

Is Commercial Real Estate Reliving the 1980s and Early 1990s?

By C. Alan Garner

Concern has been rising about the health of the U.S. commercial real estate market and any impact it may have on financial markets and institutions. It is too early to judge the full extent of any problems, but commercial real estate financing has been shaken by the financial market turmoil associated with recent residential mortgage defaults. The spreads of commercial mortgage-backed securities have widened relative to Treasury securities, and recent reports suggest that prices for many commercial properties are declining. In addition to the direct effects on construction activity, large commercial real estate losses by financial institutions might dampen broad-based economic growth by causing banks to cut back on commercial, industrial, and household lending.

One way to gain perspective on the current commercial real estate market is to look back at historical experience. A natural comparison is with the 1980s and early 1990s. In the 1980s, commercial construction boomed, resulting in a massive oversupply of commercial space and creating serious financial problems for many depository institutions and real estate investors. Many analysts believe these problems helped cause a broader credit crunch in the early 1990s, which reduced the

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availability of funds to small and middle-sized businesses and slowed overall economic growth.

How is the current economic and financial situation in commercial real estate similar to and different from the conditions leading up to the real estate bust in the late 1980s and early 1990s? The first section of this article will describe the earlier episode and identify contributing economic and financial factors. The second section will consider how current commercial real estate fundamentals are similar to and different from the earlier episode. The recent commercial construction boom was not as large as in the 1980s, suggesting excess supplies of commercial space may not grow as large. The third section will examine the current size and distribution of financial risks relative to the earlier episode. A major difference from the early 1990s—increased commercial real estate securitization—may expose developers and investors to shocks originating outside the commercial real estate sector. A major similarity is that commercial banks currently have a large direct exposure to commercial real estate loans.

I. WHAT HAPPENED IN THE 1980s AND EARLY 1990s?

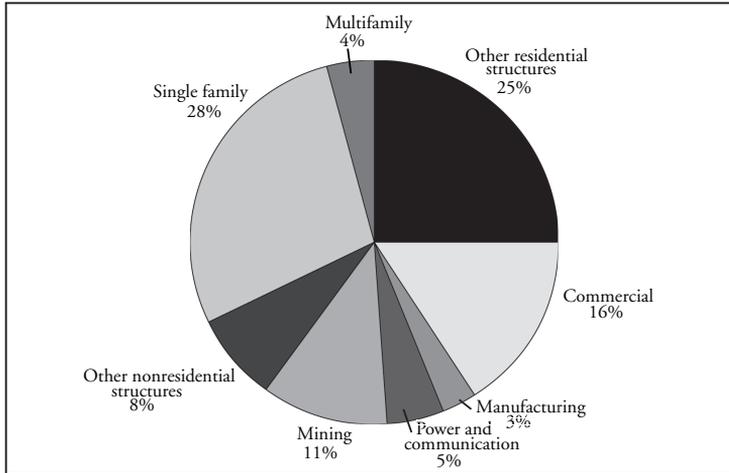
Although commercial real estate has always been cyclical in nature, the 1980s and early 1990s stand out as a major episode of overbuilding. For example, booming construction during the early 1980s eventually caused large increases in office vacancy rates in the late 1980s and early 1990s. The resulting losses on real estate loans in turn caused a surge in failures by banks and savings institutions. After a brief overview of the commercial construction sector, this section describes the causes and extent of the 1980s building boom and discusses the real and financial consequences of the subsequent real estate bust for broader economic activity.

Commercial construction

The commercial construction sector includes a wide range of property types. In this article, this sector is defined as office buildings, retail structures, warehouses, and privately owned healthcare facilities. By this definition, investment in commercial structures accounted for about 16 percent of all private investment in structures in 2007 (Chart 1). Construction of multifamily housing (apartments and some townhouses) will also be examined in comparing the 1980s and early 1990s with the present because the financing of multifamily structures is similar to

Chart 1

COMPONENTS OF PRIVATE CONSTRUCTION, 2007



Source: U.S. Department of Commerce.

commercial real estate financing. Investment in multifamily residential structures was about 4 percent of private structures investment in 2007. Because of their similarities, this article will sometimes examine the combined behavior of the commercial and multifamily categories.¹

Commercial real estate has historically been subject to booms and busts. Booms and busts in commercial and multifamily building may partly reflect aggregate fluctuations in output, employment, and financial market conditions. But some factors that encourage overbuilding also may be more specific to the real estate sector. For example, because it may take several years from the start to the finish of a commercial development project, economic conditions may be quite different when a project is completed than when it was first undertaken (Browne and Case). The long time lags and large sums the developers spend to plan a project may create a bias to go forward with a project even if there is evidence that market conditions are weakening. Moreover, real estate lenders may sometimes be guilty of assessing the creditworthiness of a proposed development on the basis of current or recent past performance of the commercial real estate sector rather than a realistic projection of future prospects. Large fluctuations in commercial construction are, therefore, not surprising from a historical perspective.

Overbuilding in the 1980s

The overbuilding of commercial and multifamily real estate in the 1980s is notable even for this highly cyclical industry. Commercial construction activity increased substantially in the first half of the 1980s, more than doubling from 1979 to 1985 (Table 1). Although some of this growth can be attributed to an increase in the overall price level and growth of the real economy, commercial construction climbed sharply as a share of GDP from 1979 to 1985. Supporting the strong construction in the early 1980s, office vacancy rates were low, although vacancy rates rose substantially by the second half of the 1980s. Multifamily construction also boomed in the first half of the 1980s, with building permits rising nearly 50 percent from 1979 to 1985.

Commercial construction boomed in the 1980s due to many factors. For example, the demand for office space expanded due to economic, structural, and demographic changes. At the same time, federal tax laws gave commercial real estate developers greater profits, while lending institutions, including savings and loans, were making large fees for financing the projects.

Economic and demographic factors increased the demand for commercial space and multifamily housing in the late 1970s and early 1980s. For example, employment grew strongly in this period as the baby-boom generation continued to enter the work force and the labor force participation rate of women rose. The mix of jobs shifted more toward service production and away from goods production. As a result, growth in the number of people working in offices exceeded 4 percent annually in the late 1970s and remained rapid through most of the 1980s (FDIC). Strong growth in the demand for office space was thus a key factor behind the commercial construction boom. But by the late 1980s, with office vacancy rates rising, growth in the supply of office space surpassed growth in demand.

