls. Therefore, the Treasury Department and OMB urged the Bank Board to use FSLIC notes and other forms of forbearance that did not have the immediate effect of increasing the federal deficit.

The free-market philosophy of the Reagan administration also called for a reduction in the size of the federal government and less public intervention in the private sector. As a result, during the first half of the 1980s the federal banking and thrift agencies were encouraged to reduce examination staff, even though these agencies were funded by the institutions they regulated and not by the taxpayers. This pressure to downsize particularly affected the FHLBB, whose budget and staff size were closely monitored by OMB and subjected to the congressional appropriations process.³² The free-market philosophy affected not only regulatory and supervisory matters but also thrift and bank chartering decisions. Before the 1980s, new charters had been granted on the basis of community need. Under the

²⁹ From 1980 to 1982 the number of state-chartered S&Ls in California fell from 126 with \$82 billion in assets to 107 with less than \$30 billion (Barth, *The Great Savings and Loan Debacle*, 55). Day notes that "funding for California's supervisory department diminished proportionately"—staff fell from 178 in 1978 to only 44 in 1983 (Day, *S&L Hell*, 124).

³⁰ Strunk and Case, *Where Deregulation Went Wrong*, 59, and for examples of liberal state laws, 60–66.

³¹ For a discussion of Reaganomics and the early years of the thrift crisis, see Day, *S&L Hell*, 73–81; and Lowy, *High Rollers*, 20–26.

³² Strunk and Case, *Where Deregulation Went Wrong*, 141. It is important to note, as discussed in Chapter 12, that the banking agencies themselves believed the number of exams could be reduced through greater reliance on computers and off-site monitoring.

Reagan administration, the FHLBB and the Office of the Comptroller of the Currency approved any application “as long as the owners hired competent management and provided a sound business plan.”³³ The devastating consequences of adding many new institutions to the marketplace, expanding the powers of thrifts, decontrolling interest rates, and increasing deposit insurance coverage, coupled with reducing regulatory standards and scrutiny, were not foreseen.

Developments after Deregulation

The savings and loan industry changed swiftly and dramatically after the deregulation of asset powers and interest rates. The period from year-end 1982 to year-end 1985 was characterized by extremely rapid growth, as the industry responded to the new regulatory and legislative climate. Total S&L assets increased from \$686 billion to \$1,068 billion, or by 56 percent—more than twice the growth rate at savings banks and commercial banks (approximately 24 percent). As discussed below, S&L growth was fueled by an influx of deposits (often via money brokers) into institutions willing to pay above-market interest rates. In 1983 and 1984, more than \$120 billion in net new money flowed into savings and loan associations.³⁴

With money flowing so plentifully, risk takers gravitated toward the S&L industry, altering ownership characteristics. Although more than a few of these new owners engaged in

Table 4.3
Number of Newly Chartered FSLIC-Insured S&Ls, 1980–1986

Year	State-Chartered	Federally Chartered	Total
1980	63	5	68
1981	21	4	25
1982	23	3	26
1983	36	11	47
1984	68	65	133
1985	45	43	88
1986	13	14	27
TOTAL	348	144	492

Source: Lawrence White, *The S&L Debacle*, 106.

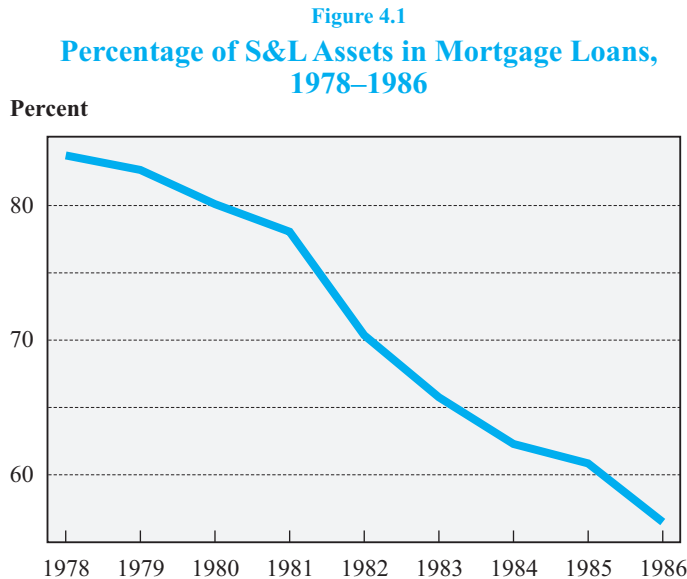
Note: Excludes state-chartered thrifts that converted from state-sponsored insurance funds to the FSLIC.

³³ Day, *S&L Hell*, 100. For further discussion of these issues, see Chapter 2, the section on entry.

³⁴ National Council of Savings Institutions, *1986 National Fact Book of Savings Institutions* (1986), 10, 16; and FDIC, *Historical Statistics on Banking: A Statistical History of the United States Banking Industry 1934–1992* (1993), 219–21.

highly publicized cases of fraudulent activity, many others were just greedy.³⁵ Sharp entrepreneurs realized the large potential profit from owning an S&L, whose charter now allowed a wide range of investment opportunities without the corresponding regulation of commercial banks. Little capital was required to purchase or start an S&L, and the growth potential was great. A variety of nonbankers entered the S&L industry, ranging from dentists, with no experience in owning financial institutions, to real estate developers, who had serious conflicts of interest. To gain entry into the S&L industry, one either acquired control of existing institutions (many of which had converted from mutual to stock) or started de novo institutions. Between 1980 and 1986 nearly 500 new S&L charters were issued (see table 4.3), with more than 200 of these issued in just two years—1984 and 1985. In 1981 stock S&Ls had constituted 21 percent of the industry; in 1986 they constituted 38 percent and controlled 64 percent of the industry's total assets.

Another major change resulting from deregulation was that, beginning in 1982, S&L investment portfolios rapidly shifted away from traditional home mortgage financing and into new activities. This shift was made possible by the influx of deposits and also by sales of existing mortgage loans. By 1986, only 56 percent of total assets at savings and loan associations were in mortgage loans, compared with 78 percent in 1981 (see figure 4.1). In



³⁵ National Commission, *Origins and Causes of the S&L Debacle*, 47.

some states, direct investments in real estate, equity securities, service corporations, and operating subsidiaries were allowed with virtually no limitations.³⁶ S&Ls invested in everything from casinos to fast-food franchises, ski resorts, and windmill farms. Other new investments included junk bonds, arbitrage schemes, and derivative instruments. It is important to note, however, that while windmill farms and other exotic investments made for interesting reading, high-risk development loans and the resultant mortgages on the same properties were most likely the principal cause for thrift failures after 1982. A large percentage of S&L assets was devoted to acquisition, development, and construction (ADC) loans; these were very attractive because of their favorable accounting treatment and the potential for future profit if the projects were successful. As discussed below, the entry of so many S&Ls into commercial real estate lending helped fuel boom-to-bust real estate cycles in several regions of the country.

In 1983, even when a sharp drop in interest rates returned many traditional S&Ls to profitability, 10 percent of the industry was still insolvent on a GAAP basis and 35 percent of the industry's assets were controlled by S&Ls that were insolvent on a tangible basis—yet these institutions were permitted to grow along with the rest of the industry, and to substitute credit risk for interest-rate risk. The high-growth period between 1982 and 1985 was also the period when examination and supervision were weakest.³⁷ States that had enacted liberal S&L laws, such as California, Florida, and Texas, were soft on supervision; and in some cases, state-chartered institutions had close political ties to elected officials and to a state's regulators.³⁸ In the Southwest, existing weaknesses in the Bank Board's supervision of federally chartered S&Ls were compounded by the relocation in September 1983 of the Ninth District of the Federal Home Loan Bank System from Little Rock, Arkansas, to Dallas, Texas. The number of examinations in the district fell by one-third and remained low during the critical years of 1984 and 1985.³⁹ Moreover, after it was realized in 1984 that a number of fast-growing S&Ls were dangerously abusing their new powers, the FHLBB's attempts to crack down were bitterly opposed by the industry, the administration, and those key members of Congress who had been persuaded by S&L operators and real estate developers that regulators had become "Gestapo-like" and "heavy-handed."⁴⁰ Nevertheless, in late 1984 the Bank Board began to tighten the S&L regulatory system by imposing a number of regulations designed to (a) curb rapid growth and direct investments by thrifts

³⁶ In January 1985, the Bank Board adopted a rule restricting direct investments by FSLIC-insured thrifts to 10 percent of assets unless permission was granted to exceed that level.

³⁷ National Commission, *Origins and Causes of the S&L Debacle*, 43.

³⁸ See, for example, Strunk and Case, *Where Deregulation Went Wrong*, 57–60; National Commission, *Origins and Causes of the S&L Debacle*, 48; and Day, *S&L Hell*, 124.

³⁹ White, *The S&L Debacle*, 89–90.

⁴⁰ One of the major themes of Martin Lowy's book (*High Rollers*) is that thrifts were able to buy political favor in order to keep regulators from interfering in their operations.

with low net worth, (b) increase net worth standards, and (c) reform accounting practices.⁴¹ In 1985, the FHLBB took the unusual step of transferring its examination staff to the Federal Home Loan Banks in order to become independent of OMB's restrictions on pay and staffing levels.

Although these measures would help control future abuses, they could not reverse the losses already incurred and those that would soon result from rapid declines in overbuilt real estate markets. Furthermore, the FHLBB was trapped by its own policies: the agency had to wait until an institution was insolvent under the relatively lax RAP before taking action, and accounting distortions favored high-growth S&Ls that continued to report healthy returns on assets and regulatory net worth. Independent of these problems, the FSLIC, with reserves of only \$5.6 billion at year-end 1984, did not have the resources to close even the RAP-insolvent institutions, which at that time numbered 71 with assets of \$14.8 billion.⁴² Within two years, these figures had ballooned to 225 institutions with assets of \$68.1 billion, largely as a result of the deflated southwestern economy. The Southwest's problems caused severe losses in the commercial banking industry as well (and are discussed in Chapter 9). In fact, the unfolding S&L crisis in general, not just in the Southwest, negatively affected the banking industry.

Competitive Effects on the Banking Industry

Enactment of Garn–St Germain and the deregulation of asset powers by several key states led many S&Ls to change their operating strategies. These changes substantially intensified the competitive environment of commercial banks and placed downward pressure on bank profitability. Although in a free-market economy competition is normally considered healthy, regulatory forbearance in the thrift industry and moral hazard created marketplace distortions that penalized well-run financial institutions.⁴³ On the liability side of the balance sheet, the bidding up of deposit interest rates by aggressive and/or insolvent S&Ls increased the cost of funds, adversely affecting both commercial banks and conservatively run thrifts. On the asset side of the balance sheet, commercial banks were negatively influenced by the entrance of inexperienced and, in some cases, rogue S&Ls into commercial and real estate lending.

The genesis of the bidding up of deposit interest rates was the S&L industry's dramatic growth between 1982 and 1985. This growth was facilitated by a flood of deposits

⁴¹ For a chronological listing of these regulations, see, for example, National Commission, *Origins and Causes of the S&L Debacle*, 98–99; and Barth, *The Great Savings and Loan Debacle*, 130–32, 137–41.

⁴² For a listing of RAP-insolvent and tangible-insolvent thrifts from 1981 to 1987, see White, *The S&L Debacle*, 114.

⁴³ Eugenie D. Short and Kenneth J. Robinson, "Deposit Insurance Reform in the Post-FIRREA Environment: Lessons from the Texas Deposit Market," Federal Reserve Bank of Dallas *Financial Industry Studies Working Paper* (December 1990), 3.

into institutions willing to pay above-market interest rates to attract money to invest in new activities. S&Ls would advertise their rates both locally and nationally, use in-house “money desks,” or get in touch with brokerage firms that were happy to help move money in large bundles to thrifts that were seeking to grow. In June 1984, when thrifts with annual growth rates of less than 15 percent had more than 80 percent of their liabilities in traditional retail deposits (generally in accounts of less than \$100,000), the comparable figure for thrifts growing at rates in excess of 50 percent per year was only 59 percent. This latter group relied more heavily on large-denomination deposits and repurchase agreements, which together accounted for more than 28 percent of their liabilities.⁴⁴

Growth among thrifts was particularly strong in the Sunbelt and in states whose economies were energy related and booming in the early 1980s. These included Arizona, Arkansas, California, Kansas, Oklahoma, and Texas. Texas S&Ls were among the most aggressive growers. Assets at the state’s thrifts increased by 117 percent between 1982 and 1985, a rate twice the national average.⁴⁵ This growth was concentrated in a number of small but fast-growing institutions known as highfliers. One of the most egregious of these, Empire Savings & Loan Association of Mesquite, grew between 1981 and 1983 from approximately \$13 million in assets to more than \$300 million.⁴⁶ When Empire failed in March 1984, large certificates of deposit accounted for more than 90 percent of liabilities. To attract this “hot money,” Empire and other Texas S&Ls paid about 100 basis points (1 percent) more than commercial banks for certificates of deposit.⁴⁷

After Empire Savings & Loan failed, the FHLBB imposed a regulation restricting growth at undercapitalized thrifts to a rate equal to the interest credited on existing deposits. S&Ls that met their net worth requirements could not grow at rates exceeding 25 percent per year without supervisory approval. As a result, industry-wide asset growth dropped from nearly 20 percent in 1984 to less than 10 percent in 1985. However, additional pressure on deposit interest rates came from thrifts that were insolvent but still operating, such as those in the FHLBB’s Management Consignment Program (MCP).⁴⁸ For as the true con-

⁴⁴ In a repurchase agreement, a thrift would “sell” mortgages or mortgage-backed securities to an investment banking firm and promise to “repurchase” them at a future date and higher price. These transactions were essentially collateralized borrowing (White, *The S&L Debacle*, 88).

⁴⁵ Strunk and Case, *Where Deregulation Went Wrong*, 105.

⁴⁶ It should be noted that not all “highfliers” were located in Texas. American Diversified Savings Bank of Lodi, California, grew from \$11 million in 1982 to \$978 million in 1985, while Bloomfield Savings and Loan of Birmingham, Michigan, grew during the same period from \$2 million to \$676 million.

⁴⁷ Lowy, *High Rollers*, 105, 127.

⁴⁸ The MCP was designed to remove owners and managers of the worst-run insolvent institutions. Essentially, the FHLBB would structure a pass-through receivership, recharter the S&L as a federal mutual association, and consign a group of managers to run it. Between 1985 and 1988, the Bank Board placed over 100 S&Ls in the program.

dition of the S&L industry became common knowledge, these institutions had to pay higher rates than solvent institutions to attract and retain deposits.⁴⁹

Because Texas S&Ls had been among the most aggressive growers, the situation there was particularly acute. By year-end 1987, insolvent Texas S&Ls accounted for 44 percent of the assets in all RAP-insolvent S&Ls in the country, and the unprofitable Texas thrifts accounted for 62 percent of all losses nationwide. The troubled condition of the state's thrift industry resulted in higher interest rates for all financial institutions in Texas: to maintain their funding base, even well-capitalized banks and thrifts had to pay the so-called Texas premium, estimated to be 50 basis points or more.⁵⁰ The ensuing bidding wars between solvent and insolvent financial institutions resulted in a situation that was "just out of control," according to a Texas thrift executive.⁵¹ The higher operating expenses associated with the Texas premium not only increased the cost of resolving insolvent S&Ls but also weakened the financial condition of healthier institutions.

Deposit premiums paid by Texas banks and thrifts peaked in mid-1987 and declined thereafter in response to regulatory actions to resolve troubled institutions, so that by year-end 1989, the average cost of deposits at Texas banks was only eight basis points higher than in the rest of the United States.⁵² One of those regulatory actions was a program that the Federal Home Loan Bank of Dallas initiated in 1988 replacing high-cost deposits in insolvent Texas thrifts with lower-cost deposits gathered from solvent thrifts. Another was the FHLBB's merging of some of the top rate payers as part of its Southwest Plan.⁵³ However, because of continuing uncertainty about the FSLIC's ability to close insolvent thrifts, the deposit premium for these institutions rose throughout 1989, until Congress passed the Fi-

⁴⁹ Elijah Brewer and Thomas H. Mondschean (*The Impact of S&L Failures and Regulatory Changes on the CD Market, 1987-1991*) noted a significant relationship between deposit interest-rate premiums (that is, the spread over comparable Treasury bill rates) and the capital-to-assets ratio and measures of S&L risk exposure for both wholesale and retail deposits. In the case of wholesale deposits (over \$100,000), the premium was attributed to risk compensation for uninsured depositors. In the case of retail or fully insured deposits, the premium was attributed to "moral hazard," or the incentive for insolvent S&Ls, with nothing to lose, to bid up rates in a gamble for resurrection.

⁵⁰ The Federal Reserve Bank of Dallas published several studies on the "Texas premium." See, for example, Eugenie D. Short and Jeffery W. Gunther, *The Texas Thrift Situation: Implications for the Texas Financial Industry* (1988).

⁵¹ "Texas Marketers Battle High Rates and Bad Publicity," *Savings Institutions* (September 1988): 84.

⁵² Short and Robinson, "Deposit Insurance Reform in the Post-FIRREA Environment," 10.

⁵³ The Southwest Plan sought to consolidate and shrink the Texas thrift industry by allowing groups of insolvent thrifts to be acquired. To conserve cash, the FSLIC used notes and other forms of future payments, such as yield maintenance and capital loss coverage. The FSLIC also heavily advertised the tax advantages of acquiring an insolvent thrift before the end of 1988, when the law allowing S&L losses to offset other taxes would expire. The Southwest Plan became controversial because for wealthy acquirers it allowed substantial tax benefits to accrue but required little capital investment.

financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA).⁵⁴ Once regulators had the money to pay down high-cost deposits and take over insolvent institutions, deposit premiums quickly declined.

After deregulation, commercial banks also faced competitive pressure from S&Ls on the asset side of the balance sheet. Much of the growth in S&L assets between 1982 and 1985 was concentrated in commercial real estate lending. During that period the proportion of total thrift assets invested in commercial mortgage loans and land loans rose from 7.4 percent to 12.1 percent—an increase of \$78.6 billion. By June 1984 aggressive thrifts, growing at annual rates greater than 50 percent, already had 16.6 percent of their assets in these two categories.⁵⁵ Real estate lending and investing were potentially very lucrative for S&Ls. Changes in the federal tax code for real estate investments in 1981 and favorable expectations regarding oil prices led to a boom in commercial real estate projects, especially in the Southwest.⁵⁶ Because S&Ls were allowed to take an equity interest in real estate development projects, they stood to share in the upside of a booming market. Additionally, interest rates on construction loans are much higher than on other forms of lending; and regulatory accounting practices allowed S&Ls to book loan origination fees as current income, even though these amounts were actually included in the loan to the borrower. For example, a borrower might have requested a \$1 million loan for two years for a housing development; the institution might have charged four points for the original loan and 12 percent annual interest. However, instead of requiring the borrower to pay the interest (\$240,000) and the fee (\$40,000), the S&L would have included these two items in the original amount of the loan (which would have increased to \$1.28 million), and paid the institution out of the loan proceeds.

There are many notorious examples of how this system was abused by unscrupulous S&L owners reporting high current income on ADC loans while milking the institution of cash in the form of dividends, high salaries, and other benefits.⁵⁷ A rapidly growing S&L could hide impending defaults and losses by booking new ADC loans. The rush into construction lending by S&Ls was such that “among the fastest growers, loan fees accounted for substantially all net income in the crucial years 1983 and 1984.”⁵⁸ Moreover, although the majority of S&Ls were not fraud-ridden, few had the management expertise necessary

⁵⁴ The U.S. General Accounting Office declared the FSLIC insolvent on the basis of its contingent liabilities at year-end 1986. In 1987, Congress passed the Competitive Equality Banking Act of 1987, which authorized the FSLIC to borrow up to \$10.825 billion but placed a \$3.75 billion limit on borrowing in any 12-month period. For a discussion of this legislation, see White, *The S&L Debacle*, 102–103.

⁵⁵ Ibid.

⁵⁶ These topics are discussed in greater detail in Chapters 3 and 9.

⁵⁷ William K. Black, *“Cash Cow” Examples* (1993).

⁵⁸ Lowy, *High Rollers*, 77.

for dealing with the new lending opportunities, particularly the inherently risky ADC lending. In many cases, prudent underwriting standards were not observed, and the necessary documents and controls were not put in place. Lending on construction projects was appraisal driven and was often “based on the overly optimistic assumption that property values would continue to rise.”⁵⁹ S&Ls sometimes loaned the entire amount up front, including interest, fees, and even payments to developers, but did not check to ensure that projects were being completed as planned. Moreover, S&L ADC loans frequently were nonrecourse: the borrower was not required to sign a legally binding personal guarantee.

S&Ls entered the commercial real estate lending arena at a time when banks were increasing their own investments in commercial real estate loans, having lost many of their traditional corporate clients to the commercial-paper and bond markets. At the same time, chartering activity of de novo banks and thrifts was high. The result was simply a matter of too many lenders chasing too few loans. The rush of new competitors, all eager to lend to developers, had a negative effect on existing commercial banks, on their underwriting standards, and on the quality of their loans. Field examiners and bank regulators have noted that in the 1980s borrowers could generate bidding wars between banks and S&Ls. Everyone wanted to lend money and everyone wanted to grow. Although for the most part S&Ls lent to lesser-qualified borrowers,⁶⁰ their presence in the marketplace contributed to the overall decline in bank lending standards during the 1980s.⁶¹ As S&Ls used lax underwriting standards to lure customers away from commercial banks, the banks began to imitate such S&L practices as the up-front fee structure, interest reserves, and the small amount of equity investment by developers. This “contamination effect” has been called a variation of Gresham’s Law that bad money drives out good. In this variation, “risk-hungry institutions will force careful institutions into taking greater risks as well.”⁶² Or in the words of Hugh McColl, chairman of NCNB (now NationsBank): “We may have the wisest underwriting policy (for loans) in the world. But if your next-door neighbor has a poor policy, it can cause oversupply of space and crush even your wisest decision.”⁶³

Competitive pressures from S&Ls were felt most acutely in states with a large number of aggressive and/or insolvent thrifts. Interviews with regional supervisory personnel have indicated that Arizona, California, Florida, and Texas were states where banks were

⁵⁹ Strunk and Case, *Where Deregulation Went Wrong*, 101.

⁶⁰ Most accounts of the S&L debacle have noted this trend. It has been variously attributed to inexperience, fraud, rapid growth, and the need to invest in high-risk ventures due to higher money costs.

⁶¹ Changes in commercial bank underwriting standards during the 1980s are discussed in greater detail in Chapter 3.

⁶² Eric I. Hemel, “Deregulation and Supervision Go Together,” *Outlook of the Federal Home Loan Bank System* (November/December 1985): 10.

⁶³ Mindy Fetterman, “NCNB Chairman Hugh McColl Touts His High-Rise’s Success, Despite Banking’s Towering Real-Estate Woes,” *USA Today* (May 28, 1991), 1B.

particularly affected by S&L lending practices. Additionally, the flood of mutual-to-stock conversions of savings banks in New England during the middle to late 1980s contributed to the boom-to-bust real estate cycle there.⁶⁴ Clearly, competition from savings and loans did not cause the various crises experienced by the commercial banking industry during the 1980s; these crises would have occurred regardless of the thrift situation. But the channeling of large volumes of deposits into high-risk institutions that speculated in real estate development did create marketplace distortions. These high-risk, speculating institutions raised the cost of funds marketwide and encouraged risk taking by competitors. The flow of capital was directed to geographic areas, like Texas, where real estate was being developed far beyond the market's ability to absorb it. This oversupply contributed to the eventual bust in real estate values and slowed economic recovery. In hindsight, the "go-go" mentality in certain regions of the country during the 1980s affected not only banks and S&Ls but also their regulators, who were slow to understand that some markets were being extravagantly overbuilt.

Resolution of the Crisis

Throughout the decade, losses in the S&L industry continued to mount as the decline in real estate values deepened and affected various regions of the country. Efforts to recapitalize the FSLIC in 1986 and 1987 were bitterly fought by the industry, which had considerable influence with members of Congress. Although the Competitive Equality Banking Act of 1987 provided the FSLIC with resources to resolve insolvent institutions, the amount was clearly inadequate. Nevertheless, under the new FHLBB chairman, Danny Wall, the FSLIC resolved 222 S&Ls, with assets of \$116 billion, in 1988. These transactions were effected with minimal cash outlays and maximum use of notes, guarantees, and tax advantages, all of which made these transactions more expensive than they would have been had the FSLIC had adequate funds. But despite these resolutions, at year-end 1988 there were still 250 S&Ls, with \$80.8 billion in assets, that were insolvent based on regulatory accounting principles. Resolution of the S&L crisis did not really begin until February 6, 1989, when newly inaugurated President George Bush announced his proposed program, whose basic components were enacted later that year in FIRREA.⁶⁵ It is amazing that such a monumental crisis, and one given top priority by the new administration, had been virtually ignored as an issue during the 1988 presidential campaign. This invisibility has been attributed partly to Chairman Wall's successful effort to downplay the problem during 1988, partly to the continued reluctance to admit that taxpayer dollars would be required, and

⁶⁴ See Jennifer L. Eccles and John P. O'Keefe, "Understanding the Experience of Converted New England Savings Banks," *FDIC Banking Review* 8, no. 1 (1995): 1–17. The New England crisis is also discussed in Chapter 10.

⁶⁵ For a detailed summary of the law's provisions, see *Encyclopedia of Banking and Finance*, ed. Charles J. Woelfel, 10th ed. (1994), 446–52. For a review and critique of FIRREA, see also White, *The S&L Debacle*, 176–93.

partly to the fact that members of both political parties were vulnerable to criticism for their role in the crisis.⁶⁶

It must be concluded that the savings and loan crisis reflected a massive public policy failure. The final cost of resolving failed S&Ls is estimated at just over \$160 billion, including \$132 billion from federal taxpayers⁶⁷—and much of this cost could have been avoided if the government had had the political will to recognize its obligation to depositors in the early 1980s, rather than viewing the situation as an industry bailout. Believing that the marketplace would provide its own discipline, the government used rapid deregulation and forbearance instead of taking steps to protect depositors. The government guarantee of insured deposits nonetheless exposed U.S. taxpayers to the risk of loss—while the profits made possible by deregulation and forbearance would accrue to the owners and managers of the savings and loans.

The S&L crisis overlapped several regional banking crises in the 1980s and at first was similar to the crisis involving mutual savings banks (MSBs). However, in contrast to the FSLIC, the FDIC had both the money to close failing MSBs and the regulatory will to put others on a tight leash, while allowing some forbearance in the form of the Net Worth Certificate Program. To be sure, some MSBs later got into trouble with poor investments and failed, but the cost of these failures pales in comparison with the cost of the failures in the S&L industry, which was encouraged to grow and engage in risky activities with little supervision. When the Bank Board realized that its strategies had failed, it attempted to correct the problem through regulation. In contrast, federal bank regulators used supervisory tools and enforcement actions to limit growth and raise capital levels at commercial banks and mutual savings banks. But both banks and S&Ls, and their regulators, got caught up in boom-to-bust real estate cycles.

In the 1980s, a “go-go” mentality prevailed, along with the belief in many regions that the economies in those regions were recession proof. In both the Southwest and New England, the high-growth strategy pursued by many S&Ls increased the competition for deposits and therefore raised interest expense for both banks and thrifts. This situation persisted and worsened as deeply insolvent S&Ls remained open because the FSLIC lacked reserves. Banks also faced competitive pressures from the thrifts that aggressively entered commercial mortgage lending markets and aggravated the risk taking already present in commercial banking.

In response to the problems that arose in the 1980s, Congress enacted two major pieces of legislation, both of which affected the FDIC. One was FIRREA, which abolished

⁶⁶ Day, *S&L Hell*, 295–96.

⁶⁷ U.S. General Accounting Office, *Financial Audit*, 13.

the FHLBB and the FSLIC and gave the FDIC initial responsibility for managing the Resolution Trust Corporation (RTC) and permanent responsibility for operating the new Savings Association Insurance Fund (SAIF). The other, passed in response not only to the problems of the 1980s but also to the S&L-caused taxpayer losses and the FDIC's near insolvency in the early 1990s, was the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), which dramatically changed the agency's operations.

Conclusion

The regulatory lessons of the S&L disaster are many. First and foremost is the need for strong and effective supervision of insured depository institutions, particularly if they are given new or expanded powers or are experiencing rapid growth. Second, this can be accomplished only if the industry does not have too much influence over its regulators and if the regulators have the ability to hire, train, and retain qualified staff. In this regard, the bank regulatory agencies need to remain politically independent. Third, the regulators need adequate financial resources. Although the Federal Home Loan Bank System was too close to the industry it regulated during the early years of the crisis and its policies greatly contributed to the problem, the Bank Board had been given far too few resources to supervise effectively an industry that was allowed vast new powers. Fourth, the S&L crisis highlights the importance of promptly closing insolvent, insured financial institutions in order to minimize potential losses to the deposit insurance fund and to ensure a more efficient financial marketplace. Finally, resolution of failing financial institutions requires that the deposit insurance fund be strongly capitalized with real reserves, not just federal guarantees.

Chapter 5

The LDC Debt Crisis

Introduction

The spark that ignited the LDC (less-developed-country) debt crisis can be readily identified as Mexico's inability to service its outstanding debt to U.S. commercial banks and other creditors. The crisis began on August 12, 1982, when Mexico's minister of finance informed the Federal Reserve chairman, the secretary of the treasury, and the International Monetary Fund (IMF) managing director that Mexico would be unable to meet its August 16 obligation to service an \$80 billion debt (mainly dollar denominated). The situation continued to worsen, and by October 1983, 27 countries owing \$239 billion had rescheduled their debts to banks or were in the process of doing so. Others would soon follow. Sixteen of the nations were from Latin America, and the four largest—Mexico, Brazil, Venezuela, and Argentina—owed various commercial banks \$176 billion, or approximately 74 percent of the total LDC debt outstanding.¹ Of that amount, roughly \$37 billion was owed to the eight largest U.S. banks and constituted approximately 147 percent of their capital and reserves at the time.² As a consequence, several of the world's largest banks faced the prospect of major loan defaults and failure.

This chapter provides a survey of the LDC debt crisis for the years 1973–89. The discussion covers the crisis year of 1982, as well as two periods that preceded it and one that followed. The opening sections examine the first two periods, 1973–78 and 1979–82, enabling us to gain some understanding of the economic conditions and prevailing psychology that not only generated increased LDC borrowing but also produced overlending by the banks. The role bank regulators played during the years leading up to the outbreak of the crisis is also explored, as are contemporary opinions on the LDC situation. The final section of the chapter discusses the post-1982 crisis years that consumed bank regulatory officials and the international banks with damage-control activity, including restructuring existing

¹ Philip A. Wellons, *Passing the Buck: Banks, Government and Third World Debt* (1987), 225. In this chapter, the term "Latin America" refers to all Caribbean and South American nations.

² Federal Financial Institutions Examination Council (FFIEC), *Country Exposure Report* (December 1982), 2; and FDIC, *Reports of Condition and Income* (December 31, 1982).

loan portfolios, preventing the failures of large banking organizations, and containing the repercussions for the U.S. financial system.

Roots, 1973–1978

The causes and consequences of the Third World debt crisis have been analyzed by scholars for more than a decade.³ Its origin lay partly in the international expansion of U.S. banking organizations during the 1950s and 1960s in conjunction with the rapid growth in the world economy, including the LDCs. For example, for more than a decade before oil prices quadrupled in 1973–74, the growth rate in the real domestic product of the LDCs averaged about 6 percent annually. For the remainder of the 1970s, the growth rate slowed but averaged a respectable 4 to 5 percent.⁴ Such growth generated new U.S. corporate investment in these markets, and the international banks followed by establishing a global presence to support such activity. This multinationalism in providing financial services contributed to the emergence of a new international financial system, the Eurodollar market, which gave U.S. banks access to funds with which they could undertake Third World loans on a large scale.

The sharp rise in crude oil prices that began in 1973 and continued for almost a decade accelerated this expansion in lending (see figure 5.1). In addition to generating inflationary pressures around the industrial world, these price movements caused serious balance of payments problems for developing nations by raising the cost of oil and of imported goods. Developing countries needed to finance these deficits, and many began to borrow large sums from banks on the international capital markets.⁵ The oil price rise that caused the deficits also increased the quantity of funds available in the Eurodollar market through the dollar-denominated bank deposits of oil-exporting countries, thereby fueling the lending boom.⁶ The banks rechanneled the funds to the oil-importing developing countries as loan credits. In addition to having those effects, the rise of oil prices in 1973 helped to bring on the world recession of 1974–75, which would eventually produce a decline in world com-

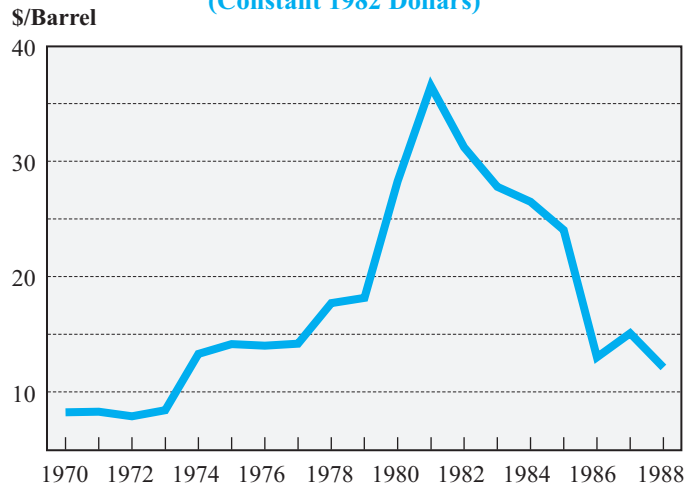
³ See especially William R. Cline, *International Debt* (1984); Raul L. Madrid, *Overexposed* (1990); and Michael P. Dooley, "A Retrospective on the Debt Crisis," working paper no. 4963, National Bureau of Economic Research, Inc., New York, 1994.

⁴ David C. Beek, "Commercial Bank Lending to the Developing Countries," Federal Reserve Bank of New York *Quarterly Review* (summer 1977): 1.

⁵ Between year-end 1973 and 1975, current-account trade deficits for the non-oil-producing LDCs increased from approximately \$8 billion to \$31 billion (Benjamin J. Cohen, *Banks and the Balance of Payments* [1981], 10).

⁶ Between 1972 and year-end 1974, the annual oil revenues of the Organization of Petroleum Exporting Countries (OPEC) increased from \$14 billion to nearly \$70 billion. In 1977, OPEC revenues were \$128 billion. By year-end 1978, OPEC had approximately \$84 billion in bank deposits, mostly in the Eurodollar market. See Cohen, *Banks and the Balance of Payments*, 7, 32.

Figure 5.1
U.S. Crude-Oil Refiner Acquisition Cost, 1970–1988
 (\$/Barrel)
 (Constant 1982 Dollars)



Source: Energy Information Administration, *Annual Energy Review* (1988).

modity prices for minerals and agricultural goods, thereby further exacerbating the developing countries' debt burden (see figure 5.2).

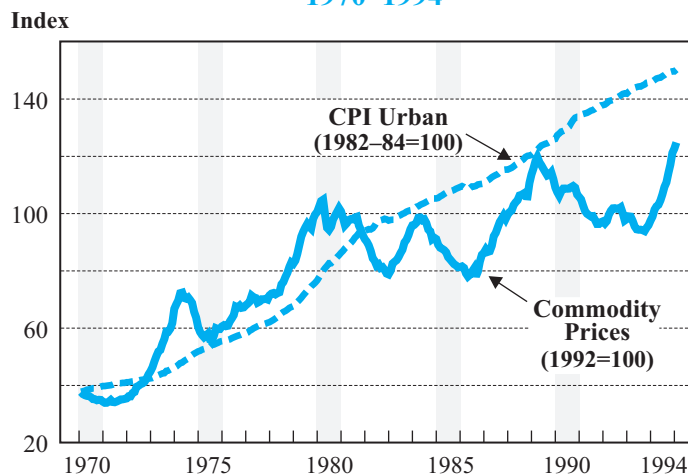
In Latin America borrowing had increased steadily in the early 1970s, and after the 1973 oil embargo it escalated significantly. As of year-end 1970, total outstanding debt from all sources amounted to only approximately \$29 billion. By year-end 1978, these outstandings had risen to approximately \$159 billion—an annual compound growth rate of almost 24 percent (see figure 5.3).⁷ It was estimated that approximately 80 percent of this debt was sovereign.⁸ The range in the annual growth rate of outstandings went from a low of 12 percent for Argentina to a high of 42 percent for Venezuela. In absolute terms, however, Mexico and Brazil accounted for approximately \$89 billion, or more than half of the total outstanding debt as of December 31, 1978.

The typical LDC loan consisted of a syndicated medium- to long-term credit priced with a floating-rate contract. The variable rate was tied to the London Interbank Offering

⁷ The burden of the debt was more moderate after adjustments were made for the inflation of the 1970s. However, the weight of this burden increased dramatically with the world recession and deflation of the early 1980s. See Cline, *International Debt*, 4.

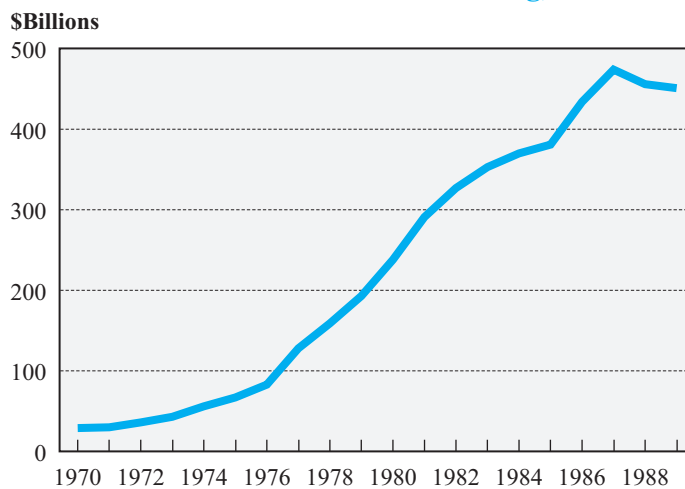
⁸ World Bank, *World Debt Tables* (1990–91 ed.), cited in Robert Grosse and Lawrence G. Goldberg, “The Boom and Bust of Latin American Lending, 1970–92” (1995), table 1. Sovereign debt refers to claims owed by national governments, by government agencies, or by private firms with public guarantees.

Figure 5.2
Monthly Commodity and Consumer Prices,
1970–1994



Source: Haver Analytics.

Figure 5.3
Total Latin American Debt Outstanding, 1970–1989



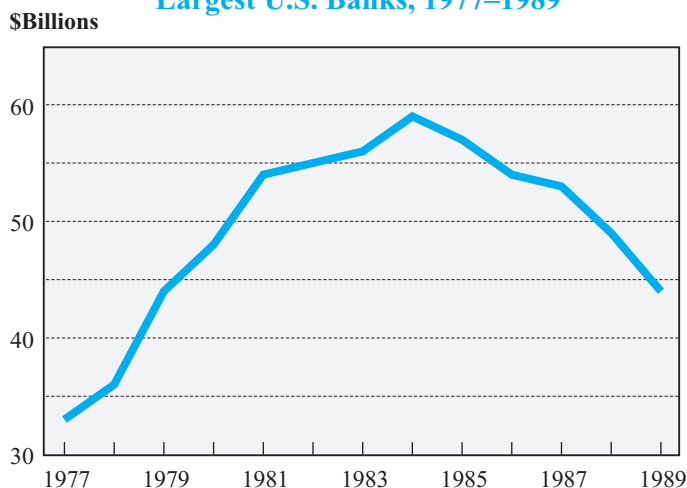
Source: World Bank, *World Bank Debt Tables* (1990–91 ed.).

Rate (LIBOR), which repriced approximately every six months. It was estimated that approximately two-thirds of outstanding developing-country debt was tied to floating LIBOR rates.⁹ Thus, these credits were especially vulnerable to repricing risk driven by changes in the macroeconomic conditions of the creditor nations.

The largest portion of Latin American claims originated from U.S. banking organizations, primarily the money-center banks, which specialized in managing large syndicated Eurodollar loans. Mid-sized regional and other non-money-center banks often participated in these credits, as well as competing for smaller, trade-related credits. LDC lending by U.S. banks overall increased rapidly in the 1970s, and it especially increased for the eight largest money-center banks. By year-end 1978, they held approximately \$36 billion in outstanding credits to Latin America (see figure 5.4). This accounted roughly for 9 percent of total assets and 208 percent of total capital and reserves for the average of the eight money-center banks (see table 5.1a).¹⁰

The primary motivation for overseas expansion of U.S. banks during the 1970s was the search for new markets and profit opportunities in response to major structural changes

Figure 5.4
Total Outstanding LDC Loans by the
Largest U.S. Banks, 1977–1989



Source: FFIEC, *Country Exposure Report* (year-end reports, 1977–89).

⁹ World Bank, *World Debt Tables* (1981–82 ed.), xvi.

¹⁰ This total excludes Continental Illinois, which received open-bank assistance in 1984.

Table 5.1a
Average Financial Ratios for Eight Money-Center Banks, 1974–1989
(Percent)

Year	Net Income/ Capital	Net Income/ Assets	LDC Loans/ Total Assets	LDC Loans/ Total Loans	LDC Loans/ Capital	LDC Loans/ Cap + Reserves
1974	13.8	0.51	N/A	N/A	N/A	N/A
1975	13.3	0.53	N/A	N/A	N/A	N/A
1976	11.5	0.49	N/A	N/A	N/A	N/A
1977	10.9	0.45	9.4	16.9	227.9	205.8
1978	12.4	0.49	9.1	16.5	232.0	207.6
1979	13.5	0.51	9.7	17.9	256.3	228.1
1980	13.8	0.53	9.7	17.3	251.7	224.3
1981	12.9	0.51	10.3	17.2	263.9	232.6
1982	12.4	0.51	10.0	16.4	247.1	217.3
1983	11.8	0.53	10.3	16.5	230.1	201.6
1984	10.6	0.51	10.4	16.3	219.5	190.2
1985	9.0	0.43	9.5	15.6	200.5	168.0
1986	8.8	0.44	9.0	15.0	179.2	145.7
1987	−22.2	−0.93	8.9	15.6	211.3	125.3
1988	21.3	1.09	8.5	14.8	167.2	107.3
1989	−9.9	−0.45	7.5	12.7	164.7	93.2

in the domestic market.¹¹ U.S. commercial banks had been losing their share of household savings to other types of intermediaries and to the capital markets for decades, and shares of traditional loan products had dwindled.¹² For example, since the early 1970s, commercial banks had been losing some of their best clients to the commercial paper market, which would grow rapidly in the 1970s and 1980s (see figure 5.5).¹³ L. William Seidman, former chairman of the FDIC, noted in retrospect that “banks’ troubles began when they lost their big corporate customers to the commercial paper market early in the 1970s.”¹⁴ This reduced share of one of the banks’ primary staples, the working capital loan, placed pressure on

¹¹ The 1970s were relatively unprofitable for the largest commercial banks in the U.S. market. The domestic earnings of the 13 largest U.S. banks actually declined in real terms during the first half of the decade (Thomas H. Hanley, *United States Multinational Banking: Current and Prospective Strategies* [1976], 13).

¹² Board of Governors of the Federal Reserve System, *Flow of Funds Accounts* (various years).

¹³ Commercial paper consists of short-term borrowings or IOUs by the largest and best-known corporate organizations.

¹⁴ L. William Seidman, *Full Faith and Credit: The Great S&L Debacle and Other Washington Sagas* (1993), 39.

Table 5.1b
Aggregate Financial Data for Eight Money-Center Banks, 1974–1989
 (\$Millions)

Year	Total Assets	Total Capital	Net Income	Total Loans	LDC Loans	Total Reserves	Provisions for Loans	Total Loan Charge-offs*
1974	\$265,916	\$ 9,803	\$1,348	N/A	N/A	N/A	\$ 547	N/A
1975	275,393	11,014	1,461	N/A	N/A	N/A	1,127	N/A
1976	304,307	12,950	1,486	\$169,615	N/A	\$ 1,431	1,136	\$1,084
1977	347,495	14,282	1,554	192,571	\$32,554	1,538	905	829
1978	392,572	15,437	1,911	217,269	35,811	1,814	866	598
1979	451,834	17,166	2,320	246,468	43,999	2,123	751	447
1980	490,753	18,918	2,614	274,920	47,614	2,310	873	667
1981	519,436	20,348	2,629	312,275	53,703	2,736	1,065	654
1982	546,729	22,115	2,764	332,799	54,655	3,036	1,583	1,254
1983	541,968	24,211	2,853	337,542	55,704	3,416	1,933	1,518
1984	560,921	26,655	2,835	359,018	58,515	4,107	2,575	1,957
1985	593,235	28,233	2,550	361,849	56,595	5,451	4,301	3,003
1986	605,566	30,343	2,659	362,495	54,387	6,988	4,779	3,426
1987	593,584	24,954	−5,529	338,617	52,720	17,107	13,065	2,875
1988	577,589	29,397	6,268	332,452	49,146	16,390	2,270	2,793
1989	584,847	26,438	−2,616	344,130	43,543	20,284	9,535	5,544

* Total loan charge-offs are net of annual recoveries.

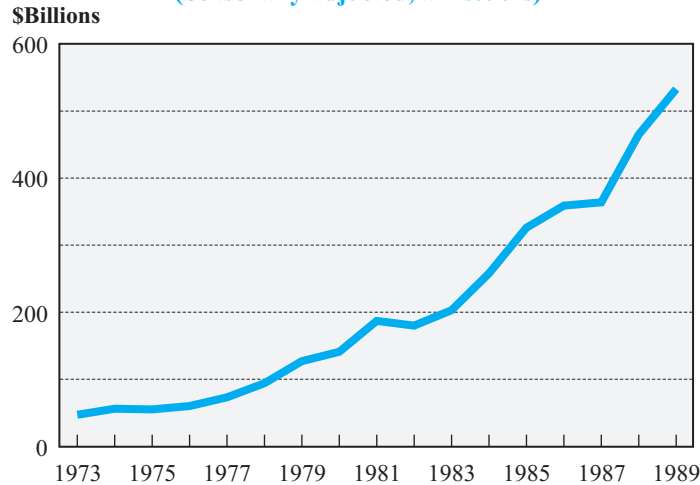
banks to seek new sources of revenue and provided an impetus for them to turn to the lucrative overseas loan markets.¹⁵

The potential risks of the growing involvement of U.S. banks in LDC debt were not unnoticed. Economists, government officials, and other observers warned of the possible dangers for both individual institutions and the banking system as a whole. In 1977 Arthur Burns, chairman of the Federal Reserve Board, criticized commercial banks for assuming excessive risks in their Third World lending, noting in a speech at the Columbia University Graduate School of Business on April 12 that

under the circumstances, many countries will be forced to borrow heavily, and lending institutions may well be tempted to extend credit more generously than is prudent. A major risk in all this is that it would render the international credit structure especially vulnerable in the event that the world economy were again to experience recession on the scale of

¹⁵ Short-term working capital loans were a relatively low-risk product for banks in comparison to the typical medium- to long-term Third World syndicated credit.

Figure 5.5
U.S. Commercial Paper Outstanding, 1973–1989
 (Seasonally adjusted, all issuers)



Source: Haver Analytics.

that from which we are now emerging . . . commercial and investment bankers need to monitor their foreign lending with great care, and bank examiners need to be alert to excessive concentrations of loans in individual countries.¹⁶

Other economists argued that international organizations should take a more active role in the recycling efforts and warned that the U.S. government would be forced to bail out any U.S. banking organizations that failed.¹⁷

Congress held hearings on the LDC issue in 1975 and expressed concern about the excessive concentration of Third World loans and its related threat to the capital position of U.S. banks. A 1977 published staff report from the Senate Subcommittee on Foreign Relations noted, “The most immediate worry is that the stability of the U.S. banking system and by extension the international financial system may be jeopardized by the massive balance of payments lending that has been done by commercial banks since the oil price hike.”¹⁸

¹⁶ Arthur F. Burns, “The Need for Order in International Finance,” Address (April 12, 1977), 4, 5, 13. Seidman recalled that when Burns brought up his misgivings about Latin American debt with the Ford administration, he was not taken seriously (*Full Faith and Credit*, 37–38).

¹⁷ Marina Whitman, “Bridging the Gap,” *Foreign Policy* 30 (spring 1978): 148–56.

¹⁸ U.S. Senate Committee on Foreign Relations, Subcommittee on Foreign Relations, *International Debt, the Banks, and U.S. Foreign Policy*, 95th Cong., 1st sess., 1977, 5.

Such pronouncements, however, were frequently greeted as exaggerated even by those who felt some caution was appropriate with regard to LDC debt, and belief in the likelihood of a crisis was not widespread.¹⁹

Prelude, 1979–1982

During the late 1970s, the signs of impending crisis began to become clearer and were more widely recognized. Some observers believed that the ability of the LDCs to continue servicing their debts (interest on short- and long-term debt plus amortization of long-term debt) was deteriorating quickly. The second major oil shock of the decade occurred in 1979, intensifying LDC debt-service problems.²⁰ At this time, the debt-service ratios of Latin American nations averaged more than 30 percent of export earnings, a level above what bankers traditionally considered acceptable. Some developing countries, such as Brazil, had debt-service ratios near 60 percent during this period. In addition, rising dollar exchange rates in response to the high U.S. interest rates of the early 1980s increased the difficulty of meeting debt commitments. The value of the dollar increased by 11 percent in 1981 and 17 percent through most of 1982 against the strongest currencies (see figure 5.6). Because the bulk of LDC debt was placed in dollars, the burden of servicing dollar debt became increasingly more difficult over time.²¹ Capital flight was also taking place because overvalued exchange rates for some of the larger LDC nations generated fears of devaluation and added to liquidity problems.²²

Nevertheless, Latin American nations continued their heavy borrowing during these years. Between the start of 1979 and the end of 1982 total Latin American debt more than doubled, increasing from \$159 billion to \$327 billion (figure 5.3). In response to this demand, U.S. banks increased their lending to the LDCs during the crucial four years leading up to the outbreak of the crisis: the outstanding loans of the eight largest money-center banks rose from approximately \$36 billion to \$55 billion, more than a 50 percent increase (figure 5.4 and table 5.1b). This overall risk exposure was reflected in the concentration of LDC loans to total capital and reserves, which was 217 percent at the end of 1982 for the average money-center bank (table 5.1a). This heavy concentration put some of the largest international banks at risk.

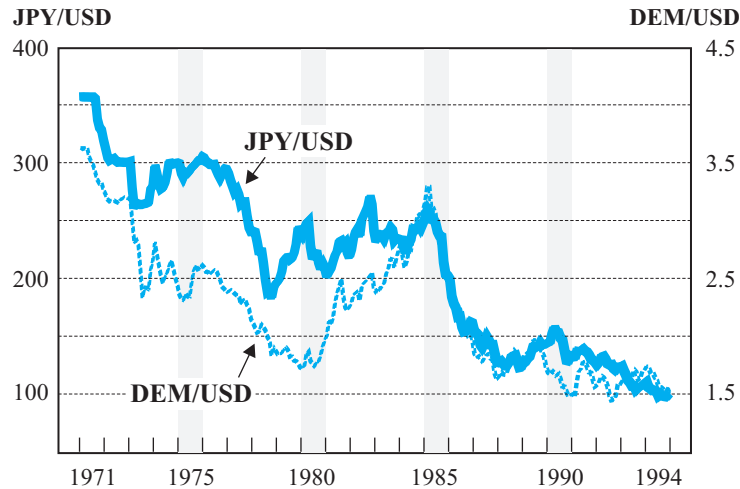
¹⁹ See, for example, Beek, “Commercial Bank Lending,” 1–8. One observer noted that “developing countries look to be good credit risks worthy of a continued flow of new loans as well as refinancing. . .” (Robert Solomon, “A Perspective on the Debt of Developing Countries,” *Brookings Papers on Economic Activity* 2 [1977], 479). As late as 1979, an editorial in a daily newspaper described the LDC debt situation as a “major nonproblem” (*American Banker* [March 28, 1979], 4).

²⁰ Between year-end 1978 and October 1980, the price of oil more than doubled, reaching \$30 per barrel, while the import bill of all non-oil-producing developing nations rose from \$26 billion to \$63 billion (Madrid, *Overexposed*, 76).

²¹ *Ibid.*, 77.

²² The World Bank estimated that between 1979 and 1982, capital flight from Argentina, Mexico, and Venezuela was almost \$70 billion, or 67 percent of gross capital inflows (*World Development Report* [1985], 64).

Figure 5.6
**German Mark and Japanese Yen
 U.S. Dollar Exchange Rates, 1971–1994**



Source: Haver Analytics.

As the LDC debt increased after 1979, so did the warnings of possible problems for U.S. banks. Paul Volcker, the chairman of the Federal Reserve Board during this period, suggested that rising oil prices would mean some rescheduling of debts owed by developing countries.²³ Henry Wallich, a Federal Reserve Board governor, criticized the rapid growth in LDC debt and indicated that the money-center banks' exposure to sovereign risk placed their capital in jeopardy. He believed that additional lending should be restrained by regulatory officials.²⁴ Others also warned about the potential implications of the accumulation of LDC debt for the U.S. and world financial systems. *The Wall Street Journal* noted in 1981:

It doesn't show on any maps, but there's a new mountain on the planet—a towering \$500 billion of debt run up by the developing countries, nearly all of it within a decade . . . to some analysts the situation looks starkly ominous, threatening a chain reaction of country defaults, bank failures and general depression matching that of the 1930s.²⁵

²³ James Grant, "Day of Reckoning? Foreign Borrowers May Have Trouble Repaying Their Debts," *Barron's* (January 7, 1980): 7.

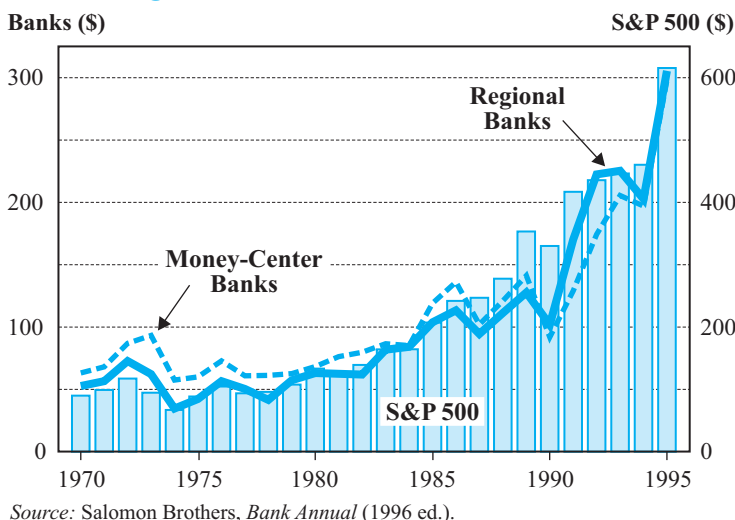
²⁴ Henry C. Wallich, "LDC Debt: To Worry or Not to Worry," *Challenge* (September/October 1981): 8–14.

²⁵ *The Wall Street Journal* (January 23, 1981), 25–28.

But although increasing numbers of observers were paying attention to the signs of approaching problems, the financial markets were generally not sending explicit signals of an impending crisis. For example, an analysis of the trend in annual stock prices for the U.S. money-center and regional banks against the S&P 500 market averages indicates no significant discounting of prices by the market in the years leading up to the crisis (see figure 5.7). For the most part, even up through 1986 the index of stock prices paralleled changes in the overall market averages. From 1987 through the early 1990s, the broader market averages appear to have outperformed bank stocks, producing a gap that partially reflected the effect on bank earnings of the heavy provisioning for LDC loan losses as well as the commercial real estate problems in the late 1980s (see Chapter 3).²⁶

Nor did corporate bond ratings of the money-center banks reveal any trend toward weakness or deterioration in the financial position of these institutions in the years leading

Figure 5.7
Share Price of Money-Center Banks and
Regional Banks vs. S&P 500, 1970–1995



²⁶ However, at least one study found that from 1966 through 1979 the stock market reacted adversely to the large syndicated loans made to Latin American countries by the money-center banks. According to this study, “syndicated loans to Latin American countries, mainly for the years 1966 to 1979, are associated with significant reductions in shareholder wealth of the participating banks. The continued issuance of these loans throughout the 1970s raises questions about the motives of bank managers or their susceptibility to political pressure or both” (William L. Megginson et al., “Syndicated Loan Announcements and the Market Value of the Banking Firm,” *Journal of Money, Credit and Banking* 27 [May 1995]: 498).

Table 5.2
Long-Term Debt Ratings of U.S. Money-Center Banks, 1977–1989

Organization	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
BankAmerica	Aaa	Aaa	Aaa	Aaa	Aaa	Aa1	Aa2	Aa3	Aa3	Baa1	Ba1	Ba3	Baa2
Bankers Trust New York	Aaa	Aa	Aa	Aa	Aa	Aa2	Aa2	Aa2	Aa2	Aa2	Aa3	A1	A1
Chase Manhattan	N/A	N/A	Aaa	Aaa	Aaa	Aa1	Aa1	Aa2	Aa2	Aa2	A2	Baa1	Baa1
Chemical New York	Aaa	Aaa	Aaa	Aaa	Aaa	Aa2	Aa2	Aa2	Aa2	Aa2	A2	Baa1	Baa1
Citicorp	Aaa	Aaa	Aaa	Aaa	Aaa	Aa1	Aa1	Aa1	Aa1	Aa1	A1	A1	A1
First Chicago	Aaa	Aaa	Aaa	Aa	Aa	Aa3	Aa3	Aa3	A1	A3	A2	A3	A2
Manufacturers Hanover	Aaa	Aaa	Aaa	Aaa	Aaa	Aa2	Aa2	Aa3	Aa3	A1	A3	Baa3	Baa3
J. P. Morgan & Co.	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aa1	Aa1

Source: Moody's Bank and Finance News Reports.

up to the crisis (see table 5.2).²⁷ Primarily because of income from overseas loans, the 1970s and early 1980s were periods of average profitability for the money-center banks. From 1974 to 1982, for example, the average money-center bank averaged a 12.7 percent return on equity and a 0.50 percent return on assets (table 5.1a), approximately equal to and slightly below the overall industry averages of 12.0 percent and 0.70 percent for the same period. Also during this period, for almost all of the large banks, interest and fee income on overseas loans accounted for a substantial portion of total income.²⁸ Thus, at that time the bond rating agencies did not appear to foresee the consequences of Third World lending.

The corporate bond ratings of the money-center banks did, however, begin to deteriorate in 1982 and continued deteriorating for the remainder of the decade, as LDC losses mounted. In 1982, Bankers Trust New York Corporation, Chemical New York Corporation, First Chicago Corporation, and Manufacturers Hanover Corporation were downgraded below Aaa or the highest levels of Aa status. By 1989, four of the eight organizations (BankAmerica Corporation, Chase Manhattan Corporation, Chemical New York Corporation, and Manufacturers Hanover Corporation) were rated only slightly above investment grade. Citicorp was rated Aa1 in 1982, and by 1987 its rating had deteriorated to A1. Only

²⁷ The only exceptions were Bankers Trust Co., which was downgraded from Aaa to Aa in 1978, and First Chicago Corporation, from Aaa to Aa in 1980.

²⁸ Between 1977 and 1981, the largest U.S. banks earned \$3.4 billion in pre-tax income from Third World loans (Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, and Federal Deposit Insurance Corporation, *Developing Country Lending Profitability Survey* [1989], 6).

J. P. Morgan & Co. Incorporated managed to retain its triple-A rating until 1988, when it was downgraded to Aa1.

In the years leading up to the outbreak of the crisis, bank regulatory authorities were aware of the heavy concentration of Third World lending in the large international banks and the threat it posed to bank capital, and they attempted to deal with it in a variety of ways. Trying to slow down the growth of LDC loans, they issued “warning letters” to the boards of lending banks, urging voluntary restraint in new lending. In addition, in 1979 the Interagency Country Exposure Review Committee (ICERC)—composed of officials of the Office of the Comptroller of the Currency (OCC), the Federal Reserve Board, and the FDIC—was established to monitor the exposure of U.S. banks to foreign lending as part of the broader bank examination process. The committee adopted a uniform examination system for evaluating and commenting on country risk to U.S. banks that had relatively large foreign lending exposure. The system became effective in the spring of 1979 and entailed identifying countries with actual or potential debt-servicing problems, drawing bank management’s attention (in examination reports) to loans to these countries, and evaluating bank internal country-exposure management systems. The overall objective was to ensure adequate diversification of bank foreign-lending risk.

However, the efforts made by the regulators appear to have had no significant effect upon the rate of bank lending during the late 1970s and the early 1980s. An analysis of the program by the U.S. General Accounting Office in 1982 suggested that the “special comments by bank examiners have had little impact in restraining the growth of specially commented exposures.”²⁹ These findings were supported by data that showed continued strong growth of LDC lending by the heavily exposed U.S. money-center banks leading up to the outbreak of the crisis in August 1982 (figure 5.4).

One key bank regulatory decision that did have a bearing on the crisis, however, came in 1979, when the OCC issued a new interpretation of a statute that set limits on the amount of loans a bank could make to a single borrower:³⁰ by law a national bank was not permitted to make loans to a single borrower in excess of 10 percent of the bank’s capital and surplus.³¹ In reality, some of the largest U.S. banks had loaned more than 10 percent of their capital to the various government agencies and government-related corporations of LDCs like Mexico and Brazil during the 1970s (and they would continue doing so into the early 1980s). Such exposure appeared to be in violation of the 10 percent rule.

²⁹ See U.S. General Accounting Office, *Bank Examination for Country Risk and International Lending*, GAO/ID-82-52 (1982).

³⁰ The OCC is the chartering and primary regulatory authority for all national banks, a category that includes all money-center banks and almost all large U.S. banking organizations.

³¹ Title 12 U.S. Code, sec. 84, established 10 percent of capital as a limit of total loans to a single borrower for all national banks. These limits held until passage of the Garn–St Germain Act of 1982, which expanded the limit to 15 percent of capital, and if certain collateral conditions were satisfied, this limit could increase to 25 percent.

In January 1978, the OCC issued a proposed interpretation of the law to address the question of whether all public sector corporations and agencies should be considered one “person” under the loans-to-one-borrower rule and should thus be combined into one group for purposes of regulatory action. In 1979, after 15 months, the OCC issued its final ruling: it concluded that public sector borrowers did not have to be counted as part of a single entity if each borrower had the “means to service its debt” and if the “purpose of the loan involved the borrower’s business.”³² The OCC delegated authority for making decisions on these issues to the lending banks. The banks in turn relied upon the statements of the public sector corporations and host governments for compliance with the “purpose” and “means” tests. If the ruling had been that the borrowers should be combined, during the LDC crisis years almost all the money-center banks would have been in violation of the 10 percent requirement.

According to at least one scholar, the OCC’s interpretation of this statute during the debt buildup in the late 1970s was an example of regulatory forbearance.³³ This individual maintains that the OCC’s ruling gave the large banks tacit approval to continue lending and sent a message from the regulatory authorities that such concentrations of LDC loans did not constitute “unsafe and unsound” banking practices. A Senate committee that examined this issue at the time questioned the effectiveness of the 10 percent rule as interpreted by the OCC, noting that “a single U.S. bank may have loans outstanding to 20 different public entities in Brazil, none of which individually exceeds 10 percent of the bank’s capital, but which taken together may far exceed the limit, and still not be in violation of the rule.”³⁴ The decision bank regulatory officials made in 1979 to reinterpret the key loans-to-one-borrower rule may have rested partly on the historical differences between domestic and international regulation of financial institutions. That is, the regulation of the international activities of the nation’s largest banks may have been influenced more by issues of competition, trade, and foreign policy than by concerns about domestic safety and soundness.³⁵ Traditionally banks had greater leeway in their international operations than they were allowed at home, so that U.S. banks had the opportunity to finance Third World deficits while at the same time assuming greater concentrations of risky overseas loans in their portfolios. Regulatory authorities apparently were not anxious to interfere with the overseas lending operations of the international banks. Furthermore, there is some evidence that political pressure was put on bank regulators not to interfere with the Third World lending.³⁶

³² *Federal Register* 44 (April 17, 1979): 22712.

³³ See Wellons, *Passing the Buck*, 100–112.

³⁴ *Ibid.*, 107.

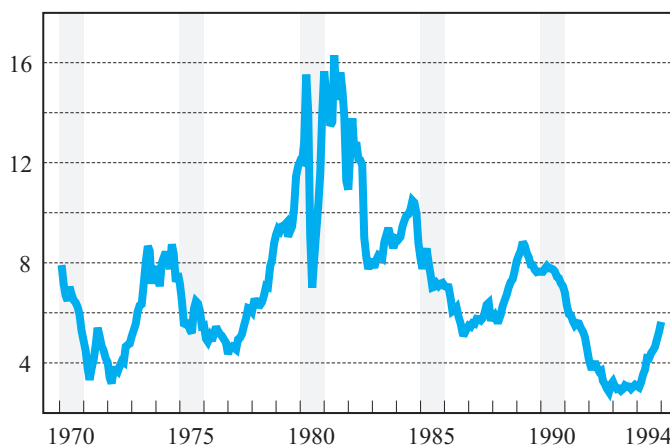
³⁵ *Ibid.*, 99–100.

³⁶ Wellons (99–100) discusses these issues in detail. Seidman discusses attempts by authorities in the executive branch to interfere with the policies of the bank regulatory agencies (*Full Faith and Credit*, 121–24).

Eruption, August 1982

The record-high interest rates of the early 1980s (see figure 5.8), caused by the Federal Reserve's efforts to curb the oil-based inflation of the 1970s, brought on a global recession and helped to trigger the overall crisis.³⁷ Because most Third World credits were priced to LIBOR rates, debt-service costs grew progressively greater as these rates reached record levels.³⁸ This situation, coupled with the slowdown in world growth and the drop in commodity prices for the second time in eight years (figure 5.2), left exports stagnant and debt-service commitments hard to meet. Many scholars point to another factor that com-

Figure 5.8
Monthly Treasury Bill Rate (3-Month), 1970–1994
Percent



Source: Haver Analytics.

³⁷ As mentioned, the crisis began with the Mexican government's notification that it was unable to meet its debt-service requirements in August 1982. What specifically triggered the Mexican situation was the combination of high interest rates, which exacerbated debt-service costs for Mexico and the other debtor nations, and the sharp decline in oil prices in 1982. Falling revenues associated with lower oil prices made it especially difficult for Mexico and other oil-exporting debtor nations to service existing debts on schedule.

³⁸ LIBOR rates were sensitive to changes in short-term U.S. interest rates because Eurocurrency deposits were primarily a dollar-denominated market. LIBOR rates averaged 10.2 percent through 1980; for 1981 and 1982 they averaged 15.8 percent (IMF, *International Financial Statistics* [1983], 92). It was estimated that for every percentage point increase in LIBOR, debt-service costs for all developing nations rose by \$2 billion. For these countries, interest payments almost tripled during 1978–80, rising from \$15.8 billion to \$41.1 billion (Madrid, *Overexposed*, 76).

pounded the debt-service problems: most of the new bank loans to the LDCs from 1979 to 1982 went to cover accrued interest on existing debt and/or to maintain levels of consumption, rather than for productive investments.³⁹

In August 1982 the Mexican finance minister indicated that his nation could no longer meet interest payments. By year-end 1982, approximately 40 nations were in arrears in their interest payments, and a year later 27 nations—including the four major Latin American countries of Mexico, Brazil, Venezuela, and Argentina—were in negotiations to restructure their existing loans. For the remainder of the decade bank lending declined significantly, as many banks refrained from new overseas lending and attempted to collect on and restructure existing loan portfolios. From the end of 1983 to 1989, money-center bank loans outstanding to Latin America decreased from \$56 billion to \$44 billion, a decline of more than 20 percent (figure 5.4 and table 5.1b).

In hindsight, many observers have asked what role, if any, outside pressure played in affecting the banks' lending decisions. There is no evidence to suggest that creditor governments or international organizations forced or pressured banks to make loans in order to recycle funds to Third World nations. Clearly, however, banks were encouraged to do so.⁴⁰ Seidman, former economic counselor to President Ford, later remarked that "the entire Ford Administration, including me, told the large banks that the process of recycling petrodollars to the less developed countries was beneficial, and perhaps a patriotic duty."⁴¹ Both the U.S. and other creditor governments believed resources would be allocated more efficiently through private financial intermediaries.⁴² Moreover, creditor governments and international organizations such as the World Bank and the IMF did not possess sufficient resources to deal with the recycling issue.⁴³

³⁹ Seidman, *Full Faith and Credit*, and others (for example, Cline, *International Debt*, and Madrid, *Overexposed*) discuss this issue at some length.

⁴⁰ As previously indicated, if any outside pressure had been exerted, it would have been directed at regulatory officials to restrain them from interfering with the international banks' LDC lending.

⁴¹ Seidman, *Full Faith and Credit*, 38. Seidman also noted that in the 1970s the Ford administration "had a chance to deal with the creation of the LDC debt problem as well as other problems in the financial system, but we just did not see the magnitude of the trouble ahead. We saw only the short-term benefits of the loans to our industry and finance. But then, long-range planning has never been an outstanding attribute of our governmental process."

⁴² Margaret Garritsen DeVries, *The International Monetary Fund, 1972–1978: Cooperation on Trial* (1985), 923–42.

⁴³ According to one researcher, profit was the primary motive behind commercial bank lending, and direct political pressure played no important role. The same researcher also posited that the banks thought creditor governments or international organizations might rescue the debtor nations in the event of default so that the threat to the banks' capital would have been limited (Madrid, *Overexposed*, 44–60). To what extent this belief led to the psychology of overlending that helped produce the crisis is not known.

Resolution, 1983–1989

The seven-year period after the most serious international financial crisis since the 1930s was devoted to restructuring existing loans, setting aside loss reserves, and attempting to protect the solvency of the U.S. financial system. A decade or more would pass after the crisis before the economies of the LDCs would recover and the banks would clear their books of the bad loans. Bank advisory committees were established to represent the banks in bilateral negotiations with the individual debtor countries for debt reschedulings. These talks lasted until the end of the 1980s and were supported by creditor governments and international financial institutions.

Unlike some European regulatory authorities, immediately after the Mexican crisis U.S. banking officials did not require that large reserves be set aside on the restructured LDC loans or on the succeeding arrearages by other LDC nations.⁴⁴ Such a policy was not feasible at the time and might have caused a financial panic because the total LDC portfolio held by the average money-center bank was more than double its aggregate capital and reserves at the end of 1982 (table 5.1a). Thus, regulatory forbearance was also granted to the large banks with respect to the establishment of reserves against past-due LDC loans. According to Seidman, this forbearance was necessary because seven or eight of the ten largest banks in the U.S. might have been deemed insolvent, a finding that would have precipitated an economic and political crisis.⁴⁵ He noted that “U.S. bank regulators, given the choice between creating panic in the banking system or going easy on requiring our banks to set aside reserves for Latin American debt, had chosen the latter course. It would appear that the regulators made the right choice.”⁴⁶

⁴⁴ In fairness to the U.S. banks, it should be noted that the European banks were able to establish “hidden reserves” by agreement between regulatory officials and the banks that to some extent were shielded from public scrutiny. In addition, the European banks had less exposure to Third World lending than did the U.S. banks, which made establishing reserves less difficult (Seidman, *Full Faith and Credit*, 127–28).

⁴⁵ The regulatory authorities did begin to raise capital standards in the banking industry starting with the OCC’s decision to raise minimum capital requirements in 1979 for national banks. Furthermore, the International Lending Supervision Act of 1983 (ILSA) required that all bank regulators achieve and maintain adequate capital standards in the industry by establishing minimum capital levels regardless of whether an institution was heavily involved in international lending. As a consequence of ILSA, all financial agencies established rules that for the first time set uniform capital requirements for all commercial banks, effective April 1985.

⁴⁶ Seidman, *Full Faith and Credit*, 127. Another analysis concluded: “Had these institutions been required to mark their sometimes substantial holdings of underwater debt to market or to increase loan-loss reserves to levels close to the expected losses on this debt (as measured by secondary market prices), then institutions such as Manufacturers Hanover, Bank of America, and perhaps Citicorp would have been insolvent.” See Robert A. Eisenbeis and Paul M. Horvitz, “The Role of Forbearance and Its Costs in Handling Troubled and Failed Depository Institutions,” in *Reforming Financial Institutions in the United States*, ed. George G. Kaufman (1993), 49–68.

In retrospect, this strategy proved to be successful by avoiding a major domestic or international financial crisis. During this period no large U.S. banks failed because of delinquent or nonperforming LDC loans.⁴⁷ The large banks were able to maintain funding and liquidity while being given time to raise capital and increase reserves. The overall debt strategy also forced structural adjustments in the LDCs, such as trade liberalization, privatization, deregulation, and tax reform, that eventually brought both growth and investment to several LDC nations. Seidman contrasted the regulatory forbearance of the debt crisis with that of the savings and loan crisis in the United States during the 1980s:

Sometimes forbearance . . . is the right way to go, and sometimes it is not. In the S&L industry, all rules and standards were conveniently overlooked to avoid a financial collapse and the intense local political pressure that such a collapse would have generated. But in this case there was not a visible plan for a recovery, so the result of this winking at standards was, as we know, a national financial disaster. On the other hand, in the case of Latin American loans, forbearance gave the lending banks time to make new arrangements with their debtors and meanwhile acquire enough capital so that losses on Latin American loans would not be fatal. Like medicine and the other healing arts, bank regulation is an art, not a science.⁴⁸

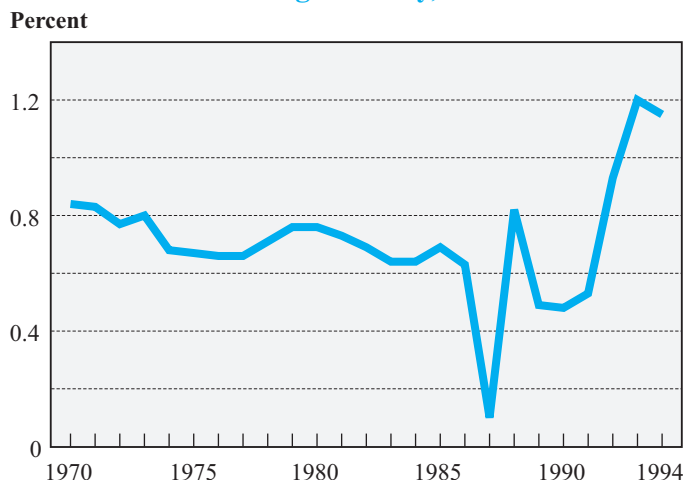
The average profitability of money-center banks in the earlier periods contrasts sharply with that in the post-1982 years. For the average money-center bank during the 1983–89 period, net income to total capital and net income to total assets averaged only 4.2 percent and 0.23 percent—returns significantly below the industry averages of 9.0 percent and 0.55 percent. Moreover, for the years 1987 and 1989, the average money-center bank experienced negative returns (table 5.1), bringing down total earnings for the U.S. banking industry during the two years (see figure 5.9).

This slowdown in earnings was reflected in the substantial buildup in loan charge-offs, loan-loss provisions, and the accumulation of total reserves recorded over the 1983–89 period (tables 5.1a and 5.1b). Although between 1982 and 1986 the loan-loss reserves for the average international bank more than doubled, as of year-end 1986 they were still only approximately 13 percent of the total LDC loan exposure. Starting in 1987, however, the money-center banks began to recognize massive losses on LDC loans that in some instances had been carried on the books at par for more than a decade. After extensive bilateral negotiations with the LDCs beginning in 1983, the banks realized that a large portion of the loans would not be repaid. In May 1987 Citicorp was the first major bank to break ranks and recognize a loss, establishing loss provisions for \$3.3 billion, or more than 30 percent of its total LDC exposure. Shortly thereafter all of the other major banks followed

⁴⁷ Continental Illinois National Bank failed in 1984 primarily because of losses on energy and energy-related loans.

⁴⁸ Seidman, *Full Faith and Credit*, 128.

Figure 5.9
Return on Assets,
U.S. Banking Industry, 1970–1994



suit. By year-end 1989, the average money-center bank had total reserves that were almost 50 percent of their total outstanding LDC loans.

The creation of a plan in 1989 by Nicholas Brady, secretary of the treasury in the Bush administration, was a recognition by the U.S. government that troubled debtors could not fully service their debts and restore growth at the same time; the plan therefore sought permanent reductions in principal and existing debt-servicing obligations. This recognition paved the way for negotiations between the creditor banks and debtor nations to shift primary focus from debt reschedulings to debt relief. As part of the process, substantial funds were raised from the IMF, the World Bank, and other sources to facilitate debt reduction. Debtor nations used such funds to exercise options such as debt-equity swaps, buybacks, exit bonds, and other solutions. To qualify for borrowing privileges, debtor countries had to agree to introduce economic reforms within their domestic economies in order to promote growth and enhance debt-servicing capacity. It is estimated that under the Brady Plan agreements between 1989 and 1994, the forgiveness of existing debts by private lenders amounted to approximately 32 percent of the \$191 billion in outstanding loans, or approximately \$61 billion for the 18 nations that negotiated Brady Plan reductions. These losses accrued primarily to the shareholders of lending banks.⁴⁹

⁴⁹ See William R. Cline, *International Debt Reexamined* (1995), 234–35. The losses mentioned here accounted for the majority of all losses derived from the LDC crisis. Some additional losses accrued to individual creditor nations that forgave direct loans to various LDC countries.

The Brady Plan set the stage, therefore, for finally solving the LDC debt problem. But negotiations were tedious, and they dragged on for years under the direction of the United States, other creditor nations, and the international lending organizations. In the end, the Brady Plan was the only basis on which a comprehensive solution to the Third World debt problem could be achieved. As one money-center banker stated, “It’s an imperfect, inefficient, frustrating system but in the end, it’s the best that we’ve been able to devise.”⁵⁰

Conclusion

From the middle to late 1970s, a number of economists, government officials, and journalists expressed concerns that the volume of lending to less-developed countries could entail serious problems for U.S. money-center banks and the international financial system. At the same time, however, the market—as reflected in both money-center bank equity prices and corporate bond ratings—apparently did not perceive a problem until the crisis actually broke out. Regulators’ attempts to urge banks to curtail LDC lending appeared to have had no significant effect on lending practices, even as evidence suggested that Latin American nations were having increasing difficulty meeting current debt obligations. The regulatory system therefore broke down and was unable to forestall the crisis. In the final stages, the realization that banks would not recover the full principal value of existing loans turned international efforts from debt rescheduling to debt relief, and substantial funds were raised through the IMF and the World Bank to facilitate debt reduction. The shareholders of the world’s largest banks assumed the losses under the Brady Plan, which ended the crisis after a decade of negotiations.

The LDC experience, as reflected in the regulators’ handling of large banks after the crisis erupted, illustrates the high priority given by banking authorities to maintaining stability in the banking system. It also represents a case of regulatory forbearance with respect to certain supervisory rules and standards. The 1979 interpretation of the loans-to-one-borrower rule allowed banks to continue lending, and the delay in recognizing loan losses avoided the repercussions that could have threatened the banks’ solvency. Over time forbearance proved to be successful, however, because loss reserves and charge-offs were greatly increased and no money-center bank failed because of LDC lending.

⁵⁰ Interview published in *Latin Finance* (March 1989): 39, as cited in Madrid, *Overexposed*, 110.

Chapter 6

The Mutual Savings Bank Crisis

Introduction

The first major crisis the FDIC had to confront in the 1980s was the threatened insolvency of a large number of mutual savings banks (MSBs). Historically, state laws had restricted these thrift institutions to investing in long-term, fixed-rate assets; and traditionally, the majority of MSB liabilities were in passbook savings accounts paying a low rate of interest. Until the 1970s, this manner of operating had enabled mutual savings banks to prosper throughout most of their history. However, in the 1970s the combined forces of rising interest rates, increased competition for deposits, and legal restrictions on diversifying the asset side of the balance sheet quickly overwhelmed many thrift institutions. During the first three years of the 1980s the mutual savings bank industry sustained operating losses of nearly \$3.3 billion, an amount equivalent to more than 28 percent of the industry's general reserves at year-end 1980. Losses at some individual MSBs were even higher, and these institutions experienced a rapid depletion of capital. This chapter describes the relatively unique development and history of mutual savings banks in the United States and the causes of the crisis that peaked in the early 1980s; it also discusses the regulatory and congressional responses to the problem.

Background

Mutual savings banks in the United States date to 1816, when the Philadelphia Saving Fund Society began operations on a voluntary basis and the Provident Institution for Savings in Boston was granted the first savings bank charter.¹ Originally MSBs were organized to help the working and lower classes by providing a safe place where the small saver, then shunned by commercial banks, could deposit money and earn interest. Unlike savings and loan associations (S&Ls), whose purpose was to facilitate the home ownership of members

¹ For a more complete discussion of MSB history, see Franklin Ornstein, *Savings Banking: An Industry in Change* (1985), 16–26; Alan Teck, *Mutual Savings Banks and Savings and Loan Associations: Aspects of Growth* (1968), 4–55; and Weldon Welfling, *Mutual Savings Banks: The Evolution of a Financial Intermediary* (1968), 8–69.

by pooling their savings and allocating housing loans, the early mutual savings banks were largely the result of a philanthropic impulse: wealthy, public-spirited individuals contributed start-up capital and served as trustees of the bank, overseeing operations without the benefit of remuneration.² Initially the investment of MSB funds was restricted to federal and state government bonds. Although depositors in a mutual savings bank technically own the institution's assets and share in its profits, they are neither stockholders nor members, and have no voting rights or influence over how their money is invested.

Soon after the early success of the Philadelphia and Boston banks, MSBs were chartered in a number of states, primarily in the Mid-Atlantic region and the industrial Northeast, where there were large numbers of wage earners seeking a safe haven for their savings. In contrast, demographic and economic conditions in the South and the expanding West favored the development of commercial banks and stock savings associations. Although eventually MSBs were chartered in 19 states, historically more than 95 percent of total deposits in mutual savings banks were accounted for by only 9 states—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Washington.³

The earliest MSB charters contained no restrictions on investment powers. In practice, however, the trustee system of savings bank operations fostered conservative management, and this was reflected in most state laws governing mutual savings banks.⁴ These statutes specified the types of investments permitted; set ceilings on the percentage of assets or deposits permitted in each type; and laid out detailed criteria for evaluating eligibility. Originally confined to investing in government securities, MSBs were soon permitted to invest in high-grade municipal, railroad, utility, and industrial bonds; blue-chip common and preferred stocks; first mortgage loans on real estate; and other collateralized lending. The expanded investment powers went hand in hand with the rapid growth in both the number of mutual savings banks and their deposits. Between 1820 and 1910, the number of MSBs in the United States grew from 10 to 637, while total deposits grew from \$1 million to more than \$3 billion.⁵

² As savings banks expanded, management was delegated to professionals appointed by the trustees.

³ The other ten states in which MSBs were chartered were Alaska, Delaware, Florida, Indiana, Maryland, Minnesota, Ohio, Oregon, Vermont, and Wisconsin. MSBs were also chartered in Puerto Rico and the U.S. Virgin Islands (National Association of Mutual Savings Banks, *1980 National Fact Book of Mutual Savings Banking* [1980], 17).

⁴ Ornstein, *Savings Banking*, 21. Notable exceptions were Delaware and Maryland, which left the investment of funds to management's discretion. Ornstein notes, however, that savings banks in these states were "subject to exhaustive examinations by the respective banking departments" (18). Traditionally, investment powers were relatively broad in the New England states and very restricted in New York and Pennsylvania.

⁵ John Lintner, *Mutual Savings Banks in the Savings and Mortgage Markets* (1948), 49; and FDIC, *Annual Report* (1934), 112–13.

The considerable success of mutual savings banks during the first century of their history has been attributed to lack of competition for small deposits and to the rapid industrial and economic growth of the areas they served. In addition, mutual savings banks traditionally enjoyed a reputation of providing a high level of safety for depositors.⁶ (An FDIC study conducted in 1934 suggested that this reputation might have been exaggerated; nevertheless, during the 1930s MSBs were far less prone to bank runs than either commercial banks or savings and loan associations.⁷ Indeed, nearly every year during the 1930s MSBs experienced a net savings inflow.)⁸ Although interest in chartering new MSBs diminished after 1910, existing institutions continued to prosper during and long after the Depression. In 1975 the average MSB had more than \$250 million in assets, compared with approximately \$66 million for commercial banks and \$69 million for savings and loan associations (see table 6.1).

The increased demand for housing after World War II meant that a greater proportion of MSB assets were invested in mortgage loans, with the remainder invested primarily in permissible securities. Mortgage loans as a proportion of total assets peaked at more than 75 percent during the mid-1960s, but in the late 1970s mortgage investments (including mortgage-backed securities) still accounted for approximately two-thirds of mutual savings bank assets (see table 6.2). In comparison, in 1975 savings and loan associations, whose primary purpose was to provide funds for housing, held more than 82 percent of their assets in mortgage loans, while commercial banks held only 14 percent.⁹

Until the mid-1960s, savings banks, like other financial institutions, operated in a relatively stable economic environment. By investing in fixed-rate mortgages and high-quality, long-term bonds, MSBs were able to provide an acceptable return on deposits (which were primarily passbook accounts) and build a comfortable capital base. Average reserve ratios at year-end 1975 ranged from 6 percent of assets in New Jersey and Pennsylvania to

⁶ For example, see Ornstein, *Savings Banking*, 154; and Teck, *Mutual Savings Banks*, 118.

⁷ FDIC, *Annual Report* (1934), 111–13. For a more detailed discussion, see Arthur Castro et al., *Public Policy toward Mutual Savings Banks in New York State: Proposals for Change* (1974), 86–91.

⁸ Ornstein, *Savings Banking*, 54; and Wellfing, *Mutual Savings Banks*, 84. As a result of both the paucity of bank runs and the savings inflows, mutual savings banks were generally reluctant to join the FDIC in its infancy and, when the permanent deposit insurance fund began operations in August 1935, only 56 MSBs—less than 12 percent of the total number—were members. Several states organized their own deposit insurance funds, but over the years these were largely abandoned as state laws came to require federal deposit insurance. By 1975, approximately 70 percent of the mutual savings bank industry was FDIC-insured; the remaining 30 percent consisted of Massachusetts savings banks insured by the Mutual Savings Central Fund, Inc. In 1985, as a result of the private insurance crises in Ohio and Maryland, all the Massachusetts savings banks insured by the Mutual Savings Central Fund applied for federal deposit insurance. By late 1986, all those applications had been granted (see Ada Focer, “Savings Banks Get FDIC Protection,” *American Banker* [October 27, 1986], 1).

⁹ U.S. League of Savings Associations, *S&L Fact Book 1976*, 81.

Table 6.1
Number, Total Assets, and Average Assets of Selected Types of
Financial Institutions, Selected Years, 1900–1975
(\$Millions)

Year	Mutual Savings Banks			Commercial Banks			Savings and Loan Associations		
	Number	Total Assets	Average Assets	Number	Total Assets	Average Assets	Number	Total Assets	Average Assets
1900	626	\$ 2,328	\$ 3.7	12,427	\$ 9,059	\$ 0.7	5,356	\$ 571	\$ 0.1
1910	637	3,598	5.6	24,514	19,324	0.8	5,869	932	0.2
1920	618	5,586	9.0	30,291	47,509	1.6	8,633	2,520	0.3
1930	592	10,496	17.7	23,679	64,125	2.7	11,777	8,829	0.7
1940	540	11,919	22.1	14,534	67,804	4.7	7,521	5,733	0.8
1945	532	17,013	32.0	14,011	160,312	11.4	6,149	8,747	1.4
1950	529	22,446	42.4	14,121	168,932	12.0	5,992	16,846	2.8
1955	528	31,346	59.4	13,716	210,734	15.4	6,071	37,533	6.2
1960	515	40,571	78.8	13,472	257,552	19.1	6,276	71,314	11.4
1965	506	58,232	115.1	13,804	377,264	27.3	6,185	129,459	20.9
1970	494	78,995	159.9	13,686	576,242	42.1	5,669	176,076	31.1
1975	476	121,056	254.3	14,633	964,900	65.9	4,931	338,233	68.6

8.9 percent in New Hampshire, while the ratio for all mutual savings banks nationwide was 7 percent (see table 6.3).¹⁰

Economic and Legislative Developments in the 1970s

Inflationary pressures in the middle to late 1960s caused interest rates generally to rise throughout the 1970s until, in 1979, they reached unprecedented highs. But already in 1966, 1969–70, and 1973–74, thrift institutions had experienced financial disintermediation and earnings pressures.¹¹ In 1966 the regulatory agencies tried to help thrift institutions by extending deposit interest-rate ceilings to them, to reduce their cost of liabilities and protect them from deposit rate wars; nevertheless, the ceilings on deposits (although somewhat

¹⁰ Table 6.3 also illustrates the effect of different state laws governing permissible investments, particularly the “other loans” category, which reflects not only differences in consumer lending powers but also the leeway provisions incorporated in many state savings bank statutes. It should be noted that states whose MSBs had the lowest levels of total loans, such as New York, New Jersey, and Pennsylvania, also had the highest concentrations of corporate (and other) bonds—and (as discussed below) produced several of the earliest failures.

¹¹ Disintermediation is the withdrawal of funds from interest-bearing accounts at banks or thrifts when rates on competing investments, such as Treasury bills or money market mutual funds, offer the investor a higher return.

Table 6.2
Composition of Assets of Mutual Savings Banks,
Selected Years, 1900–1980
(\$Millions)

Year	Mortgage Investments		Securities			Other Loans	Cash and Other Assets	Total Assets
	Mortgage	GNMA Mortgage-Backed	U.S. Gov't	State and Local	Corporate and Other			
1900	\$ 858	\$ 0	\$ 105	\$ 567	\$ 462	\$ 169	\$ 167	\$ 2,328
1910	1,500	0	13	765	906	194	220	3,598
1920	2,291	0	783	650	1,213	336	313	5,586
1930	5,635	0	499	920	2,278	312	520	10,164
1940	4,836	0	3,193	612	1,429	82	1,764	11,916
1945	4,202	0	10,650	84	1,116	62	849	16,962
1950	8,039	0	19,877	96	2,260	127	1,047	22,446
1955	17,279	0	8,463	646	3,364	211	1,382	31,346
1960	26,702	0	6,243	672	5,076	416	1,463	40,571
1965	44,433	0	5,485	320	5,170	862	1,962	58,232
1970	57,775	85	3,151	197	12,791	2,255	2,741	78,995
1975	77,221	3,367	4,740	1,545	24,626	4,023	5,535	121,056
1980	99,865	13,849	8,949	2,390	25,433	11,733	9,344	171,564
(Percentage Distribution)								
1900	36.9	0.0	4.5	24.4	19.8	7.3	7.2	100
1910	41.7	0.0	0.4	21.3	25.2	5.4	6.1	100
1920	41.0	0.0	14.0	11.6	21.7	6.0	5.6	100
1930	55.4	0.0	4.9	9.1	22.4	3.1	5.2	100
1940	40.6	0.0	26.8	5.1	12.0	0.7	14.8	100
1945	24.8	0.0	62.8	0.5	6.9	0.4	4.7	100
1950	35.8	0.0	48.5	0.4	10.1	0.6	4.6	100
1955	55.1	0.0	27.0	2.1	10.7	0.7	4.4	100
1960	65.8	0.0	15.4	1.7	12.5	1.0	3.7	100
1965	76.3	0.0	9.4	0.6	8.9	1.5	3.3	100
1970	73.1	0.1	4.0	0.2	16.2	2.9	3.5	100
1975	63.8	2.8	3.9	1.3	20.3	3.3	4.6	100
1980	58.2	8.1	5.2	1.4	14.8	6.8	5.5	100

Source: Ornstein, *Savings Banking*, 260.

Table 6.3
Percentage Distribution of Assets and Liabilities of Mutual Savings Banks,
by State, Year-end 1975

Item	Total	NY	MA	CT	PA	NJ	WA	NH	ME	RI	MD	All Other States
ASSETS												
Cash and due from banks	1.9	2.0	1.2	2.0	1.7	2.6	3.2	2.2	2.0	1.3	2.1	3.1
U. S. government obligations	3.9	3.6	4.9	3.2	3.0	5.0	2.8	4.8	5.8	3.7	8.9	5.5
Federal agency obligations	2.3	1.6	4.1	1.8	2.7	3.6	2.8	3.3	2.9	4.9	2.1	2.1
State and local obligations	1.3	1.6	0.7	1.0	1.6	0.9	0.4	0.5	0.9	0.1	0.5	1.2
Mortgage-backed securities	2.8	3.2	1.3	0.8	4.0	6.4	3.0	1.1	1.2	2.4	1.7	0.9
Corporate and other bonds	14.5	15.4	12.3	7.4	27.6	15.3	8.6	5.2	8.5	4.9	7.9	13.6
Corporate stock	3.6	3.1	4.7	6.5	2.4	1.8	2.5	6.0	5.5	4.3	1.7	3.0
Total loans	67.1	66.8	68.8	74.2	54.8	62.2	72.7	74.6	70.9	74.6	71.4	67.9
Mortgage loans	63.8	64.3	64.3	68.4	52.8	59.8	68.2	67.0	65.2	68.8	60.0	64.8
Other loans	3.3	2.5	4.5	5.8	2.0	2.4	4.5	7.6	5.7	5.8	11.4	3.1
Bank premises owned	0.9	0.8	0.9	1.0	0.6	1.1	1.3	1.3	1.4	1.7	0.7	1.2
Other real estate	0.4	0.3	0.3	0.8	0.1	0.1	1.4	0.3	0.1	0.2	*	0.3
Other assets	1.4	1.6	0.9	1.3	1.6	1.1	1.1	0.8	0.7	2.1	3.1	1.2
TOTAL ASSETS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LIABILITIES												
Total deposits	90.8	90.0	90.3	89.7	92.1	91.7	91.9	89.0	90.8	89.1	88.8	90.5
Ordinary savings	57.5	58.2	57.1	58.2	55.7	55.2	56.4	59.0	65.0	47.9	70.7	48.3
Time deposits	32.7	32.3	33.1	31.3	35.8	34.1	35.2	29.7	25.5	41.1	15.0	41.1
Other deposits	0.5	0.4	0.1	0.2	0.6	2.3	0.3	0.2	0.3	0.2	2.6	1.1
Borrowings	0.5	0.4	0.1	0.8	0.2	0.7	1.1	0.4	0.2	1.2	-	1.8
Other liabilities	1.8	2.0	1.7	1.6	1.7	1.6	0.9	1.7	1.0	2.1	3.3	1.3
TOTAL LIABILITIES	93.0	93.3	92.1	92.0	94.0	94.0	93.9	91.1	92.0	92.4	92.1	93.6
Capital notes and debentures	0.2	0.1	*	0.4	0.6	0.3	0.2	0.2	*	-	-	0.4
Other general reserves	6.8	6.6	7.9	7.6	5.5	5.7	5.9	8.7	8.0	7.6	7.9	6.0
TOTAL GENERAL RESERVE ACCOUNTS	7.0	6.7	7.9	8.0	6.0	6.0	6.1	8.9	8.0	7.6	7.9	6.4
TOTAL LIABILITIES AND GENERAL RESERVE ACCOUNTS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Association of Mutual Savings Banks, *1976 National Fact Book of Mutual Savings Banking*.

*Less than .05 percent.

higher for thrifts than for commercial banks) caused outflows from financial institutions into higher-yielding investments such as capital market instruments, government securities, and—later—money market mutual funds.¹²

From a public policy perspective, disintermediation had several undesirable consequences. Most important, it both restricted the availability of credit to consumers and increased its cost, particularly for home mortgages; the same consequences affected small and medium-sized businesses that did not have access to the commercial paper market. In addition, because normal cash outlays increased to meet deposit withdrawals while cash inflows decreased as new funds were diverted to alternative investments, disintermediation slowed the growth of financial institutions and caused them liquidity concerns. To have the cash available to meet withdrawal demands, banks and thrifts were often forced either to borrow money at above-market interest rates or to sell assets, often at a loss from book value. The former had a negative effect on earnings, the latter on book value capital.

As early as 1971 these problems were widely recognized at the federal level. In that year the President's Commission on Financial Structure and Regulation, better known as the Hunt Commission, issued its report recommending additional powers for commercial banks and thrifts; it also recommended a variety of other reforms on the liability side of the balance sheet, including a lifting of interest-rate ceilings. These recommendations subsequently received widespread support and, in both 1973 and 1975, were introduced as proposed legislation. The Senate passed the 1975 bill, but the House Committee on Banking, Currency and Housing instead commissioned its own study, *Financial Institutions in the Nation's Economy (FINE)*, which resulted in a set of discussion principles and the drafting of the Financial Reform Act of 1976—but again no legislation was passed.

The failure to enact financial reform during the 1970s can be attributed to conflicting public policy concerns, a lack of consensus among financial institutions, and the successful efforts of special-interest groups to block legislation they perceived as harmful.¹³ One example of conflict was the attitudes of different groups toward interest-rate deregulation and expanded powers for thrifts: housing groups and many members of Congress feared that both would adversely affect the cost and availability of mortgage credit; thrifts, too, feared

¹² Commercial banks had been subjected to interest-rate ceilings on deposits since the Banking Act of 1933. The extension of Regulation Q to thrift institutions was accompanied by a differential allowing a higher ceiling for thrifts than for commercial banks, in order to encourage depositors to keep their savings at thrifts (which were not allowed to offer checking accounts). The differential, originally 75 to 100 basis points, was reduced to 50 basis points in 1970 and to 25 basis points in 1973.

¹³ See Donald D. Hester, "Special Interests: The FINE Situation," and James L. Pierce, "The FINE Study," both in *Journal of Money, Credit and Banking* 9 (November 1977): 652–61 and 605–18; and Kenneth A. McLean, "Legislative Background of the Depository Institutions Deregulation and Monetary Control Act of 1980," in Federal Home Loan Bank of San Francisco, *Savings and Loan Asset Management under Deregulation: Proceedings of the Sixth Annual Conference in San Francisco, California, December 8–9, 1980*, 17–30.

the loss of the differential, and they were reluctant to compete directly with banks; and commercial banks supported expanded powers for thrifts only if the differential on deposit rate ceilings was immediately removed.¹⁴ In addition, the regulatory agencies were concerned over the FINE Study's proposal to consolidate regulatory authority. Without a unified constituency, Congress was unable to find a formula for financial reform and abandoned such efforts at the end of 1977.¹⁵

In the following year Congress turned its attention to other matters of regulatory concern: insider transactions and several highly publicized bank failures in the mid-1970s led to passage of the Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRIRCA). In addition to placing restrictions on insider lending, this legislation significantly strengthened regulatory enforcement powers by authorizing the agencies to issue cease-and-desist orders against individual bank officials, impose civil money penalties, remove directors of financial institutions, and disapprove changes in control. FIRIRCA also extended for two years the banking and thrift regulatory agencies' ability under Regulation Q to set interest-rate ceilings on deposits and, by allowing existing mutual savings banks to convert from state to federal charters, extended the dual banking system to all types of depository institutions.¹⁶

In response to the problems caused by disintermediation, regulatory efforts during the late 1970s and early 1980s were aimed at providing the means for commercial banks and thrift institutions to compete more effectively with money market mutual funds. Thus, regulators authorized a greater variety of time deposit instruments with ceilings that varied with market rates. The most important of these instruments was the six-month money market certificate of deposit (MMCD), which was introduced on June 1, 1978. These certificates required a minimum deposit of \$10,000, and thrift institutions were permitted to pay a maximum rate of interest equivalent to the Treasury auction discount rate on six-month Treasury bills plus 25 basis points. The introduction of the six-month MMCD was a dramatic change for the savings bank industry. In his remarks to the Savings Banks Association of Massachusetts in October 1978, Saul Klamman, then-president of the National Association of Mutual Savings Banks, noted that June 1, 1978, "will be recorded as the day when the philosophy of fixed deposit interest rate ceilings was shattered" and the industry was "permitted to slug it out toe to toe with high-flying money market instruments."¹⁷ Although this new instrument helped slow deposit outflows at mutual savings banks, it also served to raise the institutions' average cost of funds, since a large proportion of these certificates represented

¹⁴ Andrew S. Carron, *The Plight of the Thrift Institutions* (1982), 8.

¹⁵ McLean, "Legislative Background," 18.

¹⁶ For a detailed summary of FIRIRCA's provisions, see *Encyclopedia of Banking and Finance*, ed. Charles J. Woelfel, 10th ed. (1994), 452–55.

¹⁷ Saul B. Klamman, "The Changing World of the Savings Bank Industry," *American Banker* (October 23, 1978), 41.

transfers from low-cost passbook accounts. Less than two years after the certificates were introduced, more than 30 percent of MSB deposits were in money market certificates.¹⁸ By curbing deposit outflows, bank regulators had been able to forestall thrift failures due to liquidity pressures, a problem that was particularly acute at mutual savings banks because most were not members of the Federal Home Loan Bank (FHLB) System and therefore did not have access to that source of liquidity.¹⁹

In March 1980, as interest rates rose to record levels, Congress returned to efforts at bank reform and enacted the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA). Among the legislation's major provisions were the six-year phase-out of Regulation Q interest ceilings, nationwide authority for all institutions to offer negotiable order of withdrawal (NOW) accounts,²⁰ and an increase in the federal deposit insurance limit from \$40,000 to \$100,000. DIDMCA also preempted state usury laws for mortgage loans and provided expanded lending powers for federally chartered S&Ls. Finally, the act authorized federal savings banks to invest up to 5 percent of their assets in commercial loans and to accept demand deposits from businesses to which credit had been extended.

Although DIDMCA enacted many of the financial reforms that had been debated for more than a decade, in many respects these changes came too late for MSBs. At the time of enactment, all of them were still operating under state charters, and many states restricted their ability to diversify their asset structure or to invest in higher-yielding assets. Some actions were taken at the state level to liberalize asset powers of thrifts and to alleviate the burden of restrictive usury ceilings, but these measures, like those at the federal level, came too late.

More important, however, the federal tax code continued to provide a strong disincentive for S&Ls and MSBs to diversify their assets. Although the Revenue Act of 1951 had changed the tax-exempt status of thrifts, these institutions could still deduct up to 100 percent of taxable income through the establishment of a bad-debt reserve, whether or not losses actually occurred. Under the provisions of the Tax Reform Act of 1969, the maxi-

¹⁸ U.S. House Committee on Banking, Finance and Urban Affairs, *The Report of the Interagency Task Force on Thrift Institutions*, 96th Cong., 2d sess., 1980, 6.

