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 cyclicality 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

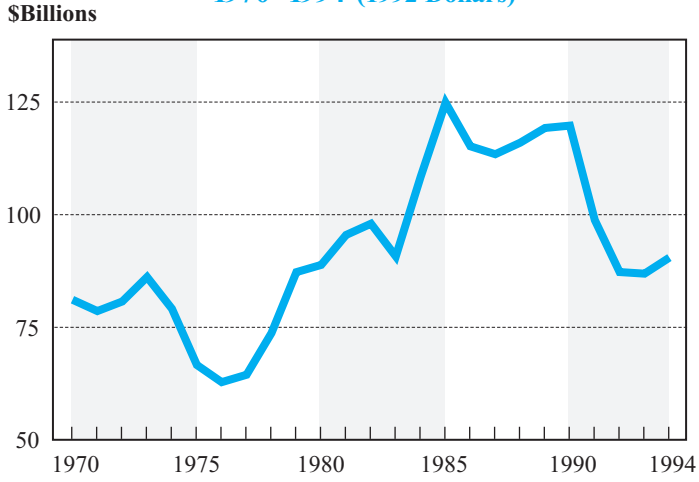
[5] According to data from the National Council of Real Estate Investment Fiduciaries and the Frank Russell Company (these two groups together produced the Russell-NCREIF report), returns on the office properties owned by institutional investors in the late 1970s and early 1980s averaged 21.9 percent; 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,

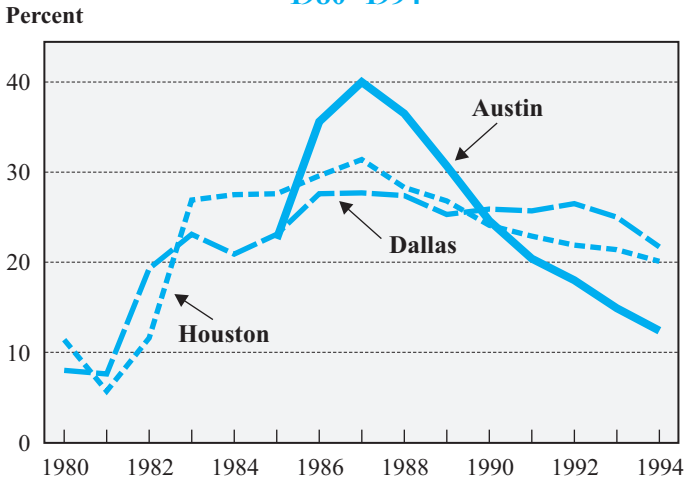
Figure 3.1
Total Nonresidential Construction Put in Place, 1970–1994 (1992 Dollars)



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



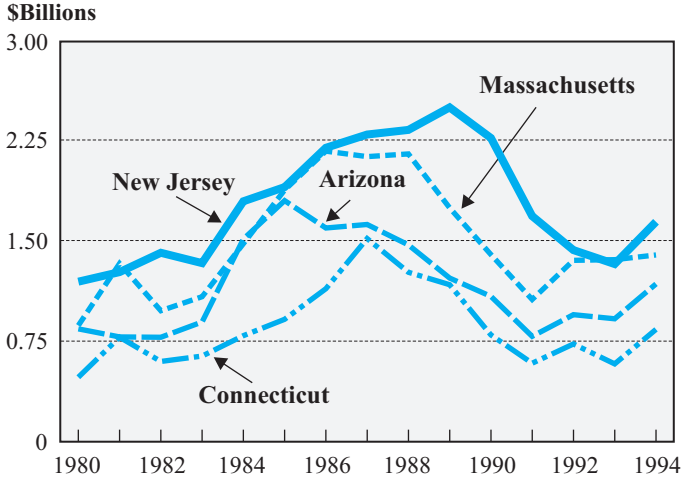
Source: CB Commercial/Torto Wheaton Research.
Note: Data for Austin are not available before 1985.

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.