Although all major geographic areas of the country participated to some degree in the construction boom, regional differences in the size and timing of the boom were notable. Economic conditions in the late 1970s were particularly strong in energy-producing regions, such as Texas and Oklahoma. A boom in energy-related construction in the early 1980s eventually led to sharp increases in office vacancy rates in such energy centers as Houston and Oklahoma City, a little ahead of

Table 1

COMMERCIAL CONSTRUCTION IN THE 1980s AND EARLY 1990s

Year	Commercial Construction Spending (current dollars)	Commercial Construction as Share of GDP (percent of nominal GDP)	Office Vacancy Rate (percent)	Multifamily Housing Permits (thousands)
1979	33.5	1.3	5.2	444.8
1980	41.0	1.5	3.4	365.7
1981	48.3	1.5	3.8	319.4
1982	55.8	1.7	5.5	365.8
1983	55.8	1.6	10.8	570.1
1984	70.6	1.8	13.1	616.8
1985	84.1	2.0	15.4	656.6
1986	80.9	1.8	16.5	583.5
1987	80.8	1.7	16.3	421.1
1988	86.3	1.7	16.3	386.1
1989	88.3	1.6	16.1	339.8
1990	87.5	1.5	16.7	262.6
1991	68.9	1.1	17.4	152.1
1992	64.5	1.0	18.8	138.4

Sources: U.S. Bureau of Economic Analysis; Coldwell Banker vacancy rates from Hester (p. 127); U.S. Census Bureau.

the rest of the country. The construction boom came somewhat later in New England and other Northeastern states, driven partly by the expansion of the computer industry in the Boston area and strong financial sector and defense-related hiring throughout the Northeast. California also experienced a major construction boom through much of the 1980s, reflecting rapid population growth, a surge of defense-related manufacturing during the first half of the 1980s, and expanding international trade with Pacific Rim nations.

Besides strong economic growth, major changes in federal tax laws contributed to the commercial construction boom in the first half of the 1980s. The Economic Recovery Tax Act of 1981 (ERTA) lowered personal income and capital gains tax rates. Another provision of ERTA was an accelerated cost recovery system that greatly shortened the period over which commercial real estate could be depreciated. Faster

depreciation produced higher after-tax returns on commercial real estate projects, encouraging real estate development through tax-oriented limited partnerships.

Fiscal policymakers eventually concluded that ERTA provided too much of an incentive to invest in real estate development projects. The Tax Reform Act of 1986 (TRA) curtailed tax-oriented real estate partnerships by making it impossible for taxpayers to offset ordinary income with tax losses generated by “passive” investments, such as commercial real estate. In addition, TRA eliminated the accelerated cost recovery system, thus lengthening the period over which commercial structures were depreciated and reducing their after-tax returns. As a result, investors became less willing to purchase existing commercial properties in the late 1980s and early 1990s, contributing to the softening in real estate prices (FDIC).

Several factors besides tax-oriented limited partnerships also increased the flow of capital into commercial real estate in the 1980s. Real estate lending by commercial banks grew strongly during this period because it was expected to be profitable. Of particular importance was that such lending generated large up-front fees. In addition, many banks expanded their real estate lending because they were experiencing greater competition in some of their traditional business lines. For example, large corporate borrowers were increasingly turning from bank loans to commercial paper for financing. And liberalization of the rules governing lending and deposit taking by savings and loan institutions also increased the competition facing commercial banks.

Savings institutions, such as savings and loans and mutual savings banks, also played an important role in the real estate boom and bust of the 1980s and early 1990s. Savings institutions were weakened when deposit deregulation caused a large increase in their cost of funds at a time when revenues were derived primarily from holdings of low-yielding fixed-rate mortgages. In an attempt to stem the mounting losses, savings institutions were allowed to expand into other activities, such as commercial real estate lending. Some savings and loans used brokered deposits and other funds to rapidly increase their holdings of residential and commercial mortgages.²

Economic and financial consequences

Commercial and multifamily construction slowed sharply in the late 1980s and early 1990s in response to high office vacancy rates in the last half of the 1980s and tax law changes that reduced the after-tax return to real estate projects. Commercial construction as a share of GDP began to erode in the second half of the 1980s and, by 1992, was well below its share of GDP in the early 1980s (Table 1). But the reduction in construction was too late to stem the rising vacancies. By 1992, the national vacancy rate had climbed to nearly 19 percent. Multifamily construction also weakened sharply, with building permits plunging between 1985 and 1992. With such an excess of commercial and multifamily space, rents and property prices deteriorated, and many real estate developers and lenders experienced large losses.

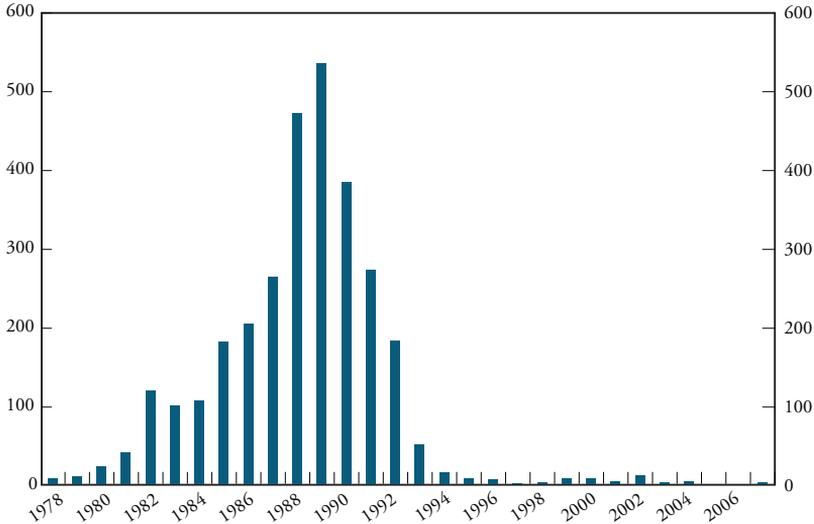
The decline in commercial real estate construction helped cause the recession in the early 1990s. Economic activity peaked in July 1990 according to the National Bureau for Economic Research, and the economy contracted through March 1991. Although this contraction was shorter than average, real GDP and employment recovered more sluggishly than in a typical postwar business cycle (Schreft and Singh). Federal Reserve Chairman Greenspan attributed the sluggishness of the recovery to financial “headwinds” generated by the “constriction of credit in response to major losses at banks, associated with real-estate and foreign lending, coupled with a crisis in the savings and loan industry.”