¹⁹ The Federal Home Loan Bank System was established in 1932 to provide a central credit system for mortgage lending institutions. The System makes advances to member institutions at interest rates lower than those in the commercial market and thus provides members with an important source of liquidity during periods of disintermediation.

²⁰ In April 1979 the U.S. Court of Appeals for the District of Columbia had ruled that federal regulators exceeded their authority when they approved automatic transfer (ATS) accounts for commercial banks, share draft accounts for credit unions, and remote service units for savings and loans. All of these accounts were the functional equivalent of interest-bearing checking accounts. At that time, NOW accounts were permitted only in the six New England states. The ruling gave Congress one year to validate the regulations; otherwise, financial institutions would be required to terminate the services and disrupt millions of account holders (McLean, "Legislative Background," 19).

num deduction for additions to bad debts was allowed only if a mutual savings bank had 72 percent (or an S&L 82 percent) of its total assets in certain qualifying assets (generally mortgages and government securities), and the deduction was lost entirely if less than 60 percent of the institution's assets met the investment standard. Moreover, once an institution failed the qualifying asset test, it was required to recapture some of the previous deduction and incur what might be a substantial tax liability. Therefore, even in states that did expand consumer lending powers during the 1970s, there was no dramatic shift of MSB funds into consumer and other nonmortgage loans.²¹ It should be noted, however, that this situation must also be attributed to the fact that prudently building up a portfolio of such loans would have been a difficult and lengthy process.

The FDIC's Response

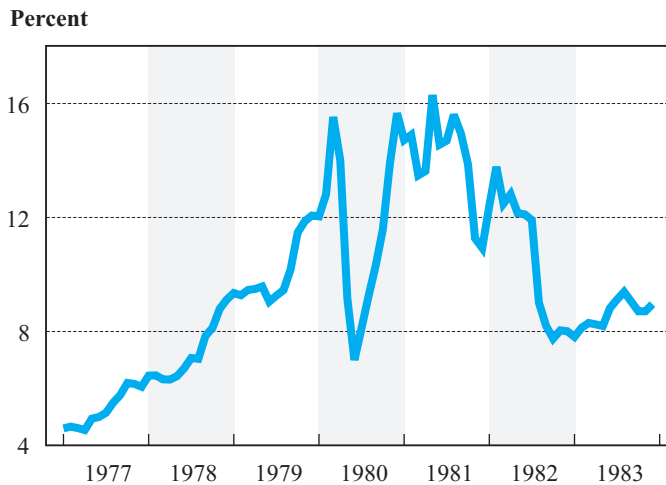
Although no one could predict the future course of interest rates, it was fairly apparent throughout the 1970s that MSBs (the only thrifts insured by the FDIC) were at risk in a rising rate environment. The FDIC's monitoring of industry trends and surveillance of individual institutions increased during 1977–78, when short-term interest rates rose from approximately 4.5 percent to more than 9 percent (see figure 6.1). The FDIC began a monthly survey of large mutual savings banks and also received periodic reports from the National Association of Mutual Savings Banks (NAMSB). The agency used the surveys to judge the rates of both internal disintermediation (from traditional savings accounts to MMCDs) and external disintermediation and to project the effect of increased interest expense on future earnings. Although in mid-1978 the outlook for savings banks appeared favorable barring a significant increase in interest rates, FDIC staff nevertheless began exploring options available to the agency in the event a large savings bank were to fail.

Because of an accelerating inflation rate in 1978 and a shift in monetary policy in October 1979, interest rates rose almost continuously until the spring of 1980. Mutual savings banks, particularly those located in New York City and Boston, sustained 13 consecutive months of external disintermediation from March 1979 to April 1980, when a record \$10.7 billion in deposits left MSBs.²² In addition to closely monitoring deposit flows and earnings, FDIC staff participated in an interagency task force on thrifts and evaluated a variety of measures proposed by the industry that were designed to permit MSBs to earn market rates of interest on assets. These proposals included expanded powers, mortgage warehousing programs, and reinstatement of the differential on six-month MMCDs which DIDMCA had removed.

²¹ U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Deposit Interest Rate Ceilings and Housing Credit: The Report of the President's Inter-Agency Task Force on Regulation Q*, 96th Cong., 1st sess., 1979, 37–45.

²² NAMSB, *1980 National Fact Book*, 7.

Figure 6.1
Monthly Treasury Bill Rate (3-Month), 1977–1983



Source: Haver Analytics.

An internal FDIC interdivisional task group, known as the Mutual Savings Bank Project Team, was formed in 1980 to develop plans to handle the possible failures of a large number of savings banks. Among other things, the group developed estimates of the potential magnitude of the problem under various economic scenarios, developed and evaluated options for handling the situation, and developed a strategic plan for each contingency. The recommendations prepared by this group shaped the structure of the ensuing assisted savings bank transactions (discussed below).

Mutual Savings Bank Failures, 1981–1982

Savings bank earnings, which had exceeded \$1 billion in 1979, deteriorated very rapidly as the cost of funds began to exceed the yield on asset portfolios. The industry sustained losses of \$123 million in 1980, the first year since World War II that it reported a negative income. In 1981, operating losses escalated to nearly \$1.7 billion.²³ By early 1982, aggregate annual losses at FDIC-insured savings banks were running at approximately 1.25

²³ NAMS, *1981 National Fact Book of Mutual Savings Banking* (1981) and *National Fact Book of Savings Banking* (1982).

percent of assets. The problem was more severe in New York City, where some of the weaker institutions were experiencing losses of 3.5 percent of assets, a devastating trend considering that at year-end 1981 total reserves for all MSBs in New York State had been only 4.8 percent.²⁴

The plight of New York's mutual savings banks was discussed in a public forum as early as 1979, when Anita Miller of the Federal Home Loan Bank Board, in an address before an annual conference on the savings and loan industry, termed their condition "particularly worrisome."²⁵ New York's MSBs were constrained by limited lending powers, a restrictive usury ceiling, and unfavorable tax treatment at both the state and city levels.²⁶ Additionally, deposit growth and asset turnover were lower than average in New York City because of a high degree of competition from large money-center banks and money market funds and a heavy concentration of long-term bonds in the portfolios of many mutual savings banks. The MSBs could not sell these bonds without incurring a severe loss. Given the market value of the securities portfolios of the ten largest MSBs in New York City, Harry V. Keefe, Jr., chairman of Keefe, Bruyette & Woods, Inc., declared in December 1980 that "the nation's mutual savings banks, as an industry, are in fact bankrupt and Congress should act immediately to rescue them from eventual collapse." Keefe further warned that the problems of Chrysler and Lockheed were "peanuts compared to those of the mutual savings banks" and that if they were to fail, "the liability facing the Federal Deposit Insurance Corp. would exceed the \$10 billion now in the fund."²⁷

The FDIC's dilemma, from the standpoint of potential exposure of the deposit insurance fund, was very different from any the agency had faced earlier in its history. Unlike the situation with most commercial bank failures, asset quality was not a problem. However, as Keefe noted, a large number of MSBs were facing "book" insolvency, with the market value of their assets actually 25 to 30 percent below outstanding liabilities. If the FDIC had been forced to absorb this market depreciation, the deposit insurance fund would have incurred enormous losses. Resolutions that used either a purchase-and-assumption transaction or a deposit payoff probably would have entailed such absorption. Payoffs would also have entailed large cash outlays up front, since almost all MSB liabilities consisted of fully

²⁴ FDIC, *Federal Deposit Insurance Corporation: The First Fifty Years* (1984), 99; and NAMS, *1982 National Fact Book*.

²⁵ *Washington Financial Report* (October 22, 1979), A-22.

²⁶ Banking institutions in New York were taxed at the higher of two alternative tax methods, one based on net income and the other based on a percentage of deposits. Despite aggregate negative earnings, therefore, MSBs operating in New York City were burdened by a significant tax liability to both the city and state governments, a liability that exacerbated the problem of declining surplus accounts.

²⁷ Gary M. Hector, "Keefe Warns on State of Savings Bank Industry; Urges Federal Assistance Now," *American Banker* (December 9, 1980), 1.

insured deposits. The FDIC's principal concern was therefore to keep the cost of handling failing savings banks at a reasonable level without undermining the public's confidence in the industry or in the agency.²⁸ The FDIC also sought to ensure that any financial institution resulting from a merger with a failing savings bank would be financially sound, would have the ability to compete effectively in its market, and would continue to serve the credit needs of its community free of excessive government control.

Pressure on the industry and on the FDIC mounted during 1981, as the growing volume of losses (particularly at the ten largest New York City mutuals) was disclosed. In mid-August it was reported that at least four mutuals with total assets of almost \$9 billion were "said to have approached the FDIC with applications or proposals for aid to boost their flagging net worth."²⁹ Losses were most severe at the 148-year-old Greenwich Savings Bank, which was forced to turn to the Federal Reserve's discount window to borrow more than \$100 million after a group of foreign banks refused to roll over approximately \$75 million in collateralized Eurodollar notes.³⁰ On October 28 it was reported that state and federal bank regulators had met behind closed doors with representatives from a number of major banks to discuss Greenwich's fate. The next day this story was picked up by *The New York Times* and major wire services, while a New York radio station mistakenly announced that Greenwich had failed. These reports prompted heavier-than-usual activity at the bank and led the FDIC to issue a press release reassuring Greenwich's depositors that their money was safe. This statement, possibly unprecedented in the agency's history, acknowledged that the FDIC was seeking a buyer for Greenwich Savings Bank and that it would arrange "an orderly transaction which will insure that no depositors—whether insured or uninsured—will experience any loss of any principal or interest."³¹

On November 4, 1981, the FDIC announced the assisted merger of the Greenwich Savings Bank into Metropolitan Savings Bank, New York—a transaction effected under Section 13(e) of the Federal Deposit Insurance Act, which authorizes the agency to reduce or avert a threatened loss to the insurance fund by providing assistance to facilitate a merger between a failing insured bank and another insured bank. Although the FDIC had always had this authority and had used it frequently in the early years, it had used it only once in

²⁸ It should be noted that no FDIC-insured mutual savings bank had failed since 1938.

²⁹ Karen Slater, "Mutuals Ask for Capital Aid; FDIC Resisting Action," *American Banker* (August 14, 1981), 1.

³⁰ Although DIDMCA authorized thrifts to borrow from the discount window, Greenwich was one of the earliest institutions to borrow under the Federal Reserve's new program to provide extended credit to banks and thrifts that were under sustained liquidity pressures.

³¹ Laura Gross and Gordon Matthews, "FDIC Assures on Greenwich; Tells Depositors Funds Are Safe; Seeks Buyers," *American Banker* (October 30, 1981), 1.

the decade before 1981, largely because the agency was reluctant to provide financial assistance that would benefit the stockholders and management of a failing institution.³²

Assisted mergers had frequently been used by the Federal Savings and Loan Insurance Corporation (FSLIC) in handling S&L failures, and the FDIC had concluded that, under appropriate circumstances, assisted open-bank mergers could be a desirable way to handle failing MSBs. Two important considerations were that Section 13(e) assistance required neither new legislation nor a finding by the FDIC's Board of Directors that the institution was essential to its community. Other advantages to this approach over a closed-bank transaction were that it preserved tax-loss carry-forwards,³³ gave the acquiring institution greater flexibility to continue leases and other contractual arrangements, and received greater cooperation from state supervisors. In addition, it was thought that depositors in other mutual savings banks would react more favorably if the failing institutions were not officially closed. The Greenwich/Metropolitan transaction was notable for several reasons. With more than \$2.5 billion in assets, Greenwich at that time was the third-largest bank failure in the FDIC's history.³⁴ More important, the initial estimated cost of the transaction—\$465 million—was more than the reported cost of handling *all* previous failures of insured banks. Finally, as the first assisted merger, this transaction served as a prototype for subsequent assisted mergers in its basic structure and procedures.

The primary strategy developed by the Mutual Savings Bank Project Team was to structure assistance around what was called an Income Maintenance Agreement (IMA).³⁵ Under an IMA, the FDIC agreed to make periodic payments to the acquiring institution on the basis of the difference between the yield on the declining balance of acquired earning assets and the average cost of funds to savings banks, plus a spread to cover administrative and overhead expenses associated with these assets. This structure allowed the agency to fund long-term assets at short-term rates, resulting in a significant cost saving relative to the cost if the bank were to be liquidated. Additionally, it provided protection against the possibility that a windfall gain would accrue to the acquirer if market rates fell. Conversely, an IMA exposed the FDIC to increased costs in a rising interest-rate environment. From the acquirer's perspective, acquired assets were completely insulated from interest-rate risk,

³² U.S. House Committee on Banking, Finance and Urban Affairs, *Report*, 173–74. In all assisted mergers of failing mutual savings banks, the FDIC insisted that senior management and most trustees would not be able to serve with the surviving institution. In cases where the failing MSB had subordinated debt outstanding, the note holders were required, as a condition of the transaction, to take a substantial “hit,” in the form of either a lower interest rate or an extended maturity.

³³ Tax-loss carry-forwards allow previously incurred taxable losses to be applied to future taxable income, thereby reducing tax liability in profitable years.

³⁴ In 1980, the FDIC provided open-bank assistance to prevent the failure of the nearly \$8 billion First Pennsylvania Bank, N.A. The largest bank failure before that had been Franklin National Bank of New York, with assets of \$3.6 billion, in 1974.

³⁵ Both the FSLIC and the FDIC had previously provided assistance along these general lines in a limited number of cases (FDIC, *First Fifty Years*, 100).

whereas the benefits of the reinvestment spread on the cash flow from existing assets provided an increasing source of income. Income maintenance agreements were used in 10 of the 17 assisted mergers of failing savings banks between 1981 and 1985 (see table 6.4).³⁶

With respect to the “cost of funds” used to compute IMA payments, the FDIC was reluctant to use a measure that was under the control of the resultant institution. Thus in the case of a surviving savings bank, the index normally used was based on a group of peer institutions; in the two instances when the resulting institution was a commercial bank, a market-based index was used. As part of the assistance agreement, a schedule of remaining asset balances and average yields was agreed upon for the term of the IMA, and payments were based on this fixed schedule. This arrangement made it unnecessary for the bank to maintain separate records and for the FDIC to perform periodic audits, and allowed the acquiring institution to hold or sell a particular asset on the basis of considerations other than assistance payments.

In the 12 months from November 1981 through October 1982, the FDIC consummated 11 assisted mergers of mutual savings banks with total assets of nearly \$15 billion, more than the total assets of all failed commercial banks since the FDIC’s inception. The cost of these failures was approximately \$1.8 billion, or approximately 12 percent of assets. Most of the acquiring institutions were other MSBs, although for the first time in FDIC history commercial banks were the winning bidders—for Farmers and Mechanics Savings Bank (F&M), Minneapolis, Minnesota, and for Fidelity Mutual Savings Bank, Spokane, Washington. The merger of F&M, with assets in excess of \$980 million, into the \$350-million-asset Marquette National Bank created the fourth-largest commercial bank in the state of Minnesota. In this case the bidding process was facilitated by the passage of emergency legislation in Minnesota permitting an out-of-state bank holding company to acquire F&M as a commercial bank. This legislation was thought to have saved the FDIC \$50 million.³⁷ The merger of Fidelity Mutual into First Interstate Bank of Washington, N.A., Seattle, Washington, also involved an interstate bidding process that saved the FDIC an estimated \$20 million.³⁸

The drastic drop in interest rates that occurred in the second half of 1982 significantly reduced the earnings pressure on the industry and brought most savings banks to or above the break-even level. However, even in the late-1982 interest-rate environment several large banks were still losing money. The Garn–St Germain Depository Institutions Act of

³⁶ Other forms of assistance generally included cash, notes, and the assumption of Federal Reserve or Federal Home Loan Bank debt.

³⁷ William M. Isaac, “Depository Institutions—The Challenge of Today’s Problems and Tomorrow’s Opportunities” (address to the 52d annual convention of the Independent Bankers Association of America, Sheraton-Waikiki Hotel, March 16, 1982), 2.

³⁸ FDIC, *Annual Report* (1982), 4.

Table 6.4
Failed and Assisted Savings Banks, 1981–1985

Date	Failed Bank/Acquirer and Location	Assets (\$Millions)	Outcome
11-04-81	Greenwich SB/Metropolitan SB New York City	\$2,475	Renamed Crossland, FSB, in 1984. Converted to stock in 1985. Failed in 1992 (pass-through receivership).
12-04-81	Central SB/Harlem SB New York City	910	Renamed Apple Bank for Savings in 1983. Converted to stock in 1985.
12-18-81	Union Dime SB / Buffalo SB New York City	1,453	Renamed Goldome Bank for Savings in 1983. Converted to FSB in 1984; to stock in 1987. Converted back to state charter in 1988. Failed in 1991 (purchased by KeyCorp and First Empire State Corporation).
01-15-82	Western NY SB/Buffalo SB Buffalo, NY	1,028	See Goldome (12-18-81).
02-20-82	Farmers & Mechanics SB/Marquette NB Minneapolis, MN	1,010	Renamed Marquette Bank of Minneapolis, NA, in 1985. Acquired by First Bank, NA, in 1993.
03-11-82	U.S. SB/Hudson City SB Newark, NJ	688	Hudson City SB is a state-chartered MSB.
03-11-82	Fidelity Mutual SB/First Interstate NB Spokane, WA	696	First Interstate Bank of Washington, NA
03-26-82	The New York Bank for Savings/Buffalo SB New York City	3,504	See Goldome (12-18-81).
04-02-82	Western Savings Fund Society/ Philadelphia Saving Fund Society Philadelphia, PA	2,126	PSFS converted to stock in 1983. Renamed Meritor SB in 1985. Failed in 1992 (purchased by Mellon Bank Corp.).
09-24-82	United Mutual SB/American SB New York City	833	Converted to FSB in 1983. Converted to stock in 1985. Converted back to state charter in 1989. Failed in 1992 (acquired by eight different banks).
10-15-82	Mechanics SB/Syracuse SB Elmira, NY	55	Syracuse SB failed in 1987 (acquired by Fleet Bank).
02-09-83	Dry Dock SB/Dollar SB New York City	2,452	Renamed Dollar–Dry Dock Savings Bank. Renamed Dollar–Dry Dock Bank in 1988. Failed in 1992 (acquired by Emigrant SB and Apple Bank for Savings [one branch]).
08-05-83	Oregon Mutual SB/Moore Financial Corp. Portland, OR	266	Renamed Oregon First Bank. Renamed West One Bank in 1989.
10-01-83	Auburn SB/Syracuse SB Auburn, NY	133	Syracuse SB failed in 1987 (acquired by Fleet Bank).
09-28-84	Orange SB/Hudson City SB Livingston, NJ	513	Hudson City SB is a state-chartered MSB.
10-01-85	Bowery SB/Ravitch Investor Group* New York City	5,277	Sold in 1988 to H. F. Ahmanson & Co. Renamed Home Savings of America, FSB, in 1992.
12-31-85	Home SB/Hamburg SB Brooklyn, NY	414	Retained the Home SB name. Acquired by H. F. Ahmanson & Co. in 1990.
Total—17 assisted mergers		\$23,835	

* The FDIC provided financial assistance to recapitalize the Bowery SB and merge it into a newly chartered stock savings bank that was then acquired by the Ravitch Investor Group.

1982 enabled the FDIC both to adopt a “wait-and-see” approach and to be more flexible in dealing with these institutions. For mutual savings banks, one of the most important provisions of this legislation was contained in Title II, which authorized the FDIC to establish a Net Worth Certificate Program.

Net Worth Certificate and Voluntary Merger Programs

On December 7, 1982, FDIC Chairman William M. Isaac announced details of the Net Worth Certificate (NWC) Program, in conjunction with a voluntary merger plan designed to induce savings banks to create their own proposals for assisted mergers. The NWC Program was intended to allow savings banks with capable management and good-quality assets a chance to recover if interest rates should drop from the high levels they were at when Garn–St Germain was passed in October 1982. Recognizing that “a few firms may have to be merged almost irrespective of what happens to rates” and that “mergers may be the only practical longer-range solution” for others, the agency’s voluntary merger plan provided tangible financial assistance to encourage mergers involving savings banks when one of the participants was eligible for aid under the NWC Program.³⁹

To qualify for assistance under the NWC Program, an institution was required to have (1) net worth equal to or less than 3 percent of assets, (2) losses incurred during the two previous quarters but not as a result of transactions involving mismanagement, and (3) investments in residential mortgages or in securities backed by such mortgages aggregating to at least 20 percent of loans. Institutions were required to apply by letter with a comprehensive business plan that included a strategic plan, lending and investment policies, plans for managing liquidity positions and rate-sensitivity gaps, plans to reduce expenses, and a two-year budget. Additional restrictions were placed on bank operations, particularly employment contracts with senior management; and participating banks were not permitted to change charter, convert to stock form, merge, or otherwise change the nature of their business or ownership without the prior approval of the FDIC. Conversely, however, MSBs that applied for assistance were required to sign a restrictive covenant obligating them to convert to stock form at the request of the FDIC.

Essentially, the FDIC increased or maintained the capital of participating institutions (for regulatory purposes) by purchasing NWCs in an amount equal to a percentage of operating losses over the preceding six-month period, in exchange for promissory notes under exactly the same terms as the NWC. The certificates counted as surplus for regulatory purposes but had no effect on the net cash flows or income of the institution.⁴⁰ Therefore, the

³⁹ FDIC Press Release PR-99-82 (December 7, 1982).

⁴⁰ However, some institutions did benefit from the exemption from state and local franchise taxes that was granted in Title II of Garn–St Germain.

NWC Program was basically a form of capital forbearance. The certificates remained outstanding until the institution became profitable. At that time, repayment was at a rate of one-third of net operating income and was accomplished through the retirement of an equal amount of promissory notes. Additionally, the FDIC could notify any institution that still held certificates seven years after issuance that it would have to repay all or a portion within six months.

A total of 29 savings banks with assets of approximately \$40 billion participated in the original NWC Program (see table 6.5).⁴¹ Nearly \$720 million in net worth certificates were issued between 1982 and 1986, and the total amount outstanding at any one time peaked at \$710.4 million at year-end 1985.⁴² The decline in interest rates during the middle and late 1980s allowed the majority of participating banks to return to profitability. All but three institutions had retired their certificates by year-end 1988, and the last certificate was retired in 1992.

After introduction of the Net Worth Certificate Program, interest-rate mismatch led to six mutual savings bank failures, including three in 1983, one in 1984, and two in 1985.⁴³ Five of these were resolved under the FDIC's voluntary merger plan. The sixth, Oregon Mutual Savings Bank of Portland, Oregon, was acquired by Moore Financial Group, Inc., of Boise, Idaho. This acquisition was made possible by newly enacted state legislation that allowed Oregon Mutual to convert to a stock-form, state-chartered commercial bank and be acquired by a bank holding company in a contiguous state. The assistance agreement between the FDIC and Moore Financial provided that Oregon Mutual's net worth certificates be prepaid.

Net worth certificates were also prepaid in the assisted merger of Orange Savings Bank with Hudson City Savings Bank, both in New Jersey. In the four other voluntary mergers, outstanding net worth certificates were retained, and the surviving institution remained in the NWC Program. One of these transactions was a financial assistance package to recapitalize the Bowery Savings Bank and merge it into a newly chartered stock savings bank in order to facilitate its acquisition by a private investor group. The Bowery and Dollar-Dry Dock eventually retired their certificates, whereas Syracuse Savings Bank and Home Savings Bank failed with net worth certificates still outstanding. These were retired as part of FDIC-assisted mergers with other institutions.

⁴¹ The NWC Program, as authorized by the Garn-St Germain Depository Institutions Act of 1982, was due to expire after three years. However, Congress granted two extensions, and the program expired on October 13, 1986.

⁴² FDIC, *Report of Activities under Title II of the Garn-St Germain Depository Institutions Act of 1982* (1983–1987).

⁴³ A seventh failure (Syracuse Savings Bank) in May 1987 was attributable to a bankrupt real estate investment tax shelter. In this case the FDIC's assistance was limited to indemnifying the acquirer, Norstar Bancorp, against certain contingent liabilities.

Table 6.5
FDIC Net Worth Certificate Program
(\$Thousands)

Bank Name	City/State	Assets at Entry into Program	Certificates (Maximum Amount Held)	Date Retired
Auburn SB*	Auburn, NY	\$ 125,646	\$ 1,640	Retained by Syracuse SB in 1983— Assisted merger
Beneficial Mutual	Philadelphia, PA	1,628,630	18,862	1991
Bowery SB*	New York, NY	4,999,357	220,100	1992
Cayuga County SB	Auburn, NY	189,957	788	1986
Colonial Mutual SB	Philadelphia, PA	70,732	776	1984—Acquired
Dime SB of NY, FSB	New York, NY	6,393,743	72,120	1986
Dime SB of Williamsburgh	New York, NY	573,858	3,559	1987
Dollar–Dry Dock SB†	New York, NY	4,972,787	41,321	1986
Dry Dock SB*	New York, NY			See Dollar–Dry Dock SB‡
East River SB, FSB	New York, NY	1,777,519	26,430	1987
Eastern SB	New York, NY	785,962	13,712	1986—Merger
Elizabeth SB	Elizabeth, NJ	31,695	351	1983—Merger
Emigrant SB	New York, NY	2,968,586	90,037	1991
Greater NY SB	New York, NY	1,816,836	23,054	1987
Home SB*	White Plains, NY	427,402	5,628	1986—Assisted merger
Inter-County SB	New Paltz, NY	123,366	1,588	1986
Lincoln SB, FSB	New York, NY	2,090,289	65,865	1987
National SB of the City of Albany	Albany, NY	391,205	1,123	1985
Niagara County SB	Niagara Falls, NY	291,887	464	1986—Merger
Orange SB*	Livingston, NJ	531,087	3,509	1984—Assisted merger
Oregon Mutual SB*	Portland, OR	260,000	1,489	1983—Assisted merger
Rochester Community SB	Rochester, NY	1,371,335	4,993	1986
Roosevelt SB	New York, NY	858,852	5,757	1986
Sag Harbor SB	Sag Harbor, NY	203,612	1,412	1987
Savings Fund Society of Germantown	Bala Cynwyd, PA	1,373,089	17,706	1987
Seamen's SB, FSB†	New York, NY	1,825,504	31,320	1986
Skaneateles SB	Skaneateles, NY	136,092	524	1986
Syracuse SB*	Syracuse, NY	1,180,471	See Auburn SB§	1987—Assisted merger
Williamsburgh SB	New York, NY	2,215,133	63,945	1987—Merger
Total—29 institutions		\$39,614,632	\$718,073	

* Failed or was assisted while in NWCP.

† Failed after NWCP participation.

‡ Certificates issued to Dry Dock SB were retained when that institution was acquired by Dollar SB. Subsequently, Dollar–Dry Dock acquired additional certificates.

§ Certificates issued to Auburn SB were retained when that institution was acquired by Syracuse SB. Syracuse SB failed in 1987.

The Net Worth Certificate Program succeeded in providing 22 potentially failing savings banks with the opportunity to return to profitable operations. Although 7 of the participating institutions did require additional FDIC assistance, the cost of these transactions was less than \$420 million, or approximately 4.1 percent of the \$10.2 billion in total assets held by these 7 institutions at the time of their failures. This figure is substantially below the average loss rate of 12 percent for the savings banks that were resolved before the NWC Program, and it is certainly far less than what it would have cost the FDIC to close all 29 savings banks had there been no Net Worth Certificate Program. It should be noted that two institutions failed after having paid off their net worth certificates: the Seamen's Savings Bank (1990) and Dollar-Dry Dock (1992). These failures occurred more than four years after the banks had paid off their net worth certificates, and therefore were probably a result of actions the institutions took after leaving the NWC Program.

The success of the FDIC's Net Worth Certificate Program depended on interest-rate levels, which were beyond the agency's control. However, the program's success was also due to several of its key aspects. Stringent application requirements helped ensure that only banks with capable management, good-quality assets, and the ability to be profitable in a favorable interest-rate environment received assistance. Equally important, banks in the program were closely monitored and supervised, and were not permitted to attempt to grow out of their problems. In sum, the Net Worth Certificate Program minimized the FDIC's potential exposure to loss while providing capital forbearance to savings banks.⁴⁴

Conclusion

In the early 1980s, many mutual savings banks failed because both macroeconomic forces and changes in the financial services marketplace were inhospitable to the industry's traditional mode of operating. By law and regulation, MSB assets were permitted to be invested primarily in fixed-rate mortgages and long-term bonds, but as short-term interest rates rose to historically high levels between 1979 and 1982, the market value of these assets plunged. At the same time, MSB liabilities were composed almost exclusively of short-term deposits paying rates of interest subject to deposit interest-rate ceilings—and as market rates rose, even small savers began to think like investors. MSB deposits were withdrawn and placed in higher-yielding investments. Regulators fought this disintermediation by permitting the introduction of a variety of time deposits paying market rates of interest. These certificates of deposit helped MSBs retain funds, but they also raised the industry's cost of funds. Yields on assets rose much more slowly, and net interest margins shrank and

⁴⁴ After so many mutual savings banks converted to the stock form of ownership, the industry is now collectively referred to as the savings bank industry.

became negative. Operating losses were so great that capital levels built up over a century or more of profitable operations quickly eroded.

MSB failures were predictable and, arguably, preventable. The problems facing the thrift industry were recognized early and were debated throughout the 1970s.⁴⁵ However, Congress's attempts to enact sweeping financial reform were stalemated by the competing interests of various industry groups, the overlapping layers of state and federal regulators, and the additional public policy concern of ensuring a continued supply of funds for home mortgage lending. Thus, despite years of studies and proposals, no consensus could be reached on how best to proceed with financial deregulation. As a result, changes were enacted on a piecemeal basis and only when a crisis was clearly evident.

From the FDIC's perspective, the problems of the mutual savings bank industry in 1980 were the most serious challenge the agency had faced since its inception in 1933. Potential losses to the deposit insurance fund were enormous. What made MSB failures particularly costly were the sizes of the institutions, the large percentage of fully insured deposits, and the low market value of otherwise good-quality assets. This potential cost prompted the FDIC to develop strategies to deal with MSB failures that were different from the traditional methods used to resolve commercial bank failures.

The predictability of the failures benefited the agency by giving it some planning time. Moreover, the threat of deposit runs was greatly reduced because a large proportion of deposits held by the MSB industry were fully insured. Finally, unlike the bank crisis of the 1930s, this crisis was not compounded by a sense of public panic.

The principal strategy the FDIC used was to provide open-bank merger assistance with healthier institutions. This procedure was acceptable to the agency because, given the absence of stockholders in mutual savings banks, only depositors would have to be protected in the transactions. Moreover, the problems facing MSBs at this time were not the result of mismanagement or fraud but were caused by forces outside the banks' control. Another consideration was the desire to avoid cash outlays. This was a major concern not only to the FDIC but also to the U.S. Treasury Department because FDIC expenditures, although not charged to the Treasury, are reflected in the unified budget. Therefore, wherever possible the FDIC attempted to substitute notes and periodic income maintenance payments (which were dependent on future interest rates) for direct up-front cash assistance. The 1982 Garn–St Germain Act granted the agency additional time and flexibility and authorized the ensuing Net Worth Certificate Program.

⁴⁵ This chapter covers only the FDIC's experience during the 1980s. Savings and loan associations also encountered problems of asset/liability mismatch early in the decade, but those institutions were regulated by the Federal Home Loan Bank Board and insured by the Federal Savings and Loan Insurance Corporation. For a discussion of that crisis, see Chapter 4.

Using all these procedures, the agency largely succeeded in managing the mutual savings bank crisis of the early 1980s. Between late 1981 and year-end 1985, the agency conducted 17 assisted mergers or acquisitions of mutual savings banks with total assets of nearly \$24 billion. These MSBs accounted for more than 15 percent of the total assets of FDIC-insured mutual savings banks as of year-end 1980. At year-end 1995, the cost of these failures was estimated at \$2.2 billion.⁴⁶ This figure is nearly equivalent to the estimated cost of these transactions when they were consummated, notwithstanding the variable nature of some of the components. Although the FDIC benefited from the effect of declining interest rates on eventual income-maintenance payments, in several transactions the agency incurred a greater-than-expected loss from the liquidation of assets it purchased. Nevertheless, the strategies that were used in these assisted mergers minimized both losses and cash outlays.

It should be noted that although a number of mutual savings banks were able to survive the crisis by the capital forbearance provided in the NWC Program and/or by virtue of being extremely well managed, a number of others failed between 1985 and 1994 (a list of these failures appears in the appendix to this chapter). For the most part, these institutions failed for reasons other than asset/liability mismatch and therefore are not discussed in this chapter. The question arises, however, whether the FDIC could have prevented these failures, many of which occurred as a result of the expanded powers granted by deregulation.

Notably, several of these post-1985 failures were from assisted mergers that had taken place in the early 1980s. American Savings Bank, CrossLand FSB (formerly Metropolitan Savings Bank), Dollar–Dry Dock Bank, Goldome Bank (formerly Buffalo Savings Bank), and Meritor Savings Bank (formerly Philadelphia Saving Fund Society) all failed in 1991 or 1992. These failures, occurring a decade after the institutions had participated in FDIC-assisted mergers, were attributable to activities in which the banks became involved after the introduction of expanded powers. Most of the institutions had long since stopped receiving any type of FDIC assistance and were operating profitably before they encountered the problems that led to failure. Estimates are not available as to what it might have cost the FDIC to resolve these institutions separately, nor can it be determined what might have happened to the institutions if they had not participated in FDIC-assisted mergers. Nevertheless, it should be recognized that not all of the assisted merger combinations were a total success. In addition, a number of savings banks in the New England region, which had largely been spared in the early 1980s, failed during the early 1990s. These banks, many of

⁴⁶ The figure was approximate because several cases were still listed as active on the FDIC's books.

which had converted to the stock form of ownership, failed after investing in the boom-to-bust New England real estate cycle (see Chapter 10).⁴⁷

In conclusion, the mutual savings bank industry underwent a profound change between 1980 and 1994. The number of banks declined because of mergers, failures, and conversions to commercial banks. Approximately 30 percent (including many of the largest savings banks) converted to stock form. Many savings banks benefited from a favorable environment and returned to profitability. (Future success depends on the ability of these banks to adapt as the financial services industry continues to evolve.) As for the FDIC, in its handling of the MSB crisis in the early 1980s it gained experience that would prove valuable, for as the decade unfolded, this crisis turned out to be only the first of many the agency had to confront in rapid succession.

⁴⁷ Jennifer L. Eccles and John P. O’Keefe, “Understanding the Experience of Converted New England Savings Banks,” *FDIC Banking Review* 8, no. 1 (1995): 1–17.

Appendix

Table 6-A.1

BIF-Insured Savings Banks That Failed, 1986–1994 (\$Thousands)

Institution Name	City, State	Failure Date	Total Assets	Resolution Cost
American Savings Bank	White Plains, NY	06/12/92	\$ 3,202,492	\$ 469,713
Amoskeag Bank	Manchester, NH	10/10/91	937,259	190,355
Attleboro Pawtucket SB	Attleboro, MA	08/21/92	632,450	32,210
Banco de Ahorro FSB	Mayaguez, PR	05/30/86	33,961	6,985
Bank Five for Savings	Arlington, MA	09/20/91	386,572	99,306
Bank for Savings	Malden, MA	03/20/92	397,979	28,620
Bank Mart	Bridgeport, CT	12/13/91	578,220	97,785
Bank of Hartford Inc.	Hartford, CT	06/10/94	321,457	23,326
Beacon Co-op Bank	Boston, MA	06/21/91	31,806	4,210
Brooklyn Savings Bank	Danielson, CT	10/19/90	130,931	29,791
Burritt InterFinancial Bcorp.	New Britain, CT	12/04/92	523,850	76,931
Central Bank	Meriden, CT	10/18/91	654,715	246,047
Central Savings Bank	Lowell, MA	02/14/92	369,110	32,594
Colony Savings Bank	Wallington, CT	02/27/92	35,664	6,107
Connecticut Savings Bank	New Haven, CT	11/14/91	1,044,990	206,959
Coolidge Corner Coop Bank	Brookline, MA	03/14/91	83,699	16,502
Crossland Savings FSB	Brooklyn, NY	01/24/92	7,431,636	547,864
Dartmouth Bank	Manchester, NH	10/10/91	877,159	224,749
Dollar Dry Dock Bank	White Plains, NY	02/21/92	4,028,368	356,622
Eastland Savings Bank	Woonsocket, RI	12/11/92	515,301	16,735
Eliot Savings Bank	Boston, MA	06/29/90	479,461	220,492
First American Bank for Savings	Boston, MA	10/19/90	526,176	137,203
First Constitution Bank	New Haven, CT	10/02/92	1,571,240	126,526
First Mutual Bank for Savings	Boston, MA	06/28/91	1,129,946	181,037
First Service Bank for Savings	Leominster, MA	03/31/89	880,658	292,365
Goldome	Buffalo, NY	05/31/91	9,890,866	847,933
Granite Co-op Bank	Quincy, MA	12/12/91	103,814	14,768
Heritage Bank For Savings	Holyoke, MA	12/04/92	1,288,435	21,566
The Howard Savings Bank	Newark, NJ	10/02/92	3,461,421	87,087
Iona Savings Bank	Tilton, NH	10/11/91	31,180	5,334
Landmark Bank For Savings	Whitman, MA	06/12/92	62,124	13,082
Lowell Institution for Savings	Lowell, MA	08/30/91	386,363	126,303
Ludlow Savings Bank	Ludlow, MA	10/21/94	222,671	16,681
Maine Savings Bank	Portland, ME	02/01/91	1,182,519	5,614
Mechanics & Farmers SB, FSB	Bridgeport, CT	08/09/91	1,083,920	323,197
MerchantsBank of Boston	Boston, MA	05/18/90	392,219	96,581
Meritor Savings Bank	Philadelphia, PA	12/11/92	4,126,701	0
Milford Savings Bank	Milford, MA	07/06/90	328,062	137,790
Monroe Savings Bank FSB	Rochester, NY	01/26/90	520,587	25,508
New England ALLBANK for Savings	Gardner, MA	12/12/90	173,269	70,404
New England Savings Bank	New London, CT	05/21/93	914,884	115,216
New Hampshire Savings Bank	Concord, NH	10/10/91	1,171,673	234,637
Numerica Savings Bank FSB	Manchester, NH	10/10/91	509,074	112,154
The Permanent Savings Bank	Niagara Falls, NY	07/13/90	329,994	0
Plymouth Five Cents SB	Plymouth, MA	09/18/92	220,972	7,078
Riverhead Savings Bank	Riverhead, NY	06/12/92	388,806	0
Seacoast Savings Bank	Dover, NH	08/28/92	84,808	7,537
Seamen's Bank for Savings FSB	New York, NY	04/18/90	3,391,988	188,916
Southstate Bank for Savings	Brockton, MA	04/24/92	285,923	16,692
Suffield Bank	Suffield, CT	09/06/91	294,777	86,222
Syracuse Savings Bank	Syracuse, NY	05/13/87	1,183,321	0
Union Savings Bank	Patchogue, NY	08/28/92	491,100	118,874
The U. S. Savings Bank of America	Seabrook, NH	07/27/90	12,416	1,511
Vanguard Savings Bank	Holyoke, MA	03/27/92	427,949	126,739
Winchendon Savings Bank	Winchendon, MA	08/14/92	65,213	7,745
Woburn Five Cents SB	Woburn, MA	06/07/91	247,219	44,154
Workingsmens Co-op Bank	Boston, MA	05/29/92	223,665	14,583
Yankee Bank Finance & Savings, FSB	Boston, MA	10/16/87	525,481	65,689

Chapter 7

Continental Illinois and “Too Big to Fail”

Introduction

One of the most notable features on the landscape of the banking crises of the 1980s was the crisis involving Continental Illinois National Bank and Trust Company (CINB) in May 1984, which was and still is the largest bank resolution in U.S. history. Although it took place before the banking crises of the decade gathered strength, the Continental episode is noteworthy because it focused attention on important banking policy issues of the period. Among the most significant of these was the effectiveness of supervision: in the wake of the bank’s difficulties, some members of Congress questioned whether bank regulators (in this case, the Office of the Comptroller of the Currency in particular) could adequately assess risk within an institution. The economic dislocation such a large bank failure might bring also engendered increased scrutiny of the supervisory process. In addition, Continental was a particularly telling example of the problem that bank regulators faced when attempting to deal with safety-and-soundness issues in an institution that had already been identified as taking excessive risks but whose performance had not yet been seriously compromised.

Continental’s size alone made it consequential. Large-bank failures in the 1980s and early 1990s would prove to have serious consequences for the Bank Insurance Fund (BIF). For example, although only 1 percent of failed institutions from 1986 to 1994 had more than \$5 billion in assets, those banks made up 37 percent of the total assets of failed institutions and accounted for 23 percent of BIF losses during that period.¹ Moreover, continuing industry consolidation can only serve to make the issues involved in the handling of large-bank failures more significant.²

¹ FDIC, *Failed Bank Cost Analysis 1986–1994* (1995), 12, 32.

² At year-end 1984, only 24 commercial banks had more than \$10 billion in assets; by year-end 1994, the number was 64. During the same ten-year period, total assets at such banks had risen from \$865 billion to \$1.94 trillion.

As the nation's seventh-largest bank, Continental forced regulators to recognize not only that very large institutions could fail but also that bank regulators needed to find satisfactory ways to cope with such failures. The methods adopted in the resolution of Continental gave rise to a great deal of controversy, with the debate centering on whether large banks like Continental had to be treated differently from smaller institutions (the policy of differential treatment was soon given the rather inaccurate sobriquet of "too big to fail" [TBTF]). In fully covering all deposits in Continental, the FDIC used a method that contrasted sharply with its continuing use of deposit payoffs in some smaller resolutions. Perceptions of inequity in the treatment of banks depending on their size were brought into even greater relief by the fact that the Continental assistance package was put together soon after the FDIC had implemented a pilot program of "modified payoffs" in which only a proportion of the amount owed to uninsured depositors and other creditors was paid, based on the estimated recovery value of the institution's assets. The FDIC, seeking to encourage depositor discipline, had hoped to expand the modified payoff to all banks regardless of size. However, the Continental assistance package effectively ended the program. At the Senate hearings for his confirmation as FDIC chairman in September 1985, L. William Seidman testified that it was important not to have bank size lead to differential treatment—but he would later write that regulators were largely unsuccessful in remedying the problem.³ The Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) took significant steps toward dealing with TBTF, but since then no very large bank has failed, so the law's effect on how regulators would respond to such a failure has not yet been tested.

Continental's Growth through 1981

The story of Continental Illinois is now well known, but before 1982 few observers would have nominated it as the institution that would become emblematic of TBTF.⁴ The bank had long been conservative, but in the mid-1970s its management began to implement a growth strategy focused on commercial lending, explicitly setting out to become one of the nation's largest commercial lenders.⁵ By 1981, management had accomplished this and more: Continental was the largest commercial and industrial (C&I) lender in the United States. CINB's emphasis on C&I lending can be seen clearly when it is compared with other money-center banks. Between 1976 and 1981, CINB's C&I lending jumped from ap-

³ L. William Seidman, *Full Faith and Credit: The Great S&L Debacle and Other Washington Sagas* (1993), 75–76.

⁴ See Irvine Sprague, *Bailout: An Insider's Account of Bank Failures and Rescues* (1986), pt. 4; James P. McCollum, *The Continental Affair: The Rise and Fall of the Continental Illinois Bank* (1987); and William Greider, *Secrets of the Temple: How the Federal Reserve Runs the Country* (1987), chaps. 14 and 17. The discussion here also owes much to FDIC, "Report on Continental Illinois" (unpublished paper), 1985.

⁵ U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, *Inquiry into Continental Illinois Corp. and Continental Illinois National Bank: Hearings*, 98th Cong., 2d sess., 1984, 39; and "Continental Illinois Sails into a Calm," *Business Week* (May 14, 1979): 114.

proximately \$5 billion to more than \$14 billion (180 percent), while its total assets grew from \$21.5 billion to \$45 billion (110 percent). During the same period, Citibank’s C&I lending rose from \$7.7 billion to \$12.5 billion (62.5 percent), while its total assets rose from \$61.5 billion to \$105 billion (70 percent). Growth at Continental Illinois substantially outstripped that at institutions such as Chemical Bank, Morgan Guaranty, and its Chicago competitor, the First National Bank of Chicago. (See table 7.1.)

Continental’s management, the bank’s aggressive growth strategy, and its returns were lauded both by the market and by industry analysts. A 1978 article in *Dun’s Review* pronounced the bank one of the top five companies in the nation; an analyst at First Boston Corp. praised Continental, noting that it had “superior management at the top, and its management is very deep”; in 1981, a Salomon Brothers analyst echoed this sentiment, calling Continental “one of the finest money-center banks going.”⁶ Continental’s share price reflected the high opinions of and performance by the bank. In 1979, an article noted that while the stocks of other big banking companies have hardly budged, “. . . Continental’s . . . has doubled in price—rising from about \$13 to \$27 . . . since the end of 1974, compared

Table 7.1
Growth in Assets and Domestic C&I Lending at the Ten Largest U.S. Banks,
1976–1981
(\$Billions)

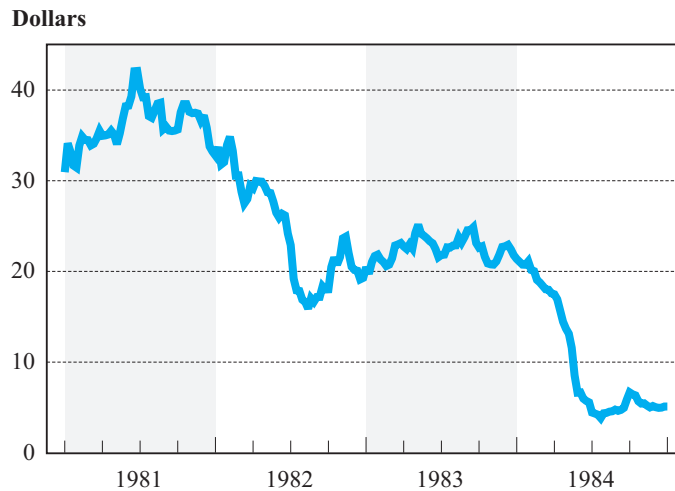
Bank	1976			1981			1976–1981	
	Total Assets	Domestic C&I	Domestic C&I as % of Assets	Total Assets	Domestic C&I	Domestic C&I as % of Assets	Asset Growth	Domestic C&I Growth
Bank of America	\$72.94	\$7.06	9.67	\$118.54	\$12.10	10.21	62.52%	71.51%
Citibank	61.50	7.71	12.54	104.80	12.54	11.97	70.40	62.57
Chase Manhattan	44.75	9.24	20.66	76.84	10.05	13.07	71.69	8.67
Manufacturers Hanover	30.10	4.43	14.73	54.91	9.46	17.22	82.44	113.39
Morgan Guaranty	28.49	3.07	10.79	53.72	5.61	10.44	88.57	82.43
Chemical Bank	26.08	4.65	17.82	45.11	10.82	23.98	72.94	132.74
Bankers Trust	21.76	3.06	14.04	33.00	5.23	15.84	51.66	71.08
Continental Illinois	21.44	5.09	23.74	45.15	14.27	31.61	110.56	180.42
First National Bank of Chicago	18.68	4.04	21.61	32.55	5.59	17.16	74.25	38.42
Security Pacific	16.15	2.49	15.43	30.46	5.91	19.38	88.59	136.98

⁶ “Here Comes Continental,” *Dun’s Review* 112, no. 6 (1978): 42–44; and “Banker of the Year,” *Euromoney* (October 1981): 134.

with a 10% gain for the average money-center bank.”⁷ And even as its share price was deteriorating during late 1981 and early 1982 (see figure 7.1), many stock analysts continued to recommend purchase of Continental shares.⁸

It is not surprising that few observers recognized the problems inherent in Continental’s rapid growth; most indicators of the bank’s financial condition were good, and some were outstanding. For example, for the five-year period from 1977 to 1981, the bank’s average return on equity was 14.35 percent, which was second only to Morgan Guaranty (14.83 percent) among other large commercial banks. Over the same period Citibank’s average was 13.46 percent, and Continental’s cross-town rival First Chicago had an average of only 9.43 percent. Continental’s return on average assets was also acceptable, exceeded only by the returns of Security Pacific, Morgan Guaranty, and Citibank (see table 7.2). Continental did have one of the lower equity levels of the large banks, with its average of 3.78 percent putting

Figure 7.1
Continental Illinois Corporation:
Average Weekly Share Price, 1981–1984



Source: Dow Jones News/Retrieval.

⁷ “Continental Illinois Sails into a Calm,” *Business Week* (May 14, 1979): 114.

⁸ See, for example, *Wall Street Transcript* (January 25, 1982), where a Morgan Stanley analyst described Continental as “attractive,” and *Keefe Nationwide Bankscan* (March 15, 1982), where market dissatisfaction with Continental was viewed as “a gross overreaction to the year-end increase in the bank’s nonperforming assets.” Two weeks after this comment, an analyst at the Bank of New York raised his rating on Continental from hold to buy (*Wall Street Transcript* [March 29, 1982]). All of these are cited in FDIC, “Report on Continental Illinois.”

Table 7.2
Average Returns and Equity Ratios at the Ten Largest U.S. Banks, 1977–1981

Bank	Average ROA*	Average ROE†	Average Equity/Assets Ratio
Bank of America	0.50%	13.91%	3.57%
Bankers Trust	0.42	10.84	3.92
Chase Manhattan	0.44	11.04	4.01
Chemical Bank	0.38	10.96	3.52
Citibank	0.59	13.46	4.40
Continental Illinois	0.54	14.35	3.78
First National Bank of Chicago	0.38	9.43	3.99
Manufacturers Hanover	0.45	12.92	3.53
Morgan Guaranty	0.65	14.85	4.37
Security Pacific	0.66	14.31	4.60

*Return on assets is year-end net income divided by year-end assets.

†Return on equity is year-end net income divided by year-end equity.

it seventh out of ten; however, only three banks had ratios significantly over 4 percent. Moreover, asset and loan growth at Continental was at least matched by growth in the bank's equity ratio, which rose from 3.55 percent at year-end 1976 to 4.31 percent at year-end 1982. If there were signs of trouble, that was not obvious from Continental's earnings.

There were, however, two aspects of Continental's financial profile that, with the benefit of hindsight, were indicators of the increased risk the bank took on during its growth period. First, Continental's loans-to-assets ratio increased dramatically—from 57.9 percent in 1977 to 68.8 percent (see appendix, table 7-A.3) by year-end 1981, when it was the highest of the ten banks. This alone suggests that the bank was riskier; the greater the proportion of its portfolio a bank holds in loans, the more exposed the firm is to default risk. Second, although Continental's return on assets was adequate over this period, it hovered at around .51 percent; with a higher percentage of assets in loans, the average loan had to have been earning less at the end of the period than it had been at the beginning, implying that over time, Continental was originating loans with lower interest rates than those on the books in 1978. Given the large increase in interest rates over this same period, such a scenario indicates the bank might have adopted a below-market pricing strategy, a possibility some observers noted at the time.

As this suggests, intimations that Continental's lending style might be overly aggressive had not been altogether lacking. The bank's growth was attributed partly to its “zeal for occasional transactions that carry more than the average amount of risk.” One bank officer

stated, “We hear that Continental is willing to do just about anything to make a deal.”⁹ Another observer noted that Continental had “sold the hell out of the corporate market by taking more than the average risks in selected areas.”¹⁰ One of the most significant of those areas was the energy sector, where Continental had a long history and the bank could claim a great deal of expertise.¹¹ Continental’s growth was also perceived to stem from aggressive pricing. A published news report stated that when Continental wanted to do business with a corporation badly enough, the bank would offer “a cheap deal . . . the financial officer can’t refuse.”¹² A Chicago competitor noted in 1981 that “even with a 20% prime they were doing 16% fixed rate loans. I don’t know how they do it.”¹³ But while some were suggesting that the bank’s aggressive lending style might be too risky, few thought so before 1982, and Continental’s management dismissed such views.¹⁴

Late in 1981, however, problems were beginning to surface. The bank’s second-quarter earnings fell 12 percent, a drop that CEO Roger Anderson explained was largely the result of backing interest rates the wrong way. (It was reported that the fall would have been much greater had the bank not taken some extraordinary gains during the quarter.)¹⁵ In September 1981, Continental’s senior vice president in charge of oil and gas dismissed the 1981 drop in oil prices—which would in fact continue steadily—as “just a little blip.”¹⁶ In addition, some of Continental’s corporate customers began to have severe problems. For example, in the first six months of 1982, Nucorp Energy lost more than \$40 million, and Continental held a large portion of the company’s debt. Continental had also lent \$200 million to the near-bankrupt International Harvester, and one bank analyst suggested that Continental had “taken some bad credit gambles that aren’t paying off . . . and it is costing them now.”¹⁷ After peaking at approximately 42 in June 1981, Continental’s share price declined almost 37 percent during the next year. Many stock analysts believed the reaction was overdone and the downturn in stock price more psychological than fundamental; nevertheless, the increasing volume of nonperforming loans was viewed as at least a short-term

⁹ Both of these citations are from “Continental Sails,” 114.

¹⁰ “On the Offensive,” *The Wall Street Journal* (October 15, 1981), 1.

¹¹ See Sanford Rose, “A Well-Heeled Gambler’s Half-Hearted Reformation,” *American Banker* (August 18, 1981), 4; and Laurel Sorenson, “In the Highflying Field of Energy Finance, Continental Illinois Bank Is Striking It Rich,” *The Wall Street Journal* (September 18, 1981), 33.

¹² Neil Osborn, “Continental Illinois Shakes Up the Competition,” *Institutional Investor* 14, no. 10 (1980): 178–79.

¹³ “On the Offensive,” 1.

¹⁴ Sorenson, “Highflying Field,” 33.

¹⁵ “Banker of the Year,” 135; and Sanford Rose, “Will Success Spoil Continental Illinois?” *American Banker* (August 25, 1981), 4.

¹⁶ Sorenson, “Highflying Field,” 33.

¹⁷ Greider, *Secrets*, 522; and *The Wall Street Journal* (June 1, 1982), 1.

problem. Yet in March 1982, when Fitch's Investors Service Inc. downgraded six large banks' ratings, Continental retained its AAA rating.¹⁸

After Penn Square

Optimism about Continental's condition ended abruptly in July 1982, when Penn Square Bank, N.A., in Oklahoma failed.¹⁹ Penn Square had generated billions of dollars in extremely speculative oil and gas exploration loans, many of which were nearly worthless, and Continental had purchased a monumental \$1 billion in participations from Penn Square. While Continental and the other "upstream" banks pressed regulators to find a way to prevent a deposit payoff of Penn Square, a course that would also have been preferred by both the Federal Reserve and the OCC, the larger banks involved refused either to inject money into Penn Square or to waive their claims on the bank. The refusal to waive their claims meant that the contingent liabilities the FDIC would have incurred militated against every course except a deposit payoff.²⁰ Penn Square became the largest bank payoff in the history of the FDIC, and remained so until 1992.²¹

News of Continental's relationship with Penn Square caused great anxiety among investors, and many stock analysts quickly halved earnings estimates and downgraded their opinions on the company.²² During July the share price had dropped to nearly 16, a 62 percent decline from a year before. The major rating agencies swiftly downgraded the bank's credit and debt ratings. Continental's lending involvement with three of the largest corporate bankruptcies of 1982 helped turn perceptions of the bank increasingly negative. Such perceptions were reinforced by the advent of the less-developed-country (LDC) debt crisis brought on by Mexico's default in August 1982; Continental had significant LDC exposure.²³ The aggressiveness and loan policies that had met with so much praise during the "go-go" years were now seen in a far more critical light. The financial press began to write about faults in the bank's management, internal controls, and loan pricing.²⁴ CEO Ander-

¹⁸ Dow Jones New Service: *The Wall Street Journal* combined stories (April 20, 1982). Moody's Investors Service had downgraded Continental's debt rating from AAA to AA in March.

¹⁹ For the story of Penn Square's failure, see Chapter 9; and Phillip L. Zweig, *Belly Up: The Collapse of the Penn Square Bank* (1985).

²⁰ See Sprague, *Bailout*; and Greider, *Secrets*, 497–500.

²¹ Penn Square had \$390 million in deposits and \$436 million in assets. In 1992, there was a deposit payoff of the Independence Bank of Los Angeles (\$548 million in deposits and \$536 million in assets). Data are for the quarter before failure.

²² For example, within a month of Penn Square's failure, revised positions were taken by analysts at Keefe, Bruyette and Woods; Smith Barney Harris Upham and Co.; and Donaldson, Lufkin, Jenrette (FDIC, "Report on Continental Illinois").

²³ See Chapter 5 for a discussion of the LDC debt crisis.

²⁴ See, for example, "The Stain from Penn Square Keeps Spreading," *Business Week* (August 2, 1982), available: LEXIS, Library: NEWS, File: BUSWK; "Forgetting the Rules," *Newsweek* (August 2, 1982), available: LEXIS, Library: NEWS, File: NEEK; and "Continental Illinois' Most Embarrassing Year," *Business Week* (October 11, 1982), available: LEXIS, Library: NEWS, File: BUSWK.

son, while admitting that Continental's system had broken down, defended the bank's lending policies and stated that the bank "had no intention of pulling in its horns."²⁵

Analysts' reactions to Continental's statements about its condition were mixed, but during 1983 the stock price did gradually recover into the mid-20s. While Continental furnished an image of a sober institution dealing with its problems, the bank's mistakes had meant a loss of credibility in the domestic money markets. This was particularly significant because Continental had little retail banking business and therefore relatively small amounts of core deposits. The bank's ability to generate retail business was severely circumscribed by the combination of federal banking laws restricting geographic expansion and Illinois law strictly requiring unit banking in the state.²⁶ In 1977 core deposits made up 30 percent of total deposits; by 1981 they had declined to just under 20 percent. (See appendix, table 7-A.1.) Instead, the bank relied on fed funds and large CDs. In addition, management favored issuing shorter-term, more volatile but less-expensive instruments rather than longer-term ones that were both more stable and more expensive. Continental therefore continually needed to roll over large volumes of deposits and search for new sources of funds, but the loss of confidence due to Penn Square meant the bank had to pay substantially higher rates on its CDs. Within three weeks of Penn Square's failure, Continental removed itself from the list of top-graded banks whose CDs traded interchangeably in the secondary markets. Unable to fund its domestic operations adequately from domestic markets, Continental increasingly turned to foreign money markets (at higher rates). Its dependence on these funds would figure significantly in the bank's crisis in 1984.²⁷

During the first half of 1983 Continental's situation appeared to have stabilized somewhat, but the bank's recovery was far from certain. Although the bank apparently had made efforts to tighten its internal controls and lending procedures, its nonperforming loans continued to mount. Earnings were bolstered by a series of extraordinary gains, while operating earnings declined. One reporter noted an example of gallows humor among bank employees: "[The only] difference between Continental and the Titanic is that the Titanic had a band."²⁸ Many institutional investors were deserting the ship, including major shareholders such as U.S. Steel & Carnegie Pensions and Mathers & Co. (a Chicago-based

²⁵ McCollum, *Continental Affair*, 248.

²⁶ Concerning federal law, see the discussion in Chapter 2 on the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. Until after the Continental open-bank assistance, Illinois law prohibited branching, only permitting one "facility" within 1,500 feet and another within 3,500 yards of the main banking premises (Conference of State Bank Supervisors, *A Profile of State-Chartered Banking* [1977], 98; and *ibid.* [1986], 86).

²⁷ FDIC, "Report on Continental Illinois," 7–12.

²⁸ A. F. Ehrbar, "Toil and Trouble and Continental Illinois," *Fortune* (February 7, 1983), available: LEXIS, Library: BUSFIN, File: FORTUN.

money management firm), both of which sold their entire stock positions.²⁹ The first-quarter 1984 results confirmed Continental’s troubles: nonperforming loans increased \$400 million to a record \$2.3 billion, with more than half the increase coming from Latin American loans; if not for the sale of its profitable credit card business to Chemical for \$157 million, Continental would have reported a loss for the quarter. This news prompted Moody’s to announce yet another review of its debt ratings on Continental.³⁰ By the end of April, Continental’s share price had sunk from a post–Penn Square high of 26 in September 1983 to less than 14.

The Bank Run and Government Assistance

The deterioration in Continental’s condition and earnings, coupled with its reliance on the Eurodollar market for funding, helped make the bank vulnerable to the high-speed electronic bank run that took place in May 1984. Among the factors that caused the run to start and made stopping it difficult, rumor was prominent. On May 9, Reuters asked Continental to comment on rumors that the bank was on the road to bankruptcy; the bank condemned the story as “totally preposterous.” In addition, stories circulated that a Japanese bank was interested in acquiring Continental, or that the OCC had asked other banks and securities firms to assist Continental.³¹ Anxious overseas depositors began to shift their deposits away from Continental, and it was reported that Chicago’s Board of Trade Clearing House had done the same. In an effort to calm the situation, the Comptroller of the Currency, departing from the OCC’s policy of not commenting on individual banks, took the extraordinary step of issuing a statement denying the agency had sought assistance for Continental and noting that the OCC was unaware “of any significant changes in the bank’s operations, as reflected in its published financial statements, that would serve as the basis” for rumors about Continental.³² The run, however, continued, and by Friday May 11, Continental had had to borrow \$3.6 billion at the Federal Reserve’s discount window to make up for its lost deposits.³³ During the following weekend Continental attempted to solve its problems by

²⁹ Lynn Brenner, “Chicago Giant’s Top Holder Isn’t Fazed: Batterymarch Financial Management Still Owns 2 Million Shares,” *American Banker* (May 23, 1984), 3.

³⁰ *The Wall Street Journal* (May 2, 1984), 41.

³¹ See Jeff Bailey and Jeffrey Zaslow, “Continental Illinois Securities Plummet amid Rumors Firm’s Plight Is Worsening,” *The Wall Street Journal* (May 11, 1984), 3; Robert A Bennett, “Continental Fighting Rumors,” *The New York Times* (May 11, 1984), sec. 4, p. 1; and Sprague, *Bailout*, 152–53.

³² For the text of the OCC press release, see U.S. House, *Inquiry*, 285. It was noted that the last time the government had made such a statement had been in 1974, ten years earlier; the bank was Franklin National, and it later failed (*The Wall Street Journal* [May 21, 1984], 3).

³³ “‘Smart Money Bank’: What Went Wrong,” *The New York Times* (May 18, 1984), sec. 4, p. 15.

creating a \$4.5 billion loan package provided by 16 banks, but this proved insufficient to stop the run; Continental's domestic correspondent banks also began to withdraw funds from the bank.

As the situation continued to deteriorate, bank regulators were faced with a potential crisis that might envelop the entire banking system. The run had to be stopped, and so the three bank regulatory agencies decided to provide a \$2 billion assistance package to Continental: the FDIC provided \$1.5 billion, and participated an additional \$500 million to a group of commercial banks. The capital infusion was in the form of interest-bearing subordinated notes at a variable rate 100 basis points higher than that on one-year Treasury bills. The Federal Reserve stated that it would meet any liquidity needs Continental might have, and a group of 24 major U.S. banks agreed to provide more than \$5.3 billion in funding on an unsecured basis while a permanent solution was sought. In what was perhaps the most controversial move by the regulators, the FDIC promised to protect all of Continental's depositors and other general creditors, regardless of the \$100,000 limit on deposit insurance. The assistance package was to remain in place while the regulators searched for a permanent solution to Continental's problems.³⁴

The regulators spent two months searching for a suitable and willing merger partner for Continental, but none could be found. Moreover, the temporary assistance package had not ended deposit outflows from Continental. In July the bank regulators agreed on a complex and controversial resolution. The plan consisted of the FDIC's purchase from the bank of \$4.5 billion in bad loans. These troubled loans would then be managed for the FDIC by the bank under a servicing contract. The structure of the loan transfer involved a charge-off to the bank of \$1 billion, but the permanent assistance plan also infused \$1 billion in capital into the bank through the FDIC's acquisition of preferred stock in Continental Illinois Corporation (CIC), which the holding company was required to downstream to the bank as equity. The FDIC wanted to place the new capital directly into the bank but was prevented from doing so by outstanding indenture agreements with the holding company.³⁵ The bank also continued to receive liquidity support from the Federal Reserve, and the funding facility that had been provided by a group of U.S. commercial banks remained in place. Finally, the permanent assistance plan removed Continental's top management and board of direc-

³⁴ See OCC, FDIC and FRB, Joint News Release (May 17, 1984).

³⁵ Placing the capital in the holding company was controversial because holding company bondholders were protected, but no other avenue to effect the resolution could be found. See John Riley, "Inside the Bailout: Continental Leaves a Wide Wake," *National Law Journal* (October 22, 1984): 29. Continental's shareholders were substantially wiped out, though they did have the prospect of some return, depending on the losses the FDIC incurred under the agreement.

tors and put John Swearingen and William Ogden in place as executive officers of CIC and CINB, respectively.³⁶ In September Continental’s shareholders approved the plan.³⁷

Policy Implications: Supervision

Continental continued in existence, though as a substantially different entity, but both the need for intervention as well as the character of the intervention highlighted several important policy debates. Even if one did not take issue with the regulators’ permanent solution (and many did), the effectiveness of the OCC’s supervisory activities before the Continental assistance plan remained open to question. There was little doubt that the bank’s management had embarked on a growth strategy built on decentralized credit evaluation unconstrained by any adequate system of internal controls and that the bank had relied on volatile funds. But how well had the responsible bank regulators assessed Continental’s situation, and should they have been more assertive in requiring the bank to change its lending and other high-risk practices?

A staff report of the House Banking Subcommittee in 1985 expressed reservations about both the OCC’s and the Federal Reserve’s supervision of Continental. Among its criticisms, the report found that the OCC failed to take “decisive action” to slow the bank’s growth or increase its equity-to-assets ratio before 1983 and failed to require Continental to remedy known problems in its loan management system before 1982. The report also held that despite the OCC’s awareness of Continental’s growing concentrations in oil and gas, the agency did not “consistently and forcefully” point out potential dangers to management, and that OCC examination reports in general were too ambiguous to provide a clear message to the bank about its problems. The OCC’s sampling technique for loan evaluation was also thought to be insufficient in the case of Continental because it relied too much on the bank’s own internal controls, which in this case were themselves woefully deficient. The report criticized the Federal Reserve on the grounds that although its supervision of the holding company identified potential risks from the reliance on volatile funding, the agency did not communicate these warnings consistently over time. The report also noted that the

³⁶ See OCC, FDIC, FRB, “Permanent Assistance Program for Continental Illinois National Bank and Trust Company,” PR-87-84 (July 26, 1984).

³⁷ As of 1997, the estimated cost to the FDIC of resolving Continental is approximately \$1.1 billion. At this writing, a small number of assets are still to be disposed of, but are not expected to change the final cost significantly. Although many criticized the Continental resolution, the FDIC’s estimated cost was considerably smaller than the costs for First Republicbank Corp. (\$3.77 billion) and MCorp-Dallas (\$2.85 billion). Moreover, if one considers estimated losses as a percentage of assets, Continental (3.27 percent) ranks behind Texas American Bancshares (22.67 percent), MCorp (18.12 percent), First Republic (11.69 percent), First City Bancorporation [its 1988 failure] (9.55 percent), New Hampshire Savings Bank (9.55 percent), Goldome Federal Savings Bank (9.24 percent), CrossLand Federal Savings (7.50 percent), and Bank of New England Corp. (3.40 percent). These percentages are calculated using asset size either at the time of closure or at the time of the assistance transaction, whichever is applicable.

Federal Reserve's continuing approval of the holding company's applications to expand its activities—despite numerous examinations containing critiques of the bank's capitalization, asset quality, and funding—"may have conveyed to CIC and the public that the Federal Reserve basically approved of the operating and financial characteristics" of both the holding company and the bank.³⁸

C. T. Conover, the Comptroller of the Currency, noted in his testimony before Congress in 1984 that the OCC had considered whether the agency ought to have taken action as early as 1976 to stop Continental from implementing its growth strategy. Conover said he believed that this would have been inappropriate but that the OCC could have placed "more emphasis on . . . evaluation and criticism of Continental's overall management processes."³⁹ This issue touches on a central quandary that bank regulators faced. On the one hand, as Federal Reserve Board General Counsel Michael Bradfield noted, "The real failure of supervision [was that] . . . nobody did anything about Continental in the late seventies and early eighties," but on the other hand, as Federal Reserve Board Governor Charles Partee pointed out, "To impose prudential restraints is meddlesome and it restricts profits. If the banking system is expanding rapidly, if they can show they're making good money by the new business, for us to try to be too tough with them, to hold them back, is just not going to be acceptable."⁴⁰

A different situation obtained, however, after Penn Square had made Continental's shortcomings obvious. Conover noted that in 1983, at the OCC's direction, Continental had entered into a formal agreement with the agency requiring the bank to deal with problems in asset and liability management, loan administration, and funding. Continental's plan called for a reduction in assets and a more conservative lending policy. The OCC believed that management and organizational changes to help recovery were being implemented but that economic conditions, such as rising interest rates and a continuing decline in the energy sector, made the plan's goals unachievable. This further deterioration was noted in the 1983 OCC examination of Continental, when the bank's composite CAMEL rating slipped to a 4.⁴¹ The bank's decline continued, and Conover stated that at that point there was little the regulators could have done to increase market confidence in the bank in a manner that would have changed the outcome in May 1984.

³⁸ U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, *Continental Illinois National Bank: Report of an Inquiry into Its Federal Supervision and Assistance, Staff Report*, 99th Cong., 1st sess., 1985, 7–10.

³⁹ U.S. House, *Inquiry*, 212–13.

⁴⁰ Cited in Greider, *Secrets*, 524–25.

⁴¹ The CAMEL rating system refers to capital, assets, management, earnings, and liquidity. In addition to a rating for each of these individual or "component" categories, an overall or "composite" rating is given for the condition of the bank. Banks are assigned ratings between 1 and 5, with 5 being the worst rating a bank can receive. See Chapter 12 for a detailed explanation of CAMEL ratings.

The Comptroller noted that removing the bank’s top management following Penn Square was viewed as unnecessary—management was perceived as capable and had put a program in place to correct problems within the bank; moreover, the officers directly responsible for Continental’s Penn Square difficulties had been removed. Forcing Continental to cease dividend payments was another option, but the bank’s management and board of directors felt the dividend was crucial to regaining market confidence, and in any case the amount of money involved would not have added appreciably to the bank’s capital. Conover stated that after mid-1982 “there was nothing more that we could have done to speed Continental’s recovery.”⁴²

A later account by William Greider, however, suggests that the regulators did informally attempt to do more after Penn Square but believed it inadvisable to impose a formal action, such as a cease-and-desist order. According to Greider, in 1982 Federal Reserve Board Chairman Paul Volcker advised Continental’s directors to make changes in both management and lending policy, but the directors refused. FDIC Chairman William Isaac remembered that “when Volcker and Conover presented their recommendations to the Continental Illinois directors, . . . the directors said to them: ‘Well, this will be the end of the bank and you will be to blame.’” Isaac noted that it would have been difficult for a regulator to proceed in the face of the directors’ refusal. “It takes real gumption for a regulator to sit there and say, ‘I’ll take the responsibility. . .’ We’re talking about one of the biggest banks in the world. No one knows what will happen.” Michael Bradfield made the same point about any Federal Reserve attempt to deny a bank access to the discount window as a way of forcing its hand, noting that “the consequences of refusing to supply liquidity support to a bank are too severe.” It appears, therefore, that in 1982 regulators believed more should have been done but were unwilling openly to require the removal of Continental’s top management or take other formal actions, such as demanding a dividend cut. However, it also seems likely that, as Bradfield noted, by the time Penn Square failed, the damage had already been done.⁴³

Policy Implications: “Too Big to Fail”

Just as Continental’s supervision had raised fundamental questions about regulatory policy, so did the bank’s resolution. Some critics objected simply to the notion of a government agency’s acquiring 80 percent ownership in a bank—the word “nationalization”

⁴² U.S. House, *Inquiry*, 211.

⁴³ Greider, *Secrets*, 522–25. William Isaac noted that “what should have been done right away was the board of directors should have fired the management, brought in strong management from outside, taken a huge loan write-off and eliminated its dividend to stockholders. They might have failed anyway, but . . . there was a substantial chance they could [have] survive[d]” (Greider, *Secrets*, 522).

was often invoked to describe the assistance package.⁴⁴ Others objected to the methods adopted in this case: the combination of the FDIC guarantee of protection to all depositors and creditors, the apparent possibility that Continental shareholders might retain some of their investment, and the protection of CIC's bondholders. Overarching all of these issues and far outlasting the immediate aftermath was the question of whether certain banks were "too big to fail." If they were, then the obvious corollary was that most banks were not, and this pointed up what many believed to be a significant inequity in the deposit insurance system.⁴⁵

Until 1950, the FDIC had basically had two options in dealing with failed and failing banks: close the institution and pay off the insured depositors, or arrange for the bank's acquisition. After 1950, a third option was available if the FDIC Board of Directors deemed a bank "essential" to its community: keep a failing bank open through direct infusion of funds (as was done with Continental).⁴⁶ Also after 1950, and until the passage of the Federal Deposit Insurance Corporation Improvement Act of 1991, the FDIC operated under a cost test for determining which method to use: it was required to estimate the cost of a pay-off and liquidation as the standard of comparison, and could adopt an alternative resolution if the alternative was expected to be less costly than the standard. But the FDIC was also allowed to use an alternative method under the essentiality provision, and the statutory language was sufficiently general to provide the FDIC with discretion to extend essentiality beyond local economic dislocation (as was done with Continental).⁴⁷ When essentiality was invoked, cost considerations could be ignored. In practice, most larger bank failures were handled by purchase-and-assumption (P&A) transactions rather than payoffs, and the

⁴⁴ Bank analyst David Cates, however, noted at the time that the fact that the FDIC shares would have voting rights only after they were sold indicated the FDIC wanted to return the bank to the private sector as soon as possible, so nationalization was not the most accurate term to describe the assistance package ("All Debits, No Credits: A Hard Look at the Government's Takeover of Continental Illinois," *Barron's* [July 30, 1984]: 6).

⁴⁵ There was a correlation between bank size and resolution method. During the period 1986–91, for example, the average asset size of institutions that were resolved by insured-deposit payoff and liquidation was approximately \$65 million, whereas the average asset size of institutions that were resolved through either acquisition or open-bank assistance, both of which meant uninsured depositors were protected, was about \$200 million (FDIC, *Failed Bank Cost Analysis 1986–1995* [1996], 11).

⁴⁶ See §13(c)(1) of the Federal Deposit Insurance (FDI) Act, 12 U.S. Code §1823(c)(1). When this change was made to the law, the FDIC noted that it was "the intent of the Corporation to exercise this authority sparingly" (FDIC, *Annual Report* [1950], 6); and indeed, it was not invoked until 1970, and since then has been used relatively infrequently.

⁴⁷ See the FDI Act, §13(c). For a discussion of the history of the essentiality issue, see Henry Cohen, "Federal Deposit Insurance Corporation Assistance to an Insured Bank on the Ground That the Bank Is Essential in Its Community," Congressional Research Service, Library of Congress (October 1984), 8. Cohen notes that before Continental, essentiality had been used five times, all of them between 1971 and 1980: Unity Bank and Trust (Boston, MA 1971), the Bank of the Commonwealth (Detroit, MI 1972), the American Bank and Trust Company (Orangeburg, SC 1974), the Farmers Bank of the State of Delaware (Wilmington, DE 1976), and First Pennsylvania Bank, NA (Philadelphia, PA 1980).

uninsured depositors were protected.⁴⁸ The FDIC recognized the inequities of its practice, but also desired to minimize local economic disruptions. Thus it often selected a resolution method that protected all deposits even with smaller banks if allowed under the cost test.⁴⁹ Overall, the FDIC weighed the particular circumstances in deciding on failure-resolution methods, and for the most part this meant that when uninsured depositors suffered losses, it was in smaller institutions—a practice that created incentives for depositors to place large deposits in larger banks, and that fueled concern over TBTF.

As has been noted, however, TBTF was an inaccurate term: “too big to liquidate” would have been more appropriate. Large banks did fail during the period, with shareholders losing their investments and managements being removed. In significant ways, Continental “failed.” But as one regulator observed, the banking agencies were “reluctant to tolerate the sudden and uncontrolled failure of large institutions and therefore generally opt[ed] for managed shrinkage, merger, or recapitalization.”⁵⁰ There were several reasons for adopting such an attitude, the most important of which was “systemic risk.” This rubric covered “potential spillover effects leading to widespread depositor runs, impairment of public confidence in the broader financial system, or serious disruptions in domestic and international payment and settlement systems.”⁵¹ In addition to systemic risk, the logistical difficulties and potential expense of liquidating a large bank also contributed to regulatory reluctance to close such a bank and pay off insured depositors. Moreover, liquidation would mean tying up uninsured depositors’ funds during the lengthy proceedings, a situation that could have a very disruptive effect on a bank’s community.⁵² For all these reasons combined, the larger the bank, the more likely it was that bank regulators would look for alternatives to closing the bank and paying off the insured depositors.

⁴⁸ In a P&A, all deposits and other nonsubordinated liabilities of the failed bank are assumed by another institution. Even without the too-big-to-fail policy, it is likely that large banks would have been resolved more often through P&As than through deposit payoffs because they had greater franchise value and marketability. The latter may have stemmed from large banks’ (1) greater flexibility in seeking new markets and offering new product lines, (2) location in states where the absence of restrictions on geographic expansion meant a greater number of qualified bidders, and (3) earlier resolution action (to the extent that disclosure requirements applicable to publicly traded companies alerted regulators to problems at an earlier stage).

⁴⁹ FDIC, “Systemic Risk (Too Big to Fail)” (unpublished paper), 1995.

⁵⁰ E. Gerald Corrigan, “A Perspective on Recent Financial Disruptions,” Federal Reserve Bank of New York *Quarterly Review* 14, no. 4 (winter 1989–90): 12.

⁵¹ Statement of John P. LaWare, U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Economic Stabilization, *Economic Implications of the “Too Big to Fail” Policy: Hearing*, 102d Cong., 1st sess., 1991, 113. Cited in Charles Moyer and Robert E. Lamy, “‘Too big to fail’: Rationale, Consequences and Alternatives,” *Business Economics* 27, no. 3 (1992): 21.

⁵² *Ibid.* For other discussions of TBTF, see Walker F. Todd, “An Insider’s View of the Political Economy of the Too Big to Fail Doctrine,” working paper 9017, Federal Reserve Bank of Cleveland, 1990; and Robert L. Hetzel, “Too Big to Fail: Origins, Consequences, and Outlook,” Federal Reserve Bank of Richmond *Economic Review* 77, no. 6 (November/December 1991): 6ff.

Regulators had another concern besides inequity and local economic disruption. They and industry observers worried that the perception of de facto 100 percent deposit insurance for many banks led depositors to believe they needed to devote little if any attention to where they placed their money, a situation that could induce some banks to take excessive risks. But some commentators thought moves to increase depositor discipline flew in the face of “too big to fail”; the issue of depositor discipline therefore became attached to the TBTF debate. During the early 1980s, the FDIC did seek ways to increase market discipline as a means of controlling inordinate risk taking. A solution proposed in 1983 was the creation of the so-called modified payoff. In such a resolution, insured depositors’ claims would be settled as they always had been. Rather than being made whole, however, other claimants would receive a proportion of their money based on an estimate of the total value of bank assets that would have been recovered in a liquidation. The agency expected that both the insured-deposit settlement and the “advance” could be handled by transfer to an operating institution.⁵³ The FDIC began to experiment with the method in 1983 and used it in 13 resolutions in 1983–84, most of which took place in March and April 1984, just before the Continental assistance package was put in place.⁵⁴ The experiments had been viewed as possibly leading to regular use of the method, but the Continental assistance package effectively ended the modified payoff as a means to instill market discipline.⁵⁵ Almost a year after Continental, the FDIC sought public comment on the possible use of modified payoffs in all resolutions, but it did not pursue the policy at that time.⁵⁶

With regard to Continental Illinois, the regulators’ greatest concern was systemic risk, and therefore handling Continental through a payoff and liquidation was simply not considered a viable option. Continental had an extensive network of correspondent banks, almost 2,300 of which had funds invested in Continental; more than 42 percent of those banks had invested funds in excess of \$100,000, with a total investment of almost \$6 billion. The FDIC determined that 66 of these banks, with total assets of almost \$5 billion, had more than 100 percent of their equity capital invested in Continental and that an additional 113 banks with total assets of more than \$12 billion had between 50 and 100 percent of their equity capital invested.

⁵³ FDIC, *Deposit Insurance in a Changing Environment* (1983), III-4-5. See also William Isaac, address before the Management Conference of the National Council of Savings Institutions (FDIC PR-92-83, December 6, 1983).

⁵⁴ See Eugenie D. Short, “FDIC Settlement Practices and the Size of Failed Banks,” *Federal Reserve Bank of Dallas Economic Review* (March 1985): 19.

⁵⁵ FDIC, *Mandate for Change: Restructuring the Banking Industry* (1987), 112. For the reaction of a depositor (after the Continental assistance package) at a bank resolved through the modified payoff, see Pam Belluck, “Continental Illinois Rescue May Doom FDIC Plan to Share the Insurance Risk,” *National Journal* (August 11, 1984), available: LEXIS, Library: BANKING, File: NTLJNL.

⁵⁶ *Federal Register* 50 (May 6, 1985): 19088.

The House Banking Committee staff found that this analysis—inasmuch as it did not take into account either the \$100,000 payment on insured deposits or the banks’ likely recovery from the disposition of Continental’s assets—overstated the true exposure of the creditor institutions and thus the numbers of correspondent banks that fell into the above-mentioned categories. In reply, FDIC Chairman William Isaac noted that the FDIC had never suggested that all these banks would fail but that these small banks would probably have lost more than \$1 billion and that such losses would have led to a number of failures. In addition, the assets involved would have been frozen while the bank was liquidated, and liquidation is a protracted process.⁵⁷

The potential impact on the correspondent banks was not the only problem. Regulators were afraid of ripple effects on other large institutions that were perceived to be in vulnerable financial condition, banks such as First Chicago, Manufacturers Hanover, and Bank of America. The financial markets’ worry about such banks was amply demonstrated just a week after the Continental assistance package was announced, when rumors about funding difficulties at Manufacturers Hanover caused its share price to drop 11 percent in one day, with other major banks’ shares falling as a result.⁵⁸ Regulators feared that if Continental were allowed to close, a series of large institutions might be next; given this perception, open-bank assistance under the “essentiality” clause was viewed as the only viable option.⁵⁹

The Continental assistance package sharpened the public’s focus on TBTF, and not only because the bank’s size ensured notoriety. C. T. Conover’s statement before Congress that regulators would be unable to do a deposit payoff of the 11 largest banks seemed an explicit confirmation that large banks were inherently treated differently from smaller ones.⁶⁰ Even if this appeared to codify TBTF, it should be noted that many of the characteristics of Continental’s resolution most relevant to TBTF were not unique to Continental. The FDIC had assisted a large bank before: only four years earlier, it had provided assistance in the form of a \$325 million loan to First Pennsylvania, a \$9 billion institution. Nor was the controversial guarantee that all depositors would be protected a novelty: the FDIC had made the same promise in the case of Greenwich Savings Bank in 1982.⁶¹ Except for the FDIC’s

⁵⁷ U.S. House, *Inquiry*, 435–36, 444–45, 471–73.

⁵⁸ Greider, *Secrets*, 626–27, 632–33.

⁵⁹ For FDIC memos on FDI Act §13(c)(2) assistance under the essentiality provision, see U.S. House, *Inquiry*, 522–25. Stanley C. Silverberg notes that another factor militated against a deposit payoff in the case of Continental: that “the FDIC did not have the system and capability to pay off Continental’s depositors in a reasonable time period and without looking incompetent.” See volume 2 of this study.

⁶⁰ While noting that he would have preferred it to be otherwise, Conover admitted there was then no mechanism for treating large and small banks “in a consistent way that is fair to them,” and he essentially agreed that the regulators could not allow any of the money-center banks to be liquidated in a payoff as they might allow smaller institutions to be (U.S. House, *Inquiry*, 299–300).

⁶¹ See Chapter 6.

involvement as primary shareholder in the resurrected bank, the steps taken in the Continental assistance package were not really unprecedented.

TBTF after Continental

Despite reservations on the part of both regulators and industry about whether TBTF should be used, it remained in place into the 1990s, when its most famous exemplar was the resolution of three banking subsidiaries of the Bank of New England Corporation (BNEC), with total assets (at the time of failure) of \$21.9 billion, in January 1991.⁶² Although questions about unfairness and depositor discipline remained, the increasingly parlous state of the Bank Insurance Fund and the attendant increases in deposit insurance premiums made the issue more urgent, and attempts to restrict the policy formed an important part of the debate over FDICIA. Some members of Congress wanted to prohibit the government from protecting uninsured depositors altogether, but most regulators as well as many legislators, though wanting to limit the application of TBTF, favored retaining regulatory flexibility to deal with the relatively rare problem of systemic risk.⁶³ All depositors in some large banks would need to be protected, Federal Reserve Board Chairman Alan Greenspan noted, “in the interests of macroeconomic stability,” but there would “also be circumstances in which large banks fail with losses to uninsured depositors but without undue disruption to financial markets.”⁶⁴

FDICIA as enacted essentially took this road, attempting to place limits on regulatory activities associated with TBTF but still leaving regulators the ability to invoke it under certain circumstances.⁶⁵ FDIC resolutions were now required to proceed according to a “least-cost” test, which would mean that uninsured depositors would often have to bear losses. The FDIC was prohibited from protecting any uninsured deposits or nondeposit bank debts in cases in which such action would increase losses to the insurance fund. One important effect of the least-cost provision was that the FDIC would not be able to grant open-bank assistance unless that course would be less costly than a closed-bank resolution; thus FDICIA limited the discretion the agency had exercised under the old cost test and essentiality provisions of the FDI Act. These changes have had a significant effect on the protection of

⁶² TBTF, specifically defined as the invocation of the essentiality clause with regard to an institution, was actually used only three times between the resolutions of Continental and BNEC. The other cases were First National Bank and Trust Company of Oklahoma City (\$1.6 billion in assets) in 1986, First Republicbank of Dallas (\$32.2 billion in assets) in 1988, and MCorp of Houston (\$15.7 billion) in 1989 (assets are as of time of failure). See U.S. House, *Economic Implications*, 83. For a discussion of BNEC, see Chapter 10.

⁶³ See *BNA's Banking Report*, 56, no. 18 (May 6, 1991): 853ff., and no. 19 (May 13, 1991): 910ff. See also statements by L. William Seidman, Robert Clarke, and John LaWare, U.S. House, *Economic Implications*.

⁶⁴ *Congressional Quarterly* (May 11, 1991): 1174.

⁶⁵ For a discussion of the post-FDICIA period, see Larry D. Wall, “Too-big-to-fail after FDICIA,” *Federal Reserve Bank of Atlanta Economic Review* 78, no. 1 (January/February 1993): 1–14.

uninsured depositors. From 1986 through 1991, 19 percent of bank failure and assistance transactions resulted in the nonprotection of uninsured depositors. From 1992 through 1994, the figure rose to 62 percent. On the basis of total assets, the average percentage of uninsured depositors suffering a loss was 12.3 percent from 1986 through 1991, but from 1992 through 1994 it increased to 65 percent.⁶⁶

The law made an exception to the least-cost requirement in cases of systemic risk, but provided for a specific decision-making process to increase governmental accountability and limit the application of the exception. At least two-thirds of both the FDIC Board of Directors and the Board of Governors of the Federal Reserve must recommend that an exception be made, and this recommendation must then be acted upon by the secretary of the treasury in consultation with the president.⁶⁷ The General Accounting Office then reviews any such actions taken and reports its findings to Congress. In addition, FDICIA establishes a relationship between a bank's capitalization and the Federal Reserve's ability to provide assistance through the discount window: for critically undercapitalized banks, the Federal Reserve has to demand repayment within no more than five days, and if that limit is violated the Federal Reserve is liable for increased costs to the FDIC. As one economist who has recently examined FDICIA notes, the law clearly moves toward the elimination of TBTF as an operating principle and it gives the accountable agencies political incentives to avoid resorting to the systemic-risk exception. He concludes by observing that “although FDICIA does not ban the too-big-to-fail doctrine, it has substantially reduced the likelihood of future large bank bailouts.”⁶⁸

Conclusion

The crisis at Continental Illinois highlighted concerns about both large-bank supervision and large-bank failure and resolution. Given the regulators' anxiety about Continental's correspondent banks and their worries about overall systemic risk, it was very unlikely they would have pursued a course different from the one taken in 1984. Regulatory options were further limited by Continental's peculiar characteristics: although very large, it had proportionately few core deposits, no retail branches, and little franchise value. The Continental assistance package brought debate over TBTF to the fore, and although regulators would have preferred otherwise (a preference that did not mean regulators had a solution to

⁶⁶ FDIC, *Failed Bank Cost Analysis* (1996), 10–11.

⁶⁷ If the systemic-risk exception is invoked, the FDIC must “expeditiously” recover the loss to the appropriate insurance fund through one or more special assessments on the members of the insurance fund of which the relevant institution is a member. (The assessment is to be equal to the product of an assessment rate established by the FDIC and “the amount of each member's average total assets during the semiannual period, minus the sum of the amount of the member's average total tangible equity and the amount of the member's average total subordinated debt.”) See Public Law 102-242, §141(a).

⁶⁸ Wall, “Too-big-to-fail after FDICIA,” 11.

put in its place), TBTF essentially remained in place until addressed by law in 1991.⁶⁹ Nevertheless, after Continental there were some significant changes as the banking agencies acquired greater experience with large-bank failures. For example, regulators were given more flexibility, which allowed them to deal with large-bank failures more efficiently. The most important addition to the regulatory arsenal was the bridge-bank authority granted by Congress in 1987.⁷⁰ Moreover, without addressing TBTF directly, by the late 1980s regulators were no longer, in L. William Seidman's words, "as solicitous of the interests of the bank's owners and bondholders" as they had been in the case of Continental. This changed policy had partly evolved by the time of the First City Bancorporation assistance in 1988, and was clearly evident in the case of First Republic, also in 1988, when FDIC money was channeled directly into the banking subsidiaries and not into the holding company.⁷¹ By the early 1990s, many of the issues surrounding TBTF had been addressed under FDICIA, but the problem of systemic risk remains, as does the question of how regulators would respond today to a dilemma similar to the one they confronted in May 1984.

⁶⁹ One effort to try to get beyond TBTF was described by Seidman, who noted that E. Gerald Corrigan, president of the Federal Reserve Bank of New York, proposed that regulators use a policy of "constructive ambiguity" to prevent any institution or its depositors from being certain they would be protected under TBTF. Seidman stated that although regulators agreed to follow such a course, "the markets knew that the largest institutions would always be known as too big to fail" (Seidman, *Full Faith and Credit*, 150).

⁷⁰ See the section on CEBA in Chapter 2.

⁷¹ Seidman, *Full Faith and Credit*, 143–54.

Appendix

Table 7-A.1

**Continental Illinois National Bank and Trust:
Consolidated Statement of Condition, 1977–1983
(\$Millions)**

	1977	1978	1979	1980	1981	1982	1983
ASSETS							
Interest-Bearing Deposits	\$ 3906	\$ 738	\$ 3883	\$ 4016	\$ 4992	\$ 1819	\$ 3483
Securities	2759	2635	2896	2817	2482	3009	2175
Loans and Leases	14462	17489	21871	25725	31071	32185	30103
Selected Loan Categories							
Commercial Loans	5618	7120	9339	10980	14272	16183	14350
Real Estate Loans	555	869	1645	1926	2584	3092	3284
Foreign Office Loans	3672	4376	5502	7310	8337	7287	6640
LESS: Reserve for Loan Losses	154	173	191	225	265	364	368
Fed Funds and Reverse Repos	183	362	308	416	494	434	665
Total Earning Assets	21157	24050	28769	32749	38774	37083	36059
Cash and Due from Banks	2740	3904	3337	4359	2512	2189	2559
Other Assets	1078	1984	2188	3179	3860	2028	2052
Total Assets	24975	29938	34294	40287	45156	41300	40670
LIABILITIES							
Core Deposits	5581	6009	6254	6242	5822	6404	6595
Large Time Deposits	4525	6117	6260	7371	9174	6234	6836
Foreign Office Deposits	8337	8767	11222	13497	14884	15741	16442
Fed Funds and Repos	4403	5152	5914	7257	7886	5893	4811
Other Borrowings	256	1151	1247	1475	1917	3340	2041
Other Liabilities	772	1516	1997	3901	3685	1652	1905
Total Liabilities	23874	28712	32934	38743	43370	39521	38839
Total Equity Capital	1102	1226	1360	1544	1776	1779	1831
Total Liabilities and Capital	24975	29938	34294	40287	45146	41300	40670
Average Total Assets	\$22892	\$26359	\$32035	\$37846	\$42320	\$44084	\$39020

Table 7-A.2
Continental Illinois National Bank and Trust:
Consolidated Statement of Income, 1977–1983
 (\$Millions)

	1977	1978	1979	1980	1981	1982	1983
INTEREST INCOME							
Interest on Deposits	\$ 217	\$ 293	\$ 430	\$ 615	\$ 722	\$ 487	\$ 209
Securities Income	162	165	199	253	253	223	183
Interest and Fees on Loans and Leases	1012	1469	2346	3315	4661	4585	3404
Interest on Fed Funds and Reverse Repos	12	39	62	66	81	46	28
Total Interest Income	1402	1967	3036	4248	5716	5342	3825
INTEREST EXPENSE							
Interest on Large Time Deposits	183	335	495	692	1138	880	324
Interest on Other Deposits (incl. Foreign)	495	703	1233	1668	2178	2323	1932
Interest on Fed Funds and Repos	255	398	676	1041	1390	1054	508
Interest on Other Borrowings	17	28	72	132	224	229	234
Total Interest Expense	951	1465	2475	3532	4929	4485	2998
NET INTEREST INCOME	451	502	561	716	787	856	827
OPERATING INCOME							
Non-Interest Income	115	149	188	234	284	306	359
Overhead Expense	310	374	451	539	605	648	691
Provision for Loan Losses	52	57	65	91	114	477	359
Pre-Tax Operating Income	205	221	233	320	352	38	137
Income Taxes (Credit)	64	62	51	101	116	(34)	34
NET OPERATING INCOME	141	159	182	218	236	72	103
Securities Gains (Losses)	(2)	(1)	2	1	(5)	(2)	1
NET INCOME	139	158	184	219	231	70	104
Dividends Upstreamed	50	34	50	30	0	62	50

Table 7-A.3.
Continental Illinois National Bank and Trust:
Financial Ratios, 1977–1983

	1977	1978	1979	1980	1981	1982	1983
Ratio to Total Assets of:							
ASSETS							
Interest-Bearing Deposits	15.64	12.49	11.32	9.97	11.06	4.40	8.56
Securities	11.05	8.80	8.44	6.99	5.50	7.29	5.35
Loans and Leases	57.91	58.42	63.78	63.85	68.81	77.93	74.02
Selected Loan Categories							
Commercial Loans	22.49	23.78	27.23	27.25	31.61	39.18	35.28
Real Estate Loans	2.22	2.90	4.80	4.78	5.72	7.49	8.07
Foreign Office Loans	14.70	14.62	16.04	18.14	18.46	17.64	16.33
LESS: Reserve for Loan Losses	0.62	0.58	0.56	0.56	0.59	0.88	0.90
Fed Funds and Reverse Repos	0.73	1.21	0.90	1.03	1.09	1.05	1.64
LIABILITIES							
Core Deposits	22.35	20.07	18.24	15.49	12.89	15.51	16.22
Large Time Deposits	18.12	20.43	18.25	18.30	20.32	15.09	16.81
Foreign Office Deposits	33.38	29.28	32.72	33.50	32.96	38.11	40.43
Fed Funds and Repos	17.63	17.21	17.24	18.01	17.46	14.27	11.83
Other Borrowings	1.03	3.84	3.64	3.66	4.25	8.09	5.02
Other Liabilities	3.09	5.06	5.82	9.68	8.16	4.00	4.68
Total Liabilities	95.59	95.90	96.03	96.17	96.04	95.69	95.50
Total Equity Capital	4.41	4.10	3.97	3.83	3.93	4.31	4.50
Ratio to Total Average Assets of:							
INTEREST INCOME							
Interest on Deposits	0.95	1.11	1.34	1.63	1.71	1.10	0.54
Securities Income	0.71	0.63	0.62	0.67	0.60	0.51	0.47
Interest and Fees on Loans and Leases	4.42	5.57	7.32	8.76	11.01	10.40	8.72
Interest on Fed Funds and Reverse Repos	0.05	0.15	0.19	0.17	0.19	0.10	0.07
Total Interest Income	6.12	7.46	9.48	11.22	13.51	12.12	9.80
INTEREST EXPENSE							
Interest on Large Time Deposits	0.80	1.27	1.55	1.83	2.69	2.00	0.83
Interest on Other Deposits (incl. Foreign)	2.16	2.67	3.85	4.41	5.15	5.27	4.95
Interest on Fed Funds and Repos	1.11	1.51	2.11	2.75	3.28	2.39	1.30
Interest on Other Borrowings	0.07	0.11	0.22	0.35	0.53	0.52	0.60
Total Interest Expense	4.15	5.56	7.73	9.33	11.65	10.17	7.68
NET INTEREST INCOME (NIM)	1.97	1.90	1.75	1.89	1.86	1.94	2.12
OPERATING INCOME							
Non-Interest Income	0.50	0.57	0.59	0.62	0.67	0.69	0.92
Overhead Expense	1.35	1.42	1.41	1.42	1.43	1.47	1.77
Provision for Loan Losses	0.23	0.22	0.20	0.24	0.27	1.08	0.92
Pre-Tax Operating Income	0.90	0.84	0.73	0.85	0.83	0.09	0.35
Income Taxes (Credit)	0.28	0.24	0.16	0.27	0.27	-0.08	0.09
NET OPERATING INCOME	0.62	0.60	0.57	0.58	0.56	0.16	0.26
Return on Assets (ROA)	0.61	0.60	0.57	0.58	0.55	0.16	0.27
Return on Equity (ROE)	12.61	12.89	13.53	14.18	13.01	3.93	5.68

Chapter 8

Banking and the Agricultural Problems of the 1980s

Introduction

Agricultural markets severely deteriorated in the 1980s, with attendant effects on agricultural banks. The roots of the deterioration lay in the events of the previous decade. In the early 1970s the demand for farm commodities significantly increased; the increased demand caused farm prices to grow at a much faster rate than expenses; and farm income therefore began rising rapidly. By 1973, real farm income had reached a record high of \$92.1 billion, nearly double the \$48.4 billion of three years earlier.¹ The combination of rising farm income and high inflation caused the value of farmland to escalate, while at the same time a ready availability of credit caused farm debt to rise sharply. In the late 1970s, however, the boom period came to an end: interest rates soared after the Federal Reserve Board tightened monetary policy to fight inflation, and changing conditions in worldwide supply and demand caused export demand for farm commodities to decrease sharply. Real farm income fell to \$22.8 billion in 1980 and to \$8.2 billion in 1983; and in 1981 prices for farmland began a dramatic contraction.²

The financial performance of banks with a large proportion of farm loans generally coincides with the performance of the farm economy. Loan demand usually increases as farm income grows; and the volume of nonperforming loans and loan losses expands when the farm sector is in a downturn. The correlation between the farm economy and banks in the agricultural sector continued to hold true during the 1980s. Events in the farm economy were reflected in farm bank failures in 1981 and 1985: in 1981 only 1 agricultural bank was

¹ Kevin L. Kliesen and R. Alton Gilbert, "Are Some Agricultural Banks Too Agricultural?" Federal Reserve Bank of St. Louis *Review* 78, no. 1 (January/February 1996): 26.

² Ibid.

among the nation's 10 bank failures, but in 1985, 62 agricultural banks failed, accounting for over half of the nation's bank failures that year.³

In this chapter we examine, first, the farm economy of the 1970s and 1980s: the history and causes of the agricultural boom-and-bust cycle of those two decades, and the degree to which forecasts accurately predicted the problems that arose. Next we survey the various nonbank sources of farm credit, and then we examine the effect the downturn in the farm economy had on the banking system—more particularly, on institutions with sizable holdings of farm loans. Finally, we analyze financial data for agricultural banks and compare them with data for small non-agricultural banks.

The Agricultural Cycle in the 1970s and 1980s

Agriculture is by nature a cyclical industry. The cycle in its most simplistic form traces the following course: when crops are plentiful, prices drop, so plantings are reduced the next year. The attendant reduction in supply then generally causes prices to rise. The higher prices lead to increased plantings and excessive production; prices decline; and the cycle repeats itself. Obviously, external forces may affect this pattern. For example, studies conducted by Louis M. Thompson, emeritus associate dean of agriculture at Iowa State University, suggest that there is a global weather pattern which, in his opinion, drives the economic cycle in agriculture.⁴ Or some event may alter the economic outlook, providing new opportunities for profits. When that happens, the opportunities may be seized and sometimes are overdone to such an extent that the usual agricultural cycle is transformed into a cycle of speculative excess followed by a reaction of crisis and panic. (Such speculative cycles have been common historical occurrences.)⁵ In the speculative, or manic, phase, characteristically individuals with wealth or credit employ available funds to purchase financial assets. The unsustainable prices may persist for years, but eventually they reverse themselves.⁶ Few of the participants in such speculative bubbles are able to anticipate reversals perfectly and therefore cannot avoid substantial losses when the bubble bursts.

Agriculture went through such a period of speculative excess in the 1970s and then encountered significant problems—the reversal—in the 1980s. This boom/bust cycle was vastly different from the usual agricultural ups and downs. Indeed, the dynamic was far more reminiscent of a speculative bubble than a “normal” agricultural cycle.

³ An agricultural bank is defined as a bank in which farm loans make up 25 percent or more of total loans.

⁴ See Louis M. Thompson, “The Boom and Bust Cycle in the Agricultural Economy,” *Journal of Agricultural Lending* 2, no. 2 (summer 1988): 20–21.

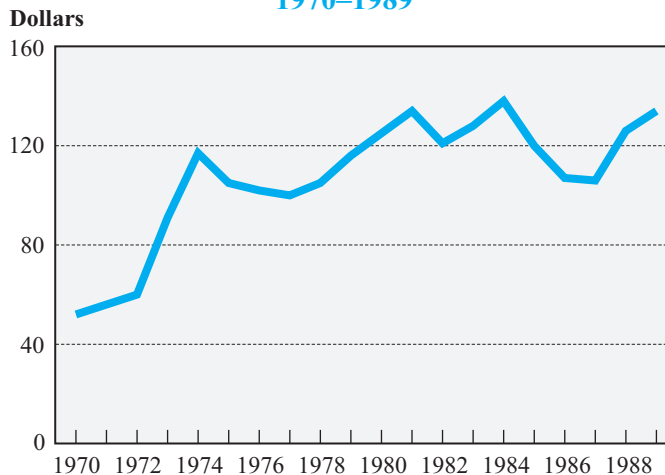
⁵ Charles P. Kindleberger, *Manias, Panics, and Crashes* (1978), 4.

