Commercial real estate (CRE) has grown rapidly as a share of total U.S. economic activity and is the largest lending category for banks. The growth of CRE loans has been particularly dramatic for small and medium-sized banks. CRE is also the riskiest part of bank portfolios, accounting for a disproportionate share of loan charge-offs and bank failures. In the years leading up to the financial crisis, CRE lending had climbed steadily, and in the ensuing recession CRE defaults contributed to a greater than normal number of bank resolutions and closures. As we will explore, although an array of entities besides banks originate and hold CRE loans, banks remain especially exposed to their risks and rewards. In this first in a series of occasional articles on CRE lending, we provide an initial lay of the land: Who are the players in the market? What are the various types of CRE loans? Why is CRE lending increasingly attractive? What makes it risky? And why is it again on the upswing?

WHAT DISTINGUISHES A CRE LOAN?

A CRE loan is used to build or purchase any income-producing property. Although “commercial” real estate implies private property, the same types of CRE loans are used for privately owned, government, and nonprofit projects. Thus, it can be said that CRE loans finance anything from shopping centers to skyscrapers, assisted living facilities to five-star resorts, even the local pizza parlor. CRE loans are also used to finance the construction of single-family home developments, though not the purchase of individual homes. A developer of a residential tract gets a type of CRE loan — a construction loan — to build the houses, but then the individual homebuyers get residential mortgages to purchase each finished dwelling.

The overriding importance of location is a key factor that distinguishes CRE lending from other types of bank lending. The importance of location means that much of the competition is local, in both the supply of and the demand for CRE loans. While there are also a number of national developers and lenders, there are plenty of niche opportunities for developers and lenders to exploit their knowledge of local market conditions and their local connections. An example of this local niche industry is a developer in Philadelphia, AMC Delancey, which specializes in walk-up apartment buildings, many of which have retail storefronts on the ground floor. Nearly all of this developer’s properties are in and around Center City Philadelphia. And as we will see, small banks have remained competitive in CRE, even while they have lost market share to large banks in consumer lending and commercial and industrial lending.

Because of this local aspect, CRE is particularly subject to local and regional economic shocks. For example, a shopping mall near Williamsport, PA, can’t offset a decrease in sales due to a drop in employment in the local fracking industry by attracting shoppers from California. Similarly, real estate is immobile. Unlike a machine, the shopping mall can’t be moved to suburban Philadelphia. There is a flip side to this risk, however. Immobility also increases the value of a CRE asset as collateral. A business in financial distress might secretly sell a machine or receivables it had put up as collateral for bank loan. By contrast, land posted as collateral for a CRE loan can’t be sold out from under the development should the developer experience financial distress.

Another major risk factor, unrelated to location, is time. Developing property is not quick under the best of circum-
stresses, and delays can arise from factors out of the developer's control. During all this time between when a loan is made and when a property is ready to be leased or sold — that is, when it starts producing revenue — economic conditions can deteriorate, making a once-promising project not viable. As we will discuss, this risk is especially present in construction projects.

There are three types of CRE loans, depending on the project in question and what the collateral is used for: construction and land development (CLD) loans, commercial mortgages, and multifamily loans. Bank lending across the three categories is volatile. Although construction lending currently represents less than 20 percent of bank CRE lending, it has risen to as high as 40 percent of the CRE portfolio and has averaged 25 percent since the 1980s. Commercial mortgages represent the largest share of CRE lending, currently just under 70 percent and averaging 64 percent since the 1980s. Multifamily housing loans have traditionally been the smallest share of banks' CRE portfolios, approximately 10 percent, but have risen to nearly 20 percent since the Great Recession, for reasons we discuss below.

