CHAPTER 12

ALTERNATIVE INVESTMENTS

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LEARNING OUTCOMES

After completing this chapter, you should be able to do the following:

- **a** Describe advantages and limitations of alternative investments;
- **b** Describe private equity investments;
- **c** Describe real estate investments;
- **d** Describe commodity investments.

1 INTRODUCTION

If a public company needs funds to invest in a project, perhaps to build a new production facility or to expand its operations abroad, it may turn to the financial markets and issue the types of debt and equity securities discussed in the Debt Securities and Equity Securities chapters. But what if an entrepreneur needs money to start a promising new business? Or what if a young company needs funds to grow, but it is not established well enough to seek an initial public offering? The entrepreneur and the young company are not established well enough to issue debt or equity securities to the public. In addition, although they may seek loans from banks, the amount of money they can borrow is often limited. Banks often do not finance new and young companies because the risk of not getting the money back is too high. So, entrepreneurs or young companies may turn to the venture capital sector to obtain the money they need. Venture capitalists specialise in financing new and young companies. They provide entrepreneurs and young companies with both the capital and the expertise to launch and grow their businesses.

Venture capital is a form of private equity, which is itself a type of alternative investment. From an investor's point of view, **alternative investments** are diverse and typically include the following:

- **Private equity:** investments in private companies—that is, companies that are not listed on a stock exchange
- **Real estate:** direct or indirect investments in land and buildings
- **Commodities:** investments in physical products, such as precious and base metals (e.g., gold, copper), energy products (e.g., oil), and agricultural products that are typically consumed (e.g., corn, cattle, wheat) or used in the manufacture of goods (e.g., lumber, cotton, sugar)

Private equity, real estate, and commodities are all considered alternative because they represent an alternative to investing exclusively in "traditional" asset classes, such as debt and equity securities. Although alternative investments have gained prominence in the 21st century, they are not new; in fact, real estate and commodities are among the oldest types of investments.

As will be discussed in the next section, alternative investments are an opportunity to potentially enhance returns and obtain diversification benefits—recall from the Quantitative Concepts chapter that diversification is the practice of combining different types of assets or securities in a portfolio to reduce risk. The search for higher returns and lower risk explains why alternative investments are now an integral part of the portfolios of many investors who view private equity, real estate, and/or commodities as opportunities to deliver both.

2 WHY INVEST IN ALTERNATIVES?

The different types of alternative investments often look completely unrelated to each other. But they have potential common advantages: they may help enhance returns and reduce risk by providing diversification benefits. They also share similar limitations: typically, they are less regulated, transparent, liquid, and easier to value than debt and equity investments. Advantages and disadvantages of alternative investments are discussed further in Sections 2.1 and 2.2.

Exhibit 1 shows the results of a global survey of institutional investors regarding their holdings of different assets. As of March 2012, almost 100% of respondents invest in equity and debt. But 94% of them also hold some type of alternative investments. On average, 22.4% of the respondents' portfolios are invested in alternative investments, with the most popular types being private equity and private real estate.

Exhibit 1 Global Survey of Institutional Investors' Holdings

Type of Asset	Percentage of Respondents Holding This Type of Asset	Average Percentage of the Portfolio Invested in This Type of Asset
Equity	98%	41.0%
Fixed income (debt)	99	33.2
Cash	61	3.2
Alternatives (total)	94	22.4
Private equity	64	5.1
Private real estate	66	4.7
Public real estate	32	1.3
Commodities	22	1.0

Source: Based on data from Russell Research, "Russell Investment's 2012 Global Survey on Alternative Investing", (19 June 2012): http://www.russell.com/Public/pdfs/publication/communique_october_2012/global_survey_on_alternative_investing.pdf.

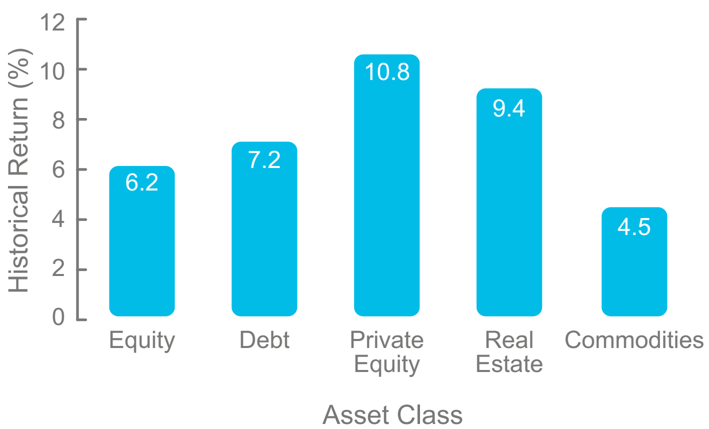
2.1 Advantages of Alternative Investments

Investors add alternative investments to their portfolios for two main reasons:

- to enhance returns and
- to reduce risk by obtaining diversification benefits.