⁶ Burton G. Malkiel, *A Random Walk down Wall Street* (1981), 32.

The boom in the 1970s was stimulated essentially by a substantial rise in crop prices during the first half of the decade (see figure 8.1). An important component of the boom—one that would have a significant effect on the problems of the 1980s—was the escalating value of farm real estate. There were several factors that combined to bring about the increased demand for and rising price of farmland, including inflation, rising farm income (partly caused by farm enlargement), the export market, and credit availability.⁷

The high inflation of the 1970s meant that real capital gains on farm real estate (excluding operators' dwellings) dwarfed those of preceding decades (the total real capital gain on farm real estate for 1972 through 1979 was \$447 billion in 1983 dollars—an annual average of \$56 billion).⁸ This new wealth led many farmers to purchase additional acreage. Furthermore, the sharp rise in farmland prices helped create a speculative frenzy and brought many outside investors into the farm real estate market as well. Neil Harl, an Iowa State University economist, noted the volume of investments being made in farmland and

Figure 8.1
Index of Prices Received by Farmers for All Crops,
1970–1989



Source: Index compiled by National Agriculture Statistics Service, U.S. Department of Agriculture.

Note: 1977=100

⁷ C. Stassen Thompson, "The Effects of the 1970s Farmland Market on Today's Agriculture Crisis," *The Appraisal Journal* (January 1988): 18.

⁸ Emanuel Melichar, "A Financial Perspective on Agriculture," *Federal Reserve Bulletin* 70, no. 1 (January 1984): 5.

commented at the time that “anytime you see an asset growing in value about 25% a year for several years, everybody wants in on the action.”⁹

The demand for farmland in the 1970s also increased because of rising farm income. Net farm income in the 1970s was volatile but, for the decade as a whole, was approximately twice the income of the 1960s. Nominal income (which does not reflect the effect of inflation) per farm jumped from \$4,900 in 1970 to \$12,200 in 1973, then declined to \$7,800 by 1977, before rising to \$13,300 in 1979.¹⁰ This increase in farm income boosted returns on investments in farm real estate so that farmland became an even more attractive investment, and the demand for it grew greater still.

An important contributor to the rise in farm incomes, and therefore to the escalating demand for farmland, was the availability of improved technologies that made possible a more efficient use of farm labor. This prompted farmers to make substantial purchases of farmland in order to spread fixed costs and to reach sufficient size so they could employ the new technology. Many farmers’ attitudes about expensive machinery reinforced the demand for farmland as a means toward enlarging their farms.¹¹

Increased demand for farmland was also fueled by a sharp rise in farm exports in the 1970s, an important component of the decade’s agricultural prosperity. In 1970, exports of agricultural products were \$6.7 billion (approximately 11 percent of U.S. farm production); nine years later they had risen to \$31.9 billion (nearly 22 percent of U.S. production).¹² This jump in exports was stimulated by increased worldwide global liquidity, rising incomes, and several crop shortfalls in other parts of the world.¹³ Another reason foreign demand expanded was that the cost of U.S. crops declined as a result of a depreciating dollar and reduced U.S. price-support levels.¹⁴ In 1980, the export market for U.S. farm commodities looked so promising that Secretary of Agriculture Robert Bergland declared, “The era of chronic overproduction . . . is over.”¹⁵

Finally, the availability of almost unlimited amounts of credit played an important role in expanding the farmland market of the 1970s. Commenting on the heady economic out-

⁹ “Land Boom in the Farm Belt,” *Forbes* (April 15, 1977), available: LEXIS, Library: NEWS, File: FORBES.

¹⁰ C. S. Thompson, “Effects of Farmland Market,” 19.

¹¹ Porter Martin, who assembled limited partnerships for farm investors, explained that machinery was a “status symbol” and noted, “These guys own too much of it and they’re eager to spread the cost” (cited in “Land Boom”).

¹² C. S. Thompson, “Effects of Farmland Market,” 19. The statistics in this article were derived from the U.S. Department of Agriculture, *Agriculture Statistics* (1983), 517.

¹³ Kenneth L. Peoples, David Freshwater, Gregory D. Hanson, Paul T. Prentice, and Eric P. Thor, *Anatomy of an American Agricultural Credit Crisis* (1992), 14.

¹⁴ John Rosine and Paul Balides, “Perspectives on the Food and Agricultural Situation,” *Federal Reserve Bulletin* 68, no. 1 (January 1982): 4–5.

¹⁵ Gregg Easterbrook, “Making Sense of Agriculture: A Revisionist Look at Farm Policy,” *The Atlantic* 256 (July 1985), available: LEXIS, Library: NEWS, File: ASAPH.

look of the period, Michael E. Fitch, vice president of Wells Fargo's Agribusiness Affairs Division, noted that everyone "concluded that never again were we going to experience depressed farm prices; that our biggest challenge was to gear up our productive capacity. As a result, there were tremendous resources placed in agriculture, one of which was credit."¹⁶ It is not surprising that this environment led farmers as well as lenders to change their attitudes toward credit-financed farmland purchases.¹⁷

The expansion of credit was greatly facilitated by the fact that many agricultural bankers continued basing their farm loans on collateral value rather than on cash-flow analysis. As a result, farmers were able to use leverage as a means to benefit from the increasing value of farmland. They would purchase farm real estate with modest down payments and, after the value of this newly purchased land increased, would use the equity to buy additional farmland with minimal down payments. A telling example of the easy access to credit during this period is the story of Benjamin R. Riensche. When he graduated from high school in the late 1970s, land prices around Jesup, Iowa, were climbing so fast that it was possible for him—a teenager—to borrow a considerable amount of money from a bank. He purchased 80 acres of farmland for \$228,000.¹⁸

Farmers' ability to obtain loans easily in order to purchase farm real estate made it possible for farm debt to rise in tandem with soaring real estate values, even though farm income levels were frequently insufficient to support the higher debt burdens. Between 1970 and 1979 farm real estate debt rose from \$29 billion to \$71 billion.¹⁹ This increase in debt may not appear excessive when compared with the rise in farm values, but if the income generated from the additional acreage purchased should prove insufficient to meet the higher debt-service payments, financial difficulties could ensue. Moreover, the substantial increase in farm real estate debt was a major factor in the rise of total liabilities of farm businesses, from \$52 billion in 1970 to \$162 billion in 1979.²⁰

Higher levels of real estate debt were supplemented by debt incurred to finance machinery and equipment to maintain the larger farms. But not all the machinery acquired was economically justified. Such purchases might have contributed to the later financial problems of some farmers.

¹⁶ "In Search of a Solution to the Farm Crisis," *ABA Banking Journal* (April 1985), available: LEXIS, Library: BANKING, File: ABABJ.

¹⁷ C. S. Thompson, "Effects of Farmland Market," 20.

¹⁸ Scott Kilman, "High Grain Price Lifts Farmers, But Will They Overexpand As Before?" *The Wall Street Journal* (March 21, 1996), A1, A8. Another insight into the ready availability of credit comes from Pat Meade, a farmer from Milo, Iowa, who recalled that "during the 1970s there were times when lenders quite literally drove up and down the road, knocked on people's doors, and asked them if they could use more credit." See Easterbrook, "Making Sense of Agriculture."

¹⁹ C. S. Thompson, "Effects of Farmland Market," 18.

²⁰ Data supplied by Haver Analytics; from the *Flow of Funds Accounts of the United States*.

The optimism of the 1970s came to an end late in the decade because of changes in domestic economic policies and in the worldwide supply and demand conditions for agricultural commodities.

In the fall of 1979, the Federal Reserve Board tightened its monetary policy to fight inflation. As a result, interest rates soared—the prime rate averaged 15.3 percent in 1980. The high interest rates contributed immensely to the decline in farmland values and to the overall reversal of conditions in the agricultural sector. The elevated interest rates significantly increased farm operating costs, such as the interest cost of money borrowed to cover planting expenses. This led to reduced net-income expectations and, in some cases, to cash-flow problems. Moreover, high interest rates automatically deflated the price of productive assets—such as farmland—by reducing the capitalized value of the land’s earning capacity.²¹

When the high interest rates helped send the farm sector on a downward spiral in the early 1980s, many farmers found themselves unable to service their debts. Although many lenders tried to accommodate the farmers, the problems were often insuperable. Oliver Hansen, president of an Iowa bank, noted, “We are working with customers if at all possible. But for any farmer who has become overextended, I am sure it is going to be hell.”²² Farmers whose loans contained variable-interest-rate clauses found the soaring interest rates of the early 1980s particularly onerous. One Iowa farmer who had been forced to declare bankruptcy complained, “They said I had nothing to worry about—that rates had varied only a fraction of a point since 1970. My rate went from 7 percent to 18.5 percent.”²³

The blow dealt by changes in the worldwide supply and demand for agricultural commodities—causing foreign demand for domestic agricultural products to decline at a time of expanded domestic production—did serious damage as well. For example, the volume of U.S. exports of agricultural products increased at an annual rate of 5.9 percent between 1973 and 1980 and peaked at \$44 billion in 1981, but by 1986 it had dropped to only \$26 billion. Over the same period, agriculture’s share of total U.S. exports fell from 19 percent to 13 percent.²⁴ Fred W. Greer, Jr., chairman of the Agricultural Bankers Division of the American Bankers Association (ABA), noted in 1984 that “farming is not an isolated sec-

²¹ Peoples et al., *Anatomy*, 33.

²² “A Credit Drought Hits the Farmers,” *Business Week* (December 20, 1982), available: LEXIS, Library: NEWS, File: BUSWK.

²³ Easterbrook, “Making Sense of Agriculture.”

²⁴ Dallas S. Batten and Michael T. Belongia, “The Recent Decline in Agricultural Exports: Is the Exchange Rate the Culprit?” *Federal Reserve Bank of St. Louis Review* 66, no. 8 (October 1984): 5; and Gerald H. Anderson, “The Decline in U.S. Agricultural Exports,” *Federal Reserve Bank of Cleveland Economic Commentary* (February 15, 1987): 1.

tor of the economy and we are not an isolated country. We have competition from around the world that we didn't have a few years ago."²⁵

Export demand was dampened by unfavorable monetary exchange rates and by the less-developed-country (LDC) debt crisis (see Chapter 5). High domestic interest rates caused a significant strengthening of the dollar. From the third quarter of 1980 to the first quarter of 1985, the Federal Reserve Board's trade-weighted average index for the dollar rose by 83 percent.²⁶ This rapid appreciation in the value of the dollar made U.S. exports more expensive in foreign currencies, not only reducing foreign demand but also encouraging foreign supply.²⁷ In addition, many developing countries that had previously been major importers of American farm products had debt problems, which led them to restrict agricultural imports in order to conserve foreign exchange. Banks in those countries reduced credit to finance agricultural imports. Moreover, creditor banks or the International Monetary Fund required austerity programs as a condition for restructuring existing loans. The decline in foreign demand caused by both the unfavorable exchange rates and the LDC debt crisis led in turn to an accumulation of huge surpluses of farm commodities in the early 1980s.²⁸

²⁵ Nancy Buckwalter, "Agricultural Banking Crisis; Bankers Struggling with Workouts to Help Farm Customers Survive," *United States Banker* (September 1984): national edition, available: LEXIS, Library: BUSFIN, File: BIS.

²⁶ Anderson, "Decline in Exports," 4.

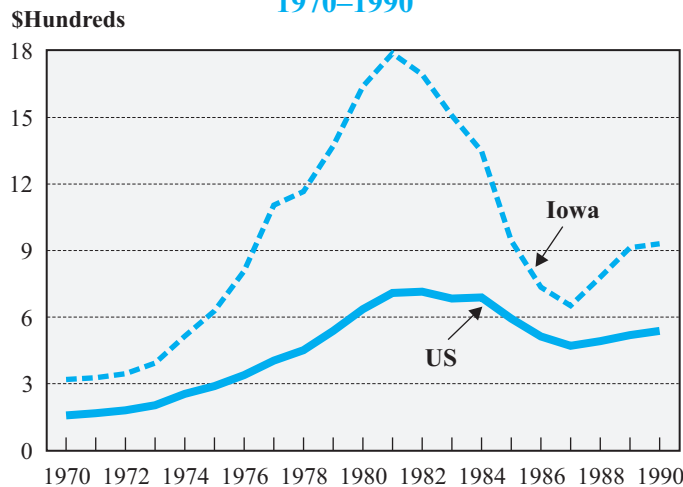
²⁷ Dallas S. Batten and Michael T. Belongia, "The Recent Decline in Agricultural Exports: Is the Exchange Rate the Culprit?" *Federal Reserve Bank of St. Louis Review* 66, no. 8 (October 1984): 5. The authors conclude that foreign income, not exchange rates, is the primary determinant of agricultural exports. However, Barbara Chattin and John E. Lee, Jr., attributed at least half of the export decline in 1982 and 1983 to the appreciation of the U.S. dollar ("United States Agricultural Policy in a 'Managed Trade' World," *United States Farm Policy in a World Dimension*, special report 305, Agricultural Experiment Station, University of Missouri—Columbia [November 1983], 18–27). According to Batten and Belongia, causal relationships between exchange rates and agricultural exports were reported by Robert G. Chambers and Richard E. Just, "An Investigation of the Effect of Monetary Factors on Agriculture," *Journal of Monetary Economics* (March 1982): 235–47; Luther Tweeten, "Economic and Policy Outlook for U.S. Agriculture," *United States Farm Policy in a World Dimension*, special report 305, Agricultural Experiment Station, University of Missouri—Columbia (November 1983), 13–17; Dale E. Hathaway, "Agricultural Trade: 1984 and Beyond," *United States Farm Policy in a World Dimension*; special report 305, Agricultural Experiment Station, University of Missouri—Columbia (November 1983); and G. Edward Schuh, "Future Directions for Food and Agricultural Trade Policy," *American Journal of Agricultural Economics* (May 1984): 242–48.

²⁸ In an effort to deal with the problem of overproduction, the Reagan administration introduced its "Payment in Kind" (PIK) program in 1983. Under this program, farmers who agreed to reduce plantings were compensated with surplus commodities from federal stockpiles of the same type they typically planted. The PIK program was especially attractive to cotton and grain (wheat, corn, sorghum, and rice) farmers, who took 82 million acres, more than a third of their total productive acreage, out of production. The program succeeded in helping to reduce the huge surplus of federally owned farm commodities. Commenting on the PIK program, Alan Tubbs, vice chairman of the ABA's Agricultural Bankers Division and president of First Central Bank in DeWitt, Iowa, said, "It bought a year for those who took part in it. It helped the farmers who were able to benefit from it to hold their own, and it held up the price of grain for everybody" (Buckwalter, "Agricultural Banking Crisis").

In 1981, as inflation declined and the problems of the agricultural sector increased, farmland prices began sliding downward. Farmland values for the United States and Iowa between 1970 and 1990 demonstrate both the boom-and-bust cycle and the dramatic changes that occurred within some states (see figure 8.2). In the nation as a whole, the value of farmland per acre rose 355 percent between 1970 and its peak in 1982 (from \$157 to \$715) but then declined 34 percent from 1982 to 1987 (down to \$471). In Iowa, farmland value per acre soared from \$319 in 1970 to \$1,694 in 1982, an increase of 431 percent, but then dropped 62 percent by 1987 (down to \$652).

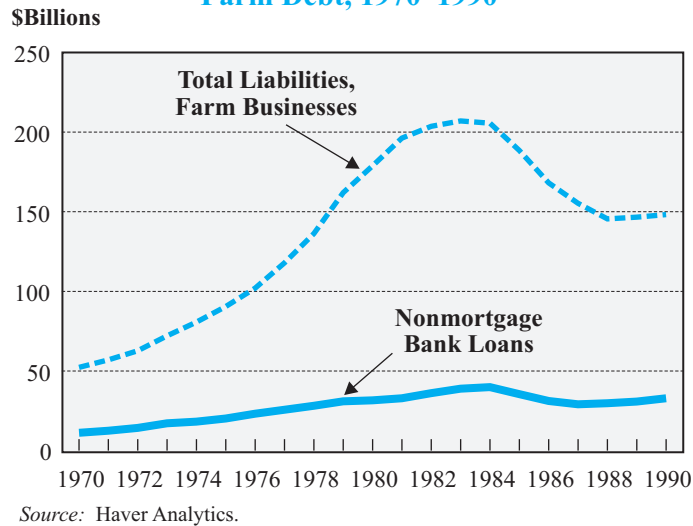
The boom in farmland values had been supported by an explosive growth in farm debt. That growth and the subsequent contraction are illustrated by the annual data for non-mortgage bank loans and total liabilities for farm businesses from 1970 through 1990. From 1970 through 1984, nonmortgage bank loans increased from \$11.2 billion to \$39.9 billion, a rise of 256 percent, but then in 1987 they declined to \$29.1 billion, a drop of 27 percent. Similarly, from 1970 through 1983, total liabilities of farm businesses rose from \$52.3 billion to \$207.0 billion, a 296 percent increase, and then in 1988 fell to \$145.5 billion, a decline of 30 percent (see figure 8.3). A large portion of the decline in farm debt that began in the mid-1980s was due to the rapid liquidation and restructuring of troubled loans. An additional source of debt reduction, however, was the behavior of those farmers who were in sound financial condition: when returns on liquid assets fell below the interest rates being

Figure 8.2
Farmland Value per Acre, U.S. and Iowa,
1970–1990



Source: Economic Research Service, U.S. Department of Agriculture.

Figure 8.3
Farm Debt, 1970–1990



paid on farm debt, many prosperous farmers chose to use their available cash to reduce or eliminate their debt. Repayment of farm debt might also be attributed to a change in attitude among farmers. Leslie W. Peterson, president of Minnesota's Farmers State Bank of Trimont, observed in 1985 that many farmers "now realize that debt is nothing but a noose around their neck."²⁹

Assessing the decision-making processes of the 1970s and early 1980s requires evaluating the correlation between the escalating farmland values and the profitability of agriculture. For both the United States and Iowa farmland value per acre increased every year from 1970 through 1981, but gross income per acre actually experienced several year-to-year decreases. For example, gross income per acre for corn and soybeans generally declined during 1973–75, 1976–77, and 1980–81 (see table 8.1). Thus, farmland values and investment returns were decoupled. More particularly, from 1970 through 1973 both land values and returns on investment increased, but in 1974–75, while land values continued to rise, returns declined—though they still compared favorably with those of 1970–71. Beginning in 1976, however, returns fell significantly below those of the early 1970s, even as farmland values continued to increase dramatically.

²⁹ John N. Frank et al., "The Farm Rut Gets Deeper," *Business Week* (June 17, 1985), available: LEXIS, Library: NEWS, File: BUSWK.

Table 8.1
Gross Income per Acre and Return on Farmland Investment,
U.S. and Iowa, 1970–1990

Year	U.S.				Iowa			
	Corn		Soybeans		Corn		Soybeans	
	Gross Income per Acre	% Return on Investment	Gross Income per Acre	% Return on Investment	Gross Income per Acre	% Return on Investment	Gross Income per Acre	% Return on Investment
1970	\$ 96	61	\$ 76	48	\$108	34	\$ 92	29
1971	95	57	83	50	106	32	100	31
1972	152	84	121	67	191	55	171	50
1973	233	115	158	78	276	70	192	49
1974	217	85	157	62	238	46	178	35
1975	219	76	142	49	225	36	173	28
1976	189	56	178	53	187	23	219	27
1977	183	45	180	45	171	15	210	19
1978	227	50	196	43	250	21	249	21
1979	272	51	202	38	311	23	231	17
1980	284	45	201	32	330	20	286	17
1981	269	38	183	26	293	16	238	13
1982	289	40	180	25	323	19	214	13
1983	260	38	205	30	271	18	272	18
1984	281	41	164	24	281	21	179	13
1985	263	44	172	29	255	27	190	20
1986	179	35	159	31	190	26	196	27
1987	232	49	199	42	246	38	260	40
1988	215	44	200	41	206	26	227	29
1989	274	53	184	35	270	30	219	24
1990	270	50	196	36	278	30	234	25

Source: Raw data are from U.S. Department of Agriculture.

Note: Gross income per acre is yield per acre in bushels multiplied by average price per bushel during the year. Return on investment is gross income per acre divided by the farmland value per acre for each year.

When U.S. farmland values reached their zenith in 1982, returns on investment for corn and soybeans were less than two-thirds of their 1970 level and only approximately one-third of what they had been in 1973. Similarly, when Iowa farmland values peaked in 1981, investment returns for corn and soybeans were less than half what they had been in 1970, and only approximately a quarter of their 1973 level (table 8.1).

From 1981 onward, U.S. farmland prices declined. At the same time, returns for corn showed virtually no improvement, and those for soybeans grew only moderately. Returns during the period 1983–90 for both crops based on land prices were never close to those of 1970. Moreover, although returns for corn and soybeans in 1990 were 25 and 44 percent

higher than they had been in 1982, they remained less than half of the returns attained in 1973. Iowa's trends were somewhat different. Here again, farmland prices began declining in 1981, but returns rose and compared reasonably well with those of 1970; returns in 1990 for corn and soybeans were almost twice those of 1981. Nevertheless, returns continued at levels half what they had been in 1973, or even less. A significant conclusion can be drawn from these pre- as well as post-1982 trends: the spectacular increases in farmland prices from 1976 through the early 1980s could not be justified by high or rising investment returns. The dramatic rise in the value of farmland had been the result of a speculative boom.

Although the review of the agricultural cycle of the 1970s and 1980s has focused on agriculture nationally, it is important to point out that the effects of this cycle on agricultural banks and the resulting bank failures were primarily regional in nature (see figure 8.7, p. 278). Problems for agricultural producers and commercial banks largely occurred in the Midwest—Iowa, the Dakotas, Nebraska, Kansas, Illinois, Minnesota, Missouri—as well as in Oklahoma and Texas. The primary reason for this is, of course, that substantial agricultural production took place in the Midwest and the economies in these states were more dependent on agriculture than the economies in most other states. Thus, a large majority of agricultural banks, and therefore most failures, were located in this region. In 1986 approximately 70 percent of the nation's agricultural banks were located in the West North Central census region (North and South Dakota, Minnesota, Nebraska, Iowa, Kansas, and Missouri—the Midwest) and the West South Central region (Oklahoma, Arkansas, Texas, and Louisiana).³⁰ However, there may be another reason for the midwestern location of agricultural banking problems. The types of crops produced in these states, such as wheat, corn, and soybeans, were greatly influenced by the export boom of the 1970s. Consequently, the Midwest experienced unusually large increases in farm real estate prices during this period. For example, from 1974 through 1978, when the price of an acre of farmland nationally rose at an average annual rate of 15 percent, in Iowa and Illinois the increase was approximately 22 percent annually.³¹ In the 1980s, declines in midwestern farmland prices were similarly dramatic. For example, after peaking in 1981, farmland prices had fallen by 49 percent in Iowa, 46 percent in Nebraska, 42 percent in Illinois, 39 percent in Minnesota, and 38 percent in Missouri.³² The financial difficulties caused by these declines, coupled with the substantial debt midwestern farmers had incurred for purchases of farmland and machinery to support crop expansion during the export boom, made farmers in the region

³⁰ Lynn A. Nejezchleb, "Declining Profitability at Small Commercial Banks: A Temporary Development or a Secular Trend?" *FDIC Banking and Economic Review* (June 1986): 12.

³¹ Linda Snyder Hayes and Kathleen Carroll Smyth, "Investors in Farmland Are on Dangerous Ground," *Fortune* (January 29, 1979), available: LEXIS, Library: NEWS, File: FORTUN.

³² Timothy B. Clark, "Borrowing Trouble," *National Journal* 17, no. 36 (September 7, 1985), available: LEXIS, Library: NEWS, File: NTLJNL.

much more vulnerable than farmers in other parts of the country to the declines in exports of wheat, corn, and soybeans, as well as to the higher interest rates of the 1980s.

In summary, agriculture flourished in the 1970s: in the first half of the decade crop prices soared, farm exports escalated, and real farm incomes reached all-time highs. This prosperous environment, combined with high levels of inflation, led farm real estate values to skyrocket. The bubble burst in the early 1980s, after monetary policy was tightened to fight inflation and, at the same time, foreign demand for domestic agricultural products plummeted. In 1981, farmland prices began a devastating spiral. Farm debt, which had supported the agricultural expansion and farmland speculation by almost quadrupling from 1970 through 1983, became a painful burden to farmers. However, by 1988, total liabilities had declined 30 percent.

The Reliability of Forecasts

The kinds of economic information available to bankers as they loaned funds to the agricultural sector are indicated by contemporary views on the agricultural situation. In this section we focus on forecasts for the boom years of 1976 and 1978; for the period 1980–82, when the expansion was winding down; and for 1985—the middle of the contraction phase.

The outlook for agriculture for the first half of 1976 was quite positive.³³ Rising gross income was expected to more than offset higher farm production expenses, so analysts anticipated a sizable increase in net farm income. Farm product exports were expected to set a record in Fiscal Year 1976, increasing approximately \$1 billion from Fiscal Year 1975 to nearly \$23 billion. Unlike the previous year's rise, this one was projected to come from larger volume rather than higher prices.

By 1977, however, in contrast to what had been forecast, the farm sector had begun to experience difficulties. Bernard Johnson, president of the Production Credit Association of Fargo, North Dakota, noted that “some of our farmers are in a real financial strain. Many are just hanging on by their boot straps. And some we’ve had to close out. The problem is, there is no profit at \$2.50 for wheat.”³⁴

Forecasts for 1978 were in accord with such experiences: the nation's farmers were expected to endure a year of relatively low prices and incomes.³⁵ Net farm income, which

³³ Forecast is taken from Sada L. Clarke, “Outlook for Agriculture Optimistic,” Federal Reserve Bank of Richmond *Economic Review* 62, no. 1 (January/February 1976): 19–21, and is based on the U.S. Department of Agriculture's National Agricultural Outlook Conference held in November 1975.

³⁴ “Bountiful Crops—So Why Are Farmers and Bankers Worried?” *U.S. News & World Report* (June 27, 1977), available: LEXIS, Library: NEWS, File: USNEWS.

³⁵ Forecast is taken from Sada L. Clarke, “The Outlook for Agriculture in '78,” Federal Reserve Bank of Richmond *Economic Review* 64, no. 1 (January/February 1978): 7–11, and is based on the U.S. Department of Agriculture's National Agricultural Outlook Conference held in November 1977.

had fallen 27 percent during the previous two years, was expected to improve little, if at all, in 1978. A combination of lower crop prices and moderate increases in farm production expenses was anticipated. In addition, the value of U.S. farm exports was expected to decline from \$24 billion in Fiscal Year 1977 to approximately \$22 billion in Fiscal Year 1978.

In contrast to these somewhat pessimistic forecasts, 1978 turned out to be an excellent year for farmers. Although lower crop prices were anticipated, the index of prices received by farmers for all crops increased 5 percent from 1977 to 1978. While farm production expenses rose 12 percent from 1977 to 1978, gross income from farming increased by 17 percent during the same period. As a result, net farm income jumped 46 percent from 1977 to 1978. Finally, U.S. farm exports soared from \$24 billion in 1977 to \$29 billion in 1978, rather than declining, as had been expected.

Predictions for 1980 (and these were made before the January 1980 embargo on grain exports to the Soviet Union) foresaw farm income falling sharply from the 1979 level, perhaps by as much as 20 percent, primarily because of surging production costs.³⁶ Agricultural exports were expected to increase by approximately 19 percent, from \$32 billion in 1979 to \$38 billion in 1980. And the value of farmland was expected to increase by only 5 to 10 percent in 1980, compared with an actual increase of 14 percent the previous year. These projections proved to be quite accurate: in 1980, net farm income declined by 20 to 25 percent; exports exceeded \$40 billion; and farm real estate values increased 7 to 12 percent.

A considerable rebound in net farm income was anticipated for the following year.³⁷ In addition, exports of U.S. farm products were expected to rise as much as 20 percent above the 1980 record level of more than \$40 billion, and farm real estate values were projected to increase by between 11 and 16 percent. Exports did increase to just under \$44 billion and farm real estate values did rise approximately 11 percent, but farm income failed to keep pace with the optimistic projections. Indeed, farm income was disappointing for the second consecutive year, and many farmers developed serious cash-flow problems. By mid-1981, Marlin Jackson, chairman of the ABA's Agricultural Bankers Division, confirmed that farm income had failed to meet expectations, noting, "The uncertainty for farm production combined with ever-increasing production expenses for energy, chemicals, and the cost of loan-production funds will eat seriously into an increased gross farm income, resulting in another

³⁶ Forecast is taken from Sada L. Clarke, "The 1980 Outlook for Agriculture," Federal Reserve Bank of Richmond *Economic Review* 66, no. 1 (January/February 1980): 14–18, and is based on the U.S. Department of Agriculture's 1980 Agricultural Outlook Conference held in November 1979.

³⁷ Forecast is taken from Sada L. Clarke, "The Outlook for Agriculture in '81," Federal Reserve Bank of Richmond *Economic Review* 67, no. 1 (January/February 1981): 21–26, and is based on the 1981 Agricultural Outlook Conference held in November 1980.

marginal net-farm-income year.”³⁸ The forecasts and results for 1981 were classic endings to a boom period. With expenses rising more quickly than gross income, net income was clearly declining. The market price of overvalued collateral peaked and began a major, long-term descent. The transition from boom to bust may take a few years, but eventually a virtual free-fall occurs. On this occasion, the free-fall began in 1981.

Little improvement in net farm income was anticipated for 1982, but exports were expected to increase approximately 4 percent to \$45.5 billion, which would have set a record for the 13th consecutive year.³⁹ As had been expected, farm income was low, and cash-flow difficulties grew as cash receipts declined while production expenses continued to rise. What exacerbated the problem, though, was that exports not only failed to increase but actually plunged 11 percent.

By the end of 1984, the farm sector was suffering from a variety of economic and financial problems, so the prospects for 1985 were considered bleak. The adverse trends that had been plaguing the agricultural sector since the early 1980s—low income, inadequate cash flow, and declining farmland prices—were expected to continue and possibly deteriorate further in 1985.⁴⁰ Agricultural net cash income in 1985 was expected to be the lowest since 1980, and the volume of U.S. exports was expected to continue declining. The future for the farming sector appeared so hopeless that sociologist Paul Lasley of Iowa State University believed “the current agriculture crisis is likely to change the face of rural America drastically, leaving it with fewer people, fewer businesses and more dependent on government aid.”⁴¹

The projections made for the period 1980 through 1982 had generally been accurate except in two important respects: a substantial recovery in net farm income had been forecast for 1981 but did not occur, and the export market was expected to increase in 1982, whereas in fact it began declining. But these forecasting failures were critical, for they meant that there was no warning of the massive regional and national agricultural problems that began in 1981. Once the downturn in agriculture had started, of course, analysts recognized the nature and severity of the problems and, as the outlook for 1985 indicated, correctly anticipated their continuation.

³⁸ Phil Battey, “High Interest Rates Squeeze Farmers and Their Lenders; Bankers Across US Note Decline in Quality of Agricultural Loan Portfolios,” *American Banker* (June 25, 1981), 2.

³⁹ Forecast is taken from Sada L. Clarke, “The Outlook for Agriculture in ’82,” Federal Reserve Bank of Richmond *Economic Review* 68, no. 1 (January/February 1982): 25–29, and is based on the 1982 Agricultural Outlook Conference held in November 1981.

⁴⁰ Forecast is derived from Raymond E. Owens, “The Agricultural Outlook for 1985 . . . Little Promise Seen,” Federal Reserve Bank of Richmond *Economic Review* 71, no. 1 (January/February 1985): 27–32, and is based on the 1985 Agricultural Outlook Conference held in December 1984.

⁴¹ C. Robert Brenton, “How Can Agricultural Bankers Weather the Storm?” *The Magazine of Bank Management* (January 1986), available: LEXIS, Library: BUSFIN, File: BJS.

Nonbank Sources of Farm Credit

Banks were a major provider of farm credit, but farmers also had other important sources to which they could turn. A substantial amount of agricultural credit was originated through the Farm Credit System (FCS), a nationwide network of financial institutions owned by borrower-stockholders. The elements of the FCS were established by the government between 1917 and 1933 to serve the credit needs of agricultural producers.⁴² The FCS's major lending arms were the Federal Land Banks (FLBs), the Federal Intermediate Credit Banks (FICBs), and the Banks for Cooperatives (BCs). The FCS was organized into 12 districts, and all three types of lenders were located within every district. In addition, a Central Bank for Cooperatives, located in Washington, D.C., helped finance loan requests that were too large to be handled by a single district cooperative bank.⁴³ The FCS was (and still is) regulated by the Farm Credit Administration, an independent agency that is not financed by the federal government but generates funds for lending by selling bonds and notes in the national money markets.⁴⁴

The FCS attracted borrowers by aggressively offering loans equal to a high proportion of collateral value and at lower interest rates than the rates charged by other primary farm lenders, including commercial banks. In 1985, the FCS held more than \$74 billion in agricultural debt nationwide and was thus the largest single source of credit for agriculture. The FLBs provided long-term farmland mortgages, and in 1985 held \$51 billion in farm debt through 437 affiliated offices. The FICBs provided operating loans to farmers and competed directly with commercial banks. The FICBs generated loans through their Production Credit Associations (PCAs), which held \$17 billion in farm debt in 1985.⁴⁵

Because of the FCS's substantial holdings in farmland mortgages, it was particularly devastated by the steep drop in farmland values that began in 1981. Since the 1930s the FCS had not incurred deficits, but by 1985 its financial condition had deteriorated so severely that it was forced to ask Congress for \$6 billion in federal aid to prevent its own collapse. The situation in which the FCS found itself was put succinctly by its chief spokesman when he was requesting aid before Congress: "Our request for assistance is one of the most difficult decisions we have ever made. But we have no choice."⁴⁶

The FCS was not the only important nonbank source of farm credit: the Farmers Home Administration (FmHA), the principal credit agency of the U.S. Department of Agri-

⁴² W. Gifford Hoag, *The Farm Credit System: A History of Financial Self-Help* (1976), 1.

⁴³ Gene D. Sullivan, "Changes in the Agricultural Credit Delivery System," Federal Reserve Bank of Atlanta *Economic Review* 75, no. 1 (January/February 1990): 13.

⁴⁴ "Hat in Hand; Farm Credit Beggars for Bailout," *Time* (November 11, 1985), available: LEXIS, Library: NEWS, File: TIME.

⁴⁵ Patrick Eugene McNerney, "Evaluating and Managing Ag Credit Risk in the Midst of the Farm Debt Crisis" (thesis, Stonier Graduate School of Banking, 1986), 29–31.

⁴⁶ "Hat in Hand."

culture, also served in this role. The FmHA was established in 1946 as the successor to the Farm Security Administration to function as a lender of last resort for farmers who were unable to obtain credit from other lending sources.⁴⁷ As a result, FmHA credits were generally lower in quality and riskier than loans of commercial banks or the FCS. During periods of economic weakness from 1974 to 1977, many loans that might have caused losses to banks were refinanced at the FmHA. In addition, from 1978 to 1981 the FmHA lent \$6.6 billion under the Economic Emergency Credit Act of 1978. Declining farm income in the early to mid-1980s, as well as adverse weather conditions in parts of Iowa in 1983 and 1984, led many farm operators to turn to the FmHA for some or all of their borrowing needs. In late 1984, about 30 percent of the \$22 billion in FmHA loans outstanding were delinquent.⁴⁸

After Vance Clark's appointment as secretary of agriculture in August 1985, a significant change was made at the FmHA. Clark had inherited a little-used FmHA program under which the government would guarantee 90 percent of an agricultural loan, and a private lender would assume the risk of the remaining 10 percent. Clark stressed the need to expand this program because it allowed borrowers to do business with local banks instead of the government while reducing the government's lending risk by 10 percent. An increasing number of banks became participants in the program; as a result, direct lending by the FmHA decreased from \$115 million in Fiscal Year 1988 to \$50 million in 1990.⁴⁹

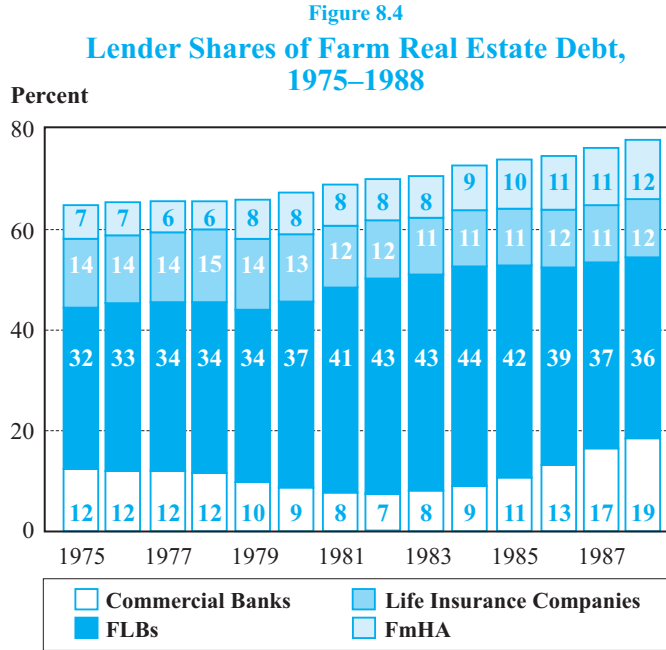
An analysis of the proportions of outstanding real estate and non-real estate debt held by commercial banks and other major agricultural lenders from 1975 to 1988 reveals that commercial banks provided a relatively small quantity of farm real estate financing. Indeed, banks' share of farm real estate debt steadily declined from 1975 to 1981, the period of booming farmland prices. Conversely, during the same period the share of financing provided by the Federal Land Banks continued to increase. Meanwhile, the FmHA exhibited fairly steady, though moderate, increases in its share of farm real estate debt from 1978 to 1988 (see figure 8.4).

For non-real estate farm credit, banks were the dominant providers from 1975 to 1988. Contrary to what might have been expected, the proportion of non-real estate farm loans held by banks declined continuously from 1976 to 1981, the final years of agriculture's boom period, but remained quite stable during agriculture's troubled years, 1983–86. FmHA lending significantly increased in importance, as its share of non-real estate debt increased more than sixfold, from 3.6 percent in 1976 to 22.8 percent in 1987 (see figure 8.5).

⁴⁷ Marvin Duncan, "Government Lending: Some Insights from Agriculture," Federal Reserve Bank of Kansas City *Economic Review* 68, no. 8 (September/October 1983): 5.

⁴⁸ McNerney, "Ag Credit Risk," 32–33.

⁴⁹ Gordon S. Carlson, "Vance Clark: Looking Back," *Journal of Agricultural Lending* 2, no. 4 (April 1989): 12–14.



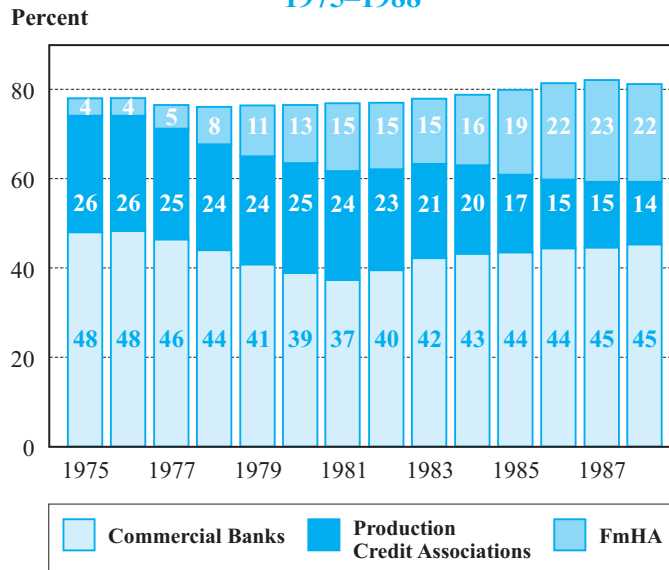
Source: Gene D. Sullivan, "Changes in the Agricultural Credit Delivery System," Federal Reserve Bank of Atlanta *Economic Review* 75, no.1 (1990): 18.

The Effect of Agricultural Problems on Banks

Between the Great Depression and the early 1980s, few agricultural banks failed. In 1984, however, the number of agricultural bank failures began increasing dramatically, and it remained high through 1987.⁵⁰ Thereafter it rapidly declined (see figure 8.6). Between 1983 and 1985 the proportion of agricultural bank failures among all bank failures more than quadrupled, going from 12.5 percent to 51.7 percent. With the farm economy's subsequent improvement, however, agricultural banks became a relatively small factor in the bank failures of the late 1980s. Although agricultural banks constituted 37.4 percent of all bank failures (205 out of 548) from 1984 through 1987, the comparable figure for the years 1988 through 1990—a period when bank failures nationally remained very frequent—was only 9.5 percent (62 out of 655). It is noteworthy that even though farmland prices peaked around 1981 and net farm income began declining in the early 1980s, agricultural bank fail-

⁵⁰ The large number of agricultural bank failures led to two forbearance programs: a capital forbearance program established by the regulatory agencies and a loan-loss amortization program instituted by Congress. For discussions of these forbearance programs, see Chapters 1 and 2.

Figure 8.5
**Lender Shares of Farm Non-Real Estate Debt,
 1975–1988**



Source: Gene D. Sullivan, "Changes in the Agricultural Credit Delivery System," Federal Reserve Bank of Atlanta *Economic Review* 75, no.1 (1990): 18.

ures did not increase significantly until 1984. This suggests that the equity amassed by farmers and bankers during the boom years was sufficient to absorb losses and postpone bank failures for several years.

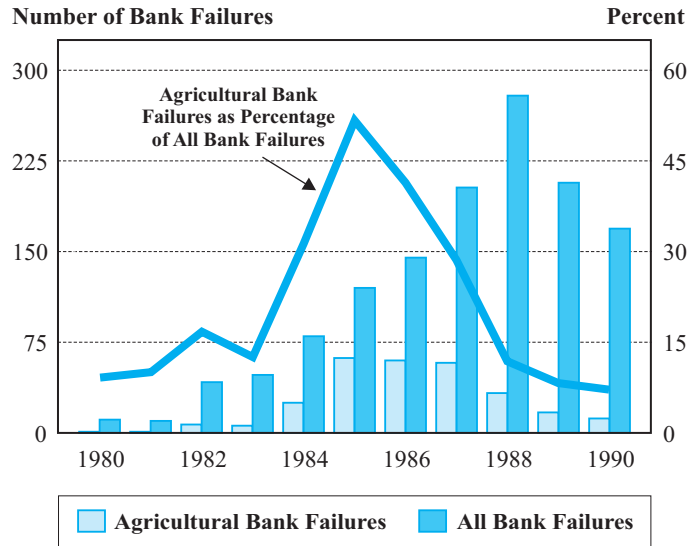
There was a pronounced geographic clustering among the agricultural bank failures, with the majority occurring in the Midwest and in the two southwestern states of Oklahoma and Texas (see figure 8.7). There were 22 or more failures in seven states—Iowa, Kansas, Minnesota, Missouri, Nebraska, Oklahoma, and Texas—while no other state had more than 9 failures.⁵¹ As another example of this clustering, in 1985, 62 agricultural banks failed, 52 of which were located in six of these seven states (all except Texas).⁵²

Fortunately for the deposit insurance fund, agricultural banks were relatively small. For example, the average asset size of agricultural banks was only approximately \$18 million in December 1979, \$28 million in December 1984, and \$32 million in December

⁵¹ Energy and real estate problems may have contributed to the large number of agricultural bank failures in Texas and Oklahoma. See Chapter 9 for further discussion of the effect of agricultural problems on banks in these two states.

⁵² "Agricultural Conditions and the Prospects for Farm Banks," FDIC *Banking and Economic Review* (March 1986): 5–6.

Figure 8.6
Agricultural Bank Failures versus All Bank Failures,
1980–1990

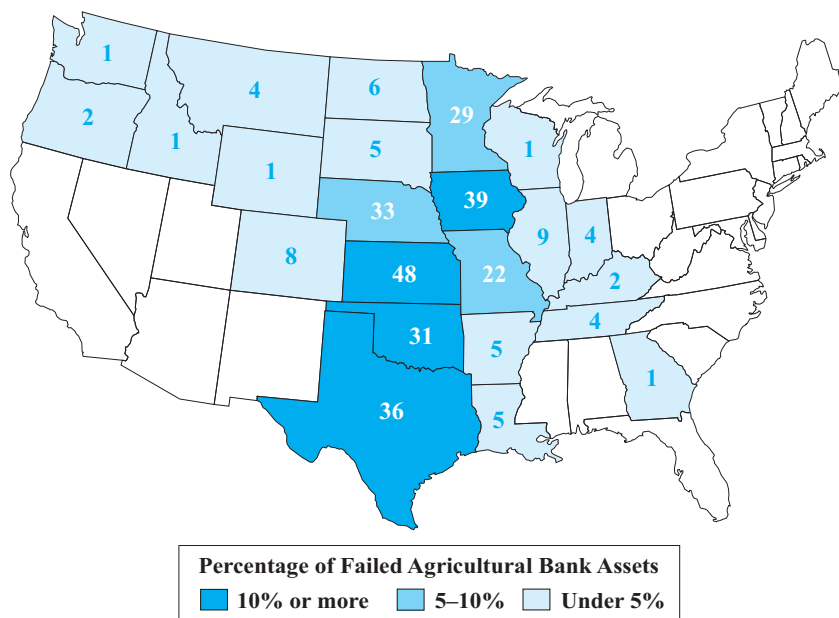


1989.⁵³ Moreover, from 1980 through 1990, when agricultural banks constituted at least 23 percent of all banks annually, they were less than 1 percent of all banks with more than \$200 million in assets—and in no year in the 1980s did more than nine agricultural banks have over \$200 million in assets. Despite their small size, however, agricultural banks were a very significant factor in the farm economy. Each year from 1980 through 1990, although agricultural banks had less than 5 percent of all bank assets, they held at least 44 percent of all commercial bank farm loans (see table 8.2).

The small size of agricultural banks meant that deposit insurance fund losses remained relatively low even when the proportion of such bank failures was at its highest level (see table 8.3). From 1984 through 1987, years when agricultural bank failures constituted 37.4 percent of all bank failures, deposit insurance fund losses averaged approximately \$1.6 billion per year, or less than \$12 million per failed bank. Indeed, in 1985 when the 62 failed agricultural banks accounted for 51.7 percent of all bank failures, deposit insurance fund losses were the lowest for the period from 1982 through 1990, totaling approximately \$1.0 billion, or just \$8.4 million per bank. In contrast, from 1988 through 1990, when agricultural

⁵³ The comparable measures for all commercial banks were \$125 million, \$182 million, and \$263 million.

Figure 8.7
Number of Agricultural Bank Failures and Percentage
of Failed Agricultural Bank Assets in U.S., 1977–1993



Note: Agricultural banks are banks in which agricultural loans are at least 25 percent of total loans and leases.

banks accounted for only 9.5 percent of all bank failures, deposit insurance fund losses averaged \$5.3 billion per year, more than \$26 million per bank.

An analysis of the geographic pattern of agricultural bank failures suggests that factors other than the local economy underlay many such failures. Most of the failed farm banks were located in rural counties where other farm banks continued to operate profitably.⁵⁴ More significantly, few counties in agricultural areas had more than one failed farm

⁵⁴ See Michael T. Belongia and R. Alton Gilbert, "The Effects of Management Decisions on Agricultural Bank Failures," *American Journal of Agricultural Economics* (November 1990): 901. As noted above in footnote 3, the term *agricultural bank* is used in this chapter to refer to banks whose farm loans are 25 percent or more of total loans. The Belongia–Gilbert study examines banks with heavy agricultural loan exposure, which the authors define as banks whose ratio of agricultural loans to total loans is greater than the national average (a definition generally attributed to Emanuel Melichar). Therefore, the term *farm banks* is used to refer specifically to the banks discussed by Belongia and Gilbert. At year-end 1986, the ratio of farm loans to total loans for farm banks exceeded 15.7 percent. Also at year-end 1986, farm loans averaged 2.9 percent of total loans at all banks, and 35 percent at the 4,700 farm banks (statistics are from Emanuel Melichar, "Turning the Corner on Troubled Farm Debt," *Federal Reserve Bulletin* 73, no. 7 [July 1987]: 532).

Table 8.2
Farm Loans and Bank Assets, Agricultural Banks versus All Banks, 1979–1990

Report Date	Number of Banks			Number of Banks over \$200 Million in Assets			Farm Loans (\$Billions)			Bank Assets (\$Billions)		
	Ag.	All	% Ag.	Ag.	All	% Ag.	Ag.	All	% Ag.	Ag.	All	% Ag.
12/79	4,365	14,688	29.72	7	875	0.80	\$20.80	\$40.03	51.95	\$ 81.85	\$1,838.98	4.45
12/80	4,316	14,758	29.25	8	940	0.85	20.80	40.86	50.91	88.80	2,008.27	4.42
12/81	4,214	14,745	28.58	7	989	0.71	21.26	42.01	50.61	95.54	2,185.08	4.37
12/82	4,107	14,768	27.81	8	1,076	0.74	22.99	45.40	50.64	102.61	2,349.48	4.37
12/83	4,064	14,747	27.56	9	1,180	0.76	24.83	49.23	50.44	110.91	2,474.99	4.48
12/84	3,918	14,774	26.52	5	1,281	0.39	25.05	50.60	49.51	109.51	2,686.30	4.08
12/85	3,685	14,796	24.91	7	1,412	0.50	21.88	47.50	46.07	103.59	2,933.22	3.53
12/86	3,513	14,668	23.95	5	1,510	0.33	19.90	44.31	44.90	101.75	3,174.34	3.21
12/87	3,337	14,186	23.52	7	1,542	0.45	19.51	43.86	44.48	99.19	3,259.51	3.04
12/88	3,241	13,613	23.81	9	1,599	0.56	20.12	45.74	44.00	98.84	3,412.54	2.90
12/89	3,174	13,196	24.05	8	1,685	0.47	21.34	47.85	44.60	101.29	3,475.59	2.83
12/90	3,093	12,815	24.14	11	1,699	0.65	22.70	50.65	44.82	106.77	3,647.83	2.93

Table 8.3
Total Deposit Insurance Fund Losses
and Average Loss per Bank, 1980–1990
(\$Millions)

Year	Total Deposit Insurance Fund Losses	Average Loss per Bank
1980	\$ 30.59	\$ 2.78
1981	776.16	77.62
1982	1,148.28	27.34
1983	1,425.12	29.69
1984	1,494.91	18.69
1985	1,007.70	8.40
1986	1,724.53	11.89
1987	2,020.68	9.95
1988	6,871.88	31.09
1989	6,123.14	29.58
1990	2,813.17	16.65

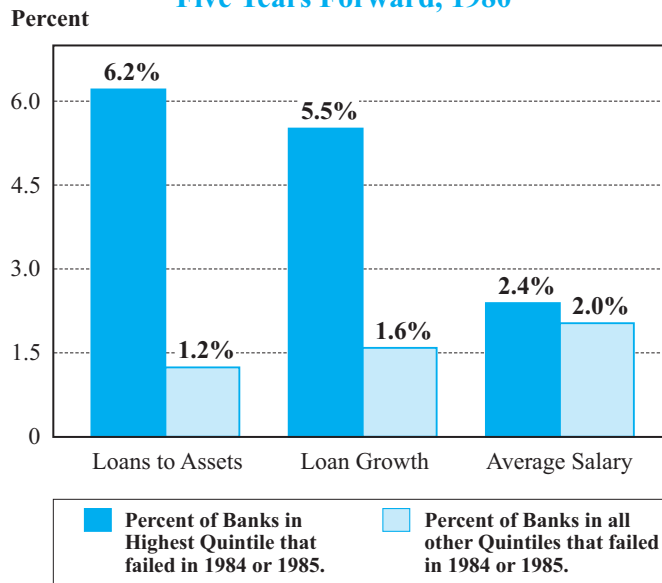
bank from 1984 through 1986: 105 farm banks failed in 96 different agricultural counties. Had the farm bank failures primarily reflected conditions in the local agricultural economy, a pronounced geographic clustering would have appeared. Moreover, research related to these bank failures demonstrated that at the approximate peak of farmland prices in 1981, farm banks that later failed had significantly higher ratios of total loans to assets than did other banks in the same counties. These findings suggest that total loans-to-assets ratios of farm banks are important to the assessment of failure risk.⁵⁵

To determine which factor is the best long-range predictor of agricultural bank failure, researchers studied eight measures of bank risk. The eight measures were (1) loans-to-assets ratio, (2) return on assets, (3) asset growth from the previous year, (4) loan growth from the previous year, (5) operating expenses to total expenses, (6) average salary expenses, (7) in-

⁵⁵ Belongia and Gilbert, "The Effects of Management Decisions," 902. A high loans-to-assets ratio by itself would not necessarily indicate a problem bank because not all banks with high ratios failed or became problem banks. Agricultural banks with elevated loan ratios that diversified their loan portfolios and maintained rigorous underwriting standards, including performing thorough cash-flow analysis on their borrowers, might have been safer than those with lower ratios that did neither. It should be noted that banks in most agricultural areas cannot effectively diversify their loan portfolios. Loans to farm-implement dealers or to the local feed store probably have risks related to agricultural prices that are similar to the risks inherent in farm loans.

terest on loans and leases, and (8) interest plus fees on loans and leases.⁵⁶ To assess whether timing or various risk factors affected agricultural banks, the researchers studied two sets of banks, one each in two different time periods. The first group included all agricultural banks that existed in 1980 and either failed in 1984 or 1985 or never failed; the second group included all agricultural banks that existed in 1982 and either failed in 1986 or 1987 or never failed. In each set, each bank was ranked from high to low within each financial ratio. The ranked banks were then divided into five groups, and each of these smaller groups was analyzed for each risk measure to determine which measure was the best predictor of failure. For both of the specified periods, banks in the highest loans-to-assets group had the highest probability of failure, a finding that confirmed previous research. For the 1980 banks, the highest loans-to-assets group had a failure rate of 6.2 percent, over five times as high as the failure rate for the rest of the agricultural banks (see figure 8.8). For the 1982 banks, the

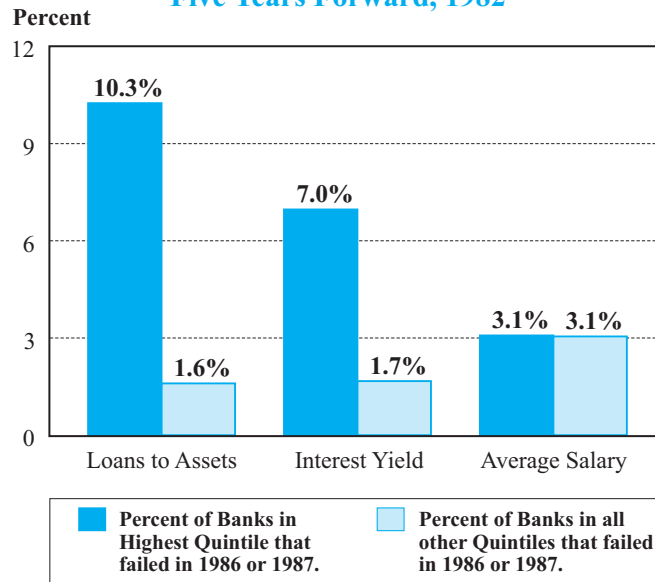
Figure 8.8
Comparison of Selected Factors in Predicting
Agricultural Bank Failures Four and
Five Years Forward, 1980



Note: These three factors represent the two highest risk factors (left and center) and the lowest risk factor (right) in predicting bank failures.

⁵⁶ For a complete description of this analysis, see Chapter 13, the section entitled “Analysis by Risk Groups.”

Figure 8.9
Comparison of Selected Factors in Predicting
Agricultural Bank Failures Four and
Five Years Forward, 1982



Note: These three factors represent the two highest risk factors (left and center) and the lowest risk factor (right) in predicting bank failures.

highest loans-to-assets group had a failure rate of 10.3 percent, more than six times as high as the remaining agricultural banks (see figure 8.9). Because the proportion of loans to assets can be largely controlled through decisions made at each bank, management prudence with regard to risk, to underwriting standards, or to the concentration of agricultural lending apparently could have improved the probability that a bank would survive.

Analysis of Agricultural Bank Data

The geographic pattern of farm bank failures and the ratio analysis indicate that management decisions were the crucial determinants of bank survival. At the same time, it is apparent that the agricultural problems of the 1980s caused the failures of many banks that might otherwise have continued to operate. The adverse effect of the weakening farm economy on agricultural banks is clearly evident in the sharp increase in these banks' levels of

nonperforming loans and the deterioration of their CAMEL ratings.⁵⁷ Nevertheless, for most agricultural banks the statistics related to capital and profitability continued to be favorable, which is another fact suggesting that more-conservative management practices could have prevented many failures.

The CAMEL ratings of agricultural banks generally mirrored the slumping farm economy (see tables 8.4a and 8.4b). For example, among all agricultural banks, the proportion of CAMEL 1-rated agricultural banks declined steadily between year-end 1981 and year-end 1986, from 43.8 percent to 20.8 percent. Similarly, during the same period the percentage of 4-rated banks among all agricultural banks increased from 0.9 percent to 13.7

Table 8.4a
CAMEL Ratings for All Agricultural Banks, 1981–1990

Report Date (Year-end)	Number of Agricultural Banks/Percentage of Total					Total
	CAMEL Ratings					
	1	2	3	4	5	
1981	1,858	2,184	164	36	3	4,245
	43.8	51.5	3.9	0.9	0.1	100%
1982	1,691	2,118	281	72	9	4,171
	40.5	50.8	6.7	1.7	0.2	100
1983	1,501	2,039	426	133	21	4,120
	36.4	49.5	10.3	3.2	0.5	100
1984	1,265	1,752	563	283	34	3,897
	32.5	45.0	14.5	7.3	0.9	100
1985	936	1,556	689	424	54	3,659
	25.6	42.5	18.8	11.6	1.5	100
1986	727	1,483	735	477	73	3,495
	20.8	42.4	21.0	13.7	2.1	100
1987	683	1,669	685	342	74	3,453
	19.8	48.3	19.8	9.9	2.1	100
1988	726	1,742	558	234	46	3,306
	22.0	52.7	16.9	7.1	1.4	100
1989	758	1,765	438	167	36	3,164
	24.0	55.8	13.8	5.3	1.1	100
1990	818	1,714	388	135	28	3,083
	26.5	55.6	12.6	4.4	0.9	100

Note: Examination ratings were obtained from the FDIC's historical database. In some instances examination ratings were missing; however, from 92 to 99 percent of banks' ratings were in the database. As a result, the number of CAMEL-rated banks each year was slightly smaller than the total number of agricultural banks in other tables.

⁵⁷ The CAMEL rating system refers to capital, assets, management, earnings, and liquidity. In addition to a rating for each of these individual or "component" categories, an overall or "composite" rating is given for the condition of the bank. Banks are assigned ratings between 1 and 5, with 5 being the worst rating a bank can receive. See Chapter 12 for a detailed explanation of CAMEL ratings.

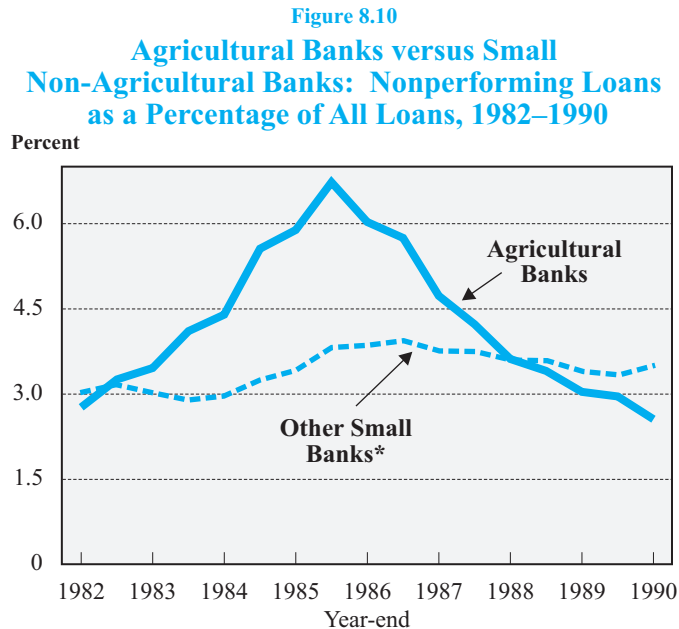
Table 8.4b
CAMEL 4- and 5-Rated Institutions, Agricultural Banks
versus Small Non-Agricultural Banks, 1981–1990

Report Date (Year-end)	Number of Banks/Percentage of Total		Total
	Agricultural Banks	Small Non-Agricultural Banks	
1981	39	142	181
	21.5	78.5	100%
1982	81	294	375
	21.6	78.4	100
1983	154	402	556
	27.7	72.3	100
1984	317	454	771
	41.1	58.9	100
1985	478	604	1,082
	44.2	55.8	100
1986	550	745	1,295
	42.5	57.5	100
1987	409	744	1,153
	35.5	64.5	100
1988	278	702	980
	28.4	71.6	100
1989	203	671	874
	23.2	76.8	100
1990	163	655	818
	19.9	80.1	100

Note: Small non-agricultural banks are defined as those with less than \$100 million in assets.

percent. By mid-1987, both measures had begun what would turn out to be a steady improvement. The percentage of agricultural banks among *all* 4- and 5-rated banks also reflected the farm economy (table 8.4b): at year-end 1981, only 21.5 percent of all 4- and 5-rated banks were agricultural banks, but this ratio rose steadily until year-end 1985, when the comparable figure was 44.2 percent. In absolute numbers, in 1981 only 39 agricultural banks were 4 and 5 rated; in 1986, 550 were. From 1986 to the end of the decade, both the percentage and the number of 4- and 5-rated agricultural banks declined steadily.

A primary cause of the deterioration in agricultural bank CAMEL ratings was a rapid rise in the nonperforming loans of agricultural banks (see figure 8.10). Between year-end 1982 and midyear 1986, nonperforming loans as a percentage of all loans at agricultural banks went from 2.8 percent to 6.7 percent. The percentage then declined steadily, reaching 2.6 percent at year-end 1990. In contrast, for other *small* banks (defined as those with less



than \$100 million in assets) the ratio of nonperforming loans was relatively constant between 1982 and 1990, reaching a low of 2.9 percent in 1984 and a high of 3.9 percent in mid-1987.

Despite the severe problems many agricultural banks had in the 1980s, by certain aggregate measures agricultural banks actually compared favorably with small non-agricultural banks (see table 8.5). For example, every year from 1979 through 1990 the median ratio of equity to assets for agricultural banks exceeded that of other small banks.⁵⁸ In addition, profitability ratios of agricultural banks were equivalent to or higher than the ratios for other small banks: the median return on assets was higher for agricultural banks than for small non-agricultural banks in 10 of the 12 years from 1979 through 1990, while the median return on equity was higher in 8 of those 12 years.

More significantly, when we compare agricultural and small non-agricultural banks in terms of the percentage that incurred losses in the 1980s, we find that for agricultural banks the percentage was far lower (see figure 8.11)—only in 1985 did the percentage of agricul-

⁵⁸ It is noteworthy that the equity-to-assets ratio for agricultural banks was quite stable during the agricultural downturn of the 1980s. This stability is probably due to the fact that many agricultural banks with relatively low ratios of equity to assets had failed.

Table 8.5
Median ROA, ROE, and Equity Ratios, Agricultural Banks versus Small Non-Agricultural Banks, 1979–1990

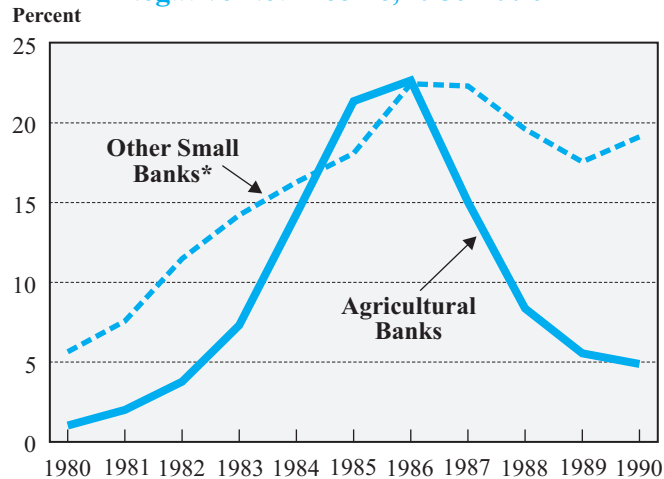
Report Date (Year-end)	Number of Banks		ROA		ROE		Equity to Assets	
	Ag. Banks	Small Non-Ag.	Ag. Banks	Small Non-Ag.	Ag. Banks	Small Non-Ag.	Ag. Banks	Small Non-Ag.
1979	4,365	8,584	1.24	1.05	14.40	13.14	8.43	8.04
1980	4,316	8,543	1.31	1.05	14.82	12.63	8.66	8.24
1981	4,214	8,471	1.30	1.02	14.42	12.07	8.71	8.25
1982	4,107	8,416	1.22	0.99	13.46	11.83	8.86	8.26
1983	4,064	8,238	1.12	0.93	12.03	11.41	8.98	8.16
1984	3,918	8,236	0.93	0.90	10.01	10.98	8.87	8.10
1985	3,685	8,241	0.83	0.90	8.91	10.83	8.83	8.14
1986	3,513	7,911	0.70	0.78	7.59	9.47	8.67	7.96
1987	3,337	7,615	0.80	0.75	8.52	8.99	8.74	8.07
1988	3,241	7,083	0.94	0.78	9.91	9.30	8.89	8.10
1989	3,174	6,735	1.01	0.84	10.47	9.73	9.01	8.21
1990	3,093	6,360	0.97	0.78	10.21	9.04	8.88	8.15

Note: Small non-agricultural banks are defined as those with less than \$100 million in assets.

tural banks significantly exceed that of small non-agricultural banks. And whereas the proportion of agricultural banks with negative net income rose dramatically from 1980 through 1986 (consistent with the deterioration in the farm economy) and declined sharply after 1986 (as the farm economy gradually improved), the proportion of small non-agricultural banks with negative net income not only increased rapidly through 1986 but also remained high through 1990.

Data on equity and reserves to assets also demonstrate that the majority of agricultural banks were in sound financial condition during the 1980s (see tables 8.6a and 8.6b). From 1979 through 1983, an average of 21.8 percent of agricultural banks had a ratio of equity and reserves to assets exceeding 11 percent. From 1984 through 1987 the average proportion of agricultural banks with such ratios increased to 29.1 percent, even with agricultural bank failures constituting a large percentage of all bank failures. These figures are quite favorable when compared with data for other small banks: the measures for the same periods for such banks were 18.7 percent and 21.1 percent. In addition, throughout the 1980s at least 30 percent of agricultural banks had a ratio of equity and reserves to assets of between 9 and 11 percent, and the proportion of such banks in that category held steady: from year-end 1979 through 1983 it averaged 32.6 percent, and from 1984 through 1987, 32.0 percent. In contrast, less than 27 percent of other small banks had ratios of equity and reserves to assets of 9 to 11 percent each year. Finally, the percentage of agricultural banks with very low

Figure 8.11
Agricultural Banks versus Small Non-Agricultural Banks: Percentage of Institutions with Negative Net Income, 1980–1990



*Small banks are banks with assets of less than \$100 million.

ratios (less than 5 percent) of equity and reserves to assets was minimal before the wave of agricultural bank failures, never exceeding 0.4 percent of all agricultural banks from 1979 through 1984. In contrast, for other small banks during the same period this ratio ranged from 0.7 percent to 1.4 percent. Such patterns indicate that low capital ratios were not a significant contributor to the large number of agricultural bank failures after 1983. The percentage of agricultural banks with less than 5 percent equity and reserves to assets rose after 1984, following the downturn in the farm economy, and reached a peak of 2.0 percent in 1987. In comparison, the ratio for other small banks peaked at 3.9 percent in 1988.

Conclusion

Agriculture prospered in the 1970s. Real farm incomes reached historical highs, farm exports increased sharply, and long-term prospects were believed to be excellent. An important component of the agricultural boom of the 1970s, and one that had a significant effect on the problems of the 1980s, was the escalating value of farm real estate. In order to invest in or purchase farm real estate, farmers assumed a substantial amount of debt. Because many agricultural bankers continued basing their farm loans on collateral value rather

Table 8.6a
Equity and Reserves to Assets of Agricultural Banks, 1979–1990

Report Date (Year-end)	Number of Banks/Percentage of Total					Total
	<5.0	Equity 5.0–7.0	Capital and Reserves to Total Assets 7.0–9.0	9.0–11.0	> 11.0	
1979	7	278	1,991	1,321	768	4,365
	0.2	6.4	45.6	30.3	17.6	100%
1980	4	202	1,799	1,446	865	4,316
	0.1	4.7	41.7	33.5	20.0	100
1981	4	199	1,744	1,372	895	4,214
	0.1	4.7	41.4	32.6	21.2	100
1982	6	201	1,551	1,395	954	4,107
	0.2	4.9	37.8	34.0	23.2	100
1983	17	200	1,433	1,324	1,090	4,064
	0.4	4.9	35.3	32.6	26.8	100
1984	17	176	1,349	1,276	1,100	3,918
	0.4	4.5	34.4	32.6	28.1	100
1985	28	179	1,179	1,213	1,086	3,685
	0.8	4.9	32.0	32.9	29.5	100
1986	68	244	1,123	1,109	969	3,513
	1.9	7.0	32.0	31.6	27.6	100
1987	66	185	1,022	1,026	1,038	3,337
	2.0	5.5	30.6	30.8	31.1	100
1988	54	141	935	1,014	1,097	3,241
	1.7	4.4	28.9	31.3	33.9	100
1989	34	118	873	1,023	1,126	3,174
	1.1	3.7	27.5	32.2	35.5	100
1990	24	132	979	916	1,042	3,093
	0.8	4.3	31.7	29.6	33.7	100

than on cash-flow analysis, farm debt rose in tandem with soaring real estate values, even though farm income levels were frequently insufficient to support the higher debt burdens.

The optimism of the early and middle 1970s came to an end late in the decade as interest rates soared and foreign demand for domestic agricultural products declined. Real farm income fell rapidly, as did farm real estate values. Many banks with a large proportion of farm loans were adversely affected by the downturn in the farm economy, and the number of agricultural bank failures increased dramatically in 1984 and 1985 and remained high through 1987, before rapidly declining. Fortunately, because these institutions were small, deposit insurance fund losses were relatively low even when the proportion of agricultural bank failures was at its highest levels.

Table 8.6b
Equity and Reserves to Assets of Small Non-Agricultural Banks, 1979–1990

Report Date (Year-end)	Number of Banks/Percentage of Total					Total
	Equity Capital and Reserves to Total Assets					
	<5.0	5.0–7.0	7.0–9.0	9.0–11.0	> 11.0	
1979	67	1,209	3,813	2,092	1,403	8,584
	0.8	14.1	44.4	24.4	16.3	100%
1980	62	978	3,667	2,285	1,551	8,543
	0.7	11.5	42.9	26.8	18.2	100
1981	80	979	3,588	2,231	1,593	8,471
	0.9	11.6	42.4	26.3	18.8	100
1982	99	995	3,482	2,154	1,686	8,416
	1.2	11.8	41.4	25.6	20.0	100
1983	112	1215	3,272	1,976	1,663	8,238
	1.4	14.8	39.7	24.0	20.2	100
1984	110	1,127	3,357	1,929	1,713	8,236
	1.3	13.7	40.8	23.4	20.8	100
1985	115	959	3,372	2,045	1,750	8,241
	1.4	11.6	40.9	24.8	21.2	100
1986	188	1,104	3,117	1,904	1,598	7,911
	2.4	14.0	39.4	24.1	20.2	100
1987	246	838	2,971	1,883	1,677	7,615
	3.2	11.0	39.0	24.7	22.0	100
1988	275	717	2,728	1,771	1,592	7,083
	3.9	10.1	38.5	25.0	22.5	100
1989	217	642	2,510	1,750	1,616	6,735
	3.2	9.5	37.3	26.0	24.0	100
1990	183	597	2,416	1,612	1,552	6,360
	2.9	9.4	38.0	25.4	24.4	100

Most of the agricultural bank failures occurred in the Midwest, not only because of the concentration of the agricultural industry in those states but also because the crops produced in those states were greatly affected by the export boom of the 1970s. It should be noted, however, that despite the sharp increase in the number of agricultural bank failures, most such banks did not fail. Because agricultural bank failures were widely spread across many midwestern counties, local economic conditions apparently did not play a significant role in causing these failures; rather, it appears that agricultural banks with the highest loans-to-assets ratios were more likely to fail than those that pursued more conservative lending strategies.

After the downturn in the farm economy of the 1980s, agricultural banks recovered, but this does not necessarily mean they will be immune to a similar episode in the future. Almost by definition, such institutions lack diversification in their loan portfolios. A 1996

study by two Federal Reserve economists found that agricultural banks had not greatly diversified their credit risk and that although the number of banks with high ratios of agricultural loans to total loans had decreased, many agricultural banks were continuing to invest very significant proportions of their loans in agriculture. Moreover, as of 1994 most agricultural banks were still within small banking organizations that accounted for approximately two-thirds of total agricultural loans by agricultural banks. By not affiliating themselves with larger banking organizations, banks with the greatest exposure to the agricultural sector had not reinforced their ability to withstand a downturn in the sector.⁵⁹

On the other side of the coin, there are suggestions that agricultural banks and farmers were chastened by their experiences in the 1980s. In the mid-1990s bankers often required larger down payments on loans, and performed extensive analyses to determine if a borrower could generate sufficient cash flow to meet loan payments. Moreover, some banks became reluctant to permit farmers to use the rising value of their land to increase their borrowing power. As an Iowa bank president declared in early 1996, “We’re not going to lend on a grain rally that could be a flash in the pan.” Some farmers, too, have learned from the past: An Iowa farmer stated that “in the 1970s we concentrated on producing crops. Now it’s the financials I worry the most about. We need the computer to figure our cash flows.” Another noted that “a lot has changed since the 1970s. We don’t do things by the seat of our pants anymore.”⁶⁰ But despite such developments and the small size of agricultural banks—both of which make such banks seem less of a threat to the Bank Insurance Fund than larger banks with a comparable lack of diversification—the large number of agricultural banks warrants continued regulatory concern.

⁵⁹ Kleisen and Gilbert, “Are Some Agricultural Banks Too Agricultural?” 30–32.

⁶⁰ All the quotations in this paragraph are reported in Kilman, “High Grain Price,” A.1. Kleisen and Gilbert, however, note that although agricultural banks responded to the problems of the 1980s by increasing lending collateral requirements, by 1994 requirements had fallen back to the levels of the mid-1970s, a trend the authors see as “inconsistent with the argument that these banks have changed their lending practices to reduce . . . credit risk” (“Are Some Agricultural Banks Too Agricultural?” 31).

Chapter 9

Banking Problems in the Southwest

Introduction

The most severe of the regional banking crises was the one in the southwestern region, defined here as Texas, Oklahoma, Louisiana, New Mexico, and Arkansas.¹ Of the total failure-resolution costs borne by the FDIC from 1986 to 1994, half (\$15.3 billion) was accounted for by southwestern bank failures. (This included losses of nearly \$6.3 billion in 1988 and \$5.1 billion in 1989—91.1 percent and 82 percent, respectively, of total FDIC failure-resolution costs for those two years.) From 1987 through 1989, 71 percent of the banks that failed in the United States were southwestern banks (491 out of 689), and so were some of the most significant failures, such as banks within the First City Bancorporation, First RepublicBank Corporation, and MCorp holding companies. The pervasiveness of the problems facing the region's depository institutions is indicated by the fact that the biggest savings and loan debacle also occurred in the Southwest, with Texas alone accounting for 18.3 percent of the Resolution Trust Corporation's resolutions and 29.2 percent of its resolution costs (see Chapter 4).

The banking collapse in the Southwest was especially devastating to the Texas banking industry. From 1980 through 1989, 425 Texas commercial banks failed, including 9 of the state's 10 largest bank holding companies. In 1988, 175 Texas banks failed with assets of \$47.3 billion—25 percent of the state's 1987 year-end banking assets. The following year

¹ The sequence in which the states are listed reflects the severity of each state's banking crisis. From 1980 through 1994, Texas had 599 bank failures and \$60.2 billion in failed-bank assets (43.8 percent of the state's total bank assets); Oklahoma: 122 failures, \$5.8 billion in failed-bank assets (23.8 percent of total state banking assets); Louisiana: 70 failures, \$4.1 billion in assets (17.4 percent of total); New Mexico: 11 failures, \$568 million in assets (9.5 percent of total); and Arkansas: 11 failures, \$161 million in assets (1.5 percent of total). The discussion in this chapter focuses on Texas, Oklahoma, and Louisiana because banking problems were concentrated in those states. However, data for the Southwest cover all five states. (Note: The number of bank failures refers to FDIC-insured commercial and savings banks that were closed or received FDIC assistance. Asset data refer to assets of banks existing in each state at year-end 1979 plus assets of newly chartered banks as of the date of failure, merger, or December 31, 1994, whichever is applicable.)

134 Texas banks failed with assets of \$23.2 billion—13.6 percent of the state's banking assets.

Oil was both the foundation of the region's economy and the primary force behind the region's banking crisis. In January 1973, the U.S. average monthly import price for crude oil was \$2.75 per barrel; after a series of unprecedented international economic and political events, this price rose to a peak of \$36.95 per barrel in April 1981. The soaring price of oil worldwide fueled the oil boom in the Southwest and became the basis for regional economic prosperity, supported by bank lending to the energy markets.

But oil prices peaked in 1981, an event that roughly coincided with the beginning of deterioration in the banking sector. Between 1981 and 1985 the price of oil slowly but steadily declined as a result of several factors: conservation efforts led to decreased demand, oil production increased, and the international political environment changed. This was the initial period of increased southwestern bank failures, caused primarily by problems with energy loans. As oil prices continued to weaken, southwestern banks sought new investment opportunities and therefore increased their lending to the then-booming real estate markets, particularly commercial real estate. In hindsight this strategy proved to be unwise, for the health of the real estate markets was tied to the hitherto-strong energy markets. Indeed, indications of potential problems may have come early: from 1981 through 1983 office vacancy rates were escalating even while commercial real estate construction expenditures remained extremely high. In 1986 oil prices dropped precipitously, devastating the region's economy, and the price decline and subsequent economic devastation contributed to the collapse of the overbuilt southwestern real estate market in the remaining years of the decade. As a result, the region's banks suffered substantial losses on real estate loans. These losses, coming when the banks were already weakened by energy-loan difficulties and by intense competition from recently deregulated savings and loan (S&L) institutions, were largely responsible for the escalating number of southwestern bank failures in the second half of the decade.

Because oil played such an important role in the region's economy, the history and causes of the oil boom and bust are reviewed first. And because bankers reacted to the weakening of oil prices by increasing their real estate lending, helping to support the substantial growth in real estate development in the Southwest, the southwestern real estate markets are discussed next. The emphasis is on Texas, the state most affected by the oil cycle. The final section on the region's economy highlights the effects of agricultural problems, especially in relation to Texas, Louisiana, and Oklahoma. The remaining sections of the chapter focus on banking: the banking environment (new charters, and competition from S&Ls), the effect of the economy on the region's banks, bank failures in the region (the failures of Penn Square and the First National Bank of Midland are looked at in detail), and regional bank data. An analysis of these data suggests that although the number of

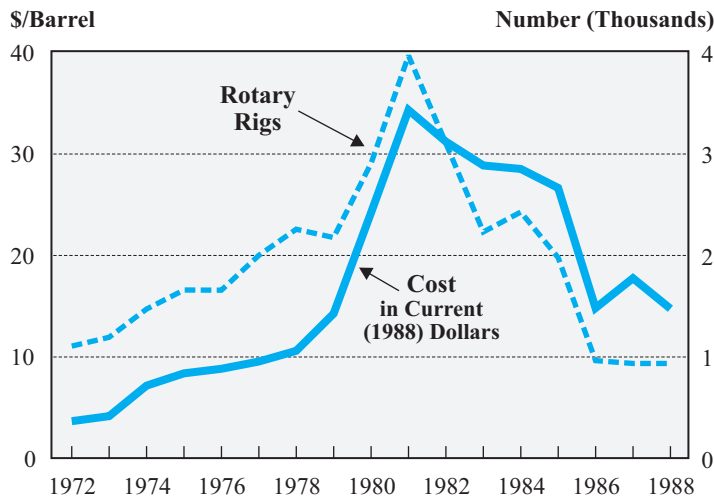
southwestern bank failures did not begin to increase substantially until 1983 and reached a peak in 1988, the beginning of the collapse can be observed in bank data as early as 1981.

Energy and the Southwestern Economy: Boom and Bust

Energy—oil and natural gas—was a vital component of the southwestern economy, and trends in the prices of these two products determined regional economic trends. In the 1970s and 1980s the price of both oil (the cornerstone of the economy) and natural gas (which also played an important role) went through a boom and bust that had a tremendous impact on the region (see figure 9.1). Between 1979 and 1982, when the prices of the two sources of energy were high, the average growth rate in the Southwest exceeded that of the nation as a whole by a substantial margin; from 1985 to mid-1987, when energy prices were depressed, the region's average growth rate was significantly less than the nation's (see figure 9.2).

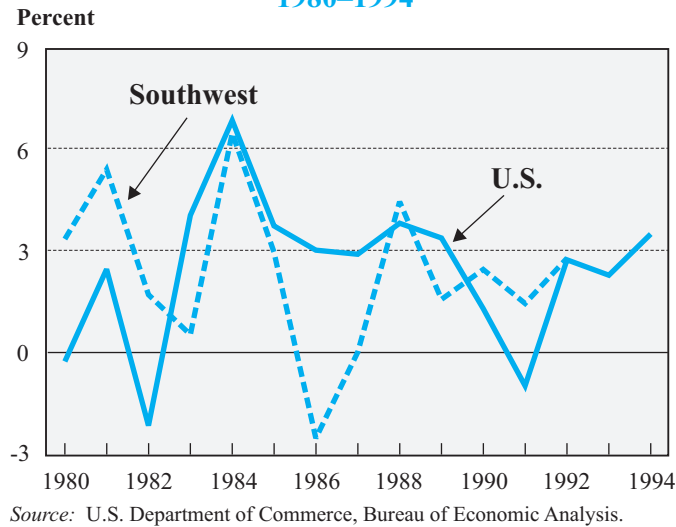
The price of oil was extremely volatile in the 1970s and 1980s. In January 1973 the average monthly import price per barrel was \$2.75, but between then and April 1981 a series of international economic and political events combined to push the price to a peak of

Figure 9.1
Domestic Crude-Oil Refiner Acquisition Cost versus
Average Number of Rotary Rigs, 1972–1988



Sources: U.S. Department of Commerce, International Trade Administration, *Industrial Outlook* (1990), 3-5; and Energy Information Administration, *Annual Energy Review 1988* (Cited in John O'Keefe, "The Texas Banking Crisis," FDIC Banking Review 3, no. 2 (1990), 17.

Figure 9.2
Changes in Southwest Gross Product versus
Changes in U.S. Gross Domestic Product,
1980–1994



\$36.95 per barrel. By August 1986, however, because of energy conservation, increased production, and a drastic change in the world political environment, imported oil prices plunged to \$10.00 per barrel. These substantial movements in the price of oil profoundly destabilized the Southwest's economy and its banks.

Throughout the 1950s and 1960s, oil had been inexpensive and plentiful, partly because new oil fields opened in the Middle East, Southeast Asia, and Africa.² During the 1950s, annual imports of crude oil and refined oil products increased 176 percent and net imports as a share of domestic consumption rose from 6 to 17 percent. In 1959, the low price of oil led domestic producers to persuade the Eisenhower administration to impose import quotas on crude oil and petroleum products as protection against foreign competition. Despite this action, the net import market share continued to grow, reaching 22 percent in 1969. Dependence on imported oil continued to increase as the production of domestic oil peaked in 1970 and then began a gradual but continuous decline (which was interrupted only briefly by the opening of the Trans-Alaska oil pipeline in 1977). By 1972, imported oil

² Information in this section, unless otherwise noted, is from Jack L. Herve, "The 1973 Oil Crisis: One Generation and Counting," Federal Reserve Bank of Chicago *Chicago Fed Letter*, no. 86 (October 1994): 1–2.

amounted to 28 percent of domestic consumption. The reduction in domestic crude production was accompanied by a 16 percent increase in consumption between 1969 and 1972. As a result, crude oil prices, which had been rising at an average annual rate of approximately 1.25 percent, rose nearly 8 percent in 1971 alone. In response to growing oil shortages and rising prices, the oil import quotas were eliminated by presidential order in 1973. Nevertheless, the U.S. monthly average import price for crude oil rose 23 percent between January and September of that year (from \$2.75 to \$3.38 per barrel).

The political ramifications of the Arab-Israeli war in 1973 had an enormous impact on oil prices. Several Arab members of the Organization of Petroleum Exporting Countries (OPEC) decided to impose a selective embargo on oil shipments to countries that supported Israel.³ However, cartels tend to be unstable, and in this case the embargo's effectiveness was undercut by the Arab nations' dependence upon oil as their primary source of revenues.⁴ Nonetheless, OPEC quadrupled the price of oil from roughly \$3 a barrel in October 1973 to around \$12 by January 1974, causing an "oil shock" that was felt by economies around the world.

After that initial price upheaval, oil prices trended upward and then remained around \$13.50 per barrel throughout 1978.⁵ In response to the higher oil prices, many oil-producing countries, members and nonmembers of OPEC alike, had increased their output by the late 1970s. In addition, crude oil extracted from both the Alaskan North Slope and newly opened fields in the North Sea became available on the world market. At the same time, the United States and other industrial nations had instituted conservation measures that significantly reduced their consumption of oil.⁶

Faced with reduced demand and the prospect of losing some control over the crude oil and petroleum markets, in 1979 OPEC again cut production and raised oil prices by 14.5 percent. OPEC's success was facilitated by the Iranian revolution of 1979, which disrupted crude oil production in that country. OPEC's actions launched the second wave of oil price increases and had a profound impact on the global economy.⁷ By April 1981, the average monthly import price for crude oil in the United States hit a peak of \$36.95 per barrel.

³ OPEC was founded in 1960 for the purpose of coordinating the petroleum policies of member countries and safeguarding their interests. Its charter members were Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela. By November 1973, it had eight additional members: Algeria, Ecuador, Gabon, Indonesia, Libya, Nigeria, Qatar, and the United Arab Emirates. Ecuador and Gabon withdrew from the cartel in 1992 and 1996, respectively, leaving OPEC with 11 members as of June 1997.

⁴ David Ivanovich, "It Was a Disaster; 1973 Arab Oil Embargo Still Scratches at Scar of Distrust," *Houston Chronicle* (October 16, 1993), available: LEXIS, Library: NEWS, File: HCHRN.

⁵ Hervey, "The 1973 Oil Crisis," 1–3.

⁶ Ibid.

⁷ For example, the Organization for Economic Cooperation and Development (OECD) estimated that the level of GNP in the 24 OECD member countries would be some 6 percent, or about \$500 billion, lower by the beginning of 1982 than it would have been in the absence of the oil price rise (*Economic Report of the President, Transmitted to the Congress* [1981], 190.)

In response to these prices, the United States and other industrial nations continued to reduce oil consumption by making stringent conservation efforts, while at the same time non-OPEC countries were further increasing their oil output. As a result, OPEC's ability to maintain a fixed price of oil was under mounting pressure. In addition, the cartel's unity deteriorated as individual members began to boost their own oil output, selling more than their OPEC quota at reduced prices on world markets. This breakdown in the cartel's discipline eventually contributed to a break in oil prices, and by early 1983 the prices of imported oil had fallen below \$30 per barrel.⁸ Then in late 1985, Saudi Arabia unilaterally engineered a substantial reduction in the price of oil by increasing its daily production of crude from two million to four million barrels.⁹ As a result, oil prices that had averaged approximately \$30 a barrel in late November dropped to approximately \$25 a barrel by January 15, 1986.¹⁰ The subsequent flood of OPEC oil caused prices to continue plummeting, falling to less than \$13 a barrel by March 1986 and to \$10 a barrel by August 1986, the lowest price since 1974.¹¹

The explosion and collapse of oil prices had a profound effect on oil drilling, especially in the states of Texas, Oklahoma, and Louisiana. Throughout the 1960s oil drilling had been declining, as U.S. fields were steadily drained of oil that could be profitably extracted at \$2 a barrel. As a result, the rig count in the United States had dropped from 2,000 in the early 1960s to just below 1,000 by the early 1970s.¹² However, the steep increases in oil prices beginning in 1973 quickly affected drilling activity, allowing U.S. producers to reach record levels of drilling for crude oil despite enduring high production costs relative to those in many other oil-producing nations.¹³ In late October 1973, one Houston producer noted: "Drilling is booming. All inland rigs that I know of are booked until after the end of this year. I'll drill about 15 wells this year—about 10 more than I would have had we not

⁸ Hervey, "The 1973 Oil Crisis," 2.

⁹ Saudi Arabia has the world's largest oil reserves and could afford to increase output sufficiently to prevent its oil revenues from declining despite a substantial drop in crude oil prices; this was not the case for other OPEC members. Saudi Arabia increased output and drove oil prices lower to force other OPEC members to adhere to agreed-upon production quotas. See Dermot Gately, "Lessons from the 1986 Oil Price Collapse," *Brookings Papers on Economic Activity* 2 (1986): 237–38, 251–53, 265.

¹⁰ "As Oil Prices Continue to Slide, Texas Banks Confront a Grim '86: Further Deterioration Expected in Energy and Real Estate Lending," *American Banker* (February 11, 1986), 2.

¹¹ David LaGesse, "Banker Predicts Rebound in Oil Prices," *American Banker* (March 27, 1986), 1; and Hervey, "The 1973 Oil Crisis," 2.

¹² James Fallows, "A Permanent Boomtown, Houston," *Atlantic Monthly* 256 (July 1985), available: LEXIS, Library: NEWS, File: ATLANT.

¹³ For example, to extract U.S. oil that was difficult to pump, it was necessary to employ enhanced recovery methods that were unprofitable when oil was priced below \$15 a barrel. In contrast, Saudi Arabian wells were shallow and comparatively free flowing and could be profitable even when oil was sold at \$5 a barrel (Thomas C. Hayes, "West Texas Oilmen Struggle to Endure," *The New York Times* [March 18, 1986], available: LEXIS, Library: NEWS, File: NYT).

gotten the free market price for new oil.”¹⁴ Oilmen bought rigs and added employees without concern in the early 1980s, for both they and many bankers expected oil prices to reach \$60 a barrel in the next few years.¹⁵ As a result, between 1979 and 1981 drilling expenditures increased from \$16.5 billion to \$38 billion.¹⁶ In 1981, the monthly average number of active rotary rigs reached a peak of approximately 4,000 (figure 9.1). When oil prices subsequently crashed, the number of profitable drilling opportunities became severely limited, leading to plunging values of drilling equipment, limited demand for oil-related loans, and losses to banks on outstanding oil-sector loans. The number of active rigs declined along with oil prices, reaching a new postwar low of 757 in May 1986.¹⁷

The plunge in oil prices inflicted severe hardship on many, including oil driller Don Hughes. Hughes had been perhaps the busiest drilling contractor in Oklahoma, but the precipitous drop in oil prices caused drilling in Oklahoma virtually to cease, bringing down the Hughes Drilling Company, which had once employed 400 and grossed \$4 million a month. Hughes reminisced about the glory days while he was in the process of handing over everything he had bought to the Continental Illinois National Bank and Trust Company:

During the boom everybody was screaming and hollerin’ for rigs. There was not a week that at least three bankers from the major banks weren’t here trying to loan me more money for more rigs. They told me I was a shining star. We were written up in Inc. magazine as one of the fastest-growing companies. Bear Stearns tried to get me to go public. I kept believing what all these people were telling me.¹⁸

Other drillers still in business at that time were justifiably worried. Mac McGee, marketing director of the Cactus Drilling Company, one of the largest drillers in West Texas, observed in early 1986 that “everybody geared up and borrowed. The banks can’t afford to carry companies very long. If things don’t pick up some, it’s going to be a real tragedy.”¹⁹ The situation, however, only worsened. The changing times were tellingly reflected in the prevailing bumper stickers. Oil-patch workers’ bumper stickers had read “\$85 [a barrel] in ’85.” In contrast, a slogan displayed in late 1986 read “Chapter 11 in ’87.”²⁰

¹⁴ Darnel Peacock, “Price Boosts Will Hasten Exploration,” *Houston Post* (October 21, 1973), CC4.

¹⁵ See Robert Dodge, “The Long Road Back in Texas,” *United States Banker* (July 1985), available: LEXIS, Library: NEWS, File: USBANK; and Hayes, “Oilmen Struggle.”

¹⁶ U.S. Congress, Joint Economic Committee, *The Economic Impact of the Oil Price Collapse: Hearing before the Subcommittee on Trade, Productivity, and Economic Growth of the Joint Economic Committee*, 99th Cong., 2d sess., March 12, 1986, 68.

¹⁷ Peter Behr and Hobart Rowen, “Fall in Price of Oil Hurts U.S. Fields; Drop in Drilling, Permanent Loss of Production Apparent,” *The Washington Post* (March 9, 1986), available: LEXIS, Library: NEWS, File: WPOST; and Thomas C. Hayes, “Oil’s Plunge Drags Gas Down,” *The New York Times* (May 23, 1986), available: LEXIS, Library: NEWS, File: NYT.

¹⁸ Robert Reinhold, “Desperation Descends on Oklahoma,” *The New York Times* (May 11, 1986), available: LEXIS, Library: NEWS, File: NYT.

¹⁹ Hayes, “Oilmen Struggle.”

²⁰ “A Dream Dies in Texas; Once a Land of Unlimited Promise, the Lone Star State Has Lost Its Shine and Now Has a Barrel of Troubles,” *People* (November 10, 1986), available: LEXIS, Library: NEWS, File: PEOPLE.

Natural gas also went through a boom-and-bust cycle, but here the important factor was federal regulation of natural gas prices. The government had been involved in regulating natural gas prices since passage in 1938 of the Natural Gas Act, which charged the Federal Power Commission (FPC) with regulating rates charged by interstate pipeline companies.²¹ Regulation of rates for intrastate pipelines and local utilities was left to state authorities. Throughout the 1960s wellhead gas prices were frozen at 1959 levels, resulting in a noticeable decline in drilling activities. By 1968, consumption exceeded additions to reserves.

In 1970, the intrastate price of natural gas, which most state regulators had left free of controls, climbed above federal price ceilings. As a result, producers began to reduce their commitments to interstate pipelines and, whenever possible, diverted natural gas to intrastate markets (mainly Texas, Oklahoma, and Louisiana). This response to the federal price-control framework was the chief cause of the so-called energy crisis during the 1970s for natural gas consumers in the Northeast and Midwest. Because of these events, in the winter of 1970–71 the FPC raised ceiling prices from their 1960s level. Then in 1974 the FPC adopted a single national price ceiling for natural gas, superseding the areawide pricing formula adopted in 1960 under which the nation had been carved into five regions, each of which was assigned its own price ceiling. However, because of political pressure, the FPC set a ceiling price about half as high as the market price for natural gas. This caused shortages to continue, since suppliers still had little incentive to commit gas for interstate sales.

Supply problems proliferated and in 1978 nearly 41 percent of the nation's annual gas sales were intrastate sales, which meant that 47 states were sharing less than 60 percent of the nation's delivered natural gas. The distorted supply situation was the impetus behind passage of the Natural Gas Policy Act of 1978. The act provided for a phased deregulation of all types of gas prices through 1985, except for "old" gas (from wells drilled before April 1977), which was to remain controlled, and "deep" gas (from wells below 15,000 feet), which immediately became free of all price controls.

The act had a significant effect on the production and price of natural gas. After its passage, the price of so-called deep gas soared to \$10 per 1,000 cubic feet and higher—more than four times the price of regulated shallow gas.²² As a result, a boom developed in the deep-gas drilling sector. A major beneficiary of the escalating prices was Oklahoma's

²¹ Unless otherwise noted, the information here on natural gas prices and on the industry is from Frederick S. Carns, "The Role of Federal Regulation in the Natural Gas Industry," *FDIC Banking and Economic Review* 4, no. 5 (June 1986): 3–8.

²² Unless otherwise noted, the information in this paragraph and the next is from Douglas Martin, "Penn Square's Oil Connection," *The New York Times* (July 19, 1982), available: LEXIS, Library: NEWS, File: NYT; and "Oklahoma Oil and Gas; This Time the Hurting Won't Heal," *Economist* (August 21, 1982), available: LEXIS, Library: NEWS, File: ECON.

Anadarko Basin, where most of the drilling activity was centered. The expansion in drilling for the basin's higher-priced deep gas is reflected in the increased number of on-shore well completions, which went from 47,413 in 1978 to 77,505 in 1981. These events contributed to the huge natural-gas surpluses of the early 1980s.

Demand for natural gas was subsequently reduced by its rising price and by the national economic recession of the early 1980s. By early 1982, therefore, pipeline companies had halved the price they were prepared to pay for deep gas. Subsequently, natural gas prices collapsed along with oil prices. For example, after a 33 percent decline in natural gas prices in 1985, from January through mid-May of 1986 spot market prices dropped another 34 percent (from \$1.90 to \$1.26 per million British thermal units [BTUs]).²³ These events were devastating to producers, who were already having problems because deep drilling had been more costly than anticipated.

For banks, the erosion of oil prices beginning in 1981 led to problems with energy loans that were largely responsible for the initial increase in the number of bank failures in 1983. Compounding the difficulties caused by the weakening energy markets was the excessive emphasis that some banks had placed on making energy loans to maintain market share in an environment in which the competition to keep oil and gas customers (during 1981 and 1982) was intense. For example, in 1981 officials of Republic Bank of Texas were feeling pressure from members of the board of directors to preserve the bank's market share in energy lending. It was reported that Chairman James D. Berry summoned the bank's top energy lenders to his office and told them he wanted to make more energy loans. The lenders, who knew the industry was gripped by a gold-rush psychology, "all sat there and blinked at the chairman, like a bunch of owls in a tree." But lenders at other institutions were assuming the price of oil would climb to \$60 a barrel or more and had lowered their lending standards to grab new business.²⁴ Republic's customers were going to those other banks.

In hindsight, although bankers might have been more prudent regarding the quality of their energy loans, there appears to have been little they could do to protect themselves from the unexpected and precipitous decline in oil prices that occurred in 1986. In mid-January 1986, when oil futures fell below \$20 a barrel,²⁵ Frank Anderson, an analyst with Weber, Hall, Sale & Associates in Dallas, expressed the following opinion:

²³ Detta Voesar, "Economic Conditions in Oklahoma," *FDIC Banking and Economic Review* 4, no. 8 (November/December 1986): 22. The spot market is a market for buying and selling commodities for immediate—as opposed to future—delivery and for cash payment; a BTU is the quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

²⁴ Robert Dodge, "The Long Road Back in Texas."

²⁵ A futures contract is an agreement to deliver or to receive some commodity (in this instance, oil) at a specified price at some specified future time.

At \$18 a barrel, you'll start seeing a little squirming. . . If oil prices come down gradually, the banks have a number of things they can do to their energy credits, like add more collateral or restructure the loans. They have a lot more flexibility. But if the price drops suddenly to \$15 a barrel, they will have no time to react.²⁶

As noted above, by August 1986 oil prices had plummeted to \$10 a barrel.

Many banks compounded their troubles by presuming that the weakening in oil prices was merely temporary. For example, James Cochrane, chief economist of Texas Commerce Bancshares, argued that the low level of exploration in mid-1985 would result in future shortages of oil and gas supplies and that "by the end of the decade, we will have a serious inability to supply energy products. . . We continue to believe in the long-term future of the industry."²⁷ In March 1986, Eugene C. Fiedorek, executive vice president of RepublicBank of Dallas, told financial analysts that "RepublicBank remains committed to the energy industry; it will make new loans based on expectations that oil prices will soon rebound to about \$18 a barrel."²⁸ In late April 1986, James Bruce, chief financial officer of Banks of Mid-America of Oklahoma, said, "I don't know anyone who in their gut believes that prices will stay at these levels. The feeling here is that Saudi Arabia is going to prove its point [by flooding the market with oil] and then prices will recover. A hell of a lot of money that's fairly smart says they're going to recover."²⁹ Even when a continued fall in oil prices was considered possible, bankers sometimes displayed a relaxed or indifferent attitude toward the eventuality. For example, in late 1985, when oil fell in just a couple of weeks from \$32 to around \$25 a barrel, Larry Helm, executive vice president and head of the energy division of InterFirst Corp. of Dallas, felt that "if the price [of oil] drops to the \$20 range, that might cause some problems on some credits but the magnitude of those problems would not be so great."³⁰

Some analysts, however, did not believe that the drop in oil prices was temporary or of little significance. In late 1985, Sandra Flannigan, a vice president at Paine, Webber, Jackson & Curtis Inc. in Houston, believed that "if we see oil prices go below [\$20 a barrel] and remain there for an extended period, we'll have substantial problems."³¹ Flannigan also observed at the time that the spillover effects of an oil price decline could reach into real estate and other areas of the Texas economy that were dependent on oil. Another warn-

²⁶ Lisabeth Weiner and Richard Ringer, "Falling Oil Prices Could Bleed Portfolios of Energy Banks," *American Banker* (January 22, 1986), 2.

²⁷ Dodge, "The Long Road Back in Texas."

²⁸ David LaGesse, "Banker Predicts Rebound in Oil Prices," 1.

²⁹ John Morris, "Banks of Mid-America Treads Water, Waits for Cheap-Oil Flood to Subside," *American Banker* (April 30, 1986), 8.

³⁰ Lisabeth Weiner and John P. Forde, "Oil Price Drop Having Little Effect on Banks: Industry Well Insulated Against Price Changes, Analysts Say," *American Banker* (December 12, 1985), 8.

