1

Characteristics of Real Estate

REAL ESTATE'S TRADITIONAL, CYCLICAL NATURE

Real estate has traditionally been a cyclical business, and that characteristic has fundamentally shaped the industry. The basic real estate cycle, illustrated in Figure 1-1, proceeds as follows: economic expansion, robust construction, rising occupancy and increasing rents, good times, easy money, abundant financing at good rates, and boom times, resulting in overbuilding, oversupply, and a glut that may take years to absorb. A real estate recession results when new-construction starts come to a virtual halt but, because of long planning and construction time frames, completions continue to come on line. Occupancy as well as rents fall, particularly after adjusting for inflation, specials, incentives, and discounts. Eventually, as the overcapacity is worked off, occupancy and rents begin to rise again, and the final recovery phase begins. Boom followed by bust has long been a hallowed real estate tradition.

Many argue that increasing sophistication in the industry, more institutional ownership with accompanying oversight, increased accounting transparency, and greater financial discipline imposed by the involvement of Wall Street capital markets will dampen, if not eliminate, real estate cycles. Computerization and the Internet are revolutionizing the flow of information in the industry, and only time will tell the full impact of all these changes.

Transparency refers to how easy it is for the investing public to view a company's books (financial statements and operating results). Traditionally, many real estate developers operated within privately-held companies that disclosed little, if any, financial information. Mistakes and missed forecasts or overoptimistic projects could be hidden from the public eye. Today, the larger number of REITs (Real Estate Investment Trusts) and other publicly-held companies that are involved in construction and development help provide information that increases investor confidence and knowledge of the industry. Still, even publicly-held companies may legally make accounting choices relevant to how

much detail they wish to report. A company may cite the need not to give out vital proprietary information to its competitors and may choose to report total expenses and income from operations without further breaking down the information by region, property class, or individual property.

In addition to the basic real estate cycle, shown in Figure 1-1, we will look at three other cycle types that affect the real estate industry:

- 1. United States national economic cycle
- 2. Capital market cycles, including liquidity and interest-rate cycles
- 3. Property market (or occupancy) cycles

Within *capital market cycles*, we will look at both *liquidity* and *interest-rate cycles*. Within *property market (or occupancy) cycles*, we will look at how various real estate sectors move through the real estate cycle at different times and how, even within one real estate sector, different parts of the country will be in different phases of the real estate cycle at the same time. We will then look briefly at how the rental-rate growth cycle impacts occupancy.

UNITED STATES NATIONAL ECONOMIC CYCLE

It is important to remember that there are many types of business cycles. The most widely followed is the U.S. national economic cycle, traditionally marked by the quarterly reporting of the expansion (or contraction) of the GNP (gross national product), with a recession defined as two consecutive quarterly contractions of the GNP. There are also global economic cycles and regional economic cycles, all of which, through imports and exports, affect investor confidence and America's national economic cycle. Obviously, new projects are more likely to be undertaken during an upswing and at the top of an economic cycle than on a downswing.

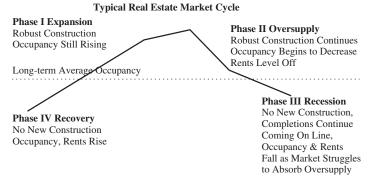


FIG. 1-1 Typical Real Estate Market Cycle.

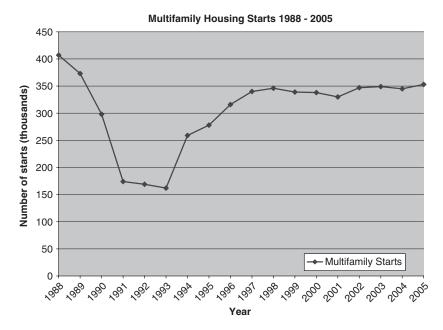


FIG. 1-2 Multifamily housing starts, 1988–2005. (*Source*: U.S. Bureau of the Census, *Construction Reports*, Series C-20, Housing Starts.)

Figure 1-2 depicts multifamily housing starts from 1988 to 2005. The impact of the real estate recession of the early 1990s is clearly shown in the multiyear decline in housing starts beginning in 1990 and continuing until 1994. The recovery phase occurs in 1995, and for the next ten years multifamily housing starts oscillate roughly between 340,000 to 350,000 per year.