Commercial and multifamily overbuilding in the 1980s and the resulting losses by real estate lenders contributed to a sharp increase in failures of financial institutions. These conditions in turn likely reduced the availability of credit to small and medium-sized businesses that were otherwise uninvolved in the real estate problems. Failures at savings institutions and commercial banks increased (Chart 2). Total closings and assistance transactions surged from 10 institutions in 1979 to 534 in 1989. Failures of savings institutions and commercial banks tapered off in the early 1990s and remained extremely low through 2007.

Although other credit problems contributed to the elevated failure rate, bank failures were closely associated with high concentrations of real estate lending.³ Compared with surviving banks, banks that failed in the 1980s had higher ratios of commercial real estate loans to total assets, commercial real estate loans to total real estate loans, noncurrent

Chart 2

TOTAL CLOSINGS AND ASSISTANCE TRANSACTIONS (COMMERCIAL BANKS AND SAVINGS INSTITUTIONS)



Source: FDIC

commercial real estate loans to total commercial real estate loans, and real estate charge-offs to total charge-offs (FDIC).

Some economists have argued that large real estate losses at commercial banks—particularly in New England and other Northeastern states—created a “credit crunch” in the early 1990s. Banks experiencing large losses on commercial real estate loans may have had to restore their capital-to-asset ratios quickly, perhaps in part because bank regulators increased their scrutiny (Peek and Rosengren 1992). Due to reduced earnings and an unfavorable financial environment, it may have been difficult for such institutions to raise new capital quickly, causing them instead to call existing loans or to refuse to extend new credit so as to shrink their assets to a level consistent with their capital base. Such asset shrinkage may have severely harmed small and medium-sized businesses that were more dependent on bank financing. Such businesses may have been too small to access capital markets directly or borrow from financial institutions outside their region.

Economists have disagreed on the extent to which the credit crunch caused, or increased the severity of, the 1990-91 recession. Some researchers conclude there probably was a bank credit crunch, but it is doubtful that a credit crunch played a major role in worsening the 1990s recession (Bernanke and Lown). Other researchers argue that shortfalls in bank capital reduced the availability of bank credit to small and medium-sized businesses, thereby slowing overall economic growth (Hancock and Wilcox; Peek and Rosengren 1995).

II. HAVE RECENT COMMERCIAL REAL ESTATE FUNDAMENTALS BEEN SIMILAR OR DIFFERENT?

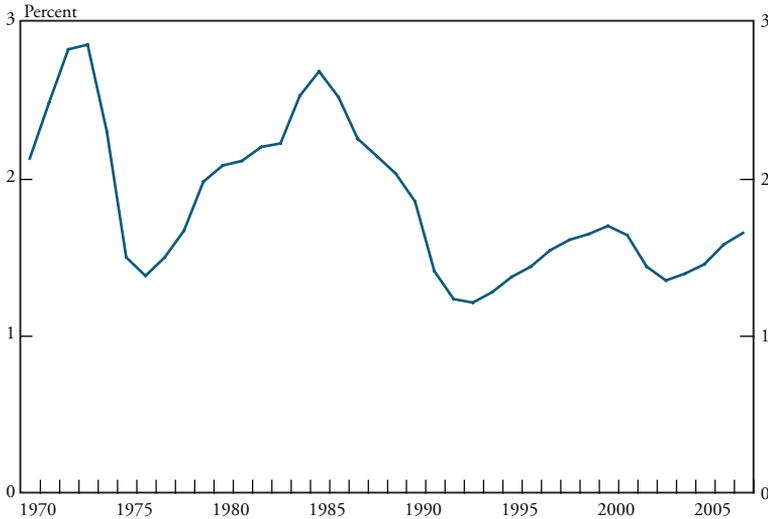
Whether or not a credit crunch in the early 1990s had a major effect on the business cycle, the construction boom created a huge oversupply of commercial space in the late 1980s and early 1990s. It is difficult to predict whether this situation will be repeated currently because the future supply of and demand for commercial space are uncertain. However, important differences between the two episodes suggest that the commercial and multifamily markets may not face excess supplies as large as in the early 1990s.

Growth in supply and demand for space

A quick look at growth in the supply of and demand for commercial space suggests that, to the extent that there is any current overbuilding, it is not as great as in the 1980s. On the supply side, commercial and multifamily construction has not boomed to the same degree as in the 1980s. Looking at commercial and multifamily construction as a share of GDP helps control for overall growth of the economy and the price level over time (Chart 3). Although commercial and multifamily construction strengthened in the last couple of years, their combined output share in 2007 was substantially below their peak in the 1980s. In 1985, commercial and multifamily construction accounted for about 3 percent of nominal GDP. This combined share dropped to 1 percent in 1992 and then gradually drifted up over the rest of the 1990s, only to weaken in the 2001 recession. Commercial and multifamily construction increased to about 1.5 percent of nominal GDP in 2007, still more than a percentage point below their combined share in 1985.

Chart 3

COMMERCIAL AND MULTIFAMILY CONSTRUCTION AS SHARE OF NOMINAL GDP



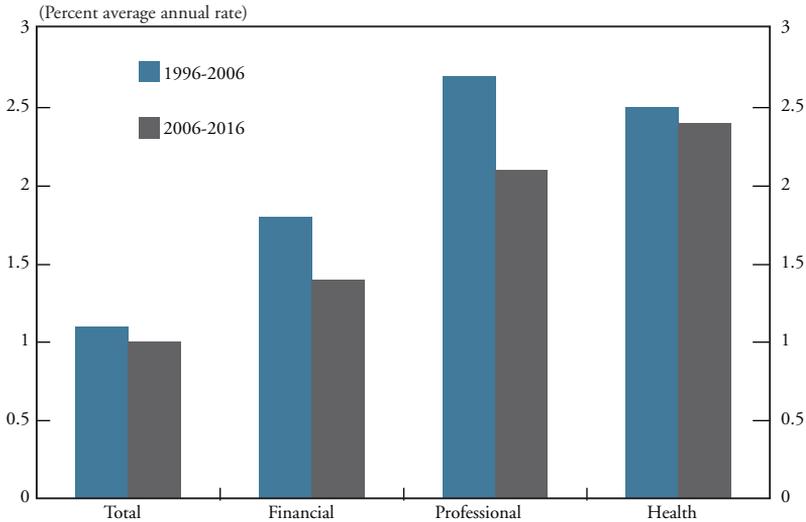
Source: U.S. Department of Commerce.