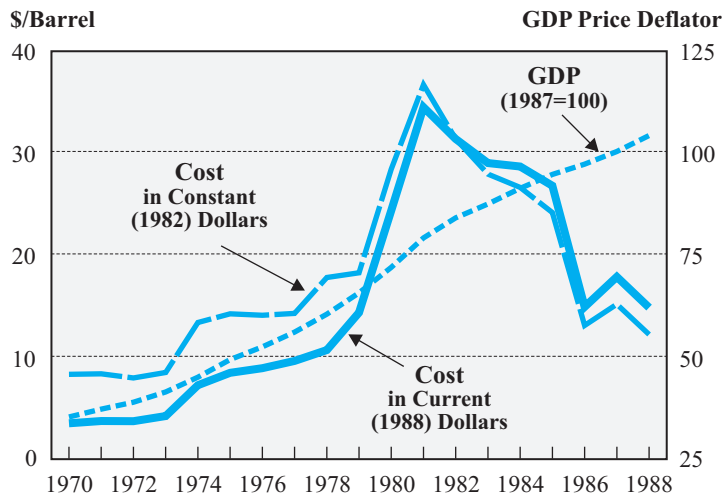
³¹ *Ibid.*

ing came in early February 1986, when James W. McDermott, Jr., a bank analyst with Keefe, Bruyette & Woods, Inc., of New York, cautioned that “we are likely to see a continuation of weak oil prices and a worsening of the financial performance of the Texas banks.”³² Few bankers appeared to heed such warnings.

Southwestern Real Estate Markets

The tremendous rise in oil prices relative to the increases in other prices resulted in a substantial transfer of wealth from oil-consuming to oil-producing areas (see figure 9.3). And even after oil prices weakened, the affluence resulting from the oil boom and expectations that oil prices would rebound kept southwestern real estate markets robust.³³ Moreover, commercial real estate in the Southwest was favorably affected not only by internal but also by external factors.³⁴ Entering the 1980s, the nation’s real estate markets were

Figure 9.3
Domestic Crude-Oil Refiner Acquisition Cost versus
Gross Domestic Product, 1970–1988



Sources: *Economic Report of the President* (1993), 352; and see source to Figure 9.1.

³² “As Oil Prices Continue to Slide,” 2.

³³ For example, Schmidt noted that despite falling oil prices through most of the year, the rapid increase in the rig count in 1981 was based on expectations that prices could rise to \$50 per barrel in the next few years (Ronald H. Schmidt, “The Effect of Price Expectations on Drilling Activity,” Federal Reserve Bank of Dallas *Economic Review* [November 1984], 1–2). Furthermore, one article noted that banks in 1981 were assuming oil prices would go much higher, not lower, and that overly aggressive energy lending was tied to a rosy view of post-1981 oil prices (Brian A. Toal, “Credit Where Credit Is Due,” *Oil and Gas Investor* 7, no. 9 [April 1988]: 30).

³⁴ See Chapter 3.

healthy: elevated inflationary expectations set off speculative demand, which led to attractive returns on real estate investments, and two public policy actions facilitated and probably intensified the demand for commercial real estate. These were the Economic Recovery Tax Act of 1981, which created substantial tax breaks that raised the returns on commercial real estate investments, and the Garn–St Germain Act of 1982, which greatly increased the investment and lending powers of thrift institutions.

The strong southwestern real estate markets attracted investors and bankers who were seeking new investment opportunities for the wealth and liquidity that had been accumulated over the years of oil prosperity, and the result was a financial environment in which lenders were aggressively providing funds for real estate development. This contributed to the substantial growth in such development, especially commercial real estate, and was the basis for the continued expansion of the southwestern economy during the first half of the 1980s. Eventually real estate development itself reached boom proportions, as evidenced by the doubling in the number of residential permits issued, from 211,705 in 1981 to 424,854 in 1983, and the increase in the value of nonresidential permits from \$7.6 billion in 1980 to approximately \$10 billion to \$12 billion annually between 1981 and 1985 (see table 9.1)

By the mid-1980s, there was concern that the amount of real estate development was becoming excessive. For example, in May 1984 Kenneth Rosen, a real estate expert, told a

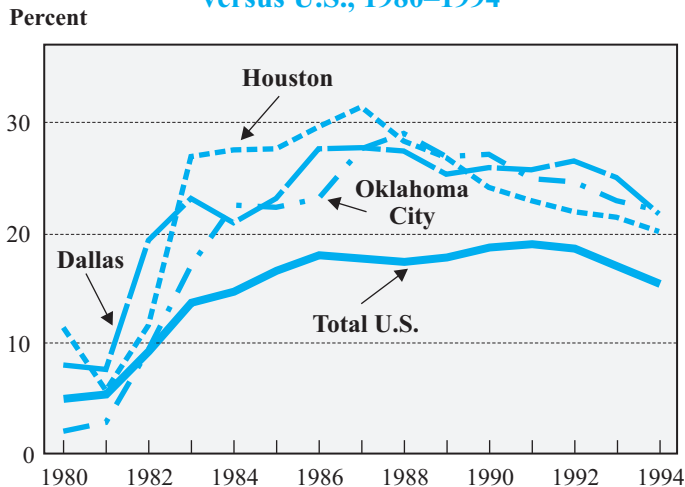
Table 9.1
Construction Permits in the Southwest, 1980–1994

Year	Number of Residential Permits Issued	Value of Nonresidential Permits (\$Thousands)
1980	211,096	\$ 7,612,364
1981	211,705	10,402,804
1982	295,365	10,016,236
1983	424,854	9,555,382
1984	342,189	11,767,921
1985	256,160	11,831,367
1986	189,349	8,447,611
1987	114,671	7,210,674
1988	92,074	5,898,880
1989	83,503	6,890,954
1990	87,856	6,166,786
1991	94,544	5,273,940
1992	120,696	6,186,262
1993	145,183	6,777,214
1994	190,246	8,095,027

session of the American Bankers Association's national conference on real estate finance that "commercial developers will take the money and build without looking at demand."³⁵ In the spring of 1985, a *Dallas Morning News* article noted that Dallas had 34 million square feet of unleased office space—more than the total office space in Miami. Such statements indicated the beginning of a slow realization that real estate markets were overbuilt.³⁶ When the sharp contraction in oil prices in 1986 weakened the regional economy, demand for office space was curtailed; this reduced demand, coupled with the huge volume of new properties, put downward pressure on real estate prices.

Although the value of nonresidential permits fell from 1985 through 1988, the decline came too late to prevent serious problems. The office space added during the decade far exceeded demand, and office vacancy rates kept escalating (see figure 9.4). For example, from 1980 to 1987 office vacancy rates in Dallas jumped from 8 percent to 28 percent; in Houston, from 11 percent to 31 percent; and in Oklahoma City, from 2 percent to 28 percent. The oversupply of office space is indicated by the fact that between 1980 and 1987 the square

Figure 9.4
Office Vacancy Rates, Southwestern Cities
versus U.S., 1980–1994



Source: CB Commercial/Torto Wheaton Research, *The Office Outlook Report* (Fall 1995).

³⁵ David LaGessee, "Shakeout Forecast for Commercial Real Estate," *American Banker* (May 8, 1984), 3.

³⁶ Frederick E. "Shad" Rowe, Jr., "Texas Has a Lesson for the Rest of Us," *Fortune* (August 1, 1988), available: LEXIS, Library: NEWS, File: FORTUN.

footage of space per office employee increased by 83 percent in Dallas, 65 percent in Houston, and 56 percent in Oklahoma City (as a comparison, the national average increased by just 22 percent). Although vacancy rates reached their highest point in about 1987, as late as year-end 1994 these southwestern cities still had excess office space: vacancy rates in all three exceeded 20 percent, compared with a national average of 15 percent.³⁷

It is noteworthy that from 1981 through 1983, while office vacancy rates were escalating, commercial real estate construction expenditures and bank funding of projects remained extremely high. The explanations for continued heavy lending for commercial real estate construction despite the rising vacancy rates include the following: (1) A substantial increase in the number of newly chartered banks in the Southwest put competitive pressure on existing institutions to retain market share. (2) Commercial real estate credits contained higher underlying risk and could therefore be priced above traditional residential real estate or consumer loans, to increase margins. (3) Perhaps even more attractive to lenders was the “up-front” fee income generated by commercial real estate loans, particularly construction loans. (4) Lenders loosened traditional standards relating to debt-service coverage on the assumption that commercial real estate markets would remain prosperous and demand would keep pace with new construction in progress. (5) Inadequate feasibility studies, which evaluated only an individual project and failed to take into account other activity in progress, might have made imprudent loans appear attractive. (6) A related problem was that the real estate appraisal process failed to act as a check on questionable underwriting practices.³⁸

Agricultural Problems

After energy and real estate, agriculture was a source of problems for many southwestern banks.³⁹ First Oklahoma and then Texas suffered severely from the farm crisis; Louisiana and Arkansas, as well, experienced some agricultural difficulties.

The financial difficulties suffered by Oklahoma’s farmers in the mid-1980s were due to high production, soft export markets, low prices, and diminishing values of farmland.⁴⁰ Compounding these difficulties was the fact that by 1986, farmers could no longer count on receiving oil and gas royalties to supplement their income: when the price of oil plummeted,

³⁷ Information on Dallas, Houston, and Oklahoma City is from “The Office Market in 1995 and the Outlook” (chap. 4, table 4.2) and “Metropolitan Markets: The Office Outlook” (chap. 6, table 7), in CB Commercial Torto/Wheaton Research, *The Office Outlook*, vols. 1 and 2 (1995).

³⁸ According to regulators who were active in the region, many appraisals were apparently out of touch with reality, and some regulators believed that inflated appraisals were easy to obtain. For example, it was not unheard of for a development project that cost \$1 million to be appraised at \$1.8 million. Thus, if a bank lent \$1.3 million on this deal, the loan would appear conservative. For a comprehensive discussion of both the appraisal process and the reasons banks strongly supported the commercial real estate markets, see Chapter 3.

³⁹ For a general discussion of the agricultural crisis of the 1980s, see Chapter 8.

⁴⁰ See Voesar, “Economic Conditions in Oklahoma,” 21–26.

many drillers abandoned wells they had formerly operated on farmers' spare acreage. Ripple effects stemming from farmers' financial problems hit rural towns in Oklahoma particularly hard, causing many merchants to go out of business and many residents to move to urban areas. As one observer noted, small rural towns in Oklahoma rapidly became an endangered species in the mid-1980s.

Texas has substantial agricultural interests, ranking second among all states in farm income and third in farm marketings in 1985.⁴¹ Texas was therefore not immune to the worst farm crisis since the Depression, but felt the effects of the crisis about two years later than the agricultural heartland.⁴² The price of farmland in Texas had not skyrocketed in the 1970s as it had in farm-belt states (James Rogers, president of the Farm Credit Banks of Texas, said, "It was not uncommon for land in the Farm Belt to be worth about \$3,000 an acre at its height, while the very best land in Texas only climbed to around \$1,500 an acre").⁴³ And in 1981–85, when land prices in other farm-belt states declined by as much as 50 percent from their highs, Texas farmland increased by 45 percent—the largest increase in the country.⁴⁴ Nevertheless, by 1986 farmers in Texas were feeling the effects of many years of rising costs and low commodity prices. "The number of farmers with heavy debt has increased dramatically over the last three to four years," said James L. Sexton, the Texas banking commissioner, in 1986. "The small-farm producer is in a pinch trying to make the proceeds of his crop pay off his costs, plus trying to make a living."⁴⁵

The region's agricultural problems had a significant effect on banks, especially in Texas. Until 1985 the state's agricultural banks had escaped many of the problems encountered by farm-bank lenders in the Midwest and Central Plains states, primarily because of the state's diverse economy and the bankers' own cautious lending policies.⁴⁶ But by 1986, the increased burden on farmers caused Texas banks to experience mounting levels of troubled loans and foreclosures.⁴⁷ Between 1977 and 1993, Texas had 36 agricultural-bank failures, the third largest of any state.⁴⁸ During the same period, Oklahoma had 31 agricultural-bank failures, the fifth-largest number. Texas and Oklahoma were two of four

⁴¹ Department of Commerce, Bureau of the Census, *National Data Book and Guide to Sources: Statistical Abstract of the United States* 1988, 108th ed., (1988), 618–19. Farm marketings represent agricultural products sold by farmers multiplied by prices received per unit of production at the local market.

⁴² Andrea Bennett, "Diversity, Caution Help Texas Weather Farm Crisis in Good Shape," *American Banker* (November 18, 1985), 14, 20.

⁴³ *Ibid.*, 14, 18.

⁴⁴ *Ibid.*, 14.

⁴⁵ "Farm Banks in Texas Beginning to Feel Lending Sting All Too Familiar to Their Midwestern Counterparts," *American Banker* (May 1, 1986), 40.

⁴⁶ Bennett, "Diversity, Caution," 14.

⁴⁷ "Farm Banks in Texas Feel Sting."

⁴⁸ Agricultural banks are banks where agricultural loans are at least 25 percent of total loans and leases.

states that each held 10 percent or more of all failed agricultural-bank assets in the U.S. In the rest of the region, Louisiana and Arkansas each had 5 agricultural-bank failures, while New Mexico had none.

The Boom and Bust in Texas

Initially the expansion of construction in Texas was tied to the rapid growth in the state's economy due largely to the escalating oil prices between early 1974 and early 1981. During this period, nonresidential construction activity more than quadrupled, while office vacancy rates fell from 15 percent to 7.6 percent in Dallas and from 7.8 percent to 5.7 percent in Houston.⁴⁹ Beginning in 1982, however, despite falling oil prices and downturns in the Texas and U.S. economies, the construction sector continued to surge. The magnitude of construction activity was tremendous, leading Texans to joke that the construction crane should replace the mockingbird as the official state bird. The divergence between the weak Texas economy and the high levels of construction continued until the mid-1980s, and the space that was added during this period far exceeded demand.

Texas banks, seeking both refuge from problem oil loans and new investment opportunities, strongly supported the real estate boom. Boom conditions often attract poorly qualified participants who see an opportunity to earn easy money, and that happened here. As Ken Sanstead, resident manager of Coldwell, Banker & Co., observed in 1985, "Forty novice developers who can call on little or no experience in the development game are involved in construction projects in Dallas [and] most of the current overbuilding is being done by the novices."⁵⁰

In 1986, however, construction in Texas began a prolonged decline, mostly because of plummeting oil prices and the consequent severe recession in the Texas economy (and partly because of the effects of the 1986 Tax Reform Act).⁵¹ According to one estimate, each \$1 drop in the price of crude oil resulted in the loss of 25,000 jobs and \$100 million in revenue in Texas.⁵² Typically, the layoffs began in the oil fields themselves and were followed by losses in related jobs, such as those held by geologists and engineers. Next, service companies began to fold, including not only oil-related companies but also motels, restaurants, and grocery and clothing stores. By the end of September 1986, 743,000 Texans were unemployed, and the unemployment rate in Houston had reached 10.5 percent, compared with only 7.4 percent in January 1986 (in contrast, the national unemployment rate fell from 7.3

⁴⁹ Information in this paragraph is from D'Ann M. Petersen, Mine K. Yucel, and Keith R. Phillips, "The Texas Construction Sector: The Tail That Wagged the Dog," Federal Reserve Bank of Dallas *Economic Review* (second quarter 1994): 23–24.

⁵⁰ Carl Hooper and Eileen O'Grady, "Overbuilding Softens Dallas Office Market: Projects Canceled, Postponed," *Houston Post* (September 29, 1985), 3E.

⁵¹ See the appendix to Chapter 3 for a discussion of the effects of this legislation.

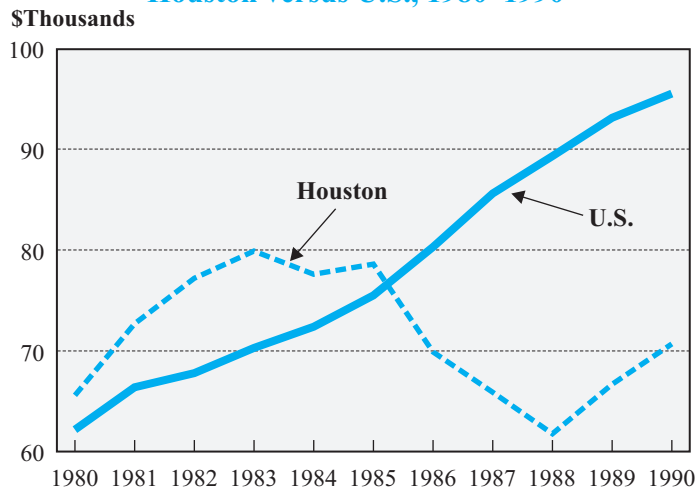
⁵² "A Dream Dies in Texas," *People* (November 10, 1986), 46.

percent in January 1986 to 6.8 percent in September 1986).⁵³ In 1986 employment in Texas fell by approximately 250,000, and people began leaving the state.

With the outward migration adding to the pressure on already high apartment and office vacancy rates, construction activity collapsed. In 1986 the state lost almost 100,000 construction jobs—40 percent of the state's total job decline, even though construction accounted for only 6.7 percent of Texas employment in 1985.⁵⁴ The volume of construction continued to fall throughout the late 1980s despite a turnaround in the Texas economy in 1987.

The commercial markets were not the sole source of the Texas real estate problems. For example, Houston was hit especially hard by a collapse in the residential real estate market.⁵⁵ The single-family housing boom there surpassed that in other oil-patch cities, leading to a greater oversupply of single-family houses and a sharper drop in prices when the bust came. Between 1983 and 1988, median home resale prices in Houston declined by 23 percent, from \$79,900 to \$61,800 (see figure 9.5). This contrasted significantly with the

Figure 9.5
Median Home Resale Prices,
Houston versus U.S., 1980–1990



Source: National Association of Realtors, *Home Sales*.

⁵³ Ibid.; and Frederick S. Carns, "Economic Conditions in Louisiana, Oklahoma and Texas," *FDIC Banking and Economic Review* (April 1986): 12.

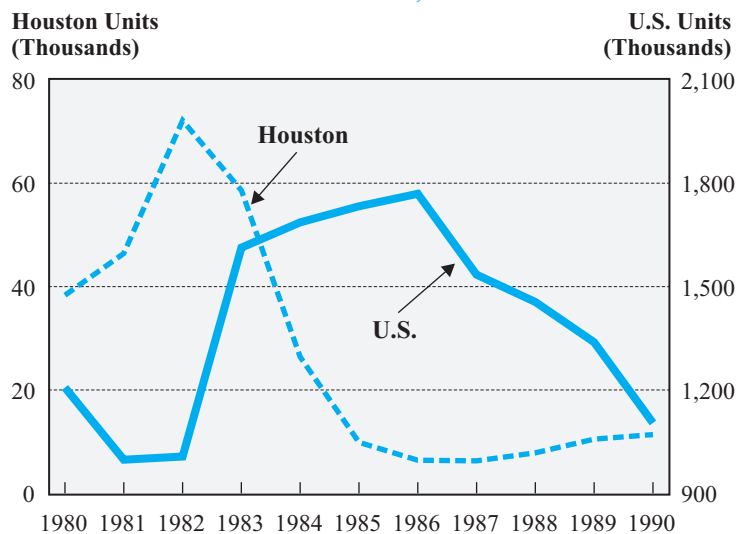
⁵⁴ Petersen et al., "The Texas Construction Sector," 26.

⁵⁵ The discussion of Houston that follows is based on Steve Frazier, "Suburban Blight: Housing-Market Bust in Houston Is Creating Rash of Instant Slums," *The Wall Street Journal* (February 5, 1987), available: WESTLAW, File: WSJ.

national trend, where home prices increased by 27 percent, from \$70,300 to \$89,300, during the same period.

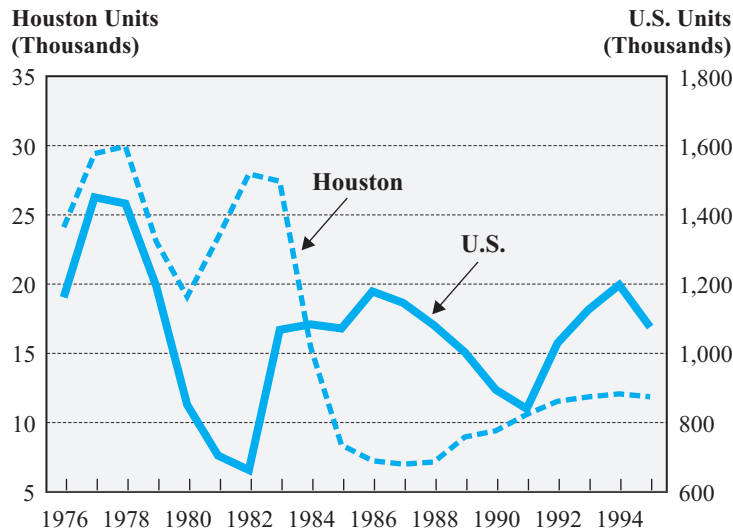
The root cause of Houston's difficulties was the frenetic overbuilding that had continued despite the beginning of the end of the oil boom. Even though employers had laid off 160,000 workers in 1982 and 1983, residential building continued at a record pace. From 1980 to 1982 the number of newly issued building permits for residential construction in Houston jumped 88 percent, and the number of single-family housing starts rose 46 percent. Nationally during the same period, building permits and housing starts were declining 17 percent and 22 percent, respectively (see figures 9.6 and 9.7). The magnitude of Houston's bust is reflected in the 91 percent plunge in the number of permits and the 75 percent drop in housing starts from 1982 to 1987. Nationally during the same period, the number of building permits for residential construction increased by 52 percent, while single-family housing starts climbed by 73 percent. As Pamela Minich, a local real estate analyst, observed, "There were problems in the [Houston] housing market long before the price of oil went through the floor. Builders just went crazy. Many, many of the neighborhoods that are

Figure 9.6
Newly Issued Building Permits (Residential),
Houston versus U.S., 1980–1990



Source: U.S. Department of Commerce, *Construction Review* (data cited in FDIC, *The Real Estate Report*, Dallas Region [January 1, 1992]).

Figure 9.7
Housing Starts, Houston versus U.S., 1976–1995



Source: F. W. Dodge/McGraw Hill, Real Estate Analysis and Planning Service (1992); and U.S. Department of Commerce, Bureau of the Census, *Current Construction Reports*.

having troubles [in 1987] are ones that shouldn't have been built.”⁵⁶ Between 1983 and 1987, numerous attractive Houston communities had been transformed into blighted, declining neighborhoods, representing the costliest housing-market debacle since the Great Depression.

At the beginning of 1987, one in six homes and apartments in Houston stood vacant. In early 1987, because of the associated plunge in property values, the tax rolls of Harris County (where Houston is located) had declined by an estimated \$8 billion. The magnitude of the collapse in property values—more than 50 percent in some suburbs—caused many homeowners simply to walk away from their homes and their mortgage payments. In some communities, foreclosure rates were in excess of 60 percent. Projections at the end of 1985 had indicated that total foreclosures in Houston for 1984–86 would exceed 70,000—about the same number of houses that were built during 1986 in the cities of Detroit, Chicago, and Seattle combined. Later some depressed neighborhoods deteriorated further because of

⁵⁶ Frazier, “Suburban Blight.”

vandalism and other damage to vacant properties. Some properties were damaged so severely that the repossessed dwellings could be unloaded only for their raw-land value.

Although many analysts did not anticipate the damage that real estate loans would inflict on Texas banks,⁵⁷ certainly there were some who foresaw problems. For example, Ronald J. Hoelscher, president of the Horne Co., told the Houston Outlook '83 conference that "declining building permits for office space [in Houston] will continue through 1983 and while developers have slowed the construction of industrial space, the demand is falling so that the supply is still over-abundant."⁵⁸ In addition, a local real estate firm observed in 1984 that "there is already at least a 10-year supply of housing in Dallas County, while normal markets generally carry about a nine-month supply."⁵⁹ Furthermore, in September 1984 the Houston Apartment Association warned that vacancy rates would continue to increase unless leases were signed for a substantial percentage of the 20,000 new units scheduled to be completed in Metropolitan Houston that year.⁶⁰

The Boom and Bust in Louisiana and Oklahoma

Although the multifaceted debacle in Texas was the major story in the Southwest, the collapse of the energy and real estate markets and the accompanying agricultural problems also had devastating effects on the economies of Louisiana and Oklahoma as well as on the banks in those states. Between 1980 and 1994 there were 70 bank failures in Louisiana—22.4 percent of the state's banks. Oklahoma endured 122 bank failures—22.0 percent of its banks.⁶¹ During the same period, assets of failed banks at the time of failure amounted to \$4.1 billion in Louisiana and \$5.8 billion in Oklahoma.

⁵⁷ For example, in 1986 Frank Anderson, a banking analyst with the firm of Weber, Hall, Sale & Associates Inc. in Dallas, stated that "we won't see the debacle in real estate that we have in energy." Such opinions were based on the fact that real estate had a relatively higher value than much of the energy-loan collateral. For example, even Houston properties generally brought at least 50 cents on the dollar, whereas oil rigs and equipment were often valued at pennies on the dollar. See two articles by Richard Ringer: "Real Estate Joins Energy in Harrying Texas Banks: As Energy Chargeoffs Diminish Real-Estate Problems Grow," *American Banker* (May 2, 1986), 3; and "Drop in Oil Prices Worries Banks in Texas and Oklahoma: Biggest Energy Lenders Construct Damage Scenarios While Waiting for Volatile Market to Stabilize," *American Banker* (February 18, 1986), 1, 28.

⁵⁸ "Real Estate's Upturn to Lag, Parley Hears," *Houston Post* (January 21, 1983), D2.

⁵⁹ Andrew Albert and Richard Ringer, "Dallas County Housing Glut Hurts Local Lenders: Empire Savings Cited as One of Several S&Ls That Financed 'Real-Estate Monster,'" *American Banker* (March 20, 1984), 16.

⁶⁰ Carl Hooper, "Tenant Wars Escalate: Year of Free Rent Latest Gimmick," *Houston Post* (September 6, 1984), F10.

⁶¹ The number of bank failures refers to FDIC-insured commercial and savings banks that were closed or received FDIC assistance. The percentage of banks that failed is based on the total number of banks existing in each state at year-end 1979 plus banks newly chartered in each state from 1980 through 1994.

In the mid-1980s, the state economies of Louisiana and Oklahoma (as well as Texas) were five times more dependent on energy production than the nation as a whole.⁶² In 1986, for example, nearly 40 percent of Louisiana's state revenues came from oil and natural gas production, and in 1985 depressed energy prices held economic growth to under 1 percent (in Oklahoma as well). In June of that year, Louisiana's unemployment rate was 11.5 percent, the second-highest in the nation. In addition, residential building permits issued in the state in 1985 declined by more than 25 percent from levels a year earlier.

Despite signs of economic weakness, as of late 1985 Louisiana banks—unlike banks in Texas and Oklahoma—had not had significant problems related to declining energy prices. One reason for this, according to Michael D. Charbonnet, a principal with Lyons, Merrigan & Charbonnet, a New Orleans-based bank consulting firm, was that “Louisiana banks were not big enough to finance the major oil and gas development projects. Texas and Oklahoma banks mainly kept that business to themselves.”⁶³ Instead, Louisiana banks had concentrated on the service companies, such as equipment supplies. But in late 1985 and early 1986, when energy prices collapsed, the state's economic woes escalated. “I haven't seen New Orleans this way since I was a child in the 1930s,” said Ruth McCusker, chairman of the New Orleans Public Library Board, in early 1986. “It's not looking real good around here. People are out on the street. It is depressing.”⁶⁴ Louisiana banks came under increasing pressure as the companies they financed faced mounting difficulties, and bank failures in the state soon escalated.

Unlike Louisiana's economy, Oklahoma's economy was based primarily on energy and agriculture, and boom-and-bust cycles had been part of the state's history.⁶⁵ But in the past, when one of the two sectors weakened, typically the state's economy would be buoyed by the relative health of the other. This general pattern held until 1985, when the energy industry was collapsing at the same time that the agriculture sector was already ailing. The simultaneous weaknesses dealt a severe blow to the state's economy.

In the mid-1980s, Oklahoma was the fifth-ranking state in oil production. But approximately 60 percent of its oil production came from “stripper” wells, which yield 10 bar-

⁶² Information in this paragraph is derived from the following sources: Herbert Swartz and Lan Sluder, “La. Banks Battle Tough Times for Profits, Equity,” *New Orleans Business* (February 3, 1986), available: LEXIS, Library: NEWS, File: BUSDTL; and Bart Fraust, “A Year of Upheaval for Louisiana Banking: State's New Multibank Law Has Spurred a Dramatic Changing of the Guard,” *American Banker* (October 19, 1985), 16–18; testimony by Robert V. Shumway, director of the FDIC's Division of Bank Supervision, before the U.S. Senate Committee on Energy and Natural Resources on March 25, 1986, as reported in: “FDIC,” *American Banker* (April 17, 1986), 4–7.

⁶³ Fraust, “A Year of Upheaval.”

⁶⁴ David Maraniss, “Oil Slump's Damage Spreading; Academic, Social, Cultural Advances Threatened in Three Energy States; Recovery May Take Years,” *The Washington Post* (April 9, 1986), available: LEXIS, Library: NEWS, File: WPOST.

⁶⁵ Unless otherwise noted, the information on Oklahoma is from Voesar, “Economic Conditions in Oklahoma.”

rels or less of oil per day and are expensive to operate. As of May 1986, there were more than 80,000 stripper wells operating in Oklahoma, many of which could not operate profitably with oil prices below \$15 a barrel. The plummeting oil prices therefore had a particularly devastating effect on that state. For example, at the end of 1981, when the number of drilling rigs operating in the state was at its peak, there were nearly 900 of them, but as of May 1986 there were only 128. Oklahoma's gas industry also suffered from plummeting prices, as described above, and producers began to shut down their wells.

The collapse in energy prices caught many Oklahoma bankers by surprise. In early 1986, Fred Moses, president of Liberty National Bank and Trust Co. (Oklahoma City), observed, "This happened so damn quickly—in 90 days. We all expected a dip, but none of us assumed it would be such a precipitous drop."⁶⁶ The extent of the damage in the state in 1986 was indicated by Diane Gower, assistant to the director of Neighbor for Neighbor, a nonprofit social services program in Tulsa, who observed that "we're seeing more and more in the middle-income family bracket. Some are unemployed, some are working at minimum wage. We have a lot where husband and wife are working McDonald's and Arby's type jobs, and it's difficult for them to make it. Some had good jobs and lost them. Oil has made this part of Oklahoma a disaster area."⁶⁷

In addition to the difficulties with energy and agriculture, problems with real estate also affected Oklahoma's economy and banks. Oklahoma State Banking Commissioner Wayne Osborn noted the predicament faced by Oklahoma bankers with regard to the real estate they had acquired through foreclosures: "The dilemma is that banks lose money on earnings if they hold the property because of the upkeep expenses and the significant vandalism problems from abandoned property. A lot of real estate investors are willing to buy the property, but they want a low price and with financing at a preferential treatment. You're sort of damned if you do and damned if you don't."⁶⁸

As has been described, the booming oil markets of the 1970s and early 1980s were the foundation of a prosperous southwestern economy, particularly in Texas, Oklahoma, and Louisiana. This prosperity supported a tremendous expansion in the real estate markets, especially commercial real estate. The southwestern economy was adversely affected when oil prices began drifting downward in 1981, since much of the region's vitality and optimism was based on the expectation that oil prices would continue to rise to ever-higher levels. Then in 1986 oil prices plunged, contributing to the collapse in the real estate markets. The Southwest in general and Texas in particular were forced to cope with serious eco-

⁶⁶ Morris, "Banks of Mid-America Treads Water," 8.

⁶⁷ Maraniss, "Oil Slump's Damage Spreading."

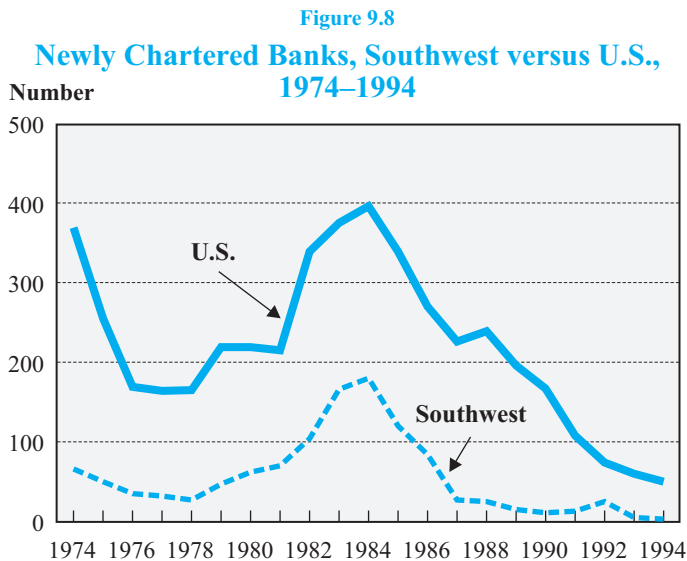
⁶⁸ Teresa McUsic, "Bank Closings to Continue," *Tulsa World* 83, no. 163 (February 26, 1988), available: LEXIS, Library: NEWS, file: TLSWLD.

conomic problems. The 1981 weakening of oil prices and the subsequent oil price crash and real estate debacle (in the mid-1980s) caused substantial losses on the energy and real estate loans made by the region's banks, and the result (as discussed in greater detail below) was an escalation in the number of bank failures later in the decade.

The Banking Environment in the Southwest

Two factors made southwestern banks particularly aggressive participants in the booming regional economy: (1) prosperity caused their numbers to increase, as chartering activity tremendously expanded during the first half of the 1980s, and (2) S&Ls were newly empowered competitors (the Garn–St Germain Depository Institutions Act of 1982 broadened their lending powers).

The increase in the number of newly chartered southwestern banks in the early 1980s was dramatic: the number jumped from 62 in 1980 to a peak of 168 by 1984 (see figure 9.8).⁶⁹ After 1984, however, the rate of chartering declined rapidly, and very few new bank charters were issued in the region from 1987 through 1990. All told, from 1980 to 1990, 745 banks were chartered there. But newly chartered banks tend to fail more frequently than es-



⁶⁹ New southwestern bank charters from 1980 through 1984 were concentrated in Texas, where there were 442. During the same period, Oklahoma had 56 new bank charters; Louisiana, 44; New Mexico, 11; and Arkansas, 5.

tablished banks, and this certainly was what happened in the Southwest. From 1980 through 1994, 33 percent of the southwestern banks that had been chartered from 1980 through 1990 failed, compared with only 21 percent of southwestern banks that were in existence on December 31, 1979. The rapid growth of newly chartered banks, therefore, appears to have contributed to the large number of failures in the region.

The problems that might follow from large increases in the number of new entrants were not ignored by observers at the time. Regulators and bankers noted that part of the reason for the highly competitive banking environment was that so many new banks had been chartered that they seemed to be pursuing the same business. Bob Lehman, president of Charter Bank-Arena, expressed the problem well in 1984 when he pointed out that “too many new independent banks are chasing too few good loans for everyone to succeed.”⁷⁰ Interviews that FDIC researchers conducted with regulators who had been active in the area at the time suggest that the apparently excessive number of new institutions could be at least partly attributed to chartering authorities’ laissez-faire approach to new charters. Among the specific lapses that some regulators observed with regard to the chartering of new institutions were the failure to test for the community need of a new bank, the lack of feasibility studies, and reliance primarily on the availability of certain amounts of capital, with few other requirements.

Chartering activity was especially pronounced in Texas, where the number of commercial banks chartered went from 45 in 1980 to 131 in 1983 but then to 0 in 1989. Commercial banks chartered in Texas were approximately 37 percent of all new commercial banks chartered in the United States in 1983 and 1984 but only 7 percent of the number chartered in 1987. The large number of Texas banks chartered in the 1980s had significant consequences: one study suggests that newly established Texas banks were much more aggressive than their mature counterparts in pursuing high-risk strategies. Specifically, these banks had, on average, a significantly higher concentration of commercial and industrial loans and a substantially lower proportion of assets in U.S. government securities and funded a far higher proportion of their assets with large certificates of deposit. These high-risk strategies help explain why Texas banks established during the 1980s had a relatively high incidence of failure.⁷¹

Intense competition from S&Ls also contributed to the poor financial condition of some southwestern banks.⁷² The savings and loan industry expanded dramatically in the

⁷⁰ Eileen O’Grady, “Soft Real-Estate Market Bad News for Banks,” *Houston Post* (April 23, 1984), F4.

⁷¹ The study results are taken from Jeffery W. Gunther, “Financial Strategies and Performance of Newly Established Texas Banks,” Federal Reserve Bank of Dallas *Financial Industry Studies* (December 1990): 10. For further discussion of chartering policy and Texas banks, see Chapter 2, the section on entry.

⁷² See Chapter 4.

early 1980s after Garn–St Germain gave the industry broader lending powers, and the expansion was especially pronounced in the Southwest because of that region’s strong southwestern energy markets. S&Ls in Texas were particularly aggressive in their pursuit of growth and were willing to pay above-market interest rates to attract funds for new investment activities. This behavior forced even well-capitalized banks to pay the so-called Texas premium, estimated to be 50 basis points or more, in order to maintain their funding base.

S&Ls competed vigorously to initiate commercial real estate loans, and the competitive pressure led some banks to lower their underwriting standards, liberalizing lending terms and minimizing equity requirements. Regulators and bankers who participated in southwestern banking activities observed that developers were receiving loan offers from both banks and S&Ls; bankers seemed to believe it was inadvisable to turn down requests from their customers because the customers could easily obtain credit elsewhere. The S&Ls’ above-market interest rates placed downward pressure on bank profitability, and the lowered lending standards contributed to the excessive real estate development, the oversupply, and the eventual collapse of southwestern real estate values.

The Effect of the Economy on Southwestern Banks

The booming economy was reflected in rising asset growth rates and in increasing ratios to assets of loans, of commercial and industrial loans, and of real estate loans. Thus, the level of risk in the banking system rose. By the same token, the subsequent oil and real estate problems were reflected in the rapidly rising levels of nonperforming assets and charge-offs, in the sharp decline in banks’ return on assets, and in the escalating numbers of bank failures.

With bank loans providing important support to the oil boom, bank asset growth rates for the region increased steadily from an annual rate of 10.8 percent in 1975 to 18.8 percent in 1981 (see figure 9.9). But after oil prices peaked in 1981, the region’s bank asset-growth rate began to decline and, from 1986 through 1988, was actually negative.

Another reflection of the increasing participation of southwestern banks in the energy markets was the substantial rise in the median ratio of commercial and industrial (C&I) loans to assets: between 1979 and 1982, the ratio rose from approximately 12 percent to over 16 percent (see figure 9.10). During the same period, the percentage for the nation as a whole increased minimally, from just under to just over 10 percent. After oil prices plunged, the C&I loans-to-assets ratio dropped from over 16 percent in 1982 to less than 7 percent in 1992. During the same period the ratio for the nation as a whole also declined, but far less dramatically—from approximately 10 percent to 7 percent.

After the energy boom had peaked, real estate loans became an increasingly larger portion of the loan portfolio of the banks in the region. The banks’ median ratio of real es-

Figure 9.9
Asset Growth Rates, Southwest versus U.S., 1975–1994

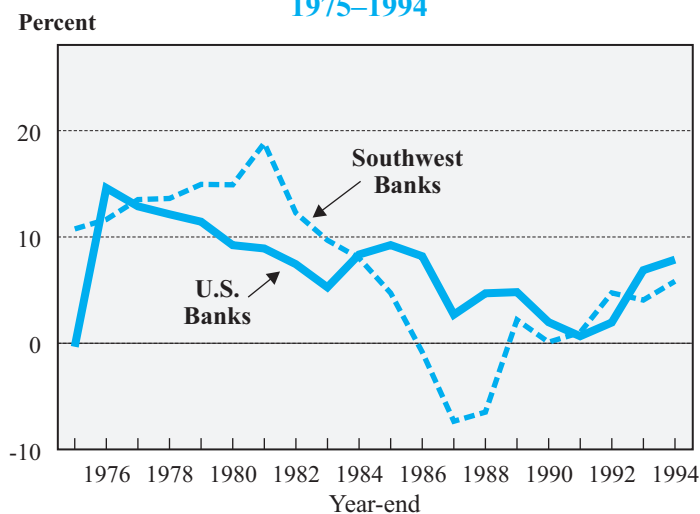
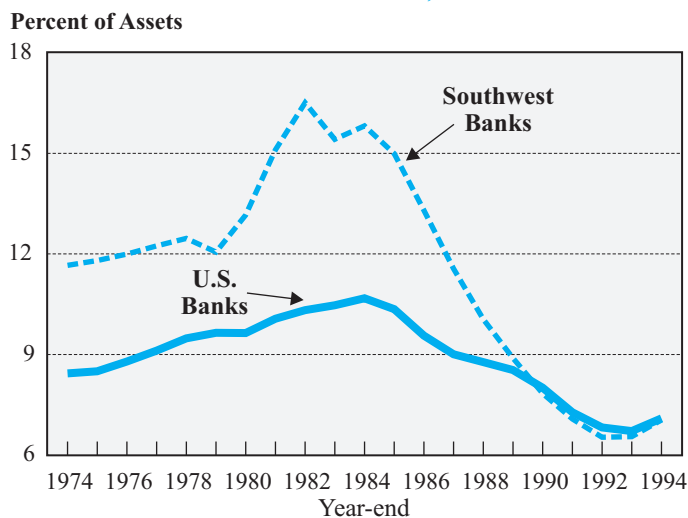


Figure 9.10
Median Commercial and Industrial Loans, Southwest versus U.S., 1974–1994



tate loans to assets rose from 12 percent in 1981 to a peak of 21 percent in 1987 (see figure 9.11). Residential real estate loans increased significantly (from 4.5 percent of bank assets in 1980 to 7.6 percent in 1985 and then to 9.8 percent in 1994), but it was the rise in commercial real estate loans that had the greatest effect on the banks: commercial real estate loans went from just over 4.5 percent of bank assets in 1981 to a peak of 8.8 percent in 1986 (see figure 9.12). The volume of bank lending to the real estate markets appears to have greatly affected loan concentrations: the median loans-to-assets ratio for southwestern banks rose from just under 50 percent in 1980 to 57 percent in 1985 but then declined to 43 percent in 1992 (see figure 9.13). This decline was in noticeable contrast to the national trend, where loan concentrations increased slightly between 1985 and 1990.

The most profitable period for the Southwest's banks was during the oil boom. Between 1978 and 1981 the median return on assets (ROA) for southwestern banks rose steadily from 1.12 percent to 1.32 percent (see table 9.5, on p. 330). However, ROA began to decline in 1982 and fell continuously to 0.32 percent in 1987. This downturn in ROA coincided with the weakening of the oil sector as well as the increased importance of real estate lending, and much of the decline in profitability can be attributed to escalating levels of nonperforming assets between 1982 and 1987 (see figure 9.14) and high loss rates on these assets (see figure 9.15). The especially steep rise in the nonperforming assets of southwest-

Figure 9.11
Median Total Real Estate Loans,
Southwest versus U.S., 1974–1994

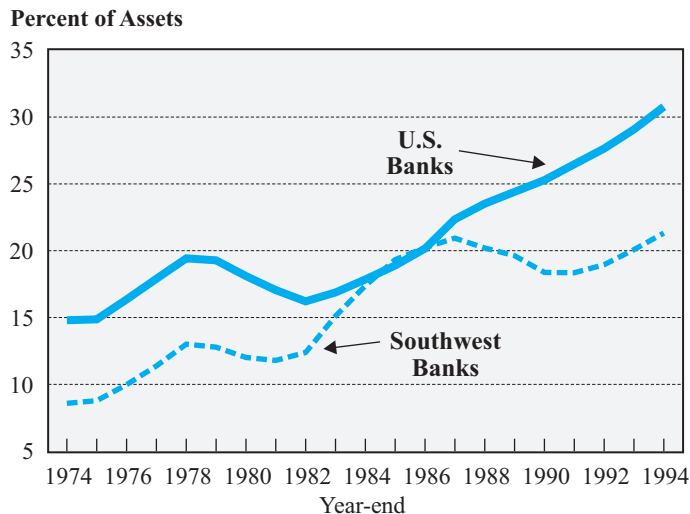


Figure 9.12
**Median Commercial Real Estate Loans,
Southwest versus U.S., 1980–1994**

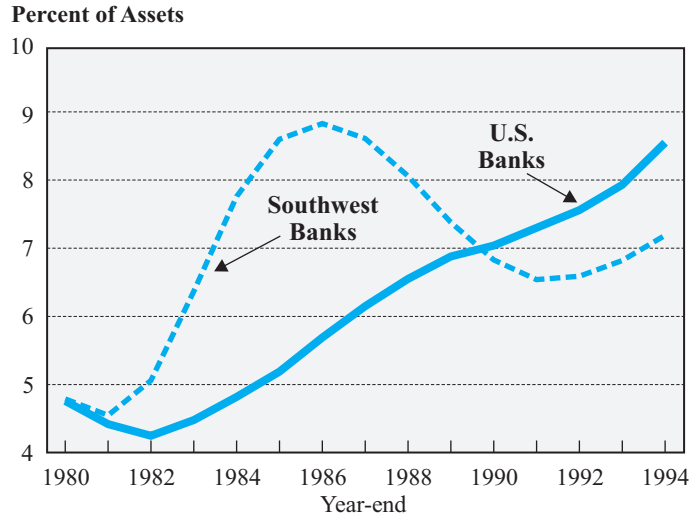


Figure 9.13
**Median Gross Loans and Leases,
Southwest versus U.S., 1976–1994**

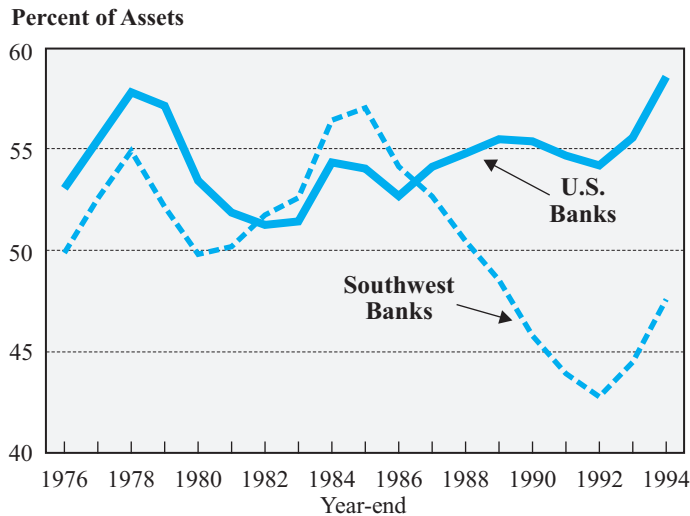


Figure 9.14

**Median Total Nonperforming Assets,
Southwest versus U.S., 1982–1994**

Percent of Assets

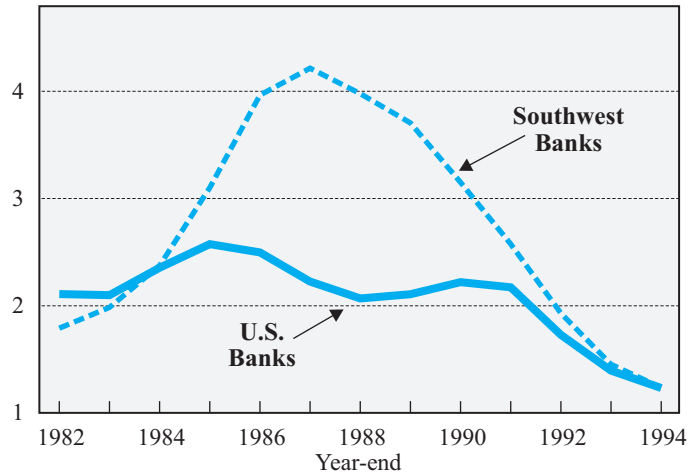
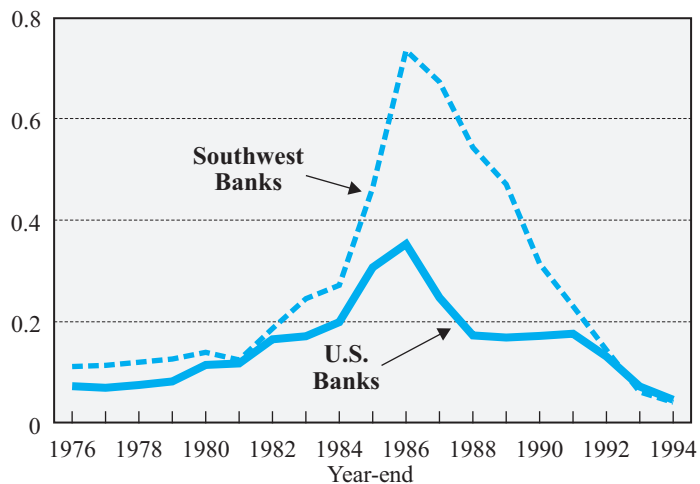


Figure 9.15

**Median Net Charge-Offs on Loans and Leases,
Southwest versus U.S., 1976–1994**

Percent of Assets

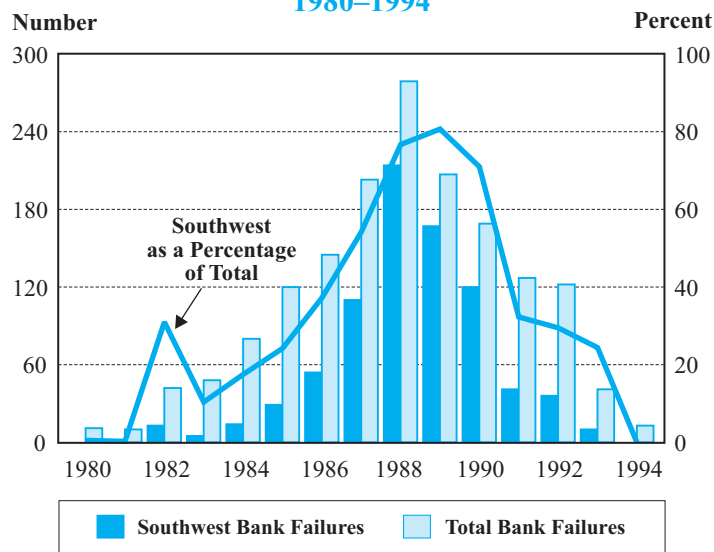


ern banks between 1985 and 1987 indicates how banks were ravaged by both the oil price collapse beginning in late 1985 and the increasing real estate problems. The performance of the region's banks from 1985 to 1987 diverged from the national trend, in which the percentage of nonperforming assets was falling at a moderate rate. In contrast, the rising trend of charge-offs at southwestern banks more closely followed the national trend, although the rate of increase of net charge-offs from 1982 to the peak in 1986 was far greater in the Southwest than nationally.

Bank Failures in the Southwest

The deterioration in the financial health of the southwestern banks eventually led to a dramatic increase in the number of bank failures in the region, from only 5 in 1983 to a peak of 214 in 1988 (see figure 9.16). Southwestern bank failures as a percentage of all bank failures jumped from 10.4 percent in 1983 to a peak of 80.7 percent in 1989. From 1987 through 1989, 71.3 percent of the bank failures in the United States were southwestern banks (491 out of 689). Southwestern banks accounted for the largest portion of U.S. bank failures in the 1980s, not only in number but also in total failed-bank assets. As noted in the introduction to this chapter, in 1988 losses to the FDIC as a result of southwestern bank failures were nearly \$6.3 billion (91 percent of total U.S. failure-resolution costs that year), and

Figure 9.16
Bank Failures, Southwest versus U.S.,
1980–1994



in 1989 were approximately \$5.1 billion (or 82 percent of national failure costs). In 1990 losses from southwestern failures fell to approximately \$1.1 billion, or 38 percent of national failure costs; and in 1991 to only \$282 million, approximately 4.7 percent of failure costs.

The initial surge in the number of southwestern bank failures was caused primarily by problems with energy loans. The second wave of failures of many of the area's banks, in the middle to late 1980s, was caused primarily by the asset-quality problems connected with the expansion of commercial real estate lending, especially among Texas banks. Banks suffered as completion rates and office vacancy rates rose, leading to defaults on many real estate loans. Banks that eventually failed in the Houston, Dallas, and Oklahoma City markets had substantially higher concentrations of commercial real estate loans than did banks that survived (see figure 9.17). The collapse of the southwestern real estate markets in the late 1980s was certainly the final blow to many banks, but it is important to remember that the previous weakening of the energy sector and the declines in energy prices had already caused many banks to suffer loan losses, and these had made the banks too vulnerable to withstand the additional losses on real estate loans.

By far the most severely affected state in the Southwest was Texas. From 1980 through 1989, 367 Texas commercial banks failed. Although in 1983 only three Texas banks failed, in 1988 the number was 175, with assets of \$47.3 billion—24.7 percent of the state's 1987 year-end banking assets. The following year there were 134 failures, with assets of \$23.2 billion—13.6 percent of the state's banking assets. In contrast, in the region's four other states (Oklahoma, Louisiana, Arkansas, and New Mexico), assets of failed banks were less than 3.5 percent of each state's banking assets in any given year. In 1988 and 1989, failed Texas banks accounted for 85 percent of total U.S. failed-bank assets. A list of the Southwest's largest bank failures indicates the severity of the situation in Texas (see table 9.2).

Certain patterns were evident among failed Texas banks.⁷³ Most Texas commercial banks that failed in the 1980s had reacted quickly to oil price movements. Concentrations of C&I loans, which include loans to oil and gas producers, increased from 1978 through 1981 along with oil prices, peaked in 1982 shortly after oil prices began to drop, and subsequently declined along with oil prices. In addition, failed Texas commercial banks had generally increased their concentrations in construction and land development loans long after the local real estate markets began declining. Finally, failed Texas banks had continued to fund completed construction projects even though commercial real estate vacancy rates were growing (traditionally, long-term financing of completed commercial properties was provided by nonbank financiers).

⁷³ These patterns are identified in O'Keefe, "The Texas Banking Crisis," 1.

It is noteworthy that healthy equity ratios in the early 1980s did not prevent large Texas banks from eventually failing. Nine of the ten largest Texas bank holding companies were recapitalized in the 1980s. Between 1980 and 1982 equity capital ratios for those nine organizations were, on average, more than 25 percent higher than the equity capital ratios

Figure 9.17

**Commercial Real Estate Lending in Houston, Dallas, and Oklahoma City,
Failed versus Nonfailed Banks, 1974–1994**
(Median Percent of Assets)

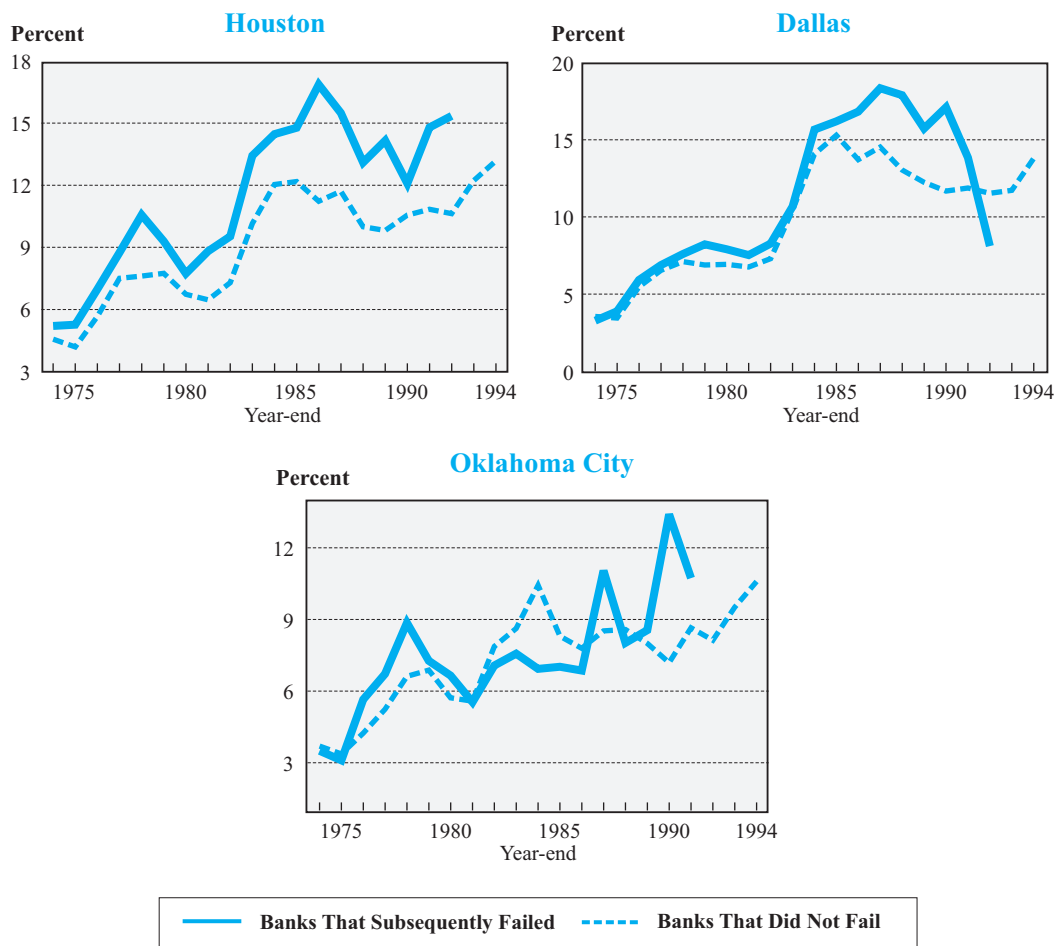


Table 9.2
Large Southwestern Bank Failures, 1980–1994

Name of Institution	Date of Failure	Assets at Failure (\$Millions)	Resolution Cost (\$Millions)	Cost as % of Assets	State
Penn Square Bank, N.A.	07/05/82	\$ 436	\$ 65	14.9%	OK
Abilene National Bank*	08/06/82	437	0	0	TX
The First National Bank of Midland	10/14/83	1,410	526	37.3	TX
First Oklahoma BC	07/11/86	1,754	168	9.6	OK
BancOklahoma Corp	11/24/86	468	79	16.9	OK
BancTexas Group	07/17/87	1,181	150	12.7	TX
First City Bancorp	04/20/88	12,374	1,101	8.9	TX
First Republic	07/29/88	31,277	3,762	12.0	TX
MCorp	03/29/89	15,641	2,844	18.2	TX
Texas American	07/20/89	4,665	1,077	23.1	TX
National Bancshares	06/01/90	1,594	213	13.4	TX

Note: “Large” is defined as more than \$400 million in assets.

* Received open-bank assistance.

of their peers. By 1987, however, this capital cushion had dissipated, and the nine holding companies held a third less capital than their peers.⁷⁴

Generally, stringent regulation prevented the “moral-hazard” problem from affecting banks as it did many thrift institutions during the 1980s.⁷⁵ (Simply put, the moral-hazard feature of deposit insurance is that an insured depository institution’s ability to put at risk funds that are guaranteed by the government may encourage it to participate in risky ventures it might otherwise avoid.) Nevertheless, one study found that moral hazard provides at least a partial explanation for the financial difficulties of so many Texas banks.⁷⁶ This

⁷⁴ Ibid.

⁷⁵ As indicated in Chapters 1 and 12 of this study, problem banks experienced reduced growth and dividend rates and increased capital infusions following regulatory intervention. Another study found that during the 1985–89 period undercapitalized banks generally did not grow rapidly, pay dividends, or make loans to insiders, all of which are behavior patterns normally associated with high-risk strategies (R. Alton Gilbert, “Supervision of Undercapitalized Banks: Is There a Case for Change?” *Federal Reserve Bank of St. Louis Review* 73, no. 3 [May/June 1991]: 17, 21, 24–26). Chapters 1 and 12 of this study also present estimates of the cost savings that might have been gained from earlier closing of failed banks. Another study found no relationship between, on the one hand, the level of capital one year before failure or the length of time a bank was undercapitalized and, on the other hand, its resolution cost (R. Alton Gilbert, “The Effects of Legislating Prompt Corrective Action on the Bank Insurance Fund,” *Federal Reserve Bank of St. Louis Review* 74, no. 4 [July/August 1992]: 10, 12).

⁷⁶ Jeffery W. Gunther and Kenneth J. Robinson, “Moral Hazard and Texas Banking in the 1980s: Was There a Connection?” *Federal Reserve Bank of Dallas Financial Industry Studies* (December 1990): 1–7.

study revealed that as long as Texas banks possessed the ability to expand their lending, lower growth rates of capital were associated with larger increases in lending, as moral hazard would suggest.⁷⁷ The implication of this finding is that managers of Texas banks that were in a weakened financial position, as indicated by a decline in capital growth, had proportionally less of their own equity funds at stake and hoped to increase expected earnings by assuming additional risks. This increase in the risk profiles of many banks, which is consistent with moral hazard, may have led to an expanded number of Texas bank failures.

The Failures of Penn Square and First National

Two significant failures of southwestern banks that occurred during the first half of the 1980s were those of Penn Square Bank, N.A., of Oklahoma City and the First National Bank of Midland, Midland, Texas. The failures of these banks were important not only because at the time the two banks were relatively large and their failures foreshadowed the problems the Southwest would face in the second half of the 1980s, but also because they glaringly illustrated the results of speculative energy lending.

The first major failure of a southwestern bank was Penn Square, a \$436 million bank that was closed on July 5, 1982.⁷⁸ Penn Square was the seventh-largest bank in Oklahoma at the time of closing, and the effect of its failure on other major banks was devastating. The First National Bank of Midland was a \$1.4 billion bank that was closed on October 14, 1983. It was Texas's largest independent bank, the largest bank in the Midland-Odessa oil region, and the second-largest commercial bank (at the time) to fail in FDIC history.⁷⁹

Penn Square, a one-office bank in a shopping mall on Oklahoma City's north side, had been an aggressive lender principally to small oil and gas producers.⁸⁰ (Approximately 80 percent of its loans had been made to energy-related businesses, as compared with the 20 percent favored by the more-conservative Oklahoma City banks.)⁸¹ In the five years ending March 1982, Penn Square's assets grew from \$30 million to a \$436 million.⁸² This phenomenal growth was held by some oil industry and financial sources to be the result of Penn

⁷⁷ Ibid., 6. Gunther and Robinson also note that once banks were more exposed to risk, institutions with lower capital growth recorded statistically insignificant differences in lending from banks with greater increases in capital. Although this finding is inconsistent with moral hazard, it points out the potential importance of both regulatory and liquidity constraints.

⁷⁸ A detailed discussion of Penn Square is available in Phillip L. Zweig, *Belly Up: The Collapse of the Penn Square Bank* (1985).

⁷⁹ The material on the First National Bank of Midland is based largely on the FDIC's *1983 Annual Report* (1984), 10, 12.

⁸⁰ Some of the information on Penn Square is from two FDIC publications: *The First Fifty Years: A History of the FDIC 1933–1983* (1984), 97–98; and *1982 Annual Report* (1983), 6.

⁸¹ Martin, "Penn Square's Oil Connection."

⁸² "Chain Letter from Your Penn Pal in Oklahoma City," *Economist* (July 10, 1982), available: LEXIS, Library: NEWS, File: ECON.

Square's willingness to lend money on almost any oil venture.⁸³ Moreover, Penn Square appears to have had extremely lenient loan standards. One oil executive said that whereas the common banking practice was to accept about half of a company's claimed proven reserves of oil and gas and then base loans on 30 percent of that figure, Penn Square regularly accepted 75 percent of the gross value as collateral.⁸⁴

To support its phenomenal growth, the bank relied heavily on purchased deposits and, to a much greater extent, on a program of selling participations in many of the risky energy loans it originated to large regional and money-center banks. Penn Square then collected fees for servicing the loans.⁸⁵ Two of the more notable banks that purchased loans sold by Penn Square were Chicago's Continental Illinois Bank (\$1 billion) and Chase Manhattan Bank of New York (\$212 million).⁸⁶ Chase would later file a suit claiming it was defrauded when it bought Penn Square loans that were backed with bogus collateral, ranging from oil rigs to thoroughbred race horses.⁸⁷ Continental would later suffer huge deposit withdrawals that were related to the problem loans it had purchased from Penn Square.⁸⁸

The energy loans in which Penn Square was so heavily invested had been based on extremely high oil and gas prices. When the energy markets deteriorated, a huge volume of loans defaulted and the value of supporting collateral was minimized, leading to Penn Square's failure. (Continental Illinois received open-bank assistance two years later.)

Like Penn Square's management, First National's management decided (in early 1980) to invest heavily in energy. At that time the oil-producing area under Midland, known as the Permian Basin, accounted for 20 percent of the hydrocarbon production in the United States.⁸⁹ First National concentrated its loans on drilling and exploration ventures and financed its loan expansion partly by soliciting large deposits from Wall Street investors. By year-end 1981, the bank had doubled its assets.⁹⁰

Euphoric about the energy boom, the bank departed from prudent banking practices in evaluating loans; for example, it allowed customers to determine the value of their own collateral.⁹¹ The bank was known for the "handshake" loans it made on long-shot oil and gas

⁸³ Martin, "Penn Square's Oil Connection."

⁸⁴ Ibid.

⁸⁵ G. David Wallace, "The 'Wild Bunch' at Penn Square; Funny Money," *Business Week* (May 27, 1985), sec. Books, available: LEXIS, Library: NEWS, File: BUSWK.

⁸⁶ Gordon Matthews, "FDIC: Chase Used Threats, Coercion on Penn Square," *American Banker* (October 17, 1983), 1; and Martin, "Penn Square's Oil Connection."

⁸⁷ Matthews, "FDIC: Chase Used Threats."

⁸⁸ For further discussion of Continental Illinois, see Chapter 7.

⁸⁹ John P. Forde, "Republic Begins to Rebuild 'Brand New' Midland Bank," *American Banker* (October 18, 1983), 48.

⁹⁰ "Burying Mother; Oil Woes Break a Texas Bank," *Time* (October 24, 1983), available: LEXIS, Library: NEWS, file: TIME.

⁹¹ "A New Wave of Fear Washes over Midland; Business Community Afraid the FDIC Will Foreclose on Many Loans," *American Banker* (November 9, 1983), 3, 39.

ventures.⁹² (These activities contributed to the bank's energy-related loan losses and eventually to its collapse, a sequence of events that would prove common among energy banks in the Southwest.)

In the 16 months before First National's failure, falling oil prices and the recession of 1982 caused the bank substantial losses on energy-related loans.⁹³ In 1983 the percentage of the bank's nonpaying loans was approximately 25 percent of assets, the highest percentage of any large bank in the United States at the time.⁹⁴ In early October 1983, First National reported that "nonperforming energy loans were the primary contributors to its \$120.8 million in losses over the first three quarters of 1983."⁹⁵ Widespread publicity about the bank's losses eroded public confidence and led to a run on deposits.

Data on Performance of Southwestern Banks

At the beginning of the 1980s, southwestern banks were healthy and compared quite favorably with other banks. As of December 1980, median return-on-assets, return-on-equity, and equity-to-assets ratios for southwestern banks exceeded the ratios for other banks, while equity and reserves to assets was favorable in comparison with the percentages for nonsouthwestern banks. At the same time, a smaller percentage of southwestern banks had negative net income than did other banks. In addition, the earliest data available show that average CAMEL ratings of southwestern banks were higher than the average ratings of all U.S. banks (year-end 1981), while southwestern and nonsouthwestern banks had roughly equal nonperforming loans as a percentage of all loans (year-end 1982).⁹⁶ With regard to risk, southwestern banks had a higher ratio of C&I loans to assets than other banks in 1980. Nevertheless, overall in 1980 the risk exposure of the region's banks was similar to, if not less than, the risk exposure of the other banks because of southwestern banks' lower percentages of loans to assets and real estate loans to assets and comparable percentages of commercial real estate loans to assets.

Analysis demonstrates that during the first half of the 1980s southwestern banks exhibited signs of weakening and then, beginning in the mid-1980s, experienced drastic, pervasive deterioration. As the discussion below indicates, CAMEL ratings degenerated;

⁹² "Burying Mother; Oil Woes Break a Texas Bank."

⁹³ Ibid; and FDIC, Press Release (PR-81-83), October 14, 1983.

⁹⁴ "Burying Mother; Oil Woes Break a Texas Bank."

⁹⁵ Andrew Albert and Robert E. Norton, "Out-of-State Buyers Eyed for Midland: Regulators Set to Deal If Texas Banks Cool," *American Banker* (October 14, 1983), 9.

⁹⁶ The CAMEL rating system refers to capital, assets, management, earnings, and liquidity. In addition to a rating for each of these individual or "component" categories, an overall or "composite" rating is given for the condition of the bank. Banks are assigned ratings between 1 and 5, with 5 being the worst rating a bank can receive. See Chapter 12 for a detailed explanation of CAMEL ratings.

returns on assets and equity, equity to assets, and nonperforming loans compared poorly with those of other banks; and the percentage of southwestern banks with negative net income rose sharply.

CAMEL ratings of the region's banks worsened along with the area's economy (see tables 9.3a and 9.3b). For example, between year-end 1981 and year-end 1989 the percentage of 1-rated banks declined from 54.5 percent of all southwestern banks to 13.5 percent. At the same time, the percentage of 1-rated U.S. banks also declined, but not as dramatically, from 39.3 percent to 21.4 percent (see table 9.4). Similarly, during the same period the percentage of 4-rated southwestern banks rose continually, from 0.8 percent to 17.1 percent (compared with an increase from 1.4 percent to 6.1 percent for all banks); and the percentage of 5-rated banks jumped from 0.2 percent to 7.4 percent (versus a rise of 0.3 percent to 1.9 percent for all banks). Moreover, during the same period the percentage of all 4- and 5-rated banks located in the Southwest rose from 11.6 percent to 54.5 percent.

Table 9.3a
CAMEL Ratings for All Southwestern Banks, 1981–1990

Report Date (Year-end)	Number of Banks/Percentage of Total					
	CAMEL Rating					Total
	1	2	3	4	5	
1981	1,437	1,063	110	21	6	2,637
	54.5	40.3	4.2	0.8	0.2	100%
1982	1,368	1,074	154	78	6	2,680
	51.0	40.1	5.8	2.9	0.2	100
1983	1,269	1,145	273	125	17	2,829
	44.9	40.5	9.7	4.4	0.6	100
1984	1,108	1,324	343	159	25	2,959
	37.5	44.7	11.6	5.4	0.8	100
1985	950	1,330	421	266	54	3,021
	31.5	44.0	13.9	8.8	1.8	100
1986	645	1294	623	415	99	3,076
	21.0	42.1	20.3	13.5	3.2	100
1987	464	1148	629	450	150	2,841
	16.3	40.4	22.1	15.8	5.3	100
1988	349	990	593	430	166	2,528
	13.8	39.2	23.5	17.0	6.6	100
1989	311	940	488	395	170	2,304
	13.5	40.8	21.2	17.1	7.4	100
1990	286	905	481	325	159	2,156
	13.3	42.0	22.3	15.1	7.4	100

Note: Examination ratings were obtained from the FDIC's historical database. In some instances examination ratings were missing, and as a result, the number of CAMEL-rated banks each year was slightly smaller than the total number of southwestern banks in other tables.

Table 9.3b
CAMEL 4- and 5-Rated Institutions, Southwestern Banks versus
Banks in Rest of U.S., 1981–1990

Report Date (Year-end)	Number of 4- and 5-Rated Banks/Percentage of Total		
	Southwestern Banks	Other Banks	Total
1981	27	206	233
	11.6	88.4	100%
1982	84	390	474
	17.7	82.3	100
1983	142	520	662
	21.5	78.6	100
1984	184	708	892
	20.6	79.4	100
1985	320	903	1,223
	26.2	73.8	100
1986	514	946	1,460
	35.2	64.8	100
1987	600	700	1,300
	46.2	53.9	100
1988	596	528	1,124
	53.0	47.0	100
1989	565	472	1,037
	54.5	45.5	100
1990	484	571	1,055
	45.9	54.1	100

Examination of southwestern banks' return on assets and capital ratios is also enlightening (see table 9.5). From 1978 through 1983 southwestern banks had a higher median ROA than other U.S. banks, but for the rest of the decade, a lower ROA. From 1978 through 1983 median return on equity for southwestern banks exceeded the ratios for other banks each year, but for the rest of the decade it was lower. For each year from 1978 through 1985 except 1981, southwestern banks' median equity-to-assets ratios were greater than those of other banks, but for the rest of the decade were lower. Furthermore, the percentage of southwestern banks with very low (less than 5 percent) ratios of equity and reserves to assets was lower than that for other banks from 1978 through 1984, comparable in 1985, and considerably higher from 1986 through 1989 (averaging 7.9 percent annually for southwestern banks and 1.3 percent for other banks) (see tables 9.6a and 9.6b). On the positive side, the percentage of strong southwestern banks—those with equity and reserves to assets exceeding 11 percent—was actually slightly higher during the decade's most troubled years, 1986 through 1989, than during the prosperous years of 1980–82.

Table 9.4
CAMEL Ratings for All U.S. Banks, 1981–1990

Report Date (Year-end)	Number of Banks/Percentage of Total Camel Rating					Total
	1	2	3	4	5	
1981	5,659 39.3	7,651 53.1	863 6.0	194 1.4	39 0.3	14,406 100%
1982	5,281 36.5	7,550 52.2	1,172 8.1	392 2.7	83 0.6	14,478 100
1983	4,908 33.9	7,450 51.5	1,456 10.1	555 3.8	107 0.7	14,476 100
1984	4,474 31.1	7,328 50.9	1,704 11.8	753 5.2	139 1.0	14,398 100
1985	3,857 26.9	7,248 50.5	2,023 14.1	1,033 7.2	190 1.3	14,351 100
1986	3,264 22.8	7,319 51.1	2,270 15.9	1,213 8.5	247 1.7	14,313 100
1987	2,999 21.7	7,400 53.5	2,147 15.5	1,018 7.4	282 2.0	13,846 100
1988	2,879 21.6	7,357 55.3	1,944 14.6	875 6.6	249 1.9	13,304 100
1989	2,769 21.4	7,394 57.2	1,718 13.3	786 6.1	251 1.9	12,918 100
1990	2,625 20.9	7,024 55.9	1,868 14.9	788 6.3	267 2.1	12,572 100

One area of particular weakness for southwestern banks was nonperforming loans (see figure 9.18). Every year from 1982 through 1990 the percentage of nonperforming loans for southwestern banks was greater than for other banks. For example, from 1986 through 1989 the percentage of nonperforming loans of southwestern banks averaged 8.8 percent, compared with 3.1 percent for other banks.

Perhaps the most telling indicator of the pervasive weakness of the southwestern banks is the percentage of those institutions with negative net income in the 1980s (see figure 9.19). From 1980 through 1982 this percentage was lower for southwestern banks than for other banks, but for the rest of the decade it was higher. From 1982 to 1987 the percentage of southwestern banks with negative net income jumped from 8.0 percent to 39.2 percent, while at the same time the percentage for other banks remained in the range of 10 to 15 percent. Incredibly, from 1985 through 1989 an average of 31.5 percent of southwestern banks had negative net income, a percentage illustrating how widespread was the adverse effect of the region's economic problems.

Table 9.5
Median ROA, ROE, and Equity Ratios, Southwestern Banks versus Banks in Rest of U.S., 1979–1990

Report Date (Year-end)	Number of Banks		ROA		ROE		Equity to Assets	
	SW Banks	Other Banks	SW Banks	Other Banks	SW Banks	Other Banks	SW Banks	Other Banks
1978	2,474	12,242	1.12	0.96	13.93	12.32	8.05	7.79
1979	2,517	12,171	1.22	1.06	15.11	13.27	8.08	8.01
1980	2,580	12,178	1.29	1.07	15.47	12.94	8.27	8.19
1981	2,647	12,098	1.32	1.02	15.89	12.26	8.19	8.20
1982	2,737	12,031	1.25	0.99	15.08	11.89	8.35	8.18
1983	2,890	11,857	1.04	0.95	12.52	11.64	8.29	8.10
1984	3,046	11,728	0.89	0.91	10.93	11.06	8.10	8.02
1985	3,125	11,671	0.78	0.92	9.65	11.17	8.07	8.02
1986	3,139	11,529	0.39	0.86	5.41	10.40	7.69	7.90
1987	2,873	11,313	0.32	0.88	4.56	10.33	7.53	8.09
1988	2,557	11,056	0.51	0.92	6.83	10.68	7.37	8.16
1989	2,325	10,871	0.69	0.95	8.74	10.87	7.45	8.26
1990	2,179	10,636	0.72	0.88	9.16	10.04	7.37	8.19

Were there characteristics that distinguished southwestern banks that failed from those banks that survived? Banks generally do not fail suddenly. The process of bank failure takes many years to develop, and failure is the result of decisions and strategies implemented at least four or five years beforehand.⁹⁷ These strategies and decisions are the underlying causes of either success or failure in difficult economic times. To study the effects of these decisions on a bank's subsequent failure or survival, FDIC researchers analyzed various financial ratios, or risk factors, that might identify risky operating strategies.⁹⁸

To determine how these risk factors affected southwestern banks, the researchers ranked each bank from low to high within each financial ratio. They then separated the banks into five risk groups in order to perform the analysis for the years 1982 (for banks that failed or survived in 1986 and 1987), 1984 (for banks that failed or survived in 1988 and 1989), and 1986 (for banks that failed or survived in 1990 and 1991). These correspond to the years during which the greatest number of failures occurred—1986 through 1991. For

⁹⁷ For a discussion of the interval between the time when a strategic decision is made and the time when the effects of the decision become evident—the life cycle of a failed bank—see Chapter 13.

⁹⁸ The eight risk factors are loans-to-assets ratios, return on assets, asset growth from the previous year, loan growth from the previous year, operating expenses to total expenses, average salary expenses, interest on loans and fees, and interest on loans and leases plus fee income on loans and leases.

Table 9.6a
Equity and Reserves to Assets of Southwestern Banks, 1978–1990

Report Date (Year-end)	Number of Banks/ Percentage of Total					Total
	Equity Capital and Reserves to Total Assets					
	<5.0	5.0–7.0	7.0–9.0	9.0–11.0	> 11.0	
1978	27	354	1,124	630	339	2,474
	1.1	14.3	45.4	25.5	13.7	100%
1979	14	346	1,135	668	354	2,517
	0.6	13.8	45.1	26.5	14.1	100
1980	11	284	1,133	730	422	2,580
	0.4	11.0	43.9	28.3	16.4	100
1981	13	296	1,201	704	433	2,647
	0.5	11.2	45.4	26.6	16.4	100
1982	12	298	1,151	758	518	2,737
	0.4	10.9	42.1	27.7	18.9	100
1983	23	384	1,130	739	614	2,890
	0.8	13.3	39.1	25.6	21.3	100
1984	25	436	1,189	743	653	3,046
	0.8	14.3	39.0	24.4	21.4	100
1985	46	427	1,173	781	698	3,125
	1.5	13.7	37.5	25.0	22.3	100
1986	141	594	995	750	659	3,139
	4.5	18.9	31.7	23.9	21.0	100
1987	221	490	917	669	576	2,873
	7.7	17.1	31.9	23.3	20.1	100
1988	269	407	840	540	501	2,557
	10.5	15.9	32.9	21.1	19.6	100
1989	203	366	792	521	443	2,325
	8.7	15.7	34.1	22.4	19.1	100
1990	138	359	824	473	385	2,179
	6.3	16.5	37.8	21.7	17.7	100

each period studied, the banks that failed four or five years later were isolated from the banks that were still in existence at the end of the five-year period and subsequently never failed. Each risk group of each risk variable was analyzed to determine which variable was the best predictor of failure. For each of the three time periods, banks in the highest loans-to-assets group had the highest incidence of failure: 12.5 percent for banks that existed in 1982 and failed in 1986 or 1987, 21.9 percent for banks that existed in 1984 and failed in 1988 or 1989, and 11.3 percent for banks that existed in 1986 and failed in 1990 or 1991. A bank in the highest-risk loans-to-assets group was three to five times more likely to fail than the banks in lower-risk loans-to-assets groups (see figure 9.20). These results indicate that banks with very high loans-to-assets ratios may be at greater risk of failure, on average, than

Table 9.6b
Equity and Reserves to Assets of Nonsouthwestern Banks, 1978–1990

Report Date (Year-end)	Number of Banks/ Percentage of Total					Total
	Equity Capital and Reserves to Total Assets					
	<5.0	5.0–7.0	7.0–9.0	9.0–11.0	> 11.0	
1978	167	2,289	5,458	2,664	1,664	12,242
	1.4	18.7	44.6	21.8	13.6	100%
1979	131	1,811	5,381	2,958	1,890	12,171
	1.1	14.9	44.2	24.3	15.5	100
1980	143	1,563	5,167	3,233	2,072	12,178
	1.2	12.8	42.4	26.5	17.0	100
1981	199	1,576	5,022	3,153	2,148	12,098
	1.6	13.0	41.5	26.1	17.8	100
1982	245	1,655	4,821	3,063	2,247	12,031
	2.0	13.8	40.1	25.5	18.7	100
1983	220	1,957	4,558	2,844	2,278	11,857
	1.9	16.5	38.4	24.0	19.2	100
1984	205	1,813	4,612	2,787	2,311	11,728
	1.7	15.5	39.3	23.8	19.7	100
1985	165	1,657	4,669	2,860	2,320	11,671
	1.4	14.2	40.0	24.5	19.9	100
1986	183	1,808	4,614	2,716	2,208	11,529
	1.6	15.7	40.0	23.6	19.2	100
1987	160	1,259	4,577	2,794	2,523	11,313
	1.4	11.1	40.5	24.7	22.3	100
1988	140	1,110	4,374	2,872	2,560	11,056
	1.3	10.0	39.6	26.0	23.2	100
1989	107	1,024	4,147	2,905	2,688	10,871
	1.0	9.4	38.1	26.7	24.7	100
1990	128	919	4,181	2,790	2,618	10,636
	1.2	8.6	39.3	26.2	24.6	100

banks with lower levels of loans because, for banks in the very high group, a larger percentage of their portfolios can default. This finding is consistent with the findings of the same analysis performed for banks throughout the country in these same years (see Chapter 13).

A review of the data for southwestern banks shows that although the number of southwestern bank failures did not begin to increase substantially until 1983 and reached a peak in 1988, beginning in 1981 banking statistics provided warnings of potential problems. For example, both the asset growth rates and the return on assets began declining in 1981 and fell continuously through 1987. In addition, nonperforming assets increased from 1982

Figure 9.18

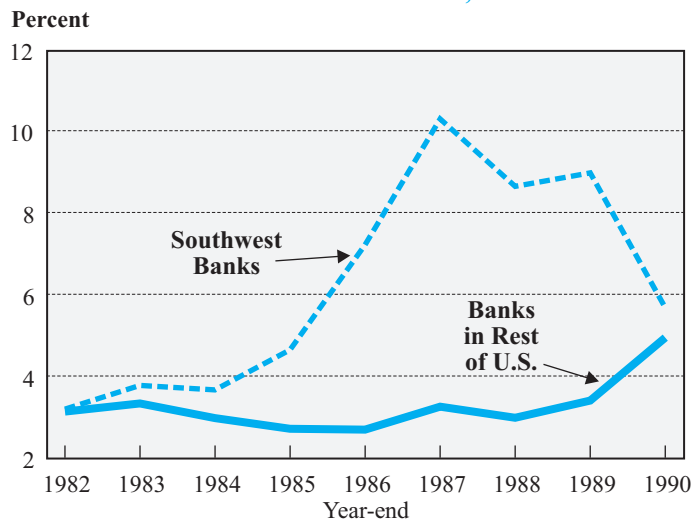
**Nonperforming Loans as a Percentage of All Loans,
Southwest versus Rest of U.S., 1982–1990**

Figure 9.19

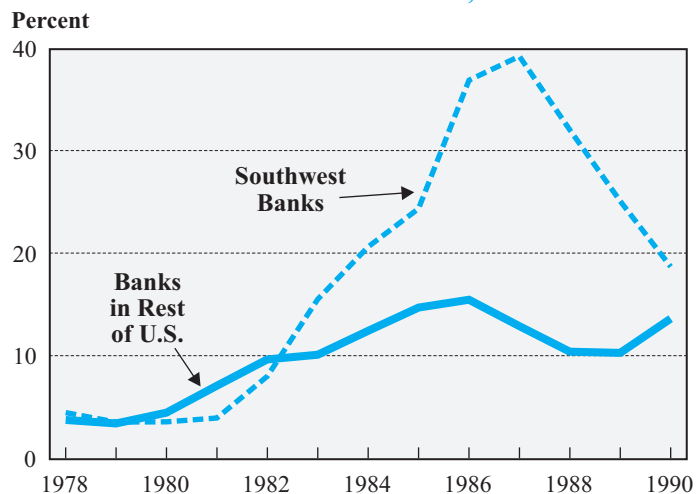
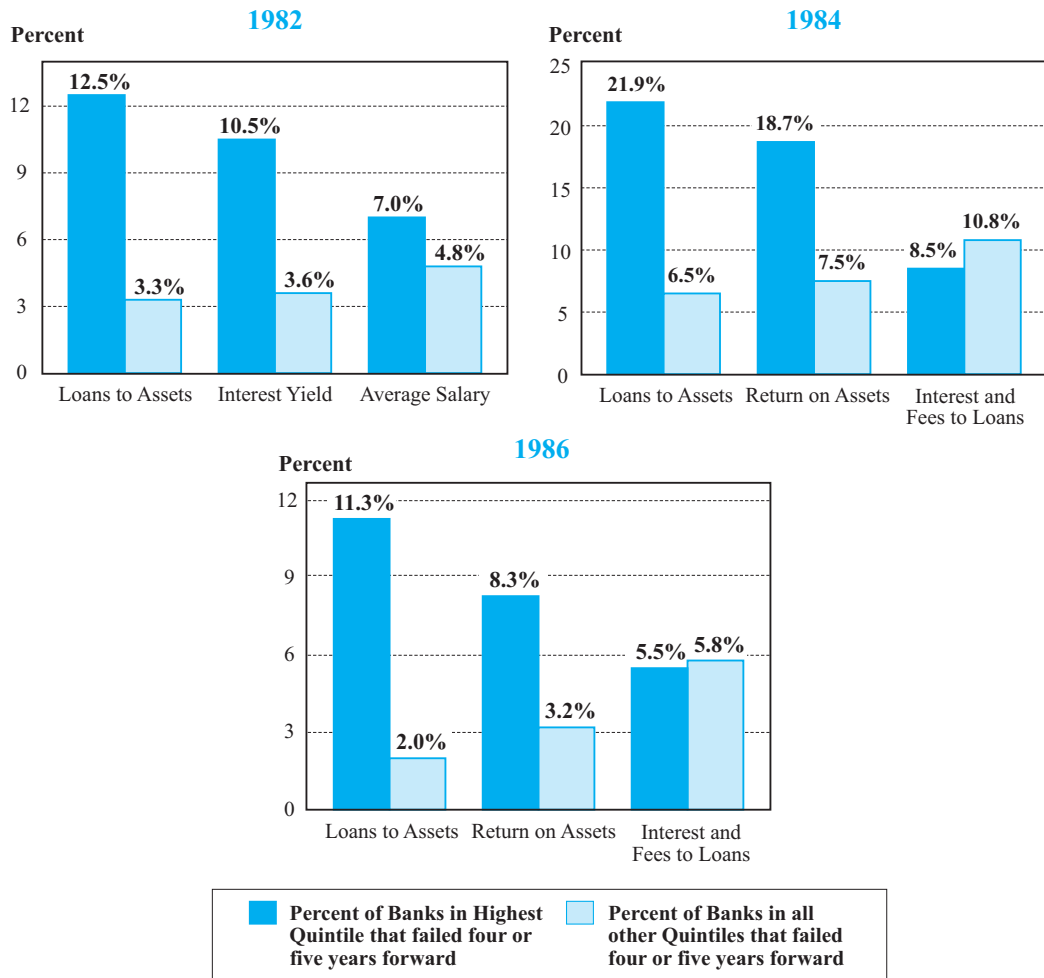
**Percentage of Banks with Negative Net Income,
Southwest versus Rest of U.S., 1978–1990**

Figure 9.20

Comparison of Selected Factors in Predicting Southwest Bank Failures Four and Five Years Forward, 1982, 1984, and 1986



Note: These three factors represent the two highest risk factors (left and center) and the lowest risk factor (right) in predicting bank failures.

through 1987, while charge-offs began rising in 1981 and did not peak until 1986. Similarly, the percentage of banks with negative net income increased consistently from 1981 through 1987. Finally, CAMEL ratings of southwestern banks began their pervasive deterioration in 1981.

When one looks back at the history of the region's economy, it is not surprising to see that 1981 proved to be the beginning of the downturn for southwestern banks. First, as discussed above, 1981 was the peak year for both oil prices and drilling activity. Many oil-related loans were based not only on the high oil prices of 1981 but also on the expectation that oil prices would continue to escalate. A number of banks began experiencing difficulties simply because oil prices failed to continue climbing. Second, 1981 was the year when office vacancy rates in Houston, Dallas, and Oklahoma City began a sharp, multiyear increase, while commercial real estate loans as a percentage of bank assets rose dramatically from 1981 to 1987. The combination of declining oil prices, weakening commercial real estate markets, and high levels of commercial real estate loans was the basis of the eventual demise of many southwestern banks.

Conclusion

A number of factors contributed to the banking debacle that occurred in the Southwest in the second half of the 1980s. The region's economy was highly dependent on oil, a sector heavily supported by the banks; and when a boom occurs in such an important segment of a region's economy, the potential clearly exists for serious difficulties when the boom period ends. The danger was especially acute in the Southwest because many lenders were initiating loans that were based on the assumption of ever-increasing oil prices. Some banks were therefore vulnerable even if oil prices did not decline but simply stopped increasing.

The boom helped create an excessively optimistic mind-set among some southwestern bankers, which led them to make numerous lending errors. For example, overly sanguine expectations about the future of oil prices drew bankers into a destructive competition to keep oil customers in the early 1980s. Then, faced with deteriorating energy loans, many banks only compounded the difficulties by pushing to invest in real estate as an antidote to their energy-loan problems. The boom atmosphere contributed here as well, blinding bankers to the potential adverse effects of weakening oil prices and concomitant increases in vacancy rates on real estate projects as well as making them more liable to base real estate loans on inaccurate feasibility studies and on unrealistic appraisals and income projections. In this area, too, bankers' lending strategies reflected unrealistic beliefs about prices: believing that real estate loans' prices rarely declined, they acted as if real estate loans entailed minimal risk, and extended credit unwisely.

In addition, the intense competition among financial institutions might also have warranted additional vigilance. The competitive intensity was generated both by the striking in-

crease in the number of newly chartered southwestern banks during the first half of the 1980s and by Congress's 1982 broadening of thrifts' powers. The problems could have been contained if regulatory standards in the chartering of new banks had been more stringent and if legislation had been attentive to the implications of deregulation.

In sum, although extraordinary events such as the oil price crash in late 1985 and 1986 and the southwestern real estate debacle are difficult if not impossible to predict, nevertheless the euphoric attitude among many southwestern bankers was highly conducive to critical errors in judgment. The simplest lesson that can be learned from the story of the banking collapse in the Southwest is that obvious excesses, in both expectations and competitive behavior, have the potential to cause serious problems, no matter how favorable a situation may seem at the time.

Chapter 10

Banking Problems in the Northeast

Introduction

The banking problems in the Northeast were indissoluble from the region's real estate problems.¹ Fueled by a strong regional economy, both residential and commercial real estate markets in the region boomed during the 1980s, but the boom eventually led to overbuilding and rampant real estate speculation. Late in the decade, when the regional economy weakened and a high volume of new construction projects coincided with diminished demand, the real estate market boom turned into a bust. During the early 1990s, an oversupply of completed projects came on the market and real estate prices went into a sharp decline. In an environment of increased real estate loan defaults, a significant number of northeastern banks failed: 16 in 1990, 52 in 1991, and 43 in 1992.² These failures accounted for substantial portions of the nation's total volume of failed-bank assets and of the FDIC's bank-failure resolution costs for those years. Losses from northeastern bank failures totaled \$1.3 billion in 1990, \$5.5 billion in 1991, and \$2.8 billion in 1992—and constituted 45 percent, 91 percent, and 77 percent, respectively, of total FDIC failure-resolution costs for those years. Failures were particularly prominent in 1991, when assets of failed banks represented 25.4 percent of prior year-end banking assets in New Hampshire, 18.3 percent in Connecticut, 15.2 percent in Maine, and 12.0 percent in Massachusetts.³

The 1991 failure of three subsidiaries of the Bank of New England Corporation (the Bank of New England, Connecticut Bank and Trust Co., and the Maine National Bank), a failure which many would identify as the last major failure of the banking crises of the 1980s and early 1990s, was especially significant. The Bank of New England's failure re-

¹ The Northeast includes the six New England states (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut) plus New York and New Jersey.

² Throughout this chapter, "banks" refers to commercial banks and savings banks supervised by the FDIC, the Office of the Comptroller of the Currency (OCC), or the Federal Reserve. Savings and loan associations supervised by the Federal Home Loan Bank Board until 1989 and then by the Office of Thrift Supervision (OTS) are not included.

³ These ratios were calculated from assets at failure as a percentage of prior year-end state banking assets for all banks failed and open.

sulted in the first use of the cross-guarantee provision of the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) to close an institution (Maine National Bank). In addition, the participation of Kohlberg, Kravis, Roberts & Co. as a partner with Fleet/Norstar in the acquisition of the three subsidiaries of the Bank of New England Corporation marked the first time that a nonbank “financial” buyer participated in the purchase of a failed commercial bank. This company’s involvement not only allowed capital to enter the banking industry from nonbanking sources but was also expected to increase the number of potential bidders in future bank failures.⁴ Finally, the decision to protect all deposits of the three subsidiaries of the Bank of New England Corporation again focused attention on the “too-big-to-fail” bank disposition policy. Later in 1991, Congress included provisions in the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) that made it more difficult to resolve bank failures in ways that would protect uninsured deposits.⁵

The problems of the northeastern banks arose to a large extent because they had been aggressive participants in the prosperous real estate markets of the 1980s. Between 1983 and 1989 the median ratio of real estate loans to assets rose from approximately 25 percent to 51 percent. Both residential and commercial real estate loans contributed to the increase, but the increase in the median commercial real estate loan concentration is widely held to have been a primary reason for the asset-quality problems and eventual failure of many of the region’s banks in the late 1980s and early 1990s; commercial real estate loan portfolios as a percentage of bank assets rose from 6.5 percent in 1982 to 14 percent in 1989 and 1990.

Since real estate lending played such an important role in the expansion and collapse of banks in the Northeast, the area’s real estate markets of the 1980s are discussed in some detail, with the focus first on New England and then on New York and New Jersey. The chapter then provides an overview of banking’s relationship to real estate in the region as a whole and then specifically in New England and in New York and New Jersey. The two succeeding sections present and analyze data on bank performance in the region and on bank failures by state. Finally, the rise and fall of the Bank of New England Corporation is recounted.

The Northeastern Economy and Real Estate

The Northeast recovered quickly from the 1981–82 national recession. Between the end of the recession and 1988, the region’s rate of change in gross product outperformed that of the nation as a whole, and its commercial and residential real estate markets boomed,

⁴ John W. Milligan, “KKR, Member FDIC,” *Institutional Investor* 25, no. 7 (June 1991): 59.

⁵ See Chapter 7, “Continental Illinois and ‘Too Big to Fail.’”

fueled by the strong regional economy as well as by employment growth. But late in the decade—partly because of a slowdown in the growth of military spending as the Cold War came to an end, a decline in the computer industry in the Boston area, and cuts by Wall Street firms after the stock market crash in October 1987—the regional economy weakened. Employment fell, growth in personal income slowed, and from 1989 through 1992 the region's rate of change in gross product underperformed the nation's (see figure 10.1).

The weakening of the regional economy exacerbated the problems of the overbuilt real estate markets, and these markets fell off dramatically. For example, the total value of nonresidential construction permits in the region, having jumped from \$4.4 billion in 1980 to \$10.2 billion in 1988, then declined to \$6.5 billion by 1991. And the number of newly issued permits for residential construction, after soaring 172 percent between 1982 and 1986, plummeted by 67 percent between 1986 and 1991 (see table 10.1).

New England

In 1988, when the New England economy began to weaken, many were caught by surprise. Until then New England had been one of the most prosperous areas of the country. Its unemployment rate had fallen to 3 percent and its per capita income had climbed to 123 per-

Figure 10.1
Changes in Northeast Gross Product versus
Changes in U.S. Gross Domestic Product,
1980–1994

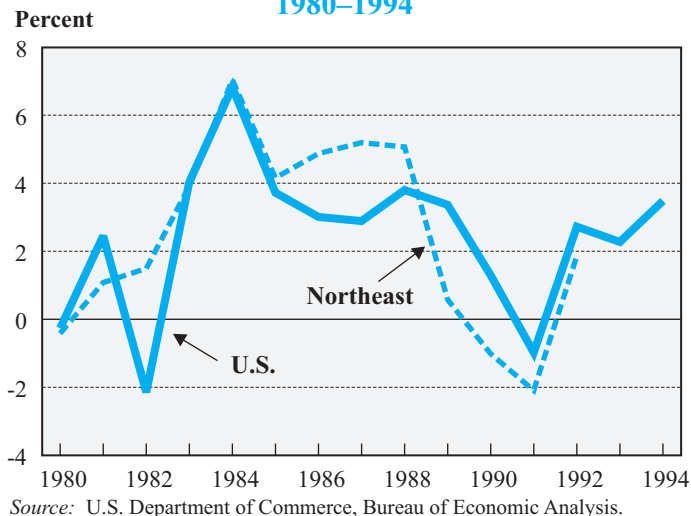


Table 10.1
Nonresidential and Residential Construction,
Northeast Region, 1980–1994

Year	Value of Nonresidential Permits (\$Thousands)	Number of Residential Permits Issued
1980	4,415,720	87,840
1981	5,415,443	85,502
1982	5,584,465	84,454
1983	5,273,951	130,848
1984	6,966,098	161,348
1985	8,988,867	216,146
1986	9,348,328	229,816
1987	10,049,755	216,992
1988	10,178,196	176,343
1989	9,915,156	133,473
1990	8,037,836	88,643
1991	6,510,983	75,173
1992	6,519,954	86,531
1993	7,448,605	93,395
1994	7,338,631	98,258

Source: Bureau of the Census (Building Permits Section, Manpower and Construction Statistics Branch).

cent of the national average, up from 106 percent in 1980.⁶ Yet despite many favorable aspects of New England's economy, some signs of potential problems had been evident. In the mid-1980s the computer industry, a regional specialty, had begun to confront a more competitive environment, and New England firms had found themselves with products and strategies that did not necessarily fit the changing marketplace. In addition, defense contractors in the region were facing the end of the Reagan defense buildup. Finally, the cost of doing business in the region had escalated during the prosperous times, causing some manufacturers to move their operations to less-expensive parts of the country. Although none of these factors had appeared to be especially harmful in itself and the resulting job losses in any one year had not been particularly noteworthy, together they added up over time. For example, between 1984 and 1988, manufacturing employment in New England declined by 140,000 jobs, or approximately 9 percent.

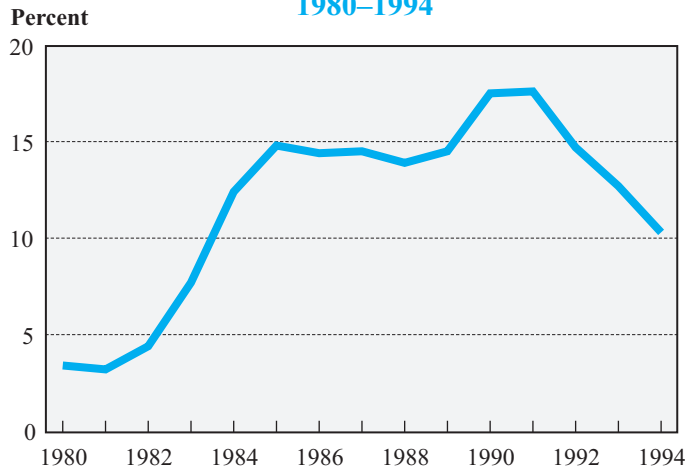
New England's real estate markets turned down along with the economy, and the commercial real estate markets were hit particularly hard. The decline in the commercial mar-

⁶ This discussion is based on Lynn E. Browne, "Why New England Went the Way of Texas Rather Than California," Federal Reserve Bank of Boston *New England Economic Review* (January/February 1992): 24, 33.

kets was surprising to the many who believed that development in New England had been relatively cautious and that the region would not experience the problem of overbuilding that had occurred in the Southwest. For example, the president of Fleet Real Estate Inc. in Providence stated in June 1987 that “the builders [around] Boston are not going hog-wild like they did in Houston. The New England marketplace, I think, is a sensible market.”⁷ Another reason the downturn was unexpected was that vacancy rates in New England’s major office and industrial markets were not markedly different in 1988, at the end of the boom, from what they had been in 1984, at its beginning (see figure 10.2).⁸ Nevertheless, as the head of the Bank of Boston’s structured real estate department noted late in 1989, “Overbuilding has resulted in high vacancy rates and revenue shortfalls of 10% to 30% or more for many projects.”⁹

The deterioration in the New England commercial real estate markets was evidenced by the 22 percent decline between 1988 and 1991 in the Torto Wheaton Rent Index for Boston, and the 17 percent decline between 1990 and 1991 in the index for Hartford (see

Figure 10.2
Office Vacancy Rates in Boston,
1980–1994



Source: CB Commercial/Torto Wheaton Research, *The Office Outlook* (spring 1997), vol. 1.

⁷ Michael Weinstein, “New England Banks Finance a Healthy Real Estate Market,” *American Banker* (June 4, 1987), 12.

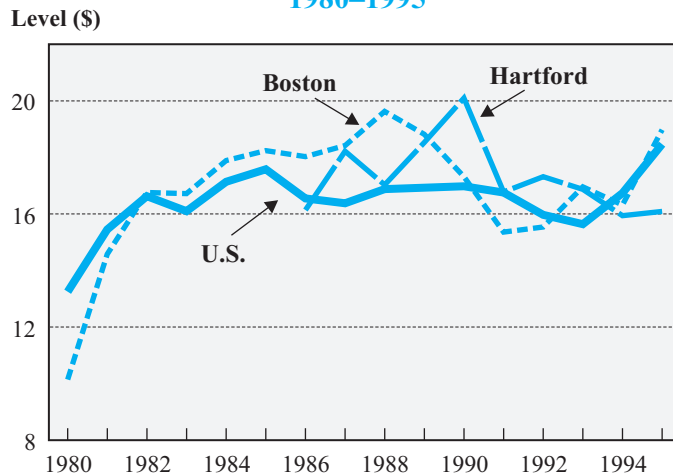
⁸ Browne, “Why New England Went the Way of Texas,” 25.