The excessiveness of the robust 1988 and 1989 multifamily housing starts of 407,000 and 373,000, respectively, is highlighted by the fact that almost twenty years later multifamily housing starts are still significantly lower (345,000 in 2004 and 353,000 in 2005) in spite of a population growth of roughly 50 million people from 1990 to 2005.

CAPITAL CYCLES: LIQUIDITY AND INTEREST RATES

Compared with other sectors, real estate is a capital-intensive sector of the economy. Real estate requires a significantly greater investment of capital for every dollar of revenue generated than may be required for a less capital-intensive sector such as the service sector, hence, real estate's sensitivity to the capital markets. Capital cycles are affected by both liquidity and interest-rate cycles. Liquidity cycles reflect fluctuations in the availability of capital; whereas interest-rate cycles reflect fluctuations in the cost of capital. Although related, these concepts are very

different. It is quite possible for interest rates to be favorable (when the cost of capital is affordable), but for one reason or another capital is not available—its availability is constrained. The opposite also is often true: When interest rates are high, money is often very available and the markets are liquid; but the cost of the money is so high that few projects will pencil out because the cost of the capital is higher than the intrinsic return of the project. Consequently, the use of debt capital would represent negative leverage.

A classic example of a liquidity crisis occurred in the conduit lending market in the fall of 1999 when Nomura (a very large Japanese bank with a major American real estate lending portfolio) abruptly shut down its real estate lending operations, shocking the *commercial mortgage backed securities* (CMBS)/conduit lending market (see Chapter 8) and virtually shutting the conduit lending door for many months.

At other times in the past, real estate has simply been out of favor as a sector of the economy, either because analysts or economists did not foresee favorable prospects or because a recent real estate downturn had left painful memories of loan losses in the minds of lenders.

Interest rates move in cycles that, although related to and with impact on national economic cycles, move somewhat independently, at times lagging and at times leading the national economic cycle. The Federal Reserve (the Fed) will tend to attempt to move interest rates higher if it thinks the economy is overheating and lower interest rates if it believes that the economy is in need of stimulation. However, the Federal Reserve can directly change only short-term interest rates. The Fed affects short-term rates by lowering the discount rate (the interest rate at which the Federal Reserve lends money to banks), but longer-term rates are set by investor expectations about inflation and the necessary return on capital.

Most ten-year term, commercial real estate loans are written at a spread (i.e., the additional amount of interest charged over a given index) over the matching 10-year U.S. Treasury note rate. Spreads are quoted in basis points or 100ths of a percentage point. Spreads over the Treasury note rate will typically be 75 to 250 basis points, or .75% to 2.5%. For instance, if the Treasury rate is 5.5%, the commercial real estate rate may vary from 6.25% to 8.0% (5.5% + 0.75% = 6.25% to 5.5% + 2.5% = 8%). The spread varies according to market conditions, the type and grade of real estate, and the amount of leverage (that is, the ratio of loan to value).

Loans to the U.S. government are generally defined as risk free, shorthand for noting that there is no risk of default (an inflation risk remains, though). Because default risk is the probability that the principal lent will not be repaid, defining loans to the U.S. government as risk free is either a vote of faith in the strength of the U.S. economy on which the taxes are levied to raise the money used to repay the loans or a tacit recognition that, if the need arose, one of the powers of a national sovereign is the ability to order that money be printed to pay its bills. Of course, printing money to pay national debts is only a temporary solution. When the supply of any good, including money, exceeds demand, the price drops. Inflation is what happens when the "price" (or value) of money drops. History has shown

that rampant inflation is the inevitable result of expanding the money supply faster than the growth rate of the underlying economy. The Confederacy found this out during the Civil War in the 1860s, as did Germany during the Great Depression in the 1930s. The bitter joke in Germany at the time was that you used to be able to go shopping with your money in your purse and take your purchases home in your cart, but the hyperinflation was so bad that you had to use your cart to carry your money to market and you could take home your resulting purchases in your purse.