Enhancing Returns. Exhibit 2 shows historical returns for various asset classes between 1990 and 2009. It indicates that over the 20-year period, investments in private equity and real estate have outperformed investments in equity and debt securities. However, you should not conclude from this exhibit that alternative investments always offer higher returns than other asset classes. During the global financial crisis that started in 2008, many investors suffered losses on their private equity and real estate investments and some of these losses were worse than those on traditional investments, such as publicly traded equity.

Exhibit 2 Historical Returns for Various Asset Classes between 1990 and 2009



Source: T. Duhon, G. Spentzos, and S. Stewart, "Introduction to Alternative Investments", in CFA Program, Level 1, Volume 6 (CFA Institute, 2012):177.

Reducing Risk. Investors rarely allocate all their money to one type of asset or security. Instead, they diversify their portfolios by investing in assets and securities that behave differently from each other. How investments behave relative to each other takes us back to the concept of correlation discussed in the Quantitative Concepts chapter. If two assets or securities do not have a correlation of +1 (that is, if they are less than perfectly positively correlated), then combining these two assets or securities in a portfolio provides diversification benefits and thus reduces the risk in the portfolio. In other words, the risk to the portfolio of including these two assets or securities is lower than the weighted sum of the risks of the two assets or securities. Because there is a relatively low correlation between different types of alternative investments and also between alternative investments and other asset classes, adding private equity, real estate, and commodities to portfolios helps investors reduce risk. As noted in the Quantitative Concepts chapter, during periods of financial crisis, returns on different investments may become more correlated and the benefits of diversification may be reduced.

2.2 Limitations of Alternative Investments

Although alternative investments have the potential to enhance returns and reduce risk, they also have limitations. Typically, alternative investments are

- less regulated and less transparent than traditional investments,
- illiquid, and
- difficult to value.

Because alternative investments are less regulated and less transparent than traditional investments, such as equity and debt securities, individual investors are less likely to invest in them. Institutional investors may view this as an opportunity to take advantage of market inefficiencies. This is discussed further in the Investment Management chapter.

In addition, most alternative investments are illiquid—that is, they are difficult to sell quickly without accepting a lower price. For example, it is much easier to sell shares of a public company listed on a stock exchange than shares in a private company, a piece of land, or a building. Some institutional investors, depending on their cash flow needs, may be willing and able to hold investments for long periods, so liquidity may be less important for them than for individuals or institutional investors that have liquidity constraints.

Alternative investments are also difficult to value because data availability to assess how much they are worth is limited. Purchases and sales of start-up companies, land, or buildings are infrequent, so valuation is challenging and is often based on an appraisal. An **appraisal** is an assessment or estimation of the value of an asset and is subject to certain assumptions, which may not always be realistic. For example, a property may be estimated to be worth £100,000 based on its location, its square footage, and the price per square foot paid in similar transactions. But if the property market slows down, the assumption about the price per square foot may prove overly optimistic and the value of the property could be worth less than estimated.

3 PRIVATE EQUITY

Let us revisit the example of the Canadian entrepreneur we first encountered in The Investment Industry: A Top-Down View chapter. When the entrepreneur set up her new business, she turned to her friends and neighbours for the money she needed. Five years later, her company was successful. To raise the additional capital the company required to support its growth plans, it could issue shares to the public via an initial public offering (IPO). But in between, the company probably needed more money to grow than the entrepreneur, her friends, neighbours, and banks were able or willing to provide, and it was not yet ready to go public. Who could have potentially financed such a young and not well-established company? As mentioned in the introduction, the answer is venture capitalists. The entrepreneur could have sold some of her company's shares to a private equity firm to get the additional capital necessary to grow her business.

Private equity firms invest in private companies that are not publicly traded on a stock exchange. Although people commonly refer to private "equity", investments include both equity and debt securities. Debt investments, however, are less common than equity investments.

3.1 Private Equity Strategies

Private equity encompasses several strategies that may help provide money to companies at different stages of their development. The most widely used strategies are venture capital, growth equity, buyouts, and distressed. Another private equity investment strategy, which is unrelated to the stage of a company's development, is called secondaries.