Although the smaller share of commercial construction reduces concerns about the potential for overbuilding, growth in the demand for commercial and multifamily space also may be weaker than in the 1980s. For example, employment growth in the main tenants of commercial office space—financial activities and professional and business services—slowed to about 1.5 percent annually in 2000-07, after growing at over a 3 percent average annual rate in the 1980s and 1990s. Growth of office employment is unlikely to recover to the strong pace in the 1980s and 1990s but should remain stronger than overall employment growth over the next decade (Chart 4). Office employment is unlikely to grow as fast as in the 1980s and 1990s because demographic factors, such as population aging, will reduce overall growth of the labor force (Clark and Nakata).

Even if office employment growth is likely to slow from its previous pace, it is still likely to remain above total employment growth over the next decade (Figuroa and Woods). Financial activities employment

Chart 4

PROJECTED EMPLOYMENT GROWTH IN SELECTED INDUSTRIES



Source: Figueroa and Woods.

is projected to increase 1.5 percent annually from 2006 to 2016, and professional and business services employment is projected to rise 2 percent annually—both above the expected growth rate of 1 percent annually in total employment. Partly due to population aging, health-care employment is projected to grow more than 2 percent annually, which also should raise the demand for nonresidential space.

Demand for multifamily housing could also be solid enough to prevent a serious excess supply of apartments. Apartment demand depends on growth in the number of households and the decisions of households about whether to own or rent a housing unit. The number of households is expected grow somewhat more slowly from 2006 to 2016. But a prolonged reduction in the availability of mortgage financing—especially to households with poor credit histories—and the rise in home foreclosures may cause a movement from homeownership toward rental housing. After a sharp increase in homeownership from 1995 to 2005, homeownership has recently been declining, and some

forecasters project that more than 2 million Americans will switch from owning to renting by 2010 (Nechayev).

How have vacancy rates and prices behaved?

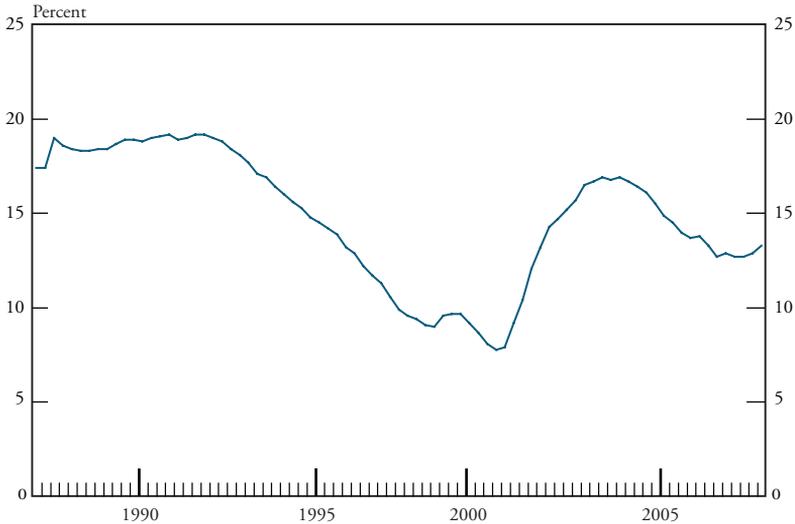
Because of the moderate construction share and the solid trends in demand, commercial and multifamily real estate markets are not currently overbuilt to the same degree as in the 1980s and early 1990s. However, demand projections covering the next year or two are especially uncertain in light of the employment declines and continued financial market turmoil in the first half of 2008. Vacancy rates and changes in property prices offer some additional information on the balance between commercial real estate supply and demand. To this point, national vacancy rates and commercial property prices are behaving differently than in the late 1980s to early 1990s.

National office vacancy rates are lower than in the years before the 1990-91 recession. Office vacancy rates rose during and immediately after the 2001 recession but have drifted downward since 2003 (Chart 5). The national office vacancy rate has risen slightly but was about 13 percent in the first quarter of 2008, compared with 18 percent in 1989. According to one analysis, to push vacancy rates back to their 1990 levels would require a “catastrophic scenario” in which “massive layoffs” lead to unprecedented drops in demand (Chen and Southard). Vacancy rates for warehouses and other light industrial structures are about the same as in 1989, but this sector was not overbuilt in the 1980s to the same degree as office buildings, and industrial vacancy rates rose fairly moderately in the 1990-91 recession.⁴

The prices of commercial property appear to be weakening after a period of sharp appreciation in the last few years. The transactions-based commercial property price index from the MIT Center for Real Estate shows sales prices for a mix of institutional-grade office, apartment, retail, and industrial properties (Chart 6).⁵ In the late 1980s and early 1990s, commercial property prices often declined, and the declines were particularly severe during and immediately after the 1990-91 recession. The recent pattern of price change is quite different, with extremely rapid appreciation from 2005 through the first half of 2007 but a rapid deceleration of prices in the second half of 2007. This index declined in the third and fourth quarters of 2007, but rose slightly in the first quarter of 2008.⁶

Chart 5

NATIONAL OFFICE VACANCY RATE



Source: CB Richard Ellis.

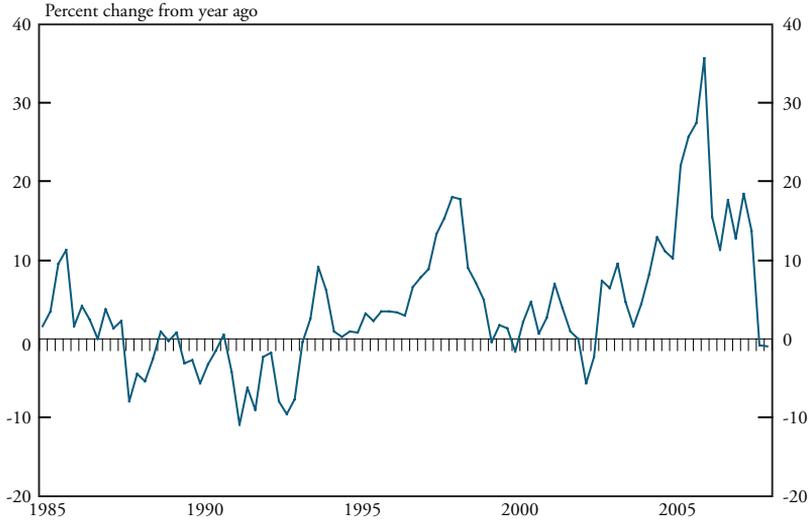
Although the sharp deceleration of commercial real estate prices last year likely reflected reduced expectations of the demand for space, credit market conditions may have independently influenced the volume and price of real estate transactions. After ample availability of credit for commercial real estate transactions from 2005 through the first half of 2007, financial market turmoil reduced credit to commercial and multifamily real estate developers in the second half of 2007 and the first half of 2008.