Because it is considered free of default risk but not free of inflation risk, the rate at which the marketplace is willing to lend money to the U.S. Treasury is considered the true cost of money plus a premium for anticipated inflation over the period of the loan. Economists have long debated the true cost of money (the rate the market would demand in the absence of risk or inflation), but it is generally considered to be about 2% to 3%.

The spread over the Treasury rate represents the risk premium the marketplace puts on commercial real estate loans. Fluctuations in interest rates charged to real estate borrowers are a result of variations in both the amount of spread over the 10-year Treasury rate demanded by the marketplace and variations in the underlying 10-year Treasury rate. This topic is covered in greater detail in Chapter 8 in relation to sources of financing.

PROPERTY MARKET CYCLES

Property market cycles, sometimes called occupancy cycles, refer to the balance of demand and supply of real estate itself. Yet, absent NASA making great strides in interplanetary exploration, because the supply of real estate is fixed, property market cycles refer to the balance of supply and demand of the buildings that sit on the real estate. Property cycles occur both in various real estate sectors and geographically within any one sector; that is, at the same time, different regions of the country will be in various stages of the cycle. In all cases, they are impacted by the rental-growth rate cycle.

Real Estate Sectors

Real estate is a vibrant, fragmented, and evolving economic sector that at times defies easy analysis. Real estate can be divided into Institutional (governmental or nonprofit: schools, museums, city halls, police stations, public hospitals, etc.), Private (owner-occupied homes), and Commercial sectors. Commercial real estate can be further divided into different sectors and subsectors. Office, Retail, Industrial and Warehouse, and Multifamily constitute a common division. The Office sector is often subdivided into suburban and central-city business districts. Retail can be divided many ways, but it is commonly divided into Regional Malls, first and second tier; Strip Malls; Factory Outlets; and Power Centers (sometimes called "big boxes" because a power center is a retailer strong enough to draw customers to a stand-alone location, to just one big box). Other types of real estate that are not as large but defy easy categorization in one of the major sectors include Senior

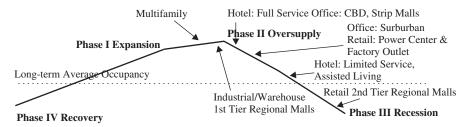


FIG. 1-3 Typical national real estate market cycle by property type.

Housing (with subsectors for active retirees, assisted living, and full service) and Hotels (full service, extended stay, limited service, and resort are potential categories), as well as specialty retail such as outlet malls and multiuse mixes of retail and entertainment. Sometimes new subsectors emerge. The trend toward miniwarehouses is an example of a sector that took off in the 1990s. "Telco hotels," that is, large equipment farms, buildings, or parts of buildings that house the transmission gear for phone, data, and Internet companies, emerged in the mid to late nineties. More recently, the residential condominium sector exploded (both new construction and conversions of existing projects; see Chapter 12) and then contracted within roughly a five-year period.

Obviously, all of these sectors and subsectors are very different and respond differently to various economic stimuli; thus, they are at any given time at different phases in the real estate cycle. Figure 1-3 illustrates a typical national real estate cycle by various types of property.

Geographic Variations Within a Property Type

Remember that although there are national cycles, by the very nature of real estate, product and occupancy cycles are local or regional in nature. Capital can flow across borders and from region to region to find the highest return; real estate, however, is immobile. If a particular region becomes overbuilt (i.e., oversupplied), it is not possible to pick up a building and ship it to a region where there is an undersupply. To a certain extent, even though the buildings do not move, it is possible for the people who occupy and use those buildings to move. However, this can be a slow, costly, and disruptive solution. Figure 1-4 shows a typical distribution of where various cities may be in a multifamily (apartment) cycle.

Typically, rental-growth rate cycles are a primary driver of occupancy cycles. Figure 1-5 illustrates a rental-growth rate cycle as stagnant to negative rent growth, characterized by the recession portion of the cycle, giving way to modest rent growth during the recovery, followed by strong rent growth during the expansion phase that justifies new construction. Equilibrium occurs at the top of the cycle but is generally recognized only in retrospect. The oversupply phase of the real estate cycle features declining but still positive rent growth.