3.1.1 *Venture Capital*

As mentioned in the example provided in the introduction, **venture capital** is a private equity investment strategy that consists of financing the early stage of companies that have an innovative business idea. Venture capitalists frequently invest in "start-up" companies that exist merely as an idea or a business plan. The company may have only a few employees, have little or no revenue, and still be developing its product or business model. Entrepreneurs are often looking not only for capital to start their business but also for advice and expertise about how to establish and run their company.

Venture capital is considered the riskiest type of private equity investment strategy because many more companies fail than succeed. It can take many years before a company becomes successful, and most venture capital–funded companies have years of unprofitable activity before they reach the point of making money. So, venture capital investing requires patience. However, those companies that do succeed tend to greatly reward their investors.

3.1.2 *Growth Equity*

Growth equity is a private equity investment strategy that usually focuses on financing companies with proven business models, good customer bases, and positive cash flows or profits. These companies often have opportunities to grow by adding new production facilities or by making acquisitions, but they do not generate sufficient cash flows from their operations to support their growth plans. By providing additional money in return for equity of the company, growth equity investors help these companies expand and become more established.

Some growth equity investors specialise in helping companies prepare for an initial public offering. These investors provide additional money at a later stage of a company's development than venture capitalists or early-stage growth equity investors. As discussed in the Equity Securities chapter, additional equity dilutes existing shareholders' ownership because there are more investors sharing the company's cash flows. However, because the later-stage growth equity investors typically have expertise in organising initial public offerings, they may bring benefits that outweigh the disadvantages of dilution. An initial public offering, such as those of Microsoft, Google, and Facebook, is an opportunity for founders and existing shareholders to convert some or all of their investment in the company into cash. So, the late addition of equity investors that have successful track records in organising initial public offerings may be valuable for founders and existing shareholders.

3.1.3 *Buyouts*

Buyouts are a private equity investment strategy that consists of financing established companies that require money to restructure and facilitate a change of ownership. Buyout transactions sometimes involve making a publicly traded company private. For example, such companies as UK-based Alliance Boots or US-based Hertz and Hilton Hotels were once public companies, but they underwent buyouts and are now privately owned companies.

Buyouts for which the financing of the transaction involves a high proportion of debt are often called **leveraged buyouts** (LBOs)—recall from the Debt Securities chapter that financial leverage refers to the proportion of debt relative to equity in a company's capital structure. Because the high level of debt implies high interest payments and principal repayments, companies that undergo an LBO must be able to generate strong and sustainable cash flows. So, they are often well-established companies with good competitive positioning in their industry. Buyout investors often target companies that have recently underperformed but that offer opportunities to grow revenues and margins.

3.1.4 *Distressed*

When companies encounter financial troubles, they may be at risk of not being able to make full and timely payments of interest and/or principal. This risk, which is known as credit or default risk, was discussed in the Debt Securities chapter. **Distressed** investing focuses on purchasing the debt of troubled companies that may have defaulted or are on the brink of defaulting. Frequently, investments are made at a significant discount to par value—that is, the amount owed to the lenders at maturity. For example, an investor who purchases the debt of a troubled company may only offer the existing lenders 20% or 30% of the amount they are owed. If the company can survive and prosper, the value of its debt will increase and the investor will realise significant value. Distressed investing does not typically involve a cash flow to the company.

3.1.5 *Secondaries*

Another strategy that does not involve a cash flow to the company is secondaries. **Secondaries** are not based on a company's stage of development. This strategy involves buying or selling existing private equity investments. As discussed more thoroughly in the next section, private equity investments are usually organised in funds managed by partnerships. The life of a private equity fund is typically about 10 years, but it can be longer. It includes three or four years of investing followed by five to seven years of developing the investments and returning capital to those who invested in the private equity fund. Some private equity partnerships may not be able or willing to hold on to all of their investments, which could be venture capital, growth equity, buyouts, or distressed. So, a partnership may want to sell one or several of its investments to another private equity partnership in what is known as the secondary market. The purchases and sales between private equity partnerships are secondary transactions.

3.2 Structure and Mechanics of Private Equity Partnerships

As mentioned in the previous section, private equity investments are usually organised in funds managed by partnerships. A **private equity partnership** usually includes two types of partners:

- The **general partner** is typically a private equity firm that sets up the partnership. It is responsible for raising capital, finding suitable investments, and making decisions. General partners have unlimited personal liability for all the debts of the partnership—that is, general partners could lose more than their investment in the partnership because if necessary, their personal assets could be used to pay the partnership's debts.
- **Limited partners** are investors who contribute capital to the partnership. They are not involved in the selection and management of the investments. Limited partners have limited personal liability—that is, limited partners cannot lose more than the amount of capital they contributed to the partnership.