**Construction and land development loans.** CLD loans cover the cost of acquiring the land, preparing the site, and constructing the buildings. This is the riskiest type of CRE lending. To illustrate how a CLD loan is structured to manage risk, say that a (fictional) developer, Philly Flats Incorporated, wants to buy an old factory and convert it to manage risk, say that a (fictional) developer, Philly Flats Incorporated, wants to buy an old factory and convert it to manage risk, say that a (fictional) developer, Philly Flats Incorporated, wants to buy an old factory and convert it to manage risk, say that a (fictional) developer, Philly Flats Incorporated, wants to buy an old factory and convert it to manage risk, say that a (fictional) developer, Philly Flats Incorporated, wants to buy an old factory and convert it to manage risk, say that a (fictional) developer, Philly Flats Incorporated, wants to buy an old factory and convert it

building Bank — a specialist in construction lending — provides a three-year line of credit to Philly Flats, the typical maturity for CLD loans. This line of credit carries a balloon payment due when the project is completed. Building Bank's loan provides 80 percent of the financing necessary for the project; this is on the high end of the usual range. The rest of the debt financing comes from a mezzanine lender whose loan is unsecured and therefore carries a higher interest rate. The typical ratio of the loan's dollar amount to the market value of the property, or loan-to-value ratio (LTV), for a CLD loan varies depending on the type of project being financed, but the range is about 75 to 85 percent.

The loan from Building Bank is provided in three stages, with each disbursement subject to Building Bank's assessment of whether the project is on time and within budget. This staging of the loan is designed to mitigate Building Bank's risk. Stage one is for buying the land. Once the property is acquired, Philly Flats needs approval from a number of government and quasi-governmental agencies such as the zoning board, planning commission, and historical review board. A problem with any one of these entities can derail the project before it even starts. They can also significantly increase the development costs by requiring unforeseen features such as additional parking or green space, and they can decrease the projected revenue by reducing the number of units. For example, Philly Flats may have planned on eight floors of apartments but the zoning board allowed only four. Real-life examples of approval risk are commonplace. In Philadelphia, for example, City Council members can exercise their councilmanic prerogative to hold up projects of concern in their districts.

The second stage finances the preparation of the site. Even if the project is in a developed area and much of the basic infrastructure is already in place, the site may require substantial improvements such as plumbing connections, additional sewer access, or additional electrical connections. Projects in undeveloped areas may require roads and sewers to be built and power and water lines to be run. Each of these improvements requires dealing with a separate local utility and increases scheduling risks.

Assuming the project makes it past the first two stages, the third stage is the actual construction. Anybody who has renovated his or her home is familiar with at least some of the risks associated with this stage. Bad weather can delay outdoor work, supplies sometimes aren't delivered on time, and subcontractors don't always show up when they're needed, all of which can result in lost time and increased costs. In a larger, more complicated commercial project, these risks are magnified. For example, a strike by just one of a number of construction unions working on the site can shut down the entire project for weeks or more.

Ultimately, once the project is completed, Building Bank expects Philly Flats to obtain a commercial mortgage from another lender to make the balloon payment and pay off the CLD loan. Until then, though, bad things can and do happen. Imagine that five other brewpubs open within a couple of miles of Beer for Lunch, and now no other bank is willing to take on the financing. This leaves Building Bank in the position of providing the commercial mortgage itself — remember that it specializes in CLD loans and has no expertise in commercial mortgages. It may also have a number of loans in the same area as Beer for Lunch, so another loan there will increase its portfolio risk and invite greater regulatory scrutiny.

**Commercial mortgages.** These loans are used to finance the purchase or partial ownership of existing buildings. A commercial mortgage can be secured by several
types of properties: retail, office, industrial, hotel, as well as mixed-use properties.

To illustrate how a commercial mortgage works and the risks entailed in making one, let’s take the fictional example of Hometown Bank lending to a local real estate company to purchase a local mall; let’s call it Big Box Mall. The loan is for 10 years, the typical length of a commercial mortgage. At the time the loan is made, the local economy is excellent, the mall is 100 percent occupied, and it has two big department stores as anchors. Hometown believes that it has been prudent and designed the loan to mitigate its risk. The LTV ratio is the industry norm, about 75 percent. Thus, given the state of the local economy, the amount of available space leased, and the terms of the loan, prospects for the loan being paid in full appear good.

But let’s say that after three years, the parent companies of the two anchor stores agree to merge, and as part of the deal one of the mall’s anchor stores is closed. Partly because the regional economy has cooled, no replacement anchor can be found. The loss of an anchor has ripple effects as mall traffic shrinks and several other tenants close their stores. The mall’s owners renegotiate the rents of some other tenants to keep them there and lower the rent on the vacant spaces to attract new tenants. The resulting loss of revenue leaves the mall’s owners unable to make their payment to Hometown. Thus, even though the loan appeared prudent at the time it was made — with a strong borrower, a good property, and conservative loan terms — Hometown is faced with a choice: either renegotiate the loan with a lower revenue stream or push the borrower into default.