⁹ David Neustadt, “Bank of Boston Acts to Stem Losses,” *American Banker* (December 5, 1989), 6.

figure 10.3).¹⁰ Nationally over both time periods, this index fell only about 1 percent. But as dramatic as the rent index declines were, they probably did not reflect the full extent of the collapse in New England real estate values. According to one contemporary study, if commercial values at the end of 1992 had been based on then-current rental agreements and occupancy rates, the value of the office stock in the Boston metropolitan area would appear to have fallen more than 70 percent since 1987.¹¹

The collapse of commercial real estate is further illustrated by the jump in the amount of repossessed property in Massachusetts between year-end 1988 and year-end 1989, from \$339 million to \$1.5 billion.¹² In 1990, many real estate professionals believed that troubled properties represented the fastest-growing segment of the Metropolitan Boston commercial real estate market. These problems arose in part because the “Massachusetts Miracle” had lured novice developers—many with weak business plans often based on little or poor market research—into the real estate game. Some commercial projects were 100 percent fi-

Figure 10.3
Rent Indices, Boston and Hartford versus U.S.,
1980–1995



Source: CB Commercial/Torto Wheaton Research, *The Office Outlook* (fall 1996), vol. 1.

¹⁰ The Torto Wheaton Rent Index is a statistically computed dollar value for a five-year, 10,000-square-foot lease for an existing high-rise building in the statistical average of the metro area.

¹¹ Lynn E. Browne and Eric S. Rosengren, “Real Estate and the Credit Crunch: An Overview,” Federal Reserve Bank of Boston *New England Economic Review* (November/December 1992): 28.

¹² Information in this paragraph is derived from Paul Korzeniowski, “Distress for Success,” *Metro Business*, Danvers, MA (October 1990), available: DIALOG, File: 635: Business Dateline.

nanced and based on such unrealistic expectations as the continuation of 10 percent annual price hikes into the 1990s. “Many projects simply should not have been built,” observed the principal at Richard Flier Interests, a Brookline real estate firm.¹³

Some of the most serious difficulties in the commercial real estate markets occurred in New England’s condominium market, where some developers went bankrupt when units failed to sell.¹⁴ The condominium market in Connecticut was so glutted in early 1990 that just absorbing the units then available was expected to take two years.¹⁵ An illustration of the depth of the problem was an action taken by the Collaborative Co., one of Boston’s leading specialists in marketing troubled properties, which made news in the spring of 1990 by halving prices at the St. George condominium development in Revere.¹⁶

The commercial real estate debacle was graphically demonstrated by banking analyst Gerard Cassidy of Tucker, Anthony Inc., Portland, Maine, who developed a 40-mile guided tour of New England real estate lending disasters for potential investors. One stop on a 1990 tour was a rubble-strewn development site in the Boston suburb of Weymouth, with a ghostly row of unfinished condominium units long abandoned by builders. A bank had lent \$25 million for the development of the property and had foreclosed in June 1990. Another stop, this one in Boston’s high-tech heartland, revealed empty commercial space with boarded-up windows—ten empty buildings within an area of a mile and a half. “I thought I knew how bad it was,” said a portfolio manager at Fidelity Investments who took the tour, “but it was worse than I anticipated. I mean, 20-story towers of see-through tinted green glass: What I saw was no different than Dallas during the worst days of the slump.”¹⁷

The commercial real estate market was not alone in its volatility. The New England housing market, too, had a turbulent decade. As the region emerged from the national recession of 1981–82, housing was not much more expensive in New England than in the rest of the country. In 1983, the median home resale price in Boston was \$82,600, 17 percent above the national median of \$70,300 (see figure 10.4). In Providence in the first quarter of 1983 the median was 26 percent *below* the national median. But strong pent-up housing demand and slowly responding supply led to a boom in housing prices throughout New England from 1983 to 1987. In Boston, resale prices rose 21 percent in 1984, 34 percent in 1985, and 19 percent in 1986. In 1987, Boston’s median home resale price reached

¹³ Ibid.

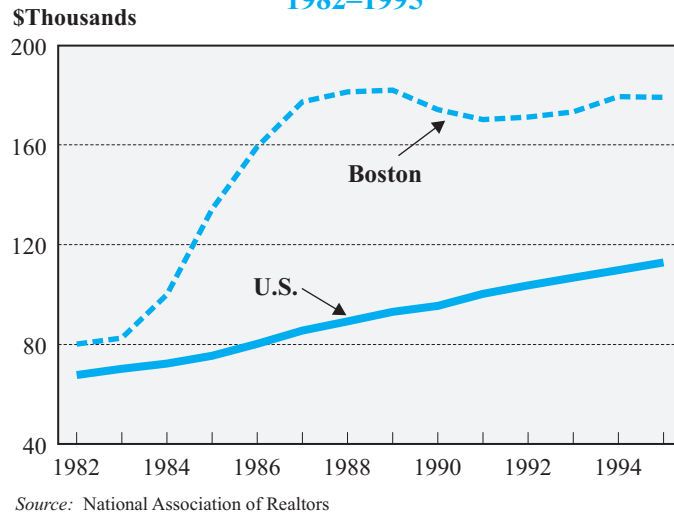
¹⁴ Margot E. Jenks et al., “New England Economic Summary, First Quarter 1990,” Federal Reserve Bank of Boston *New England Economic Indicators* (August 1990): ix.

¹⁵ Katherine Morrall, “Weakening Northeast Real Estate Market Raises Concerns,” *Savings Institutions* 111, no. 4 (April 1990): 13.

¹⁶ Korzeniowski, “Distress for Success.”

¹⁷ This paragraph is based largely on Tom Leander, “New England Graveyard Tour: Here Lie Nonperforming Loans,” *American Banker* (September 12, 1990), 1, 16–17.

Figure 10.4
Median Home Resale Prices, Boston versus U.S.,
1982–1995



\$177,200, which was 115 percent higher than in 1983 and more than twice the national median price (which had increased by only 22 percent during the same four years). The price boom lagged one year in Providence and two years in Hartford, where the most rapid increases occurred in 1986 and 1987, respectively. Nevertheless, the result was the same: by 1988, housing in New England was more than twice as expensive as comparable housing in most other parts of the country.¹⁸

Favorable economic conditions certainly played an important role in the housing-price escalation in New England.¹⁹ For example, a building boom coupled with expansion in the region's trade and service sectors created a substantial increase in the demand for labor. This helped personal income increase more rapidly in New England than in any other part of the country between 1984 and 1988. Higher home prices were also supported by advantageous tax laws, favorable demographics, lower interest rates, and an accommodating banking sector. Yet despite these positive economic circumstances, economists Karl E. Case and Robert J. Shiller argued that fundamentals alone were insufficient to explain the

¹⁸ Data on Boston housing prices were obtained from the National Association of Realtors. Other housing price information in the paragraph was derived from Jenks et al., "New England Economic Summary," viii, ix.

¹⁹ Information in this paragraph is derived primarily from Karl E. Case, "The Real Estate Cycle and the Economy: Consequences of the Massachusetts Boom of 1984–87," Federal Reserve Bank of Boston *New England Economic Review* (September/October 1991): 37–39.

extent of the price increases, at least in Boston. For example, Case's 1986 model, which took into account a number of variables that affected prices, predicted a 15 percent increase in single-family housing prices in Boston between 1983 and 1986, whereas in fact the prices approximately doubled. Case and Shiller also wrote articles in 1988, 1989, and 1990 contending that home buyers were significantly influenced by boom psychology.²⁰ In other words, reacting to rising prices and generally favorable economic conditions, home buyers paid inflated prices in anticipation of future price increases and capital gains.

Some individuals were indeed worried about potential problems from the escalating real estate prices. For example, in mid-1987 a senior vice president at Moseley Securities Corp. in Boston expressed concern because "we've had enormous inflation in real estate values. If there's a slight hiccup up here, there could be serious repercussions."²¹ Nevertheless, despite occasional views such as these, most observers were far more anxious about the long-term consequences of high housing prices on the region's ability to attract workers. In fact, the rising prices of real estate were generally seen as a sign of economic health in the short term.²²

The escalation in home prices occurred even though the population of the region grew at a very slow pace.²³ Prices were therefore rising not because more people wanted to live in New England but because the optimism of those who lived there led them to purchase larger, more expensive dwellings in the expectation of future price increases. As a result, when residential construction finally caught up with the price explosion, the region overbuilt and overbuilt quickly. Excess supply began to appear in areas of New England as early as 1987. (Compounding the problem, the regional economy began faltering at the end of the decade, exhibiting falling employment and slow growth in personal income.) The combination of overproduction and slowing demand led to a softening, though not a collapse, of home prices throughout the area. For example, median home resale prices in the Boston area increased by less than 1 percent from 1988 to 1989 and then fell 4 percent from 1989 to 1990 and another 2 percent from 1990 to 1991.

New York and New Jersey

In New York and New Jersey, too, the commercial real estate sector was overbuilt and exhibited serious problems. In New York City, for example, zoning and tax incentives had prompted a flurry of excess building, with the result that office vacancy rates escalated throughout the 1980s, leaving Manhattan with about 25 million square feet of vacant office

²⁰ Citations for the other articles referenced in this paragraph can be found in Case, "The Real Estate Cycle," 46.

²¹ Weinstein, "New England Banks."

²² Browne, "Why New England Went the Way of Texas," 36.

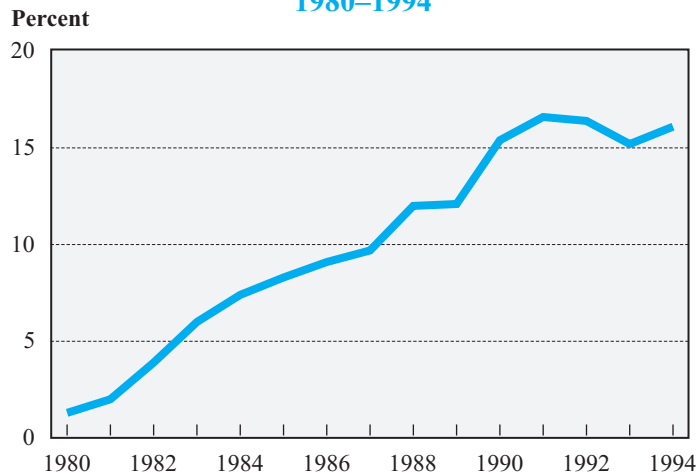
²³ Information in this paragraph was derived primarily from Jenks et al., "New England Economic Summary," ix.

space by mid-1990 (see figure 10.5).²⁴ At the same time, office vacancy rates were even higher in the New York suburbs than in Manhattan.²⁵

The substantial amount of vacant office space put downward pressure on rents. Between 1988 and 1992 the Torto Wheaton Rent Index for Long Island showed a 25.3 percent decline, and between 1988 and 1993 the index for New York City showed a 23.0 percent decline (see figure 10.6). Nationally over the same periods this index fell 5.4 percent and 7.3 percent, respectively. Official statistics on rental rates were likely to have masked the pattern of newly negotiated contracts, which probably showed a greater response to the depressed market. Falling rents notwithstanding, between 1987 and the last quarter of 1991 the vacancy rate for downtown office space grew from just over 10 percent to over 20 percent.²⁶

The residential market in New York also weakened significantly. During the 1980s, residential home prices in New York rose at rates considerably above the national average. By 1988, the median single-family home in the New York metropolitan area sold for as

Figure 10.5
Office Vacancy Rates in New York City,
1980–1994



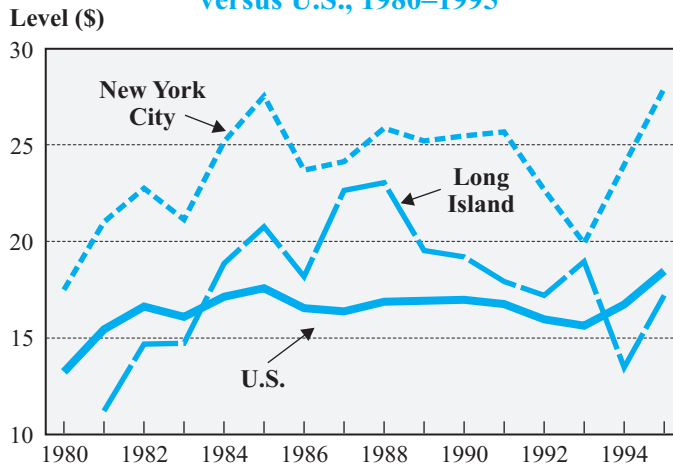
Source: CB Commercial/Torto Wheaton Research, *The Office Outlook* (spring 1997), vol. 2.

²⁴ Stephen Kleege, "Fate of Banking in the 1990s Hinges on Real Estate Loans," *American Banker* (October 15, 1990), 1, 24; and Larry Light and John Meehan, "The Walls Keep Closing In on New York Developers," *Business Weekly* (July 2, 1990): 72.

²⁵ Light and Meehan, "The Walls Keep Closing In," 72.

²⁶ David Brauer and Mark Flaherty, "The New York City Recession," Federal Reserve Bank of New York *Quarterly Review* 17, no.1 (spring 1992): 70.

Figure 10.6
**Rent Indices, New York City and Long Island
 versus U.S., 1980–1995**



Source: CB Commercial/Torto Wheaton Research, *The Office Outlook* (fall 1996), vols. 1 and 2.

much as \$194,000, more than double the national average and almost triple what the median price of a home had been in the New York area in 1981.²⁷ However, after 1988 prices began declining. In the New York City area, for example, prices of homes fell approximately 5 percent in 1989.²⁸ By mid-1990, the weak housing market increased the average time needed to sell a residential unit to six months, double the time that had been required in 1987.²⁹ Residential prices continued to fall, and by the fourth quarter of 1991, median single-family home prices in the New York metropolitan area had declined by 12 percent from their peak, to \$170,800.³⁰ Cooperatives and condominium units were hit particularly hard and many developments were as empty as mausoleums—despite falling prices.³¹ In fact, the price declines of condominium developments were sometimes staggering. For example, in mid-1990 in New York City, broker Saul Stolzenberg tried to sell an empty 66-unit building that he said had a value of \$14.5 million. The only offer he received was \$6 million.³² There

²⁷ Ibid.

²⁸ Michael Quint, “Northeast Banks Face Heavy Losses on Problem Loans,” *The New York Times* (December 15, 1989), available: LEXIS, Library: NEWS, File: NYT.

²⁹ Light and Meehan, “The Walls Keep Closing In,” 73.

³⁰ Brauer and Flaherty, “The New York City Recession,” 70.

³¹ Light and Meehan, “The Walls Keep Closing In,” 72.

³² Ibid., 73.

are indications that portions of the New Jersey housing market suffered similar declines. For example, from 1989 to 1990 the National Association of Realtors' median sales price of existing single-family homes declined by 8 percent for Bergen and Passaic, and 3 percent for Middlesex, Somerset, and Hunterdon.

Banking and Real Estate in the Northeast

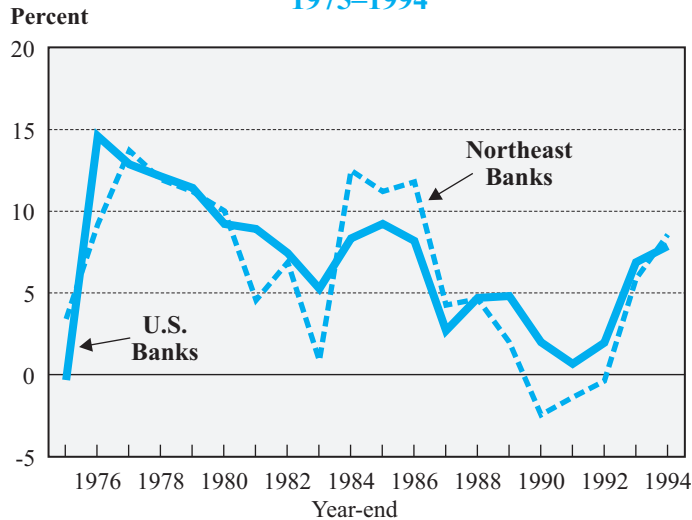
The northeastern region is a highly concentrated banking market. As of year-end 1994, it was the nation's largest in terms of domestic banking assets. At the end of 1980, when the region contained only 5 percent of U.S. commercial and savings banks, these banks nevertheless accounted for 17 percent of domestic bank assets. By year-end 1994, when northeastern banks constituted 7 percent of U.S. banks, their share of domestic bank assets had increased to more than 24 percent. Although much of this bank asset concentration can be attributed to the large money-center banks located in New York, many of the other northeastern states contain densely populated urban centers with strong banking markets that have been fostered not only by the region's high population density but also by its well-established educational, commercial, industrial, and manufacturing industries. Moreover, the region's state legislatures have been very supportive of the banking industry, typically leading the nation in expanding bank products and powers.

Many northeastern banks aggressively participated in the booming real estate markets of the 1980s. Between 1983 and 1986, bank asset growth for the region increased from an annual rate of less than 1 percent to nearly 12 percent (see figure 10.7). This growth was supported by substantial new capital investment during the 1980s resulting from increases in mutual-to-stock-form bank conversions, capital restructuring, retention of high levels of income, and an increase in bank chartering.

The conversion of savings banks from mutual to stock ownership was especially significant for asset growth.³³ Mutual-form institutions have no equity shareholders and therefore must rely solely upon internally generated capital. Conversion to stock form provided institutions with access to equity capital and an expanded potential for loan growth, thus augmenting an institution's ability to participate in the region's booming real estate markets. In addition, conversion to stock form often caused an institution to feel pressure to

³³ The Northeast is home to a substantial portion of the savings bank industry, and savings banks and savings associations were historically mutual-form institutions. As of 1986, approximately 32 percent of the region's depositories were savings banks, 23 percent were savings associations, and 45 percent were commercial banks. In the early 1980s, many northeastern states legalized mutual-to-stock-form conversions. Between 1985 and 1990, 199 mutual-form depositories in the Northeast—a third of the 586 savings banks and savings associations in the region as of year-end 1984—converted to stock form. The converted institutions typically exhibited rapid asset growth, which also contributed to a significant number of failures. For further discussion of this subject, see Jennifer L. Eccles and John P. O'Keefe, "Understanding the Experience of Converted New England Savings Banks," *FDIC Banking Review* 8, no. 1 (winter 1995).

Figure 10.7
Asset Growth Rates, Northeast versus U.S.,
1975–1994



seek substantial increases in earnings: conversion led to a significant increase in an institution's capitalization, thereby diluting returns on equity. To maintain competitive returns on equity, a rise in the volume of loans and other earning assets was therefore needed.

Chartering activity, which was also an important contributor to the expansion of the northeastern banking markets, escalated in the Northeast as the economy prospered: during the 1980s the annual number of new charters soared from 3 in 1980 to a peak of 39 in 1987, and the total number of banks chartered in the region was 212. After the region's economy weakened, chartering steadily declined, and in 1994 only 3 charters were issued.

Overall lending concentrations at the region's banks rose substantially during the 1980s, primarily because of real estate loans (which had represented a sizable portion of northeastern banks' loan portfolios even before the real estate market boom). Between 1983 and 1988 the median loans-to-assets ratio for northeastern banks jumped from a low of just under 55 percent to a peak of 73 percent, an increase that significantly exceeded the national trend (see figure 10.8), and between 1983 and 1986 the median total real estate loan concentration as a percentage of bank assets rose from approximately 25 percent to nearly 39 percent; in 1989, it reached a high of 51 percent (see figure 10.9). (It should be noted that a portion of this growth is attributable to the fact that a large number of state-insured savings banks obtained FDIC insurance between 1980 and 1986 and began reporting financial data to federal bank regulators. The savings banks' real estate activity is therefore not fully

Figure 10.8
Median Gross Loans and Leases,
Northeast versus U.S., 1976–1994

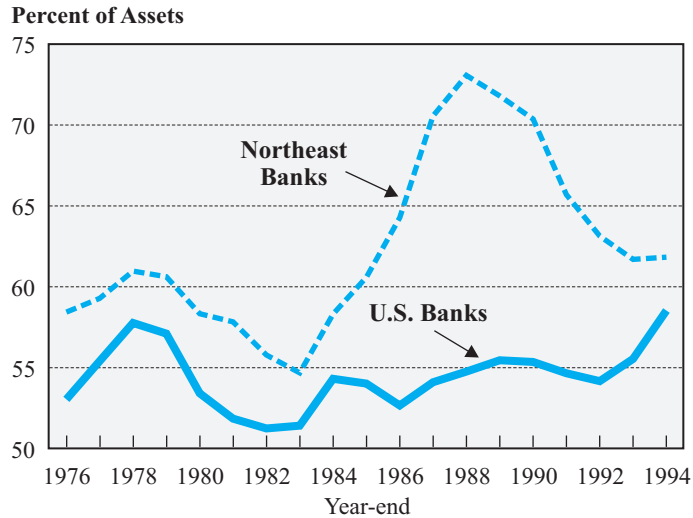
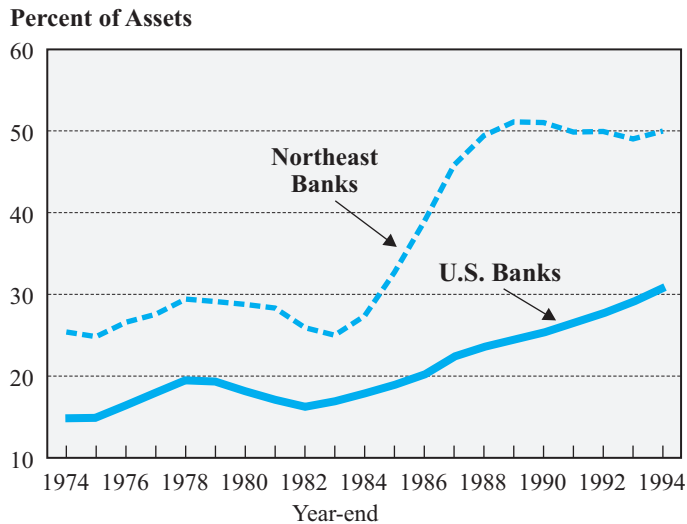


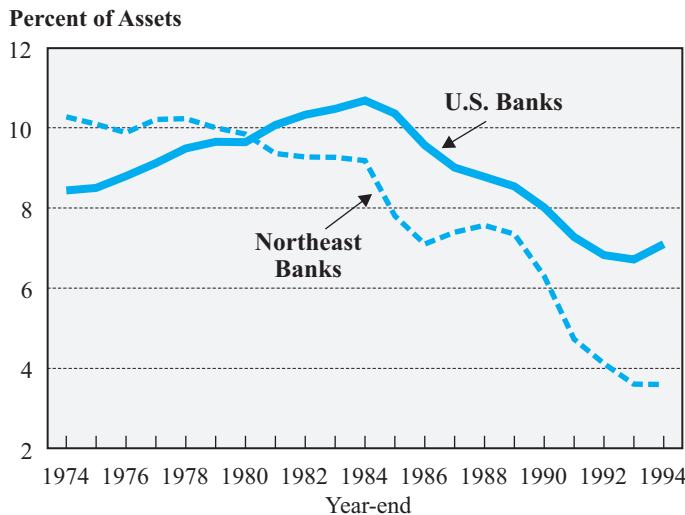
Figure 10.9
Median Total Real Estate Loans,
Northeast versus U.S., 1974–1994



reflected in the data until 1986.)³⁴ This expansion in real estate lending may have been due partly to the shrinkage of the banks' traditional loan markets, as is indicated by the decline in the concentrations of commercial and industrial loans throughout the 1980s (see figure 10.10).

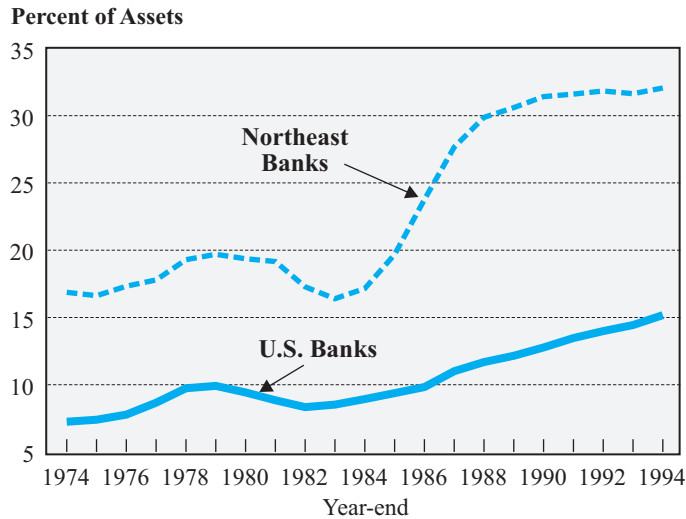
The higher concentrations of real estate loans reflected activity in both residential and commercial real estate lending. The median ratio of residential real estate loans to bank assets rose from about 19 percent in 1980 to approximately 23 percent in 1986 and then climbed to 32 percent in 1994 (see figure 10.11). More significant was the growth in commercial real estate lending, particularly the relatively risky short-term loans secured by properties in development whose income-generating potential was uncertain at the time the

Figure 10.10
Median Commercial and Industrial Loans,
Northeast versus U.S., 1974–1994



³⁴ In the Northeast, the number of savings banks reporting to federal bank regulators rose from approximately 287 in 1980 to 444 by 1986. Events in Massachusetts accounted for a large proportion of this increase. After the failure of Ohio's private deposit insurance fund, privately insured mutual savings banks and cooperative banks in the Commonwealth of Massachusetts recognized the potential for a loss of public confidence in their private fund. The Massachusetts Banking Department required approximately 200 savings banks to acquire federal deposit insurance from either the FDIC or the Federal Savings and Loan Insurance Corporation. Most of the institutions obtained FDIC deposit insurance (FDIC, *Annual Report* [1985], 16–17). The failure of many savings banks and the industry's consolidation by the late 1980s and early 1990s reduced the number of savings banks in the Northeast at year-end 1994 to 367.

Figure 10.11
Median Residential Real Estate Loans,
Northeast versus U.S., 1974–1994



loans were made.³⁵ The median commercial real estate loan concentration for the region's banks, as a percentage of bank assets, rose from 6.5 percent in 1982 to a peak of 14 percent in 1989 and 1990 (see figure 10.12).

The loan expansion of the early 1980s was initially successful in augmenting profits by generating substantial interest and non-interest income, as is indicated by the rise in the median return on assets (ROA) for northeastern banks from 0.72 percent in 1980 to 1.06 percent by 1986 (see table 10.4 on p. 365). However, the weakening real estate market of the late 1980s led the northeastern banks' ROA to drop to only 0.20 percent in 1990. (Interestingly, the rise in northeastern banks' ROA occurred while the ROA for banks outside the Northeast was declining, and conversely the decline in the northeastern banks' ROA occurred during a generally rising trend in ROA for other banks.) This drop in the Northeast was largely attributable to problems of asset quality—problems widely held to have been caused primarily by the increase in commercial real estate lending—as the regional recession and real estate market bust led to rising levels of nonperforming assets and increasing loss rates on these assets (see figures 10.13 and 10.14).

³⁵ See Chapter 3.

Figure 10.12

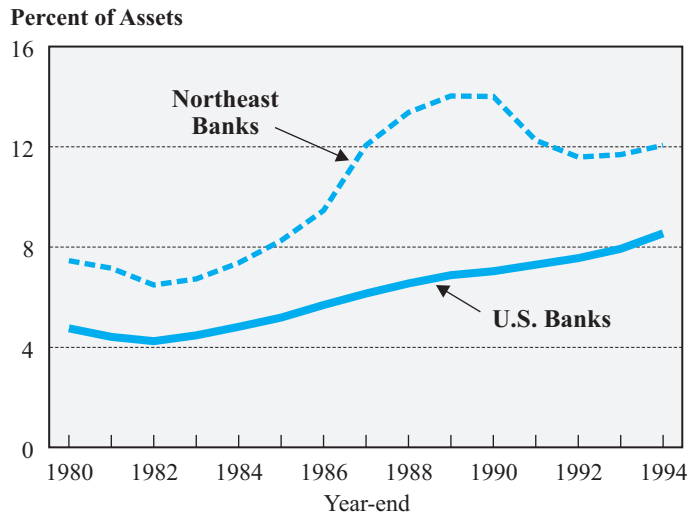
**Median Commercial Real Estate Loans,
Northeast versus U.S., 1980–1994**

Figure 10.13

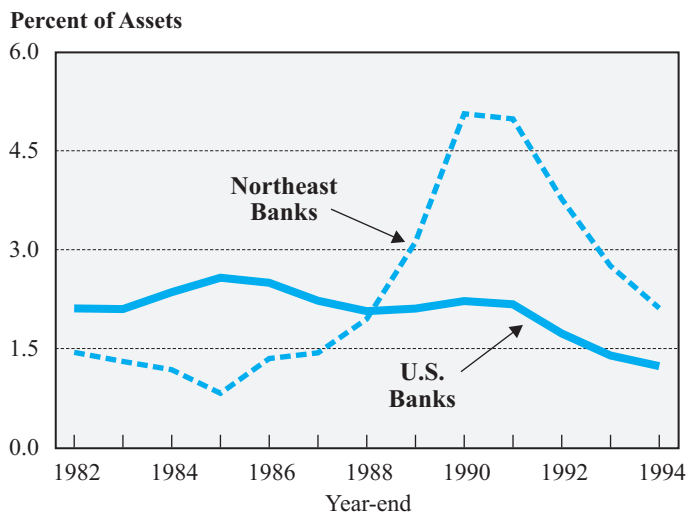
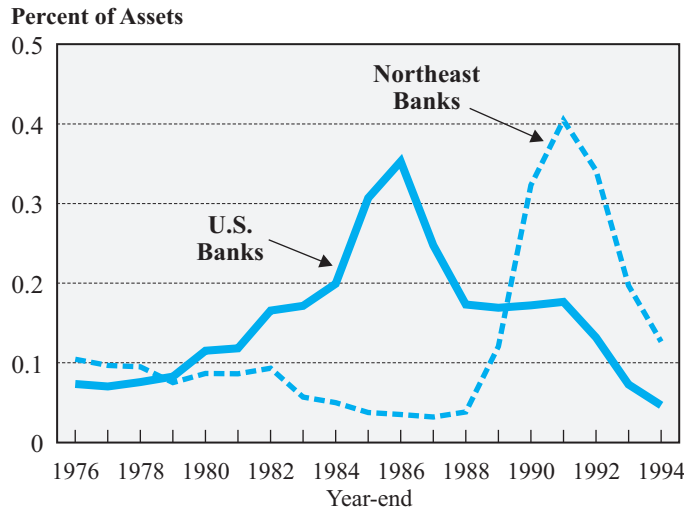
**Median Total Nonperforming Assets,
Northeast versus U.S., 1982–1994**

Figure 10.14
Median Net Charge-Offs on Loans and Leases,
Northeast versus U.S., 1976–1994



Bankers in the Northeast remember 1990 as the year they were hit harder than bankers in any other region by losses precipitated by a plunge in real estate values.³⁶ With office vacancy rates reaching 25 to 30 percent in places like central New Jersey and Stamford, Connecticut, and with many condominium developments only half filled after two years on the market, a number of developers were unable to repay their bank loans. L. William Seidman, chairman of the FDIC, noted in late 1989 that certain northeastern areas “have some of the highest commercial vacancy rates in the country.”³⁷ Even more disturbing was the fact that eight of the ten states whose banks showed the highest increase in bad real estate loans in 1989 were in the Northeast. In addition, according to an analysis of second-quarter 1990 results prepared by Veribanc Inc., a Wakefield, Massachusetts, consulting firm, the 15 U.S. banks whose problem domestic loans were most in excess of equity and reserves were all in the Northeast.³⁸ Robert Clarke, the Comptroller of the Currency, stated in early 1990 that real estate was the main cause of weakness among national banks in the Northeast, noting

³⁶ Marian Courtney, “The Great Loss: Analyzing the Northeast Banking Crisis,” *Business Credit* 93, no. 6 (June 1991): 10.

³⁷ Quint, “Heavy Losses on Problem Loans.”

³⁸ Ibid; and Charles McCoy and Ron Suskind, “FDIC’s Expected Losses Reflect Slump in Northeast: Increase in Reserves Stems from the Agency’s Fear of Major Bank Failures,” *The Wall Street Journal* (December 20, 1990), available: WEST-LAW, File: WSJ.

that “during 1989, nonperforming real estate loans jumped to \$9.1 billion from \$3.6 billion at Northeastern banks.”³⁹

The root of these problems, according to some analysts, was overzealous lending by institutions that sought new markets because opportunities to lend to businesses had dwindled and foreign lending frequently resulted in losses. This eagerness to lend led to an excessive number of new buildings flooding the market in many areas.⁴⁰ Losses on real estate loans hit savings banks in the Northeast particularly hard, according to Don J. Fauth, an analyst at the First Albany Corporation, a securities firm. He noted that savings banks raised additional capital by issuing stock to investors during the 1980s and then attempted to increase profits through risky lending on construction projects rather than stay with their traditional home mortgage lending business.⁴¹

The real estate problems that hit the northeastern banks beginning in 1989 had been quite unexpected just two years earlier. Bankers’ confidence in northeastern real estate had been strong because the commercial real estate markets in the region remained robust despite problems nationwide. Nationally the Comptroller of the Currency expected troubled commercial real estate loans to be one of the factors behind lower bank earnings in 1987, stating in mid-1987 that “the number of nonperforming assets is high and it’s going to get higher.”⁴² Others, too, believed that problems with commercial real estate loans nationally would worsen before improving. For example, Robert Grossman, a bank analyst at Standard & Poor’s Corp., said in 1987, “I think it’s a while before we hit bottom.” By contrast, real estate in the Northeast appeared to be in excellent shape. James F. Murray, senior vice president at Chase Manhattan Bank, observed in mid-1987 that “the whole Northeast corridor is much stronger than the rest of the country.”

Even though many bankers in the Northeast became cautious soon thereafter and began cutting back on new lending and tightening loan standards as early as 1988, they were still overwhelmed by the real estate market’s rapid deterioration.⁴³ It quickly became apparent that real estate would cause severe problems for many banks. Commenting on the situation, Michael Zamorski, deputy regional director for the FDIC, observed in mid-1991 that “banking problems shift geographically with the economy. Troubles in agriculture led

³⁹ Barbara A. Rehm, “Banks Binging Despite Realty Hangover,” *American Banker* (March 8, 1990), 1.

⁴⁰ Quint, “Heavy Losses on Problem Loans.”

⁴¹ Ibid.

⁴² All quotations in this paragraph are from Nina Easton, et al., “Shaky Real Estate Loans Hitting Banks,” *American Banker* (June 4, 1987), 10.

⁴³ Quint, “Heavy Losses on Problem Loans.”

to bank failures in the Midwest, then falling energy prices caused problems in the Southwest. Now the focus is in the Northeast, where the worst real estate problems are.”⁴⁴

New England

The boom and bust in New England real estate took its toll on the area’s banks, which had been among the healthiest in the nation during much of the 1980s but which later experienced high rates of failure, primarily because of their extensive exposure to real estate loans. During the 1980s, real estate portfolios at New England banks grew at twice the national rate, and some lenders, in the belief that “we’ve just had such a terrific market, it’s hard to make mistakes,” became lax. Moreover, bankers generally believed that New England’s diversified economy would protect the region from a real estate debacle. Said one banker, “I don’t see any disasters out there.”⁴⁵

At the end of the 1980s, when economic growth and nominal real estate prices began to decline in New England, cash-flow problems as well as the diminished collateral values led many borrowers to stop making their loan payments.⁴⁶ By early 1989, according to one analyst at Merrill Lynch, everyone was “very jittery about real estate.”⁴⁷ The anxiety may have stemmed from credit-quality problems that had begun to surface rather frequently at many New England banks and other financial institutions. Yet at the beginning of 1989, despite mounting problems with real estate–related loans, most analysts and bankers continued to remain cautiously optimistic because of New England’s basically healthy and diversified economy. Dennis F. Shea, who followed New England banks for Morgan Stanley & Co., said in early 1989 that “I’m not expecting a debacle. I think it’s a very good banking market. I think what it’s suffering from is indigestion.”⁴⁸

The banks, however, turned out to be more than dyspeptic. For example, during the first quarter of 1989, while the nation as a whole exhibited a decline in foreclosures, in New Hampshire foreclosures on conventional mortgages rose from 0.05 percent of all such mortgages a year earlier to 2.41 percent—the largest such gain in any state. The second-largest increase was in Massachusetts, from 0.10 percent to 0.49 percent.⁴⁹ Cynthia Latta, senior financial economist for DRI/McGraw Hill Inc., explained this rise in foreclosures by noting

⁴⁴ Courtney, “The Great Loss,” 10–11.

⁴⁵ Both comments were made in 1987. See Weinstein, “Healthy Real Estate Market,” 12, 18.

⁴⁶ Joe Peek and Eric S. Rosengren, “The Capital Crunch in New England,” Federal Reserve Bank of Boston *New England Economic Review* (May/June 1992): 21, 24.

⁴⁷ Michael Weinstein, “Slower Growth Forecasted for New England Financial Institutions,” *American Banker* (January 10, 1989), 28.

⁴⁸ *Ibid.*

⁴⁹ Phil Roosevelt, “Home Loan Defaults Rise in Northeast; Region Shows Foreclosure Gains as US Figure Decreases,” *American Banker* (June 22, 1989), 2. Quotations and information in the balance of this paragraph are from the same source.

that home buyers throughout the Northeast “have had to really stretch themselves to the limit to buy homes in the past two years” (at the time, fixed-rate-mortgage monthly payments in the Northeast were about \$1,000, compared with \$620 nationwide) and, she said, their burden became heavier as “buyers who took adjustable mortgages in the past two years experienced steady payment increases, first as the loans adjusted from their introductory ‘teaser’ rates and then as market rates increased.” Robert Rosenblatt, an economist with the Mortgage Bankers Association, said he “had found anecdotal evidence that many lenders in New England qualified borrowers based on payment sizes as set by teaser rates, rather than second-year rates” (secondary markets generally require borrowers to be qualified on the basis of the maximum second-year rates). Moreover, New England lenders tended to retain loans—and thus the risk of default—in their own portfolio rather than sell them in the secondary market.

A rapid increase in nonperforming loans led to serious problems for New England banks in 1989.⁵⁰ The banks were hit particularly hard by commercial real estate loan losses. Many commercial projects were highly leveraged, and the owners were frequently individuals or partnerships whose assets either were unavailable to banks or were concentrated in real estate whose value was declining. Banks were therefore forced to absorb much of the loss on commercial real estate projects. As it became clear that loan losses would be substantially greater than anticipated, banks dramatically increased loan-loss reserves, thereby causing a rapid deterioration in bank capital throughout the region. Coincident with this substantial erosion of the capital base of New England banks, regulators were placing increased emphasis on bank capital ratios. Banks with substandard capital-to-assets ratios were required to either increase equity capital or shrink their asset portfolios. Since loan losses prevented banks from increasing capital through retained earnings, the only realistic alternative for raising capital was to issue new shares. For many institutions, however, such an option was not feasible, because investors required a large risk premium, which made it difficult to sell stock at a reasonable price. As a result, the only choice open to many New England banks that were trying to satisfy their capital-to-assets ratio requirements was to reduce the size of their institution. Thus, New England banks substantially contracted during the early 1990s. Although some shrinkage was inevitable after the collapse of the area’s real estate markets and slowdowns in both the New England and the national economies, some observers believed that the effects were aggravated by the increased emphasis on bank capital ratios.⁵¹

⁵⁰ The discussion in this paragraph is based on Browne and Rosengren, “Real Estate and the Credit Crunch,” 28; and Peek and Rosengren, “Capital Crunch,” 24, 26–27, 30.

⁵¹ For a discussion of the development of capital standards, see Chapter 2.

New York and New Jersey

New Jersey's real estate experience was similar to New England's and caused problems for many of the state's banks. During the 1980s, New Jersey's strong economy made it one of the most desirable banking areas in the country.⁵² By the end of the decade, although the state's commercial real estate boom was over, banks expected a soft landing, not a collapse such as had shaken the Southwest and New England. This expectation was based partly on the diversification of the state's economy. As an analyst with a New York brokerage firm noted, "Five hundred of the Fortune 1,000 have a significant presence in New Jersey."⁵³ But later that same year (1989) the same analyst stated, "Every bank in [New Jersey] has experienced a significant increase in nonperforming loans."⁵⁴ In the third quarter of 1989, for a group of New Jersey banks rated by Thomson BankWatch, nonperforming loans of all types were up 25 percent.⁵⁵ By late 1990, major New Jersey banks had suffered through a severe slide in real estate values and, according to a report by Fitch Investors Service, Inc., were not likely to feel relief soon.⁵⁶ The credit rating firm noted that "sharply deteriorating asset quality is destroying earnings and eroding capital ratios at most major New Jersey banks."⁵⁷ Even the \$24 billion Midlantic Corporation in Edison, New Jersey, the second-largest banking company in the state and, according to analysts, one of the best run, suffered greatly from real estate loan losses.⁵⁸

By mid-1991, the collapsing real estate markets caused many bankers to abandon their belief that such problems would solve themselves because the property market would inevitably recover.⁵⁹ "The typical banker's approach was always to give developers time to work out their problems," said an executive in charge of real estate lending at a New York money-center bank. "Now, bankers believe the change in value is permanent. Prices aren't coming back to their old levels."⁶⁰

In New York the story was similar. Primarily because of the weak real estate markets, the seven largest New York banks ended 1990 with \$30.7 billion worth of nonperforming

⁵² Gordon Matthews, "New Jersey Banks Won't Rebound Anytime Soon, Rating Agency Says," *American Banker* (November 16, 1990), 24.

⁵³ David Neustadt, "Jersey Braces for Lending Slowdown; Vacancy Rates Drop, But So Does Demand for Space," *American Banker* (November 21, 1989), 10.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Matthews, "New Jersey Banks Won't Rebound Soon," 24.

⁵⁷ Ibid.

⁵⁸ Courtney, "The Great Loss," 11; and Michael Quint, "A Crystal Ball for Banking's Ills," *The New York Times* (January 12, 1991), available: LEXIS, Library: NEWS, File: NYT.

⁵⁹ John Meehan, Larry Light, Geoffrey Smith, Joseph Weber, and bureau reports, "For Banks, the Panic Is Coming to an End," *Business Week* (June 17, 1991): 87.

⁶⁰ Ibid.

assets, compared with \$24.1 billion at year-end 1989.⁶¹ The New York money-center banks suffered relatively greater losses than the smaller banks. For example, Citicorp, then the nation's biggest banking organization with assets of \$217 billion, lost \$382 million in the fourth quarter of 1990.⁶² Chase Manhattan, then the nation's third-largest bank, continued to reel from its \$9.5 billion portfolio of deteriorating commercial real estate loans, adding \$200 million to its provision for possible credit losses in the fourth quarter of 1990 while charging off \$230 million worth of domestic loans.⁶³ Chemical Bank recorded high real estate-related loan losses in its New York–New Jersey home base, where problem assets were 27 percent higher in the fourth quarter of 1990 than in the third quarter.⁶⁴

The collapsing real estate markets hit the two states' savings banks with a vengeance. Several large savings banks suffered huge losses, primarily from nonperforming real estate loans, and failed in 1992. These included CrossLand Savings Bank (New York, \$7.4 billion in assets), Dollar–Dry Dock (New York, \$4.0 billion in assets), The Howard Savings Bank (New Jersey, \$3.5 billion in assets), and American Savings Bank (New York, \$3.2 billion in assets).

CrossLand was a particularly interesting case because of the circumstances leading to its collapse as well as the methods used to resolve the failure (see footnote 70). Although it lost millions in the junk bond market, losses on commercial real estate loans were the primary cause of its failure. In early 1986, CrossLand Savings converted from mutual to stock ownership and, by early 1989, had increased its asset size from \$8 billion to just over \$15 billion.⁶⁵ The once-specialized thrift that was primarily a lender on apartment buildings and other commercial real estate in the New York metropolitan market became a diversified financial services company that operated up and down both coasts through acquisitions of other financial institutions. CrossLand's activities included mortgage banking, commercial and consumer lending, discount brokerage and life insurance services, and real estate development.

In the first quarter of 1990, CrossLand realized a loss of \$136.5 million.⁶⁶ Much of the problem was due to the Office of Thrift Supervision's (OTS) new rule that disallowed the inclusion of CrossLand's \$363 million of cumulative preferred stock as core capital, thereby creating a capital deficiency of \$113 million. Because it was undercapitalized, CrossLand

⁶¹ Jed Horowitz, "NY Bank Profit Disappointing as Loans Falter," *American Banker* (February 8, 1991), 1.

⁶² Courtney, "The Great Loss," 11.

⁶³ Horowitz, "NY Bank Profit Disappointing," 13.

⁶⁴ Ibid.

⁶⁵ Information in this paragraph was taken from Mark R. Wolff, "CrossLand Savings, Before and After," *Bottomline* 6, no. 3 (March 1989): 44, 46.

⁶⁶ Unless otherwise noted, information in this paragraph was taken from John Liscio, "Star-Crossed CrossLand: But a Recap Plan Could Revive the Thrift's Prospects," *Barron's* 70, no. 18 (April 30, 1990): 30–31.

was forced to sell its junk bond portfolio in a weak market, suffering a substantial loss. In early 1990, CrossLand had 22 percent of its assets in Metropolitan New York City commercial real estate loans, and the bank was adversely affected in 1990 and 1991 by the decline in the area's real estate market. Further, management asset-allocation decisions left CrossLand highly vulnerable to the fortunes of the real estate markets, as could be seen at year-end 1990 when approximately 49 percent of the bank's portfolio was composed of high-risk real estate investments and acquisition, development, and construction loans.⁶⁷ As of September 30, 1991, regulators had classified 21.5 percent (\$1.68 billion) of CrossLand's assets as substandard or lower.⁶⁸ These circumstances resulted in CrossLand's incurring net losses of \$421 million in 1990 and an additional \$308 million for the first nine months of 1991, which wiped out its equity capital.⁶⁹ On January 24, 1992, CrossLand Savings of Brooklyn was closed by the OTS, and the FDIC was appointed receiver of the institution.⁷⁰

The Howard Savings Bank was another notable loser in the floundering real estate markets. The 70-branch, state-chartered savings bank based in Livingston, New Jersey, was the largest bank failure in New Jersey's history.⁷¹ By the mid-1980s, the bank's portfolio had become heavily concentrated in commercial real estate loans. The assets of the bank peaked near \$5.2 billion in 1988 and then declined to \$3.5 billion by October 1992. Although the overall rate of asset growth was relatively moderate during the 1980s, loans and

⁶⁷ "CrossLand Savings, Brooklyn, Placed in Receivership; Depositors Protected," *U.S. Newswire* (January 24, 1992), available: LEXIS, Library: NEWS, File: WIRES.

⁶⁸ *Ibid.*

⁶⁹ Susan Benkelman and Timothy L. O'Brien, "CrossLand Bailed Out; Seized Thrift Gets \$1.2B from FDIC," *Newsday* (January 25, 1992), available: LEXIS, Library: NEWS, File: NEWSDY; and Phil Roosevelt and Barbara Rehm, "CrossLand Seized as Regulators Reject Bids," *American Banker* (January 27, 1992), 10.

⁷⁰ In response to the FDIC's solicitation of bids for the failed bank, the best offer submitted was only \$17 million for CrossLand's branches. Accepting that offer would have left the FDIC with the task of disposing of billions of dollars' worth of real estate loans and investments. As a result, under what then-Chairman William Taylor called his "bank hospital" plan, the FDIC decided to spend \$1.2 billion to keep the bank open, intending to nurse it back to health and sell it for more than it would bring in January 1992. Chairman Taylor believed that this was a less-expensive course of action than closing CrossLand; in addition, he said the FDIC "wanted to let [the bidders] know that we have alternatives" and that the FDIC was willing to keep banks open rather than give them away. Under the "hospital plan," CrossLand executives renegotiated with borrowers rather than automatically foreclosing and selling off their holdings, according to Richard Kraemer, the veteran banker whom the FDIC had installed as CrossLand's president. According to an April 1994 GAO report, the FDIC expected savings of \$517 million as a result of having used this method of dealing with CrossLand's failure. In August 1993, the FDIC sold CrossLand by public offering and realized savings from the conservatorship sale (adjusted as if savings had been realized in 1992) of around \$333 million (Jerry Knight, "FDIC's 'Hospital' Plan a Bitter Pill for Some; Government Takeover of Ailing CrossLand Savings Bank Called Unfair, Uneconomical," *The Washington Post* [March 1, 1992], available: LEXIS, Library: NEWS, File: WPOST; and U.S. General Accounting Office, *Failed Bank: FDIC Sale of CrossLand Conservatorship Satisfied Least-Cost Test* [GAO-GGD-94-109, April 1994], 8–9).

⁷¹ Information about The Howard Savings Bank is taken from James L. Freund, "Howard Savings Bank: Observations of Regulator/Banker Differences in Evaluating Commercial Real Estate Risks" (unpublished paper, FDIC, 1996).

real estate investments nearly doubled between 1984 and 1989 (from \$2 billion to approximately \$3.7 billion). By 1988, The Howard was already burdened with severe commercial real estate problems. The Report of Examination for 1988 noted a rapid increase in total classified loans due to “poor credit underwriting and administration and a desire for loan growth and out-of-area lending.” As the economy weakened in the late 1980s, The Howard experienced massive asset deterioration and debilitating losses; the bank’s CAMEL rating dropped from a 2 in 1988 to a 5 January 1992.⁷² After three successive years of substantial losses resulting from its aggressive real estate lending practices, The Howard was declared insolvent and placed in receivership on October 2, 1992. It was a somber ending for the 135-year-old institution, which had been able to survive the Great Depression but succumbed to the real estate bust.

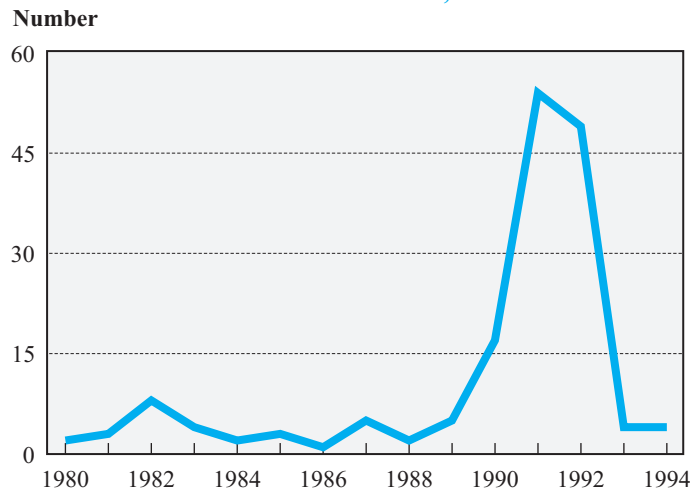
Bank Performance

The northeastern banking markets had historically been extremely stable, and until the 1990s, few banks had failed. Even during the turbulent 1980s there was an average of only three bank failures a year in the region (see figure 10.15). Moreover, in 1986 and 1987, when the northeastern real estate markets were still healthy, the region’s banks were sound and compared very favorably with banks outside the Northeast. For those two years, CAMEL ratings of northeastern banks were superior, on average, to those of all U.S. banks; return on assets and return on equity were vastly superior to the U.S. average; the percentages of nonperforming assets to total assets and charge-offs to total assets were well below those of all U.S. banks; a far lower percentage of northeastern banks had negative net income than did other banks; and northeastern banks had lower ratios of commercial and industrial (C&I) loans to assets than other banks. On the other hand, during those two years the region’s banks had substantially higher percentages of total loans to assets, real estate loans to assets, and commercial real estate loans to assets.

Despite the very sound condition of the region’s banks in 1986 and 1987, analysis demonstrates that beginning in 1989 they experienced drastic, pervasive deterioration. As the discussion below indicates, CAMEL ratings degenerated; ratios of median return on assets and nonperforming loans compared poorly with the ratios at other banks; the percent-

⁷² The CAMEL rating system refers to capital, assets, management, earnings, and liquidity. In addition to a rating for each of these individual or “component” categories, an overall or “composite” rating is given for the condition of the bank. Banks are assigned ratings between 1 and 5, with 5 being the worst rating a bank can receive. See Chapter 12 for a detailed explanation of CAMEL ratings.

Figure 10.15
Northeast Bank Failures, 1980–1994



age of northeastern banks with negative net income skyrocketed; and the number of failures escalated.

CAMEL ratings of the region's banks worsened along with the area's real estate problems (see table 10.2). For example, from 1983 through 1988, approximately 24 to 26 percent of all northeastern banks were rated 1; the comparable figure as of year-end 1991 was 10 percent. In addition, from year-end 1988 to year-end 1991, the percentage of 4-rated northeastern banks rose from 2.1 percent to 16.5 percent and the percentage of 5-rated banks rose from 0.6 percent to 6.7 percent. (In other words, the percentage of northeastern banks that were rated 4 and 5 rose from 2.7 percent to 23.2 percent.) At the same time, the percentage of all 4- and 5-rated banks that were located in the Northeast rose from 2.4 percent to 19.4 percent (see table 10.3).

Examination of the capital ratios of northeastern banks is also enlightening (see table 10.4). The ratio of equity to assets for northeastern banks remained fairly stable during the troubled years and actually compared favorably with the percentages for the region's banks during the first half of the 1980s. For example, from 1980 through 1984 the average ratio of equity to assets for northeastern banks was only 6.9 percent, but from 1988 through 1992 it increased to 7.8 percent. In contrast, the equity-to-assets ratio for other banks remained constant at 8.2 percent for both periods. The improvement in the capital ratios of northeastern

banks can be attributed largely to the substantial amounts of equity that resulted after savings banks converted to stock form.⁷³

Table 10.2
CAMEL Ratings for All Northeastern Banks, 1981–1994

Report Date (Year-end)	Number of Banks/Percentage of Total					
	CAMEL Rating					Total
	1	2	3	4	5	
1981	213	584	100	28	9	934
	22.8	62.5	10.7	3.0	1.0	100%
1982	204	568	110	26	17	925
	22.0	61.4	11.9	2.8	1.8	100
1983	210	540	81	18	16	865
	24.3	62.4	9.4	2.1	1.9	100
1984	216	508	73	24	18	839
	25.7	60.6	8.7	2.9	2.2	100
1985	242	573	76	15	18	924
	26.2	62.0	8.2	1.6	2.0	100
1986	263	644	63	16	11	997
	26.4	64.6	6.3	1.6	1.1	100
1987	263	646	64	15	5	993
	26.5	65.1	6.5	1.5	0.5	100
1988	249	635	87	21	6	998
	25.0	63.6	8.7	2.1	0.6	100
1989	200	621	113	40	18	992
	20.2	62.6	11.4	4.0	1.8	100
1990	130	486	196	117	41	970
	13.4	50.1	20.2	12.1	4.2	100
1991	91	364	236	148	60	899
	10.1	40.5	26.3	16.5	6.7	100
1992	83	386	225	123	25	842
	9.9	45.8	26.7	14.6	3.0	100
1993	118	473	147	70	18	826
	14.3	57.3	17.8	8.5	2.2	100
1994	167	475	98	36	8	784
	21.3	60.6	12.5	4.6	1.0	100

Note: Examination ratings were obtained from the FDIC's historical database. In some instances examination ratings were missing; however, from 92 to 99 percent of banks' ratings were in the database. As a result, the number of CAMEL-rated banks each year was slightly smaller than the total number of northeastern banks in other tables.

⁷³ The total capital raised by converted savings banks in Massachusetts alone in 1986 was approximately \$1.1 billion, sufficient capital to support a 17.5 percent increase in the state's banking assets (assuming a 4.8 percent capitalization rate on the additional assets). As a comparison, the largest bank in Massachusetts at year-end 1986 had equity capital of \$1.2 billion (information derived from Eccles and O'Keefe, "The Experience of Converted New England Savings Banks," 1).

Table 10.3
CAMEL 4- and 5-Rated Institutions, Northeastern Banks versus
Banks in Rest of U.S., 1981–1994

Report Date (Year-end)	Number of 4- and 5-Rated Banks/Percentage of Total			Total Northeastern Banks/ % Rated 4 and 5
	Northeastern Banks	Other Banks	Total	
1981	37 15.9	196 84.1	233	934 4.0
1982	43 9.1	431 90.9	474	925 4.7
1983	34 5.1	628 94.9	662	865 3.9
1984	42 4.7	850 95.3	892	839 5.0
1985	33 2.7	1,190 97.3	1,223	924 3.6
1986	27 1.9	1,433 98.2	1,460	997 2.7
1987	20 1.5	1,280 98.5	1,300	993 2.0
1988	27 2.4	1,097 97.6	1,124	998 2.7
1989	58 5.6	979 94.4	1,037	992 5.9
1990	158 15.0	897 85.0	1,055	970 16.3
1991	208 19.4	863 80.6	1,071	899 23.2
1992	148 20.2	584 79.8	732	842 17.6
1993	88 22.5	303 77.5	391	826 10.7
1994	44 19.7	179 80.3	223	784 5.6

Moreover, although the percentage of northeastern banks with very low (less than 5 percent) ratios of equity and reserves to assets rose from 1.3 percent in 1988 to 4.7 percent in 1990, this ratio was still much lower than it had been for 1981–84, when it averaged 10.3 percent (see tables 10.5 and 10.6). In addition, the percentage of strong northeastern banks—those with equity and reserves to assets exceeding 11 percent—remained fairly steady through the troubled years. It is noteworthy that in 1986 there was a large increase in the percentage of northeastern banks with capital ratios greater than 11 percent. This jump can be attributed primarily to the influx of mutual savings banks into the FDIC fund be-

Table 10.4
Median ROA, ROE, and Equity Ratios of Northeastern Banks versus
Banks in Rest of U.S., 1980–1994

Report Date (Year-end)	Number of Banks		ROA		ROE		Equity-to-Assets	
	NE Banks	Other Banks	NE Banks	Other Banks	NE Banks	Other Banks	NE Banks	Other Banks
1980	1,030	13,728	0.72	1.13	10.26	13.52	7.15	8.26
1981	1,010	13,735	0.72	1.09	10.36	12.96	7.08	8.26
1982	974	13,794	0.75	1.04	10.55	12.44	6.86	8.28
1983	898	13,849	0.77	0.98	11.59	11.79	6.57	8.21
1984	883	13,891	0.82	0.91	11.61	11.00	6.62	8.11
1985	982	13,814	1.02	0.89	14.49	10.64	6.93	8.10
1986	1,055	13,613	1.06	0.77	14.45	9.33	7.21	7.90
1987	1,064	13,122	0.97	0.79	12.51	9.30	7.73	8.02
1988	1,061	12,552	0.81	0.88	9.90	10.19	7.83	8.06
1989	1,049	12,147	0.60	0.94	7.05	10.75	7.92	8.17
1990	1,016	11,799	0.20	0.89	2.78	10.24	7.71	8.09
1991	925	11,445	0.26	0.92	3.42	10.51	7.63	8.21
1992	858	11,123	0.65	1.10	8.04	12.30	7.91	8.51
1993	838	10,714	0.89	1.16	9.92	12.39	8.49	8.90
1994	792	10,270	0.89	1.11	9.87	11.92	8.68	8.90

tween 1980 and 1985, many of which converted from mutual to stock form in 1986 and increased their equity capitalization substantially. The percentage of commercial banks with capital ratios of 11 percent or more increased only slightly from year-end 1985 to year-end 1986 (from 14.6 percent to 15.1 percent). For savings banks, however, this ratio jumped from 7.7 percent to 20.3 percent over the same period.

The percentage of nonperforming loans of northeastern banks reflected the deterioration in the region's real estate markets. From 1982 to 1987 the percentage was lower than for other banks, but from 1988 through 1994 it was higher (see figure 10.16). During the most troubled years, 1990–92, this percentage averaged 7.9 percent for northeastern banks, compared with 3.6 percent for other banks. This high level of nonperforming loans led to a substantial increase in the percentage of northeastern institutions with negative net income: 9.4 percent in 1988, 40.2 percent in 1990, and 35.2 percent in 1991 (see figure 10.17). Over the same period, this ratio for other banks dropped from 14.9 percent to 10.5 percent.

This declining performance of the northeastern banks resulted in an enormous increase in the number of failures (see table 10.7). In 1989 there were 5; in 1990, 16; in 1991, 52; and in 1992, 43 (in 1993, the number tumbled to only 3). In 1991 and 1992, 5.6 percent and 5.0 percent, respectively, of northeastern banks failed. Northeastern bank failures as a

Table 10.5
Equity and Reserves to Assets, Northeastern Banks, 1980–1990

Report Date (Year-end)	Number of Banks/Percentage of Total					Total
	Equity Capital and Reserves to Total Assets					
	<5.0	5.0–7.0	7.0–9.0	9.0–11.0	>11.0	
1980	66	318	355	176	115	1,030
	6.4	30.9	34.5	17.1	11.2	100%
1981	104	289	336	156	125	1,010
	10.3	28.6	33.3	15.5	12.4	100
1982	114	305	304	142	109	974
	11.7	31.3	31.2	14.6	11.2	100
1983	87	355	251	114	91	898
	9.7	39.5	28.0	12.7	10.1	100
1984	85	346	270	92	90	883
	9.6	39.2	30.6	10.4	10.2	100
1985	55	348	340	121	118	982
	5.6	35.4	34.6	12.3	12.0	100
1986	34	344	353	142	182	1,055
	3.2	32.6	33.5	13.5	17.3	100
1987	17	244	406	167	230	1,064
	1.6	22.9	38.2	15.7	21.6	100
1988	14	206	414	210	217	1,061
	1.3	19.4	39.0	19.8	20.5	100
1989	25	167	400	217	240	1,049
	2.4	15.9	38.1	20.7	22.9	100
1990	48	144	378	225	221	1,016
	4.7	14.2	37.2	22.2	21.8	100
1991	42	146	331	221	185	925
	4.5	15.8	35.8	23.9	20.0	100
1992	15	106	306	238	193	858
	1.8	12.4	35.7	27.7	22.5	100
1993	12	52	271	263	240	838
	1.4	6.2	32.3	31.4	28.6	100
1994	4	55	244	242	247	792
	0.5	6.9	30.8	30.6	31.2	100

percentage of all bank failures went from 2.4 percent in 1989 to 40.9 percent in 1991 and to 35.2 percent in 1992. Northeastern bank failures in the early 1990s accounted for substantial portions of the volume of failed-bank assets and of the FDIC's bank-failure resolution costs (see table 10.8).

Since recently chartered institutions generally fail at higher rates than established banks, the sizable number of newly chartered northeastern banks (see above, "Banking and Real Estate in the Northeast") contributed to the substantial number of bank failures in the

Table 10.6
Equity and Reserves to Assets, Nonnortheastern Banks, 1980–1990

Report Date (Year-end)	Number of Banks/Percentage of Total					Total
	<5.0	Equity Capital and Reserves to Total Assets			>11.0	
		5.0–7.0	7.0–9.0	9.0–11.0		
1980	88	1,529	5,945	3,787	2,379	13,728
	0.6	11.1	43.3	27.6	17.3	100%
1981	108	1,583	5,887	3,701	2,456	13,735
	0.8	11.5	42.9	26.9	17.9	100
1982	143	1,648	5,668	3,679	2,656	13,794
	1.0	11.9	41.1	26.7	19.3	100
1983	156	1,986	5,437	3,469	2,801	13,849
	1.1	14.3	39.3	25.0	20.2	100
1984	145	1,903	5,531	3,438	2,874	13,891
	1.0	13.7	39.8	24.7	20.7	100
1985	156	1,736	5,502	3,520	2,900	13,814
	1.1	12.6	39.8	25.5	21.0	100
1986	290	2,058	5,256	3,324	2,685	13,613
	2.1	15.1	38.6	24.4	19.7	100
1987	364	1,505	5,088	3,296	2,869	13,122
	2.8	11.5	38.8	25.1	21.9	100
1988	395	1,311	4,800	3,202	2,844	12,552
	3.1	10.4	38.2	25.5	22.7	100
1989	285	1,223	4,539	3,209	2,891	12,147
	2.3	10.1	37.4	26.4	23.8	100
1990	218	1,134	4,627	3,038	2,782	11,799
	1.8	9.6	39.2	25.7	23.6	100
1991	139	920	4,374	3,184	2,828	11,445
	1.2	8.0	38.2	27.8	24.7	100
1992	73	611	3,844	3,543	3,052	11,123
	0.7	5.5	34.6	31.9	27.4	100
1993	15	352	3,145	3,771	3,431	10,714
	0.1	3.3	29.4	35.2	32.0	100
1994	34	490	2,989	3,331	3,426	10,270
	0.3	4.8	29.1	32.4	33.4	100

region.⁷⁴ During 1991 and 1992 approximately 12 percent of the banks in the Northeast that had been in existence for five years or less failed annually, compared with an annual failure

⁷⁴ See John P. O’Keefe, “Risk-Based Capital Standards for Commercial Banks: Improved Capital Adequacy Standards?” *FDIC Banking Review* 6, no. 1, (spring/summer 1993): 1–15. De novo bank failure rates are discussed in note 23 of the article.

Figure 10.16

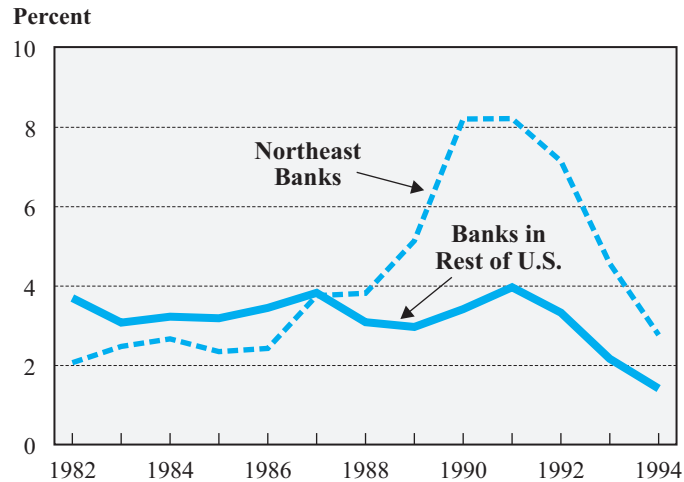
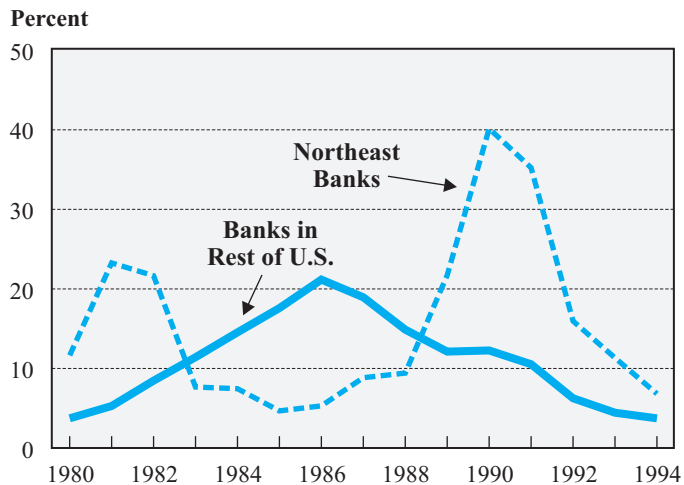
**Nonperforming Loans as a Percentage of All Loans,
Northeast versus Rest of U.S., 1982–1990**

Figure 10.17

**Percentage of Banks with Negative Net Income,
Northeast versus Rest of U.S., 1980–1994**

rate of less than 5 percent for all other banks in the region. The large number of mutual savings banks that converted to stock form during the 1980s also contributed to failures in the

Table 10.7
Bank Failures, 1980–1994

Year	Northeastern Banks	All Banks	Northeast as a Percent of All Failures
1980	1	11	9.1%
1981	3	10	30.0
1982	6	42	14.3
1983	3	48	6.3
1984	1	80	1.3
1985	3	120	2.5
1986	0	145	0.0
1987	4	203	2.0
1988	1	279	0.4
1989	5	207	2.4
1990	16	169	9.5
1991	52	127	40.9
1992	43	122	35.2
1993	3	41	7.3
1994	4	13	30.8

Table 10.8
FDIC Bank-Failure Resolution Costs, 1990–1994

Year	Losses to FDIC from Northeastern Failures (\$Millions)	Percent of Total U.S. Failure Costs
1990	\$1,300	45%
1991	5,500	91
1992	2,800	77
1993	192	29
1994	46	22

Northeast. These conversions led to rapid growth and increased risk taking at such institutions. More than 20 percent of the stock savings banks that existed at year-end 1989—32 of 149—failed between 1990 and 1994. Only 8 percent of the mutual savings banks that existed at year-end 1989 failed during the same period.

A major reason for the large number of northeastern bank failures in the early 1990s was the combination of a regional recession in the late 1980s and a national recession between 1990 and 1991. But each of the recessions was rapidly followed by a regional or national economic recovery; and between 1991 and 1993 the yield curve became very

favorable, leading to record-high net interest margins for banks. Further, mortgage rates began declining substantially in 1991 and reached a 30-year low in 1993, bolstering the recovery of real estate markets. The drop in mortgage rates led to an increase in first-time home ownership and a wave of mortgage refinancing, resulting in substantial fees for mortgage lenders. These conditions no doubt helped reduce the number of northeastern bank failures to only three in 1993 and four in 1994.

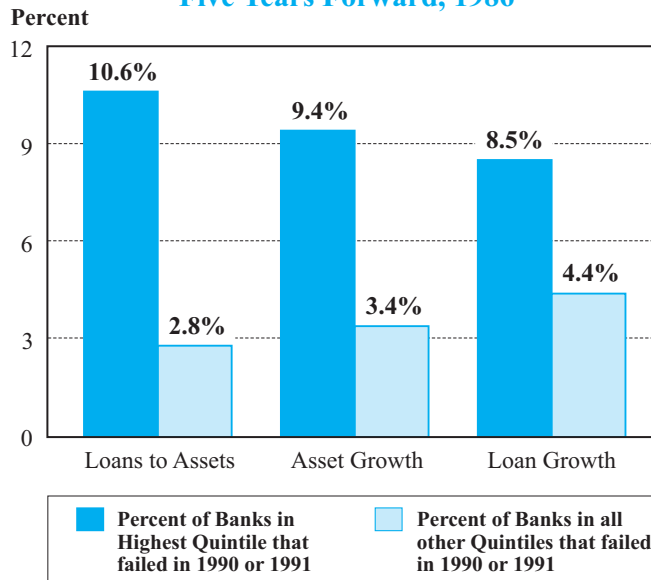
As in other regional recessions, the rapid economic decline in the Northeast did not affect all banks in the same way. Even with the large number of northeastern bank failures (111 between 1990 and 1992), most of the approximately 1,000 banks in the region as of December 1989 survived the turmoil. The FDIC has conducted research to determine if there were characteristic differences between the banks that survived and those that failed. As is shown in Chapter 13, many years before a bank fails, it usually has a riskier operating strategy than do surviving banks.

To see if this pattern existed in the Northeast, the FDIC researchers studied two cohorts of banks. The first consisted of all northeastern banks that existed in 1986 and either failed in 1990 or 1991 or never failed. The second cohort consisted of banks that existed in 1988 and either failed in 1992 or 1993 or never failed. To analyze the effect of risky bank strategies, the researchers used eight financial ratios.⁷⁵ To assess how varying degrees of risk affected northeastern banks, they ranked each bank for each financial ratio. Each ranking was then divided into five risk groups, and the failure rate was determined for each group. For the 1986 cohort, banks in the highest loans-to-assets group had the highest percentage of failure four to five years later—10.6 percent. This was 3.8 times as high as the percentage of failures for the remainder of the banks (see figure 10.18). In the 1988 cohort, the banks with the highest asset growth had the highest incidence of failure—10.1 percent, 3.2 times as high as for slower-growing banks (see figure 10.19). The finding for 1986—that banks in the highest loans-to-assets quintile had the highest failure rate—is consistent with the findings for banks nationwide in that period.⁷⁶ However, the results for 1988 are not the same as those for the nation as a whole. As noted above, the large-scale conversion of mutual savings banks to stock form and their subsequent rapid asset growth was a distinguishing feature of the Northeast's banking environment. Growth rates of converted savings banks in the Northeast were very high, and a disproportionate percentage of these institutions failed as compared with failure rates in the rest of the country (thus, high growth rates in 1988 were a better predictor of future failure in the Northeast than they were for banks nationwide).

⁷⁵ The eight risk factors are loans-to-assets ratio, return on assets, asset growth from the previous year, loan growth from the previous year, operating expenses to total expenses, average salary expenses, interest on loans and leases, and interest plus fees on loans and leases.

⁷⁶ See Chapter 13, "Off-Site Surveillance Systems."

Figure 10.18
Comparison of Selected Factors in Predicting
Northeastern Bank Failures Four and
Five Years Forward, 1986



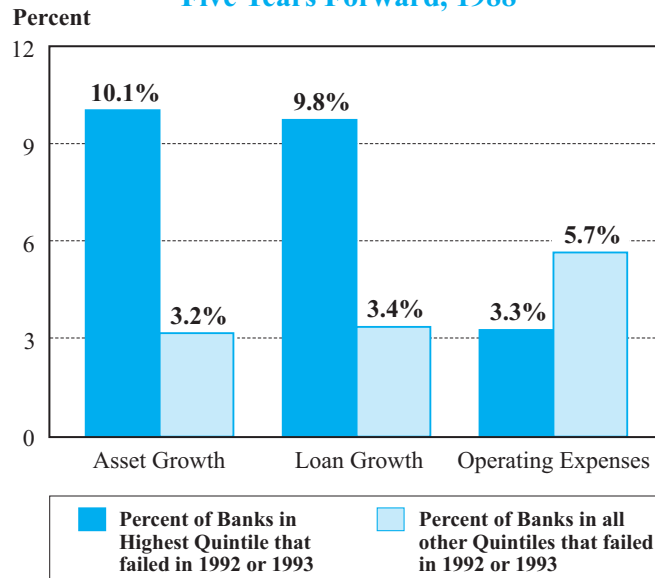
Note: These three factors represent the two highest risk factors (left and center) and the lowest risk factor (right) in predicting bank failures.

Data on Bank Failures by State

The impact of the northeastern banking crisis varied depending on the state, but the adverse effects tended to be fairly concentrated in time, peaking between 1991 and 1992. In terms of failed-bank assets relative to each state's total banking assets, the most severely affected state was New Hampshire: in 1991, 12 banks failed with assets of \$5.2 billion (25.4 percent of the state's prior year-end assets). Comparable figures were 18.3 percent in Connecticut, 15.2 percent in Maine, and 12.0 percent in Massachusetts. In contrast, an average of only about 3.0 percent of bank assets failed in the region's other states (New Jersey, New York, Rhode Island, and Vermont).⁷⁷

⁷⁷ Most of the franchise of a failed bank, both assets and liabilities, typically remains within the same geographic market after the bank's closure. This is because the typical way to resolve bank failures is by selling portions of the assets and liabilities to healthy former competitors in the state. Consequently, one should not infer that failed-bank assets are "lost" to these markets.

Figure 10.19
Comparison of Selected Factors in Predicting
Northeastern Bank Failures Four and
Five Years Forward, 1988



Note: These three factors represent the two highest risk factors (left and center) and the lowest risk factor (right) in predicting bank failures.

Included among the region's bank failures were many of the Northeast's larger banking organizations (see table 10.9). It is noteworthy that in New York and New Jersey, although the percentage of failed-bank assets was relatively small, there were several major failures, including Goldome (\$9.9 billion), Dollar–Dry Dock (\$4.0 billion), Seamen's (\$3.4 billion), and American Savings Bank (\$3.2 billion), as well as CrossLand Savings Bank (\$7.4 billion) and The Howard Savings Bank (\$3.5 billion), as discussed above.

The 1990s northeastern bank-failure experience will perhaps be most remembered for two events. The first was the failure of the Bank of New England Corporation (BNEC) on January 6, 1991. (This failure is described in the next section.) BNEC had a significant regional presence through the Bank of New England (Boston), Connecticut Bank and Trust Co. (Hartford), and Maine National Bank (Portland). BNEC had assets of approximately \$22 billion at the time of its failure, and its resolution cost the FDIC approximately \$733 million. The second memorable event was the failure of seven New Hampshire banks on October 10, 1991. These seven failed banks included four of the state's ten largest (Amoskeag Bank, Dartmouth Bank, Bankeast, and Numerica Savings Bank) as well as

Table 10.9
Large Northeastern Bank Failures in the 1990s

Institution	Failure Date	Assets (\$Millions)	Resolution Costs (\$Millions)	Cost as a Percentage of Assets	State
The Seamen's Bank for Savings, FSB	04-18-90	\$ 3,392	\$189	5.57%	NY
Bank of New England Corporation	01-06-91	21,886	733	3.35	
Connecticut Bank & Trust Co.	01-06-91	7,211	152	2.11	CT
Bank of New England	01-06-91	13,429	581	4.33	MA
Maine National Bank	01-06-91	1,046	0	0.00	ME
Maine Savings Bank	02-01-91	1,183	6	0.47	ME
First National Bank of Toms River	05-22-91	1,418	132	9.31	NJ
Goldome	05-31-91	9,891	848	8.57	NY
First Mutual Bank for Savings	06-28-91	1,130	181	16.02	MA
Citytrust	08-09-91	1,919	505	26.32	CT
Mechanics & Farmers Savings Bank, FSB	08-09-91	1,084	323	29.80	CT
Connecticut Savings Bank	11-14-91	1,045	207	19.81	CT
CrossLand Savings Bank	01-24-92	7,432	548	7.37	NY
Dollar-Dry Dock	02-21-92	4,028	357	8.86	NY
American Savings Bank	06-12-92	3,203	470	14.67	NY
First Constitution Bank	10-02-92	1,571	127	8.08	CT
The Howard Savings Bank	10-02-92	3,461	87	2.51	NJ
Heritage Bank for Savings	12-04-92	1,288	22	1.71	MA

Note: Resolution costs are as of year-end 1995.

three relatively large banks (Nashua Trust Company, New Hampshire Savings Bank, and Bank Meridian). These seven New Hampshire failures represented approximately 25 percent of the state's commercial and savings bank assets.

The Rise and Fall of the Bank of New England Corporation

The “new” Bank of New England Corp. (BNEC), headquartered in Boston, was formed in June 1985 after the merger of the “old” Bank of New England Corp. of Boston (\$7 billion in assets) and CBT Corp. (Connecticut Bank & Trust) of Hartford (\$6.8 billion in assets).⁷⁸ The merger was designed to take advantage of the best features of both institutions—Bank of New England Corp.'s expertise in real estate lending and CBT's knowledge

⁷⁸ Alan Lavine, “Bank of New England Corp. Takes Its Name Seriously with Ambitious Acquisition Strategy in Four States,” *American Banker* (September 2, 1986), 24; and John P. Forde, “‘New’ Bank of New England's Rosy Prospects,” *American Banker* (December 19, 1985), 3.

of retail banking.⁷⁹ The reaction to the merger was favorable. An analyst at Goldman, Sachs & Co. said, “The ‘new’ Bank of New England Corp. is a well managed, \$14 billion–asset bank holding company located in a booming region.”⁸⁰ James J. McDermott, Jr., an analyst at Keefe, Bruyette & Woods Inc. in New York, believed that “the Bank of New England and CBT merger was one of the more brilliant strokes in banking. Two strong retail and wholesale markets were merged.”⁸¹

After the merger, BNEC initiated a growth strategy in which it spent over \$1.4 billion, mostly in stock swaps, to buy leading banks in key economic areas of New England. For example, in December 1985 it completed a merger with Maine National Bank of Portland (MNB), a \$700 million institution.⁸² These acquisitions helped BNEC grow to \$24 billion in assets within 20 months.⁸³ By mid-1988, BNEC had executed mergers with more than a dozen institutions and had captured a major share of the New England market, with about 12 percent of domestic deposits and about 19 percent of commercial loans.⁸⁴ As of July 1989, BNEC had \$32 billion in assets, 8 subsidiary banks, and 482 branches in the states of Connecticut, Maine, Massachusetts, and Rhode Island.⁸⁵

BNEC’s spectacular growth ended when problems began to develop in the late 1980s as the regional economy declined and real estate markets became troubled. By the end of the first quarter of 1989, BNEC’s banks had \$551 million in nonperforming loans—2.2 percent of the banks’ total loans. The depth of BNEC’s problems was indicated by Kidder Peabody’s mid-1989 recommendation that its clients sell their stock in the company.⁸⁶

The growing financial problems of BNEC’s banks, especially its lead bank, the Bank of New England, Boston (BNE), were of increasing concern to the Office of the Comptroller of the Currency (OCC).⁸⁷ The results of the agency’s year-end 1988 examination (completed in May 1989) of BNE and each of its affiliated banks were such that BNE and its directors consented to a formal agreement on August 10, 1989, to correct deficiencies the OCC examiners had identified in the banks’ real estate lending practices. Beginning in September 1989, the OCC had examiners in BNE on a continuous basis. However, the finan-

⁷⁹ Alice Arvan, “The Regionals That Roar,” *Bankers Monthly* 105, no. 5 (May 1988): 68.

⁸⁰ Forde, “‘New’ Bank of New England’s Rosy Prospects,” 3.

⁸¹ Lavine, “Bank of New England Corp. Takes Its Name Seriously,” 23.

⁸² Forde, “‘New’ Bank of New England’s Rosy Prospects,” 3; and Lavine, “Bank of New England Corp. Takes Its Name Seriously,” 24.

⁸³ Lavine, “Bank of New England Corp. Takes Its Name Seriously,” 24.

⁸⁴ Arvan, “The Regionals That Roar,” 68.

⁸⁵ Alan Wade, “Bank of New England’s Woes,” *United States Banker* 98, no. 7 (July 1989): 46; and Arvan, “The Regionals That Roar,” 68.

⁸⁶ Wade, “Bank of New England’s Woes,” 48–49.

⁸⁷ For the OCC’s views on BNE, see Clarke statement, testimony in OCC *Quarterly Journal* 10, no. 2 (June 1991): 31–32.

cial deterioration continued, and in late 1989 the OCC began to increase its supervision of the bank's day-to-day operations.

In January 1990, the chairman of BNEC (who was also chairman of BNE) resigned after the corporation announced that its constituent banks had lost \$1.1 billion in 1989. On January 22, 1990, BNE found it necessary to borrow \$225 million at the Federal Reserve's discount window in order to meet its immediate liquidity needs. On February 26, 1990, BNE and its directors consented to a cease-and-desist order with the OCC; the order served, among other things, to prevent further dissipation of the bank's assets. The OCC executed similar cease-and-desist orders in April and May with, respectively, CBT and MNB and their directors.⁸⁸

Despite the efforts of a new management team to improve performance, BNE lost another \$80 million in the first half of 1990; and by year-end 1990, \$3.2 billion, or 20 percent, of BNEC's loans were nonperforming.⁸⁹ On January 4, 1991, after BNEC announced that it expected a \$450 million fourth-quarter loss that would render both the holding company and BNE technically insolvent, depositors mobbed BNE's branches and withdrew \$1 billion.⁹⁰ On Sunday, January 6, 1991, the OCC formally declared BNEC's three major banking units—BNE, CBT, and MNB—insolvent and appointed the FDIC as receiver. On the same day the FDIC announced that (1) the OCC had chartered three new bridge banks (New Bank of New England, N.A., Boston; New Connecticut Bank & Trust Company, N.A., Hartford; and New Maine National Bank, Portland) to assume the assets and liabilities of the three insolvent banks; (2) the bridge banks would be open for business as usual on Monday, January 7, 1991; and (3) all deposits of the three insolvent banks would be protected, even those over the \$100,000 insured limit.⁹¹

The insolvencies of CBT and MNB were triggered by the failure of BNE. Because of BNE's insolvency, CBT was unable to recover \$1.5 billion in federal funds it had loaned to BNE. The FDIC charged the resulting loss against the capital accounts of CBT, with the result that CBT had an equity capital deficiency of \$49 million.⁹² The OCC then declared CBT insolvent and placed it in receivership. Furthermore, under the cross-guarantee provision contained in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), the FDIC demanded immediate payment from MNB of an amount equal

⁸⁸ Ibid., 32.

⁸⁹ Geoffrey Smith, "Lawrence Fish's Best May Not Be Good Enough," *Business Week* (October 22, 1990): 98–99; and "Bank of New England: Here We Go?" *Economist* 318 (January 12, 1991): 72.

⁹⁰ "Bank of New England: Here We Go?" 72; and Clarke testimony, 32.

⁹¹ FDIC News Release PR-3-91, "FDIC Establishes Three New Banks to Assume Deposits of Bank of New England, N.A., Boston, Massachusetts, Connecticut Bank & Trust Company, N.A., Hartford, Connecticut, and Maine National Bank, Portland, Maine," January 6, 1991.

⁹² Clarke testimony, 32–33.

to the FDIC's expected loss as receiver of BNE.⁹³ When MNB was unable to make the payment, the OCC declared it to be insolvent and placed it in receivership. This was the first time the cross-guarantee provision of FIRREA had been used to close a bank.

On April 22, 1991, the FDIC announced that the three bridge banks would be acquired by Fleet/Norstar Financial Group, Inc., of Providence and investment managers Kohlberg, Kravis, Roberts & Co. (KKR). Fleet agreed to raise \$683 million in capital for the banks within three months; KKR would provide \$283 million, and the bank planned to raise the remaining \$400 million in stocks and bonds. The participation of KKR as a partner with Fleet/Norstar in the acquisition of the three bridge banks was the first time that a nonbank "financial" buyer participated in the purchase of a failed commercial bank. KKR's involvement not only allowed capital to enter the banking industry from nonbanking sources but was also expected to increase the number of potential bidders in future bank failures.⁹⁴

The decision to protect all deposits of the three BNEC banks again focused attention on the "too-big-to-fail" bank disposition policy. During congressional hearings held on January 9, 1991, many members of the House Banking Committee had expressed the view that paying depositors of large institutions in full was not only unfair to those with deposits in small banks but also undermined depositor discipline.⁹⁵ FDICIA consequently included provisions making it more difficult for bank failures to be resolved in ways that would protect uninsured deposits.⁹⁶

After the failure of the BNEC banks, the chairman of the Senate Banking Committee asked the U.S. General Accounting Office (GAO) to review the factors that had caused the failure. The 1991 GAO report noted that between 1985 and 1989, the assets of BNEC banks grew from \$7.5 billion to \$32.6 billion, primarily through aggressive acquisitions and increased real estate lending.⁹⁷ The GAO believed that this expansion should have caused the OCC to conduct a thorough and aggressive examination early in the period to assess the potential adverse effects of both BNEC's rapid growth and its concentration in commercial real estate lending.⁹⁸

⁹³ The cross-guarantee provision of FIRREA provides that an insured depository institution can be held liable for any loss that the FDIC expects to incur in connection with the default of a commonly controlled insured depository institution.

⁹⁴ FDIC News Release PR-61-91, "FDIC to Sell Bank of New England Franchise to Fleet/Norstar," April 22, 1991; Barbara A. Rehm, "How the Acquisition by Fleet Will Work," *American Banker* (April 24, 1994), 8; and Milligan, "KKR, Member FDIC," 59.

⁹⁵ U.S. House Committee on Banking, Finance and Urban Affairs, *Failure of the Bank of New England: Hearing*, 102d Cong., 1st sess., January 9, 1991, 1–50 (comments by various members of the committee and by Mr. Seidman and Mr. Clarke).

⁹⁶ FDIC, "Systemic Risk ('Too Big to Fail') (unpublished paper), 1995, 7.1-1 to 7.1-5. For additional information, see Chapter 7.

⁹⁷ U.S. General Accounting Office, *Bank Supervision: OCC's Supervision of the Bank of New England Was Not Timely or Forceful* (GAO/GGD-91-128, September 1991), 1.

⁹⁸ *Ibid.*, 22.

The GAO report also pointed out that during BNEC's high-growth years OCC examiners repeatedly identified and reported problems with BNEC banks' controls over lending operations and strategies, but not until 1989 did the OCC take enforcement action to compel corrective measures.⁹⁹ For example, the OCC found that over half of the commercial real estate loans reviewed at BNE during the December 1987 examination were 100 percent financed and that nearly half of the loans reviewed had inadequate or stale credit information on borrowers, but the agency generally relied on BNEC management's assurances that it would address problems such as these.¹⁰⁰

The GAO concluded that the BNEC banks failed as a result of their liberal lending practices, poorly controlled growth, and concentration in commercial real estate loans in a severely declining regional economy.¹⁰¹ The GAO findings indicated that the OCC had failed to take timely and forceful supervisory actions to compel BNEC to correct problem areas before they adversely affected capital adequacy. Although the GAO could not say with certainty that close supervisory scrutiny would have saved BNEC's banks, the agency did believe that more vigilant supervision could at least have reduced losses.¹⁰²

Although the "new" Bank of New England had been established with great expectations in 1985, by early 1991 it was the country's third-largest bank failure (after First Republic Bank Corporation and Continental Illinois). BNEC's aggressive lending practices had produced a large concentration of real estate loans, and when New England's construction boom faltered, BNE's loan book was "reduced to rubble."¹⁰³ There were other factors in BNE's collapse. Former executives, competitors, and customers told "a tale of confused and haphazard management." Lines of authority and responsibility were blurred, lending standards were often lax, and numerous unwise real estate loans were made. It was reported that the former chairman had personally courted large real estate developers and, in an effort to complete a transaction, sometimes offered bargain-priced loans without seeking any collateral. Some former executives alleged that the chairman had "often made such loans without even consulting his lending officers."¹⁰⁴ While these activities were certainly examples of poor bank management, they were not illegal. In fact, it was reported the chairman was not only allowed to retire rather than resign, thereby becoming eligible for lifetime

⁹⁹ Ibid, 5.

¹⁰⁰ Ibid, 13–15.

¹⁰¹ Loans were issued with favorable terms, such as 100 percent financing, no collateral except the development project on which the loan was made, and interest-only payments for a number of years.

¹⁰² U.S. GAO, *OCC's Supervision of the Bank of New England*, 38.

¹⁰³ "Bank of New England: Here We Go?" 70, 72–73.

¹⁰⁴ Laura Jereski, "A Stomachache for the Bank That Ate New England," *Business Week* (February 5, 1990): 68–69.

retirement benefits of approximately \$1 million a year, but was also offered a severance package worth several million dollars.¹⁰⁵

Conclusion

The banking problems in the Northeast in the 1980s and early 1990s were associated with the third in a series of four rolling regional recessions that had been preceded by speculative booms (the first two were in the farm belt and the Southwest; the fourth was in California). The Northeast's regional problems were exacerbated by the national recession that took place during 1990–91. With respect to banking problems, the most important element of the region's boom was real estate—particularly commercial real estate. Expecting a continuation of the substantial gains that accompanied the building boom of the mid-1980s, numerous banks throughout the region lent aggressively into projects that, in many cases, became increasingly marginal, especially as the economy worsened. As in the Southwest, vacancy rates shot up and many real estate loans made during the boom turned into problem loans. Although many observers believed that the Northeast's diversified economy would cushion the region against a Texas-style collapse, that assessment proved inaccurate. As had been the case in the farm belt and in the Southwest, the end of the boom led to significant numbers of bank failures. In 1989 only five banks failed in the region, but two years later, in 1991, the number had risen more than tenfold to 52. Also like the Southwest, the Northeast experienced a number of large-bank failures. In the New York area, several large savings banks failed, including Goldome, CrossLand, and Dollar–Dry Dock. The most notable failure was undoubtedly that of the Bank of New England in January 1991, the resolution of which created pressure for legislative action to deal with the “too-big-to-fail” issue; Congress responded with FDICIA.

One important element of the banking problems in the Northeast was peculiar to the region: the presence of large numbers of mutual savings banks that converted to stock form during the period. Between 1985 and 1990, approximately 40 percent of all the mutual saving banks in the region as of year-end 1984 took this course. Converted institutions experienced significant increases in capitalization and therefore increased their loan growth in order to sustain returns on equity. Many of these savings banks had concentrated on traditional residential real estate lending, but upon conversion they pushed into unfamiliar commercial real estate in new geographic markets where their managements had little experience. Converted savings banks therefore became a uniquely northeastern element in the series of boom-to-bust cycles that had occurred in the Midwest and the Southwest in the middle to late 1980s and would occur once more, in California in the early 1990s.

¹⁰⁵ Jed Horowitz, “Grapevine: That Connolly ‘Chute,’” *American Banker* (January 31, 1990), 4.

Chapter 11

Banking Problems in California

Introduction

California recorded major economic gains during the 1980s. In absolute terms, the state's growth during that decade was the most significant in its history, rivaled only—in percentage terms—by the economic expansion prompted by World War II. One of the main factors in the growth was an increase in funds flowing into the state's defense-related industries and real estate markets. The boom of the 1980s reinforced Californians' belief that the state and its economy were different from other regions of the nation, some of which were experiencing serious downturns during this period. This particular boom psychology led many to downplay the prospects of a serious recession, which in fact occurred during the early 1990s and was California's most severe since the 1930s.

Compared with the crises in the Southwest and the Northeast, California's deep recession of the early 1990s—despite the effect on earnings of the banking sector—was relatively mild in terms of bank failures. Only 47 banks failed during this period, all of them fairly small. Several factors contributed to this result, including the sharp decline in interest rates during the early 1990s, the localized nature of the recession, which was primarily concentrated in Southern California, and the dominance of the state's four largest banking organizations, whose geographically diversified portfolios were in a better position than other banks' portfolios to withstand the rigors of the recession. Most of the failures were banks chartered during the 1980s and/or community banks (those with less than \$300 million in assets) headquartered in Southern California. Failed banks had generally pursued aggressive real estate lending strategies, favoring higher-risk construction and commercial real estate loans over relatively more conservative residential real estate lending.

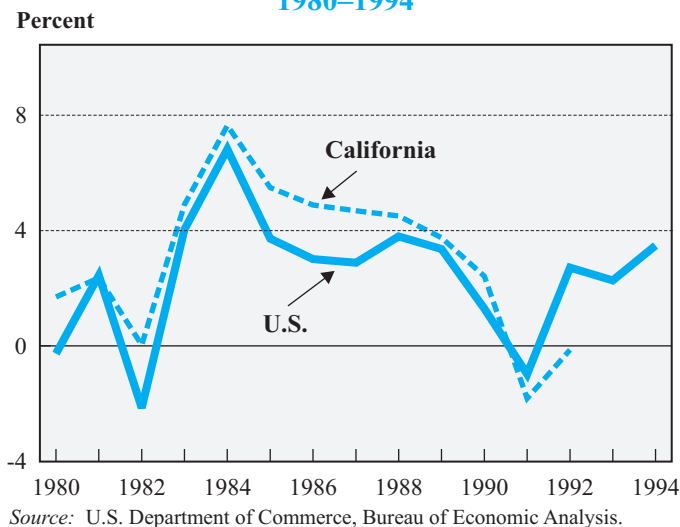
The first half of this chapter describes California's economy in the 1980s, particularly the defense-related industries and real estate markets; it also describes the lens through which Californians viewed their state's economy and its prospects. The second half of the chapter reviews the performance of the California banking industry before and during the

recession, with an emphasis on differences in the performance and failure experience of various groups of banks within the state's industry.

Economic Expansion, 1983–1989: Fundamentals

California outperformed the nation economically in the 1980s according to most measures, including output, income, population, and employment (see figure 11.1 and table 11.1). From 1983 to 1989, gross state product increased at an annual rate of 5.1 percent, far above the national rate of 3.6 percent. Personal income grew at an average annual rate of 8.1 percent, nearly triple the 2.7 percent national rate. California attracted 6 million new residents during the 1980s, accounting for nearly 25 percent of the national population increase. (Most of the new residents, drawn by employment opportunities, settled in Southern California. Los Angeles County attracted more than 1.2 million of the new residents, while neighboring counties also registered impressive gains.) Total employment advanced by 2.8 million, accounting for approximately 17 percent of all new jobs created nationally; and although California's labor force increased by 20 percent (150 percent of the national average), its jobless index was halved: by early 1989, the state's unemployment rate had declined to 5.0 percent, its lowest in 20 years.¹

Figure 11.1
**Changes in California Gross State Product versus
Changes in U.S. Gross Domestic Product,
1980–1994**



¹ *Economic Report of the Governor, The State of California* (1990), 49.

Table 11.1
Three Economic Growth Measures, California and U.S., 1980–1994
(Percent)

Year	Total Personal Income Growth		Population Growth		Non-Agricultural Employment Growth	
	CA	U.S.	CA	U.S.	CA	U.S.
1980	14.49	0.92	1.76	0.88	1.90	0.64
1981	8.82	2.74	2.61	1.28	1.38	0.82
1982	6.01	0.39	2.19	0.92	1.75	−1.76
1983	9.41	1.52	2.13	0.91	1.59	0.67
1984	10.39	5.99	1.94	0.86	6.10	4.72
1985	7.90	3.15	2.31	0.89	3.83	3.15
1986	6.66	2.94	2.49	0.92	2.54	2.0
1987	7.99	1.68	2.49	0.89	3.73	2.63
1988	7.95	2.84	2.47	0.91	1.99	3.18
1989	6.10	2.50	2.34	0.94	2.75	2.55
1990	7.74	1.47	2.35	1.24	5.80	1.41
1991	1.66	0.19	1.70	0.89	−4.56	−1.06
1992	6.59	2.80	1.62	1.14	−1.66	0.32
1993	1.34	1.74	0.99	1.08	−0.88	1.95
1994	4.15	3.86	0.68	0.99	0.75	2.98

Sources: U.S. Census Bureau, U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Bureau of Labor Statistics.

In fact, since World War II the state had almost always performed relatively well. In the years between the end of World War II and 1989, all eight national recessions had triggered a corresponding downturn in California, but in only one case—the 1970 recession—had California fared worse than the nation.² In two national recessions in the early 1980s (the first from January to July 1980, the second from July 1981 to November 1982), just before the expansion of the 1980s, the downturns in California were milder than those in the nation as a whole when measured by duration and employment losses. There were several reasons that California’s economy fared better at those times than the national economy. First, the state was strengthened by continued rapid population growth, expanding at twice the national rate in the early 1980s.³ A second factor was a booming semiconductor industry headquartered in Silicon Valley. Finally, California’s employment distribution in the early 1980s offered some protection in recessionary periods: the predominant industries

² David Hensley, “Recovery Pushed Back to ’92,” *UCLA Business Forecasting Project* (September 1991), 1.

³ The state added 525,000 new residents in 1980, 496,000 in 1981, and 527,000 in 1982 (for the years ending July 30). Approximately 55 percent of these population gains were attributable to migration (*California Statistical Abstract* [1995], 10, 12). This created a boom in the housing and construction industry during this period.

were the less-cyclical ones, including finance, services, trade, and aerospace, whereas the industries whose fortunes were closely tied to fluctuations of the national economy—construction, non-aerospace manufacturing, and transportation—were somewhat underrepresented.⁴

Initially, California's economic expansion was led by the defense-related manufacturing and construction industries, both of which more than counterbalanced agriculture and consumer electronics, which were having problems. Then by 1986, as growth in defense and construction decelerated, agriculture, commercial aviation, and consumer-goods manufacturing took over as the engines of growth for the state.⁵ In addition, foreign trade, particularly commerce with Pacific Rim nations, provided the state economy with crucial support. During the 1980s, Los Angeles overtook New York as the nation's leading port.

California is commonly referred to as the nation's largest economy, accounting for approximately 13 percent of national output. But its economy is not monolithic and comprises three distinct economies, one in each of the state's three key areas.⁶ The first is the San Francisco Bay area, with a mature, diversified economy that is home to Silicon Valley, the world leader in high-tech manufacturing. The second is the Central Valley, which specializes in agriculture and food processing and lies between the coastal mountains and the Sierra Nevada, stretching south from Sacramento to Bakersfield. Finally, there is the Los Angeles Basin, which is the dominant region economically and accounts for 50 percent of the state's population. Its most important economic sectors include defense-related manufacturing (aircraft related, missiles, space vehicles, naval equipment), high-tech manufacturing (computer, office, communications equipment, electronic components), advanced services (business, financial, health, tourism, and entertainment), construction, and consumer-goods manufacturing (furniture, apparel, and plastics).⁷ While all of California benefited from the economic expansion of the 1980s, the largest gains occurred in Southern California, particularly Los Angeles County.

Defense-Related Manufacturing: Southern California

World War II transformed the state's economy, particularly that of Southern California: manufacturing replaced agriculture as the dominant economic sector. With the Cold War, a new emphasis was put on high technology in arms production, an activity California had mastered during the war and one in which its dominance has never been challenged. Then in 1980, the election of Ronald Reagan to the presidency signaled the beginning of a

⁴ *Economic Report of the Governor, The State of California* (1983), 1.

⁵ Bank of America Corporation, *Economic and Business Outlook* (January 1989), 2.

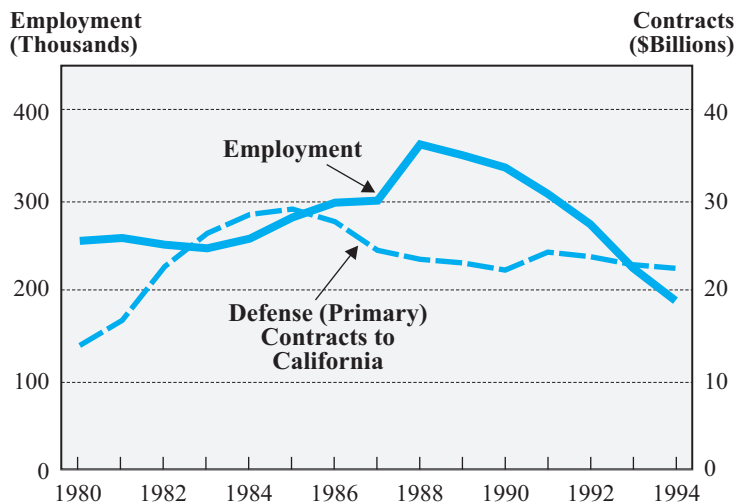
⁶ A discussion of the three Californias is provided in Pacific Gas and Electric, *Economic Outlook* (May 1993).

⁷ SRI International, *Understanding Changes in the Southern California Economy* (1991), 1-2.

major arms buildup during which large amounts of federal funds flowed into California's economy. The state's share of primary defense contracts averaged 20 percent during the 1980s, a percentage share it has maintained since the mid-1950s.⁸ (The state's share of National Aeronautics and Space Administration [NASA] expenditures was even greater.) In Fiscal Year 1984, federal primary defense contracts in California were valued at \$28.5 billion, more than double the volume just four years earlier (see figure 11.2).⁹

Defense-related manufacturing jobs are some of the most highly sought-after positions in the manufacturing industry. Employees generally possess high skill levels and are well compensated. One study estimates that defense-related employees create 30 percent more gross state product per worker than employees engaged in manufacturing, and nearly double the per capita level of service jobs.¹⁰ Defense-related employment peaked in 1988 at

Figure 11.2
Defense-Related Manufacturing Sector, FY 1980–1994



Source: *California Statistical Abstract* (1995).