A private equity firm may create different private equity funds for different types of investments. The investments are usually not managed by the general partner itself, but by professional fund managers who are hired by the general partner. Each private equity fund may have its own fund manager who is responsible for the day-to-day management of the investments in the funds.

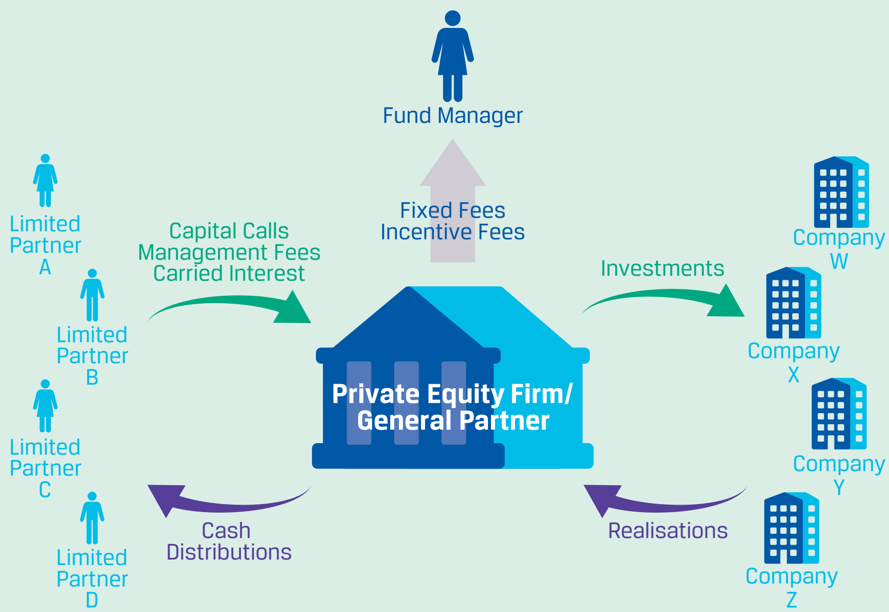
The private equity firm makes money through two mechanisms:

- **management fees**, which are the fees that limited partners must pay general partners to compensate them for managing the private equity investments. Management fees are typically set as a percentage of the amount the limited partners have committed rather than the amount that has been invested. Additionally, limited partners must pay management fees even if an investment is underperforming and must continue paying management fees even if an investment has failed.
- **carried interest**, which is a share of the profit on a private equity investment. It is a form of incentive fee that general partners deduct before distributing to the limited partners the profit made on investments. Carried interest is designed to ensure that general partners' interests are aligned with limited partners' interests.

Investments in private equity partnerships tend to be illiquid. That is, once the limited partners have committed capital to the partnership, it is difficult, if not impossible, for them to exit the investment before the end of the commitment term.

Example 1 illustrates the structure and mechanics of a private equity partnership.

EXAMPLE 1. STRUCTURE AND MECHANICS OF A PRIVATE EQUITY PARTNERSHIP



Assume that a private equity firm has created a $4 million private equity fund to invest in start-up companies. As discussed in Section 3.1.1, this private equity investment strategy is called venture capital. The private equity firm is the general partner and its first task is to raise capital from investors. Suppose that it identifies four investors who are willing and able to contribute $1 million each. These investors are the limited partners—A, B, C, and D in the figure. The limited partners do not transfer $1 million each to the general private equity firm immediately; initially, they only *agree* to invest $1 million each over the commitment term of the private equity fund's life, say 10 years.

When the private equity firm has secured the $4 million, it can start investing. Assume that it finds a suitable investment in Company W for $400,000. The private equity firm contacts the limited partners and makes a capital call of $100,000 per limited partner—capital calls often happen on short notice. Limited partners A, B, C, and D transfer $100,000 each to the private equity firm, which invests the $400,000 in Company W. A few months later, the private equity firm identifies another suitable investment in Company X for $600,000. It makes another capital call, this time of $150,000 per limited partner. This process may continue for several years until the private equity firm has invested the $4 million.