Multifamily loans. These loans are used to purchase residential buildings that house five or more families such as apartment or condominium complexes. Except for the type of properties securing them, multifamily loans are very similar to commercial mortgages. The main contractual difference is that the maturity of the loan may be longer. Although the typical maturity for a multifamily loan is 10 years, it can go as high as 40 years.

**HOW AND WHY HAS CRE LENDING GROWN?**

CRE had risen strongly during the real estate boom of the 1990s and 2000s, especially in the years leading up to the Great Recession. Following the deleveraging that took place during the downturn and the subsequent recovery, it has turned around in the past few years. Since the trough in CRE lending in mid-2012, CRE loans outstanding have increased to $3.6 trillion and now represent 19.8 percent of national GDP (Figure 1). Indeed, bank regulators have expressed concern about the rapid growth of CRE lending.

During the past 20 years, a growing source of funding for CRE has been commercial mortgage-backed securities (CMBS). Through securitization, loans are pooled into CMBS and sold to special purpose vehicles. This permits a wide range of investors to hold CRE loans as part of a diversified portfolio. Commercial mortgage pools now account for around 17 percent of total commercial mortgage loans outstanding, rising from nearly zero in the 1980s.

During the recent boom in CRE lending, multifamily loans have been a source of strength, nearly doubling for banks since the trough (Figure 2). This strong growth is partly an aftereffect of the Great Recession on the single-
family housing market — tighter lending conditions for receiving a mortgage; households’ weakened financial position, especially among young and lower-income families; a slowing in the rate of household formation — and partly a demographic trend toward living in urban areas that have an abundance of amenities within walking distance. Since the second quarter of 2012, multifamily loans outstanding have increased 26.7 percent, while loans on one- to four-family properties have decreased almost 1 percent. Homeownership rates decreased from an all-time high of 69.2 percent in 2004 to 63.8 percent in 2015. At the same time, apartment vacancy rates decreased from 10 percent to 7 percent, and the median rent increased from $620 to $850 per month. Despite the recent growth in multifamily lending, there is a lot of uncertainty among economists, real estate developers, and bankers as to how much of this shift from single-family homes to apartments is temporary and how much is longer term.

WHO BORROWS? WHO LEADS?

The borrowing side of the CRE loan market is highly fragmented, with borrowers differentiated by geography and industry. On the lending side, while banks remain the dominant lenders, the composition of bank lenders and nonbank lenders has changed over time. Over the past 20 years, banks overall have consistently held about half of all CRE loans. However, for midsize and small banks, the share of CRE loans in their portfolios has roughly doubled. Besides banks, insurers remain a significant player in the CRE lending market, but as we will discuss, their participation has diminished. Another significant supplier of CRE funding is the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac, which have a strictly multifamily CRE niche. Looking at lenders and borrowers in more detail, some interesting trends emerge.
Who borrows? The largest class of borrowers taking out CRE loans consists of noncorporate nonfinancial firms (Figure 3). This class makes up 75 percent of the borrowers in the CRE market and includes everything from large real estate developers to the corner green grocer.

Real estate developers come in a wide range of sizes and degrees of specialization. They can run part of the commercial project, such as buying raw land, or they can oversee and manage the entire development process of designing, preparing, and building the property. For instance, Berger-Epstein Associates of Allentown, PA, owns and develops retail properties mostly in eastern Pennsylvania. Another example of a smaller real estate developer is New Vistas Corporation of Mount Laurel, NJ, which develops office, retail, and multifamily properties in New Jersey.

Large real estate developers can own commercial property all over the world. For example, one of the largest developers of office properties in the country is Hines, a real estate investment, development, and management firm based in Houston, TX. It has properties in 182 cities and 20 countries worldwide with $89.1 billion of assets under management.

Real estate investment trusts (REITs) represent a steadily increasing share of CRE borrowings and represent around 6.6 percent of total CRE loans borrowed. These companies own and manage income-producing real estate and are required to pay at least 90 percent of their earnings to their investors as a condition for avoiding taxes at the corporate level. REITs own and manage all types of commercial real estate and tend to specialize in a certain type, such as hotels, apartments, storage units, offices, malls, or student housing.