III. HAS RECENT COMMERCIAL REAL ESTATE FINANCING BEEN SIMILAR OR DIFFERENT?

This section identifies some similarities and differences in the financing of commercial real estate between the late 1980s to early 1990s and the present. First, the section documents an important difference: the substantial growth in securitization of commercial and multifamily mortgages since 1990. Second, it examines whether the amount of commercial and multifamily mortgages has changed relative to GDP and whether the holders of these mortgages are similar or different. Third, it considers whether commercial banks have similar exposures to commercial real estate risks as in the late 1980s to early 1990s.

Chart 6

TRANSACTIONS-BASED COMMERCIAL PROPERTY PRICES



Source: MIT Center for Real Estate

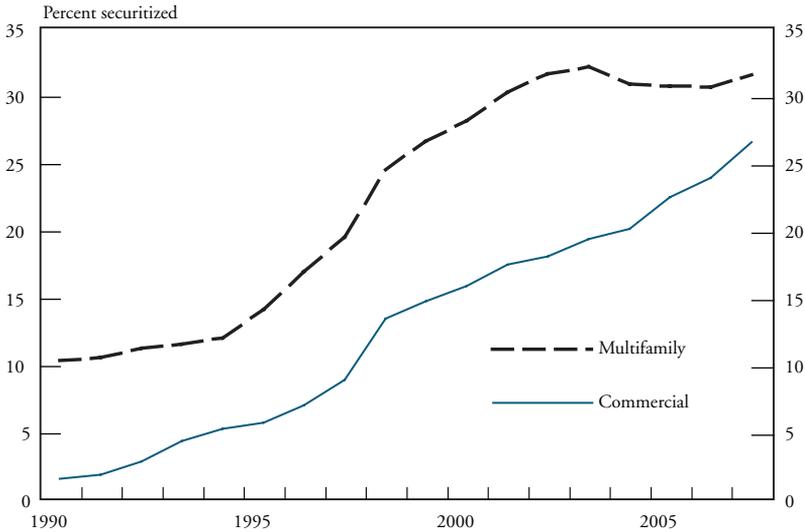
Securitization growth

A major difference between the earlier real estate cycle and the present is the degree of real estate securitization. Securitization is the process by which individual loans, such as the mortgages on particular commercial properties, are pooled and repackaged into securities that can be sold in public capital markets. Interest and principal payments on the underlying loans are passed through to the holders of the publicly traded securities. Often these payments are prioritized so that different classes of investors are paid off before others. Securitization broadens the sources of capital available to the commercial real estate industry and provides investors with a convenient way to invest in a diversified pool of commercial and multifamily properties.

Securitization of commercial and multifamily real estate has increased substantially since 1990. Less than 2 percent of commercial mortgages were securitized in 1990, but that percentage grew steadily to over 26 percent at the end of 2007 (Chart 7). Securitization of

Chart 7

MORTGAGE SECURITIZATION LEVELS



Source: Flow of Funds Data as reported in CMSA *Compendium of Statistics*.

multifamily mortgages grew from 11 percent in 1990 to more than 31 percent at the end of 2007.

The pullback by more traditional commercial and multifamily real estate lenders in the late 1980s and early 1990s stimulated the growth of real estate securitization (box). Although real estate investment trusts already existed, their number and assets grew substantially in the 1990s. Commercial mortgage-backed securities (CMBSs) also expanded in importance, and more complex financial instruments, such as commercial real estate collateralized debt obligations (CRE CDOs), emerged in the 2000s.

Efforts to resolve the financial failures of the late 1980s and early 1990s also helped the growth of the CMBS market. Congress created the Resolution Trust Corporation (RTC) in 1989 to oversee the disposal of assets from failed savings and loan institutions.⁷ The RTC pooled many commercial real estate loans from failed financial institutions into CMBS, issuing about \$15 billion of such securities between 1991 and 1993 (UBS Investment Research).

COMMERCIAL REAL ESTATE SECURITIES

Real estate investment trusts (REITs) were created in 1960 by Congress as an investment vehicle for holding real properties, mortgage-related assets or both. Corporate-level taxes are waived if REITs are widely held and distribute 90 percent of their taxable income as dividends to shareholders. REITs can be classified in three broad types: equity, mortgage, or hybrid. The percentages of equity and mortgage REITs have shifted over time, but equity REITs continue to dominate.

REITs have three main benefits (Krainer). First, they are exchange traded and thus provide investors with greater liquidity. Also REIT returns are not highly correlated with stock market returns and thus give potential for investors to diversify. Second, REITs allow capital markets to send valuable signals to management about whether they approve of the REITs projects. Third, improved integration between real estate markets and capital markets reduces the importance of bank finance and may partially insulate end users of capital from bank shocks. At the same time, capital market integration opens real estate markets to a wider range of financial shocks.

Commercial mortgage-backed securities (CMBSs) are backed by a static pool of commercial mortgages, most of which are investment-grade "A-notes." A-notes have a senior claim on the income generated by the property. The CMBS is structured into a number of rated tranches, and principal and interest payments on the underlying commercial real estate loans are used to pay the principal and interest on the different tranches by order of seniority. Any losses on the underlying loan pool are absorbed in order by the most junior tranches. Although the tranches can be structured in various ways, typically the security has been designed so that a large part of the debt structure gets a high credit rating.

Different types of investors tend to be drawn to different CMBS tranches. The investment-grade tranches are often purchased by financial institutions, insurance companies, and pension funds. The riskier tranches are often purchased by specialists in real estate, hedge funds, or CRE CDOs, who should have the expertise to accurately assess these higher risks.