⁸ *California Statistical Abstract*, table H-8, 120.

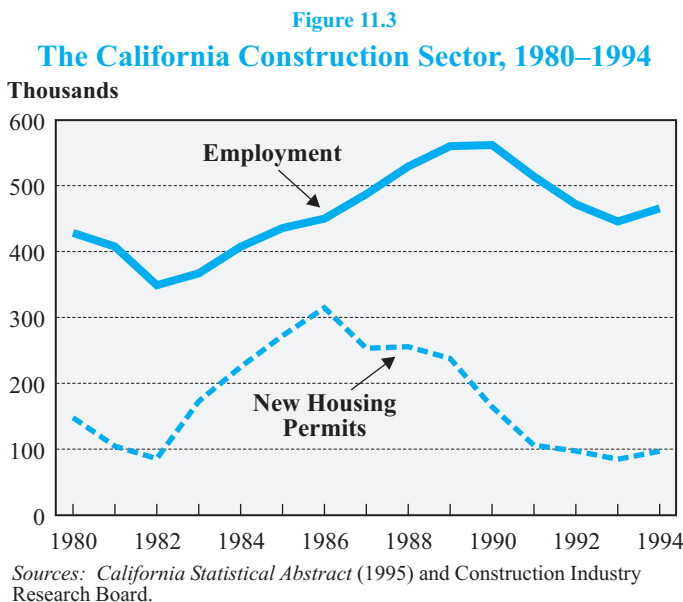
⁹ The defense establishment in California was dominated by several large firms—for example, Northrop, Hughes, Lockheed, TRW, Rockwell, McDonnell-Douglas, and General Dynamics—with the resources to compete for such projects as the Strategic Defense Initiative, the B-1 bomber, and the Trident missile. These organizations and their networks of smaller subcontractors are concentrated in the Los Angeles area, which absorbs more than half of statewide defense spending. The Commission on State Finance estimated that the top 20 defense-related contractors held 75 percent of the dollar value of primary defense contracts (Commission on State Finance, *Impact of Defense Cuts on California* [1992], 15–16).

¹⁰ James Dertouzos and Michael Dardia, *Defense Spending, Aerospace and the California Economy* (1993), 15–16.

approximately 363,000 jobs, up 42 percent from 1980, with approximately 107,000 new jobs created. At year-end 1988, defense-related manufacturing accounted for approximately 3 percent of the state's total non-agricultural employment and approximately 17 percent of its manufacturing employment. In Los Angeles County, defense-related manufacturing accounted for 7.5 percent of nonfarm employment and 33.4 percent of all manufacturing employment. The peak in defense expenditures was reached in Fiscal Year 1985: \$29.1 billion. By FY 1989, the amount had fallen to \$23.1 billion—a 21 percent decline (before inflation is taken into account). However, the falloff in defense spending did not have an immediate and substantial effect upon California's economy, for two reasons. First, there is a substantial lag between the initial funding authorization and the actual disbursement of funds over the life of a multiyear project. Second, strength in commercial aviation and increased NASA expenditures also helped cushion the blow. Nevertheless, by the end of the decade defense-related employment had declined 7.1 percent from the 1988 peak (figure 11.2).

The Construction Industry and Real Estate Markets

The 1983–89 expansion was also sparked by the revival of the construction industry. In the early 1980s, California's building industry had been hit hard by recession, high interest rates, and high rates of inflation. In 1982, only 85,700 new housing units were authorized (see figure 11.3), marking the fifth consecutive year of declining housing starts and



the lowest level of activity since 1954.¹¹ In 1983, the construction industry started to rebound, responding to a declining interest-rate environment and a renewal of confidence in the economy. The number of new housing permits issued doubled in 1983, rising to 172,600, and construction employment increased by 5 percent, reversing a three-year trend of job losses. With further declines in interest rates and the apparent containment of inflation, the construction recovery gained momentum in 1984 and 1985, yielding substantial gains in employment through the end of the decade.

Much of the surge in construction activity in 1984 and 1985 was channeled into multifamily units, an unsurprising result in view of the shortages created by the decline in construction activity in the late 1970s and early 1980s and this activity's sensitivity to interest costs and credit availability. Beyond cyclical considerations, the industry was anticipating possible changes in the tax law that would reduce depreciation allowances and restrict real estate tax shelters. According to the Construction Industry Research Board, permit authorizations for multifamily construction peaked in 1986 at 168,000 and then declined throughout the rest of the decade and beyond, falling to 75,096 in 1989 (see figure 11.4). The Tax Reform Act of 1986 eliminated many of the incentives for multifamily construction.¹² Whereas multifamily building activity declined sharply after 1986, authorizations for construction of single-family homes continued strong, peaking at 162,651 permits in 1989 (figure 11.4).¹³ Although an average of nearly 250,000 housing units were authorized annually during the last seven years of the 1980s,¹⁴ supply failed to keep pace with growth in employment, population, and household formation.¹⁵

The shortage of dwellings exerted upward pressure on housing prices. At the beginning of the 1980s, the median California home price (\$99,550) was 60 percent above the national median (\$62,600). (See figure 11.5.) In contrast, before 1970 the differential between the median California and national home prices had been less than \$2,000. The 1980 price differential reflected substantial appreciation in California housing markets during the second half of the 1970s. Between 1982 and 1985 home prices in the state rose moderately, in 1986 they accelerated, and from 1987 to 1989 they increased at an unsustainable rate of 20

¹¹ *Economic Report of the Governor* (1983), 43.

¹² For a more detailed examination of the tax issues, see Chapter 3.

¹³ Construction Industry Research Board, *New Housing Units and Residential, Nonresidential, and Total Building Permit Valuations* (November 13, 1995), 1.

¹⁴ *Ibid.*

¹⁵ Center for Real Estate and Urban Economics, University of California at Berkeley, *California Real Estate Opportunities in the 1990s* (1991), 34.

Figure 11.4

New Housing Permits, Multifamily versus Single Family, California, 1978–1994

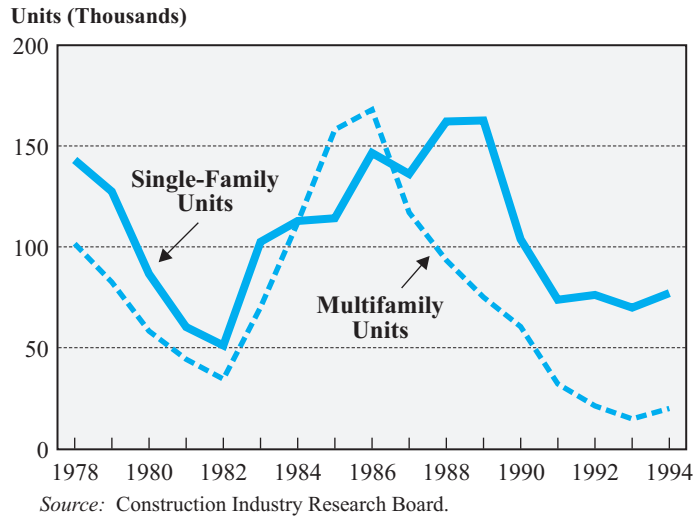
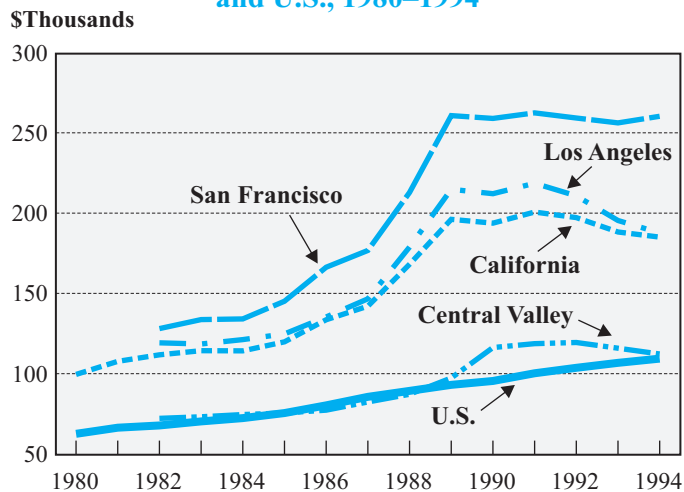


Figure 11.5

Median Home Prices, California (Selected Markets) and U.S., 1980–1994



Source: California Association of Realtors, *California Existing Single-Family Housing Market: Historical Data Summaries*, March 1995.

to 25 percent. At the end of the decade, the median home price in California was more than double the national average: \$196,120 versus \$93,100.¹⁶

The substantial appreciation in home prices was not evenly distributed throughout the state. The greatest appreciation occurred in coastal areas—the San Francisco Bay area and Southern California from Santa Barbara to San Diego. In 1989, median home prices peaked in San Francisco (\$260,722) and Los Angeles (\$214,831). While the disparity between housing demand and supply was most acute in California's coastal areas, supply and demand factors alone do not explain the surge in home prices at the end of the 1980s, which was heavily influenced by speculation. For many Californians, private residences had become a preferred investment vehicle offering little perceived risk, easily available credit, interest costs subsidized by the federal tax code, and the opportunity to make only modest down payments, thereby providing excellent leverage opportunities and producing large profits. In the late 1980s in San Francisco and Los Angeles, speculation was rampant.¹⁷ Homes sold quickly and there were occasional bidding wars, as prospective buyers bid above asking prices so as not to lose an opportunity for what appeared to be certain capital gains.

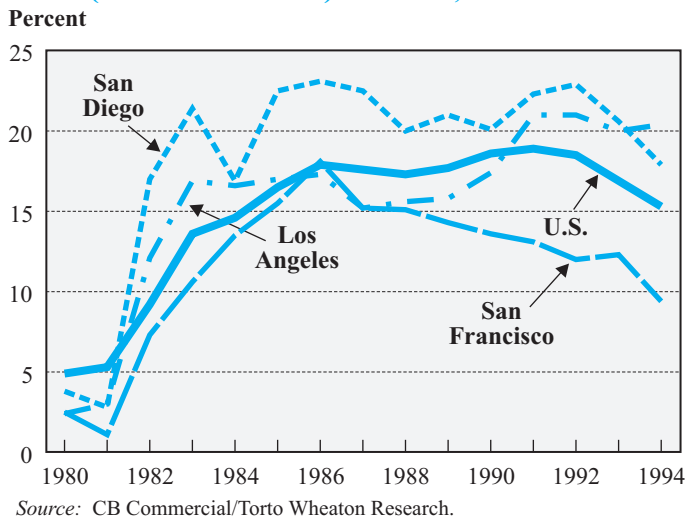
The construction surge also encompassed office space, as California participated in the office-building boom of the 1980s and mirrored developments in Texas, Boston, and New York. At the beginning of the 1980s there was a significant shortage of office space, as indicated by low vacancy rates in the state's three largest office markets—Los Angeles (2.4 percent), San Francisco (2.5 percent), and San Diego (3.8 percent). (See figure 11.6.) Office-space inventories grew rapidly in the remainder of the decade, as nearly 300 million square feet of office space were added. In Los Angeles alone, between year-end 1979 and year-end 1989, office-space inventories jumped from 61.8 million square feet to 139.4 million square feet. In San Francisco, office-space inventories increased by nearly 75 percent, rising to 65.3 million square feet (see table 11.2). Significant development also occurred in San Diego, Santa Clara County (Silicon Valley), and Sacramento.¹⁸ And even though vacancy rates peaked in 1986, the building continued. The rules of development were turned upside down in the 1980s. As one commentator noted, "Developers did not borrow to build; all too often they built in order to borrow and borrow some more." Under the old rules, developers acquired a site, completed construction plans, secured a major tenant, and then sought financing. In the 1980s, the financing was often secured first and then

¹⁶ California Association of Realtors, *California Existing Single-Family Housing Markets: Historical Data Summaries* (1995), 2.

¹⁷ George Salem and Donald Wang, *California Banking: Industry Outlook* (October 15, 1990), 12.

¹⁸ Center for Real Estate and Urban Economics, *Real Estate Opportunities*.

Figure 11.6
Commercial Office Vacancy Rates, California
(Selected Markets) and U.S., 1980–1994



the other parts of the package were brought together. Furthermore, lenders often offered 100 percent financing.¹⁹

The most explosive growth in office space occurred in Los Angeles. Although savings and loans and institutional investors provided some funding, Japanese banks and Japanese investors became a major force in development. Using the wealth created by booming domestic real estate and equities markets, the Japanese moved aggressively overseas, acquiring premium properties and financing construction projects at prices that seemed modest in comparison with prevailing real estate prices in Japan. Acquisitions were further facilitated by easily available credit and the impressive purchasing power of the Japanese yen. Between 1985 and 1993, the Japanese invested \$73.1 billion in U.S. real estate (see figure 11.7). Nearly 80 percent of the funds were invested during the four-year period 1987–90, the peak coming in 1988 (\$16.5 billion). Approximately one-third of the total investment from 1985 to 1993 was concentrated in California (\$25 billion).²⁰ Japanese ownership of California real estate increased rapidly: \$5 billion in 1987, \$6.5 billion in 1988, \$10 billion

¹⁹ Maggie Mahar, “The Great Collapse, Commercial Real Estate Is on the Skids across the Nation,” *Barron’s* (July 22, 1991): 11.

²⁰ E & Y Kenneth Leventhal Real Estate Group, “1993 Japanese Disinvestment in U.S. Real Estate” (1994), 7.

Table 11.2
Office Real Estate Market Trends,
Los Angeles County and San Francisco, 1980–1994
(Thousands of Square Feet)

Year	Completions		Stock	
	Los Angeles	San Francisco*	Los Angeles	San Francisco*
1980	5,875	3,838	67,663	40,656
1981	6,786	1,492	74,449	42,148
1982	11,620	3,353	86,069	45,501
1983	7,233	4,238	93,302	49,739
1984	6,956	2,439	100,258	52,178
1985	9,901	2,739	110,159	54,917
1986	9,793	4,675	119,952	59,592
1987	6,246	1,820	126,198	61,412
1988	7,133	2,412	133,331	63,824
1989	6,054	1,487	139,385	65,311
1990	8,516	2,380	147,901	67,691
1991	7,711	428	155,612	68,119
1992	2,482	41	158,094	68,160
1993	257	0	158,351	68,160
1994	51	0	158,402	68,160

Source: *The Office Outlook*, vol. 2. CB Commercial/Torto Wheaton Research.

*Three-county total for Marin, San Francisco, and San Mateo Counties.

in 1989, \$13 billion in 1990, and \$18 billion in 1991.²¹ In addition, analysts estimated that in Los Angeles, Japanese commercial banks provided more than half of the commercial real estate loans.²² By 1991, the Japanese investors owned approximately 45 percent of premium downtown Los Angeles office space.²³ Japanese purchasers focused primarily on trophy properties: in 1989, Dai-ichi Mutual Life Insurance paid \$530 per square foot for a quarter-interest in First Interstate World Center, Los Angeles's tallest building.²⁴ In 1989, a Japanese developer paid \$850 million for the Pebble Beach resort near Monterey in Northern California (sold in 1992 for \$500 million). The property was financed by Japanese financial institutions.²⁵

²¹ Ibid., 10.

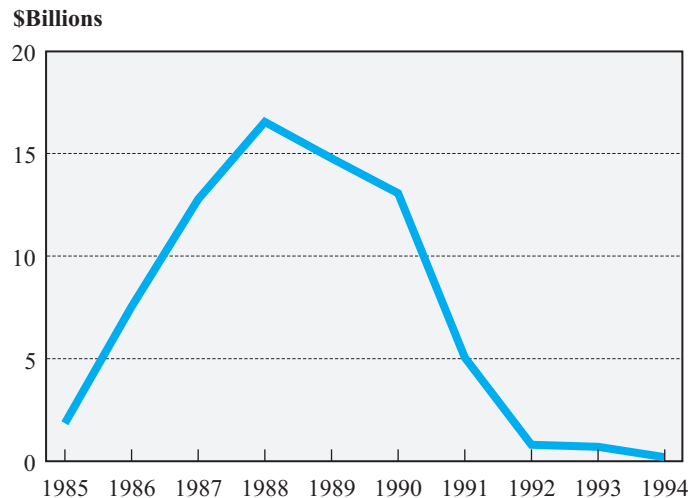
²² Stephen S. Cohen, Clara Eugenia Garcia, and Oscar Loureiro, "From Boom to Bust in the Golden State: The Structural Dimension of California's Prolonged Recession," working paper 64, Berkeley Roundtable on the International Economy, University of California at Berkeley, September 1993, 9.

²³ James Bates, "Japan's New Investment in U.S. Real Estate Down 61%," *Los Angeles Times* (February 21, 1992), A1.

²⁴ Ralph T. King, Jr., "Another Houston: Real-Estate Developers See the Next Disaster in Central Los Angeles," *The Wall Street Journal* (August 27, 1991), 1.

²⁵ James S. Granelli, "Japan's Banks Shaken by Fall in California Values," *Los Angeles Times* (March 18, 1993), A1.

Figure 11.7
Japanese Investment in U.S. Real Estate, 1985–1994



Source: E & Y Kenneth Leventhal Real Estate Group, “1994 Japanese Investment in U.S. Real Estate,” exhibit 1 (1995).

The overbuilding that occurred in the late 1980s had a strong speculative element. Despite high vacancy rates, building continued unabated. Investors, lenders, and developers assumed that demand for office space would continue to increase and that real estate values would likewise continue to increase. An additional indicator of the speculative nature of the market was the price paid for office space: in Los Angeles and Orange Counties between 1985 and 1990, despite high vacancy rates and a substantial volume of office construction nearing completion, sale prices rose from \$234 to \$303 per square foot.²⁶

From Boom to Bust: “But California Is Different”

California’s economic gains in the 1980s reinforced a belief long held in the state that California was different. The Golden State, it appeared, had always been rich. California’s most famous boom, the first of many, was the Gold Rush of 1849. During the remainder of the 19th century, agriculture and the railroads fostered substantial growth and created wealth. During the 20th century, the most prominent sources of wealth were, in turn, the oil industry, the entertainment industry, construction, defense/aerospace, and the computer chip. If California had been a separate nation, its 1989 gross product of \$703 billion²⁷ would

²⁶ Cohen et al., “Boom to Bust,” 10.

²⁷ U.S. Department of Commerce, Bureau of Economic Analysis, cited in *California Statistical Abstract* (1996), table D-1, 48.

have been surpassed by only six countries: the United States, Japan, Germany, France, Italy, and the United Kingdom. And even by historical standards, the growth in the 1980s was impressive—the most significant the state had ever experienced. Only the economic expansion during World War II rivaled this growth (in percentage terms). What made California's economic achievement in the 1980s particularly striking was the national context. The Midwest, Texas and the Southwest, and the Northeast endured a series of recessions during the 1980s and early 1990s.

The underlying psychology of the boom—that California was different—made it more difficult for those inside the state to perceive on the horizon the early-warning signs of a serious recession.²⁸ The relevance of the recent major downturns experienced by Texas and the Northeast was often denied. The boom and then bust in Texas were viewed as having been based essentially on a single commodity (oil), whereas California had a large, diverse economy, accounting for approximately one-eighth of national output. In the Northeast, the boom of the 1980s (followed by the bust of the early 1990s) was seen as representing a recapture of economic ground lost in the 1970s when the economy was undermined by high energy prices and a rapidly declining manufacturing sector. For these reasons, the parallels between these areas and California were not taken seriously by many observers. For decades California had been “the very model of a successful and dynamic regional economy,” continually growing, adapting, and overcoming obstacles to growth, generating new ideas and converting them to sources of wealth.²⁹ The boom in California in the 1980s had been preceded by the booms of the 1970s, the 1960s, and the 1950s. To many inside the state, just as previous booms had not been followed by a bust, this one would not be, either.

By 1989, the California economy slowed and began showing signs of distress. The initial problems emerged in precisely the sectors that had led the economic boom of the 1980s: defense-related manufacturing, construction, and commercial and residential real estate markets. But these early-warning signs were interpreted very differently depending on whether the analyst was based in California or elsewhere. In-state analysts, buoyed by the achievements of the 1980s, generally anticipated continued growth.³⁰ They minimized the threat posed by declining defense expenditures, and provided justifications for current real estate valuations. Analysts from outside were more circumspect in assessing the state's economy and prospects, particularly the price of residential real estate in coastal areas.³¹ These analysts, sensitive to what had happened in Texas and New England, questioned whether California's would be the next regional economy to face a serious downturn.

²⁸ David Hensley, “Where Concerns Mount, Growth Continues,” *UCLA Business Forecasting Project* (March 1990), 1.

²⁹ Cohen et al., “Boom to Bust,” 4.

³⁰ Hensley, “Growth Continues,” 1.

³¹ Salem and Wang, *California Banking*, 1–2.

The debate among analysts is illustrated by contrasting statements on the effect of declining defense expenditures. Defense spending peaked in California in Fiscal Year 1985 but, as noted above, the delay between appropriations and actual spending, strength in commercial aviation, and increased NASA expenditures all kept the state's economy from feeling the effect of the reduction in such spending. According to an analysis undertaken by the Bank of America, there was no question that defense spending would continue to decline—nevertheless, only a “modest” effect upon the state economy was anticipated.³² California had experienced a serious recession in the early 1970s, when real military spending fell by more than 10 percent in 1970 and 1971 as the Vietnam War moved toward a conclusion, but some analysts based in the state argued that during the two decades since that time, the structure of the state's economy had been transformed and was now large and diverse enough to offer insulation from problems in specific sectors.³³ In addition, defense-related manufacturing accounted for an increasingly smaller share of the state economy (between 1970 and 1990 it dropped from approximately 15 percent of the gross state product to approximately 8 percent). Thus, future cutbacks in that sector (in-state analysts maintained) would have less of an effect on the state's economy than cutbacks in the same sector had had 20 years earlier. In contrast, analysts who were more cautious about the potential implications of reduced defense expenditures pointed to New York State, which had been forced into a recessionary phase by problems in the securities industry after the October 1987 stock market crash even though, at the time, securities activities accounted for only between 4 and 5 percent of state output.³⁴

A second important issue in the debate over California's near-term economic performance was current valuations of real estate assets. The future was most clearly seen by two Prudential-Bache analysts, George Salem and Donald Wang.³⁵ Their October 1990 report, because it was so clearly at odds with the conventional wisdom, was both highly publicized and highly controversial; they concluded that residential markets in California were substantially overvalued and that a price correction was under way. In the previous year, prices in California's coastal markets had fallen by 10 to 20 percent from mid-1989 peaks, and Salem and Wang anticipated a total correction of 25 percent or more by year-end 1991. They characterized commercial real estate markets, particularly Los Angeles, as overbuilt, commanding declining rents, and failing to provide a sufficient return to satisfy institutional investors. It followed, according to the two analysts, that major price revisions would ensue. Finally, Salem and Wang viewed real estate in California as analogous to oil in Texas, in the sense that—because so much of household net worth in California was based on

³² Bank of America Corporation, “The California Economy in 1990: Surmounting the Challenges,” *Economic and Business Outlook* (January 1990), 1.

³³ *Ibid.*

³⁴ “Golden State Worriers,” *Business Week* (May 14, 1990): 35.

³⁵ Salem and Wang, *California Banking*.

home ownership—a drop in prices would have a major effect on consumption patterns, job creation, and unemployment.

An analysis produced at the Bank of America responded that nonresidents, unable to grasp the historical context, failed to understand the state's real estate markets. California home prices as a percentage of national home prices had increased at a faster rate between 1974 and 1981 than in the recent 1987 to mid-1989 boom. Prices had stalled during the 1981–82 recession, but there had been no significant deterioration.³⁶ In addition, the authors of the analysis claimed that California's residential real estate markets were not overbuilt: despite the authorization of nearly 250,000 housing permits annually during the expansion, a significant shortfall in housing supply allegedly remained, resulting from employment and population growth during the 1980s.³⁷

An economist at the Federal Reserve Bank of San Francisco also took issue with Salem and Wang, arguing that “relatively high home prices in California are easily explained by the comparative productivity of sites.” Rejecting Salem and Wang's metaphor of California real estate as an overvalued stock vulnerable to correction, the Federal Reserve economist viewed the underlying land as a scarce production factor that was in limited supply and was given value by the high productivity of the area and competing uses. In fact, “the bulk of the sixfold increase in home prices” in the prior 20 years could be explained by movement in the gross state product.³⁸ Finally, the historical movement of home prices during both the Great Depression and the more recent recession in Texas indicated significant barriers to price rollbacks; these barriers included transactions costs and tax considerations.³⁹

In summary, because of California's economic successes in the 1980s and its history of prosperity, few anticipated the depth of the coming recession, which would be the state's worst economic downturn since the Great Depression. After all, in the early 1980s, amid a serious national recession, California had experienced only minor problems (except in the building industry): was that not additional evidence of the state's continuing strength? In fact, however, the events of the 1980s may have made the state economy more vulnerable to an economic correction. First, the influx of dollars increased the importance of construction—a highly cyclical industry. Second, the size of the defense establishment in California made the state somewhat more vulnerable to events such as the end of the Cold War and the consequent reduction in defense spending. Third, Japanese acquisitions and financing of California real estate development, especially with respect to commercial real estate mar-

³⁶ Bank of America Corporation, “The California Economy in 1990,” 3.

³⁷ Ibid.

³⁸ Randall Johnston Pozdena, “Why Home Prices Don't Fall (Much),” *FRBSF Weekly Letter* (January 4, 1991): 1–2.

³⁹ Ibid., 3.

kets, made California more dependent on Japanese investments, so that the continued health of the Japanese economy became a major factor in California's economic future.

Recession, 1990–1994

California's economy followed the nation's into recession in December 1990 and was seriously hurt. Employment peaked at the end of 1990, but for the last six months of that year employment growth had been essentially flat, and some observers argued that the recession probably began in mid-year. Between December 1990 and January 1994, employment in the state declined by approximately 752,000, or nearly 6 percent of the total non-agricultural employment base. The most substantial employment losses occurred in the manufacturing sector (290,300, or 14 percent of total manufacturing employment—the defense-related manufacturing sector declined 126,000, or approximately 39 percent), trade (287,700, or 9 percent), and construction (116,000, or 21 percent). (See table 11.3.) The unemployment rate peaked in September 1992 at 9.5 percent, up from 5.0 percent in January 1990.

Table 11.3
Recession-Related Employment Losses in California and Los Angeles County

	Employment (Thousands)		Change (Percent)
	December 1990	January 1994	
California			
Total non-agricultural	12,634	11,882	-6.0
Construction	540	424	-21.0
Manufacturing	2,028	1,738	-14.0
Defense-related	327	201	-39.0
Trade	3,069	2,782	-9.0
Financial services	812	795	-2.0
Services	3,416	3,421	0.0
Government	2,107	2,083	-1.0
Los Angeles County			
Total non-agricultural	4,125	3,636	-11.9
Construction	130	94	-27.2
Manufacturing	811	633	-22.0
Defense-related	191	114	-40.3
Trade	958	806	-15.9
Financial services	276	246	-10.9
Services	1,188	1,119	-5.8
Government	543	534	-1.6

Source: California Employment Development Department.

The recession in California had at least three principal causes: the 1990–91 national recession, which reduced the demand for California’s goods and services; the substantial decline in national defense spending, which affected California defense contractors, particularly those headquartered in Southern California; and the collapse of residential real estate markets and overbuilt commercial markets, which had a major effect on the state’s construction industry.⁴⁰

The effects of the recession were unevenly distributed. The Central Valley region was affected only marginally. The effect on the San Francisco Bay area was greater, but was still cushioned somewhat by the diversified structure of the regional economy.⁴¹ The effect on the Los Angeles metropolitan area, in contrast, was severe. Between December 1990 and January 1994, Los Angeles County lost 489,600 jobs, representing nearly 12 percent of its total nonfarm employment base and 65 percent of the jobs lost in the whole state. Most seriously injured was the manufacturing sector, including defense-related manufacturing; also deeply affected were trade, services, financial services, and construction (table 11.3).

A 1993 study posits specific structural problems within the local economy as the reason the California recession was longer and more severe than the national downturn.⁴² For example, Southern California was particularly vulnerable to cutbacks in defense spending because of the way the defense-related manufacturing industry was structured. Large bureaucratic organizations had been created to serve the unique needs of the industry’s sole client, the Department of Defense. Competition was limited, incentives to control costs were lacking, and the emphasis was on accommodating the specifications of the buyer. When defense spending was reduced, secondary markets for these products were difficult to find. In contrast, the defense-related sector in Northern California was dominated by much smaller, entrepreneurial firms that were forced to contain costs to a greater extent in order to compete in the global marketplace.⁴³

Southern California’s commercial and residential real estate markets were also vulnerable to correction because the former were substantially overbuilt and the latter eventually became overpriced. Commercial developers, investors, and lenders counted on inflation and continued strong growth in office employment to make their projects viable. During the 1990s, with real estate inflation subsiding and office employment declining, commercial real estate markets were destabilized. In addition, Japan’s economy went into

⁴⁰ Center for the Continuing Study of the California Economy, *California Economic Growth* (1994), 3–3.

⁴¹ Pacific Gas and Electric, *Economic Outlook* (January 1995), 9.

⁴² Cohen et al., “Boom to Bust,” 3.

⁴³ Ibid., 8–9.

recession in 1990, with investors suffering major losses in equities and real estate; Japanese lenders were forced to reassess the real estate strategy they had aggressively pursued in the 1980s. Japan's marginally capitalized banks—confronted by major losses, that country's worst post-war recession, a rising interest-rate environment, a large portfolio of nonperforming assets, and pressure from financial markets and Japanese regulators to deal with these issues—significantly cut their lending and investments in U.S. real estate markets.⁴⁴

The office market in Los Angeles County was undercut further when the completion of substantial amounts of new office space (16.2 million square feet in 1990 and 1991—table 11.2) coincided with a wave of corporate restructurings that significantly reduced the demand for office space. The result was declining rents, falling purchase prices, and higher vacancy rates. (In San Francisco, local ordinances that restricted annual expansion of downtown office space to 475,000 square feet—essentially, one building—had been in place since 1986, saving developers from themselves.)⁴⁵

In the residential sector, the substantial appreciation in California home prices during the 1980s created a problem of affordability. Median home prices in the state peaked in 1991 at \$200,660, approximately six times the nation's average household income. As prices increased, the market of potential buyers became narrower. According to the California Association of Realtors, only 14 percent of Los Angeles households in 1989 could afford to purchase a local median-price home.⁴⁶ Because the decline in home prices in the early 1990s was largely unanticipated, it was particularly worrisome to existing homeowners. The number of California home sales peaked in 1988 at 562,240, but uncertainty about future real estate values reduced sales activity in 1991 to 425,420 homes.⁴⁷ The Real Estate Research Councils of Southern and Northern California estimated that between March 1990 and October 1995, average home prices declined by 21.1 percent in Southern California and 9.6 percent in Northern California.⁴⁸

⁴⁴ Japanese investment in U.S. real estate declined to \$13 billion in 1990 and to \$5 billion in 1991. New investment was nonexistent in 1992 and 1993, with only limited funds disbursed to complete projects under construction. The Japanese destabilized markets further by becoming sellers in 1993 and continuing to sell in 1994. E & Y Kenneth Leventhal Real Estate Group estimated disinvestment and restructurings by Japanese interests of \$4.5 billion in California in 1993 and sales of \$3.14 billion in 1994, representing a liquidation of 30 percent of the \$25 billion the Japanese had invested in California real estate since 1985.

⁴⁵ "California Dreaming, on a Rainy Day," *The Economist* (June 23, 1990): 78.

⁴⁶ California Association of Realtors, *Historical Data Summaries*, 18.

⁴⁷ *Ibid.*, 7.

⁴⁸ Estimates provided by Michael Carney, Real Estate Research Council of Southern California, in a presentation at the UCLA Business Forecast Meeting, December 13, 1995.

The Banking Industry: Profitability, Structure, and Competition, 1980–1989

Because the recession primarily affected Southern California, most bank failures during the 1990–94 period occurred in this region.⁴⁹ However, although the recession was the state’s most severe since the 1930s, the banking crisis as measured by both the number of bank failures and losses to the Bank Insurance Fund was relatively minor in comparison with the crises in the Southwest and the Northeast. To this extent the California banking crisis was “different” from those in the other regions. Contributing to this result were the sharp decline in interest rates during the early 1990s; the localized nature of the recession, which was concentrated in Southern California; and the dominant presence in the state of four of the largest banking organizations in the nation, whose geographic diversification both inside and outside the state mitigated the recession’s effect on their overall operations.

Although California’s economic growth was strong during the 1980s, the overall performance of the state’s banking industry was relatively mediocre going into the recession of the early 1990s. The weighted average median return on assets (ROA) for all California banks over the 1980–89 period was 0.63 percent, which was substantially below the median return for the U.S. banking industry (0.94 percent).⁵⁰ (See table 11.4.) These subpar returns were heavily influenced by the poor earnings record of the Bank of America (BoA) during most of the decade, which averaged only 22 basis points over this period. However, from 1988 to 1990 the overall performance of the California banking industry improved significantly, and the industry’s ROA matched or exceeded the returns for the U.S. banking industry.

Table 11.4 also identifies the profitability of the various banking groups that played roles in the provision of banking services within the state: established community banks (those with less than \$300 million in assets), banks chartered during the 1980s, and the four statewide organizations. Community bank operations are generally restricted to localized banking markets; because these institutions have limited geographic scope in comparison with larger organizations, they have fewer opportunities to diversify their lending. Commercial “banks chartered in the 1980s” were also small, locally oriented organizations. What distinguished them from community banks was their large number, which made them a competitive force in the state banking industry. Finally, the four statewide organizations dominated the California banking structure, their large branch networks operating within all major markets as well as competing on an interstate basis (in three of the four cases).⁵¹

⁴⁹ For convenience in analyzing the effects of the recession on the state banking industry, five complete years of data—1990–94—are discussed to approximate the duration of the recession.

⁵⁰ All ROAs for the different banking groups discussed in this section for the 1980–89 and 1990–94 periods refer to weighted average medians unless otherwise noted.

⁵¹ The Bank of America, First Interstate Bank, and, to a more limited extent, Security Pacific Bank all had a presence outside of California.

Table 11.4
Median Return on Assets for U.S. and California Banking Industries, 1980–1994
(Percent)

	Yearly Medians															Weighted Medians‡	
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1980–1989	1990–1994
U.S. Banking Industry	1.12	1.09	1.04	0.98	0.90	0.90	0.80	0.81	0.87	0.92	0.86	0.89	1.07	1.14	1.09	0.94	1.00
California Banking Industry	0.79	0.83	0.37	0.24	0.44	0.49	0.51	0.73	0.87	1.04	0.93	0.56	0.48	0.46	0.73	0.63	0.63
Established California Community Banks* California Banks Chartered in the 1980s	0.95	0.94	0.47	0.38	0.59	0.64	0.73	0.85	0.98	1.16	1.02	0.74	0.67	0.49	0.76	0.76	0.75
California "Big Four" Banks	-0.53	0.45	0.10	0.06	0.23	0.27	0.35	0.64	0.82	1.00	0.92	0.55	0.38	0.32	0.62	0.44	0.57
Bank of America	0.60	0.49	0.35	0.41	0.48	0.35	0.55	-0.55	1.14	1.28	1.11	-0.10	0.60	1.14	1.15	0.51	0.78
First Interstate	0.54	0.36	0.34	0.30	0.34	-0.41	-0.48	-0.96	0.91	1.21	0.91	0.98	1.00	1.14	1.15	0.22	1.04
Security Pacific†	0.65	0.61	0.36	0.52	0.62	0.67	0.77	-1.69	1.33	1.28	1.32	-0.24	0.07	0.96	0.97	0.51	0.62
Wells Fargo	0.70	0.69	0.68	0.67	0.65	0.56	0.63	-0.15	1.12	1.31	0.80	-1.04	—	—	—	0.69	-0.12
	0.55	0.29	0.25	-0.07	-1.59	0.13	0.47	0.16	1.17	1.27	1.41	0.04	0.60	1.36	1.63	0.26	1.01

*California community banks are defined as institutions with less than \$300 million in total assets.

† Acquired by Bank of America in 1992.

‡ Medians are weighted by number of banking organizations.

The ROA of the different banking groups in the state varied widely over the 1980–89 period. Community banks recorded an ROA of 0.76 percent, which exceeded the ROA for all California institutions but fell short of the 0.94 return for the U.S. banking industry. In contrast, the performance of banks that were chartered during the decade was relatively poor. Over the entire 1980–89 period, this group recorded a median return on assets of only 44 basis points, below that of all the other groups within the state as well as the U.S. banking industry (table 11.4).

The dominant banking group in the state consisted of the statewide banking organizations, known collectively as “the Big Four”: Bank of America, First Interstate Bank, Security Pacific Bank, and Wells Fargo Bank. At the beginning of the decade they accounted for approximately 72 percent of statewide assets and 70 percent of total income of all California banking organizations. Any discussion of the performance of the California banking industry during the 1980–89 period is therefore heavily weighted by the performance of these organizations. Their median ROA from 1980 to 1989 was 51 basis points, substantially below the 94 basis point return for the U.S. banking industry. In 1987 this group actually experienced a net loss on assets of 55 basis points, as most of these firms charged earnings to set aside reserves for potential losses on loans to less-developed countries. From 1988 to 1990, however, their returns rebounded strongly, with gains that substantially exceeded those for the U.S. banking industry (table 11.4).

The below-average performance of the California banking industry from 1980 to 1989 was influenced by the intense competitive climate within the state’s banking and financial sectors. First and most especially, the newly deregulated California thrift industry posed strong challenges for deposit and loan products. Second, as just mentioned, the vibrant economy produced a large number of new entrants in the form of newly chartered banks that began operations in the first half of the 1980s. Finally, the increased market share of the California subsidiaries of Japanese banks also enhanced competition.

California thrift institutions, which are among the largest in the nation, have traditionally posed substantial competitive challenges to California’s commercial banks. At the beginning of the 1980s, four of the state’s ten largest depository institutions were thrifts; at year-end 1984, thrift institutions controlled approximately 50 percent of the state’s total domestic deposits, while commercial banks held approximately 48 percent and credit unions another 2 percent (see tables 11.5 and 11.6). Commercial banks in California have traditionally played an important role in providing residential and commercial mortgage credit. For example, at year-end 1989 median real estate loans (not shown) represented approximately 33 percent of total assets at California banks, substantially above the 23 percent median total for the U.S. banking industry.

Table 11.5
Ten Largest Depository Institutions in California,
December 31, 1979

Rank	Name of Institution	Location	Total Domestic Deposits (\$Billions)
1	Bank of America	San Francisco	\$86.1
2	Security Pacific Bank	Los Angeles	18.5
3	Wells Fargo Bank	San Francisco	16.1
4	Crocker National Bank	San Francisco	12.5
5	United California Bank	Los Angeles	11.7
6	Home Savings of America	Los Angeles	9.4
7	Great Western Savings	Beverly Hills	7.4
8	American Savings & Loan	Beverly Hills	7.3
9	Union Bank	Los Angeles	4.5
10	California Federal Savings & Loan	Los Angeles	4.5

Source: *American Banker* (February 21 and 26, 1980).

Table 11.6
Market Share of Total Domestic Deposits, by Type of Depository Institution in
California, 1984–1992

Year	Total Domestic Deposits					
	Commercial Banks (\$Billions)	Commercial Banks (Percent)	Thrift Institutions (\$Billions)	Thrift Institutions (Percent)	Credit Unions (\$Billions)	Credit Unions (Percent)
1984	\$177.4	48.3%	\$181.6	49.5%	\$ 8.3	2.3%
1985	185.8	47.9	191.6	49.4	10.8	2.8
1986	192.5	45.8	215.0	51.1	13.3	3.2
1987	191.3	42.7	241.7	54.0	14.9	3.3
1988	201.9	41.5	268.2	55.2	16.2	3.3
1989	217.9	43.0	270.6	53.4	17.9	3.5
1990	235.9	45.8	260.2	50.5	19.4	3.8
1991	245.9	48.1	242.0	47.4	22.9	4.5
1992	240.5	48.6	227.0	45.8	27.8	5.6

Source: Federal Reserve Bank of San Francisco.

During the early 1980s, while Congress was partly deregulating the thrift industry, the California state assembly went much further by significantly expanding the powers of state-chartered thrifts. The Nolan bill, which became effective on January 1, 1983, authorized state-chartered thrifts to invest directly in real estate *without limitation*; previously, direct

real estate investments had been limited to 12 percent of total assets.⁵² The legislation also eliminated a 5-percent-of-total-assets ceiling on loans secured by commercial real estate. In 1982, when the Nolan bill was passed, seven of the state's ten largest thrifts were state-chartered.⁵³

The attractiveness of the new powers was reflected in chartering patterns. The broad discretion granted to state-chartered thrifts, coupled with access to federally insured deposits, attracted new investors to the California thrift industry.⁵⁴ In the five years after the effective date of the Nolan bill, more than two-thirds of new thrifts (48 of 67) elected to be state chartered. Partly as a result of the new entrants and expanded powers, thrift institutions' share of statewide domestic deposits increased to 55 percent by year-end 1988, up almost 6 percentage points since 1984, while commercial banks' market share dwindled to 42 percent (down approximately 7 points) (table 11.6). Yet despite the new thrift powers granted at federal and state levels, the profit performance of California thrifts was relatively poor during the 1980s. Their ROA averaged only 11 basis points from 1984 through 1989; during the best year—1985—it was 46 basis points.⁵⁵

The second factor affecting the competitive environment was trends in the number of commercial banks. California began the decade of the 1980s with 240 commercial banks. During the next ten years (1980–89) that number more than doubled, with a total of 299 new banks being chartered—about 87 percent of them (260) during the first six years of the decade. More than half of the new banks were federally chartered (the remainder were state chartered [see figure 11.8]) and most of the new banks were headquartered in Southern California (not shown). The large number of new entrants enhanced competition within the state, but as a group, these newly chartered banks were outperformed by all other California banking groups (table 11.4).

The third factor that intensified competition in the state's banking industry was the significantly increased presence of Japanese banks in the state's banking markets. Between 1985 and 1990, assets of the nine California subsidiary banks owned by Japanese interests rose from \$11.8 billion to \$37.8 billion. This substantial growth was accomplished primarily by acquisitions; and by 1989, Japanese interests owned four of California's ten largest commercial banks. To gain market share, the Japanese banks were often willing to sacrifice

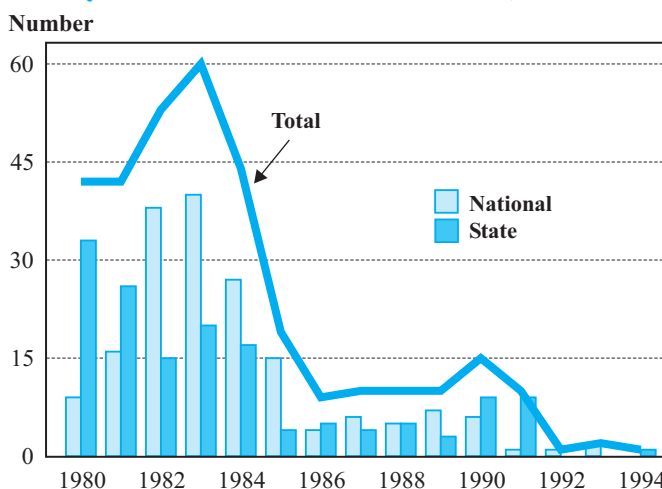
⁵² "California S&L Powers Bill to Governor," *American Banker* (June 15, 1982), 2.

⁵³ Norman Strunk and Fred Case, *Where Deregulation Went Wrong: A Look at the Causes behind Savings and Loan Failures in the 1980s* (1989), 57. In 1983 the California state legislature also expanded the power of state-chartered banks to make direct investments in real estate, adding a provision to the state banking code to allow state banks to invest up to 100 percent of total equity and/or 10 percent of total assets directly into real estate. More than 100 state banks took advantage of this provision, often with the encouragement of state officials.

⁵⁴ *Ibid.*, 58.

⁵⁵ Office of Thrift Supervision.

Figure 11.8
Newly Chartered Banks in California, 1980–1994



short-term profits, by pricing loans at 25 to 50 basis points below rates charged by their competitors.⁵⁶ In 1989, after five years of losses or marginal results, Japanese banks' ROA reached a high of 0.80 percent.⁵⁷

Effects of the Recession on California Banking (I): Troubled Banks

The condition of the California banking industry closely tracked changing economic circumstances within the state. In 1985–86 only 72 (approximately 17 percent) of the state's banks received problem-bank ratings (CAMEL 4 and 5) (see table 11.7a). These institutions accounted for less than 6 percent of the total number of problem banks nationally at that time. As the state economy gained momentum during the second half of the decade, the number of problem banks declined. In 1989, the industry registered a record income level of \$3.7 billion, while the number of problem institutions was half what it had been four years earlier. With the California recession of the early 1990s, however, the number of problem institutions jumped dramatically, reaching a peak of 118 in 1992, or approximately 26 percent of the total number of California banks. In 1993 and 1994, as the state was recov-

⁵⁶ Robert Luke, "Japanese Banks Tackle California Middle Market," *American Banker* (September 10, 1988).

⁵⁷ For a discussion of the presence of Japanese banks in the California banking system, see Gary C. Zimmerman, "The Growing Presence of Japanese Banks," *FRBSF Weekly Letter* (October 28, 1988).

Table 11.7a
CAMEL Ratings for All California Banks, 1981–1994

Report Date (Year-end)	Number of California Problem Banks/Percentage of Total					
	CAMEL Rating					Total
	1	2	3	4	5	
1981	53	181	41	12	1	288
	18.4	62.8	14.2	4.2	0.3	100%
1982	52	175	55	28	11	321
	16.2	54.5	17.1	8.7	3.4	100
1983	53	195	63	40	11	362
	14.6	53.9	17.4	11.0	3.0	100
1984	45	197	94	44	12	392
	11.5	50.3	24.0	11.2	3.1	100
1985	44	234	81	51	21	431
	10.2	54.3	18.8	11.8	4.9	100
1986	41	261	87	53	19	461
	8.9	56.6	18.9	11.5	4.1	100
1987	38	276	94	43	12	463
	8.2	59.6	20.3	9.3	2.6	100
1988	49	285	86	37	2	459
	10.7	62.1	18.7	8.1	0.4	100
1989	56	300	68	31	5	460
	12.2	65.2	14.8	6.7	1.1	100
1990	51	294	74	28	8	455
	11.2	64.6	16.3	6.2	1.8	100
1991	36	245	100	68	10	459
	7.8	53.4	21.8	14.8	2.2	100
1992	17	203	110	96	22	448
	3.8	45.3	24.6	21.4	4.9	100
1993	26	189	110	77	22	424
	6.1	44.6	25.9	18.2	5.2	100
1994	25	202	92	59	26	404
	6.2	50.0	22.8	14.6	6.4	100

Note: Examination ratings were obtained from the FDIC's historical database. In some instances examination ratings were missing; however, from 92 to 99 percent of banks' ratings were in the database. As a result, the number of CAMEL-rated banks each year was slightly smaller than the total number of California banks in other tables.

ering from the recession, the number of problem banks was declining relatively slowly. In 1993 and 1994, problem banks still accounted for 23 and 21 percent, respectively, of all banks in the state.

In contrast to what happened in the recession in the Southwest, where commercial bank equity capital and reserves declined as the crisis intensified, in California the banks'

Table 11.7b
CAMEL 4- and 5-Rated Institutions, California Banks versus
Banks in Rest of U.S., 1981–1994

Report Date (Year-end)	Number of Problem Banks/Percentage of Total		
	California Banks	Other Banks	Total
1981	13	220	233
	5.6	94.4	100%
1982	39	436	475
	8.2	91.8	100
1983	51	611	662
	7.7	92.3	100
1984	56	836	892
	6.3	93.7	100
1985	72	1,151	1,223
	5.9	94.1	100
1986	72	1,388	1,460
	4.9	95.1	100
1987	55	1,245	1,300
	4.2	95.8	100
1988	39	1,085	1,124
	3.5	96.5	100
1989	36	1,001	1,037
	3.5	96.5	100
1990	36	1,019	1,055
	3.4	96.6	100
1991	78	993	1,071
	7.3	92.7	100
1992	118	614	732
	16.1	83.9	100
1993	99	292	391
	25.3	74.7	100
1994	85	138	223
	38.1	61.9	100

levels of capital and reserves increased significantly during the 1980s and throughout the recession years. These increases offered some support for the notion that the state's banking industry had been relatively undercapitalized in the 1980s. For example, in 1986, 36 percent of California's banks had equity capital and reserve ratios at or below 7 percent, whereas only 19 percent of the U.S. banking industry had similar ratios (see tables 11.8a and 11.8b).

Table 11.8a
Equity and Reserves to Assets, California Banks, 1980–1994

Report Date (Year-end)	Number of U.S. Banks/ Percentage of Total					Total
	<5.0	Equity Capital and Reserves to Total Assets 5.0–7.0	7.0–9.0	9.0–11.0	> 11.0	
1980	12	63	75	43	88	281
	4.3	22.4	26.7	15.3	31.3	100%
1981	9	65	70	38	130	312
	2.9	20.8	22.4	12.2	41.7	100
1982	17	63	76	40	165	361
	4.7	17.5	21.1	11.1	45.7	100
1983	21	92	84	59	152	408
	5.2	22.6	20.6	14.5	37.3	100
1984	17	89	117	79	150	452
	3.8	19.7	25.9	17.5	33.2	100
1985	22	106	143	86	124	481
	4.6	22.0	29.7	17.9	25.8	100
1986	30	145	146	74	89	484
	6.2	30.0	30.2	15.3	18.4	100
1987	13	79	201	88	102	483
	2.7	16.4	41.6	18.2	21.1	100
1988	14	80	198	88	93	473
	3.0	16.9	41.9	18.6	19.7	100
1989	10	81	188	98	102	479
	2.1	16.9	39.3	20.5	21.3	100
1990	8	46	198	119	111	482
	1.7	9.5	41.1	24.7	23.0	100
1991	16	47	178	108	131	480
	3.3	9.8	37.1	22.5	27.3	100
1992	13	31	137	142	132	455
	2.9	6.8	30.1	31.2	29.0	100
1993	7	22	119	141	136	425
	1.7	5.2	28.0	33.2	32.0	100
1994	5	21	104	125	149	404
	1.2	5.2	25.7	30.9	36.9	100

Note: Data exclude Bank of America, First Interstate, Security Pacific, and Wells Fargo banks.

Capital levels improved during the second half of the 1980s as California's banks moved closer to industry benchmarks. At year-end 1989, only 19 percent of California's commercial banks had equity and reserve positions at or below 7 percent; the percentage of banks

Table 11.8b
Equity and Reserves to Assets, U.S. Banks, 1980–1994

Report Date (Year-end)	Number of U.S. Banks/ Percentage of Total					Total
	<5.0	Equity Capital and Reserves to Total Assets			> 11.0	
		5.0–7.0	7.0–9.0	9.0–11.0		
1980	154	1,847	6,300	3,963	2,494	14,758
	1.0	12.5	42.7	26.9	16.9	100%
1981	212	1,872	6,223	3,857	2,581	14,745
	1.4	12.7	42.2	26.2	17.5	100
1982	257	1,953	5,972	3,821	2,765	14,768
	1.7	13.2	40.4	25.9	18.7	100
1983	243	2,341	5,688	3,583	2,892	14,747
	1.7	15.9	38.6	24.3	19.6	100
1984	230	2,249	5,801	3,530	2,964	14,774
	1.6	15.2	39.3	23.9	20.1	100
1985	211	2,084	5,842	3,641	3,018	14,796
	1.4	14.1	39.5	24.6	20.4	100
1986	324	2,402	5,609	3,466	2,867	14,668
	2.2	16.4	38.2	23.6	19.6	100
1987	381	1,749	5,494	3,463	3,099	14,186
	2.7	12.3	38.7	24.4	21.9	100
1988	409	1,517	5,214	3,412	3,061	13,613
	3.0	11.1	38.3	25.1	22.5	100
1989	310	1,390	4,939	3,426	3,131	13,196
	2.4	10.5	37.4	26.0	23.7	100
1990	266	1,278	5,005	3,263	3,003	12,815
	2.1	10.0	39.1	25.5	23.4	100
1991	181	1,066	4,705	3,405	3,013	12,370
	1.5	8.6	38.0	27.5	24.4	100
1992	88	717	4,150	3,781	3,245	11,981
	0.7	6.0	34.6	31.6	27.1	100
1993	27	404	3,416	4,034	3,671	11,552
	0.2	3.5	29.6	34.9	31.8	100
1994	38	545	3,232	3,573	3,674	11,062
	0.3	4.9	29.2	32.3	33.2	100

declined continuously until, at year-end 1994, approximately 6 percent of banks had positions at or below 7 percent.

The improvement in ratios of equity capital and reserves, especially after 1991, may be partly explained by the phase-in of risk-based capital standards and the passage of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA). This legislation imposed severe restrictions on undercapitalized banks.⁵⁸ In addition, FDICIA-mandated risk-related deposit insurance premiums in the early 1990s also gave banks an incentive to improve their capital positions.

Effects of the Recession on California Banking (II): By Bank Group

The California recession affected the performance of individual banking groups differently. Community banks and banks chartered during the 1980s, especially those headquartered in Southern California, were most affected by the recession, as reflected in the number of bank failures. Most of the large statewide organizations, with more-diversified loan portfolios, came through in satisfactory condition.

During the 1990–94 period, commercial banks headquartered in Southern California were generally less successful than those headquartered elsewhere. Banks located outside of Southern California’s six counties recorded a median ROA of 0.83 percent, in comparison with only 0.45 percent for banks located in the six southern counties (see table 11.9).

Over the 1990–94 period, California community banks as a group earned a median return of 75 basis points on assets, significantly higher than the 63 basis points earned by the state banking industry during that same period (table 11.4). Performance varied, however, between the community banks inside and those outside Southern California. Those located within Southern California had a median ROA of only 0.58 percent, while those headquartered outside of Southern California recorded an ROA of 0.95 percent (table 11.9). Banks chartered during the 1980s, which were weakened by their poor earnings during most of the decade, were especially vulnerable to a downturn in the economy. This group averaged only 57 basis points on assets over the 1990–94 period (table 11.4). Those located in Southern California were particularly affected, earning only 25 basis points on assets—substantially lower than the 81 basis points earned by those located outside of Southern California (table 11.9). Given the relatively poor performance of this group and then the recession of the early 1990s, it is not surprising that California banks chartered during the 1980s accounted for 29 of the 47 bank failures in the state during this period.

The recession had only a relatively modest effect on the profitability of the Big Four, which outperformed all other groups during this period. The Big Four recorded a median re-

⁵⁸ See Chapters 2 and 12 .

Table 11.9
Median Return on Assets for California Banking Groups and U.S., 1990–1994

	1990	1991	1992	1993	1994	Weighted Medians* 1990–1994
Southern California Banks	0.92%	0.51%	0.17%	0.04%	0.56%	0.45%
Rest of California Banks	0.95	0.75	0.74	0.80	0.93	0.83
U.S. Banking Industry	0.86	0.89	1.07	1.14	1.09	1.00
California Community Banks						
Southern California	1.01	0.56	0.48	0.15	0.53	0.58
Rest of California	1.06	0.94	0.85	0.92	0.98	0.95
Banks Chartered in the 1980s						
Southern California	0.87	0.47	0.05	0.48	0.17	0.25
Rest of California	0.98	0.67	0.71	0.76	0.95	0.81

Note: “Southern California” includes Los Angeles, Orange, Riverside, San Bernadino, Ventura, and San Diego Counties. “Rest of California” includes all remaining counties.

*Medians are weighted by number of banking organizations.

turn on assets of 78 basis points from 1990 to 1994, above the ROA of the other groups in the state (table 11.4). The statewide operations of the Big Four provided a diversified earnings base that offered some protection from the recession. For some members of this group, especially the Bank of America, earnings gathered from multistate operations provided additional support.⁵⁹ Generally, loan losses recorded mostly from Southern California units were offset or reduced by gains obtained from units located in other regions of California as well as in other states.

However, performance varied significantly among the four organizations. The best-performing were the Bank of America and Wells Fargo, both headquartered in Northern California. These organizations coupled diversity of statewide operations with considerable skill in containing credit losses. The Bank of America was not seriously affected by the recession, with an ROA of more than 1.0 percent from 1990 to 1994.⁶⁰ Net income on California operations totaled \$1.33 billion in 1992, \$1.56 billion in 1993, and \$1.70 billion in

⁵⁹ Bank of America and First Interstate Bank were the most diversified of the four organizations. Security Pacific Bank had some limited out-of-state holdings, while Wells Fargo Bank was primarily concentrated in California.

⁶⁰ During the 1980s the Bank of America was, and in the 1990s continued to be, California’s dominant financial institution. At the end of 1984 the bank operated 1,070 branches in California, accounting for 37 percent of statewide deposits and 49 percent of the net income earned by banks in the state. But the 1980s were a difficult period for the Bank of America, which absorbed large losses in 1985 (\$431 million), 1986 (\$442 million), and 1987 (\$780 million). In 1988, after selling a number of subsidiaries, the Bank of America resumed profitable operations, which have continued through the 1990s.

1994. After experiencing massive losses in the mid-1980s, the Bank of America instituted a rigorous system of credit controls.⁶¹ An industry report prepared by Smith Barney stated: “Thanks to its ill-fated commercial real estate lending, [Bank of America] was too busy overhauling its systems to make many [commercial real estate] loans in the 1985–1987 period. And it returned to the market with a conservative attitude. Once bitten, twice shy, or so we hope.”⁶² For Wells Fargo Bank, the fact that it focused on the California market made it especially vulnerable to the 1990–94 recession, particularly given its extensive commercial real estate exposure. The recession’s effect upon Wells Fargo was felt principally in 1991, when net income was only \$23 million and ROA only 0.04 percent. The bank rebounded in 1992 (net income of \$306 million, an ROA of 0.60 percent) and in 1993 and 1994 was one of the nation’s most profitable banks.

First Interstate Bank and Security Pacific Bank, both headquartered in Los Angeles, were considerably more damaged by the recession than the two organizations based in San Francisco. Unlike Wells Fargo, First Interstate Bank was not focused entirely upon its California operations. It sought a national presence and was operating in 16 states in 1989. During the 1980s, it moved into new geographic markets by licensing its name and services to banks not owned by the holding company. To a certain extent, the earnings from its interstate operations helped cushion the effect of the recession on loan losses in its primary market—Southern California. Nevertheless, during the recession First Interstate incurred a loss in 1991 (-0.24 ROA) and resumed marginally profitable operations in 1992 (0.07 percent ROA). The bank made a full recovery in 1993 and 1994, with returns on assets of almost 1 percent. (In 1995 First Interstate was purchased by Wells Fargo.)

Security Pacific, the state’s fourth major organization, focused its strategy during the 1980s primarily on serving retail customers and middle-market business firms in California.⁶³ Despite the organization’s solid profit performance during the 1980s, the recession had a major effect on Security Pacific’s operations and its heavy concentration of loan exposures within the state. Security Pacific was the only major California bank that was threatened by failure during the early 1990s, registering a loss on assets of 1.04 percent (\$555 million) in 1991. In 1992, weakened by the recession, it was purchased by the Bank of America. Before the acquisition, which *The Wall Street Journal* characterized as “a salvage operation,” the Security Pacific holding company had posted total losses of \$1.41 billion in its three preceding quarters.⁶⁴ After the acquisition, as a result of the continuing recognition of loss in Security Pacific’s loan portfolio, the Bank of America eventually

⁶¹ See description of the credit process for commercial real estate in Bank of America Corporation, *Annual Report* (1992), 25.

⁶² Smith Barney, *California Banking Report* (October 18, 1990), 8.

⁶³ Janet Lewis, “The War for California,” *Institutional Investor* (July 1990): 90.

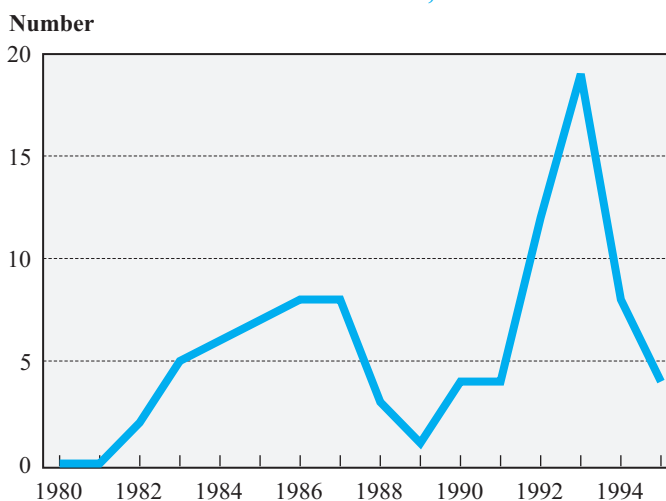
⁶⁴ Ralph T. King, Jr., “New Bank Behemoth Has Big Burdens, Rich Potential,” *The Wall Street Journal* (April 23, 1992), 1.

charged \$3.6 billion of the \$4.2 billion acquisition price to goodwill.⁶⁵ Nevertheless, the three large banks that then remained rebounded strongly during 1994, the final year of the recession. Wells Fargo, Bank of America, and First Interstate had ROAs of 1.63 percent, 1.15 percent, and 0.97 percent, respectively, while all U.S. banks earned 1.11 percent on assets (table 11.4).

Effects of the Recession on California Banking (III): Failed Banks

Given the severity of the California recession, the number and size of bank failures in California were relatively modest. Over the 1990–94 period, only 47 banks with total assets of \$3.5 billion failed (see figure 11.9 and table 11.10). Total resolution costs to the FDIC amounted to \$766 million. All failed institutions were relatively small—the largest had assets of only \$564 million; 10 banks had assets between \$100 million and \$200 million; the remaining 36 banks had assets under \$100 million. The sharp decline in interest rates in the early 1990s played a role in reducing the number of bank failures in California and else-

Figure 11.9
California Bank Failures, 1980–1995



⁶⁵ Bank of America Corporation, *Annual Report* (1992), 48.

Table 11.10
Bank Failures in California by Region, 1990–1994

Institution	Failure Date	Assets (\$Thousands)	Resolution Costs (\$Thousands)	County
Northern California				
1 Alvarado Bank*	01/25/91	\$ 30,499	\$ 4,323	Contra Costa
2 Financial Center Bank NA*	05/04/92	198,802	26,895	San Francisco
3 Statewide Thrift & Loan Co.*	11/13/92	10,335	2,341	Santa Clara
4 American Bank & Trust Co.	06/18/93	35,577	6,261	San Mateo
5 Regent Thrift & Loan Assn.*	09/17/93	7,383	1,429	San Francisco
6 Barbary Coast National Bank*	05/19/94	10,453	656	San Francisco
Total		\$ 293,049	\$ 41,905	
Central Valley				
1 Placer Bank of Commerce*	03/27/92	\$ 29,447	\$ 5,340	Placer
2 Valley Commercial Bank*	04/24/92	25,495	4,852	San Joaquin
Total		\$54,942	\$ 10,192	
Southern California				
1 Wilshire Bank National Assn.*	05/31/90	\$ 22,818	\$ 3,435	Los Angeles
2 Merchant Bank of California*	06/08/90	52,501	3,745	Los Angeles
3 First Pacific Bank	08/10/90	112,980	43,514	Los Angeles
4 Far Western Bank*	12/14/90	157,763	25,398	Orange
5 Manilabank California*	03/08/91	20,144	4,067	Los Angeles
6 Landmark Thrift & Loan Assn.	07/12/91	13,974	2,143	San Diego
7 Mission Valley Bank NA*	10/24/91	40,637	14,241	Orange
8 Assured Thrift & Loan Assn.	01/03/92	51,956	18,810	Orange
9 Independence Bank	01/30/92	564,201	139,551	Los Angeles
10 Mission Viejo National Bank*	02/28/92	98,283	29,957	Orange
11 United Mercantile B & T Co. NA*	03/20/92	30,218	9,893	Los Angeles
12 Bank of Beverly Hills	04/03/92	118,136	31,686	Los Angeles
13 North American Thrift & Loan	05/29/92	21,337	4,496	Orange
14 American Interstate Bank	06/12/92	40,943	7,239	Orange
15 Huntington Pacific Th&L Assn.	12/04/92	40,980	16,064	Orange
16 Columbia National Bank*	01/22/93	45,880	16,844	Los Angeles
17 First American Capital Bk. NA*	03/04/93	26,355	6,946	Orange
18 Olympic National Bank*	04/02/93	84,025	23,641	Los Angeles
19 Premier Bank*	04/08/93	51,174	9,219	Los Angeles
20 First Western Bank NA*	04/15/93	14,298	3,319	San Diego
21 American Commerce NB*	04/30/93	137,774	28,434	Orange
22 Wilshire Center Bank NA*	05/06/93	9,239	5,431	Los Angeles
23 Palos Verdes National Bank*	05/20/93	49,630	11,081	Los Angeles
24 Capital Bank of California*	06/18/93	200,138	62,163	Los Angeles
25 City Thrift & Loan Assn.	07/09/93	41,676	18,046	Los Angeles
26 First La Mesa Bank*	07/09/93	77,361	15,334	San Diego
27 Maritime Bank of California*	08/27/93	30,857	6,987	Los Angeles
28 Western United National Bank*	09/24/93	19,386	6,463	Los Angeles
29 Brentwood Thrift & Loan Assn.	10/15/93	12,972	3,271	Los Angeles
30 Mid City Bank National Assn.*	10/21/93	87,750	14,190	Los Angeles
31 Bank of San Diego	10/29/93	296,470	61,546	San Diego
32 Century Thrift & Loan	11/05/93	35,363	11,993	Los Angeles
33 Mechanics National Bank	04/01/94	149,643	41,279	Los Angeles
34 Pioneer Bank*	07/08/94	107,611	20,008	Orange
35 Bank of San Pedro	07/15/94	112,109	31,628	Los Angeles
36 Commercebank	07/29/94	119,785	14,732	Orange
37 Western Community Bank*	07/29/94	46,794	6,934	Riverside
38 Bank of Newport	08/12/94	151,026	28,212	Orange
39 Capital Bank	08/26/94	7,546	14,183	Los Angeles
Total		\$3,371,733	\$816,123	
Grand Total		\$3,719,724	\$868,220	

* Banks chartered between 1980 and 1990.

where.⁶⁶ The decline in interest rates produced a sharply upward-sloping yield curve, which increased the value of bank security portfolios and raised net interest margins on new loans. In California, the gains from lower interest rates absorbed losses caused by the recession and permitted some institutions to write off problem assets.

The recession had the greatest effect, in terms of failures, on banks chartered during the 1980s, especially those located in Southern California. Twenty-nine of the 47 failed banks (62 percent) had been chartered during the 1980s,⁶⁷ and 39 of the 47 were headquartered in Southern California—22 of the failures involved banks headquartered in Los Angeles County, nearly four times the number of failures that occurred in the nine-county San Francisco Bay area.⁶⁸ Only 8 failures occurred in Northern California: the 6 that occurred in the Bay Area, and 2 located in the Central Valley area (table 11.10).

Nationally, California led the nation in total number of bank failures in 1993 (19) and 1994 (8), replacing Texas, which had the lead from 1986 to 1992. But even so, during the first five years of the 1990s California bank failures accounted for only approximately 10 percent of the nation's failed banks, 2.6 percent of failed assets, and 5.7 percent of resolution costs.⁶⁹ Furthermore, the 47 California bank failures constituted only a fraction of the number of failures that had occurred in the Southwest and Northeast. In Texas, for example, 485 banks failed during the 1986–92 period. In addition, during the second half of the 1980s, nine of the ten largest Texas banking organizations had either been closed or required outside assistance, whereas only one of the four largest California organizations—Security Pacific Bank—was threatened by the recession. In the Northeast crisis, 111 banks failed during the three years 1990–92; in 1991 alone there were 52 failures, more than all of the failures in the California recession. In addition, the largest failure in California had total assets of only \$564 million, whereas in the Northeast much larger institutions were closed in the 1990–92 period. To this extent, the California banking crisis was indeed “different” from those in other regions of the nation.

⁶⁶ From 1990 to 1994 the federal funds rate declined from 8.1 to 4.2 percent. This decline significantly increased the U.S. banking industry's net income (which rose from \$16.6 billion to \$44.7 billion) and ROA (from 0.50 to 1.15 percent). In addition, over the same period, the number of bank failures declined from 168 to 13.

⁶⁷ Ten of the failed banks were chartered in 1983, four in 1982, five in 1981, four in 1980, two in 1984, and one each in 1985, 1986, 1987, and 1988.

⁶⁸ Independence Bank was headquartered in Los Angeles and had total assets of \$564 million at the time of failure. Thus, it was not counted as a “community bank.”

⁶⁹ During this period a total of 466 banks failed nationally, with total assets of approximately \$128 billion and resolution costs of \$13.5 billion.

California Bank Failures and Real Estate Investment

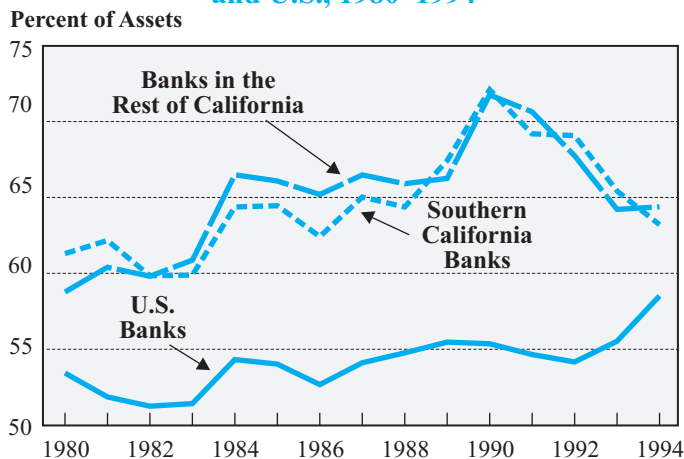
What made California banks particularly vulnerable to an economic slowdown were key investment choices made during the 1980s. In this period California banks' ratios of total loans and leases to assets substantially exceeded the national averages (and in 1990 went above 70 percent). (See figure 11.10.)

In addition to maintaining relatively high loans-to-assets levels, the California banks also altered the risk orientation of their lending programs by originating increasing proportions of real estate loans as a percentage of total assets. In 1989 these types of loans amounted to more than 30 percent, significantly above the level held at the end of 1980 (see figure 11.11). Exposure continued to increase through the early part of the recession before leveling off in 1991 at just above 40 percent of total assets. Although this trend toward greater real estate lending was occurring nationally, the proportion of real estate loans to total assets was significantly higher for California banks than for the U.S. banking industry. The higher levels of real estate lending for California banks were reflected primarily in the holdings of commercial real estate loans, which from 1980 to year-end 1989 increased from approximately 8 percent to almost 20 percent of total assets. This trend continued into the recession, with commercial real estate loans leveling off in 1991 at approximately 25 percent of total assets (see figure 11.12).

The switch to real estate lending was partly a function of the loss of market share of commercial and industrial loans to the capital markets and to other competitors, a trend that had been occurring nationally in the U.S. banking industry for some time (see figure 11.13). In California between 1984 and year-end 1989, the median commercial and industrial loans dropped from more than 20 percent of total bank assets to approximately 16 percent. These types of loans continued to decline in importance in California bank loan portfolios, averaging between 10 and 15 percent in 1994. Another reason for the switch to real estate lending was that the surge in population growth in the state during the 1980s created new investment opportunities for such activity. As mentioned above, California attracted 6 million new residents during the decade, accounting for nearly 25 percent of the national population increase. In dollar values, between 1980 and year-end 1989 annual real estate lending by California banks rose from only \$47 billion to approximately \$105 billion.

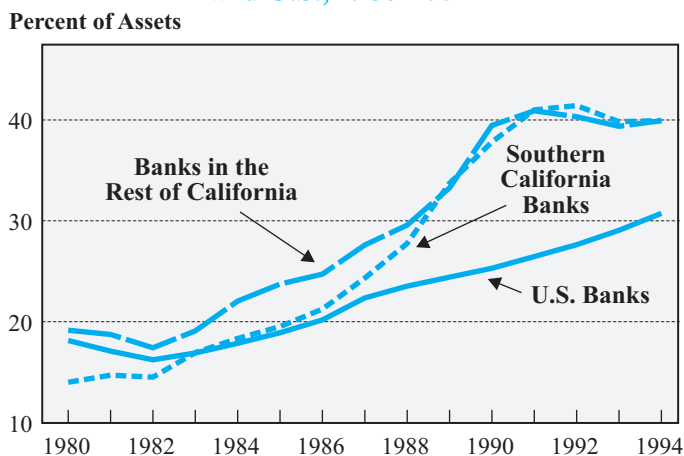
The high proportion of real estate loans in California bank loan portfolios during this period accounted for a substantial percentage of nonperforming assets as the recession hit in the early 1990s. This fact was reflected in the rising median volume of nonperforming assets and median net charge-offs on loans and leases (see figures 11.14 and 11.15). The high levels of nonperforming loans and charge-offs significantly affected the earnings performance of California banks during these same years (table 11.9).

Figure 11.10
Median Total Loans and Leases,
Southern California versus the Rest of California
and U.S., 1980–1994



Note: Southern California consists of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties.

Figure 11.11
Median Total Real Estate Loans,
Southern California versus the Rest of California
and U.S., 1980–1994



Note: Southern California consists of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties.

Figure 11.12
Median Total Commercial Real Estate Loans,
Southern California versus the Rest of California
and U.S., 1980–1994

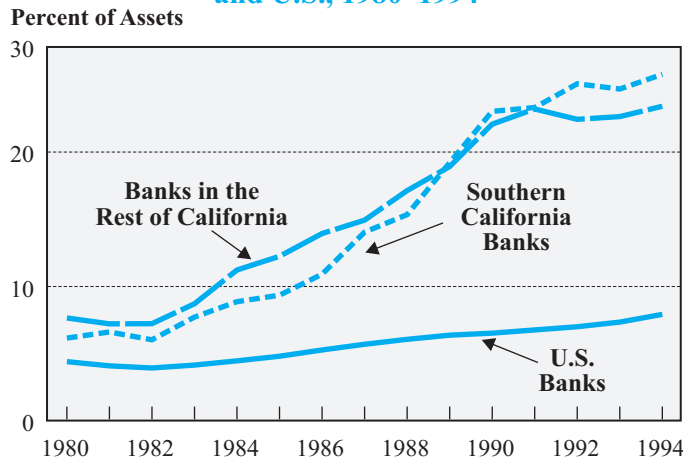


Figure 11.13
Median Total Commercial and Industrial Loans,
Southern California versus the Rest of California
and U.S., 1980–1994

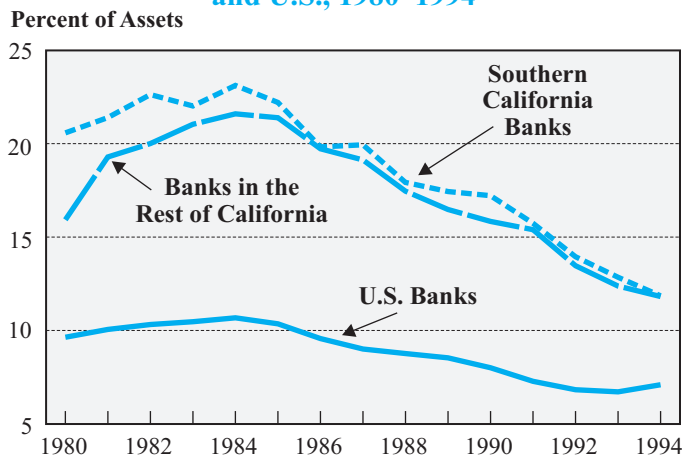
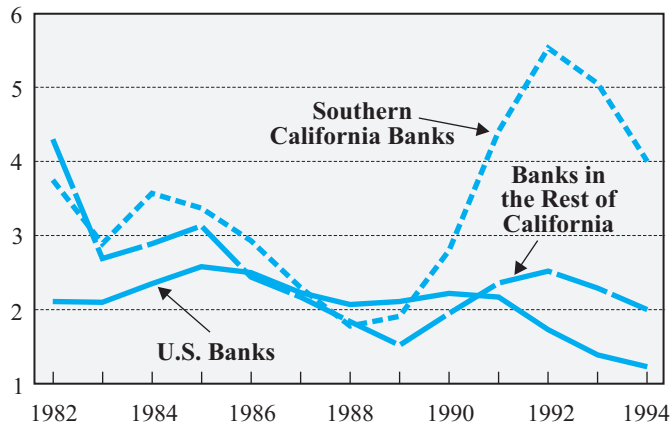


Figure 11.14
Median Nonperforming Assets,
Southern California versus the Rest of California
and U.S., 1982–1994

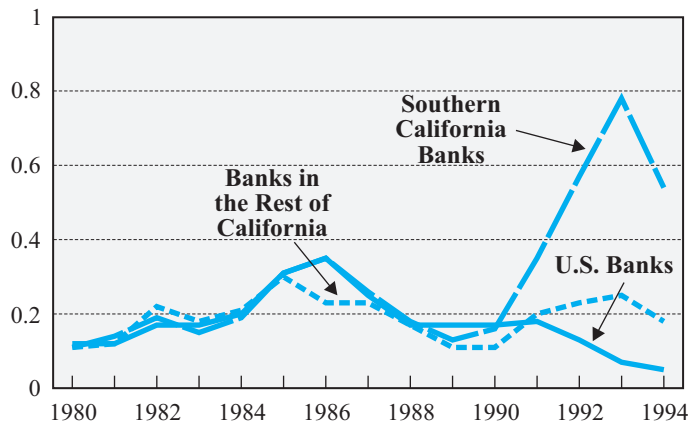
Percent of Assets



Note: Southern California consists of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties.

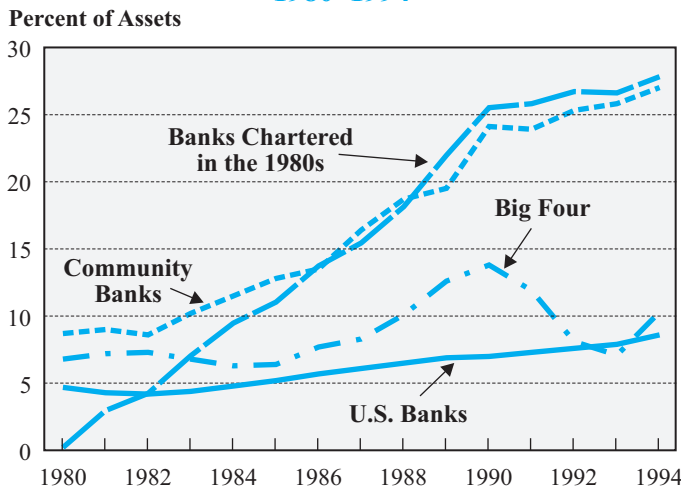
Figure 11.15
Median Net Charge-Offs on Loans and Leases,
Southern California versus the Rest of California
and U.S., 1980–1994

Percent of Assets



Note: Southern California consists of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties.

Figure 11.16
Median Commercial Real Estate Loans,
California Banking Groups versus the U.S.,
1980–1994



Within the individual banking groups, although all three groups increased their real estate lending during the 1980–89 period, their portfolio choices and risk strategies differed. The Big Four organizations were less aggressive lenders in commercial real estate than community banks and banks chartered in the 1980s. (Commercial real estate lending includes construction and land development loans, loans secured by multifamily residential properties, and loans secured by nonfarm nonresidential properties.) Median commercial real estate loans as a percentage of total assets at the Big Four amounted to approximately 13 percent at the end of 1989, up from only approximately 7 percent in 1980 (see figure 11.16). For California community banks, however, median commercial real estate loans increased significantly between 1980 and year-end 1989, rising from only approximately 9 percent of total assets to approximately 20 percent. A similar pattern was observed for banks chartered during the 1980s: between 1980 and 1989, median commercial real estate loans as a percentage of total assets increased by almost 21 points, going from less than 1 percent to approximately 22 percent. For community banks and banks chartered during the 1980s, this type of lending continued to increase during the recession years of the early 1990s (figure 11.16). When the recession was at its fullest, the relatively high proportion of

commercial real estate lending played a leading role in the majority of failures of both community banks and banks chartered in the 1980s.⁷⁰

Conclusion

The series of regional recessions during the 1980s and early 1990s reached California last. However, in sharp contrast to the recessions in the Southwest and Northeast, where large numbers of banks failed and huge insurance losses were recorded, California experienced relatively few bank failures and relatively low losses. This was the situation despite the recession that was the deepest the state had experienced since the 1930s. Some reasons for this comparative mildness include, first, the fact that short-term interest rates declined during the early 1990s, allowing banking industry profits to increase. Second, the most serious consequences of the recession were localized in Southern California, so that bank failures were primarily restricted to banks in this geographic area. Most banks headquartered outside of Southern California were not seriously challenged by the recession. Third, most failures occurred among relatively smaller community banks and/or banks that had been chartered in the 1980s, so that losses to the insurer were limited. Fourth, primarily because of the geographic portfolio diversification (both inside and outside California) of the four statewide organizations, the loan losses these organizations experienced in Southern California were mostly offset or reduced by gains from units in other regions. Thus, the effect of the recession was not as pronounced on the large organizations as on banks whose loan portfolios were restricted to local markets. This result also differentiates the California bank crisis from the other regional crises: in California no large banking organization failed.⁷¹

However, although there were several differences between the California recession and the other regional recessions, there were also certain shared elements. These included a boom psychology that spurred development and inflated real estate prices; a shift by commercial banks into real estate lending, particularly high-risk commercial and construction lending; and the vulnerability of banks chartered during the 1980s. At least in these three respects, the California experience essentially paralleled the experiences in the Southwest and the Northeast.

⁷⁰ The correlation between commercial real estate lending and deterioration in the asset quality of California community bank portfolios between 1990 and 1994 has been documented. See two articles by Gary C. Zimmerman: "California's Community Banks in the 1990s," *FRBSF Weekly Letter* (January 26, 1996), and "Factors Influencing Community Bank Performance in California," Federal Reserve Bank of San Francisco *Economic Review*, no. 1 (1996): 34–36. For a more general discussion of the issue, see Lynn E. Brown and Karl E. Case, "How the Commercial Real Estate Boom Undid the Banks," in *Real Estate and the Credit Crunch*, ed. Lynn E. Brown and Eric Rosengren (1992), 57–97.

⁷¹ Because Security Pacific Bank was purchased by Bank of America without any assistance from the FDIC, it was not counted as a bank failure.

Chapter 12

Bank Examination and Enforcement

Introduction

The 1980s and early 1990s were undoubtedly a period of greater stress and turmoil for U.S. financial institutions than any other since the Great Depression. Over this period more than 1,600 commercial and savings banks insured by the FDIC were closed or received FDIC financial assistance. As a consequence, the bank regulatory system came under intense scrutiny, and fundamental questions were raised about its effectiveness in anticipating and limiting the number of bank failures and losses to the deposit insurance fund.

Effective supervision can be achieved in two ways: (1) problems can be recognized early, so that corrective measures can be taken and the bank returned to a healthy condition; (2) supervision can limit losses by closely monitoring troubled institutions, limiting their incentives to take excessive risks, and ensuring their prompt closure when they become insolvent or when their capital falls below some critical level.

This chapter reviews and analyzes the bank supervisory system during the 1980s and early 1990s by focusing principally upon bank examination and enforcement policies. The first part surveys the federal agencies' bank examination policies during the 1980s and early 1990s and discusses how changes in bank supervisory philosophy affected examination staffing and frequency, and what the implications of these policies were for losses to the deposit insurance fund. The second part presents a retrospective on the effectiveness of bank supervisory tools used during this period, focusing on the ability to identify troubled banks and the ability to limit risk taking in these institutions by applying enforcement actions. The final part of the chapter discusses the implications for the bank supervisory process of the Prompt Corrective Action (PCA) provisions of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA). An appendix describes the bank examination process, including the bank rating system and the nature and types of regulatory enforcement actions.

Bank Supervisory Policies, 1980–1994

Given the constraints imposed on banking activities by the chartering authorities and by legislation and regulation, the primary tools the banking agencies use to ensure the health and stability of the financial system and the solvency of the bank and thrift insurance funds are bank examinations and enforcement actions. Currently there are four basic types of bank examinations. The first focuses on the bank's trust department, to determine whether it is being operated in accordance with established regulations and standards. The second investigates whether the bank is in compliance with various measures designed to protect consumers, such as truth-in-lending requirements, civil rights laws, and community reinvestment regulations. A third type of bank examination focuses on the integrity of the bank's electronic data processing (EDP) systems. Finally and most important, safety-and-soundness examinations focus on five key areas affecting the health of the institution: capital adequacy, asset quality, management, earnings, and liquidity (CAMEL).¹ A bank is rated from 1 to 5 in each area, or component (1 representing the highest rating, 5 the lowest rating). After the overall condition of the bank is evaluated, a composite safety-and-soundness rating, known as a CAMEL rating, is also assigned. A composite CAMEL rating of 1 is given to banks performing well above average. A rating of 2 is given to banks operating adequately within safety-and-soundness standards. A CAMEL rating of 3 indicates below-average performance and some supervisory concerns. Performance well below average yields a CAMEL rating of 4, indicating that serious problems exist at the bank and need to be corrected. Finally, a CAMEL rating of 5 indicates severely deficient performance and the high probability of failure within 12 months. (The appendix includes a detailed description of the CAMEL rating system.) A serious deficiency in any of the areas covered by trust, EDP, and safety-and-soundness exams could lead to failure, but only safety-and-soundness examinations, because of their broad coverage, are discussed here.

Through the early 1970s, all banks—regardless of size and condition—received an examination approximately every 12 months.² But in the middle to late 1970s, bank supervision policy changed significantly, and the change remained in place through the first half of the 1980s. The banking agencies began placing relatively more weight on off-site sur-

¹ As of January 1, 1997, the bank and thrift regulatory agencies added a sixth component to the safety-and-soundness examination, known as the "sensitivity-to-market-risk" component. After that date, therefore, the CAMEL rating system would be referred to as "CAMELS." The new component evaluates how well institutions are prepared to protect bank earnings and capital from shifts in interest rates, in foreign exchange rates, and in commodity prices, and from fluctuations in portfolio values. In this chapter, the sixth component is not discussed.

² The discussion of examination staffing and frequency is partly based on Lee Davison, "Bank Examination and Supervision" (unpublished paper), FDIC, February 1996.

veillance and relatively less on on-site examinations.³ This shift occurred partly because the Call Report data furnished by banks were increasingly comprehensive and partly because sophisticated computer models had been developed for analyzing these data; the increases in comprehensiveness and analytical ability allowed the agencies to make extensive use of off-site surveillance. They viewed off-site analysis as potentially reducing the need for on-site examination visits in nonproblem institutions; it would also reduce examination costs and the burden upon banks. These decisions had widespread implications for subsequent examiner staffing levels and examination frequency, both of which were being reduced during the first half of the 1980s. By the latter half of the decade, however, off-site analysis had become relatively less important in the bank evaluation process vis-à-vis on-site examinations;⁴ and with passage of FDICIA, frequent on-site examinations again became required, this time as a matter of law.

Other important changes in supervisory activity also occurred during the 1980s. Both the Office of the Comptroller of the Currency (OCC) and the FDIC sought to concentrate more examination resources on banks that posed greater systemic risk and relatively less on nonproblem institutions.⁵ All three agencies began cooperative examination programs during the early 1980s.⁶ Both the FDIC and the Federal Reserve System increasingly made use of state bank examinations for nonproblem institutions, often alternating examinations with state regulators in a move to increase efficiency. (See the appendix to this chapter for additional details.)

OCC Policies

The National Bank Act of 1864 mandated that the OCC examine all national banks twice a year but allowed an extension to three examinations every two years. This policy stood until 1974, when the Comptroller of the Currency commissioned a review of the agency's operations from Haskins & Sells, a national accounting firm.⁷ The Haskins & Sells report had a major impact on the theory and practice of federal bank supervision. It criticized the OCC's existing examination policy as inefficient and recommended that the

³ This shift in policy took place primarily at the Office of the Comptroller of the Currency and the FDIC. Although the Federal Reserve System enhanced its off-site surveillance capabilities as well, it did not significantly reduce its commitment to annual examinations for state member banks regardless of size.

⁴ FDIC, *Annual Report* (1990), 20.

⁵ The targeting of problem banks for more frequent examinations and enhanced supervision is documented in John O'Keefe and Drew Dahl, "The Scheduling and Reliability of Bank Examinations: The Effect of FDICIA" (unpublished paper), October 1996.

⁶ The cooperative examination programs primarily meant that the two federal banking agencies that had regulatory oversight of state banks (the FDIC and the Federal Reserve System) accepted state examinations in place of federal examinations if certain conditions were satisfied. In addition, all three federal banking agencies occasionally scheduled joint examinations, and they shared examination information with each other as needed.

⁷ The review was ordered primarily in response to the failure of the United States National Bank.

agency make greater use of statistical, computerized off-site analysis, focus examination resources on weak banks, and, in examinations, put more emphasis on evaluating bank management and systems of internal control and less on doing detailed audits of bank assets.⁸ These recommendations were gradually adopted beginning in 1976, when the OCC extended examination schedules to 18 months for banks with total assets of less than \$300 million.⁹ At the same time, the OCC also established a risk-based examination structure by categorizing banks according to size: multinational, regional, and community.¹⁰

This risk-based structure was further refined under the “hierarchy of risk” policy in 1984. This new approach defined risk categories according to a bank’s size and perceived condition. Resident examiners were placed in the 11 largest multinational banks in 1986, and beginning early in the 1990s some larger regional banks also received resident examiners. In general, on-site resources moved toward the larger institutions and away from smaller banks that were perceived to have no problem. This development was accompanied by the increased use of continuous off-site analysis as well as by the use of targeted examinations (examinations that focused on a particular segment of a bank’s business) rather than full-scope examinations.¹¹

FDIC Policies

Until 1976, the FDIC required that all institutions under its supervision receive a full-scope examination annually. Starting in 1976 and continuing through the early 1980s, the examination schedule was stretched out: only problem banks (those with CAMEL ratings of 4 or 5) were required to receive an annual full-scope examination; banks with lesser problems (CAMEL 3) were to be examined (full scope) at least every 18 months; and banks in satisfactory condition (CAMEL 1 or 2) were to receive either a full-scope or a modified (that is, somewhat less comprehensive) examination at least every 18 months.¹² During the early 1980s, the FDIC also started to emphasize the expanded use of off-site monitoring as

⁸ See OCC, *Haskins & Sells Study: 1974–75* (1975), A2–6. See also Jesse Stiller, *OCC Bank Examination: A Historical Overview*, OCC, 1995, and Eugene N. White, *The Comptroller and the Transformation of American Banking, 1960–1990* (1992), 32–34.

⁹ White, *Comptroller*, 38.

¹⁰ Stiller, *OCC Bank Examination*, 27–28.

¹¹ In 1982, Comptroller C. T. Conover noted that in 1980 the OCC put 70 percent of its effort into examining banks constituting only 20 percent of national bank assets and said the agency had to “examine smarter” by reducing the frequency of on-site examinations of small banks (changing the normal frequency for such banks from 18 months to 3 years) and by supplementing examinations with bank visitations (Linda W. McCormick, “Comptroller Begins Major Revamp,” *American Banker* [April 29, 1982], 15). The movement toward electronic off-site analysis was symbolized by the cake at the OCC’s 120th anniversary celebration in 1983: it was made in the shape of a computer (Andrew Albert, “Comptroller’s Office Throws a Bash,” *American Banker* [November 4, 1983], 16).

¹² FDIC, *Annual Report* (1979), 4. For banks rated 1 or 2 in states where state examinations were accepted, the FDIC allowed alternating federal and state exams (FDIC, *Annual Report* [1980], 8–9).

well as the prioritization of examinations, which were to focus primarily upon problem institutions or those that posed the most risk to the deposit insurance fund. In 1983, the examination interval for nonproblem banks was extended to 36 months. By 1985, problem banks (CAMEL 4- and 5-rated) were to receive examinations every 12–18 months, CAMEL 3-rated banks every 12–24 months, and higher-rated institutions every 36 months, though for banks with less than \$300 million in total assets this could be extended to five years.¹³

By 1986, facing a record number of problem banks, some of which had been highly rated, the FDIC revised its examination policies. The new policy called for all 1- and 2-rated banks to receive on-site examinations at least every 24 months, and all other banks to be examined by either the FDIC or state examiners at least every year. At year-end 1986, 1,814 commercial banks subject to FDIC supervision had not been examined in three years; by 1988 the number was reduced to 197, and by the following year, to 92.¹⁴ With the passage of FDICIA, the return to the examination policies of the 1970s was complete: the law mandated annual on-site examinations of all banks except highly rated small institutions, for which the interval could be extended to 18 months.

Federal Reserve Policies

The Federal Reserve System (FRS) also changed its examination policies in the early 1980s, placing more emphasis on remote surveillance and slightly stretching out examination schedules, but it varied the examination frequency much less than the other agencies did. In 1981, the FRS shifted from a policy of annual examinations for all state member banks to one that allowed the interval to extend to 18 months.¹⁵ This policy remained in place until 1985, when the previous annual requirement for state member banks was reinstated.¹⁶

¹³ FDIC, *Annual Report* (1983), xi; and *Annual Report* (1985), 14–15. The expanded intervals for on-site examinations were paired with the requirement that either bank visitations or off-site reviews be undertaken at least annually for 1- and 2-rated banks, every six months for 3-rated banks, and every three months for 4- and 5-rated banks. Visitations by bank regulators generally involve meetings with bank officials to discuss a variety of issues concerning the bank's operations. Some examples of these issues are compliance with formal and informal corrective orders, progress in correcting deficiencies noted at the previous examination, and any other issues deemed relevant to the sound operations of the bank.

¹⁴ FDIC, *Annual Report* (1988), 2; and *Annual Report* (1989), 8.

¹⁵ FRB, *Annual Report* (1981), 180.

¹⁶ There were gradations to the Federal Reserve policy. Multinational state member banks and all banks with more than \$10 billion in assets were to receive annual full-scope examinations as well as (in most cases) an additional targeted examination. Such examinations had to be conducted either independently by the Federal Reserve or jointly with state authorities. Gradations of smaller banks allowed progressively less Federal Reserve involvement with examinations, but in all cases annual examinations were still mandated. See "Fed Policy for Frequency and Scope of Examinations of State Member Banks and Inspections of Bank Holding Companies," *American Banker* (October 10, 1985), 4–5; on follow-up meetings, see *American Banker* (October 11, 1985), 4.

Examination Staffing and Frequency

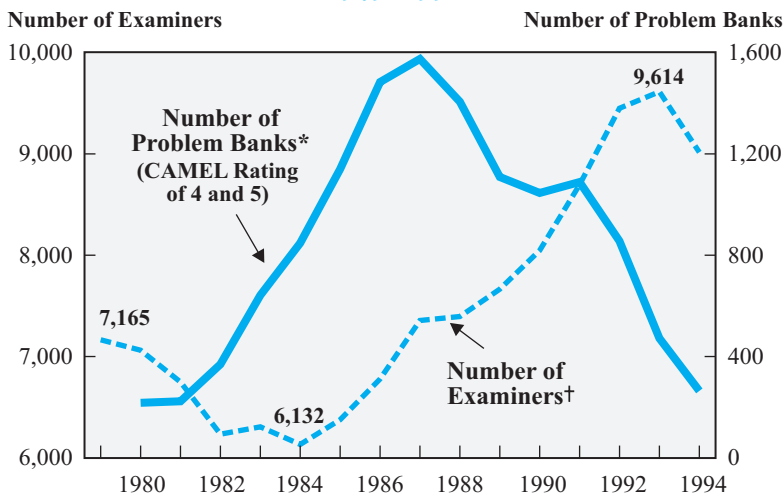
The agencies' shift in supervisory philosophy in the early 1980s, placing more emphasis on off-site analysis and relatively less on on-site examination, had major implications for examination staffing and therefore for the ability to detect problem institutions at early stages. From 1979 through 1984 both the FDIC and the OCC reduced their examiner resources: the FDIC's field examination staff declined 19 percent, from 1,713 to 1,389, and the OCC's declined 20 percent, from 2,151 to 1,722. The Federal Reserve's examination capacity remained almost unchanged. State examiner levels, however, declined, from approximately 2,496 to 2,201. From 1979 through 1984, overall examiner resources at federal and state levels declined by 14 percent, from 7,165 to 6,132 (see figure 12.1).¹⁷

This substantial reduction in staff, especially at the federal level, came about primarily by means of a series of freezes on the hiring of new examiners at the FDIC and the OCC in the late 1970s and the early 1980s; these freezes were consistent with the policies of increased off-site surveillance and with the desire of first the Carter administration and then the Reagan administration to lessen the size of government.¹⁸ As a consequence of the freezes, staff shortages developed in subsequent years and continued until and even beyond the mid-1980s. By year-end 1985, for example, staffing levels at the FDIC were 25 percent below authorized levels. In addition to freezes in hiring, high turnover rates among examiners also helped produce shortages in examiner staffs. The high turnover rates were due in part to the pay differential between the banking agencies and the private sector. Unfilled examiner vacancies persisted until the mid-1980s, when the agencies started to hire new examiners as the number of problem banks increased (rising from 217 to 1,140 between 1980 and 1985—more than a fivefold increase). Thus, during a period of rapidly growing instability in banking with an unprecedented number of problem banks, the agencies' examination staffs consisted of large numbers of inexperienced personnel. As a consequence, experienced staff were forced to devote considerable effort to training new examiners and were correspondingly less available to conduct work on safety-and-soundness examina-

¹⁷ The reduction in examination staff and examination frequency over the period 1981–85 was not a function of a reduced number of banks or assets under supervision by the regulatory agencies. For the OCC, for example, the number of national banks increased from 4,468 to 4,959; total assets under supervision increased from \$1.2 trillion to \$1.6 trillion; and the assets per examiner for all national banks increased from \$668 million to \$910 million. (In Texas, the number of national banks increased from 694 to 1,058.) For the FDIC, the number of state nonmember banks did decline about 5 percent, going from 9,257 to 8,767, but the total assets under supervision increased from \$589 billion to \$805 billion, and the assets per examiner increased from \$355 million to \$520 million. (In Texas, the number of state nonmember banks actually increased slightly, going from 786 to 808.) For the Federal Reserve, the total number of state member banks increased from 1,020 to 1,070; the total assets under supervision increased from approximately \$387 billion to \$495 billion; and assets per examiner grew from \$484 million to \$593 million. (There were only a small number of state member banks in Texas.)

¹⁸ Under the directives of the Reagan administration in 1981, the OCC instituted a hiring freeze for all examiners. The FDIC, as an independent agency, was under no legal obligation to follow suit but chose to freeze its examination staff in 1981. In the late 1970s, the Carter administration had also attempted to limit the size of the federal work force.

Figure 12.1
Field Examination Staffs of the Federal and State
Banking Agencies, and Total Number of Problem Banks,
1979–1994



Sources: FDIC, FRB, OCC, and Conference of State Bank Supervisors.

* Because problem banks were not classified as those having 4 and 5 CAMEL ratings until 1980, the number of problem banks for 1979 is not included.

† Total number of examiners includes all federal and state bank regulators.

tions.¹⁹ From 1986 to 1992, for example, approximately half of the supervisory staff at the FDIC consisted of assistant examiners with less than three years' experience.

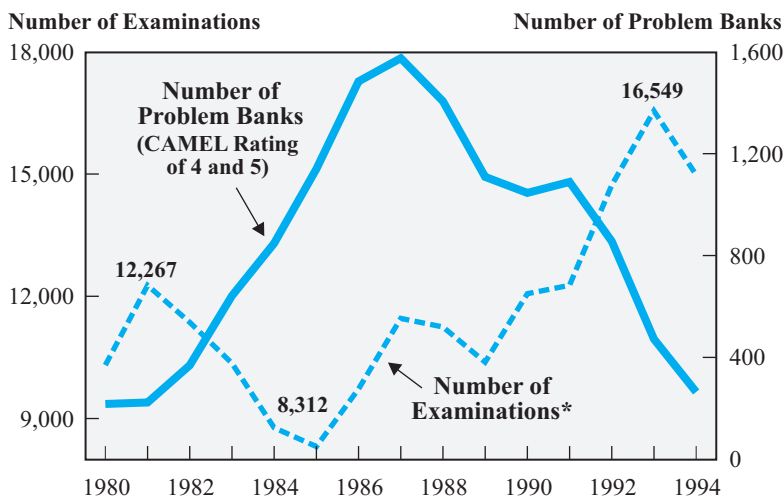
Furthermore, as problem banks multiplied in the Midwest and Southwest, resources were shifted from areas with seemingly healthy banks, such as the Northeast. Experienced FDIC examiners in the Northeast routinely spent a quarter of their time out of the region assisting with problems elsewhere. Moreover, as bank failures increased, bank examination personnel were detailed to support bank resolution activities. In 1984, the FDIC deployed 11 percent of its total examination staff time to such matters. This shift of resources among regions and across functions placed additional pressure on the examination force's ability to detect problem banks, especially in a seemingly healthy area like New England, where a crisis was about to erupt.

¹⁹ The training cycle for newly hired examiners is lengthy and complicated; approximately three to five years are required before a new hire is a fully trained, commissioned examiner.

The reduction in examination staff, as mentioned above, was partly a side effect of the agencies' decision to reduce the number of bank examinations and increase the median interval between examinations. The total number of examinations declined from a high of approximately 12,267 in 1981 to a low of approximately 8,312 in 1985, a drop of more than 30 percent (see figure 12.2). By far the largest decline occurred at state nonmember banks, where on-site examinations decreased more than 40 percent, from approximately 8,000 in 1981 to approximately 4,600 during 1985. Declines were more moderate for national banks and state member banks: both declined less than 15 percent during the same period. In addition to frequency, the scope of examinations was also curtailed, as limited resources gave the agencies no option but to continue to modify their examination procedures.

Reductions in examination frequency are tantamount to extensions of examination intervals. Between 1979 and 1986, the mean examination interval in days for all commercial and savings banks increased dramatically from 379 to 609 (see table 12.1). The intervals were increasing for all CAMEL rating categories, but especially for highly rated institutions. For 1-rated banks, the interval increased from 392 to 845 days; for 2-rated banks, from 396 to 656 days. The interval also grew for poorly rated institutions, but not as much.