Other borrowers of CRE loans include nonfinancial corporate businesses and nonprofit organizations such as universities, churches, and hospitals. They comprise about 12 percent and 6 percent of CRE borrowings, respectively.

Who lends? Banks are the most significant suppliers of funds for CRE, holding over half of total CRE loans in their own portfolios, a share that has been roughly constant for the past 20 years (Figure 4). By the fourth quarter of 2015, banks’ holdings of CRE loans totaled $1.98 trillion. This total actually understates the role that banks play because they also originate loans that are securitized. Taking loans that are securitized into account, depository institutions originate about two-thirds of total CRE loans.

Large banks held about $775 billion in CRE loans in the fourth quarter of 2015 (Figure 5) — accounting for around 40 percent of all CRE loans held by banks — but they account for the preponderance of CRE loans securitized by banks. (See The Securitization of CRE Loans.) The growth in CRE lending by small and medium-sized banks has been particularly striking (Figure 5). CRE loans account for around 21 percent of all banks’ loan portfolios, but in the past 20 years they have risen from 15 percent to 30 percent of midsize bank portfolios and from around 20 percent to over 40 percent of small bank loan portfolios (Figure 6). Small banks made approximately $855 billion in CRE loans while medium-sized banks made approximately $345 billion in CRE loans in the fourth quarter of 2015. Small and medium-sized banks retain most of what they originate in their portfolios. The loans made by Hometown and Building Bank are good illustrations of the types of loans...
made by small and medium-sized banks.

Insurance companies hold a significant share — about 11 percent — of total CRE loans (Figure 4). This share has declined from over 20 percent in the 1980s, more or less mirroring the insurance industry’s declining share of lending across the board. In CRE markets, insurance companies’ declining share has coincided with the growth of mortgage pools, which currently make up about 17 percent of CRE loans outstanding.

The GSEs also directly hold over 7 percent of CRE loans outstanding, holdings that are composed exclusively of multifamily loans. As mentioned earlier, the GSEs are also major players in the CMBS market. Together they held over $204 billion in CRE loan pools at the end of 2015.

The remaining 15 percent of CRE loans are held by a range of investors including REITs, private investors, mutual funds, and pension funds, each specializing in particular locations, types of loans, and risk profiles.

LOOKING AHEAD

Although financing for commercial development comes from an array of sources, banks and savings and loans remain by far the largest originators and holders of CRE assets. Smaller banks’ detailed knowledge of local real estate markets may now be a more important source of comparative advantage in financing CRE than for other types of loans. Given banks’ critical role in the economy, it is fruitful to explore the extent of their investment in this profitable and volatile industry. In future articles, we will explore in more detail which lending markets are local and which are regional or national, who competes with whom, and the differences between securitized and portfolio loans.

NOTES

1 We refer to depository institutions, a category that includes both commercial banks and savings and loans, as banks. For the purposes of this article, small banks are defined as those with assets of less than $10 billion, medium-sized banks are those with assets totaling $10 billion to $50 billion, and large banks’ assets total $50 billion or more.

2 For instance, for 2009, banks had net charge-offs on CRE loans of over $8 billion, representing over 30 percent of all net charge-offs, according to Federal Financial Institutions Examination Council Call Reports. For smaller banks, net charge-offs on CRE loans represented over 50 percent.

3 Our data begin in 1984, the first year for which we have reliable Federal Financial Institutions Examination Council Call Report data.

4 See David Ling and Wayne Archer’s book for a fuller discussion of CRE contract terms. In addition to having three-year terms, typical CLD loans are interest-only, with variable interest rates.

5 By regulation, land development loans cannot have an LTV greater than 75 percent, LTVs for construction loans on commercial and multifamily properties cannot exceed 80 percent, and those on residential properties cannot exceed 85 percent.