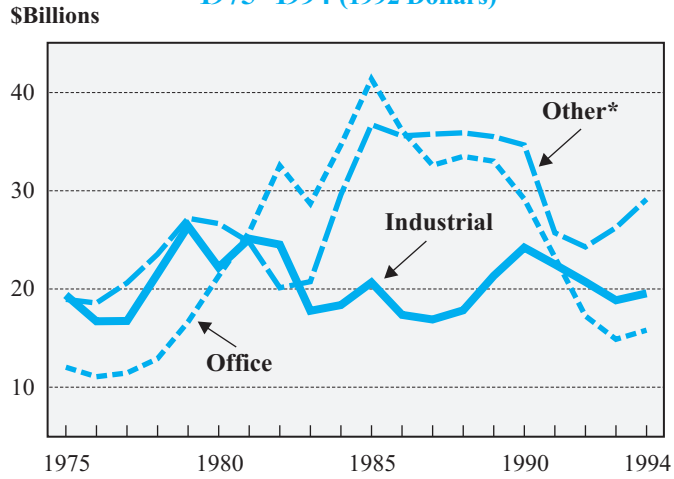
In both dollars and square feet, the magnitude of the 1980s office boom was extraordinary. In dollars, the nationwide upswing in new construction that began in 1977 with $11 billion worth of office construction put in place peaked eight years later with $41 billion worth of space produced (figure 3.4). 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.

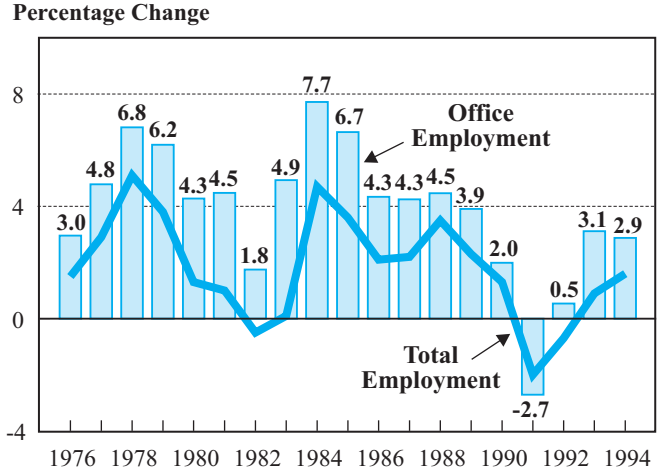
†"Absorptions" refers to the net change in occupied space over a defined period.

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



Source: CB Commercial/Torto Wheaton Research.

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.

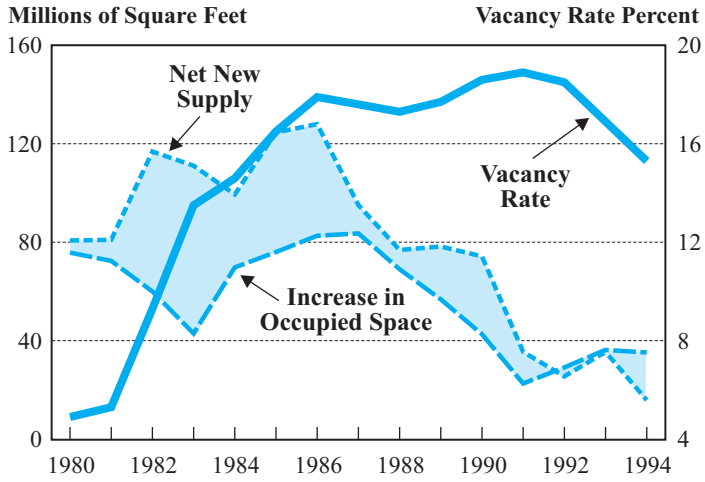
Estimates of aggregate supply and demand for retail properties for 56 major markets across the country are presented in figure 3.7. Between 1984 and 1990, construction of new

[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)

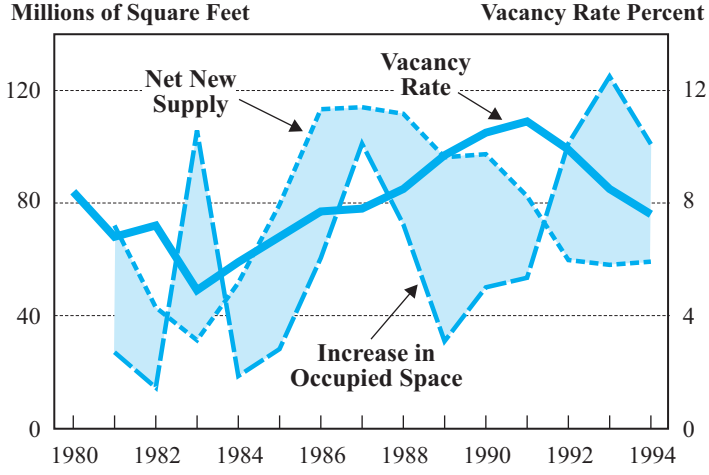


Source: CB Commercial/Torto Wheaton Research.