Figure 12.2
Total Number of Examinations per Year
and Total Number of Problem Banks, 1980–1994



Sources: FDIC, FRB, and OCC.

* Total number of examinations includes all examinations conducted by federal agencies and all state examinations accepted by federal authorities.

Table 12.1
Mean Examination Interval for Commercial Banks,
by CAMEL Rating, 1979–1994
(Days)

Year	Composite CAMEL Rating					All Banks
	1	2	3	4	5	
1979	392	396	338	285	257	379
1980	456	460	402	312	286	450
1981	493	482	342	279	236	472
1982	459	446	321	262	249	434
1983	500	450	309	261	243	436
1984	620	499	327	303	270	480
1985	761	596	369	324	284	564
1986	845	656	407	363	313	609
1987	754	597	386	354	284	556
1988	615	497	376	339	315	477
1989	562	487	373	324	296	466
1990	463	436	331	303	270	411
1991	420	412	323	286	273	385
1992	409	396	319	291	278	373
1993	400	379	296	286	232	363
1994	380	357	296	279	245	354

Sources: FDIC, FRB, and OCC.

For 4-rated banks, the interval increased from 285 to 363 days; for 5-rated banks, from 257 to 313 days. These data indicate that the regulatory policy in the early 1980s of focusing more resources on the examination of troubled banks and thus reducing examination intervals for these organizations was generally not being carried out successfully.²⁰

Data on examination intervals by bank regulatory agency show that for the period 1980–86, overall examination intervals increased for all three agencies (see table 12.2). For the OCC, the interval increased about 45 percent, or from 417 to 604 days. For the FDIC, 37 percent, or from 460 to 628 days. The increase for banks supervised by the Federal Reserve was a more modest 27 percent, from 411 to 520 days.

The reductions in examination frequency were most pronounced in the Southwest, particularly Texas, which had the largest concentration of problem and failed banks and

²⁰ A study specifically of Texas banks reaches the same conclusion (John O’Keefe, “The Texas Banking Crisis: Causes and Consequences 1980–1989,” *FDIC Banking Review* 3, no. 2 [1990]: 12).

Table 12.2
Mean Examination Interval for Commercial Banks,
by Regulatory Agency, 1980-1994
(Days)

Year	OCC	FDIC	FRS
1980	417	460	411
1981	521	451	502
1982	468	415	503
1983	469	415	514
1984	529	446	503
1985	567	568	532
1986	604	628	520
1987	511	580	516
1988	552	452	461
1989	589	415	461
1990	482	379	439
1991	445	356	414
1992	422	351	404
1993	433	333	386
1994	395	333	401

produced the greatest losses to the insurance fund.²¹ In Texas, for example, the average number of examinations for all banks declined from a high of more than 1,200 in 1983 to approximately 600 at year-end 1985 (see figure 12.3). This decline is reflected in the median number of days between examinations for all failed banks in the region (see figure 12.4). In the Southwest as a whole, the median interval for failed banks reached a high of 579 days in 1986; for failed Texas banks, it reached 667 days. The average for all U.S. banks that failed in the same year was substantially lower: 455 days.

Bank examination staffs and examination frequency continued to increase during the second half of the 1980s and into the 1990s, as all of the agencies attempted to deal with the backlog of problem banks. In 1993 the number of field examiners reached a high for all federal and state agencies (9,614), up more than 30 percent over the number in 1979 (figure 12.1). In addition, the total number of examinations began trending upward beginning in 1985, until by the early 1990s the number of annual examinations reached the levels of the

²¹ For a more complete discussion of the issue of examination frequency in Texas and the Southwest during the 1980s, see O’Keefe, “The Texas Banking Crisis,” 1–14.

Figure 12.3
Average Number of Examinations per Year for
Texas Commercial Banks, 1980–1994

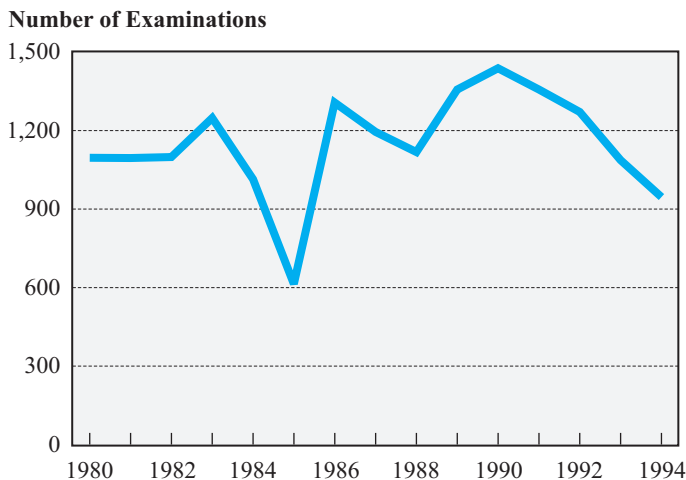
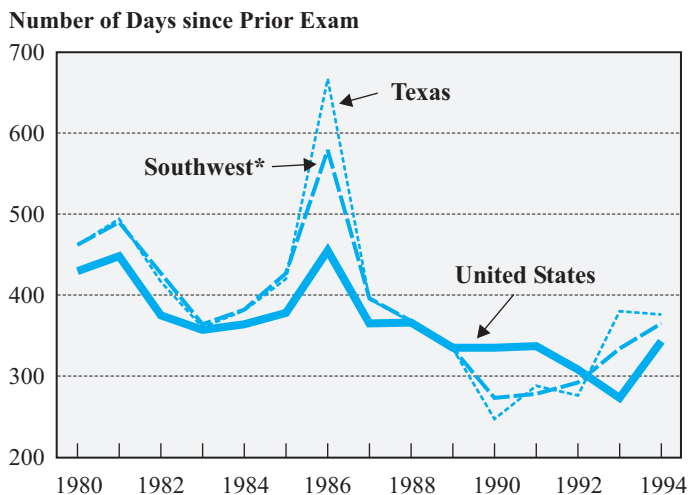


Figure 12.4
Median Examination Period (Days) for
Failed Banks, 1980–1994



*The Southwest region includes Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

early 1980s (figure 12.2). The passage of FDICIA in 1991, therefore, reinforced a trend that had already begun. The data show that bank regulators had recognized the need for more frequent examinations and had begun moving in that direction.

In summary, the decisions that caused examiner levels to be reduced during the first half of the 1980s were a public policy failure. Such policies reduced the ability of supervisors to detect problems early enough to take corrective action. This was especially true in Texas and the Southwest, where the economy was changing rapidly and the number of problem banks was increasing. It is reasonable to assume, although impossible to demonstrate empirically, that if examination frequency had not been reduced, problems would have been detected earlier and losses to the insurer reduced.²² But the reduced frequency of examinations did more than limit the usefulness of information derived from examinations. It also limited the usefulness of the financial reports used in off-site monitoring: on-site examiners are able to evaluate the quality of the loan portfolios and verify the data reported by banks on nonperforming loans and loan charge-offs. Thus, if examinations are less frequent, Call Report data are less reliable—and the off-site monitoring systems that are based on Call Report data are less able to predict future problems.²³

Examination Ratings and Reports: Effectiveness in Identifying Troubled Banks

To identify and control risk in troubled institutions, bank supervisors have essentially two types of tools: on-site bank examinations and follow-up enforcement actions. (See the appendix for a description of the examination and enforcement process.) The aim of the on-site examinations is, by means of the rating system, to identify the risk of failure in troubled institutions in sufficient time for supervisors to take corrective action. The aim of the follow-up enforcement actions is to control the risk-taking behavior of problem banks after they have been identified.

Regular on-site safety-and-soundness examinations that identify potential problem banks early and appraise their financial condition accurately are bank supervisors' primary vehicle in identifying troubled banks, and the analysis in this chapter shows that for most failed banks that had had recent examinations, ratings generally did a satisfactory job of identification well in advance of failure.²⁴ Nevertheless, some omissions in the supervisory system were apparent, for examination ratings sometimes gave an inaccurate picture of a bank's con-

²² Several empirical studies have demonstrated that with more frequent examinations, problem banks would have been detected earlier. See especially O'Keefe and Dahl, "Scheduling and Reliability."

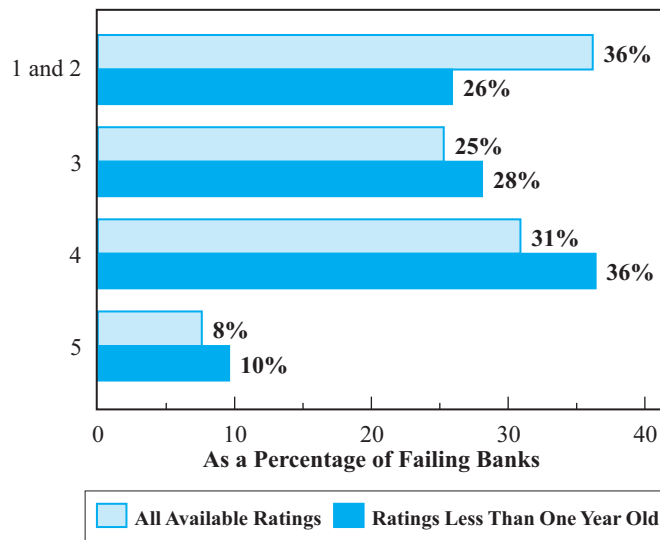
²³ See Drew Dahl, Gerald A. Hanweck, and John O'Keefe, "Audits, Exams and Accounting Integrity in Banking" (unpublished paper), February 1995; and R. Alton Gilbert, "Implications of Annual Examinations for the Bank Insurance Fund," Federal Reserve Bank of St. Louis *Economic Review* 75, no. 1 (1993): 35–52.

²⁴ A "recent" examination is one generally given within the preceding 12 months.

dition until relatively shortly before failure. The record shows that 260 failed banks were not identified as requiring increased supervisory attention within 24 months of failure. Of these, 141 were not detected as troubled banks within 18 months of failure; 57 were not detected within 12 months of failure; and 9 were not detected within 6 months of failure.

Bank examination ratings two years before failure for all failed banks are shown in figure 12.5.²⁵ These data refer to examinations available two years before failure, including those that were already several years old.²⁶ The two-year interval was selected because FDIC bank supervisors believe that the examination system should uncover signs of potentially serious deficiencies in the financial condition of a bank within at least 24 months of

Figure 12.5
Composite CAMEL Ratings Two Years before
Failure for Banks Failing between 1980 and 1994



* Ratings that were less than one year old as of the two-years-before-failure date; that is, ratings based on examinations dated between two and three years before failure.

²⁵ All examinations cited were regular full-scope or modified-scope on-site safety-and-soundness examinations. Consumer compliance, EDP, and other types of non-safety-and-soundness examinations were not included in the analysis.

²⁶ The analysis accounts for examination ratings that existed two years before failure. However, many of the examinations that were on the books two years before failure were several years old at that time.

failure. The data show that within two years of failure, 36 percent of the banks that failed had the highest ratings (a 1 or 2 rating), 25 percent had a 3 rating, 31 percent a 4 rating, and only 8 percent a 5 rating. Examination ratings did, therefore, identify nearly two-thirds of the total 1,617 failures as in need of increased supervisory attention (CAMEL 3, 4, or 5 ratings) at least two years before failure.

Nevertheless, a significant number of cases went undetected in the early stages: overall, 565 banks, or approximately 36 percent of those banks that eventually failed, held a satisfactory 1 or 2 rating two years before failure. Several factors may have contributed to the inability of the supervisory process to identify these banks. For example, some of these banks might have deteriorated quickly or might not have been examined recently. An alternative explanation is that the examinations failed to detect the problems.²⁷ An analysis of the lack of supervisory identification of these 565 banks demonstrates that the most significant factor was outdated examinations (see table 12.3). In approximately 34 percent of these cases (194 banks), the existing examination ratings available two years before failure were more than one year old at that time. If only examination ratings that were less than one year old at that time are counted, the proportion of banks with 1 and 2 ratings two years before failure declined from 36 percent to 26 percent, and the proportion of banks with CAMEL 3,

Table 12.3
Failing Banks with CAMEL Ratings of 1 or 2 Two Years before Failure, 1980–1994

	Number	Percent of Total Failures
Total 1- and 2-rated future failures	565	35%
Specific types:		
Cross-guarantee cases	25	
Failures associated with fraud	24	
First City Bancorporation affiliates	36	
First RepublicBank Corporation affiliates	26	
CAMEL ratings more than one year old*	194	
Total of above	305	19
Remaining 1- and 2-rated future failures	260	16

* Failures of banks with ratings more than one year old (two years before failure) do not include cross-guarantee cases, failures associated with fraud, First City Bancorporation affiliates, or First RepublicBank Corporation affiliates.

²⁷ The majority of the 565 banks were relatively small and were concentrated in a few geographic areas: approximately 80 percent of them held total assets of less than \$100 million, and almost 70 percent of them were located in the Midwest or the Southwest. In addition, almost all were either national or state nonmember banks.

4, and 5 ratings (those identified as exhibiting various degrees of weakness) rose from 64 percent to 74 percent of the institutions that would fail two years later. (See table 12.5).

These findings are consistent with the supervisory policies adopted by the banking agencies during the 1980s. This was a period when most banking agencies had cut examination staffs, were placing more reliance on off-site monitoring based on Call Report data, were concentrating their examiner resources on the most troubled banks, and, in the case of the FDIC, were using existing supervisory personnel increasingly to assist in closing and liquidating failed banks. In many cases these changes had reduced the ability of bank supervisory examiners to detect financial problems early enough to prevent failure.²⁸

But in addition, the failure to give sufficient warning for some of the 1- and 2-rated banks was caused by safety-and-soundness conditions for which the CAMEL system was not designed. Of the 565 banks, 25 were cross-guarantee failures pursuant to the provisions of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), and bank examiners could not have been expected to know two years in advance that the FDIC would decide to invoke this provision.²⁹ Another 24 failures were associated with bank fraud, a problem that is difficult to detect and one that bank examiners are not trained to uncover. In some cases, bank fraud can—and in these cases did—result in the quick closing of otherwise healthy banks.³⁰ Finally, 62 banks failed when the lead banks of two large Texas bank holding companies, First City Bancorporation and First Republicbank Corporation, collapsed. In economic terms, these affiliates were more like branches than independent banks, and CAMEL ratings for the affiliates did not reflect the condition of the parent companies. More important, the banking agencies were not dependent on CAMEL ratings for information on these two holding companies; their situation had been under consideration for a protracted period. Thus, when these failures are excluded, 260 banks, or ap-

²⁸ These findings are supported by the research of Dahl, Hanweck, and O’Keefe (“Audits,” 18–20), who show that during the period 1987–94, bank regulatory authorities directed their examination resources primarily at banks that had the lowest examination ratings. They concluded that “examinations appear to have been consistently targeted at banks with the worst performance as indicated by prior CAMEL ratings or nonperforming loan experience” and that “losses are higher with longer gaps between examinations.”

²⁹ The FDIC’s “cross-guarantee” program generally assesses all banks in the holding company for the FDIC losses of individual members. In some cases, this assessment results in the closing of all banks in the holding company, but the end result is to reduce the insurer’s losses.

³⁰ The precise role that fraud and financial misconduct played as a cause of bank failures during the 1980–94 period is difficult to assess. The consensus of a number of studies is that fraud and financial misconduct (1) were present in a large number of bank and thrift failures in the 1980–94 period; (2) contributed significantly to some of these failures; and (3) were able to occur because of the same managerial deficiencies and inadequate internal controls that contributed to the financial problems of many failed and problem institutions in the first place. With respect to the last issue, the conclusion appears to be that internal weaknesses left the institutions vulnerable to both abuse and fraud as well as to adverse economic developments. The studies also found that for many reasons it is very difficult to estimate the dollar impact of such activity. For a more detailed discussion of the relationship between bank failures and fraud, see Chapter 1.

proximately 16 percent of the 1,617 failures that occurred during the period, were not detected by the supervisory system two years before failure.³¹

An analysis also was undertaken to determine whether examiners were more effective in identifying, within two years of closing, relatively larger-sized banks that failed. After outdated examinations were eliminated and additional adjustments were made for the reasons previously discussed, the results show that approximately 15 percent of banks that received 1 or 2 ratings within two years of failure and had total assets of over \$250 million were not identified. This compares to 16 percent for the total group that is presented in table 12.3.³² These findings by themselves do not provide evidence that examiners were substantially better at identifying risk in larger-sized banking organizations two years before failure than they were with all banks that failed.

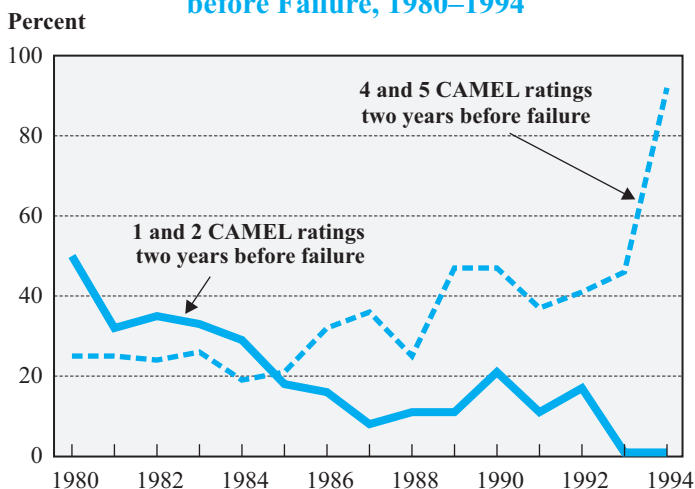
A further investigation was conducted to determine if the CAMEL rating system of risk identification improved incrementally over the period 1980–94. As mentioned above, additional examination resources were being made available to the bank regulatory agencies during the middle to late 1980s, and examination frequency increased substantially during this period. Thus, the detection of problem banks should have been improving over this period. To test for this effect, the 260 banks that were rated 1 or 2 within two years of failure were broken out by year and weighted by the total number of failures within each of the years from 1980 to 1994. The data show that from 1980 to 1986 approximately 28 percent of total failures, on average, had a CAMEL rating of 1 or 2 two years before failure. From 1987 to 1994, however, the comparable figure was only about 12 percent of total failures. The difference in means for the two time periods for the 1- and 2-rated group was statistically significant at the 99 percent confidence level. The analysis was also conducted for failed banks that had a 4 or 5 rating two years before failure. The data show that from 1980 to 1986, 25 percent of banks that failed had a 4 or 5 rating within two years of failure. From 1987 to 1994, however, the comparable figure was 46 percent. The difference in means for this group for the different time period was also statistically significant at the 99 percent level.

These data are presented in figure 12.6, which charts the improving accuracy of the CAMEL rating system in identifying problem banks after 1985. The improvement in the rating system's effectiveness was partly a function of the increasing frequency of bank examinations starting in the second half of the 1980s. In summary, given the turmoil and the

³¹ Exclusion of banks with ratings that were more than one year old two years before failure means, in effect, that the data refer to examinations conducted between two and three years before failure.

³² The 1,617 failures during the period 1980–94 included 156 banks with total assets over \$250 million. Of these 156 banks, 47 had a 1 or 2 rating two years before failure, while 103 had a 3, 4, or 5 rating. Six of the other banks were not counted, because examination information on them was unavailable in electronic form. Of the 47 1- or 2-rated banks, 24 were discarded for the reasons discussed in connection with table 12.3. Thus, 23 of a total of 150 large banks were not identified by the examiners two years before failure.

Figure 12.6
CAMEL Ratings of Failed Banks Two Years
before Failure, 1980–1994



regional banking crises of the 1980s and early 1990s, overall CAMEL ratings (when they were current) appear to have done a reasonably satisfactory job of focusing attention on most of the institutions that subsequently failed.

Limitations of the CAMEL Rating System

Although the CAMEL ratings identified most failed banks that had had examinations within two years of failure, the rating system suffers from some limitations. First, the ratings did not necessarily capture the seriousness of the situation of banks that subsequently failed. For example, if only officially designated problem institutions (those with 4 or 5 ratings) are discussed, then the system identified only 46 percent of the banks in that group that failed within two years (figure 12.5). Second, because CAMEL ratings are based only on internal operations, they measure only the current financial condition of a bank and do not take into account regional or local economic developments that may pose future problems but that are not yet reflected in the bank's condition.³³ Third, CAMEL ratings by design are not forward-looking and do not systematically track long-term risk factors that may cause losses several

³³ In light of the various regional economic recessions and banking crises of the 1980s and early 1990s, most bank regulatory agencies were more careful about monitoring regional economic conditions starting in the mid-1990s and attempted to incorporate the analysis of these conditions into the bank examination process. For example, in late 1995 the FDIC established the Division of Insurance, which monitors regional economic conditions and other potential risks to commercial banks and works closely with the Division of Supervision.

years later. Thus, the picture they provide of a bank's condition is current rather than prospective.³⁴ For example, many banks during the period under review engaged in risky behaviors that in the past had been associated with failures, like excessive asset growth, high ratios of commercial real estate loans and total loans to total assets, or a heavy dependence upon volatile deposit liabilities, yet if the bank was performing satisfactorily, these risk factors were generally not captured or weighted in the current examination ratings.

Fourth, while not a limitation of the rating system per se, the frequent use of on-site bank examinations that are designed to limit future bank failures imposes a burden on depository institutions, which must absorb their costs and contend with the disruption they impose on the work environment. This can be particularly burdensome during good economic times, when the condition of most banks is reasonably healthy and examination ratings change relatively little. For example, an average of less than 15 percent of examination ratings resulted in downgrades each year during the period 1980–94, although the number varied significantly depending on region, especially during deep recessions.³⁵

The burden of on-site examinations may also be illustrated by the fact that even most banks that are designated as problem banks (CAMEL 4 or 5 rating) do not fail.³⁶ It can be argued either that this is a defect of the rating system as a means of forecasting failures or, conversely, that examination ratings trigger the supervisory responses that prevent troubled banks from failing or reduce failure costs when the banks have to be closed. It must be recognized, however, that both the large number of banks whose ratings do not change through repeated examinations and the large number of troubled banks that do not fail are unavoidable consequences of having frequent on-site examinations. Given that on-site examinations provide information to the regulators that is otherwise unavailable, these consequences must be borne if the condition of insured banks is to be monitored effectively.

³⁴ There may be some exceptions, however. While the overall or composite rating is not forward-looking, some examination component ratings, like that of management (M), may be forward-looking and may yield information about the future risk of failure. For example, a poor management component rating may indicate that the bank suffers from weak internal controls, unsatisfactory underwriting policies, or other deficiencies that could threaten the solvency of the bank. Deterioration in this component may yield information about future risk. To test this proposition, researchers at the FDIC evaluated the management component ratings for the 1,564 banks (excluding assistance cases) that failed between 1980 and 1994. The results show that two years before failure, in only 6 percent of the cases was the management rating one full number worse than the average of the other four components.

³⁵ Bank examination ratings can change rapidly as banks' conditions change during deep recessions, like those experienced in the Southwest in the late 1980s and in New England in the early 1990s. In the Southwest during the years 1985–89, for example, 34 percent of the banks that were examined recorded ratings downgrades. In the New England states between 1989 and 1992, 29 percent of the banks that were examined recorded ratings downgrades. For further discussion of this issue, see Rebel Cole and Jeffery W. Gunther, "A CAMEL Rating's Shelf Life," Federal Reserve Bank of Dallas *Financial Industry Studies* (December 1995): 13–20.

³⁶ Most of these banks do not fail in the sense of causing losses to the insurer. However, a large percentage survived only through the acquisition by or merger with another organization.

Monitoring: Measures of Effectiveness in Limiting the Risk-Taking Behavior of Troubled Institutions

Identifying problem banks early is one responsibility of bank supervisors. Another is to monitor the behavior of troubled institutions in an attempt either to prevent failure or to limit losses to the insurance fund in the event of a closing.³⁷

As an insured depository's capital is depleted, it has less to lose from pursuing high-risk investment strategies in an attempt to return to profitability. The institution's owners or managers may be tempted to engage in speculative lending or to assume greater-than-normal interest-rate risk. They may also make inappropriate dividend payments or engage in other fund transfers. Such behavior contributed significantly to the cost of resolving failed thrift institutions during the 1980s. Marginally capitalized (or insolvent) thrifts undertook high-risk ventures that ultimately increased losses to the thrift insurance fund, and it is widely believed that ineffective monitoring and supervision—as well as the regulators' inability to close insolvent thrifts due to inadequate funds—permitted them to do so.³⁸ However, neither existing empirical studies of banking nor the findings presented in this chapter have found widespread evidence of such behavior at marginally capitalized banks.³⁹

One measure of the effectiveness of the supervisory monitoring program is the number of problem banks that recovered without cash assistance by the insurer. From 1980 to 1994, there were 4,808 institutions that were classified as either a 4- or a 5-rated bank sometime during the period. Of this total, 1,311 (27 percent) failed, while 3,497 (73 percent) ei-

³⁷ The following studies analyze the effectiveness of supervisory oversight of problem banks: French, "Early Corrective Action," 1–12; David K. Horne, "Bank Dividend Patterns," *FDIC Banking Review* 4, no. 2 (1991): 13–24; R. Alton Gilbert, "Supervision of Undercapitalized Banks: Is There a Case for Change?" *Federal Reserve Bank of St. Louis Review* 73, no. 3 (1991): 16–30; and R. Alton Gilbert, "The Effects of Legislating Prompt Corrective Action on the Bank Insurance Fund," *Federal Reserve Bank of St. Louis Review* 74, no. 4 (1992): 3–22. Studies that have found formal enforcement actions to be effective in altering the behavior of problem banks are Joe Peek and Eric S. Rosengren, "Bank Regulatory Agreements and Real Estate Lending," *Real Estate Economics* 24 (1996): 56–73; and U.S. General Accounting Office, *Bank Supervision: Prompt and Forceful Regulatory Actions Needed*, report to the Chairman, House Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, April 1995.

³⁸ In some instances, thrift regulators encouraged certain types of risky behaviors, like high growth rates, which they thought would permit thrifts to grow out of their problems. For research documenting the existence of the so-called moral-hazard problem associated with the behavior of thrift institutions during the 1980s, see James R. Barth, Philip F. Bartholomew, and Carol Labich, "Moral Hazard and the Thrift Crisis: An Analysis of 1988 Resolutions," in *Proceedings of the Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, May 3–5, 1989, 344–84; and Gillian Garcia, "The FSLIC Is 'Broke' in More Ways Than One," *Cato Journal* 7, no. 3 (1988): 727–41.

³⁹ For example, Gilbert ("Supervision of Undercapitalized Banks") found that undercapitalized banks during the period 1985–89 generally did not grow rapidly, pay dividends, or make loans to insiders, all of which are behavioral patterns normally associated with high-risk strategies. Moreover, Gilbert ("Legislating Prompt Corrective Action") also found no relationship between resolution cost and either the level of capital one year before failure or the length of time a bank was undercapitalized.

ther survived as independent banks, were purchased by bank holding companies, or merged into other banks without FDIC assistance. Therefore, approximately three out of four problem banks recovered without assistance.

The behavioral changes of all problem banks for three years before either failure (for failed banks) or the date of recovery (for the problem banks that survived) are presented in table 12.4. The data show that 4- or 5-rated banks slowed down their asset growth, cut dividend payments, and generally increased capital from external sources.⁴⁰ These trends are consistent over the three-year observation period for both problem banks that failed and problem banks that survived. Furthermore, these trends became more pronounced with the evolution of the various banking crises, as supervisors received additional examination resources during the second half of the 1980s, gained more experience dealing with the heavy volume of problem banks, and became more aggressive in constraining the risky behavior.

Table 12.4
Asset Growth Rates, Dividend Payments, and Capital Injections,
All Banks with CAMEL Ratings of 4 or 5, 1980–1994

Years before Failure, Recovery, or Merger	Failed Banks			Surviving Banks			Total (Failed and Surviving)		
	Year of Failure			Year of Recovery or Merger*			Year of Failure, Recovery, or Merger*		
	1980–85	1986–91	1992–94	1980–85	1986–91	1992–94	1980–85	1986–91	1992–94
A. Asset Growth Rate (Percent)									
3	14.60	15.65	18.77	10.39	13.38	4.42	11.91	14.09	5.93
2	10.72	1.71	–3.53	3.67	1.25	–0.61	6.21	1.40	–0.92
1	0.91	–10.17	–13.39	1.96	0.96	–0.64	1.58	–2.51	–1.98
B. Dividends to Average Assets (Percent)									
3	0.34	0.21	0.09	0.20	0.21	0.13	0.25	0.21	0.13
2	0.32	0.16	0.06	0.16	0.14	0.09	0.22	0.15	0.09
1	0.16	0.05	0.02	0.13	0.13	0.08	0.14	0.11	0.07
C. Capital Injections to Average Assets (Percent)									
3	0.18	0.42	0.45	0.19	0.46	0.42	0.19	0.45	0.42
2	0.22	0.52	0.54	0.39	0.56	0.42	0.33	0.55	0.43
1	0.65	0.39	0.40	0.44	0.45	0.49	0.51	0.43	0.48

Note: Data are unweighted averages of individual bank percentages.

* Recovery is either the date of a bank's unassisted merger or, if the bank survived as an independent institution, the date it received a CAMEL rating of 1, 2, or 3.

⁴⁰ Capital injections include new stock issues, capital contributed through merger, and capital contributed from parent holding companies.

(The data are broken out for three different time intervals during the period 1980–94, each reflecting a different stage of the banking crisis: the early [1980–85], the middle [1986–91], and the late [1992–94] periods.)⁴¹

The findings show, therefore, that the moral-hazard problem was being contained, for banks were shrinking their assets over this period. In the case of surviving banks, reduced dividend payouts and increased capital injections helped restore equity positions and were instrumental in facilitating recovery. In the case of failed banks, dividend cuts and new capital had the effect of reducing the costs of failure. Thus, the end result of changes in the operation of problem banks appears to have been a reduced number of bank failures, a reduction in risk taking at troubled banks, and a reduction in losses to the fund—whether the changes were due to management, stockholders, market forces, or bank supervisors.⁴²

Number and Kinds of Formal Enforcement Actions

To achieve effective oversight, banking authorities need adequate supervisory powers to limit potential risk-taking behavior by undercapitalized banks. The ability to identify problem banks is of limited usefulness without adequate authority to compel corrective actions. Most regulatory agencies have sufficient power to improve capital, levy fines, remove management, restrict dividends and other inappropriate funds transfers, and restrict riskier lending and excess asset growth. Bank chartering authorities also have the power to appoint a conservator or receiver, and the FDIC has the power to terminate or suspend deposit insurance.

The risk-control activity that begins with the examination process may be completed by enforcement actions both informal and formal. Informal actions are usually assigned when a bank receives a CAMEL 3 rating. At this time the agency generally receives a written commitment from bank management to take corrective action; the commitment is in the form of a memorandum of understanding (MOU) or a bank board resolution. Formal actions, which are legal decrees and legally enforceable in the courts, are usually taken when

⁴¹ The “early period” was a time when most of the banking agencies were cutting examination staffs, while the number of problem banks was increasing significantly. The “middle period” was when the majority of the bank failures were occurring. The “late period” corresponded to a change in regulatory regime after the passage of FDICIA in 1991.

⁴² J. Kimball Dietrich and Christopher James argue that higher capital injections of weaker banks were not the result of supervisory pressure but the result of actions taken by the banks and the equity markets. Such a position appears unrealistic because, from whatever source, the urgency to raise capital nonetheless reflects a desire to avoid closure or other sanctions. The capital injection can therefore probably be considered a result of the supervisory system. See Dietrich and James, “Regulation and the Determination of Bank Capital Changes: A Note,” *Journal of Finance* 38, no. 5 (1983): 1651–58. It should be noted that new legal and institutional constraints were being put into place starting in the late 1980s to control the incidence of moral hazard in banking. Minimum and risk-based capital standards were in place at least since the late 1980s; the least-cost test for resolving bank failures, Prompt Corrective Action, and risk-based insurance premiums originated with the passage of FDICIA in 1991. All of these actions were intended to minimize moral hazard and to place more of the risk of loss on the shareholders of institutions and less on the U.S. taxpayer and the deposit insurance fund.

a bank's deterioration is more serious and it receives a 4 or 5 rating. Formal actions include cease-and-desist orders and/or suspension or removal of bank officers or directors. Civil money penalties—fines—may be imposed on depository institutions for failing to meet the terms of cease-and-desist orders or for violating federal or state laws or regulations, and these fines are often heavy.⁴³

FDIC formal enforcement actions. During the 1970s, the FDIC did not widely use formal supervisory enforcement actions. The agency was first given authority to issue cease-and-desist orders and removal authority under the FDI Act as amended in 1966, and during the first half of the 1970s the agency issued only 37 orders. Over the next four years, however, the agency became more aggressive, issuing 176 orders primarily under Sections 8(a) and 8(b) of the FDI Act as amended. These sections deal with termination of insurance and cease-and-desist orders. During the 1980s, as the number of problem banks increased dramatically, so also did the number of formal actions brought against FDIC-supervised banks. The number of formal actions issued by the FDIC for safety-and-soundness purposes grew quickly in the early 1980s, and peaked in 1985 at 272 (see table 12.5).⁴⁴ From 1986 through 1990, as the number of problem banks declined, the issuance of formal actions also declined, with an annual average of approximately 168. But the growing number of problem banks in New England again brought an increase in the number of FDIC formal actions, with an annual average of 200 issued in 1991–92. During the following years, the numbers of actions declined as the economy improved and commercial bank earnings rebounded.⁴⁵

The greatest proportion of actions were brought against 4-rated banks, which accounted for over half of all formal actions. Generally such institutions suffer from serious problems but are usually salvageable. An additional 35 percent of the total were issued against 5-rated banks. CAMEL 5-rated banks are thought to have substantial risk of failing within one year. Actions against these banks are intended to correct the problems if possible, but if the institution is too ill to recover, the objective is to limit losses before failure. A smaller number of actions (159) were brought against highly rated (1- and 2-rated) banks. Over half of these actions dealt with the removal and suspension of officers and directors.⁴⁶

⁴³ Formal enforcement actions are issued by all federal banking agencies, but OCC data on enforcement actions brought against troubled banks were not available for this analysis. Thus, only formal actions against FDIC-supervised and Federal Reserve-supervised banks are analyzed.

⁴⁴ FDIC enforcement actions brought against state banks in all categories from 1980 to 1995 (including not only safety and soundness but also violations of consumer laws and regulations, trust, and EDP, and other miscellaneous categories) amounted to 3,041.

⁴⁵ The data on FDIC-issued informal actions are available only from 1992. The number totaled 750 for 1992, 616 for 1993, and 472 for 1994 for all other categories.

⁴⁶ The reasons for the actions taken against the other 1- and 2-rated banks are unknown at this time.

Table 12.5
FDIC Formal Enforcement Actions by Examination Rating, 1980–1995

Year	Number	CAMEL Rating at Examination before Enforcement Action				
		1	2	3	4	5
1980	47	1	3	1	32	10
1981	38	2	6	1	22	7
1982	93	1	4	4	56	28
1983	238	0	4	4	166	64
1984	184	2	5	9	103	65
1985	272	1	9	6	164	92
1986	174	0	4	1	89	80
1987	197	1	2	6	92	96
1988	175	0	3	5	78	89
1989	156	0	4	6	76	70
1990	137	0	4	4	73	56
1991	203	0	10	11	110	72
1992	197	0	15	14	126	42
1993	140	2	13	27	59	39
1994	85	8	29	9	18	21
1995	62	3	23	7	17	12
Total	2,398	21	138	115	1,281	843

Note: Formal enforcement actions for safety-and-soundness purposes only.

The largest number of formal enforcement actions brought by the FDIC, accounting for over 60 percent (1,485) of the total number of actions, consisted of Section 8(b) actions, or the issuance of cease-and-desist orders (see table 12.6). These actions are generally issued to curb unsafe banking practices like insider abuses, unsound underwriting practices, inaccurate loan-loss reserve accounting, unwise dividend policies, and other types of unauthorized fund transfers. Other major enforcement categories include Section 8(a) proceedings for termination of insurance, and Section 8(e) removals of officers, directors, and other principals; actions in those two categories accounted for an additional 32 percent (763) of the total. Miscellaneous actions make up the remainder.⁴⁷

Table 12.7 shows the number of FDIC-supervised problem banks from 1980 to 1994 and their resultant status as either failed or surviving. These data show that of the 2,826

⁴⁷ The number of formal enforcement actions for safety-and-soundness purposes excluded civil money penalties because it could not be determined if the actions were related to safety-and-soundness violations or to some other areas.

Table 12.6
FDIC Formal Enforcement Actions by Type, 1980–1995

Type	Number	Description
8(a)	394	Termination of insurance
8(b)	1,485	Cease-and-desist order
8(c&b)	88	Temporary cease-and-desist order
8(e)	369	Removal and/or prohibition and/or suspension of individuals
8(a&t)	2	Temporary suspension of deposit insurance
8(g)	19	Suspension and/or prohibition of individuals based on criminal indictment
8(i)	2	Petition for enforcement of administrative order
ILSA *	13	Capital directive
PCA†	25	PCA directive
OA	1	Other formal action
Total	2,398	

Note: Formal actions for safety-and-soundness purposes only.

*International Lending Supervision Act.

†Prompt Corrective Action (see section below on FDICIA).

banks that were classified as 4- or 5-rated at some point during this period, 662 (23 percent) failed, while 2,164 (77 percent) either survived as independent banks, were purchased by bank holding companies, or merged into banks without FDIC assistance. Therefore, approximately three out of four FDIC problem banks recovered without cash assistance from the insurer.

Tables 12.8 and 12.9 show the number and percentages of FDIC problem banks that received some type of formal enforcement action during the period. The data indicate that 47 percent of the total FDIC problem bank population received some type of formal enforcement action over this period. When displayed by CAMEL rating, 71 percent of 5-rated banks and 45 percent of 4-rated institutions received formal actions. Of the failed problem banks, approximately 71 percent received a formal FDIC enforcement action; of the surviving problem banks, approximately 40 percent did also (table 12.9). These data show that the enforcement policy of the FDIC was most aggressive with respect to the most unhealthy institutions—those that failed.⁴⁸

⁴⁸ Because data on FDIC-issued informal enforcement actions were not available before 1992, it was not possible to trace this record during the early stages of the problem-bank cycle. To verify the presence of informal actions for troubled banks, a set of randomly selected files, available for the years 1986 to 1994, on FDIC problem banks was reviewed. Of the 307 bank files that were examined, 292, or more than 95 percent of the banks, had received some type of formal or informal action. Only 15 of the 307 banks had no action on record. Thus, the data show that almost all problem banks received some type of enforcement action.

Table 12.7
FDIC-Supervised Problem Banks, 1980–1994
(Number)

Year of First 4 or 5 Camel Rating	All Problem Banks	Failed Problem Banks	Surviving Problem Banks		
			Independent Status	Acquired or Merged*	Total
1980	75	24	11	40	51
1981	96	30	14	52	66
1982	213	71	35	107	142
1983	242	54	51	137	188
1984	300	88	72	140	212
1985	423	117	132	174	306
1986	399	98	146	155	301
1987	263	64	83	116	199
1988	179	31	76	72	148
1989	151	32	66	53	119
1990	158	34	62	62	124
1991	178	14	96	68	164
1992	92	4	56	32	88
1993	33	1	23	9	32
1994	24	0	17	7	24
Total	2,826	662	940	1,224	2,164

*Acquired by a bank holding company or merged with another banking organization.

Federal Reserve Formal Enforcement Actions. The number of formal enforcement actions issued by the Federal Reserve System for safety-and-soundness purposes only against state member banks for the years 1980–95 is shown in table 12.10.⁴⁹ The number is broken out by CAMEL rating for the years 1980–95. The data show that the number of actions issued rose in the early 1980s as the number of problem banks increased, and reached a peak (47) in 1985. The number of actions fluctuated at lower levels until the early 1990s, when the total again increased, this time in response to the Northeast banking crisis. (The FDIC enforcement action program showed a similar temporal pattern.) Most Federal Reserve actions were brought against 4-rated banks, which accounted for over half of the

⁴⁹ Formal enforcement actions brought by the Federal Reserve against state member banks for violations of consumer laws and regulations, trust, EDP and other non-safety and soundness categories are excluded from the analysis. Also excluded are formal actions brought against bank holding companies, uninsured foreign banks, and those banks with missing examination records or other information.

Table 12.8
FDIC Problem Banks That Received Formal Enforcement Actions, 1980-1994
(Number)

Year of First 4 or 5 Camel Rating	All Problems Banks			Failed Problem Banks			Surviving Problem Banks		
	CAMEL Rating 4	CAMEL Rating 5	Total	CAMEL Rating 4	CAMEL Rating 5	Total	Independent Status	Acquired or Merged*	Total
1980	42	3	45	16	2	18	19	8	27
1981	52	5	57	19	2	21	21	15	36
1982	139	16	155	48	11	59	64	32	96
1983	116	19	135	36	11	47	50	38	88
1984	133	19	152	49	13	62	67	23	90
1985	157	21	178	63	16	79	76	23	99
1986	111	23	134	44	18	62	51	21	72
1987	70	14	84	20	10	30	38	16	54
1988	66	9	75	17	6	23	31	21	52
1989	59	4	63	21	2	23	29	11	40
1990	55	15	70	16	12	28	27	15	42
1991	81	10	91	3	7	10	65	16	81
1992	54	3	57	3	1	4	40	13	53
1993	13	4	17	0	1	1	12	4	16
1994	11	0	11	0	0	0	8	3	11
Total	1,159	165	1,324	355	112	467	598	259	857

*Acquired by a bank holding company or merged with another banking organization.

Table 12.9
Percentage of FDIC Problem Banks That Received Formal Enforcement Actions,
by CAMEL Rating, 1980–1994

Camel Rating	Failed Problem Banks	Surviving Problem Banks	Total Problem Banks
4	70%	39%	45%
5	73	66	71
4 + 5	71%	40%	47%

actions. However, 3-rated banks accounted for a higher percentage of actions (18 percent) than did 5-rated institutions (14 percent).

A breakdown of the types of formal actions issued by the Federal Reserve is shown in table 12.11. “Written agreements” is the category that accounted for the majority of the actions, with 203 (56 percent of the total). Cease-and-desist orders made up an additional 25

Table 12.10
Federal Reserve Formal Enforcement Actions by Examination Rating, 1980–1995
(Number)

Year	Number	CAMEL Rating at Examination before Enforcement Action				
		1	2	3	4	5
1980	7	0	0	2	5	0
1981	17	0	1	3	13	0
1982	18	1	3	3	8	3
1983	20	0	1	1	12	6
1984	23	0	1	3	13	6
1985	47	1	6	9	25	6
1986	43	0	1	7	27	8
1987	13	1	0	1	9	2
1988	25	0	3	4	12	6
1989	17	2	1	2	7	5
1990	26	0	2	8	14	2
1991	18	0	1	4	12	1
1992	40	2	8	6	22	2
1993	18	1	2	2	11	2
1994	19	1	1	8	8	1
1995	11	4	2	1	4	0
Total	362	13	33	64	202	50

Source: FRB.

Note: Formal enforcement actions for safety-and-soundness purposes only.

Table 12.11
Federal Reserve Formal Enforcement Actions by Type, 1980–1995

Type	Number	Description
8(b)	90	Cease-and-desist order
8(c)	10	Temporary cease-and-desist order
8(e)	56	Removal and/or prohibition and/or suspension of individuals
PCA	3	PCA directive
WA	203	Written agreement
Total	362	

Source: FRB.

Note: For safety-and-soundness purposes only.

percent, and removal actions against problem bank officials accounted for another 15 percent. When the Federal Reserve assigns formal enforcement actions to correct management

practices, it starts by issuing “written agreements.” If these actions are ineffective in altering management practices, the process is ratcheted upward by the issuance of cease-and-desist orders.

The number of Federal Reserve-supervised problem banks from 1980 to 1994 that received a 4 or 5 CAMEL rating, and their resulting status as either failed or surviving, are presented in table 12.12. The total number is significantly smaller than (only approximately 13 percent of) the number of FDIC-supervised problem banks. These data show that of the 365 banks that received a 4 or 5 rating during this period, 104 (29 percent) failed, while 261 (72 percent) either survived as independent banks, were purchased by bank holding companies, or merged into banks without FDIC assistance. Therefore, almost three-fourths of the Federal Reserve problem banks recovered without cash assistance from the insurer—about the same percentage as for the FDIC. The number and proportions of problem banks that received formal enforcement actions during the period are presented in tables 12.13 and 12.14. The data show that 50 percent of the 365 problem banks received some type of formal action. In contrast to FDIC actions, 4-rated Federal Reserve-supervised institutions received formal actions at a higher rate (51 percent) than for 5-rated banks (39 percent). Therefore, the

Table 12.12
Federal Reserve–Supervised Problem Banks, 1980–1994
(Number)

Year of First 4 or 5 Camel Rating	All Problem Banks	Failed Problem Banks	Surviving Problem Banks		Total
			Independent Status	Acquired or Merged*	
1980	11	1	8	2	10
1981	12	5	3	4	7
1982	20	6	7	7	14
1983	23	7	9	7	16
1984	27	13	11	3	14
1985	50	18	25	7	32
1986	49	16	28	5	33
1987	40	16	22	2	24
1988	26	7	10	9	19
1989	19	4	12	3	15
1990	22	6	11	5	16
1991	42	4	31	7	38
1992	19	1	10	8	18
1993	2	0	1	1	1
1994	3	0	2	1	3
Total	365	104	190	71	261

*Acquired by a bank holding company or merged with another banking organization.

Table 12.13
Federal Reserve—Supervised Problem Banks That Received
Formal Enforcement Actions, 1980–1994
(Number)

Year of First 4 or 5 Camel Rating	All Problem Banks	Failed Problem Banks	Surviving Problem Banks		Total
			Independent Status	Acquired or Merged*	
1980	7	1	5	1	6
1981	8	4	1	3	4
1982	11	4	4	3	7
1983	15	4	7	4	11
1984	19	10	7	2	9
1985	28	11	11	6	17
1986	17	11	5	1	6
1987	14	7	6	1	7
1988	12	2	5	5	10
1989	6	3	3	0	3
1990	8	2	4	2	6
1991	20	4	12	4	16
1992	15	1	9	5	14
1993	1	0	1	0	1
1994	2	0	1	1	2
Total	183	64	81	38	119

Source: FRB.

Table 12.14
Percentage of Federal Reserve—Supervised Problem Banks That Received
Formal Enforcement Actions, by CAMEL Rating, 1980–1994

Camel Rating	Failed Problem Banks	Surviving Problem Banks	Total Problem Banks
4	68%	46%	51%
5	35	46	39
4 + 5	62%	46%	50

highest percentage of actions were brought against 4-rated institutions, or those that had a fair chance of surviving; the remainder were applied against 5-rated banks, or those in more imminent danger of failing. Of the failed problem banks, approximately 62 percent were issued a formal action; of the surviving problem banks, 46 percent received one.

Formal Enforcement Actions: Relation to Risk-Taking Behavior

Above, the behavior of all problem banks (for the period 1980–94) is analyzed in relation to the dates of the banks' failure, recovery, or merger. In this analysis, problem-bank behavior is analyzed in relation to the dates of regulatory intervention, specifically, the dates of the on-site examinations that produced CAMEL ratings either with or without formal actions. To perform this analysis, an event study was undertaken to analyze the ex ante and ex post behavioral patterns of these institutions. The hypothesis to be tested was that formal corrective actions are more effective in bringing about behavioral changes than are informal actions because informal agreements outstanding are not administratively or judicially enforceable in court, whereas formal actions have legal standing, and noncompliance often carries serious penalties. The variables examined were the same as in the earlier analysis: asset growth, dividend restrictions, and capital injections.⁵⁰

The event date chosen for the analysis was the date of the on-site examination that led to the formal enforcement action.⁵¹ To analyze the effect of enforcement actions, two sets of banks were observed: (1) those banks subsequently issued formal actions; and (2) those banks that did not receive a formal action.⁵² The population of banks was the combined sample of 2,826 FDIC and 365 Federal Reserve problem banks. Over the period 1980–95, the FDIC issued 2,398 formal actions, and the Federal Reserve issued 362. For the asset growth variable, the data were collected for four quarterly periods before and four after the event date. But because many firms do not report dividend payouts and capital contributions on a quarterly basis, these two variables were analyzed on an annual basis (for which all banks report data) for one year before and four years after the event date. To determine the stability of the relationship between regulatory intervention and changes in bank behavior over time, three different subperiods were analyzed: 1979–85, 1985–90, and 1990–95. The boundaries of the subperiods correspond with the various regional banking crises that occurred over the period under review.

For the asset growth variable, the results for the two groups are presented in figure 12.7. The median quarterly asset growth rates of banks supervised by the FDIC and the Federal Reserve with CAMEL ratings of 4 declined before the date of regulatory interven-

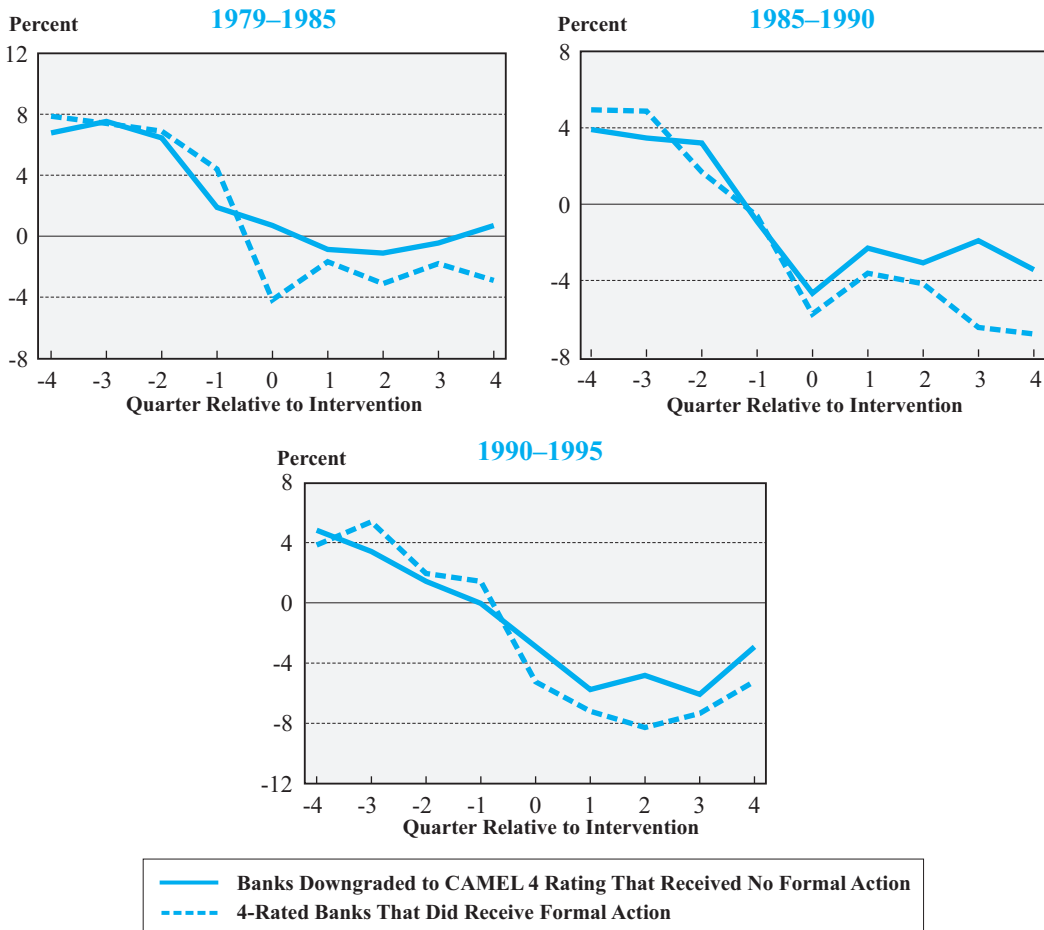
⁵⁰ Some studies have found that formal enforcement actions were effective in altering bank behavior. See Peek and Rosengren, "Bank Regulatory Agreements"; and U.S. General Accounting Office, "*Bank Supervision*," 6–10.

⁵¹ The "event date" was not the date when the bank actually received the enforcement action; rather, it was the date of the examination that led to the decision to issue a formal action. The reason for choosing the earlier date as the "event date" is that remedial changes in bank behavior are expected to start at least at the earlier time, if not before (in anticipation of the action). The legal document itself is not presented to the problem institution until the paperwork is completed, generally at least six to nine months after the examination.

⁵² As previously indicated, although some problem banks may not have been presented with a formal enforcement action, at the time of their rating as a problem bank most of them had an informal action already in place.

Figure 12.7

Median Asset Growth Rates of CAMEL 4-Rated Banks before and after Regulatory Intervention (Annualized)



Note: Data are median asset growth rates of FDIC- and Federal Reserve-supervised banks before and after regulatory intervention. For this analysis, the intervention dates were dates of

- (1) examinations that resulted in the downgrading of the bank's CAMEL rating to 4 but did not result in a formal enforcement action, or
- (2) the last examination before the issuance of a formal enforcement action against a bank with a CAMEL 4 rating.

Normally, a bank is informed at the time of the examination of the prospect of a CAMEL rating downgrade or a formal enforcement action. Data were run on a constant population sample for each period. The number of observations ranged from 200 to almost 500 for the different periods for banks downgraded to CAMEL 4 rating that did not receive formal enforcement actions, and from 200 to 300 for 4-rated banks that did receive formal enforcement actions.

tion and generally remained negative in the quarters immediately following the intervention.⁵³ This was true both for banks that did and for banks that did not receive formal actions. Banks with formal actions showed more pronounced changes in growth rates, on average, from before to after intervention than banks without such actions. Other measures revealed similar results (see figure 12.8). Dividend rate reductions and increases in external capital infusions began before regulatory intervention and generally accelerated in the first year after intervention; banks subject to formal enforcement action showed the largest dividend cuts and capital infusions. The data for loan-loss provisions (not presented here) revealed comparable results.

The analysis indicates that bank management was taking remedial actions before the examinations that triggered reductions in CAMEL ratings and (possibly) formal enforcement actions. It is not known whether these remedial actions were a response to market forces, management's own analysis, or anticipated regulatory action, but in any event, regulatory intervention apparently had the effect of reinforcing and accelerating these remedial actions. Changes in the behavior of problem banks were greatest for banks subject to formal enforcement actions, but it is not clear whether the differences associated with formal enforcement actions were primarily due to the more stringent nature of such actions or to the relatively poorer condition of those banks that received them.

In general, the reduction in asset growth indicates that moral hazard was being contained—that troubled banks were not attempting, or were not allowed, to “grow out of their problems”; indeed, in most cases the assets were shrinking. In the case of the surviving banks, reduced dividend payouts and increased capital injections helped restore equity positions and were instrumental in facilitating recovery. In the case of the failing banks, dividend cuts and new capital had the direct effect of reducing the costs of failure. Again, whether these favorable results were due to the actions of management, stockholders, market forces, or supervisors, they were consistent with the objectives of preventing the failure of troubled banks and reducing costs to the insurer for banks that did fail.

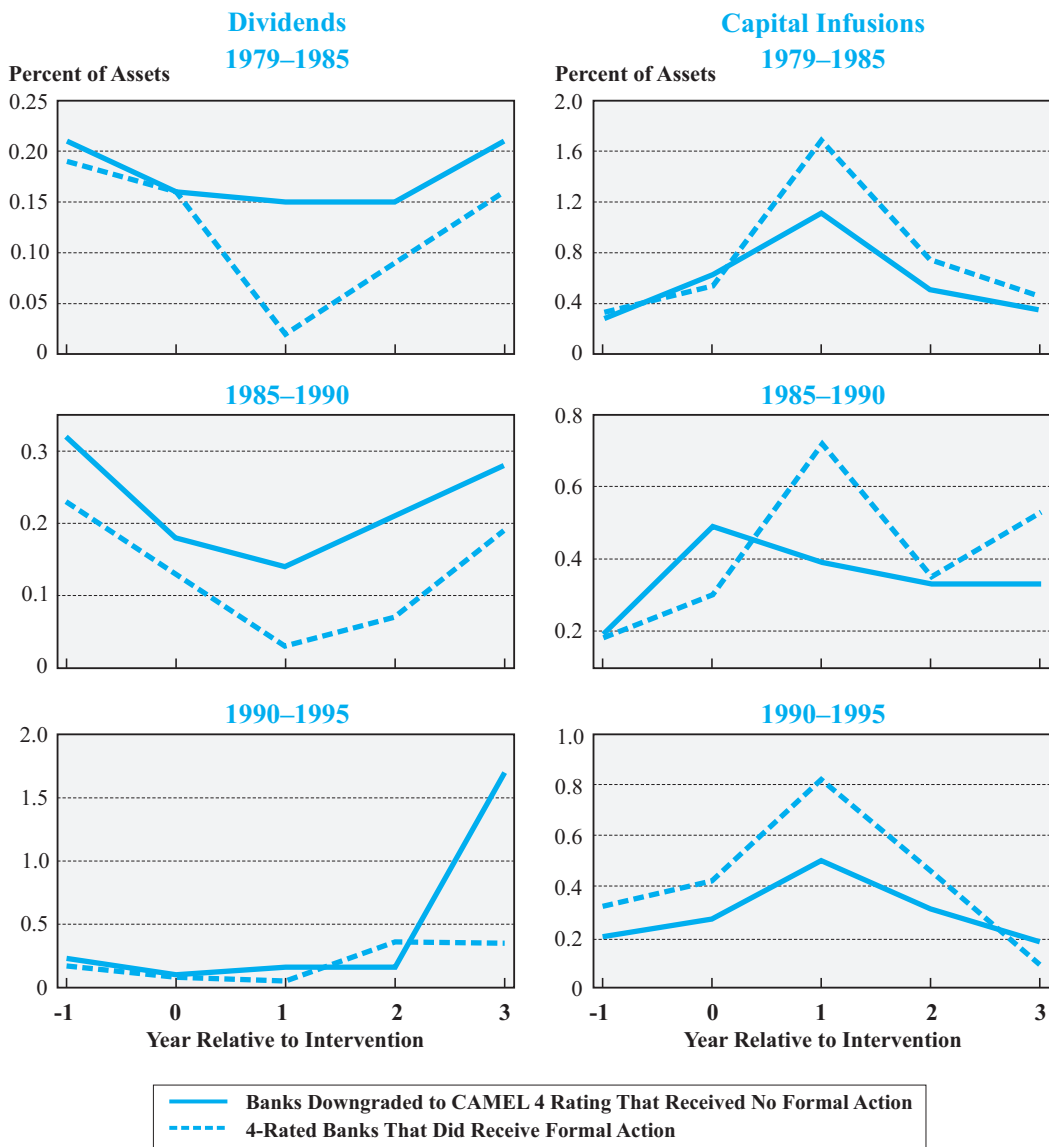
FDICIA and Prompt Corrective Action

Congress passed FDICIA in 1991 to correct what it perceived as the banking agencies' regulatory forbearance toward undercapitalized banks during the 1980s.⁵⁴ FDICIA was designed to limit regulatory forbearance by requiring (1) a more timely closure of failing institutions and (2) earlier intervention in problem banks. These provisions are referred

⁵³ The analysis was also run for 3- and 5-rated banks but, because of the limited sample size of the observations, the data are not presented here. The results for the 3-rated banks showed no significant and consistent results between the assignment of formal actions and changes in behavior. The results for the 5-rated banks were consistent with the overall findings for the 4-rated institutions.

⁵⁴ However, during the 1980s Congress itself had mandated several statutory forbearance programs for financial institutions, including the Net Worth Certificate Program for thrift institutions and the loan-loss amortization for agricultural banks.

Figure 12.8
**Dividend Rates and Capital Infusions of CAMEL 4-Rated Banks
 before and after Regulatory Intervention**



Note: Data are averages of individual bank ratios. See note to figure 12.7.

to as “prompt corrective action” (PCA).⁵⁵ PCA specifically mandated certain rules the banking agencies had to follow with respect to the supervision of undercapitalized banks.⁵⁶ As an institution’s capital position declines, the appropriate federal regulator is required to take increasingly stringent actions; for “undercapitalized” institutions, these include establishing a capital restoration plan and restricting deposit taking, asset growth, dividends, and management fees; for banks that are “critically undercapitalized” for a prescribed period, this includes closing the bank.

The question arises how FDICIA and PCA might have affected problem banks during the 1980s if the law had been in effect then. Would PCA provisions have reduced losses to the bank insurance fund between 1980 and 1992 by requiring earlier closure of some banks? Conversely, would other banks that did not fail have been closed unnecessarily, with increased losses to the fund?

It is difficult to reach any conclusion about what would have happened if PCA had been in effect during the 1980s, because both banks and bank regulators would have been responding to a different statutory and regulatory regime. Thus, the analysis presented here to quantify the effects of PCA is only an approximation.

Timely Closure

Concerning timely closure, it is unclear what impact FDICIA would have had on undercapitalized banks during the period 1980–92. PCA requires that banks be closed when their tangible capital ratio reaches 2 percent for a specified period.⁵⁷ Had this provision been in effect during the 1980s, some banks that failed might have been closed earlier, but it is also possible that some banks that did not fail might have been closed unnecessarily. During the period 1980–92, most banks that failed were closed within the time frame specified by FDICIA for critically undercapitalized banks. However, 343 banks (approximately 21 percent of all failures) with \$88 billion in total assets might have been closed earlier, presumably resulting in reduced losses to the insurance fund (see table 12.15). The table also

⁵⁵ The Prompt Corrective Action provisions of FDICIA did not become effective until one year after passage of the act, or about year-end 1992.

⁵⁶ FDICIA mandated five capital categories: “well capitalized,” “adequately capitalized,” “undercapitalized,” “significantly undercapitalized,” and “critically undercapitalized.” For banks in the last three categories, supervisors are required to impose a ladder of constraints on their operations.

⁵⁷ Under FDICIA, when an institution is critically undercapitalized for 90 days a receiver or conservator must be appointed or some other action must be taken to achieve the purpose of the provision. The 90-day delay may be extended, provided that the regulator and the FDIC concur and document why extension would better serve the purposes of the provision. After the institution has been critically undercapitalized for 270 days, a receiver or conservator must be appointed unless the regulator and the FDIC certify that the institution is viable and not expected to fail. Under the conditions existing in the 1980s when failures were bunched and the market for failed institutions was often saturated, it seems reasonable to suppose that taking more than 90 days to spread out marketing efforts for failed banks would have been an acceptable reason for delay up to the 270-day limit.

Table 12.15
Estimated Number of Failed Banks That Would Have Been Closed Earlier
under FDICIA Rules, 1980–1992

Year	Number of Banks	Average Number of Days*	Average Number of Days (Weighted)†	Total Assets (\$Millions)
1984	1	16	16	\$ 9.6
1985	2	180	169	182.9
1986	16	99	96	1,111.4
1987	49	127	168	1,857.1
1988	69	144	173	9,095.8
1989	78	164	271	13,497.3
1990	63	252	334	5,561.2
1991	39	172	257	36,565.1
1992	26	238	507	19,946.4
Total	343	174	308‡	87,826.7

Note: Before 1984 no banks would have been closed earlier under FDICIA. The PCA provisions of FDICIA became effective in December 1992 so the following years are not included.

* Number of days beyond the 270 allowed before bank would have had to be closed under FDICIA.

† Days are weighted by total assets. Total assets are as of PCA failure date.

‡ This figure is not a total; rather, it is the average number of days for the 343 banks.

shows the average number of days that the banks remained open beyond the PCA mandate. For the group as a whole, the number averaged 174 days on an unweighted basis and 308 days when the number of days is weighted for bank size, a differential suggesting that size was a factor in the closing decisions. When this group is broken out by bank charter class, the data show that 201 of the 343 banks (59 percent) were national banks, 131 (38 percent) were state nonmember banks, and 11 (3 percent) were state member institutions (see table 12.16).

The closing of depository institutions is the shared responsibility of both federal and state banking authorities. The OCC has the responsibility for closing national banks, and the state banking departments for closing state-chartered institutions. Because the chartering authority and not the insurer has authority to declare insolvency, the various agencies may have different incentives leading them to pursue different closure strategies. The insurer will usually want earlier action, but the chartering agency may have practical reasons to delay closing. These reasons may include the effect on the local economy or some feeling of allegiance to a bank the agency itself chartered. Charterers also are seen as having some in-

Table 12.16
Estimated Number of Failed Banks That Would Have Been Closed Earlier under
FDICIA Rules, by Bank Charter Class, 1980–1992

Year	National		State Nonmember		State Member	
	Number of Banks	Average Number of Days	Number of Banks	Average Number of Days	Number of Banks	Average Number of Days
1984	1	16	0	0	0	0
1985	1	204	1	156	0	0
1986	9	83	6	123	1	94
1987	25	155	24	98	0	0
1988	40	154	23	148	6	64
1989	56	164	19	181	3	75
1990	49	252	13	252	1	267
1991	13	241	26	138	0	0
1992	7	181	19	259	0	0
Total	201	184*	131	167*	11	88*

Note: Refer to footnotes for table 12.15.

*This figure is not a total; rather it is the average number of days for the 201 banks.

terest in promoting their own segment of the banking industry. Meanwhile, the insurer assumes any additional costs associated with a delayed closing.

Data for the banks whose closings were delayed beyond the PCA limit are broken down for the six states that had the most closings overall and the most late closings (see table 12.17). Of the 343 banks nationwide whose closings were delayed, 256 were located within these six states. The data show that state banking authorities in the six states generally closed problem banks in a more timely fashion than did the OCC. Of the total 473 national banks closed in the six states during the years 1980–92, the OCC closed 178 (38 percent) later than would have been required under the PCA mandate. Conversely, regulators in the six most active states closed 459 banks, only 78 of which (17 percent) would have violated the PCA requirement. These differences were especially apparent in the southwestern states of Texas and Oklahoma, which accounted for more than 75 percent of all failures over the period. In these two states, national banks were closed late 38 percent of the time, whereas the comparable figure for state banks was less than 16 percent. The timely closing pattern was observed in all six states except Louisiana, where 38 percent of the 58 banks were closed later than would have been called for by the PCA rule—yet even there the state had a better record than the OCC, which was late in the case of more than half of the national banks closed.

Table 12.17

Estimated Number of Failed Banks That Would Have Been Closed Earlier under FDICIA Rules in the Six States with the Greatest Number of Closings, 1980–1992 (by Closing Authority)

State	OCC					State				
	PCA Required Earlier Closure	Total OCC Failures (Number)	Late Closing (Percent)	Average Closing (Days)	Total Assets (\$Millions)	PCA Required Earlier Closure	Total State Failures (Number)	Late Closing (Percent)	Average Closing (Days)	Total Assets (\$Millions)
Texas	136	359	37.9	185	\$24,418	41	230	17.8	134	\$ 2,811
Oklahoma	20	51	39.2	203	626	7	71	9.9	137	333
Louisiana	7	12	53.3	139	136	22	58	37.9	216	1,614
Colorado	7	25	28.0	107	95	0	33	0.0	0	0
New York	4	9	44.4	392	826	4	24	16.7	771	20,525
California	4	17	23.5	104	100	4	43	9.3	63	262
Total	178	473	37.6	185*	\$26,201	78	459	17.0	186*	\$25,545

Note: Refer to footnotes for table 12.15.

*This is not a total; rather it represents the average number of days for the 178 banks.

Part of the reason for the OCC's comparatively greater delay may be the bank closure rules adopted by the respective closing authorities. Up through mid-December 1989, OCC rules prohibited the closing of a national bank until all "primary capital" was exhausted (the regulatory-insolvency rule). This was based on a statutory requirement that a national bank be closed if the Comptroller was satisfied that the bank was insolvent and the OCC's own definition of insolvency. "Primary capital" was defined to include both total equity capital and loan-loss reserves. Most individual states were not constrained by the same set of rules. The six states where most of the bank failures occurred during this period had the authority to close banks when capital was "impaired" or when the bank either faced "imminent insolvency" or was in an "unsafe" or "unsound" condition. These more flexible standards made it possible for the states to close banks earlier.⁵⁸ However, although the OCC's closing policy was constrained by a statutory insolvency requirement, the agency had wide latitude to define insolvency and could have adopted a more flexible standard than it did during most of the 1980s. In December 1989, after about a year of study, the OCC changed the historical closure rules by adopting an equity capital-only rule, excluding reserves, which allowed for

⁵⁸ Information on the statutory authority of the six state banking departments is based on conversations with representatives of each of the six departments.

more timely closures.⁵⁹ But by the time this change was made, most of the failures of the 1980s had already been resolved.⁶⁰

To estimate the cost of delaying the closure of the 343 undercapitalized institutions that might have been closed earlier, FDIC researchers analyzed changes in total equity capital between the date of the PCA-required closing and the date of actual failure (see table 12.18). The results show that the 343 banks had total equity capital of approximately \$220 million at the PCA-required closing date and approximately a negative \$1.6 billion at the actual closing date. However, a large part of these losses were not accrued over the six-month average holding period, because a substantial percentage were already embedded within bank portfolios at the PCA failure date, although not yet recognized. Operating losses might still have been incurred, however, because of the higher private sector funding

Table 12.18
Changes in Total Equity Capital for Failed Banks That Would Have
Been Closed Earlier under FDICIA Rules, 1980–1992

Year	Number of Banks	Equity Capital at PCA Failure Date (\$Thousands)	Equity Capital at Actual Failure Date (\$Thousands)
1984	1	\$ -140	\$ -161
1985	2	-543	-6,032
1986	16	12,299	46,501
1987	49	-56,944	-136,232
1988	69	-189,748	-256,323
1989	78	-73,577	-693,064
1990	63	-64,654	-359,590
1991	39	21,184	-539,336
1992	26	571,826	358,068
Total	343	\$219,703	\$ -1,586,169

Note: Refer to footnotes for table 12.15 where applicable.

⁵⁹ OCC, *Bulletin BB-89-39*, December 13, 1989.

⁶⁰ Edward J. Kane argues that bank supervisors have incentives to forbear from prompt closure of insured banks because bank failures and insurance losses make it appear that supervisors are not effectively discharging their responsibilities of oversight. He claims that this was one of the prime motives for the forbearance granted to insolvent thrift institutions during the 1980s (*The S&L Insurance Mess: How Did It Happen?* [1988], chap. 4).

costs and the cost of operating retail branch systems.⁶¹ These costs that would have been saved (estimated to be approximately \$825 million) are approximately 8 percent of the total resolution costs of the 343 banks and approximately 2 percent of the cost of all bank failures during the period 1980–92. Approximately 60 percent of the estimated cost savings are attributable to six large banks that operated with less than 2 percent tangible capital for relatively long periods of time.

An alternative estimate of the avoidable cost, based on net operating losses, produced essentially the same aggregate result. Net operating losses before loan-loss provisions, gains/losses on transactions, taxes, and extraordinary items totaled \$815 million for the 343 banks for the intervals between closure dates required by PCA and actual closure dates. As in the previous estimate, these losses were concentrated in a few large banks.

Some caveats should be mentioned with respect to these estimates. Regulators' bank closure policies would have been different if PCA had been in effect in the 1980s, and such policy changes might have reduced projected cost savings. For example, for the many banks that were allowed to operate with tangible capital below 2 percent for only a few months beyond the interval allowed by PCA, earlier closure might have meant insufficient time to market the institution among potential acquirers and therefore the resolving of more banks through insured-deposit payoffs.⁶² This outcome would have been likely in periods when failures were proliferating and the market for failed bank and thrift deposit franchises and assets was temporarily saturated. Spreading closures over a longer period of time might have attracted improved bids and offset some of the additional costs resulting from delayed closings. Therefore, the savings resulting from the earlier implementation of PCA might have been smaller for many of the 343 banks than these estimates suggest. For the 6 large banks that operated for extended periods of time with low capital levels, earlier closure would probably have achieved cost savings, although for some of these banks lengthy marketing periods might have been needed, which might have reduced the amount of the savings. Presumably, because of PCA, regulators might have had to start the marketing process earlier, while the banks had capital well above the 2 percent level.

⁶¹ The avoidable cost is estimated as the sum of (1) the actual funding costs of these banks minus the one-year Treasury rate and (2) the operating expenses of transactions and nontransactions deposit accounts as estimated by the 1990 Functional Cost Analysis of the Federal Reserve Board. The avoidable cost was computed for the period of time beyond 270 days that the bank's tangible capital ratio was below 2 percent. In cases where the tangible capital ratio fluctuated below and above 2 percent, the bank was considered to be critically undercapitalized for the entire period after the ratio first fell below 2 percent, except when the ratio subsequently rose above 3 percent. In the latter case, that bank was counted as critically undercapitalized only for the period it was below 2 percent subsequent to having reached the 3 percent level. Two large savings banks that had entered into Income Maintenance Agreements with the FDIC in connection with the acquisition of other failed institutions were counted as critically undercapitalized from the time the bank's agreement was terminated (in one case) and (in the other case) from the date the FDIC formally permitted the bank to miss capital targets prescribed in its agreement.

⁶² Gilbert makes this point in volume 2 of this study.

Conversely, the 2 percent tangible equity capital rule might have forced the possibility of unnecessary closure on 143 problem banks (those rated CAMEL 4 or 5), with \$11 billion in total assets, that did not fail. The result might have been increased cost to the deposit insurance fund (see table 12.19).⁶³ The data show that at the time when FDICIA might have mandated their closure, the 143 banks had total assets of \$10.9 billion and \$64 million in equity capital. What it might have cost the insurer to resolve these cases is unknown. And in addition to payoff costs by the insurer, there would have been social or deadweight costs that the public and the local communities would have had to absorb upon the unnecessary closing of local institutions.

The assumptions underlying the forbearance programs that Congress mandated during the 1980s differed from those underlying the later PCA provisions of FDICIA. Thus, banks in those forbearance programs were excluded from the computations that produced the estimates that 343 failing banks would have been closed earlier and that 143 banks might have been unnecessarily closed if PCA had been applied in the 1980s. Nevertheless, to complete the record, a similar methodology was used for banks that participated in these forbearance programs. The results show that 48 banks that actually failed, with \$11 billion

Table 12.19
Estimated Number of Problem Banks That Survived but
Might Have Been Closed under FDICIA Rules, 1980–1992

Year	Number of Banks	Total Assets (\$Millions)	Total Equity (\$Thousands)
1982	1	\$ 8.4	\$ -24
1983	1	33.8	256
1984	7	366.8	18,255
1985	9	363.6	13,784
1986	14	844.2	11,455
1987	19	378.1	6,311
1988	26	2,974.4	88,358
1989	16	2,892.8	46,912
1990	15	1,305.0	-18,573
1991	25	1,160.0	-107,041
1992	10	602.0	3,933
Total	143	\$10,929.1	\$ 63,626

Note: Refer to footnotes on table 12.15 where applicable.

⁶³ A large percentage of these banks were able to raise capital within 12 months of the PCA failure date; thus, many of these banks would probably have been recapitalized rather than closed.

in assets, would have been closed earlier as a result of PCA, and 66 banks that actually survived, with \$16 billion in assets, would have been closed.

Early Intervention

Recent empirical studies of banking show that in most cases, PCA's early-intervention provisions would not have required bank supervisors either to impose more severe restrictions on banks or to intervene earlier. In fact, supervisors had identified most problem banks and had some enforcement actions in place at significantly earlier stages than might have been required under the PCA provisions.⁶⁴ Moreover, the restrictions the regulators imposed were more comprehensive than those prescribed in the PCA legislation.⁶⁵ The reason behind this finding is that capital ratios prescribed in PCA are lagging indicators of the health of the institution and would trigger enforcement actions well after problems had been identified in examinations. Examiners evaluate considerably more information than capital ratios to determine the bank's likelihood of failure.

These findings are supported by an analysis of FDIC-supervised problem banks, some of which failed and some of which survived. Of the 127 banks that might have been closed earlier, 101 (approximately 80 percent) had received enforcement actions to control or limit risk-taking behaviors before PCA closure would have been required.⁶⁶ On average, these enforcement actions were brought 419 days before the mandated PCA failure date and 570 days before actual failure (see table 12.20).

For problem banks that survived but might have been closed by PCA provisions, 33 of the 58 banks (57 percent) received a formal enforcement action (see table 12.21). The average number of days that enforcement actions were brought before PCA failure was 550. The data also show that 16 banks (28 percent) received no formal action, and another 9 banks received a formal action after the required PCA closure; these data suggest that something may have been lacking in the enforcement process.

⁶⁴ See Gilbert, "Legislating Prompt Corrective Action."

⁶⁵ Recent studies show that bank supervisors generally intervened with problem banks at much earlier stages, initiating more formal enforcement actions during the 1980s and early 1990s than would have been required by PCA legislation, and these actions were more stringent than those PCA would have imposed. This was especially true with respect to the New England banking crisis of the early 1990s. See two articles by Peek and Rosengren: "Will Legislated Early Intervention Prevent the Next Banking Crisis?" Federal Reserve Bank of Boston, Working Paper 96-5 (1996), and "The Use of Capital Ratios to Trigger Intervention in Problem Banks: Too Little, Too Late," Federal Reserve Bank of Boston *New England Economic Review* (September/October 1996).

⁶⁶ Enforcement data were unavailable on four of the FDIC-supervised banks that would have been closed earlier under the FDICIA rules.

Table 12.20

Timing of FDIC Enforcement Actions against FDIC Problem Banks That Failed and Would Have Been Closed Earlier under FDICIA Rules, 1980–1992

FDIC Enforcement Action	Number of Banks	Enforcement Action before FDICIA Failure Date (Average Days)	Enforcement Action before Actual Failure Date (Average Days)	Between FDICIA Failure Date and Actual Failure Date (Average Days)
Formal	101	419	570	151
No Formal	16			84
Formal (after FDICIA Failure Date)	10	–48	187	235
Total	127			

Note: Formal enforcement actions for safety-and-soundness purposes only.

Table 12.21

Timing of FDIC Enforcement Actions against FDIC Problem Banks That Survived but Might Have Been Closed under FDICIA Rules, 1980–1992

FDIC Enforcement Action	Number of Banks	Enforcement Action FDICIA Failure Date (Average Days)
Formal	33	550
No Formal	16	
Formal (after FDICIA Failure Date)	9	–244
Total	58	

Note: Formal enforcement actions for safety-and-soundness purposes only.

Conclusion

Several lessons can be drawn from this analysis about the bank supervisory system. First, hindsight shows that the public policy decisions to reduce examination resources in the early 1980s were a failure. Few could have anticipated the severity of the regional recessions or their attendant problems, but reducing examination staffs was a high-risk policy. Second, to identify risk early and ensure the integrity of bank financial reporting, frequent on-site examinations are necessary. Third, early detection of problem institutions increases the likelihood that supervisory monitoring and enforcement actions will be effective in stemming losses to the insurance fund. Fourth, the examination system needs to capture more risks systematically, including those posed by changes in local and regional economic conditions.

Appendix

The Examination Process

Supervisory responsibilities for the nation's insured commercial banks are divided among the 3 federal banking agencies and the 50 state supervisory authorities. Of the federal banking agencies, the Office of the Comptroller of the Currency is responsible for supervising national banks; the Federal Reserve System is responsible for supervising both state member banks and holding companies; and the FDIC is responsible for supervising state nonmember banks and FDIC-insured savings banks. The FDIC also has back-up supervisory responsibility for monitoring the condition of national banks and state member banks, and in fulfilling these responsibilities it works with the other two federal regulatory agencies. Under the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), it also has back-up authority to examine thrift institutions as well. State banking departments supervise state-chartered banks.

Within the context of maintaining public confidence in the integrity of the banking system and protecting the insurance fund, bank examiners evaluate all aspects of a bank's operations. In particular, examiners analyze the overall financial condition of an institution; appraise the quality of its management, including its board of directors; determine its overall compliance with applicable laws and regulations; review the adequacy of its internal controls and procedures; identify areas where corrective action may be necessary; and establish a factual record to support recommendations for corrective actions. The examination consists of three major stages: off-site analysis and review, on-site examination, and preparation of a report that documents the results of the examination. When the examiners identify significant problems, there is a fourth stage: the use of informal or formal administrative corrective actions.

Chapter 13 discusses off-site analysis and review. The other three stages of the examination process are surveyed here. Also discussed here are cooperation between state and federal agencies in the examination process, and coordination among the federal agencies.

On-Site Examinations

An examination starts when the field office supervisor schedules an examination for a specific date and assigns an examiner-in-charge to supervise the job.⁶⁷ This examiner has full responsibility for supervision of the entire examination process. The examiner-in-charge is assisted by a junior commissioned examiner or assistant examiner, who oversees

⁶⁷ In the past, examinations were conducted on a surprise basis—especially for smaller-sized and problem banks. Institutions are now notified of pending examinations and allowed time to assemble requested information.

the financial analysis and operational portions of the review. The size and composition of the examination team depend on the scope of the examination and the size and complexity of the bank. The team is normally composed of assistant and commissioned examiners from a wide range of grade levels and with varied examination experience.

In anticipation, the examiner-in-charge reviews past examination reports, information on bank holding companies and chain banking relationships,⁶⁸ various off-site reviews, bank correspondence, and any other available information. Although pre-exam review and planning always existed during the 1980s, the process was not formalized. Recently, however, the federal agencies developed more formalized procedures, and current procedures require written pre-examination plans. To gather pre-exam information, regulators submit requests for various bank records and often use informal questionnaires before physically entering the bank. The FDIC also requires management to complete a formal questionnaire.

Generally the examination focuses on two broad areas: (1) the review of asset quality, and especially the loan portfolio, which generally constitutes the largest share of the bank's total assets; and (2) the financial analysis of the bank's condition, as well as a review of all other aspects of the bank's operation. The more experienced examiners generally focus on the loan portfolio, while the assistant and less-experienced examiners work on the financial analyses and the remaining operations work not associated with the loan portfolio.

The examiners conducting the loan-portfolio review first determine a loan cutoff, or the percentage of the loan portfolio that will be reviewed. The percentage of loans reviewed depends on a number of factors, including the bank's last composite CAMEL rating, trends in loan quality, and local economic conditions. Examiners normally analyze not only the loans identified by the cutoff but also the previously classified credits, non-performing loans, loans included on the bank's internal watch list, and insider loans. (When the OCC determines which loans will be reviewed by its examiners, it generally relies on statistical and judgmental sampling techniques. The FDIC uses sampling procedures in larger banks and in institutions with strong internal monitoring and quality review programs.) The examiner-in-charge has the option of expanding the volume of loans reviewed at any time, particularly in banks with deteriorating asset quality. In institutions with severe or deteriorating asset problems, examiners often review 70 percent or more of a bank's loan portfolio.

During the loan review, examiners make a judgment as to which credits are of poor quality or have deteriorated in quality and/or have more than the normal risk of repayment. These credits are flagged for further discussion with the loan officers and management. In

⁶⁸ "Chain banking relationships" refers to banks that are controlled by the same ownership group but are not associated with a bank holding company.

addition to the loan quality analyses, examiners review the loan portfolio for concentrations of credit, violations of legal lending limits, technical exceptions to the credit files, and loans made in contravention of the bank's internal loan and underwriting policies. Loans are then discussed with the loan officers and management and are classified on the basis of their overall quality and the examiner's perception of the risk of loss to the bank. The examiner will either "pass" a credit or assign it to one of the following categories: (1) special mention, (2) substandard, (3) doubtful, or (4) loss. Management is provided with a list of the adversely classified loans, of loans that are held in apparent violation of banking laws and regulations, and of concentrations of credit. In addition, management is provided with a list of those credits that have documentation exceptions (if the volume is significant).

The more-junior examiners, charged with completing the financial analysis and operational aspects of the examination, conduct nearly all the remaining aspects of the on-site review: they examine the other asset and liability accounts, capital and reserve adequacy, liquidity and interest-rate sensitivity, insider activities, subsidiary and affiliate information, litigation, contingent liabilities, and any off-balance-sheet activities.

The overall examination procedures are directed primarily toward the five performance categories used in the "Uniform Financial Institutions Rating System" (UFIRS), namely, Capital Adequacy, Asset Quality, Management, Earnings, and Liquidity (CAMEL).⁶⁹ The examiners must address each of these areas and must include an assessment of each in the final report of examination (see box 1, below).

Once the on-site review is complete, the examiner-in-charge conducts an exit meeting at which the examination findings are fully discussed with the active officers of the bank. Management's and the bank's strengths are recognized, but the primary focus of the comments and recommendations is on those areas needing management's special attention. Emphasis is placed on providing management with a complete summary of the examination findings and obtaining a commitment from management to correct any deficiencies. Management is given an opportunity to discuss these findings and to agree or disagree with the results of the review.

The final step of the on-site examination is a meeting to which all members of the board are invited. The board meeting could be scheduled either during the on-site review or within a reasonable period of time after the examiners leave the bank. (The FDIC does not always require a board meeting but schedules one whenever a bank is, or probably will be, given a composite rating of 3, 4, or 5. In contrast, the OCC is required to conduct a final meeting with the board during or following the on-site review.) The results of the review are

⁶⁹ FDIC, *DOS Manual of Examination Policies*, pp. 1.1-1 to 1.1-4; and Policy Statement on Uniform Financial Institutions Rating System (UFIRS), *Federal Register* 62 (January 6, 1997), 752. Use of UFIRS began in 1979.

discussed with individual board members, who are given the opportunity to express their views and opinions. In these meetings the emphasis is on getting a commitment from the board members, individually and as a group, to take strengthening or corrective actions where necessary. Management weaknesses and strengths are also discussed. If the results of the review are such that the condition of the bank has deteriorated enough to become a problem, the likelihood of informal and/or formal corrective action is also discussed. In cases in which the bank is, or is likely to be, rated a composite 4 or 5, the regional or district office would send a representative to the meeting with the board.

The examiner is required to disclose the bank's composite rating to the bank's board of directors. (For the definition of each of the five CAMEL composite ratings, see box 2, below.) Historically the five component CAMEL ratings were used internally by the regulators and were not disclosed to management or the bank's board. Since January 1997, however, under revised examination procedures worked out by all federal bank regulatory agencies, component CAMEL ratings have been released to officials of the bank. The ratings are confidential and are available only to bank officials and the regulators.

Preparation of the Examination Report

A written report is prepared in conjunction with every on-site examination and is subsequently sent to the bank's board of directors for review. The report makes a factual presentation of the institution's overall condition and is organized in accordance with the components of the CAMEL rating system: capital adequacy, asset quality, management, earnings, and liquidity. It also summarizes the scope of the examination; references the meetings held with management and the board, including the topics discussed and any of management's actions, commitments, and responses; and makes recommendations for improving the areas containing deficiencies and other weaknesses. The report should enable bank directors to identify areas in which they are not fulfilling their duties and should encourage them to discharge properly their responsibilities for operating the bank in a safe and sound manner.

Before the final report is forwarded to the bank, the report plus recommendations for any informal or formal enforcement action are transmitted to the FDIC regional office for review. (The OCC has delegated much of its review process to the field level, with the district office involved in reviewing only 3-, 4-, or 5-rated banks or banks subject to various enforcement actions.) The examiner-in-charge works closely with various staff members of the regional or district office, especially when examining a deteriorating or problem bank, keeping the staff members informed of any unusual activities or findings. A transmittal letter and the report of examination are then forwarded to the bank's board for final action. Any additional supervision and follow-up are generally handled by the various regulatory regional or district office staffs.

Use of Formal and Informal Enforcement Actions

A number of formal and informal administrative corrective actions are available to the federal bank regulatory agencies. The primary corrective tools of all the regulatory agencies are the use of reason and moral persuasion during the on-site examination, management meetings, and final board review; the commentary and recommendations in the report of examination; and communications from the regional and Washington offices. Informal corrective procedures consist of the use of memorandums of understanding (MOU) and the bank's adoption of a board resolution. Under Section 8 of the FDI Act as amended in 1966, the FDIC Board of Directors was given broad formal enforcement powers (cease-and-desist and removal authority), and FDICIA mandated the use of Prompt Corrective Action. Finally, the federal regulatory agencies have the authority to impose civil money penalties in certain cases. Although the three regulatory agencies may vary in this respect, formal or informal administrative actions are generally taken on banks whose composite uniform ratings are 3, 4, or 5, unless specific circumstances warrant otherwise. (For a description of the types of enforcement actions, see box 3, below.)

Federal-State Cooperation

In the early 1970s, all state-chartered banks were examined annually by both state and federal agencies. In 1974, the FDIC started an experimental program in three states to determine the feasibility of using state examinations in alternate years for nonproblem banks.⁷⁰ Three years later, it made its first agreement with a state—with Georgia.⁷¹ By 1980 it had examination agreements with 14 states, and during the decade the number grew.⁷²

To qualify for the program, a state is required to have sufficient examination resources and capabilities to complete the task satisfactorily. Problem banks (4- and 5- rated) and banks of supervisory concern (3-rated) are not included in the program. The FDIC and state authorities coordinate their examination schedules to take advantage of their combined resources and to minimize duplication and burden on the institutions. In addition to alternating examinations, the FDIC allows state authorities access to computerized databases that provide Call Report information.⁷³ The FDIC also works closely with state authorities in issuing enforcement actions and in developing common application forms, to minimize duplicative filings.

⁷⁰ FDIC, *Annual Report* (1974), 10.

⁷¹ Ibid. (1977), 3.

⁷² Ibid. (1980), 5; and an address by FDIC Chairman L. William Seidman to the Conference of State Bank Supervisors, Washington, D.C., December 9, 1985.

⁷³ FDIC, *Annual Report* (1980), 5.

In 1981, the Federal Reserve also adopted a policy of alternating federal and state examinations for certain of the banks it supervised.⁷⁴

In addition to alternating examination cycles, state and federal agencies conduct concurrent and joint examinations, to reduce the supervisory burden on state banks. Joint examinations result in one examination report used by both agencies, while a concurrent examination usually yields two separate reports.

Federal Agency Coordination

The federal banking agencies began to coordinate their operations and policies in the mid-1970s. In 1976, they began their shared national credit program for all loans \$20 million or more that are owned by two or more banks.⁷⁵ The review and classification of these credits are conducted independently of the regular bank examination by an interagency team of examiners, who review the loans for credit quality. The classification of these credits is then used in the examination of each institution that participated in the loans.

In 1977 the Interagency Supervisory Committee, which included representatives from the five federal banking, thrift, and credit union agencies, was established to coordinate supervisory policies and procedures.⁷⁶ A significant accomplishment of the committee was adoption of the uniform interagency system for rating the condition of banks—the immediate predecessor of the CAMEL rating system. The uniform rating system provided a basis on which the examination findings of all federally insured banks could be compared, so that for the first time meaningful reports on the condition of the nation’s banking system could be given to the public and to Congress.

In 1979, after passage of the Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRIRCA), the Interagency Supervisory Committee was replaced by the Federal Financial Institutions Examination Council (FFIEC).⁷⁷ The council’s membership consists of the OCC, the Federal Reserve Board, the FDIC, the Office of Thrift Supervision, and the National Credit Union Administration.⁷⁸ The council has established task forces to work on coordination of supervisory activities, uniformity of consumer protection laws and regulations, use of common data-gathering systems, and use of common educational programs. Some of its early accomplishments were standardizing instructions and forms for banks’ quarterly reports of condition and income, bringing uniformity to bank performance reports, instituting interagency examiner training, and preparing a number of uniform supervisory policy statements.

⁷⁴ Ibid. (1981), 183.

⁷⁵ Ibid. (1977), 7–8.

⁷⁶ Ibid. (1978), 9–10.

⁷⁷ Ibid., 9.

⁷⁸ Before passage of FIRREA, the Federal Home Loan Bank Board was represented on the FFIEC.

Box 1***The CAMEL Evaluation Components***

An institution's *Capital Adequacy* is evaluated in relation to the volume of risk assets; the volume of marginal and inferior quality assets; the bank's growth experience, plan and prospects; and the strength of management. Consideration is also given to an institution's capital ratios relative to its peer group, its earnings retention, its dividend policies and its access to capital markets or other appropriate sources of financial assistance. Capital adequacy for the FDIC, the OCC and the Federal Reserve is guided by regulation.

Asset Quality is evaluated by the level, distribution and severity of adversely classified assets; the level and distribution of non-accrual and reduced-rate assets; the adequacy of the allowance for loan losses; and management's demonstrated ability to administer and collect problem credits. In addition, examiners evaluate the volume of concentrations of credit, trends in asset quality, volume of out-of-territory loans, level and severity of other real estate held and the bank's underwriting standards.

Management is evaluated against virtually all factors considered necessary to operate the bank within accepted banking practices and in a safe and sound manner. Thus, management is evaluated in relation to technical competence; leadership and administrative ability; compliance with banking regulations and statutes; adequacy of, and compliance with, internal policies and controls; and whether the board has a plan covering management succession. The assessment of management also takes into account the quality of internal controls, operating procedures and all lending, investment, and other operating policies. Finally, examiners review and assess the composition, experience level, abilities and involvement of the officers, directors and shareholders.

Earnings are evaluated with respect to their ability to cover losses and provide adequate capital protection; trends; peer group comparisons; the quality and composition of net income; and the degree of reliance on interest-sensitive funds. Consideration is also given to the bank's dividend payout ratio, the rate of growth of retained earnings and the adequacy of bank capital. The adequacy of provisions to the allowance for loan losses, and the extent to which extraordinary items, securities transactions and tax effects contribute to net income, are also assessed.

Note: Information in Box 1 and Box 2 is quoted from the FDIC's *DOS Manual of Examination Policies*.

Box 1—continued

Liquidity is evaluated in relation to the volatility of deposits; the frequency and level of borrowings, use of brokered deposits, technical competence relative to the structure of liabilities, availability of assets readily convertible into cash; and access to money markets or other ready sources of funds. The overall effectiveness of asset-liability management is considered, as well as the adequacy of, and compliance with, established liquidity policies. The nature, volume and anticipated use of credit commitments are also factors that are weighed.

Box 2***Definitions of Composite CAMEL Ratings***

Composite “1” — Institutions in this group are basically sound in every respect; any adverse findings or comments are of a minor nature and can be handled in a routine manner. Such institutions are resistant to external economic and financial disturbances and more capable of withstanding the vagaries of business conditions than institutions with lower ratings. As a result, such institutions give no cause for supervisory concern.

Composite “2” — Institutions in this group are fundamentally sound, but may reflect modest weaknesses correctable in the normal course of business. The nature and severity of deficiencies, however, are not considered material and, therefore, such institutions are stable and able to withstand business fluctuations quite well. While areas of weakness could develop into conditions of greater concern, the supervisory response is limited to the extent that minor adjustments are resolved in the normal course of business and operations continue to be satisfactory.

Composite “3” — Institutions in this category exhibit financial, operational or compliance weaknesses ranging from moderately severe to unsatisfactory. When weaknesses relate to financial condition, such institutions may be vulnerable to the onset of adverse business conditions and could easily deteriorate if concerted action is not effective in correcting the areas of weakness. Institutions that are in significant non-compliance with laws and regulations may also be accorded this rating. Generally, these institutions give cause for supervisory concern and require more than normal supervision to address deficiencies. Overall strength and financial capacity, however, are still such as to make failure only a remote possibility.

Composite “4” — Institutions in this group have an immoderate volume of serious financial weaknesses or a combination of other conditions that are unsatisfactory. Major and serious problems or unsafe and unsound conditions may exist that are not being satisfactorily addressed or resolved. Unless effective action is taken to correct these conditions, they could reasonably develop into a situation that could impair future viability, constitute a threat to the interest of depositors and/or pose a potential for disbursement of funds by the insuring agency. A higher potential for failure is present, but is not yet imminent or pronounced. Institutions in this category require close supervisory attention and financial surveillance and a definite plan for corrective action.

Composite “5” — This category is reserved for institutions with an extremely high immediate or near term probability of failure. The volume and severity of weak-

Box 2—continued

nesses or unsafe and unsound conditions are so critical as to require urgent aid from stockholders or other public or private sources of financial assistance. In the absence of urgent and decisive corrective measures, these situations will likely result in failure and involve the disbursement of insurance funds to insured depositors, or some form of emergency assistance, merger or acquisition.

Box 3***FDIC Informal and Formal Actions to Correct
Unsafe and Unsound Practices*****Informal Corrective Actions**

Memorandum of Understanding—A memorandum of understanding is the means of seeking informal corrective action from institutions that are considered to be of supervisory concern but have not deteriorated to the point where they warrant formal administrative action. As a general rule this informal action is to be considered for all institutions rated a composite 3. A memorandum of understanding is generally drafted at the regional level and is based on the recommendations of the examiner and the report of examination. This document is signed by the institution's board of directors and a representative of the FDIC, with the state authority invited to join the action. Use of a memorandum of understanding is generally appropriate when the regional office believes that the problems discussed with management and the board of directors of the institution have been adequately detailed and that the institution will move in good faith to eliminate the problems.

Board Resolution—A board resolution is generally used in lieu of, and contains basically the same items as those covered in, a memorandum of understanding. An institution's board of directors, after reviewing and concurring with the problems discussed by the examiner and outlined in the report of examination, adopts a resolution indicating the directors' intent to take corrective action and eliminate the problems. The board resolution is a formal commitment adopted by the bank's board members but is not signed by the FDIC. A board resolution is generally used when the bank is rated a composite 3 and management and the board have demonstrated an ability and willingness to initiate corrective action to eliminate the problems.

Formal Enforcement Actions

Section 8 of the Federal Deposit Insurance Act—Section 8 provides the FDIC's Board of Directors with a broad range of formal administrative enforcement powers. The FDIC Board of Directors has delegated certain Section 8 actions to the various levels within the Division of Supervision and has retained certain authority at the Board level. Banks with composite ratings of 4 or 5 will, by definition, have problems of sufficient severity to warrant formal action. Division of Supervision policy requires the FDIC to take formal action pursuant to Section 8 of the FDI Act against all insured state nonmember banks rated 4 or 5 when evidence of unsafe or unsound practices is

Box 3—continued

present. This enforcement action normally consists of *either* a cease-and-desist order under either Section 8(b) or Section 8(c) *or* initiation of termination of insurance proceedings under Section 8(a). Section 8(e) gives the FDIC the power to order the removal of an institution-affiliated party (director, officer, employee, controlling stockholder, independent contractor, etc.) from office. This section also allows the FDIC to prohibit the party from participating in the conduct of the affairs of any insured depository institution.

Other Actions

Written Agreements/Capital Directives—The use of a written agreement should normally be used for a bank whose problems are limited to a capital deficiency that has not been caused by the unsafe and unsound practices of its management. A written agreement is intended to be used only when a Section 8(a) or Section 8(b) action or a capital directive against a bank is not justified or practical. This document must be between a bank and its primary federal regulator, with the FDIC a party to the agreement. A capital directive is an order to a state nonmember bank that fails to maintain capital at or above its minimum capital requirements, and is to be used solely to correct a capital deficiency.

Prompt Corrective Action—The Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) requires each appropriate federal banking agency to take prompt corrective action to resolve the problems of insured depository institutions at the least possible long-term loss to the deposit insurance fund. Prompt Corrective Action is a framework of supervisory actions for insured depository institutions that are not adequately capitalized. Other supervisory actions associated with prompt corrective action are discretionary and may be imposed on an institution by the FDIC.

Civil Money Penalties—Although this specific proceeding is not a formal enforcement action, the FDIC and the other federal regulatory agencies have the authority and power to assess civil money penalties in certain situations. The Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRIRCA) gave the FDIC authority to prospectively assess civil money penalties against both banks and individuals. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) significantly increased their applicability and the dollar amount of the penalties that could be assessed. Civil money penalties may be assessed for the violation of any law or regulation, any final order or temporary order issued, any con-

dition imposed in writing by the appropriate federal banking agency in connection with the approval of any application, and any written agreement between a depository institution and federal banking agency. An interagency statement of policy regarding the assessment of civil money penalties was adopted by the FDIC in 1980. This policy statement describes 13 factors an agency should consider in determining whether to pursue civil money penalties.

Chapter 13

Off-Site Surveillance Systems

Introduction

Bank regulators have used computerized off-site surveillance systems since 1975, yet during the banking crises of the 1980s and 1990s, bank supervisors seemed surprised as each new bank crisis erupted. This chapter examines why, even with computerized off-site systems, it is difficult to anticipate which banks will fail many years in advance of the failure and what tools bank regulators can use to identify banks in the various stages of financial distress.

A brief history of off-site monitoring and a discussion of the advantages and disadvantages of off-site systems are followed by a section in which the goals of a forecasting system are discussed, two sample approaches to achieving those goals are explored, and the conclusion is drawn that the best way to predict long-term failure rates is to measure risk characteristics. The next section focuses on the obstacles to predicting failures in the real world (the life cycle of failing banks, the role of the economic environment, and the non-linear nature of banks' financial process), and the following section develops and tests an analysis of risk groups. Then the systems currently in use at the three bank supervisory agencies are described, with special attention to the FDIC's systems for monitoring growth and tracking changes in bank financial condition that may warrant added supervisory attention. (Also included is a discussion of several proposed improvements in the FDIC's Growth Monitoring System.) A brief concluding section sums up the lessons learned, given the history of banking in the 1980s and early 1990s and the strengths and limitations of current computerized off-site surveillance systems.

History of Off-Site Surveillance Systems

The advent of computerized off-site monitoring of banks in 1975 significantly affected bank examination and enforcement in the 1980s and 1990s. Computerized systems allowed regulators to analyze rapidly and systematically the enormous amounts of data that banks report on their Call Reports. Back in the 1960s, when computers and computer time

were very expensive, there were no off-site monitoring systems as we understand them today. But from the early 1960s onward the price of computer time kept dropping,¹ and dramatic price drops in the early 1970s coincided with a crisis at the Office of the Comptroller of the Currency (OCC). Two large national banks failed, United States National Bank (USNB) in 1973 and Franklin National Bank in 1974.

In response to the USNB failure, the OCC commissioned a study by the accounting firm of Haskins & Sells to recommend changes in the OCC's examination system. The report, issued in 1975, recommended putting less reliance on comprehensive reviews of assets in the OCC's banks, increasing the reporting by banks, and establishing a computerized off-site system.² It also recommended making vast changes in examination procedures, and implementation in 1976 resulted in a sharp drop in the annual number of on-site examinations, mainly by extending the time between examinations from 12 months to 18 months.³ In 1975 the OCC did institute an off-site system, the National Bank Surveillance System, in which the primary tool was the Bank Performance Report (BPR).⁴ The surveillance system drew on early economic research into the causes of bank failure and on the OCC's own analysis, and the BPR used various financial ratios and benchmarks of financial performance for different "peer groups" to identify banks that could develop problems.⁵

The Haskins & Sells recommendations were designed to make the OCC examination system more efficient, but in the early 1980s the computerized ability to analyze Call Report data was used to help justify reducing the frequency of on-site bank examinations and therefore the number of bank examiners.⁶ In fact, between 1975 and 1983 the OCC became

¹ For example, the System/360 Model 30 IBM mainframe computer, introduced in 1964, had a price-per-instruction-per-second cost of \$25.02 in 1992 dollars. In 1971 IBM released the System/370 Model 135, after which the price per instruction dropped to \$8.91 (1992 dollars), a 65 percent decrease. Throughout the 1970s the rate of price decreases accelerated. In 1979 IBM released the 4341 mainframe, with which the price per instruction fell to \$0.64 (1992 dollars), less than 10 percent of the 1971 price (Emerson W. Pugh, *Building IBM: Shaping an Industry and Its Technology* [1995], 329).