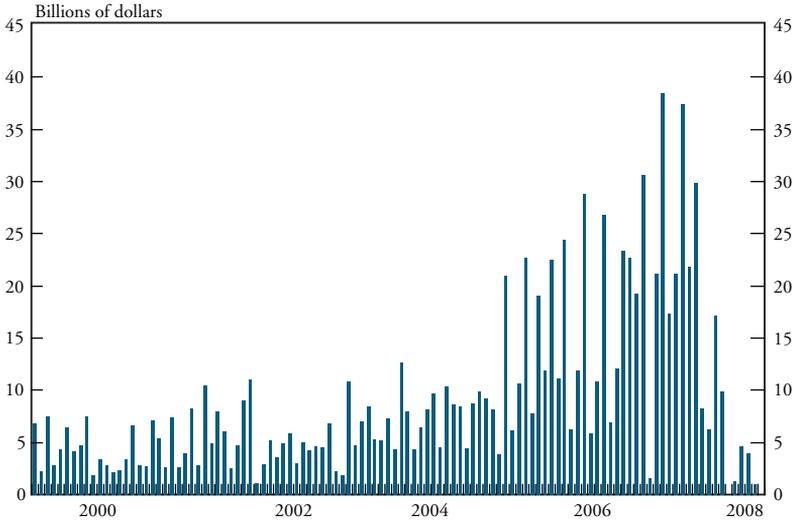
Commercial real estate collateralized debt obligations (CRE CDOs) emerged in the late 1990s and are still often viewed as a niche product in the larger CDO market. A CDO issues debt and equity and uses the proceeds

to invest in a portfolio of financial assets. For a CRE CDO, these assets can include a wide range of commercial real estate securities, such as commercial real estate loans, commercial mortgages, unsecured REIT debt, CMBSs, and even other CDOs. Like a CMBS, there is typically a tranching liability structure with subordination and additional credit protections. CMBS have historically dominated CRE CDO portfolios, but allocations to other types of commercial real estate securities have grown rapidly. The CRE CDO market mushroomed from \$21 billion in 2005 to \$36 billion in 2006, driven by both issuer and investor demand (Lucas, Goodman, Fabozzi and Manning). Issuance of CRE CDOs slowed sharply in the second half of 2007, and these securities were not issued in the last two months of 2007 or early 2008.

More recently, monthly issuance of CMBS in the United States picked up substantially from 2005 through the first half of 2007. However, the financial turmoil in the second half of 2007 and the first half of 2008 has greatly reduced CMBS issuance (Chart 8). In the first quarter of 2008, CMBS issuance nearly came to a standstill, with only \$6 billion of securities issued, compared to \$61 billion in the first quarter of 2007, and CMBS issuance remained at this reduced pace in the second quarter of 2008.

Although some observers have argued that greater securitization could moderate commercial real estate cycles, recent events seem to confirm that securitization can also be a source of new disturbances. Securitization can stabilize real estate markets by evening out the flow of capital to the commercial real estate sector, providing more effective market discipline of developers and spreading commercial property risk to a broader array of investors. But securitization also can subject the commercial real estate market to financial shocks that had relatively little effect on commercial property in the past. For example, such market disruptions as the Russian bond default and the implosion of Long Term Capital Management in 1998 increased CMBS spreads sharply and caused liquidity to dry up almost overnight (Zhu). The market response to these earlier shocks foreshadowed the near shut-down of the CMBS market during the financial turmoil of 2007-08.

Chart 8
 UNITED STATES CMBS INSURANCE

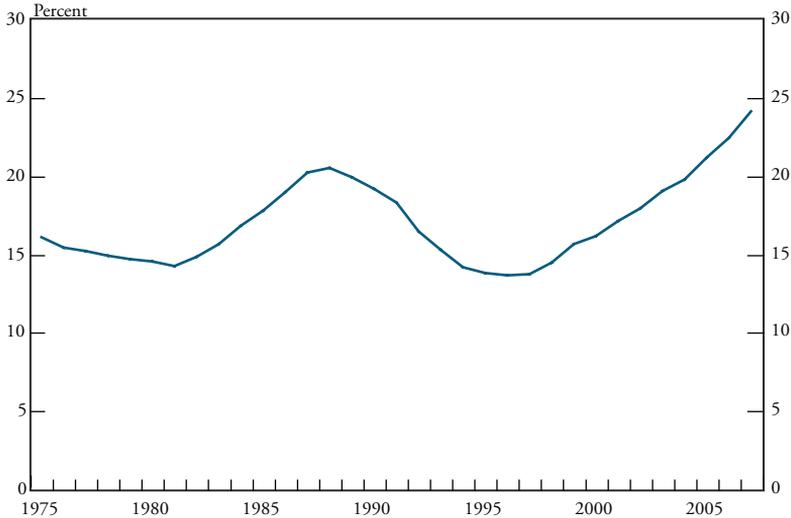


Source: Commercial Mortgage Alert, www.CMAlert.com

Commercial and multifamily mortgage trends

Clearly, greater securitization is an important difference between the current real estate situation and the early 1990s. But how different is the total value of commercial and multifamily mortgages relative to the overall size of the economy, and have holdings of these mortgages by different investor groups changed significantly? A worrisome trend is that commercial and multifamily developers currently are relying more on debt to finance their projects than in the late 1980s. Commercial and multifamily mortgages were 24 percent of nominal output in 2007, up nearly 4 percentage points from 1988 (Chart 9). However, relative to the overall size of the economy, commercial and multifamily mortgages have climbed much less steeply than residential mortgages over this period.

Some important changes have occurred since 1990 with respect to which investors hold commercial and multifamily mortgages. Commercial banks held 42 percent of commercial and multifamily mortgages in 2007, up from 36 percent in 1990 (Chart 10). The most dramatic change was, however, in the share of CMBS issuers, which rose from

*Chart 9***COMMERCIAL AND MULTIFAMILY MORTGAGES
RELATIVE TO NOMINAL GDP**

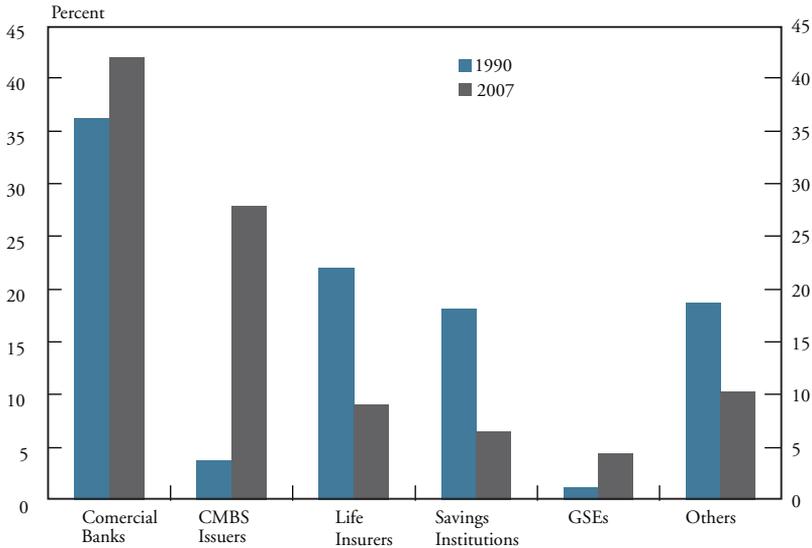
Source: Flow of Funds Data, Board of Governors of the Federal Reserve System; U.S. Department of Commerce