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.

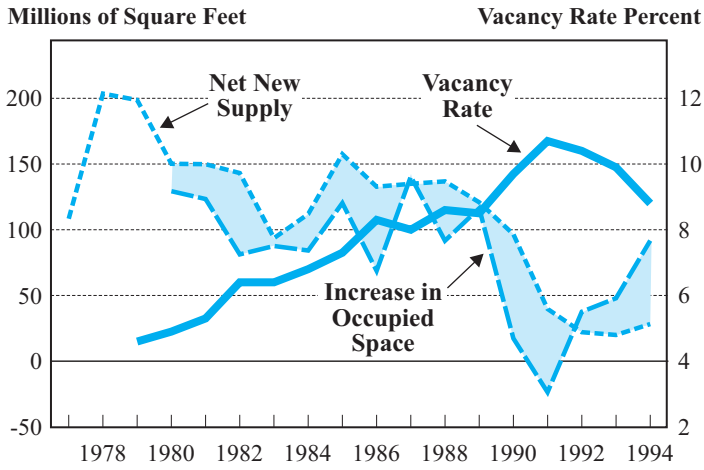
[12] For a good discussion of the issues associated with the boom-and-bust conditions of real estate markets during the 1980s, see Patric H. Hendershott and Edward J. Kane, "Causes and Consequences of the 1980s Commercial Construction Boom," *Journal of Applied Corporate Finance* (spring 1992): 61–70.

[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-

Figure 3.8
Industrial Market Conditions, 1977–1994
(31 Major Markets)



Source: CB Commercial/Torto Wheaton Research.

[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.

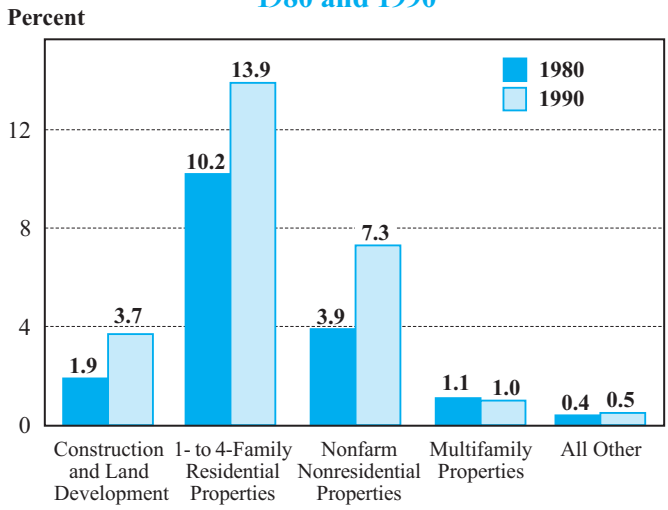
[19] Commercial real estate loans consist of loans for construction and land development, loans secured by nonfarm nonresidential properties, and loans secured by multifamily properties.

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 polices 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 polices 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.

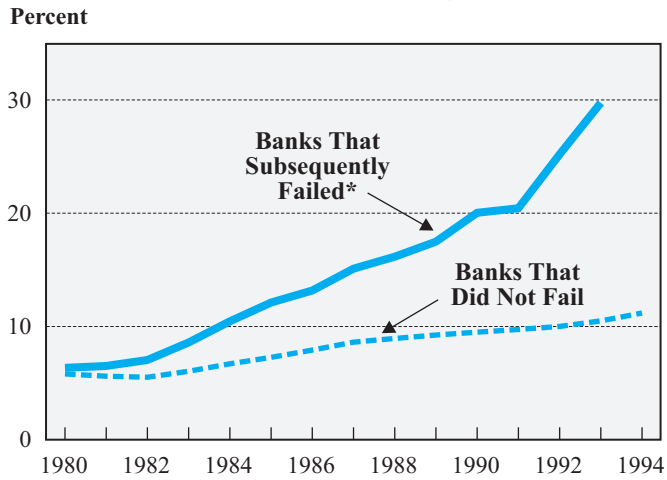
[29] The appraisal foundation is a private sector organization that has established an Appraiser Qualification and Standards Board. The purpose of the board is to professionalize the appraisal industry and establish coordination between the industry and federal and state officials in developing a national 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