² Eugene N. White, *The Comptroller and the Transformation of American Banking, 1960-1990* (1992), 27, 38-39.

³ In 1976 there were 5,426 examinations in 4,737 national banks; in 1977 there were 2,886 examinations in 5,665 national banks, a 47 percent decline (White, *Comptroller*, 38). For a more detailed description of these changes, see Chapter 12.

⁴ Before this time the Call Report itself was the principal off-site monitoring tool. Examiners would look at their particular institution's Call Report to see if there were any significant changes from the previous examination or the previous Call Report.

⁵ Edward I. Altman, "Predicting Performance in the Savings and Loan Association Industry," *Journal of Monetary Economics* 3 (October 1977): 443-66; and Joseph Sinkey, "A Multivariate Statistical Analysis of the Characteristics of Problem Banks," *Journal of Finance* 30 (March 1975): 21-36. The National Bank Surveillance System eventually became the Uniform Bank Surveillance System (UBSS), and the Bank Performance Report became the Uniform Bank Performance Report (UBPR). Currently (1997), the UBPR is the major tool used by banks and bank regulators to compare an individual bank's performance with the performance of its peers. Information on peer groups is given below, in the section entitled "Modifying the Peer Groups."

⁶ White, *Comptroller*, 61; and Linda W. McCormick, "Comptroller Begins Major Revamp," *American Banker* 147 (April 29, 1982), 15. See Chapter 12.

so identified with computerized off-site monitoring that the cake at the OCC's 120th-anniversary celebration was in the shape of a computer.⁷

During this same period the Federal Reserve Board (FRB) and the FDIC developed their own off-site systems similar to the OCC's.⁸ However, as the number of bank failures dramatically increased through the early 1980s, it became obvious that off-site monitoring was not a substitute for frequent, periodic on-site examinations but was instead a valuable complement to the examination process and could be used to target examination resources. Examinations provide a scrutiny of management practices that no Call Report can capture, and makes it possible for loans to be reviewed in detail. Moreover, studies have shown that examinations affect the integrity of Call Reporting by encouraging banks to recognize loan losses in a timely manner. And unless Call Report data are accurate, an off-site system will not be effective.⁹

To make surveillance systems more useful, changes were introduced in the early 1990s. As a result, contemporary bank surveillance systems are designed to take Call Report data and build indicators of the condition of a bank so that regulators can determine whether additional supervisory attention is warranted before the next regularly scheduled on-site examination. Regulators have also developed various failure models that predict how many banks have a high probability of failure within the next two years. These models are used to plan for the FDIC's future cash needs and to alert examiners to the impending failures.

Advantages and Disadvantages of Off-Site Monitoring

The best way for supervisors to track the condition of banks is to conduct frequent, periodic on-site examinations of banks. But examiners cannot be perpetually on-site at all banks—that would be prohibitively expensive and, for most banks, unnecessary. Even in 1988, the worst year of the bank crisis, only approximately 2 percent of U.S. banks failed. Therefore, regulators now help bridge the time between regularly scheduled examinations by combining off-site monitoring systems and additional examinations so that they have up-to-date evaluations of the financial condition of banks.

Off-site systems currently being used by bank regulators have several strengths. First, they are “current.” That is, they are updated every quarter with new Call Report information. Second, they are far less intrusive than on-site examinations. This is very important.

⁷ Andrew Albert, “Comptroller’s Office Throws a Bash,” *American Banker* 148 (November 4, 1983), 16.

⁸ Barron H. Putnam, “Early-Warning Systems and Financial Analysis in Bank Monitoring,” *Federal Reserve Bank of Atlanta Economic Review* 68 (November 1983): 6–12.

⁹ Drew Dahl, Gerald A. Hanweck, and John O’Keefe, “The Influence of Auditors and Examinations on Accounting Discretion in the Banking Industry” (paper presented at the Academy of Financial Services conference, October 1995).

To achieve the same level of surveillance without these systems would require more on-site examinations and more staff. Third, these systems help regulators target examination resources efficiently. Institutions that show signs of financial distress can have their examination dates moved forward, or an institution can be contacted and asked to explain the changes observed. This also means that well-run and highly rated institutions will generally not be examined outside of the regular examination schedule. Fourth, today's off-site systems enable the failure models to be modified and updated with relatively few staff resources. Finally, whereas examinations focus on the current condition of the bank, off-site systems—which are current in terms of information—have the potential to identify high-risk characteristics that may increase the probability that a bank will fail.

Although the systems now in use function reasonably well, they have some weaknesses that generally stem from their complete dependence on Call Report data. For example, Call Reports do not note either the quality of management or management practices, as on-site examinations do, so the evaluation of management remains outside the realm of off-site systems. Likewise, under current methods, only on-site examinations look at individual loan files. A less-serious example of the problem with relying solely on Call Report data is that the accuracy of any of the models' data depends on on-site examinations (accordingly, the predictive power of the models decreases as the time between examinations increases). In addition, because of increased industry consolidation, only on-site examinations can determine the geographic loan concentrations of some banks.¹⁰ Finally, because contemporary off-site models are used to assist in the examination process, they are “current condition oriented,” which is their first strength, but for that very reason they do not measure the long-term risk in a bank—yet key aspects of changes in a bank's operations may take place as much as four or five years before a bank's crisis.

Discovering What a Forecasting System Can Do

To see why today's surveillance models work well in identifying a bank's current condition but not the risks a bank may face well into the future, researchers at the FDIC examined the characteristics of banks that failed and banks that survived over a five-year period. To examine how banks' condition changed over time, they constructed a data set consisting of all banks that existed in 1982 and *either* were still in existence in 1987 *or* had failed in 1986 or 1987 (banks that failed after 1987 or between 1983 and 1985 were excluded). The set of banks examined therefore contained two clear types: those that existed over the entire five-year period and never experienced failure, and those that existed at the beginning of the five-year period and failed during the fourth or fifth year.

¹⁰ David Holland, Don Inscoe, Ross Waldrop, and William Kuta, “Interstate Banking—The Past, Present, and Future,” *FDIC Banking Review* 9, no. 1 (1996): 1–17.

Four indicators of bank condition were examined: (A) equity ratio, (B) coverage ratio (equity plus reserves less delinquent loans, to total assets), (C) return on assets, and (D) nonperforming loans (see figure 13.1). In 1982, banks that would not fail during the next five years had an average equity ratio of 8.84 percent, while banks that would fail had a ratio 55 basis points lower (8.29 percent). This lower ratio is above the level that, under the risk-based system now in effect, is considered well capitalized. The coverage ratio, of course, was also lower for future failures: 6.57 percent versus 7.90 percent; so was the return on assets: 86 basis points versus 101 basis points. Nonperforming loans were slightly higher in the future failures: 2.3 percent of assets, versus 1.44 percent of assets in nonfailed banks. For all of the indicators, the average was worse for the future failures than for the survivors. However, these ratios would not in themselves be considered typical, or predictive, of banks that would fail, for the future failures also had good capital levels, decent earnings, and a low percentage of nonperforming loans.

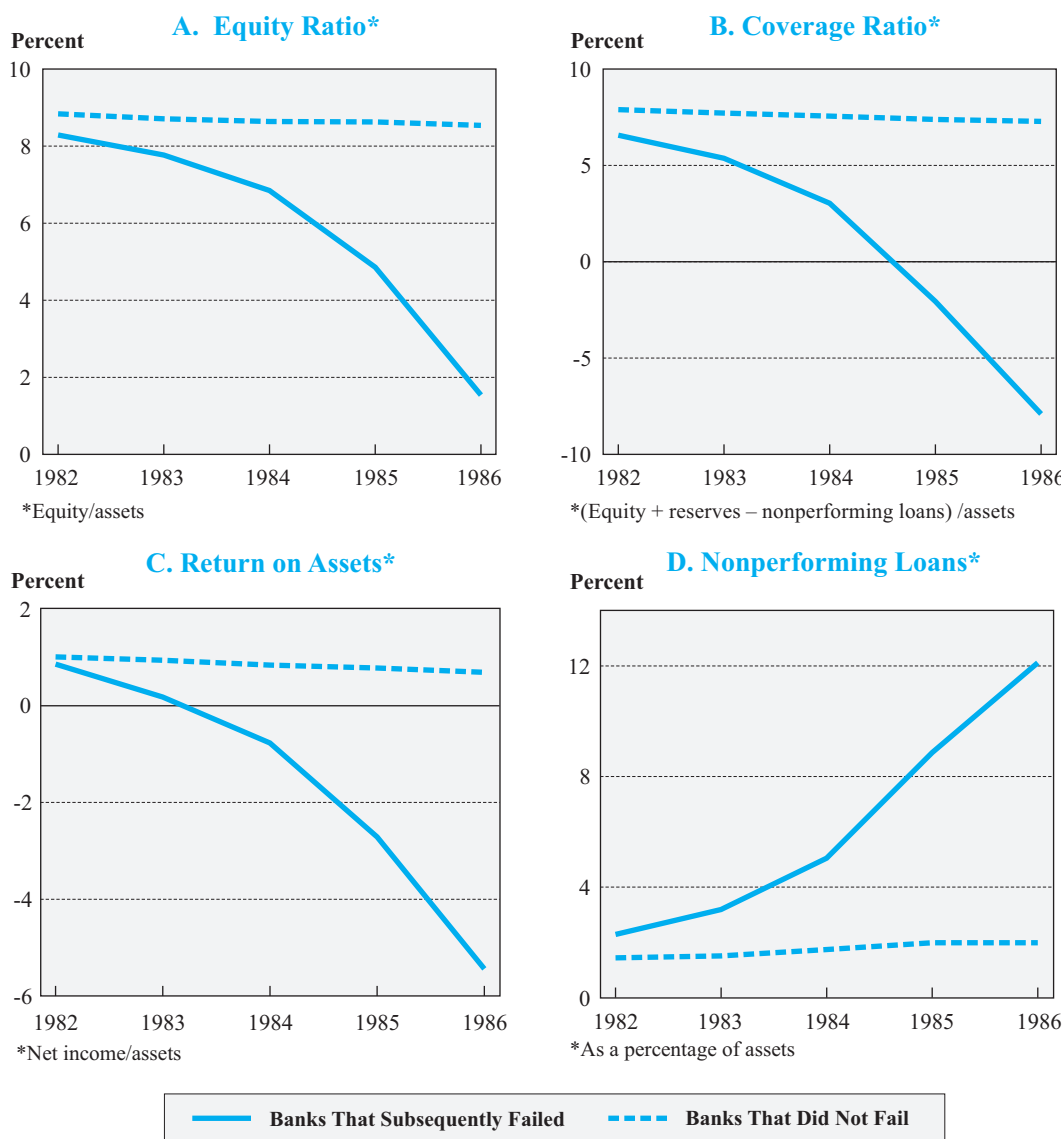
With each passing year, the divergence between the healthy banks and the failed banks grew. By 1984, three years before failure, the equity ratios of the failing banks were 179 basis points lower than those of the nonfailed banks (6.85 percent versus 8.64 percent). The healthy banks had maintained a return on assets of 84 basis points, whereas the failures had fallen to -77 basis points. The future failures also showed the beginnings of large increases in their nonperforming loans, which had risen from 2.3 percent in 1982 to 5.05 percent in 1984.

The data from 1985 demonstrate the wide differences that had developed between the two groups of banks. Equity at the healthy banks was virtually unchanged at 8.63 percent (compared with 8.64 percent in 1984), whereas at the future failed banks it had dropped 199 basis points to 4.86 percent. The failed banks' coverage ratio had fallen below zero (-2.06 percent); losses were accumulating rapidly, bringing the return on assets down to -2.71 percent; and the level of nonperforming loans had increased 76 percent to 8.87 percent of assets, above the average equity of three years earlier.

At the end of 1985, just before their failure, the failing banks are easy to identify. Their average equity was a very low 1.54 percent (healthy banks had 8.54 percent) and they were suffering enormous losses, with an average return on assets of -5.44 percent; nonperforming-loan ratios exceeded 12 percent. These data clearly show, therefore, that standard indicators of condition can identify banks that are already in financial distress but do not indicate which banks may *become* distressed.

Instead of looking at indicators of condition, if we look at the risk characteristics of the same banks over the same five-year period, we find a somewhat different pattern. Whereas the condition indicators for failed and surviving banks were very similar many years before failure, some of the risk indicators show wide differences several years prior to failure. The

Figure 13.1
Bank Condition Ratios for Failed and Nonfailed Banks, 1982–1986



Note: “Failed” means banks that existed in 1982 and failed in 1986 or 1987; “nonfailed” means banks that existed during the entire period and never failed.

four ratios used to measure risk in a bank were (A) the loans-to-assets ratio, (B) the asset growth rate, (C) the interest-and-fees-to-loans ratio, and (D) the salary-to-employee ratio (see figure 13.2).¹¹

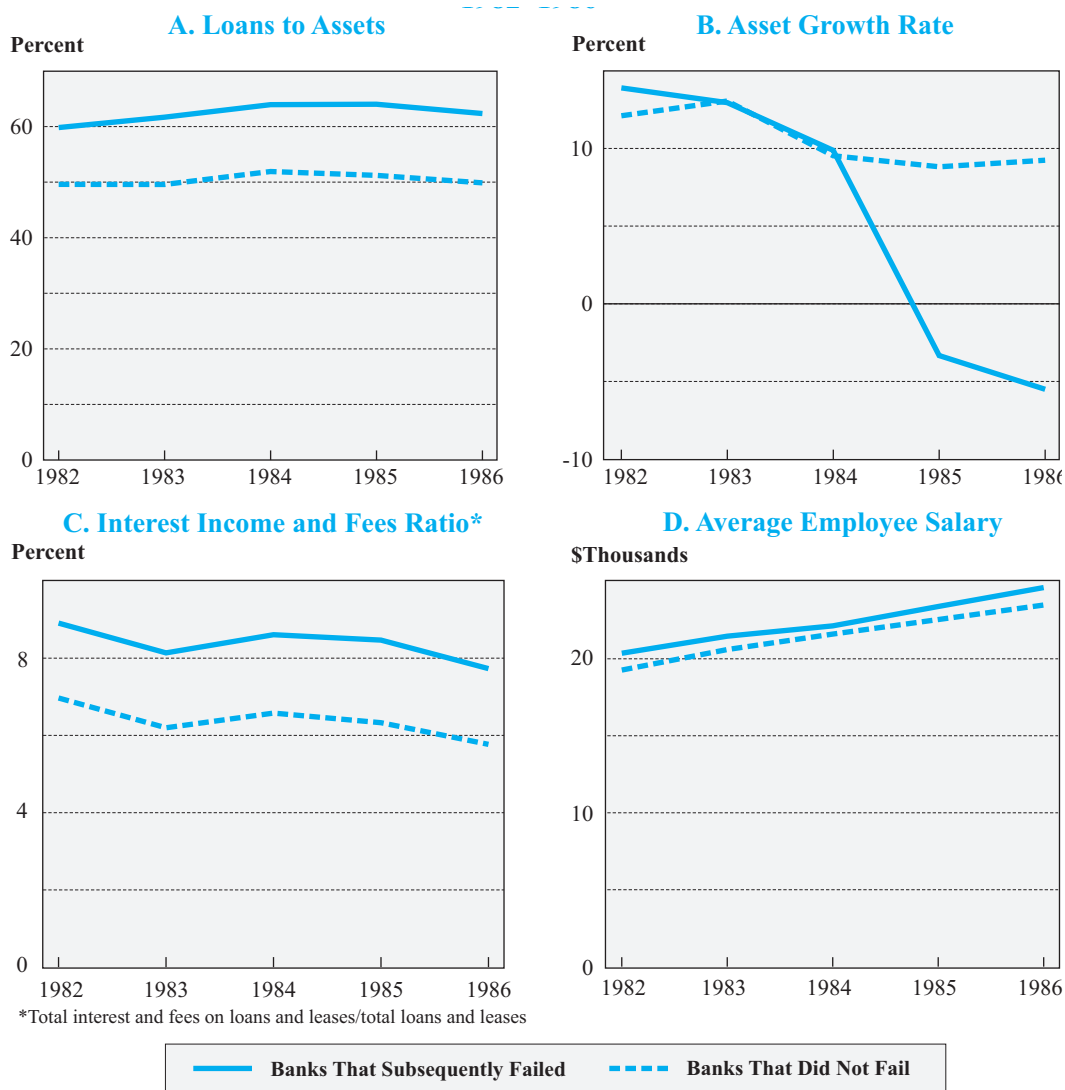
In 1982, in all four risk categories the surviving banks had lower average ratios than the failed banks. The surviving banks had a loans-to-assets ratio of 49.6 percent, a full 10 percent below the 59.8 percent ratio of the failed banks. Failed banks had an interest-income-and-fees-to-loans ratio that was almost 200 basis points above the ratio of the surviving banks (8.91 percent versus 6.97 percent). Failed banks were also growing slightly faster than the survivors: 13.9 percent per year versus 12.1 percent. And failed banks had salary-to-employee ratios that were 5.7 percent above those of surviving banks: \$20,364 per employee for failed banks and \$19,272 for survivors.

The pattern that developed over time for the risk indicators was very unlike the pattern for the condition indicators. For three out of four of the risk indicators, the difference between failed and surviving banks hardly changed at all. By the end of 1986 the failed banks had an average loans-to-assets ratio 12 percent higher than that of surviving banks (in 1982 the difference was 10 percent). The interest-and-fee-income ratio was still 200 basis points higher for failed banks than for survivors; and the failed banks' salary ratio—which in 1982 had been 5.7 percent higher than that of the surviving banks—was 4.8 percent higher (\$24,637 for failed banks, \$23,500 for survivors). The only ratio that demonstrated a dramatic difference over time was the asset growth rate. Over the entire period the asset growth rate for failed banks plummeted, going from a high of 13.9 percent in 1982 to 9.88 percent in 1984 and then to -5.5 percent in 1986, but the asset growth for surviving banks never fell below 8.8 percent.

The condition indicators and risk indicators behave in such dissimilar ways (except for asset growth) that they are obviously measuring different aspects of banks. The current condition of a bank, as measured by the four condition indicators discussed above, can be viewed as the result of the risks the bank has accepted over a number of years. Exposure to excess risk can ultimately produce the conditions that cause failure. Exposure to risk involves the types of loans the bank issues or the type of business it chooses to enter, and in their day-to-day operations banks are continuously changing their risk exposure. Eventually such changes are reflected in the condition statements of the banks. If risk can be measured, it might be possible to see if banks that engaged in riskier practices failed at a higher rate than less-risky banks.

¹¹ The definitions of these risk ratios and explanations of what they measure are presented in table 13.1 (in the subsection entitled "Developing a Procedure").

Figure 13.2
Bank Risk Ratios for Failed and Nonfailed Banks, 1982–1986



*Total interest and fees on loans and leases/total loans and leases

Note: “Failed” means banks that existed in 1982 and failed in 1986 or 1987; “nonfailed” means banks that existed during the entire period and never failed.

Banks earn profits by accepting and managing risk. For example, when a bank issues a loan, the bank's management is making a conscious decision to accept the risk that the borrower will default. By issuing a large number of loans the bank can spread the risk of default over an entire portfolio. Borrower default is just one of the risks that bank management faces—and an important aspect of management's responsibilities is to establish the levels and types of risks the bank can accept, given management's ability to manage risk and the bank's ability to absorb the losses that may result. If the bank accepts too little risk, earnings will suffer, but if it accepts too much, it might face losses that would consume the institution's capital.

The types of risk a bank faces include credit risk, interest-rate risk, concentration risk, liquidity risk, and operating risk. Credit risk is the risk of default by a borrower. Interest-rate risk refers to the risk that an asset will lose value as interest rates rise or fall, or the risk that interest-rate changes will adversely affect income. Concentration risk refers to a situation in which a large percentage of assets are concentrated in one product or in one geographic area. This type of risk can flow from the very nature of the bank's business. For instance, small banks in agricultural communities are highly exposed to the risks of the agricultural economy. Likewise, specialized mortgage lenders are highly exposed to extreme changes in mortgage markets. Concentration risk can also occur when an institution undergoes rapid growth: the rapid growth results in the bank's having a high concentration of unseasoned loans, probably approved in a boom economy, or at least a benign one, but this high concentration of recent loans puts the institution at considerable risk when the economic environment worsens. Liquidity risk refers to potential difficulties in meeting cash demands from liability holders out of current assets. Operating risk is the risk of loss from mistakes and inefficiencies in the operation of the bank. A bank can fail from any one of these risks or from a combination of them.¹²

These risks may be magnified when bank management changes the institution's goals. For example, one particularly well-documented case is that of Continental Illinois (see Chapter 7). In 1976, acting on a report by the management consultants McKinsey & Co., the bank made very significant changes in its operating philosophy and decided to concentrate its lending in high-growth segments of the economy. In addition, to implement this strategy fully the bank "decentralized" its lending function and made loan approvals much easier to obtain.¹³ In other words, the bank made a conscious decision to increase its risk profile. By concentrating lending in high-growth areas—that is, by lending into a "boom" sector—management increased the risk that loan defaults would result when the bust occurred. By reducing management controls for loan approvals, the bank also made it more

¹² George J. Vojta, *Bank Capital Adequacy* (1973).

¹³ *Business Week* (October 21, 1982): 82.

likely that loans would go to financially weak firms. Not long after initiating these changes, Continental's senior management established a goal of growing to be one of the three largest commercial lenders in the nation.¹⁴ Within two years after changing its goals, Continental had markedly increased its risk exposure.

Though it is difficult to detect differences in the financial condition of failing and surviving banks many years in advance of the failure, it may be possible to determine if failed and surviving banks have different risk characteristics. But even if it is possible to identify risk characteristics and therefore to identify a large percentage of eventual failures, it is nonetheless true that among banks with the same risk characteristics, a very high percentage may survive.

Thus, both accuracy and comprehensiveness are required if a system or model is to be judged effective. A failed-bank model might be calibrated so that a high percentage of its predicted bank failures actually fail, with a correspondingly low percentage of predicted bank failures that actually survive. This high accuracy, however, may not mean that the model identifies all, or even a majority, of the problem institutions. Alternatively, the model can "flag" a large percentage of the total number of banks as potential problems or failures, and although the probability that any individual bank will actually fail is low, a large percentage of failing institutions will nonetheless eventually be captured.

In statistics one quantifies these trade-offs by deciding what type of error one is willing to accept—Type I or Type II. A Type I error is an error one makes by rejecting a null hypothesis when the null hypothesis is in fact true, and a Type II error is an error one makes by accepting a null hypothesis when the alternative hypothesis is in fact true.¹⁵ The trade-off between Type I and Type II errors is exemplified by the U.S. criminal justice system, in which a person is presumed innocent until proven guilty. In a criminal trial, the null hypothesis is that a defendant is not guilty. A Type I error occurs when an innocent person is found guilty (convicting the innocent). A Type II error occurs when a person who is guilty is incorrectly acquitted (acquitting the guilty). There is an obvious trade-off between the two types of errors. If one wants to have a very low Type I error (few innocents wrongly convicted), one usually accepts the fact that there will be a large Type II error (a large percentage of acquitted people will in fact be guilty). To minimize the occurrence of the Type I error, the courts require that there be evidence "beyond a reasonable doubt" in order to convict someone.¹⁶ Likewise, if a small Type II error is desired (so that few people who are

¹⁴ Ibid., 83.

¹⁵ Richard W. Madsen and Melvin L. Moeschberger, *Statistical Concepts with Applications to Business and Economics* (1986), 360–65.

¹⁶ In a civil case, the standard is the less-exacting "a preponderance of the evidence."

actually guilty are acquitted), then there is likely to be a very large Type I error (many innocent people will be judged guilty).

These trade-offs are inherent not only in statistical models but also in the bank examination system. All banks are examined within 18 months of the previous examination whether or not there is any evidence of a negative change in the bank's financial condition. The examinations are performed to capture the relatively few banks that have significant changes. Thus, in contrast to the criminal justice system, the bank examination process has a large Type I error: many healthy banks are examined so the regulators can find the few that had negative changes. These trade-offs are important to keep in mind when one considers the various surveillance systems.

Real-World Obstacles to Forecasting

For several reasons, it is difficult to identify future problem banks even when the effort is made to identify risk factors. The life cycle of problem banks is such that in its early years, future problem banks cannot yet be clearly distinguished from other banks. In addition, both the economic environment and the financial process are dynamic and not easily modeled by the forecasting tools available.

The Life Cycle of a Bank Failure

In interviews with bank and thrift regulators, rapid loan growth was identified again and again as a precursor to failure. Whether or not loan growth is the primary risk in which banks engage, one regulator's description of a three-phase process by which rapid loan growth evolves into a major problem does a good job of laying out the long-term nature of the development of a bank's financial distress.

In the first stage, there is rapid loan growth; loan concentrations emerge, and lending is aggressive (internal controls in the growth areas are weak, and underwriting standards are lenient). The increased lending may be, but is not always, funded by a volatile lending source. This growth could occur throughout the entire institution or within a specific asset type. If the growth is in a specific asset type, the increase could stem either from growth in concentration in a loan category or from a shift into a new activity, with subsequent growth. If the rapid growth draws the attention of the relevant regulator, management usually points to the excellent earnings and contribution to capital that the growth has provided. This stage of the development of the problem can take up to two years.

In the second stage, the institution has rising loan-quality problems. Associated expenses may far exceed industry averages. Nonrecurrent sources of income are used to maintain the same level of profits that existed during the growth phase. Eventually profits begin to decline, and inadequate reserve levels become apparent. At this point the bank may be

“loaned up” (that is, have a high loans-to-assets ratio). Management may still believe that the problem is manageable. This stage may take an additional one to two years.

In the final stage, deteriorating asset quality is a serious problem. The institution is incurring large loan losses, and charge-offs have increased. If the institution is large, the capital markets have recognized that the institution has inadequate loan-loss reserves and are unwilling to provide fresh capital. At this point, major changes in the bank’s operations are necessary. Dividends may be cut, expenses (mostly personnel) are slashed, and assets are sold to cover charge-offs and operating expenses (especially in larger institutions). This crisis phase may last up to a year and results either in the failure of the bank or, if dramatic and fundamental changes are made, in its eventual recovery.

As this account of the life cycle of failure makes clear, only in the course of years do changed behavior and the acceptance of greater risk lead to financial distress or failure. After all, neither growth itself nor most other risk taking is necessarily bad for a financial institution. Banks earn their income by assuming risk; to increase risk through growth can therefore be a sound strategy. Such a strategy would ideally be accompanied by increases in capital as a buffer against higher losses, maintenance of high underwriting standards, and attention to proper risk management—in other words, by prudent management of the institution’s growth. Moreover, regardless of whether the increased lending is prudent, ill timed, or very risky, the growth will generate added revenue from increased loan fees and interest income. In addition, because these are all new loans, initially there are no delinquencies and no loss charge-offs, so that the growth is almost always accompanied by growth in income and capital (assuming retained earnings). Only over time do the effects of growth or other risk taking—whether these effects are good or bad—become apparent. This long lead time before problems appear makes it difficult to identify future problem banks accurately.

The Dynamics of the Economic Environment

Long lead times are not the only problem encountered in forecasting failures. There are two others.

One is that economic conditions, both regional and national, change over time, but the changing nature of economic conditions is not built into failure forecasts. All failure forecasts are based on financial profiles of banks, indicating whether a bank has the characteristics of other banks that have failed. This seems relatively straightforward. If it is found that failed banks have low capital levels, high percentages of nonperforming assets, and poor earnings, then nonfailed banks with similar financial profiles should be considered probable failures. Embedded in this type of analysis, however, is the underlying assumption that the set of economic conditions under which the failures occurred will not change. Without explicit economic variables in a model, the forecasts for future failures assume the same

economic environment as the one in which the actual failures occurred: the then-current interest-rate environment, the particular real estate market, and the same general nationwide economic health. But if economic conditions change, as they always do (for example, there may be a recession or a dramatic interest-rate change), the number of actual failures (or CAMEL rating downgrades) can substantially diverge from the forecasts.

The Dynamics of the Financial Process

Finally, forecasting is difficult because normal economic models assume linearity, but as the three-stage life cycle shows, the financial process that leads to failure is inherently nonlinear. Failure is a rare event, and only extreme behavior eventually causes a bank to fail. For an analogy, consider the situation of people who are overweight (assuming that excess weight is bad for a person's health): if overweight people continue to gain weight their health will worsen, and if they lose weight their health will improve—but if they lose *too much* weight, their health will again suffer. Many aspects of bank risk taking can be thought of in the same way: too much growth can result in financial distress, but too little may threaten the bank's long-term financial viability. This “too much or too little” phenomenon makes the financial process nonlinear; hence, both very high growth and very low growth may be “risky.” For that reason, economic models that attempt to capture the specific dynamics of the financial process are unstable and lumpy, and do not isolate the risks of failure.

Analysis by Risk Groups

To isolate these risks, contingency table analysis is needed in which the specific dynamics of the process are ignored and one looks at “levels” of risk or risk groups to classify banks or people (the underlying dynamics of the process, nevertheless, are always present). Analysis by risk groups is most common in epidemiological studies. For example, a person who smokes has twice the risk of having a heart attack compared with a person who does not smoke. The risk of a heart attack is also double for a person who has high blood pressure or high blood-cholesterol levels. In addition, these risk factors are multiplicative: if a person has two factors, the risk of a heart attack increases four times; if all three factors are present, the risk increases eightfold.¹⁷ For banks it may be possible to determine risk factors in a similar manner—in other words, to develop nonlinear models. The two subsections that follow give details of an attempt to do that.

¹⁷ NIH Pub. No. 93-2724, rev. October 1992, National Heart, Lung and Blood Institute, National Institutes of Health.

Developing a Procedure

In connection with heart attacks, the levels for “high blood pressure” or “high cholesterol” have already been determined. In contrast, for banks the levels for risk factors have not yet been identified. We assume, however, that risk increases when the risk measure increases. The goal in analyzing risk measures is to find the set of variables that has the greatest predictive power for determining which banks will fail.

A group of researchers at the FDIC chose nine measures of risk to study and eventually used eight of them (see table 13.1). To determine how these measures of risk predict failure individually and as a set, the researchers divided each measure into five risk groups (quintiles) from high to low, using the data for the years 1980, 1982, 1984, 1986, and 1988. For each year studied, banks that never failed were separated from banks that failed four or five years later (all other banks that existed for only part of the five-year period were excluded from the study, as is explained in more detail below). Both groups of banks in each period were then analyzed to determine which risk measures were the best long-range predictors of failure (the details of the analysis also appear below).

A brief summary of the results of the analysis appears here (a fuller presentation appears in the next subsection). Among this group of variables, the best long-range predictor

Table 13.1
Ratio Measures of Bank Performance

Identification of Variable	What the Variable Measures
Loans-to-assets ratio	Liquidity and risk. The higher the ratio, the greater the amount of the bank's total portfolio that is subject to default risk.
Deposits over \$100,000 (large deposits) to total liabilities*	The use of larger deposits to fund assets. These deposits may be more volatile than fully insured deposits.
Return on assets	The bank's profitability. Low ROA may encourage risk taking by the bank. High ROA may indicate high-risk lending to increase profits.
Asset growth from previous year	Risk of growth.
Loan growth from previous year	Risk of growth.
Operating expenses to total expenses	Management's control of expenses. Higher expenses are assumed to be an indicator of loose controls.
Salary expenses per employee	Management's control of expenses.
Interest on loans and leases to total loans and leases (interest yield)	The average income of loans. High yields might indicate that the bank is originating high-risk loans.
Interest and fee income to total loans and leases (interest and fees to loans)	Income. The addition of fees to the variables may catch firms that are loading up on fee income.

* This variable was eventually dropped (see the discussion below about banks in Texas).

of failure is a bank's loans-to-assets ratio. This result appears to be consistent across all years and all regions. In all five years studied, approximately 50 percent or more of the failures come from the top loans-to-assets quintile. In the last three periods (1984 through 1988), if banks in that quintile are excluded, then the banks in the highest return on assets (ROA) risk group are the best predictor of failure.

The evidence is strong that the basic pattern of bank distress and failure as set forth by the regulators and presented above is valid. Banks that eventually become troubled do undertake risky business strategies several years before their financial condition deteriorates. But even if it turns out to be possible to identify these risky strategies, it may still be very difficult to identify which banks within a risk group will fail and which will survive. In addition, the predictions have a large Type II error: although the procedure identifies the quintile that contains a very large percentage of the failures, more than 95 percent of all the banks in the quintile never fail.

Contingency Table Analysis: Methodology and Results

The data for the study were constructed from all BIF-insured institutions (banks and savings banks) that existed in the beginning year and *either* did not ever fail (then or later) *or* failed four or five years from the beginning date. Thus, the study excludes banks that existed in the beginning year and (a) failed before the fourth year, (b) were merged out of existence during the period, or (c) failed subsequently; and it also excludes all de novo banks created during the period. The reasons for the exclusions were that banks that failed or merged in the interim period were not in the sample long enough to be studied, nor were de novo banks, and banks that failed subsequent to the period under study were excluded to ensure that each sample had clearly defined groups of survivors and failures.

So that an epidemiological approach could be used, a contingency table analysis was performed on each year's data. First, a logit regression was performed on each variable, where the dependent variable was whether the bank failed or did not fail (1 or 0). The variable with the highest predictive power for failure was determined by a Chi-Square test score for each regression. The coefficients for each quintile grouping of the variable were then compared, and a Chi-Square test was performed to determine which quintile or group of quintiles was the best predictor of failure. The split of the quintiles created a "high-risk" group and a "low-risk" group. The analysis was then repeated on both of the two groups to determine the next-best predictor of failure in each group. This procedure was repeated for each subgroup until the cells became too sparse (the number of failures was too low) to analyze (see figure 13.3).¹⁸

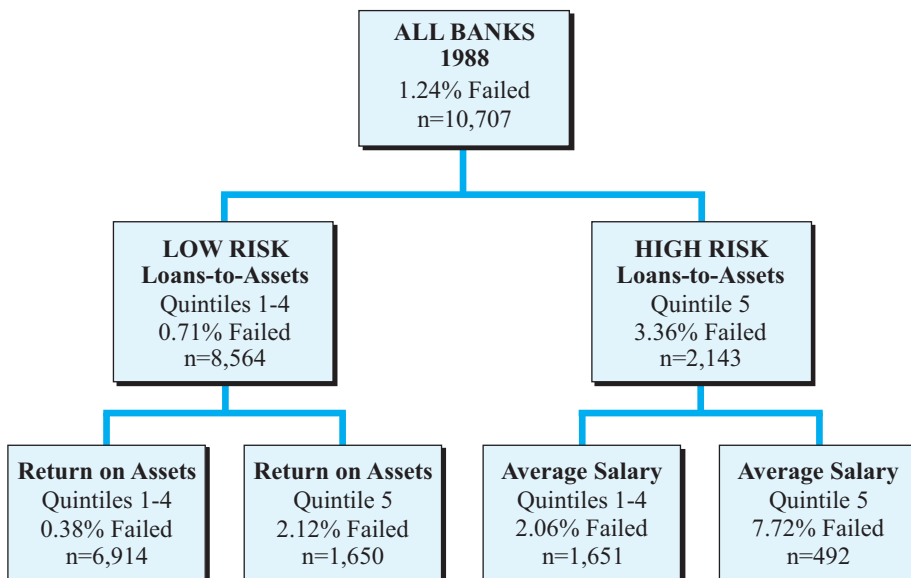
¹⁸ The procedure used was not complicated but was very time-consuming. Thus, it was important to keep the number of analyzed variables at a reasonable level.

The five study periods began in 1980 and spanned ten years of failures, from 1984 to 1993. Included were 1,193 failures. Not included were 300 failures that occurred during the period but were excluded from the study because they fell into one of the following groups: (1) banks that did not exist for at least four years, (2) banks that were taken over under a “cross-guarantee” subsequent to the passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, (3) banks that were closed primarily because of fraud, and (4) subsidiary banks of First Republic and First City that had composite CAMEL ratings of 1 or 2 as of closing (similar to cross-guarantees).

An examination of the relationship between the nine variables and the failures over the five different periods reveals that banks in the highest loans-to-assets quintile had the highest probability of failure for the periods beginning in 1980, 1982, and 1988 and the second-best “high-risk” probability in 1984 and 1986. In those two years the best predictor was the large-deposit ratio.

However, because the large-deposit ratio did not show up as either a primary or a secondary indicator in 1980 or 1982, there was concern that it might not be an indicator of

Figure 13.3
Procedure Used in Contingency Table Analysis



volatile funding. This issue arose apropos of banks in Texas—the predominant state in the Southwest—which was a unit-bank state. The lack of branching might have forced Texas banks to rely more heavily on large deposits than did banks in states with branching. In periods of high growth, the inability to produce deposits through a branch system might also produce high ratios of large CDs. It was hypothesized that the large-deposit ratio might be a function of the particular region rather than an actual risk measure. To test the theory, the researchers examined the distribution of Texas banks' large-deposit ratio and found that Texas banks were extraordinarily concentrated in the high quintiles of large deposits. In 1980, 63 percent of Texas banks were in the two highest quintiles. During the next four years, assets in Texas banks grew 66 percent (from \$118 billion to \$198 billion),¹⁹ and by year-end 1984, 84 percent of Texas banks were in the two highest quintiles of the large-deposit ratio (58 percent were in the highest quintile). In 1986 the comparable figures were 89 percent and 68 percent. It appears that Texas started the 1980s with a higher-than-average number of banks with a high percentage of large deposits, and banks in that state disproportionately used large deposits to fund asset growth. Thus, large deposits indicated a high probability of being a Texas bank rather than being an indicator of risk, so large deposits were dropped from the list of variables.

Once large deposits were excluded, the loans-to-assets ratio was always the best predictor of future failure. Being in the highest loans-to-assets quintile more than doubled a bank's probability of failure (see table 13.2). More important, after 1980 more than 50 per-

Table 13.2
Probability of Failure When a Bank Appears in the Highest-Risk Category

Beginning Year	Aggregate Failures		Highest Loans-to-Assets Quintile		Increased Probability of Failure from Total Population to Banks in Highest Loans-to-Assets Quintile (Percent)
	Probability of Failure (Percent)	Number of Failures	Probability of Failure (Percent)	Number of Failures	
1980	1.51	184	3.62	88	140
1982	2.45	291	6.75	160	175
1984	2.89	332	8.20	188	184
1986	2.25	253	6.46	145	187
1988	1.24	133	3.36	72	171

¹⁹ FDIC, *Statistics on Banking: A Statistical History of the United States Banking Industry, 1934–1994*, vol. 2 (1995), E–545.

cent of the total failures for each cohort of banks came from the highest loans-to-assets quintile.

As noted, in the contingency table analysis the banks were split into two groups, the “high-risk” group (in this case, the banks in the highest loans-to-assets quintile) and the “low-risk” group (all other banks), and the calculations described above were repeated so that the next-greatest indicators of risk could be found.²⁰ This second-level analysis for the high-risk group did not yield a consistent pattern for second-level predictors. In 1980 and 1982, the interest-and-fee-income ratio was the best second-level predictor; in 1984, 1986, and 1988 the second-level predictors were, respectively, asset growth, return on assets, and average salaries. This result is discouraging, for it indicates that the relationship between the second-level risk indicators and failure is unstable (see table 13.3).

If a bank was not in the highest-risk quintile, that did not mean the bank had no risk of failure. A little under half of all banks that failed were not in the high loans-to-assets quintile, so it may be useful to see if the remaining banks that failed had any identifiable risk characteristics. For banks that were not in the high-risk loans-to-assets quintile, the best predictors of failures were loan growth in 1980, interest yield in 1982, and ROA in 1984, 1986, and 1988. The risk indicators for the so-called low-risk groups (that is, all groups except the highest-risk quintile) performed quite well. They identified a very large percentage of the remaining failures, particularly in 1986 and 1988, when being in the highest ROA quintile identified 57 percent of the remaining failures. If the high-risk and low-risk groups

Table 13.3
Probability of Failure When a Bank
Appears in the Highest- and Second-Highest Risk Categories

Beginning Year	Highest Loans-to-Assets Quintile		Second-Level High-Risk Ratio	Subset of Loans-to-Assets Quintile	
	Probability of Failure (Percent)	Percent of Total Failures		Probability of Failure (Percent)	Percent of Total Failures
1980	3.6	47.8	Interest and loan fees	7.2	31.5
1982	6.8	55.0	Interest and loan fees	11.6	35.4
1984	8.2	56.6	Asset growth	12.6	28.0
1986	6.5	57.3	Return on assets	12.0	27.3
1988	3.4	54.1	Average salary	7.7	26.3

²⁰ After the first “high-risk” group was identified, the remaining banks were not redistributed into new, equal quintiles. Rather, they were left in the original quintile distribution, with the already identified “high-risk” banks removed.

were taken together in 1988, they would contain more than 80 percent of the study group failures (see table 13.4).

From these results, one can infer that it may be possible to identify groups or populations of banks with a high probability of containing a high proportion of future failures, or that it may be possible to identify large populations of banks with a very low probability of failing in the future. Thus, the analysis described above has limitations that must be considered. First, to identify 80 percent of the failures, the contingency analysis “flagged” 35 percent of the entire study population for 1988: 2,143 banks in the loans-to-assets quintile and 1,650 banks in the ROA quintile, or a total of 3,793. The entire study population for that year consisted of 10,707 banks, 133 of which failed, and 107 of the failures (80 percent of 133) were in two identified risk groups. The two identified risk groups also contained 3,686 banks that did not fail, or approximately 97 percent. In addition, in 1988 there was no way to identify *which* 3 percent would fail in 1992 or 1993. Nor would identification have been much easier if only the highest-risk loans-to-assets banks had been identified. In the 1988 cohort approximately 96 percent of the high-risk loans-to-assets quintile survived, and in the 1984 cohort (the one with the highest number of failures), 92 percent survived. Second, to differentiate clearly between failures and survivors, the analysis was performed on a subset of all banks, but the exclusion of some banks from the analysis might have introduced measurement errors. Third, the lack of consistency in the secondary risk factors may mean that the industry changes so rapidly that supervisory attention could be diverted to monitoring diminishing risks instead of identifying emerging risks.

Table 13.4
Probability of Failure in “Low-Risk” Banks
(Banks Not in the Highest-Risk Group)

Year	Highest Loans-to-Assets Quintile		High-Risk Indicator for “Low-Risk” Group	“Low-Risk” Failure Indicator	
	Probability of Failure (Percent)	Percent of Total Failures		Probability of Failure* (Percent)	Percent of Remaining Failures †
1980	3.62	47.8	Loan growth	2.32	41.7
1982	6.75	55.0	Interest yield	3.76	40.4
1984	8.20	56.6	Return on assets	3.96	45.1
1986	6.46	57.3	Return on assets	3.74	57.4
1988	3.36	54.1	Return on assets	2.12	57.4

* This is the probability of failure in the remaining 80 percent of banks that are not in the high-risk loans-to-assets quintile.

† Excludes failures in the high-risk loans-to-assets quintile.

The FDIC's Growth-Monitoring System (GMS)

The contingency analysis—attempting to identify the interactions within a set of risk groups in order to find a way to predict future failures—feeds into and seeks to improve the FDIC's growth-monitoring system (GMS). GMS was developed during the mid-1980s and was designed to detect the initial stage in the life cycle of failing banks—the rapid-growth stage. The system's premise is that rapid growth in total assets (or loans) represents a risky activity of which bank supervisors should be aware. Growth-related risk can come in at least two areas, loans and bank management: there may be increased loan concentrations in risky areas, and there may be management lapses such as lowered underwriting standards, increased reliance upon volatile funding, or a general weakening of internal controls in order to facilitate rapid growth. Banks that GMS identifies as rapid-growth institutions in these two areas are flagged for off-site review and may receive increased supervisory attention.

The system is based upon the levels and quarterly trends of five summary measures. These include two growth rates (for total assets and for loans and leases) along with three financial ratios (as percentages of assets): loans and leases, plus securities with maturities of five years or more; volatile liabilities; and equity capital.²¹ The system measures both the levels and the trends (growth) of the three financial ratios in addition to asset growth and loan growth, for a total of eight terms. Banks' percentile rankings are computed quarterly for each of the eight terms; all percentile rankings are relative to a bank's Uniform Bank Performance Report (UBPR) peer group (see appendix B). There are 25 UBPR peer groups based on asset size, location in a metropolitan area or a nonmetro area, and number of branch offices. These eight percentile rankings are subsequently weighted in a two-step process, and the weighted percentile rankings of the eight terms are then summed to give a GMS score (see table 13.5).

Composite GMS scores are evaluated separately for two groups of banks. The first group is composed of banks whose quarterly asset and loan growth rates were 5 percent or more (high-growth banks). For all high-growth banks, composite GMS score percentile rankings are computed. Banks in the highest composite GMS score percentiles—currently the 95th to 99th percentiles—are “flagged” for off-site review. Supervisors may also review banks beneath the 95th percentile, particularly those with poor CAMEL ratings. The second group is composed of banks with quarterly asset and/or loan growth under 5 percent (low-growth banks). These low-growth banks' GMS scores and related information are available for review by regional office examiners in the GMS system.

²¹ Volatile liabilities are defined as the sum of the following: time deposits of \$100,000 or more, deposits in foreign offices, federal funds purchased and repurchase agreements, demand notes issued to the U.S. Treasury, and other liabilities for borrowed money.

Table 13.5
Hypothetical GMS Score Computation Example

	Trend Weight		Trend Percentile		Ratio Weight		Ratio Percentile		Raw Score		Weight		Score
Asset growth	0.60	x	98	+	-	x	-	=	58.9	x	0.67	=	39.4
Loan growth	0.60	x	99	+	-	x	-	=	59.4	x	0.00	=	0.0
Loans and securities/assets	0.60	x	98	+	0.40	x	82	=	91.6	x	0.11	=	10.1
Volatile liabilities/assets	0.60	x	96	+	0.40	x	86	=	92.0	x	0.11	=	10.1
Equity/assets	0.60	x	98	+	0.40	x	85	=	92.8	x	0.11	=	10.2
Composite GMS Score													69.8

The next subsection contains a detailed review of GMS's predictive abilities as many as five years before deterioration in banks' financial condition. The findings can be summed up as follows: GMS appears to perform the function for which it was designed. The system identifies a group of banks that have a higher-than-average risk of failure, and may do so up to four years before failure. When a standard failure estimation technique is used, the GMS score has also been found to be a significant long-term predictor of failure in three out of four time periods. In addition to predicting failure moderately well, GMS has been a better-than-average predictor of CAMEL downgrades two to three years in advance of the event.

No significant changes have yet been made to the system. However, marked and significant improvements have been suggested for each stage of the process (these suggested changes are also detailed in a later subsection). Major proposed improvements include a new weighting scheme for the GMS score, new variables for inclusion in the score, better methods of constructing growth variables, and use of peer groups not based on the UBPR groupings. If all of these suggested changes were made, they could increase the percentage of banks accurately identified as future problems and could decrease the percentage of banks incorrectly identified as future problems (in other words, the changes should decrease Type II errors).

Effectiveness

If GMS is effective, risk detection should occur well before there are adverse changes in banks' financial condition. Therefore, researchers evaluated GMS's predictive abilities as much as five years before deterioration by comparing (1) GMS composite scores with future bank-failure rates, and (2) GMS score percentile rankings with changes in banks' composite safety-and-soundness (CAMEL) ratings.

Early detection of failure. To review the first relationship (between GMS composite scores and future bank-failure rates), the researchers began by computing GMS composite scores for the last calendar quarter of each year between 1984 and 1994. Next they ranked banks' GMS scores into deciles, and compared bank failures occurring in subsequent years (between one and five years after scores were assigned) across GMS score deciles. For computational simplicity, open-bank assistance transactions were excluded from the group of failed banks. The analysis showed that banks in the lowest GMS score decile usually failed at the highest rates during the two years immediately after scores were measured. The situation was reversed, however, for failures occurring between three and five years after scores were computed: the long-term failure rates were generally higher for banks in the highest GMS decile. These results are in agreement with the life-cycle profile for failing banks.

For example, among banks ranked by GMS score deciles for December 1984, approximately 39 percent of the banks that failed during the next year were in the lowest (first) GMS score decile (see table 13.6). The proportion of 1986 failures in the lowest GMS decile was also high, at approximately 19 percent.²² Failures in subsequent years were more frequent for the highest (tenth) GMS score decile: banks in the tenth GMS decile accounted for approximately 21 percent of 1987 failures, 20 percent of 1988 failures, 22 percent of 1989 failures, and 20 percent of all failures occurring between 1990 and 1995. Similar results (not presented here) were obtained for other GMS score ranking years.

Exam rating changes. The reason for targeting banks for inclusion on an off-site review list is that they may be undergoing rapid changes in condition. Thus, the second test of the usefulness of GMS was the relationship between GMS score percentile rankings and subsequent changes in banks' composite safety-and-soundness (CAMEL) ratings—more specifically, changes in CAMEL ratings measured between banks' most recent CAMEL rating as of the date of the GMS ranking and the examination subsequent to the ranking date (the analysis used examination ratings over a period of two years before and two years after the date of the GMS score ranking). Those tests (not presented here) revealed no consistent relationship between banks' GMS rankings and changes in CAMEL ratings, either downgrades or upgrades. That result was not unexpected, however, given the previous results for failure rates. The evidence from failure rates and GMS rankings indicates that rapid growth is related to failure three or more years afterward. To the extent that CAMEL ratings are concurrent as opposed to leading indicators of condition, deterioration in CAMEL ratings would not be expected in the near term. Rather, deterioration in CAMEL ratings among banks in the highest GMS decile is expected three or more years after rapid growth occurs.

²² These results are consistent with those reported in Chapter 12.

Table 13.6
Bank Failures by GMS Score Ranking and Failure Year
(Number and Percent of Year's Failures)

December 1984 GMS Decile	Never Failed		Failed 1 year Later		Failed 2 Years Later		Failed 3 Years Later		Failed 4 Years Later		Failed 5 Years Later		Failed More Than 5 Years Later		Total	
1	1,318	9.74%	42	38.89%	26	18.98%	24	13.48%	16	8.79%	12	6.52%	28	8.00%	1,466	9.99%
2	1,363	10.07	15	13.89	22	16.06	19	10.67	10	5.49	13	7.07	25	7.14	1,467	10.00
3	1,364	10.08	6	5.56	18	13.14	16	8.99	15	8.24	22	11.96	26	7.43	1,467	10.00
4	1,376	10.17	7	6.48	12	8.76	12	6.74	14	7.69	18	9.78	28	8.00	1,467	10.00
5	1,389	10.27	5	4.63	6	4.38	13	7.30	16	8.79	10	5.43	28	8.00	1,467	10.00
6	1,373	0.15	4	3.70	10	7.30	18	10.11	9	4.95	17	9.24	36	10.29	1,467	10.00
7	1,367	10.10	6	5.56	14	10.22	10	5.62	15	8.24	21	11.41	34	9.71	1,467	10.00
8	1,364	10.08	9	8.33	9	6.57	15	8.43	26	14.29	14	7.61	30	8.57	1,467	10.00
9	1,347	9.96	5	4.63	14	10.22	14	7.87	24	13.19	17	9.24	46	13.14	1,467	10.00
10	1,269	9.38	9	8.33	6	4.38	37	20.79	37	20.33	40	21.74	69	19.71	1,467	10.00
Total	13,530	100.00%	108	100.00%	137	100.00%	178	100.00%	182	100.00%	184	100.00%	350	100.00%	14,669	100.00%

To test the latter hypothesis, the researchers looked at the relationships between GMS rankings at a given year-end and changes in CAMEL ratings assigned one and three years later—for example, the relationships between GMS rankings at year-end 1984 and changes in CAMEL ratings for exams given in 1985 and 1987 (see table 13.7). Nearly 16 percent of CAMEL downgrades occurred among the highest GMS decile group, a higher proportion than for any other decile. Moreover, for most examination years considered between 1984 and 1995, the proportion of downgrades generally rose with decile rankings. These results support the previous relationships between GMS rankings and future failure rates; they also support GMS's use as a leading indicator of bank risk.

Statistical significance of the results. What the previous analysis does not test is the statistical significance of the relationships between GMS score rankings and subsequent changes in banks' condition. To test the statistical significance of GMS scores in measuring bank risk, the researchers included GMS scores in standard models of bank-failure prediction.

Logit Model Methodology

Logit estimations of the relationships between banks' financial condition and the incidence of failure were obtained with the use of year-end financial data, actual failures, and assistance transactions during the subsequent two years (see appendix A). Equation 1 is the basic model:

Table 13.7
Comparisons of Exam Ratings as Assigned in 1985 and 1987
(Number and Column Percent)

December 1984 GMS Decile	CAMEL Upgraded Next Exam		CAMEL Downgraded Next Exam		No CAMEL Change Next Exam		Missing Because of Mergers, etc.		Total	
1	248	19.89%	93	8.73%	323	9.70%	802	8.88%	1,466	9.99%
2	159	12.75	81	7.61	357	10.72	870	9.64	1,467	10.00
3	130	10.43	100	9.39	351	10.54	886	9.81	1,467	10.00
4	121	9.70	81	7.61	361	10.84	904	10.01	1,467	10.00
5	117	9.38	96	9.01	333	10.00	921	10.20	1,467	10.00
6	114	9.14	106	9.95	361	10.84	886	9.81	1,467	10.00
7	97	7.78	98	9.20	333	10.00	939	10.40	1,467	10.00
8	95	7.62	111	10.42	295	8.86	966	10.70	1,467	10.00
9	96	7.70	129	12.11	296	8.89	946	10.48	1,467	10.00
10	70	5.61	170	15.96	319	9.58	908	10.06	1,467	10.00
Total	1,247	100.00%	1,065	100.00%	3,329	100.00%	9,028	100.00%	14,669	100.00%

Equation 1

$$\begin{aligned} \text{Likelihood of failure}(i, \text{ next two years}) = & c0 \\ & + c1(\text{Capital, loss reserves})(i) \\ & + c2(\text{Loans past due 30–89 days})(i) \\ & + c3(\text{Loans past due 90 days or more, non-accrual loans, repossessed} \\ & \quad \text{real state})(i) \\ & + c4(\text{3-year mean operating income})(i) \\ & + c5(\text{3-year standard deviation in operating income})(i) \\ & + c6(\text{Examination interval, normalized})(i) \\ & + c7(\text{Most recent capital rating})(i) \\ & + c8(\text{Most recent asset rating})(i) \\ & + c9(\text{Most recent management rating})(i) \\ & + c10(\text{Most recent earnings rating})(i) \\ & + c11(\text{Most recent liquidity rating})(i) \\ & + c12(\text{Average salary/employee})(i) \\ & + c13(\text{Multibank holding co. dummy})(i) \\ & + c14(\text{Log of bank assets})(i) \\ & + c15(\text{GMS score current year-end})(i) \\ & + c16(\text{GMS score prior year-end})(i) \\ & + c17(\text{GMS score 2 years prior})(i) \\ & + c18(\text{GMS score 3 years prior})(i) \\ & + c19(\text{GMS score 4 years prior})(i) \\ & + e(i,t) \end{aligned}$$

Models in the form of equation 1 had previously been tested and were found to be fairly accurate failure-prediction models.²³ Results from this model show that the lower a bank's GMS score in the most recent period, the higher the probability of failure. That result is consistent with those found earlier. Moreover, the relationship between the most recent GMS score and failure was statistically significant for four of the five estimations. The results for lagged GMS scores were not as consistent, however. The expectation had been that high lagged GMS scores would be positively related to failures, as above, but in fact lagged GMS scores were sometimes—but not consistently—significantly and positively related to the likelihood of failure.

²³ Gerald A. Hanweck, Gary Fissel, and John O'Keefe, "A Comparative Analysis of Modeling Methodologies of Financially Distressed Banking Firms" (paper presented at the Financial Management Association Meetings, October 1995).

Proposals for Improvement

Several proposals have been made to refine GMS. These are described below.

Distinguishing types of growth. GMS does not distinguish between two important types of bank growth—increases in assets through existing offices (internal growth) and growth in assets through mergers, acquisitions, and consolidations (external growth). It may be that the risk profiles of banks are different for the two types of growth. The researchers hypothesized that external growth is less risky than internal growth. Internal growth may require more “new business” for the bank in terms of customers, markets, and products/loan types, whereas mergers and consolidations are more likely to involve the acquisition of seasoned loans from target banks. Moreover, because of regulatory limits on geographic expansion of banks, many mergers occur between former competitors in a single market. Rapid growth in “new business” or unseasoned loans may be considered risky for several reasons. Information about new customers and new markets may be limited, and underwriting standards may be loosened as a way to expand business in existing markets.

To test for the importance of these factors in assessing the riskiness of growth, the researchers used a simplified version of the bank-failure prediction model (equation 1) and included a control variable for merger-related growth. The variable of interest is a dummy variable set equal to 1 if the bank was involved in a merger, acquisition, or consolidation during the quarter its GMS growth score was measured, and zero otherwise. Logit estimations show that growth by mergers was negatively related to the likelihood of failure; however, the coefficients for the merger dummy were usually not statistically significant. This negative relationship is consistent with the hypothesis about internal versus external growth.

Modifying the peer groups. Banks’ financial performance often differs systematically across industry segments, so some form of peer ranking is needed in GMS. GMS puts banks into peer groups based upon the UBPR standards. As mentioned above, the 25 UBPR (Uniform Bank Performance Report) peer groups distinguish banks on the basis of asset size, location in metropolitan area, and number of branch offices.²⁴

Some form of asset size grouping would appear to be necessary. For example, small banks that do not have easy access to direct financial markets for equity often rely on retained earnings for equity funding. This lack of flexibility in equity finance is a reason that small banks hold large amounts of excess or buffer capital relative to regulatory capital requirements. Large banks, however, do not suffer from financial diseconomies and may rely on new equity issues for additional capital. For those and other reasons, banks’ capital-to-assets ratios generally decline as asset size increases. However, it is less clear whether lo-

²⁴ See UBPR peer definitions in appendix B, Table 13-A.6.

cation in a metro or nonmetro area and number of branch offices have significance in assessing risk. With the advent of interstate branch banking in 1997, these latter two criteria would seem to have become particularly irrelevant.

Several alternative peer-group designations were tested, and the results of risk detection based upon revised GMS score rankings were compared with those based on the original 25 UBPR groups. One of the more promising alternatives tested was peers formed on the basis of seven geographic regions and two asset-size ranges (assets over and under \$1 billion). Preliminary results (not presented here) indicate that rankings of GMS scores using this peer grouping performed marginally better than the 25 UBPR peer groupings in detecting banks likely to have CAMEL rating downgrades. Although the relevant peer groups depend in large measure upon the ratios used in scoring, it seems likely that a simplified peer-group structure can be used without any loss in risk detection.

Modifying the ratio weighting structure. As explained above, GMS uses a two-step weighting system to assign importance to the eight terms used to score banks. Since it seems unlikely that the importance of any bank activity or growth in detecting risk is stable over time, a periodic resetting of GMS term weights is necessary. The GMS User Manual does not state how the present weighting structure was chosen. In this section we present a means of determining GMS term weights on the basis of the importance of the eight growth measures in a model forecasting CAMEL rating downgrades. Specifically, the eight GMS terms were used as explanatory variables in a logit model relating the growth measures to the incidence of CAMEL rating downgrades occurring three years after growth was measured (see table 13.8).

Table 13.8
Relationship between GMS Weightings
and Logit Estimations of CAMEL Downgrades

GMS Term	Initial Weight	Final Weight	December 1988 Model Coefficient
Asset growth	.60	0.67	0.0022 ns
Loan growth	.60	0	0.0053 *
Loans and sec/assets growth	.60	0.11	20.0043 *
Volatile liab/assets growth	.60	0.11	20.0016 ns
Equity/assets growth	.60	0.11	0.0005 ns
Loans and sec/assets ratio	.40	0.11	0.0111 *
Volatile liab/assets ratio	.40	0.11	0.0085 *
Equity/assets ratio	.40	0.11	0.0063 *

Note: The asterisk denotes significance at the 1 percent confidence level, and “ns” denotes “not significant” at the 1 percent confidence level.

The coefficient estimates from logit estimation of the CAMEL downgrade model were fairly consistent over time. Comparisons of the GMS weights and logit coefficients show that whereas GMS placed the greatest weight on asset growth and the least weight on loan growth, the logit model argued in favor of doing the reverse. Logit estimations indicated that whereas loan growth was significantly related to changes in condition (CAMEL downgrades), asset growth was not. In addition, the logit estimations argued for placing much greater emphasis (weight) upon the three ratios—loans and securities to assets, volatile liabilities to assets, and equity to assets—than do the present GMS weightings. The next subsection discusses tests made to see how GMS would be enhanced if the system were reweighted. It also discusses tests made with the use of additional risk measures.

Adding to the variables. The focus of GMS can be broadened to consider potentially risky changes in bank loan concentrations or shifts in business activity that may occur with (or without) growth in total loans or assets. For example, during the 1980s and 1990s the risks associated with rapid loan growth were often linked to increased portfolio concentrations in risky areas such as commercial real estate—a type of growth that is presumably riskier than growth in safe loan products such as residential mortgages. Yet GMS does not distinguish between these or other types of growth. To GMS, growth in residential mortgages is no different from growth in unsecured loans or loans with questionable collateral values.

Shifts in business activity can be measured with summary measures of loan portfolio concentration, analogous to the Herfindahl-Hirschman Index (HHI).²⁵ The bank portfolio concentration index proposed here is a summary measure of loan concentration for an individual bank. First, to measure overall loan concentration one computes the shares of total loans for several well-defined categories of loans. Next, to form the loan concentration index one squares and sums the portfolio shares.

Table 13.9 presents two hypothetical cases for Bank A. In Case 1, Bank A replaced \$20 of residential mortgages with construction loans, increasing its loan portfolio concentration in the process. The portfolio concentration index increases from 2,500 to 3,300 (+32 percent) between 1980 and 1981 in Case 1. In Case 2, the bank reduced long-term commercial real estate by \$20 and increased construction loans by the same amount, and the same concentration increase occurs. The portfolio shifts in Case 1 and Case 2, however, are not equal in terms of overall risk exposures. Most observers would agree that long-term commercial real estate and construction loans are riskier loan categories than residential

²⁵ The HHI is a measure of product market concentration and measures concentration of market shares across competitors in a market. The HHI is defined as the sum of squared market shares for all competitors in a well-defined geographic or product market. High HHI values indicate the concentration of market power (shares) among a few firms, while low HHI values indicate higher levels of competition.

Table 13.9
Hypothetical Loan Portfolios for Bank A: Loan Shares Not Weighted

	1980	1981	
		Case 1	Case 2
Residential mortgages	\$25	\$ 5	\$25
Commercial and industrial	25	25	25
Commercial real estate	25	25	5
Construction and land development	25	45	45
Loan concentration index	2,500	3,300	3,300
Percent change in loan concentration (unweighted)		+32%	+32%

mortgages. Consequently Case 1, where total commercial real estate and construction loan exposures are higher, should be treated differently from Case 2. The way to distinguish these cases is by weighting loan portfolio shares, giving greater weight to riskier loan categories. A weighted portfolio concentration index would show greater increases in (weighted) concentration when overall risk exposures increase. Using the previous example but giving commercial real estate and construction loans greater weight in the portfolio concentration index, one finds that in Case 1 the overall risk exposure is now greater than in Case 2 (see table 13.10).

To test the usefulness of the concentration index, the researchers devised a loan portfolio concentration index by dividing total loans into 15 loan categories and weighting riskier loan shares more heavily than other loan categories. The loan categories and weights used are presented in table 13.11.

Table 13.10
Hypothetical Loan Portfolios for Bank A: Loan Shares Weighted

	Weight	1980	1981	
			Case 1	Case 2
Residential mortgages	0%	\$25	\$ 5	\$25
Commercial and industrial	100	25	25	25
Commercial real estate	200	25	25	5
Construction and land development	200	25	45	45
Loan concentration index		3,125	5,925	4,700
Percent change in loan concentration (weighted)			+89.6%	+50%

Table 13.11
Loan Portfolio Concentration Index

	Weight
Loans Secured by Real Estate	
Construction loans	5
Secured by farmland	0
1- to 4-Family residential	0
Multifamily (5+) dwellings	5
Other commercial properties	5
Other real estate loans	0
Loans Not Secured by Real Estate	
Loans to banks	0
Agricultural loans	0
Commercial and industrial	1
Acceptances of U.S. banks	0
Consumer loans	1
Loans to foreign govts and orgs.	1
Municipal loans	0
Total leases	0
Unearned income	0

These weights were chosen somewhat arbitrarily to reflect the riskiness of commercial real estate loans relative to other loan areas. More-precise weights could be based upon loss experience by loan type.²⁶

The researchers tested the relationships between revised GMS score rankings and changes in CAMEL ratings three years after scores were computed. The GMS scores were revised in two ways. First, the portfolio concentration index just described was included as a scoring variable, as was the percentage change in the portfolio concentration index over the growth quarter. Second, the percentile ranks of the ten terms in the revised GMS score (the original eight terms [table 13.8] plus portfolio concentration and growth in portfolio concentration) were weighted by use of the coefficients obtained from a logit model that related the ten terms to changes in CAMEL ratings, as discussed above. (See table 13.12.) To

²⁶ Concentration measures based upon income or revenue shares might also be better measures of risk. For example, the proportion of total revenue generated by each loan type might be used to form a concentration index normalized by revenue. Such measures will be tested in the future.

Table 13.12
12/1988 CAMEL Logit

GMS Term	Model Coefficient
Portfolio concentration	0.0025*
Growth in portfolio conc.	0.0060*
Asset growth	0.0022 ns
Loan growth	0.0054*
Loans and sec/assets growth	20.0044*
Volatile liab/assets growth	20.0017 ns
Equity/assets growth	0.0005 ns
Loans and sec/assets ratio	0.0111*
Volatile liab/assets ratio	0.0068
Equity/assets ratio	0.0067*

Note: The asterisk denotes significance at the 1 percent confidence level, and “ns” denotes “not significant” at the 1 percent level.

weight the terms, estimated coefficients from 1988 were chosen arbitrarily. Terms that were not statistically significant were given zero weight.

The analysis indicated that in each year the revised GMS score rankings were improved indicators of the likelihood of future CAMEL rating downgrades. For example, in December 1984 the proportion of downgraded banks in the highest (original) GMS decile was 15.96 percent (table 13.7), but with the revised GMS score the proportion increased to 18.45 percent. Similarly, with the revised GMS score the proportion of downgraded banks in the top two deciles increased from 28.07 percent to 32.4 percent (see table 13.13). In every year between 1984 and 1995 the highest revised GMS decile contained greater concentrations of downgraded banks than did the highest decile for the original GMS score. Even greater improvement can be expected to follow from less-arbitrary loan weightings as well as from adjustments in GMS term weightings over time.

The FDIC's Examination Ratings Model (CAEL)

Identifying factors that might affect bank performance several years in the future is not the same thing as identifying banks with deteriorating financial condition between examinations so that examination resources can be efficiently targeted at the identified institutions. Identifying the institutions with deteriorating condition has been the general focus of early-warning systems. And just as in a civil suit a preponderance of the evidence is required to reject the null hypothesis of innocence in favor of guilty, in a surveillance system for problem-bank detection the equivalent of a preponderance of the evidence is a high

Table 13.13
Comparisons of Exam Ratings as Assigned in 1985 and 1987
Portfolio Concentration Model
(Number and Column Percent)

December 1984 GMS Decile	CAMEL Upgraded		CAMEL Downgraded		No CAMEL Change		Missing Because of Mergers, etc.		Total	
1	203	16.29%	54	5.06%	384	11.47%	825	9.16%	1,466	9.99%
2	144	11.56	75	7.02	387	11.56	861	9.56	1,467	10.00
3	157	12.60	75	7.02	391	11.68	844	9.37	1,467	10.00
4	140	11.24	75	7.02	337	10.07	915	10.16	1,467	10.00
5	138	11.08	95	8.90	350	10.45	884	9.81	1,467	10.00
6	106	8.51	106	9.93	346	10.33	909	10.09	1,467	10.00
7	111	8.91	122	11.42	351	10.48	883	9.80	1,467	10.00
8	114	9.15	120	11.24	279	8.33	954	10.59	1,467	10.00
9	85	6.82	149	13.95	291	8.69	942	10.46	1,467	10.00
10	48	3.85	197	18.45	232	6.93	990	10.99	1,467	10.00
Total	1,246	100.00%	1,068	100.00%	3,348	100.00%	9,007	100.00%	14,669	100.00%

measured probability that a flagged institution will turn out to be a problem bank (so that few healthy banks are wrongly flagged as problem banks). Such systems should have a small Type II error.

Historical Development

In 1977, after the OCC developed the National Bank Surveillance System (NBSS), the FDIC introduced the Integrated Monitoring System (IMS). IMS consisted of 12 “tests”: a set of Call Report ratios and associated benchmarks performed on commercial banks whose composite CAMEL ratings at their last examinations were 1 or 2. Institutions failing these benchmarks were flagged for the analytic attention of regional and field office personnel. Over time, the IMS failed to achieve a small Type II error. For example, in an IMS Failure Report for the first quarter of 1984, 2,758 institutions (more than 39 percent of the 7,400 institutions scored) were given “top-priority flags.” Included were 100 of the 168 (60 percent) institutions having assets of \$1 billion or more. The inclusion of so many high-asset institutions may have occurred for a number of reasons, but probably when the flag cutoffs were established the system did not take into account the differences in operation between banks of different sizes.

In response to these problems, the IMS off-site monitoring approach was given a major overhaul. This led to the FDIC’s CAEL model that, like the IMS, was based solely on

Call Report data. The model was introduced at the end of the December 1985 Call Report processing period, and it remains the principal tool for the FDIC's off-site monitoring system. The CAEL model is named after the first letter of four of the five examination rating components: capital, asset quality, earnings, and liquidity (the "M," management, is not modeled). CAEL is used to perform a variety of tasks designed to help achieve and maintain efficient allocation of supervisory resources, primarily by early detection of banks that appear to have a high probability of a rating downgrade.

Description

CAEL is an "expert system," designed to replicate the financial analysis that an examiner would perform to assign an examination rating. As such, the system is a nonparametric, nonstatistical construct. CAEL is designed to predict examination ratings that would have been assigned if an institution had been examined as of the date of a Call Report. CAEL uses 19 financial ratios that are matched within peer groups.²⁷

The FDIC periodically updates the CAEL model by having analysts subjectively determine new weights for each of the relevant CAEL ratio components. In addition, the CAEL component rating tables are updated each quarter to mirror the proportionate distribution of peer-group examination ratings over the previous year. Through this process, the CAEL rating distribution always approximates the previous year's examination rating distribution. The final component ratings are multiplied by their respective weights and combined to generate a single CAEL composite rating for an institution. CAEL component and composite ratings range from 0.50 (best) to 5.49 (worst), a range that corresponds to the examination CAMEL rating range of 1 to 5.

Banks' CAEL ratings are compared with their most recent composite CAMEL ratings. If the result is a large predicted downgrade from the current CAMEL rating, the appropriate Division of Supervision regional office gives those banks increased supervisory attention. Regional personnel are required to review these lists and, for each institution, determine whether they agree or disagree with CAEL's results. If they agree, appropriate supervisory follow-up of the subject institution must take place (appropriateness is a function of the severity of the CAEL rating and the gap between the CAEL rating and the CAMEL rating). If regional staff disagree with CAEL's results, the reason(s) for the disagreement must be documented in writing and transmitted to the Washington, D.C., office. In volume the CAEL Off-Site Review List has ranged from 1 percent to 3 percent of the institutions modeled.²⁸ In addition to following up on the Off-Site Review List, regional staff use CAEL to help in such

²⁷ There are three commercial-bank peer groups based solely on asset size; a fourth group encompasses all FDIC-supervised savings institutions.

²⁸ During the study period (1987–94), CAEL encompassed only about 80 percent of all commercial banks. It excluded all banks with over \$1 billion in assets and all banks with a CAMEL rating of 1.

supervisory activities as scheduling exams, doing preexamination planning, assessing affiliated holding company institutions and chain banking organizations,²⁹ and reviewing risk-related premium classifications.

Validation

CAEL has been in existence since 1985, but only since 1987 have sufficient examinations been conducted for there to be measurable results. The validation analysis, for the period from 1987 to 1994, focuses on how well the system performs its stated functions, which are to identify deteriorating banks so that exam resources can be efficiently targeted and to do so with a high probability that a flagged institution will in fact have deteriorated (high probability of guilt).

From 1987 to 1994, only 16 percent of banks with composite CAMEL ratings of 2 or lower experienced a rating downgrade. If there had been no off-site system and the bank regulators had simply randomly chosen banks for accelerated examinations, 16 percent of the examinations would have resulted in a rating downgrade. Over the same period, 52 percent of all CAEL-predicted downgrades were actually downgraded within six months. In other words, CAEL was more than three times better than a random draw at predicting downgrades. Note that a random draw would result in a Type I error rate of 84 percent (84 percent of institutions examined would not be downgraded), while the CAEL model has a Type I error rate of 48 percent, a very large improvement.

Another way to analyze CAEL's effectiveness is to see what percentage of total downgrades were identified. During the period there were 2,867 downgrades, 715 of which—or 25 percent of the relevant group—CAEL predicted. Although CAEL does not predict downgrades for CAMEL 1-rated institutions, some of these institutions were downgraded, and a large number by more than one rating, that is, CAMEL 1 to CAMEL 3. If these downgrades are included, CAEL correctly predicted only 14.3 percent of the total of 3,810 downgrades. By design, CAEL will miss a large number of actual downgrades in order to avoid targeting banks that are, in fact, in sound condition.

The Federal Reserve Board's Financial Institutions Monitoring System (FIMS)

During the years when the OCC and the FDIC were developing their first off-site systems, the Federal Reserve Board developed a similar system,³⁰ a system of screens, which it replaced in the mid-1980s with the Uniform Bank Surveillance System (UBSS), an out-

²⁹ "Chain banking organizations" refer to banks that are controlled by the same ownership group but are not associated with a bank holding company.

³⁰ Putnam, "Early-Warning Systems."

growth of the OCC's early National Bank Surveillance System (NBSS).³¹ After the UBSS and CAEL were developed, a substantial body of economic research focused on modeling bank failures and financial distress.³² This research indicated that banks' financial condition could be successfully modeled with the use of standard Call Report data and that the models would probably use far fewer variables than CAEL. Taking note of the research, in 1993 the FRB replaced the UBSS with the Financial Institutions Monitoring System (FIMS).³³

FIMS represented a major advance in surveillance systems by using sophisticated statistical models to predict CAMEL ratings (ordinal-level logit) and probabilities of commercial bank failures (binary-probit). These techniques allow the bank analyst to determine statistically what bank condition ratios are significant determinants of CAMEL ratings or of failure, and how important each ratio might be in the model. The techniques also help the analyst discard ratios that do not have a statistically significant relationship with CAMEL ratings or bank failures. These models can also be updated (reestimated) as often as four times a year (when new Call Report data are received) to adapt to changes in examination standards or in the banking environment.

The FIMS model lends itself to the same type of validation that was performed for CAEL. The FIMS validation covers the period from December 1989 to March 1992, a much shorter period than that used for validating the CAEL system.³⁴ Over its validation period FIMS correctly identified 61 percent of downgrades predicted, with a 39 percent Type II error rate. FIMS also identified 41.2 percent of the total downgrades. For purposes of comparison, a CAEL validation was performed for the same period. CAEL correctly identified 51 percent of downgrades (10 percent below FIMS), with a 49 percent Type II error rate. CAEL also predicted a smaller percentage of total downgrades than FIMS, 34 percent (41.2 percent for FIMS). Thus, over the same study period, FIMS was more accurate than CAEL.

It should be noted that there are meaningful differences between an "algorithmic" model like CAEL and a "probabilistic" model like FIMS. FIMS estimates the "probability" of bank failure or of rating downgrade by using historical trends and relationships. CAEL is not based on any statistical model and does not require assumptions about standard statistical problems, such as normality in dependent-term distribution. But CAEL's nonpara-

³¹ Rebel A. Cole, Barbara G. Cornyn, and Jeffery W. Gunther, "FIMS: A New Monitoring System for Banking Institutions," *Federal Reserve Bulletin* 81 (January 1995): 3.

³² Alst Demircug-Kurt, "Modeling Large Commercial-Bank Failures: A Simultaneous-Equations Analysis," working paper 8905, Federal Reserve Bank of Cleveland, May 1989; Alst Demircug-Kurt, "Deposit-Institution Failures: A Review of the Empirical Literature," Federal Reserve Bank of Cleveland *Economic Review* 27 (March 1991); Gregory R. Gajewski, "Assessing the Risk of Bank Failure," in *Bank Structure and Competition*, conference proceedings, Federal Reserve Bank of Chicago (May 1989), 432–56; and Gary Whalen and James Thomson, "Using Financial Data to Identify Changes in Bank Conditions," Federal Reserve Bank of Cleveland *Economic Review* (quarter 2, 1988): 17–26.

³³ Cole, Cornyn, and Gunther. "FIMS: A New Monitoring System," 1–15.

³⁴ Ibid.

metric approach is nonetheless dependent upon historical patterns and is therefore still open to the same weaknesses as probabilistic models. In addition, the Type I and Type II error trade-offs are inherent in all forecasts regardless of estimation method.

After FIMS, the FRB went on to make many improvements to its entire surveillance system. The bank-failure model described in FIMS is no longer in use; the model was reestimated quarterly using the previous two years' data. But as the number of bank failures dramatically decreased through the 1990s, the model became less and less reliable.³⁵ The FRB then developed a new failure model: a pooled time series model that uses failures for the years 1985 through 1993 to estimate failure probabilities. Building on the original FIMS work, researchers studied a large number of aggregate economic variables (Treasury bond rates, changes in GDP, etc.) to see if they increase the predictive power of either the CAMEL ratings model or the failure model. Although some of the variables were statistically significant, none of them improved the accuracy of the "out-of-sample" predictions of the models. The FRB also continues to develop and use various financial-ratio screens that highlight outlier banks. Currently the ratings model is updated quarterly, and the pooled failed-bank model is updated every two years. All parts of the FRB surveillance system are produced and distributed within three days of final Call Report data.

The OCC's Surveillance System

The OCC's current off-site surveillance system uses a variety of mainframe and PC applications based on Call Report and UBPR information. Two of the PC systems use artificial intelligence and expert system technology. One of the two takes the UBPR for each national and state-chartered bank and produces an English-language report based on expert financial analysts' experience. The other analyzes the interest-rate risk of each bank based on historical changes, and produces an English-language summary of the findings. Summary scores from both systems provide for trend and systematic analysis across all banks. For national banks, these reports are produced within a day after quarterly Call Report data are final.

Conclusion

The lessons of the banking crises of the 1980s and the use of off-site monitoring during that period are fairly clear. First, banks that either become financially distressed or fail apparently exhibit identifiable risk characteristics several years in advance of the distress or failure. Second, off-site surveillance systems like those now used by the FRB appear to be reliable and valuable tools when used in conjunction with regular examinations. Finally, ongoing research at each of the federal bank regulatory agencies is warranted. Such research would include regional economic data in the current off-site monitoring models, thereby further enhancing our understanding of the causes of financial distress.

³⁵ The model did not have enough failure "events" for the statistical procedure used to run to a solution.

Appendix A

The tables in this appendix present a comparison of different factors in predicting bank failures four and five years into the future for the years 1980, 1982, 1984, 1986, and 1988. The banks studied consisted of all banks that were in existence on December 31 of the beginning year (for instance 1980) and either failed four or five years later or never failed. Excluded from the analysis were banks that failed before the fourth or fifth year, banks that were chartered after the beginning period, and banks that failed subsequent to the fifth year.

There is a table for each beginning year of the study, and three groups of banks are shown within each table. The first part of each table contains data from the entire set of banks studied for the particular time period. This analysis (described below) identifies the subset of banks that exhibit the highest risk of bank failure within the universe of banks studied. The second part of the table then repeats the analysis using only the highest-risk subset of banks. The third part of the table takes the remaining banks in the universe (those not identified as the highest risk in the first part of the table) and again repeats the analysis.

Table 13-A.1 compares the different risk factors as predictors of bank failures four and five years forward from 1980. The eight financial ratios that were chosen as risk factors for the analysis are listed across the top of the table. For each ratio, banks are sorted from lowest to highest and divided into five equal portions or quintiles, with banks in quintile 1 supposedly having the lowest risk and those in quintile 5 the highest. By reading across each quintile, one can identify how many banks failed and how many banks never failed for each risk factor. For instance, in the first quintile for Loans to Assets for 1980 (the 20 percent of the banks with the lowest Loans-to-Assets ratio), 20 banks failed either in 1984 or 1985 and 2,415 never failed. The first quintile for Return on Assets (ROA) in 1980 had 39 failed banks four or five years later and 2,396 banks that never failed. The Total row shows that 184 of the banks in existence in 1980 failed either in 1984 or 1985 and that 11,989 banks in existence in 1980 never failed.

Below the Total row are the Chi-Square statistics for the logit regression for each risk factor. The higher the Chi-Square statistic, the better the risk factor is as a predictor of bank failures. In 1980 the Loans-to-Assets ratio is the risk factor with the highest Chi-Square: 99.668. The risk factor with the next-highest score is Loan Growth, with a Chi-Square of 88.352.

The last row is labeled Best Grouping and identifies which set of banks within the high-risk ratio is the best predictor of failure. Obviously banks in quintile 5 had the highest failure rate (88 out of 2,434), but it may be that the best predictor of failure was being a bank in either quintile 4 or quintile 5. To determine which grouping of banks yields the best prediction of failure, four groupings are analyzed: quintile 1 versus quintiles 2–5, quintiles 1–2 versus quintiles 3–5, and so forth. A Chi-Square statistic is calculated on the difference

between each two groups. The largest Chi-Square indicates the largest difference between the groups, and being in the group with the highest percentage of failures is the best predictor of failure. For the Loans-to-Assets factor, the smallest difference was between quintile 1 and quintiles 2–5, with a Chi-Square of 9.74. The largest difference was between the grouping of quintiles 1–4 versus quintile 5, with a Chi-Square of 90.4. Of the 20 percent of the banks in quintile 5, 3.6 percent failed, over three times the failure rate (1 percent) of the other 80 percent of the banks. Thus, in 1980 a bank with a Loans-to-Assets ratio in the highest 20 percent of all banks was the best predictor of failure in 1984 or 1985.

In the next part of the table, banks in the highest-risk grouping (that is, quintile 5 of Loans to Assets) are analyzed to determine if there were additional risk factors that were related significantly to failure. Although the 2,434 highest-risk banks identified so far were all in the top 20 percent of Loans to Assets, they are not uniformly distributed in the highest-risk quintiles of the other risk factors. For example, the 2,434 institutions (88 failures and 2,346 nonfailures) are spread relatively evenly through the Average Salary quintiles but very unevenly through the Interest Yield quintiles, where a large percentage of banks were concentrated in quintiles 4 and 5. Interest Yield would appear to be an excellent predictor of risk, as 78 of the 88 failures (89 percent) are in the fourth and fifth quintiles. However, a very large percentage of all of the high-risk banks (65.3) are in those quintiles, so the prediction may not be as good as it first appears. In fact, the Chi-Square for the best predictor for the Interest Yield is 36.05, the second-highest for the High-Risk Group. The best predictor turned out to be Interest and Fees on Loans and Leases (Chi-Square of 52.22). For this predictor, the best grouping was between quintiles 1–3 and quintiles 4–5. A bank in both the top 20 percent of Loans to Assets and the top 40 percent of Interest and Fees to Loans and Leases would have a 7.2 percent probability of failure, twice the rate of being only in the top quintile of Loans to Assets.

The final part of the table is the risk analysis of the banks that were in the lower 80 percent of Loans to Assets. The same procedure that was used for the high-risk banks was followed, and the results are shown in the Low-Risk Group section of table 13-A.1. The variable with the highest Chi-Square statistic (42.61) is Loan Growth. The best grouping was between quintiles 1–4 and quintile 5 (Chi-Square of 36.26). In quintile 5, 2.3 percent of banks failed, versus 0.7 percent of the remaining banks.

To summarize, on December 31, 1980 there were 12,173 banks that either failed in 1984 or 1985 or never failed. Of that group, 184 failed four or five years later. Of the risk factors studied, the banks with the highest probability of failure were those in the highest quintile for Loans to Assets and in the highest 40 percent of banks for Interest and Fees on Loans and Leases. For the 80 percent of banks that were not in the High-Risk Group, being in the highest Loan Growth quintile was the best predictor of failure.

Table 13-A.1

Comparison of Different Factors in Predicting Bank Failures Four and Five Years Forward, 1980

	Loans to Assets		ROA		Asset Growth		Operating Expenses		Interest Yield		Average Salary		Int and Fees to Loans		Loan Growth	
Quintile	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed
All Banks																
1	20	2,415	39	2,396	36	2,398	25	2,409	23	2,412	45	2,390	34	2,400	21	2,414
2	13	2,421	31	2,404	16	2,419	20	2,414	17	2,418	19	2,416	14	2,421	13	2,421
3	25	2,410	24	2,410	32	2,403	36	2,399	18	2,416	38	2,397	30	2,405	29	2,406
4	38	2,397	36	2,399	34	2,400	36	2,399	44	2,390	30	2,403	52	2,383	36	2,399
5	88	2,346*	54	2,380	66	2,369	67	2,368	82	2,353	52	2,383	54	2,380	85	2,349
Total	184	11,989	184	11,989	184	11,989	184	11,989	184	11,989	184	11,989	184	11,989	184	11,989
Chi-Square	99.668		13.769		36.323		36.803		83.604		18.274		30.382		88.352	
Best Grouping	(1 vs 2–5) 9.740				(1–2 vs 3–5) 37.895				(1–3 vs 4–5) 63.140				(1–4 vs 5) 90.404			
High-Risk Group																
1	0	0	28	356	20	557	11	449	3	135	16	435	7	657	3	158
2	0	0	15	374	9	560	11	401	4	279	9	490	5	489	6	345
3	0	0	11	462	14	476	14	452	3	438	17	488	18	453	15	517
4	0	0	16	486	18	410	18	497	19	620	13	478	30	406*	19	660
5	88	2,346	18	668	27	343	34	547	59	874	33	455	28	341*	45	666
Total	88	2,346	88	2,346	88	2,346	88	2,346	88	2,346	88	2,346	88	2,346	88	2,346
Chi-Square			19.415		22.420		11.896		36.057		19.984		52.216		22.371	
Best Grouping	(1 vs 2–5) 17.189				(1–2 vs 3–5) 42.167				(1–3 vs 4–5) 44.473				(1–4 vs 5) 19.681			
Low-Risk Group																
1	20	2,415	11	2,040	16	1,841	14	1,960	20	2,277	29	1,955	27	1,743	18	2,256
2	13	2,421	16	2,030	7	1,859	9	2,013	13	2,139	10	1,926	9	1,932	7	2,076
3	25	2,410	13	1,948	18	1,927	22	1,947	15	1,978	21	1,909	12	1,952	14	1,889
4	38	2,397	20	1,913	16	1,990	18	1,902	25	1,770	17	1,925	22	1,977	17	1,739
5	0	0	36	1,712	39	2,026	33	1,821	23	1,479	19	1,928	26	2,039	40	1,683*
Total	96	9,643	96	9,643	96	9,643	96	9,643	96	9,643	96	9,643	96	9,643	96	9,643
Chi-Square			27.905		25.469		19.978		12.260		9.423		15.379		42.611	
Best Grouping	(1 vs 2–5) 1.146				(1–2 vs 3–5) 13.71				(1–3 vs 4–5) 23.62				(1–4 vs 5) 38.26			

*Quintile that is best predictor of failure.

Table 13-A.2

Comparison of Different Factors in Predicting Bank Failures Four and Five Years Forward, 1982

	Loans to Assets		ROA		Asset Growth		Operating Expenses		Interest Yield		Average Salary		Int and Fees to Loans		Loan Growth	
Quintile	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed
All Banks																
1	8	2,363	54	2,318	63	2,306	37	2,333	24	2,345	54	2,317	29	2,340	25	2,345
2	25	2,347	55	2,316	47	2,325	49	2,322	20	2,353	45	2,326	27	2,345	23	2,348
3	36	2,333	50	2,323	40	2,331	45	2,326	33	2,338	45	2,328	52	2,318	33	2,339
4	62	2,311	53	2,319	56	2,317	62	2,311	58	2,314	63	2,307	76	2,296	88	2,285
5	160	2,212*	79	2,290	85	2,287	98	2,274	156	2,216	84	2,288	107	2,267	122	2,249
Total	291	11,566	291	11,566	291	11,566	291	11,566	291	11,566	291	11,566	291	11,566	291	11,566
Chi-Square	255.143		9.838		21.183		40.572		225.857		18.58		80.164		139.722	
Best Grouping	(1 vs 2–5)		55.472		(1–2 vs 3–5)		102.109		(1–3 vs 4–5)		163.495		(1–4 vs 5)		227.845	
High-Risk Group																
1	0	0	31	359	33	582	18	381	7	161	26	391	9	524	9	195
2	0	0	29	369	26	445	21	333	7	275	25	439	18	458	13	331
3	0	0	32	391	19	398	28	393	13	376	24	501	30	443	14	436
4	0	0	24	395	39	352	42	460	30	542	39	436	50	456*	55	585
5	160	2,212	44	698	43	435	51	645	103	858	46	445	53	331*	69	665
Total	160	2,212	160	2,212	160	2,212	160	2,212	160	2,212	160	2,212	160	2,212	160	2,212
Chi-Square			3.009		16.491		6.016		43.245		12.469		66.747		27.729	
Best Grouping	(1 vs 2–5)		27.947		(1–2 vs 3–5)		46.228		(1–3 vs 4–5)		52.778		(1–4 vs 5)		36.207	
Low-Risk Group																
1	8	2,363	23	1,724	30	1,724	19	1,952	17	2,184	28	1,926	20	1,816	16	2,150
2	25	2,347	26	1,880	21	1,880	28	1,989	13	2,078	20	1887	9	1,887	10	2,017
3	36	2,333	18	1,933	21	1,933	17	1,933	20	1,962	21	1827	22	1,875	19	1,903
4	62	2,311	29	1,965	17	1,965	20	1,851	28	1,772	24	1871	26	1,840	33	1,700
5	0	0	35	1,852	42	1,852	47	1,629	53	1,358*	38	1843	54	1,936	53	1,584
Total	131	9,354	131	9,354	131	9,354	131	9,354	131	9,354	131	9354	131	9,354	131	9,354
Chi-Square			11.009		17.524		32.494		75.695		8.221		39.209		65.372	
Best Grouping	(1 vs 2–5)		7.7978		(1–2 vs 3–5)		26.783		(1–3 vs 4–5)		46.436		(1–4 vs 5)		68.628	

*Quintile that is best predictor of failure.

Table 13-A.3
Comparison of Different Factors in Predicting Bank Failures Four and Five Years Forward, 1984

	Loans to Assets		ROA		Asset Growth		Operating Expenses		Interest Yield		Average Salary		Int and Fees to Loans		Loan Growth	
Quintile	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed
All Banks																
1	11	2287	44	2,255	90	2,200	34	2,260	42	2,254	45	2,250	61	2,233	64	2,227
2	22	2276	34	2,263	36	2,260	33	2,264	34	2,263	55	2,241	53	2,244	39	2,256
3	47	2249	42	2,257	35	2,264	60	2,239	47	2,251	62	2,233	58	2,240	44	2,255
4	64	2231	75	2,222	39	2,258	88	2,209	71	2,222	84	2,210	66	2,229	51	2,246
5	188	2104*	137	2,150	132	2,165	117	2,175	138	2,157	86	2,213	94	2,201	134	2,163
Total	332	11147	332	11,147	332	11,147	332	11,147	332	11,147	332	11,147	332	11,147	332	11,147
Chi-Square	314.339		112.728		116.781		81.377		111.339		20.134		16.192		93.997	
Best Grouping	(1 vs 2–5)		59.593		(1–2 vs 3–5)		129.011		(1–3 vs 4–5)		184.104		(1–4 vs 5)		287.196	
High-Risk Group																
1	0	0	26	298	42	376	16	302	21	230	24	405	34	522	23	206
2	0	0	19	351	14	317	20	323	13	249	31	441	33	414	15	313
3	0	0	25	417	17	369	35	366	23	324	35	401	38	423	24	411
4	0	0	46	466	22	399	49	476	47	480	45	428	42	410	27	505
5	188	2,104	72	572	93	643*	68	637	84	821	53	429	41	335	99	669
Total	188	2,104	188	2,104	188	2,104	188	2,104	188	2,104	188	2,104	188	2,104	188	2,104
Chi-Square			16.442		40.392		9.797		6.564		11.643		7.975		40.262	
Best Grouping	(1 vs 2–5)		2.312		(1–2 vs 3–5)		0.778		(1–3 vs 4–5)		9.363		(1–4 vs 5)		28.061	
Low-Risk Group																
1	11	2,287	18	1,957	48	1,824	18	1,958	21	2,024	21	1,845	27	1,711	41	2,021
2	22	2,276	15	1,912	22	1,943	13	1,941	21	2,014	24	1,800	20	1,830	24	1,943
3	47	2,249	17	1,840	18	1,895	25	1,873	24	1,927	27	1,832	20	1,817	20	1,844
4	64	2,231	29	1,756	17	1,859	39	1,733	24	1,742	39	1,782	24	1,819	24	1,741
5	0	0	65	1,578*	39	1,522	49	1,538	54	1,336	33	1,784	53	1,866	35	1,494
Total	144	9,043	144	9,043	144	9,043	144	9,043	144	9,043	144	9,043	144	9,043	144	9,043
Chi-Square			79.204		33.559		44.975		57.976		7.892		24.152		12.514	
Best Grouping	(1 vs 2–5)		73.962		(1–2 vs 3–5)		22.899		(1–3 vs 4–5)		48.909		(1–4 vs 5)		73.962	

*Quintile that is best predictor of failure.

Table 13-A.4

Comparison of Different Factors in Predicting Bank Failures Four and Five Years Forward, 1986

Quintile	Loans to Assets		ROA		Asset Growth		Operating Expenses		Interest Yield		Average Salary		Int and Fees to Loans		Loan Growth	
	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed
All Banks																
1	7	2,247	18	2,237	66	2,171	32	2,220	53	2,195	40	2,208	72	2,175	47	2,190
2	14	2,239	25	2,229	31	2,219	25	2,228	28	2,222	33	2,216	50	2,200	33	2,214
3	26	2,221	29	2,225	27	2,225	29	2,219	38	2,216	55	2,191	43	2,208	40	2,213
4	61	2,187	50	2,202	28	2,225	47	2,204	46	2,204	43	2,204	45	2,202	43	2,211
5	145	2,099*	131	2,100	101	2,153	120	2,122	88	2,156	82	2,174	43	2,208	90	2,165
Total	253	10,993	253	10,993	253	10,993	253	10,993	253	10,993	253	10,993	253	10,993	253	10,993
Chi-Square	261.134		177.554		85.494		128.176		42.67		29.761		12.301		41.059	
Best Grouping	(1 vs 2–5)		48.202		(1–2 vs 3–5)		108.822		(1–3 vs 4–5)		185.640		(1–4 vs 5)		225.957	
High-Risk Group																
1	0	0	10	311	38	360	16	299	22	305	21	421	50	701	23	158
2	0	0	18	409	15	273	14	295	11	306	21	417	30	472	17	223
3	0	0	18	440	15	296	21	374	30	318	29	450	24	377	22	364
4	0	0	30	433	14	470	26	470	26	410	23	402	23	280	26	559
5	145	2,099	69	506*	63	700	68	661	56	760	51	409	18	269	57	795
Total	145	2,099	145	2,099	145	2,099	145	2,099	145	2,099	145	2,099	145	2,099	145	2,099
Chi-Square	43.549		22.670		14.888		7.813		21.342		1.051		16.217			
Best Grouping	(1 vs 2–5)		6.940		(1–2 vs 3–5)		13.717		(1–3 vs 4–5)		30.233		(1–4 vs 5)		39.067	
Low-Risk Group																
1	7	2247	8	1,926	28	1,811	16	1,921	31	1,890	19	1,787	22	1,474	24	2,032
2	14	2239	7	1,820	16	1,946	11	1,933	17	1,916	12	1,799	20	1,728	16	1,991
3	26	2221	11	1,785	12	1,929	8	1,845	8	1,898	26	1,741	19	1,831	18	1,849
4	61	2187	20	1,769	14	1,755	21	1,734	20	1,794	20	1,802	22	1,922	17	1,652
5	0	0	62	1,594*	38	1,453	52	1,461	32	1,396	31	1,765	25	1,939	33	1,370
Total	108	8894	108	8,894	108	8,894	108	8,894	108	8,894	108	8,894	108	8,894	108	8,894
Chi-Square	116.120		34.973		81.976		27.438		10.198		1.602		19.816			
Best Grouping	(1 vs 2–5)		12.841		(1–2 vs 3–5)		34.958		(1–3 vs 4–5)		65.614		(1–4 vs 5)		110.775	

*Quintile that is best predictor of failure.

Table 13-A.5

Comparison of Different Factors in Predicting Bank Failures Four and Five Years Forward, 1988

	Loans to Assets		ROA		Asset Growth		Operating Expenses		Interest Yield		Average Salary		Int and Fees to Loans		Loan Growth	
Quintile	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed	Failed	Nonfailed
All Banks																
1	6	2135	16	2,127	31	2,109	30	2,111	19	2,123	18	2,118	31	2,110	27	2,112
2	8	2134	13	2,129	9	2,133	12	2,129	14	2,128	14	2,124	15	2,126	15	2,127
3	17	2123	21	2,121	16	2,125	17	2,125	14	2,127	16	2,122	27	2,114	14	2,127
4	30	2111	18	2,123	12	2,130	21	2,120	26	2,115	27	2,112	25	2,116	14	2,128
5	72	2071*	65	2,074	65	2,077	53	2,089	60	2,081	58	2,098	35	2,108	63	2,080
Total	133	10574	133	10,574	133	10,574	133	10,574	133	10,574	133	10,574	133	10,574	133	10,574
Chi-Square	111.600		71.628		81.030		39.765		56.791		49.897		8.632		67.567	
Best Grouping	(1 vs 2–5)		20.186		(1–2 vs 3–5)		48.751		(1–3 vs 4–5)		75.492		(1–4 vs 5)		97.888	
High-Risk Group																
1	0	0	8	396	14	203	22	412	11	162	7	430	18	532	9	145
2	0	0	10	408	4	271	7	341	6	229	7	405	11	509	8	298
3	0	0	15	394	7	350	10	358	6	350	7	405	15	379	9	423
4	0	0	9	414	8	528	10	437	14	527	13	377	10	345	9	564
5	72	2,071	30	459	39	719	23	523	35	803	38	454*	18	306	37	641
Total	72	2,071	72	2,071	72	2,071	72	2,071	72	2,071	72	2,071	72	2,071	72	2,071
Chi-Square			17.269		24.812		9.279		11.051		40.015		7.869		20.454	
Best Grouping	(1 vs 2–5)		5.225		(1–2 vs 3–5)		12.674		(1–3 vs 4–5)		27.092		(1–4 vs 5)		37.388	
Low-Risk Group																
1	6	2,135	8	1,731	17	1,906	8	1,699	8	1,961	11	1,688	13	1,578	18	1,967
2	8	2,134	3	1,721	5	1,862	5	1,788	8	1,899	7	1,719	4	1,617	7	1,829
3	17	2,123	6	1,727	9	1,775	7	1,767	8	1,777	9	1,717	12	1,735	5	1,704
4	30	2,111	9	1,709	4	1,602	11	1,683	12	1,588	14	1,735	15	1,771	5	1,564
5	0	0	35	1,615*	26	1,358	30	1,566	25	1,278	20	1,644	17	1,802	26	1,439
Total	61	8,503	61	8,503	61	8,503	61	8,503	61	8,503	61	8,503	61	8,503	61	8,503
Chi-Square			59.088		38.601		39.578		33.524		9.119		6.912		34.985	
Best Grouping	(1 vs 2–5)		1.963		(1–2 vs 3–5)		12.803		(1–3 vs 4–5)		27.707		(1–4 vs 5)		57.352	

*Quintile that is best predictor of failure.

Appendix B
Table 13-A.6
UBPR Peer-Group Characteristics

Peer Group	Average Assets for Latest Quarter	Number of Banking Offices	Location
1	In excess of \$10 billion	—	—
2	Between \$3 billion and \$10 billion	—	—
3	Between \$1 billion and \$3 billion	—	—
4	Between \$500 million and \$1 billion	—	—
5	Between \$300 million and \$500 million	3 or more	—
6	Between \$300 million and \$500 million	2 or fewer	—
7	Between \$100 million and \$300 million	3 or more	Metropolitan area
8	Between \$100 million and \$300 million	3 or more	Nonmetropolitan area
9	Between \$100 million and \$300 million	2 or fewer	Metropolitan area
10	Between \$100 million and \$300 million	2 or fewer	Nonmetropolitan area
11	Between \$50 million and \$100 million	3 or more	Metropolitan area
12	Between \$50 million and \$100 million	3 or more	Nonmetropolitan area
13	Between \$50 million and \$100 million	2 or fewer	Metropolitan area
14	Between \$50 million and \$100 million	2 or fewer	Nonmetropolitan area
15	Between \$25 million and \$50 million	2 or more	Metropolitan area
16	Between \$25 million and \$50 million	2 or more	Nonmetropolitan area
17	Between \$25 million and \$50 million	1	Metropolitan area
18	Between \$25 million and \$50 million	1	Nonmetropolitan area
19	Between \$10 million and \$25 million	2 or more	Metropolitan area
20	Between \$10 million and \$25 million	2 or more	Nonmetropolitan area
21	Between \$10 million and \$25 million	1	Metropolitan area
22	Between \$10 million and \$25 million	1	Nonmetropolitan area
23	Less than or equal to \$10 million	—	Metropolitan area
24	Less than or equal to \$10 million	—	Nonmetropolitan area
25	Were established within the last three years, and have assets less than or equal to \$25 million		

Chapter 1

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Chapter 2

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