4 percent in 1990 to 28 percent in 2007. This growth in holdings by CMBS issuers is consistent with the large increase in real estate securitization noted earlier. Life insurance companies, savings institutions, and other investors correspondingly decreased their shares of multifamily and commercial mortgage holdings, while the government-sponsored enterprises slightly raised their share. The decreased shares of life insurance companies, savings institutions, and other investors, however, may have been offset to some degree by increased holdings of CMBS or CRE CDOs.

Although commercial and multifamily mortgages have not changed greatly relative to GDP between 1990 and 2007, these trends suggest that some concern is warranted on the part of lenders and policymakers. A comparison of commercial and multifamily mortgage holdings cannot establish the underlying risks because it cannot control for economic and financial conditions or differences in lending standards. But the relatively high levels of commercial and multifamily real estate debt suggest that financial risks are elevated, and the larger share of mortgages held by CMBS issuers suggests the commercial real estate market

Chart 10

HOLDERS OF MULTIFAMILY AND COMMERCIAL MORTGAGE LOANS



Source: Flow of Funds Data as reported in CMSA Compendium of Statistics

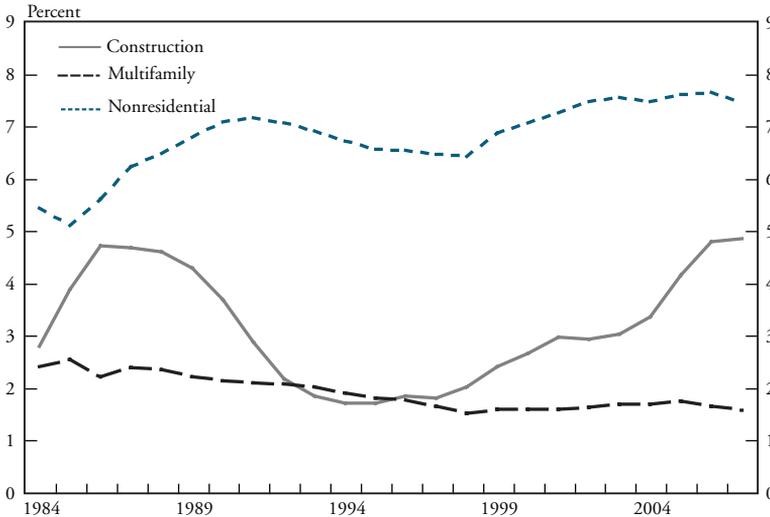
may be more affected than in the past by financial market disturbances originating in other capital markets.

How exposed are banks?

As the preceding discussion suggests, the exposure of commercial banks and savings institutions to commercial and multifamily real estate loans is somewhat higher than in the 1980s. Examining the trends in nonresidential real estate loans, multifamily residential loans, and construction and land development loans as percentages of the total assets of commercial banks and savings institutions helps shed additional light on banks' exposure.⁸ Nonresidential real estate loans were a little over 7 percent of total assets in 2007, slightly above their share in 1990 (Chart 11). Multifamily residential loans have decreased gradually as a share of total assets since 1985 and were less than 2 percent of commercial bank and savings institution assets in 2007. In contrast, construction and land development loans increased sharply since the mid-1990s, approaching 5 percent of assets in 2007, about the same as their peak

Chart 11

REAL ESTATE LOANS AS SHARE OF COMMERCIAL BANK AND SAVINGS INSTITUTION ASSETS



Source: Federal Deposit Insurance Corporation

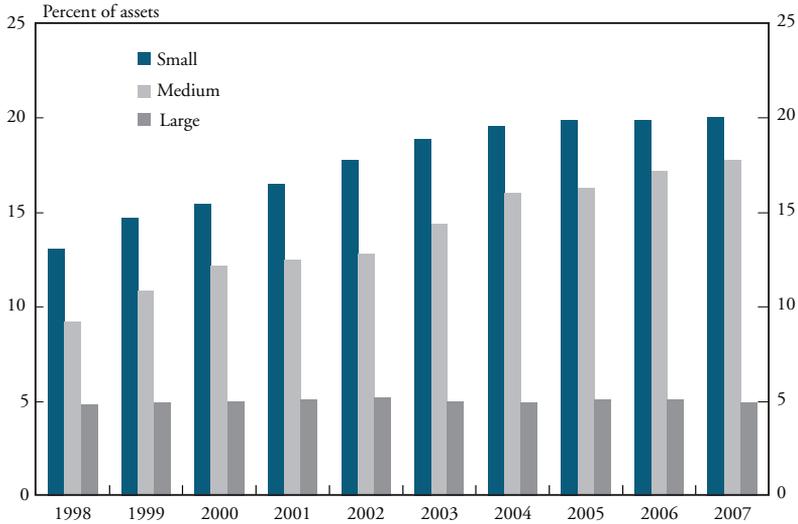
share in the second half of the 1980s. However, because this category includes both residential and nonresidential construction loans, much of this exposure likely reflects the past boom in single-family home construction rather than commercial real estate development.

In December 2006, federal banking regulators issued new guidance on risk management in response to increases in commercial real estate loan concentrations. The trend toward increased commercial real estate concentration was centered in small to mid-sized banks with limited access to the CMBS market (Nichols). Most banks with high concentrations of commercial real estate loans managed their exposures prudently, although some of this success may have been due to the relatively benign economic conditions through 2006 (Lopez).

Regulators have continued more recently to express concerns about commercial real estate loan concentrations at commercial banks. Comptroller Dugan noted that the ratio of commercial real estate loans to capital has nearly doubled in the past six years. In addition, over a third of the nation's community banks have commercial real estate concentrations exceeding 300 percent of their capital, and nearly 30

Chart 12

NONFARM NONRESIDENTIAL REAL ESTATE LOANS BY BANK SIZE



Source: Federal Deposit Insurance Corporation

percent have construction and development loans exceeding 100 percent of their capital.