6 See the 2015 Pew Report and the May 7, 2016, article by Jacob Adelman about an apartment tower and retail mall proposed for Broad Street and Washington Avenue.
December 18, 2015.

the Office of the Comptroller of the Currency put out a joint “Statement
reserve is based on the number of units rather than square feet.
unit, though this can go as low as $250 and as high as $750. The size of the
which can go as low as 1.2 percent, and (4) a reserve of about $300 per
monthly net operating income to monthly debt payment) of 1.35 percent,
go as low as five and as high as 40, (2) an LTV ratio of 75 percent, though
norm is 15 to 20 cents per square foot. However, these reserves can go as
high as 50 cents per square foot depending on the type of property.

Typical terms on a multifamily loan are (1) a 10-year term, though they can
go as low as five and as high as 40, (2) an LTV ratio of 75 percent, though
ratios can go as high as 85 percent, (3) a debt coverage ratio (the ratio of
monthly net operating income to monthly debt payment) of 1.35 percent,
which can go as low as 1.2 percent, and (4) a reserve of about $300 per
unit, though this can go as low as $250 and as high as $750. The size of the
reserve is based on the number of units rather than square feet.

The Federal Deposit Insurance Corporation, the Federal Reserve, and
the Office of the Comptroller of the Currency put out a joint “Statement
on Prudent Risk Management for Commercial Real Estate Loans” on
December 18, 2015.

See Ronel Elul’s Business Review article for a more detailed description of
how securitization works.

See Burcu Eyigungor’s Economic Insights article and Paul Flora’s Regional
Spotlight for discussions of these issues.

See Jackelyn Hwang and Jeffrey Lin’s working paper for evidence of this trend.

Federal Reserve Flow of Funds data.

7 Typical terms on a commercial mortgage are (1) a 10-year term, although
terms can go as low as five and as high as 30 years, (2) an LTV ratio of 65
percent, though it can go as high as 75 percent, and (3) a debt coverage
ratio (the ratio of monthly net operating income to monthly debt payment)
of 1.45 to 1.5 percent, and this can go as low as 1.25 percent. Also, a bank
can require the borrower to set aside a reserve per square foot. The industry
norm is 15 to 20 cents per square foot. However, these reserves can go as
high as 50 cents per square foot depending on the type of property.

6 Typical terms on a multifamily loan are (1) a 10-year term, though they can
go as low as five and as high as 40, (2) an LTV ratio of 75 percent, though
ratios can go as high as 85 percent, (3) a debt coverage ratio (the ratio of
monthly net operating income to monthly debt payment) of 1.35 percent,
which can go as low as 1.2 percent, and (4) a reserve of about $300 per
unit, though this can go as low as $250 and as high as $750. The size of the
reserve is based on the number of units rather than square feet.

REFERENCES

Adelman, Jacob. “Moratorium on Construction at Blatstein’s Tower Site

Black, Lamont, John Krainer, and Joseph Nichols. “From Origination to
Renegotiation: A Comparison of Portfolio and Securitized Commercial Real

Black, Lamont K., Chenghuan Sean Chu, Andrew Cohen, and Joseph B.
Nichols. “Differences Across Originators in CMBS Loan Underwriting,”

DiSalvo, James, and Ryan Johnston. “Banking Trends: How Our Region
Differs,” Federal Reserve Bank of Philadelphia Business Review (Third
Quarter 2015).

Elul, Ronel. “The Economics of Asset Securitization,” Federal Reserve Bank of

Eyigungor, Burcu. “Housing’s Role in the Slow Recovery,” Federal Reserve
Bank of Philadelphia Economic Insights (Second Quarter 2016).

Financial Accounts of the United States: Flow of Funds, Balance Sheets, and
Integrated Macroeconomic Accounts, Board of Governors of the Federal

Flora, Paul R. “What’s Holding Back Homebuilding?” Federal Reserve Bank of
Philadelphia Regional Spotlight (Second Quarter 2015).

Commercial Real Estate: Analysis and Investments, second edition, Mason,

Hwang, Jackelyn, and Jeffrey Lin. “What Have We Learned About the Causes
of Recent Gentrification?” Federal Reserve Bank of Philadelphia Working Paper
16–20 (June 2016).

Lea, Michael J., Achim Dubel, Jacek Laszek, and Loic Chiquier. “The Risks of
Commercial Real Estate Lending,” U.S. Agency for International Development
(1997).


Ling, David C., and Wayne R. Archer. Real Estate Principles: A Value

Linneman, Peter. Real Estate Finance and Investments: Risks and