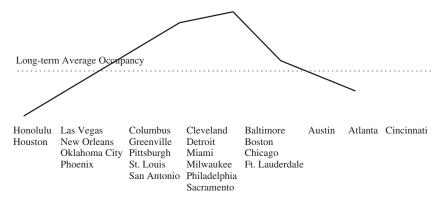


FIG. 1-4 Geographic occupancy cycle analysis.

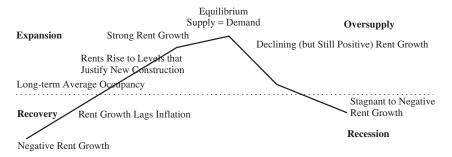


FIG. 1-5 Rental-growth rate cycle.

Although analysts attempt to define what the long-term average occupancy rate is for a given sector, the vagaries of the marketplace defy easy categorization, as illustrated by Figures 1-6 and 1-7. Figure 1-6 shows nationwide industrial vacancy (availability) rates ranging from 5.5% to more than 10.5% for the period 1981 to 2004, illustrating how difficult it is to determine a long-term average occupancy rate for a sector. Was the peak in vacancies that occurred during the recessionary years of the early 1990s an aberration to be discounted or part of a normally occurring cycle for which one must plan? What about the vacancy peak in 2002 to 2004? Is there a long-term upward trend in vacancy? Or are recent trends an aberration? And can a reversion to the long-term mean be forecasted? How can one tell the difference among random fluctuations, "normal" cycles, and long-term structural changes in the marketplace? No easy answers exist and opinions among intelligent professionals differ, which, in turn, is what creates markets.

Figure 1-7 shows the ten highest and lowest Central Business District (CBD) office rents for North America as of 2001. These numbers probably represent close



FIG. 1-6 Nationwide industrial vacancy (availability) rates, 1981–2004. (*Source*: Torto Wheaton Research, published online at www.tcasset.com.)

HIGHEST CENTRAL BUSINESS DISTRICT RENTS			LOWEST CENTRAL BUSINESS DISTRICT RENTS	
CITY		RENTS PER SQ. FT.	CITY	RENTS PER SQ. FT.
1.	\$an Francisco, CA	\$69.00	1. Edmonton, AB (Canada	a) \$12.00
2.	Boston, MA	\$60.00	2. Vancouver, BC (Canada	n) \$18.00
3.	Silicon Valley, CA	\$54.00	3. Philadelphia, PA	\$18.08
4.	Manhattan, NY	\$49.51	4. Raleigh-Durham, NC	\$18.75
5.	Seattle, WA	\$39.00	5. Memphis, TN	\$19.25
6.	Washington, DC	\$36.48	6. Nashville, TN	\$19.50
7.	Toronto, ON (Canada)	\$34.00	7. St. Louis, MO	\$20.00
B.	Chicago, IL	\$32.10	8. Wilmington, DE	\$20.00
9.	W. Palm Beach, FL	\$31.01	9. Winston-Salem, NC	\$20.00
10.	Sacramento, CA	\$30.00	10. Montreal, QC (Canada)	\$20.05

FIG. 1-7 Highest and lowest central business district rents. (Copyright © 2001 by Institutional Real Estate Inc. All Rights Reserved.)

to the peak of CBD rents during the great Internet run-up of the stock market. Markets softened after the tech bubble burst, and it took roughly five years for the office market to completely recover, that is, for 2006 rents to approximate 2001 rents.

It is important to note that these numbers, like many numbers in real estate, are only approximations. Rent numbers are generally gathered from brokers who specialize in office leases, and since there is generally no legal requirement to

report such numbers nor penalty for inflating or providing selective disclosures, all numbers must be taken with a grain of salt. It is not unusual to see different sources reporting significantly different numbers at the same time for supposedly the same market, with variations arising from the source of their data, their definition of the market, and their chosen methodology.

Furthermore, there are many submarkets within any given market, and rents may vary greatly even within a submarket, depending on building quality and the desirability of the location. For instance, even in Manhattan (which is a submarket of New York City itself), there is substantial variation between office rents downtown (Wall Street) and midtown (Rockefeller Center). In addition, office locations exist on the Upper West Side, Harlem (the location of former U.S. President William J. Clinton's official office), the Upper East Side, and on and on.