Even excluding construction and development loans, concentrations of nonfarm nonresidential real estate loans are highest among small and medium-sized banks (Chart 12). Nonresidential real estate loans were 20 percent of assets at the end of 2007 for small banks (assets of \$100 million to \$1 billion) and about 18 percent of assets at medium-sized banks (assets of \$1 billion to \$10 billion). Concentrations of nonfarm nonresidential real estate loans increased fairly steadily for both groups of banks since 1998. In contrast, nonresidential real estate concentration held fairly steady around 5 percent of assets for large banks (assets greater than \$10 billion).

Although the current high exposure to commercial real estate loans is similar to that in the late 1980s and early 1990s, real estate lenders may have maintained higher lending standards than earlier. However, prior to the recent substantial tightening of lending standards, commercial real estate lending standards likely slipped to some degree. For example, the Board of Governors' Senior Loan Officer Opinion Survey

for January 2007 found that in the prior year, 55 percent of responding domestic banks had trimmed the spreads of their commercial real estate loans rates over their cost of funds. Moreover, institutions that had eased terms on their commercial real estate loans cited “more-aggressive competition from other banks or nonbank lenders as the most important reason for having done so.” An important source of competition for banks may have been rapid growth in commercial mortgage securitization. Various reports suggest that strong CMBS issuance from 2005 through the first half of 2007 may have been accompanied by easier lending terms, similar to developments in residential mortgage lending around the same time.⁹

IV. CONCLUSION

Policymakers and analysts can gain some perspective on potential commercial real estate problems by examining the similarities and differences between the current situation and the real estate boom and bust of the 1980s and early 1990s. An important difference is that commercial real estate on its own is less worrisome today than in the late 1980s and early 1990s because commercial and multifamily construction is a smaller share of economic activity and office vacancy rates are lower. But the economy is still vulnerable to any weakening in this sector in the sense that it would add to a list of problems that already includes the sharp drop in residential construction and home prices, financial market disruptions, and high energy prices.

On the financial side, both the differences and the similarities are more worrisome. Although the recent growth of commercial real estate securitization is an important difference that may have beneficial long-run effects by broadening the possible sources of capital and improving market discipline, increased securitization also exposes commercial and multifamily markets to shocks in other capital markets, such as the recent problems in residential mortgage markets. In addition, an important similarity is the large exposure of banks to commercial real estate lending. In the early 1990s, commercial real estate losses impaired bank capital and reduced the availability of credit to small and middle-sized businesses. An important lesson from that period is that in times of financial turmoil, it is important to restore more normal functioning to capital markets and to deal promptly with problem financial institutions.

ENDNOTES

¹Commercial real estate does not include factories, power and telecommunications structures, and other heavy industrial structures, which tend to be owned by corporations and financed differently than commercial structures. Such heavy industrial structures are included along with commercial construction in the non-residential structures category of the national income and product accounts. Religious and educational structures, lodging, and amusement and recreation facilities are classified as other residential structures rather than commercial construction in the national income accounts. Multifamily residential construction is part of residential investment in the national income and product accounts, along with construction of new single-family housing and other residential structures investment. Other residential structures investment consists primarily of manufactured homes, home improvements, dormitories, and brokers' commissions on the sale of residential structures.

²Brokered deposits were placed by money brokers, such as securities firms, for their customers at the highest available rate. Large sums were often broken into deposits of \$100,000 or less, which were fully covered by federal deposit insurance. As a result, the depositors had an incentive to shop for the highest rate with little regard to the credit risks being taken by the depository institution.

³Another credit problem that contributed to high bank failures was energy lending. High oil prices in the late 1970s caused a sharp expansion of domestic energy exploration and drilling, leading to riskier investment and bidding up prices of oil and gas leases. A drop in energy prices then led to a substantial contraction in such activity and large losses for energy-related lenders.

⁴The Torto Wheaton industrial vacancy rate was 9.4 percent in 2007, slightly above its value of 8.9 percent in 1989. This vacancy rate rose to 10.9 percent in 1991. The industrial vacancy rate rose more sharply during the last recession, increasing from 6.8 percent in 2000 to 11.8 percent in 2003. Because the Torto Wheaton multifamily vacancy rate is only available back to 1994, it is not possible to compare the current value of this vacancy rate with its values in the 1980s and early 1990s. However, the multifamily vacancy rate of 4.7 percent in 2007 was slightly below the average of 5.1 percent for 1994-2007. Similarly, the retail vacancy rate was 9.2 percent in 2007, near its average of 9.0 percent for 1991-2007.

⁵This index is produced on a quarterly basis from transactions of commercial properties in the National Council of Real Estate Investment Fiduciaries database. An advantage of the index is that it is based on actual sales prices rather than the appraisal-based values sometimes used in commercial real estate indexes. The index is not, however, a repeat-sales index. The MIT index uses hedonic methods to control for changes in the mix of properties sold, and for that reason, the index may be preferable to average or median sales prices, which may fluctuate

because of changes over time in the mix of properties. Rappaport provides further discussion of repeat-sales and hedonic methods in the context of aggregate house prices.

⁶The transactions-based price index for all properties was down 1.3 percent from the first quarter of 2007 to the first quarter of 2008. Other data confirm the recent softening in commercial real estate prices, although typically such price data do not have a long enough history to allow a comparison with the late 1980s and early 1990s. For example, the Moody's/REAL commercial property price index was down 2.8 percent over the year ending in April 2008.

⁷The RTC closed its operations in December 1995. By that time, it had managed some 747 closures of savings and loan institutions with total assets of \$394 billion (Curry and Shibut)

⁸Construction and land development loans are often viewed as being particularly risky because such projects do not generate revenue until construction is completed and the property is sold or rented. Such loans tend to be short-term and require refinancing when the project is completed, which may be difficult in periods of reduced overall credit availability.

⁹For example, a report by a major real estate securities rating firm, Fitch Ratings (Johnson and MacNeill) stated, "Fitch expects CMBS loan defaults to rise, as deals issued in 2005, 2006, and 2007 contain higher concentrations of interest-only loans, loans with high loan-to-value ratios, and an increasing amount of the pool having or allowing for additional subordinate debt. These loans will be especially sensitive to any future market downturn."

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