As shown in the figure, the private equity firm makes investments in four companies. These investments are typically managed by a professional fund manager who charges the private equity firm fees for his or her services, usually a combination of a fixed fee plus an incentive fee. In turn, the private equity firm charges the limited partners management fees to cover the fund manager fees and other administrative fees. For example, assume that the annual management fee is 1.5% of the committed capital. So, each limited partner who committed $1 million must pay the private equity firm an annual management fee of $15,000 regardless of how much capital the private equity firm has already invested. Thus, in the early years of the private equity fund's life, the limited partners may be paying management fees on amounts that have not actually been invested.

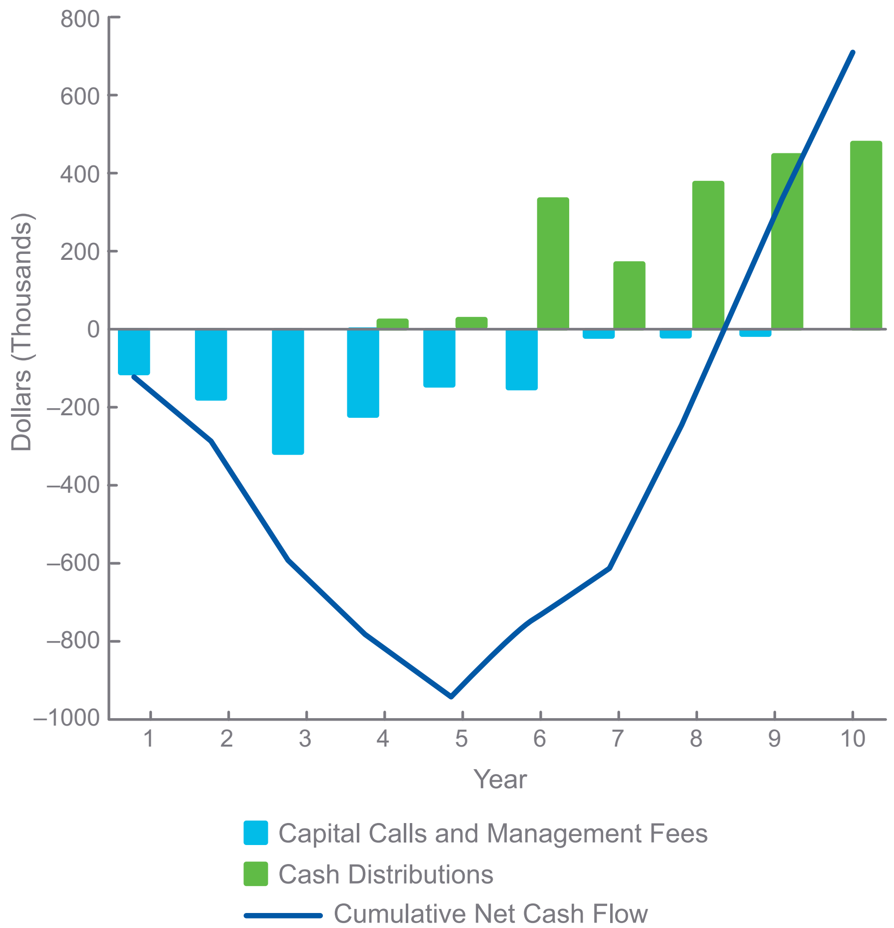
After several years, assume that the private equity firm sells its investment in Company W for $1 million. It can now distribute capital plus profit to the limited partners. Before it does so, it deducts a share of the profit, which is carried interest. Recall that carried interest is a form of incentive fee that ensures that the private equity firm and the fund manager make the best possible decisions on behalf of the limited partners. Suppose that carried interest is 15%. The profit on the investment in Company W is $600,000—that is, the difference between the selling price of $1,000,000 and the initial investment of $400,000. So the private equity firm and the fund manager can keep $90,000 (15% of $600,000) in carried interest, which means that the amount of profit to be split between the limited partners is $510,000 ($600,000 – $90,000). Thus, each limited partner receives a cash distribution of $227,500—that is, $100,000 of capital plus $127,500 of profit, which represents a return on investment of 128% [($227,500 – $100,000)/$100,000], *ignoring management fees*.

This return on investment is high, but remember that venture capital is risky. Assume that Company X encounters financial trouble and that the private equity firm wants to sell its ownership interest in Company X. Another private equity firm is willing to buy this ownership interest but for only $100,000; recall from Section 3.1.5 that such a transaction is called a secondary transaction. The investment in Company X turns out to be a loss of $500,000 (the selling price of $100,000 minus the initial investment of $600,000) so there is no carried interest. Each limited partner receives a cash distribution of $25,000, which represents a return on investment of –83% [($25,000 – $150,000)/$150,000], ignoring management fees. As mentioned earlier, limited partners are not exempt from paying management fees on their total commitment, including the $150,000 contribution to Company X, even if the investment is underperforming or fails.