Even the ranges within the top ten and bottom ten rents are great. The range on the high side is \$69 to \$30 per square foot and on the low side, \$12 to \$20 per square foot. Applying national averages to local markets can be a recipe for disaster.

The problem of real estate cycles is exacerbated by the long lead times necessary for development, which are being further lengthened by an increasingly complex regulatory environment. A New York City rezoning can easily take five years or more; the CEO of a major apartment REIT (Real Estate Investment Trust) that specializes in infill development and redevelopment said several years ago that the company faces court battles in approximately 30% of its projects, and that percentage is no doubt higher today. At the time of the original conception of a development, market conditions may be favorable. By the time the land has been tied up, approvals secured, and a great deal of time and capital invested, the outlook may not be so rosy. By this time, the project has tremendous momentum, and many firms and people (and their egos and pocketbooks) are committed to it. These enterprises are rarely cut and dried. Signs of downturn are often hard to read, and although hindsight is usually 20/20, the crystal ball is often murky when one tries to look ahead. Moreover, there is a strong tendency to believe that "this project" is different because of "the unique site," "our extraordinary architecture," "the strength of our development team," "the wonderful marketing plan," "the financial strength of our backers," or some other factor.

If the project's conception is basically sound, forecasters may be right. There is a philosophy that every development over a given 50-year life will have its up and down times, and if the first down time happens to come up front, well, those are the breaks of the business: If you do not have the deep pockets to ride it out, you should not be in the business.

Another philosophy of development holds that the time to start thinking about a development is during a down cycle, because by the time you get through the lengthy planning, permitting, and regulatory approval process, the market will have recovered. As someone once said, all real estate makes money, it is just a question of who owns it when it does. Another common saying among those in the real estate field who urge caution at the top of the cycle is that "in the long run, it's the deals you *don't* do that make you the money."

LIQUIDITY AND EXIT STRATEGY

Every investment should have an exit strategy—that is, a plan indicating how long the investment will be held, and when and how it will be sold, and specifying the criteria for determining when it is time to sell. This is especially true of real estate. By its nature, real estate is not a liquid investment. Unlike a Treasury bill or the stock of a Fortune 500 company, real estate cannot be quickly sold and converted to cash. Thus, it is important for an owner to have given significant thought on how best to liquidate an investment. Some developers and investors are "flippers": Build it, stabilize it, and sell it. While this is the time of greatest risk, it is also the time that yields the greatest profit. In apartment development, returns on equity in the high teens to mid-20s can be achieved with regularity by sophisticated players. Other developers and investors can be long-term holders, but even a long-term holder tends to sell after ten years.

Real estate is illiquid for several reasons:

- Unlike shares of stock, real estate is not fungible. Each site and structure is unique in design, age, maintenance, location, and market, among other variables.
- Financing is generally required. The dollar amounts tend to be large, at least relatively. Existing financing is often not readily assumable, and even if the purchaser wishes to pay cash, there may be existing financing that has prepayment penalties.
- Tax consequences tend to be significant, and sophisticated tax avoidance strategies—such as a Section 1031 exchange—may be required.
- Ownership can be complex: Title insurance and surveys are generally required, easements and covenants must be reviewed, lien searches must be done.
- Environmental liability issues must be carefully investigated; a current owner can be held liable for cleaning up environmental contamination caused by prior owners.
- Due diligence must be performed for deferred maintenance as well as zoning and code compliance.
- On income property, existing leases must be analyzed and verified, credit reports run on existing tenants (sometimes), and expenses verified.

To use a term of art from economics, real estate tends to be inelastic on the downside; that is, factors that tend to create upward rises in prices, when reversed, tend to create less downward pressure on prices. The reason is simple: Most holders of real estate are wealthy, with other available resources, and tend to wait out downward price cycles. This is not always a successful strategy in terms of real inflation-adjusted dollars. Sometimes a potential seller simply ends up waiting until inflation has increased the "value" of the subject property to the asking price.