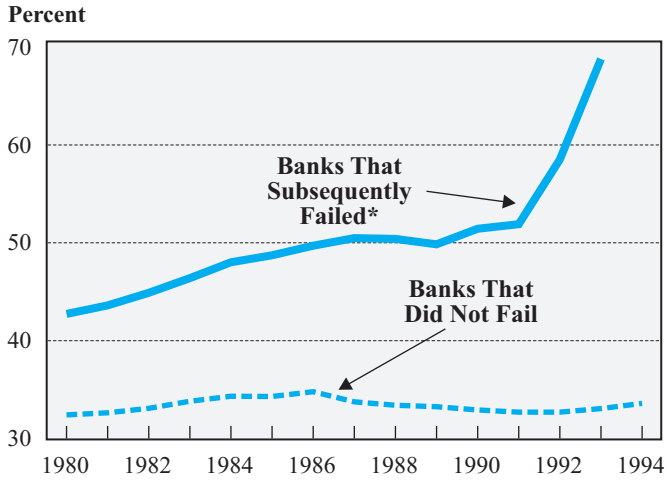


Note: Ratios are unweighted averages. Open-bank assistance cases are not counted as failures.

* Banks that failed in 1994 did not report year-end financials.

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.

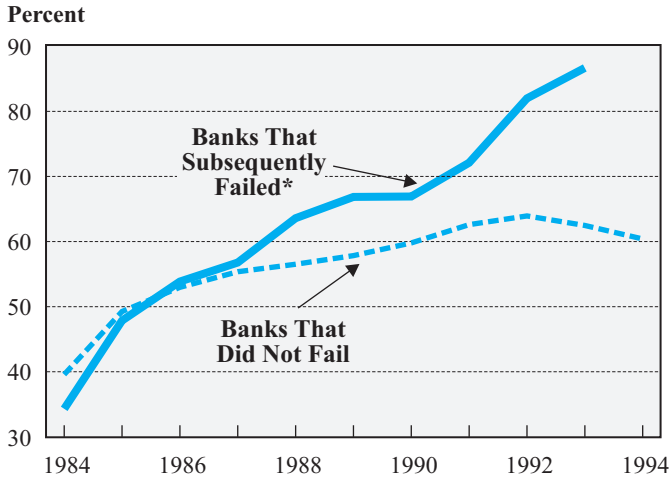
These exposures to volatile commercial real estate markets contributed to the asset-quality problems of many banks. Although data on nonperforming commercial real restate loans were not available before 1991, data on nonperforming real estate assets were available beginning in 1984. Nonperforming real 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

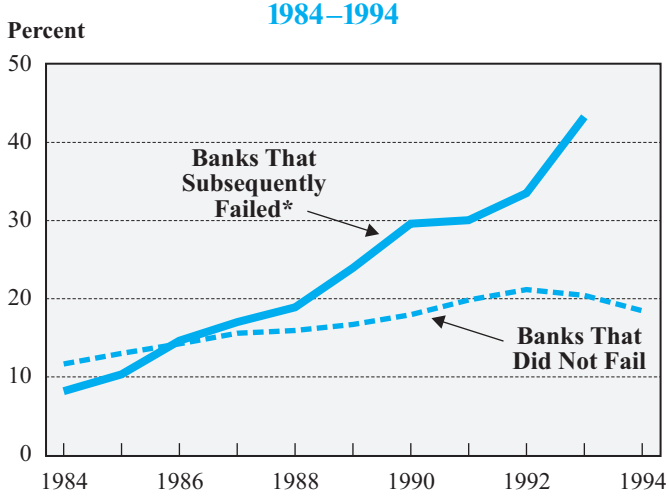
In the early 1980s, a large demand for real estate investments produced a boom in commercial construction activity. Public policy actions further stimulated the boom: tax breaks enacted as part of the Economic Recovery Act of 1981 greatly enhanced the after-tax returns on real estate investment, and 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.