As illustrated in Example 1, each limited partner's capital of $1 million is drawn down gradually over the commitment term of the private equity fund's life. In the early years of the fund, the limited partners face negative cash flows because they receive several capital calls to fund investments and they must pay management fees on the committed capital. Later on, when investments pay dividends or are sold, the private equity firm makes cash distributions to the limited partners. When cash distributions net of carried interest exceed capital calls and management fees, the limited partners experience positive cash flows.

A typical pattern of cash flows for a limited partner is illustrated in Exhibit 3. This illustration reflects a hypothetical investment of $1 million in a private equity fund with a life of 10 years. It is assumed that the private equity firm makes investments in 10 companies between Year 1 and Year 6, these investments start paying dividends in Year 4, and they get sold between Year 6 and Year 10. The blue bars show the sum of the capital calls and management fees, which are assumed to be 1.5% of the committed capital. The green bars reflect the cash distributions, ignoring carried interest. The line is the cumulative net cash flow to the limited partner—that is, the sum of the cash distributions minus the sum of the capital calls and management fees. This line is known as a **J curve** because its shape resembles the letter J.

Exhibit 3 The J Curve



4 REAL ESTATE

Real estate investments take different forms. For many people, it is the purchase of their home, which may be a significant portion of their net worth. Houses, apartments, and other residential properties that are owner occupied are indeed the foundation of many individuals' financial plans. However, although considered part of their financial plan, most residential real estate is not included in individuals' investment portfolios.

Generally, residential real estate transactions involve owner-occupiers (that is, people who live in the home they own), and are made for personal reasons as opposed to purely investment-related reasons. Individuals or groups of individuals may invest in residential real estate for investment-related purposes, such as renting out holiday homes.

Many investors focus their real estate investments on what is commonly referred to as **commercial real estate**—that is, income-generating real estate. As illustrated in Exhibit 4, the majority of commercial real estate in terms of value is concentrated in a small number of countries.

Exhibit 4 Country Share of Commercial Real Estate

Country	Country Share
United States	25.4%
Japan	10.1
China	7.0
Germany	6.1
United Kingdom	5.2
France	4.7
Italy	3.7
Brazil	3.3
Canada	2.9
Spain	2.6
Australia	2.5
Russia	2.3
South Korea	1.8
Netherlands	1.4
Mexico	1.4
India	1.3
Switzerland	1.1
Remaining Countries	17.2

Source: Prudential Real Estate Investors, "A Bird's Eye View of Global Real Estate Markets: 2012 Update", (2012): www.prei.prudential.com/view/page/pimcenter/6815.

4.1 Commercial Real Estate Segments

Commercial real estate is made up of many segments, which all have their own characteristics, advantages, and limitations. The major segments are land, offices, multifamily residential dwellings, retail and industrial properties, and hotels. The following sections describe each in turn.

4.1.1 *Land*

Undeveloped, or raw, land can be highly speculative because there are no cash inflows from tenants or occupants, only cash outflows in the form of real estate taxes and other costs of holding the land. As improvements are made, such as obtaining building permits and installing roads, utilities, and other services, the land becomes more developed and its value rises based on a projected stream of future cash flows. Investing in undeveloped land is risky because values can decrease rapidly when housing demand falls. As an example, CalPERS, one of the largest US pension plans representing public employees in California, had a $970 million investment in 15,000 acres of undeveloped land outside Los Angeles lose more than 90% of its value in the aftermath of the 2008 global financial crisis.[1]

4.1.2 *Offices*

Offices represent one of the largest segments of commercial real estate. They are usually owned by real estate investment companies that lease space to tenants in varying terms, from short-term monthly leases to longer multiyear leases. Because tenants are responsible for paying their leases whether they occupy the space or not, the income associated with office rents is relatively predictable over the life of the lease. In addition, office rents typically adjust for inflation, which makes offices an attractive investment for those seeking to protect their real estate income against inflation.

4.1.3 *Multifamily Residential Dwellings*

Also known as apartments or flats, multifamily residential dwellings represent a significant portion of the investable commercial real estate market. They are commercial properties that contain multiple units within a single property or development. These units are rented to individuals or families. Most leases tend to be for periods of one year or less, so the multifamily residential dwellings segment is sensitive to supply and demand dynamics in the local marketplace.