Historically, nationwide real estate cycles tend to occur in a seven- to ten-year wave. Although values in some real estate sectors are relatively stable (such as

apartments), others (such as office, hotel, and retail sectors) tend to rise and fall with greater volatility. Astute investors may attempt to time sales and purchases so as to catch these fluctuations in value. Furthermore, maintenance requirements for real estate increase with time and operational requirements may also increase. Many investors prefer to stay with top-grade portfolios and regularly cull their holdings of properties over a desired age.

A ten-year investment in an apartment development can yield returns in the low to mid teens. This return is a blend of the "pop" in value created by the development process and the lower underlying return that comes from the operation of the project. Obviously, the return pop created by development is not available in a straight purchase, unless some value is added through repositioning or renovating the property.

There are several ways in which apartments (and most real estate) may deliver value. The first is from the capitalization (or cap) rate, which is the rate of return required by the market (see Chapter 6). The cap rate is a measure of the income produced from the day-to-day operation of the property.

Cap rate is simply the Net Operating Income (NOI) produced by the real estate divided by the price paid for the real estate. For example, a property that was purchased for \$10 million, which produces \$500,000 of NOI, has a cap rate of 5% (e.g. \$500,000/\$10,000,000 = 5%).

Another way that apartments may deliver value is through appreciation. Real estate has a good historical track record of delivering appreciation. However, (1) the past is no guarantee of the future, (2) good maintenance and frequent capital expenditures are often required, (3) appreciation must always be measured against inflation, and (4) it is difficult for a real estate asset to appreciate if the surrounding area does not progress as well—i.e., demographic and economic trends may overwhelm the efforts of even the most capable property managers.

The third way that property may deliver value is through leverage. Leverage refers to the use of debt to "lever" the return on investors' equity investment. Leverage should be *positive*. The interest rate on the debt must be less than the cap rate of the property or, in other words, less than the return on the operation of the property.

Obviously, debt with an interest rate of 6% on a property with a cap rate of 5% results in negative leverage and a negative cash flow at any meaningful loan-to-value ratio. To put it mildly, negative cash flow is generally considered bad! Most financial institutions will not make loans that result in negative cash flow and, indeed, most require a positive debt-coverage ratio (discussed later). Alternately, debt of 6% on a property with a cap rate of 7% would result in positive leverage.

Amortization and the resulting mortgage constant must be taken into account, too. Most loans require not only the payment of interest but of principal as well. Dividing the amount of the total loan payment (interest AND principal) by the total amount of the remaining loan yields the mortgage constant. Since the amount of remaining loan is constantly being reduced for an amortizing loan, the mortgage constant is constantly increasing. Also, the shorter the amortization period, the higher the mortgage constant.

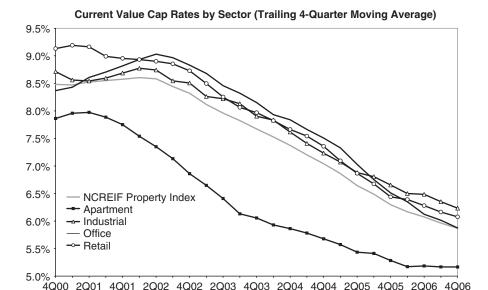


FIG. 1-8 Declining cap rate trend. (*Source*: NCREIF; Prudential Real Estate Investors (U.S.), published online in Prudential Financial October 2004 newsletter, www.prudential.com/prei.)

Warning: A mortgage constant higher than the cap rate will result in negative leverage and may yield a negative cash flow at a higher loan to value.

Cap rates fell drastically in the first five years of the twenty-first century (see Figure 1-8). In 2000, cap rates of 8%–9% were available; in 2006, cap rates of 5%–6.5% were more the market norm. Theories abound for the decline, with the most-mentioned culprits being the fall in the 10-year Treasury rate and the decline of the stock market, which combined with globalization, created pools of capital in search of a resting place. Others believe that the financial markets have come to accept real estate as a stable asset class deserving of greater capital allocation. Still others believe that investors have relatively short memories, and the lack of a significant real estate downturn since the early 1990s has led to complacency about risk evaluation and insufficient risk premiums being required by the marketplace in the pricing of real estate returns.

Factors such as grade, property age, and geographic region all impact capitalization rates. California and the heavy urban corridors of the northeast, such as Boston, Manhattan, and Washington, DC, tend to have some of the lowest cap rates in the nation. Presumably California compensates for its lower capitalization rate with greater price appreciation, security, and glamour. Likewise, the urban corridors are valued for the depth and breadth of their markets and their higher international profile. Perhaps there is security in increased market data and thus with lower risk, making a lower return acceptable.

Because apartments tend to be one of the more stable real estate sectors, most other sectors offer higher operational returns as the marketplace demands additional compensation for added volatility.

There are several reasons to sell a real estate project, including the desire to maintain a certain average age of properties, to realign toward a new strategic investment philosophy, or to raise capital for new investment. However, the most obvious reason to sell is to harvest profit. This may be motivated by both economic reasons and the requirements of financial reporting. Publicly-held corporations operate under GAAP (generally accepted accounting principles), which are based on historical costs and transactions. Generally, investments in real estate must be carried at historical costs less depreciation, regardless of market value. Therefore, under GAAP, the only way a publicly-held company can show the increase in value of an investment in real estate on its books is to sell it.

SUMMARY

Traditionally, real estate is cyclical and is characterized by four phases: *expansion*, characterized by robust construction and rising occupancy; *oversupply*, where robust construction continues as occupancy begins to decline and rents level off; *recession*, during which no new construction is begun, but projects in the pipeline are completed and begin operating amid falling occupancy and rents; and *recovery*, characterized by increasing occupancy and rents as the market absorbs oversupply. Historically, nationwide real estate cycles tend to occur in seven- to ten-year waves.

Real estate cycles are affected by the U.S. national economic cycle; capital market cycles, including liquidity and interest rate cycles; and property market (or occupancy) cycles. The U.S. national economic cycle traditionally is marked by the expansion or contraction of GNP. As real estate is a capital-intensive sector of the economy, it is sensitive to fluctuations in the capital markets. Capital cycles are affected by both liquidity cycles and interest rate cycles. Property market cycles are also called occupancy cycles, and these terms refer to the balance of demand and supply of real estate itself. These cycles occur both in various real estate sectors and geographically within any single sector, so that at the same time different regions of the country will be in various stages of a real estate cycle. Finally, every investment should have an exit strategy, and this is especially true of real estate because of its illiquid nature.

KEY TERMS AND DEFINITIONS

Basis point: 1/100 of a percent, e.g., 25 basis points = .25%.

Default risk: The probability that the lent principal will not be repaid.

Exit strategy: How long an investment will be held, when and how it will be sold,

and what criteria determine when it is time to sell.

Federal Reserve discount rate: The rate at which the Federal Reserve lends money to banks, a short-term interest rate.

GNP: Gross national product, the sum of all goods and services produced by a country.

Interest rate cycles: Fluctuations in the cost of capital.

Liquidity: The ease with which an asset can be converted to cash.

Liquidity cycles: Fluctuations in the availability of capital.

REIT: Real Estate Investment Trust, a publicly-held firm that invests in real estate.

Spread: The additional amount charged over a given index, normally given in basis points; it reflects the risk premium placed on a loan by the market.

Transparency: How easy it is for the investing public to view a company's financial statements and operating results.

KEY LEARNING POINTS

- Understand the traditional real estate cycle
- Understand how liquidity and interest rates affect capital cycles
- Identify different real estate sectors and give examples in each sector
- Understand the role of the Federal Reserve, inflation, and spreads in setting commercial real estate loan interest rates
- Understand that real estate markets are local or regional while capital can flow across borders
- Understand why real estate is illiquid

QUESTIONS

- 1. Explain the traditional real estate cycle by detailing its phases and how the cycle affects construction, occupancy, and rents.
- **2.** What are the aspects of capital markets that are described by liquidity cycles and interest rate cycles?
- **3.** You are working to secure a 10-year commercial real estate loan. The current 10-year Treasury note rate is 5.00%. If your bank is willing to lend to you at a spread of 125 basis points over the Treasury note rate, what is the interest rate of your loan?
- **4.** What are the three primary real estate sectors? Give examples in each.
- **5.** What is the primary driver of occupancy cycles?
- **6.** Give seven reasons why real estate is considered illiquid.
- 7. Explain how "real estate tends to be inelastic on the downside."