4.1.4 *Retail Properties*

The retail segment includes such assets as shopping malls, commercial shopping centres, and other buildings designated for retail purposes. The owner, or investor, leases the space to a retailer with lease terms varying from weeks to years.

4.1.5 *Industrial Properties*

The industrial segment includes such properties as manufacturing facilities, research and development space, and warehouse/distribution space. Again, lease terms vary in length.

4.1.6 *Hotels*

Hotels include branded short-term stay facilities and longer-stay facilities catering to contract workers in remote locations, as well as boutique and independent facilities.

4.1.7 *Other Segments*

Depending on the country, there may be other commercial real estate segments. For example, in many developed markets, senior housing designed for people aged 55+ and student housing for post-secondary education have both received considerable investments.

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1 Michael Corkery, “Calpers Confronts Huge Housing Losses”, *Wall Street Journal* (13 November 2008).

4.2 How To Invest in Real Estate?

Investors who have sufficient funds can buy real estate directly. Otherwise, they can gain exposure to real estate through either the private or public market.

4.2.1 *Private Market Investments*

In the private market, the primary way of investing in real estate is through real estate limited partnerships and real estate equity funds.

Real estate limited partnerships are partnerships that specialise in real estate investments. Their structure and mechanics are similar to those of the private equity partnerships discussed in Section 3.2. The partnership is often set by a real estate development firm that becomes the general partner. The general partner then raises capital from investors, who become the real estate limited partnership's limited partners. The capital raised is invested in real estate projects. Real estate projects take different forms, such as the construction of an office block or an apartment complex. If the general partner is a real estate development firm, it may also manage the real estate projects. As with private equity partnerships, the limited partners in a real estate limited partnership must pay the general partner management fees on the committed capital and carried interest on the profit made on the real estate assets.

Similar to investments in private equity partnerships, investments in real estate limited partnerships are illiquid. In addition, the limited partners may face years of negative cash flows because the general partner may not make cash distributions until the real estate assets—the office block or the apartment complex—are sold.

Real estate equity funds typically hold investments in hundreds of commercial properties. These properties are diversified by geography, property type, and vintage year (that is, the year the purchase was made). Real estate equity funds are often open-end funds, meaning that they issue or redeem shares when investors want to buy or sell—open-end mutual funds are discussed in the Investment Vehicles chapter. Redemptions either take place at regular intervals, such as quarterly, or on demand. They are made out of the real estate equity funds' cash flows, such as the income received from rents and the sale of properties. So, real estate equity funds are, in theory, more liquid than real estate limited partnerships. However, there is no guarantee that the cash flows will be sufficient to meet investors' redemption requests.

4.2.2 *Public Market Investments*

In contrast to real estate limited partnerships and real estate equity funds that are private investments, **real estate investment trusts (REITs)** are investments through public markets. Like other equity securities, the shares of REITs are traded on exchanges, which makes them more liquid than real estate limited partnerships and real estate equity funds. REITs are companies that mainly own, and in most cases operate, income-producing real estate. Most REITs are involved at all stages of the real estate process, from the development of land to the construction of buildings and the management of the properties.

5 COMMODITIES

Commodities, such as precious and base metals, energy products, and agricultural products, tend to rise in price with inflation. So, they can provide inflation protection in a portfolio.

There are several ways for investors to gain exposure to commodities. They can buy

- the physical commodity,
- shares of natural resources or commodity-related companies, or
- commodity derivatives.

Purchase of the physical commodity. Theoretically, an investor could buy a barrel of oil or a head of cattle or a bushel of wheat. But the transportation and storage difficulties associated with purchasing a physical commodity means that it is rare for investors to gain access to commodities this way.

Purchase of shares of natural resources or commodity-related companies. Investors can buy shares of companies that have a major portion of their operations in the exploration, recovery, production, and processing of commodities. For example, an investor who wants exposure to oil may buy shares in a major oil company, such as BP, Eni, ExxonMobil, Petrobras, PetroChina, Statoil, or Total.

Purchase of commodity derivatives. As mentioned in the Derivatives chapter, investors can buy derivatives in which the underlying asset is a commodity or a commodity index. Typical commodity derivatives are forwards, futures, options, and swaps. Recall that futures and some types of options are traded on exchanges, whereas forwards, swaps, and other types of options are privately negotiated agreements.

SUMMARY

Many investors allocate a portion of their portfolios to alternative investments, such as private equity, real estate, and commodities, in order to potentially enhance returns and reduce risk by taking advantage of the diversification benefits.

The following points recap what you have learned in this chapter about alternative investments:

- Alternative investments are an alternative to traditional investments, such as debt and equity securities.

- Alternative investments are diverse and include private equity, real estate, and commodities.
- Investors add alternative investments to their portfolios to potentially help enhance returns and reduce risk by obtaining diversification benefits. Diversification benefits occur because there is a relatively low correlation between different types of alternative investments and also between alternative investments and other asset classes. The benefits of diversification may be reduced in periods of financial crisis when returns on different investments may become more correlated.
- Alternative investments have limitations. Typically, they are less regulated, transparent, liquid, and easy to value than traditional investments.
- Private equity is often categorised according to the stage of development of the companies it invests in. Categories include venture capital, growth equity, buyouts, and distressed investing. Another category, which is unrelated to the stage of a company's development, is called secondaries.
- Private equity investments are usually organised in funds managed by partnerships. Limited partners commit capital and the general partner, usually a private equity firm, makes investment decisions. Limited partners pay the general partners annual management fees based on the amount they have committed. The general partner also charges limited partners carried interest, a form of incentive fee equal to a share of the profit made on the private equity fund's investments.
- Real estate includes both residential and commercial properties, the latter representing a larger portion of the investable universe.
- Commercial real estate segments include land, offices, multifamily residential dwellings, retail and industrial properties, and hotels.
- Investors can buy real estate directly or gain exposure to real estate through the private market via real estate limited partnerships and real estate equity funds, or through the public market via real estate investment trusts.
- To gain exposure to commodities, investors can buy the physical commodity, shares of natural resources or commodity-related companies, or commodity derivatives.

CHAPTER REVIEW QUESTIONS

1 Alternative investments *most likely*:

A are highly liquid.

B exhibit low correlations with equity and debt securities.

C offer greater transparency than investments in equity and debt securities.

2 Which type of private equity strategy is *most likely* used to finance a start-up company?

A Buyout

B Growth equity

C Venture capital

3 A private equity fund is *most likely*:

A funded by investors who are limited partners.

B operated by a fund manager who is a limited partner.

C set up by a private equity firm who is a limited partner.

4 The private equity firm receives management fees:

A based on committed capital.

B only if the private equity fund is profitable.

C based on profits generated by the private equity fund's investments.

5 Which of the following real estate segments represents the *most* speculative investment?

A Offices

B Undeveloped land

C Land with utilities and building permits

6 A private market investment vehicle holding hundreds of commercial properties that are diversified by geography, property type, and vintage year is *best* described as a real estate:

A equity fund.

B investment trust.

C limited partnership.

7 Which of the following alternative investments is the *least* liquid?:

A An investment in a private equity fund

B An investment in a real estate investment trust

C An investment in a commodity futures contract

ANSWERS

1 B is correct. There is a relatively low correlation between alternative investments and equity and debt securities. Thus, alternative investments provide diversification benefits. A is incorrect because most alternative investments are illiquid—that is, it is difficult to sell them quickly without accepting a lower price. C is incorrect because many alternative investments are less transparent than investments in equity and debt securities.

2 C is correct. The venture capital strategy invests in start-up companies that exist merely as an idea or a business plan. The company may have only a few employees, have little to no revenue, and may still be developing its product or business model. A is incorrect because buyouts are investments in established companies that require money to restructure and facilitate a change of ownership. B is incorrect because the growth equity strategy usually invests in existing companies with proven business models, good customer bases, and positive cash flow or profits.

3 A is correct. A private equity fund is typically funded by investors who are limited partners; these investors face limited liability, which means that they cannot lose more than the amount of capital they contributed to the private equity fund. B is incorrect because a private equity fund is typically operated by a fund manager but the fund manager is not a limited partner. C is incorrect because a private equity fund is set up by a private equity firm but the private equity firm is a general rather than limited partner.

4 A is correct. The private equity firm receives management fees based on the amount of committed capital. B is incorrect because the private equity firm receives management fees even if the private equity fund is not profitable. C is incorrect because carried interest is the fee that the private equity firm receives based on profits generated by the private equity fund's investments.

5 B is correct. Undeveloped (raw) land can be highly speculative. It has no cash flow streams from tenants or occupants and instead has only cash outflows in the form of real estate taxes and other costs of holding the land. The success of the investment depends on developing the land at a profit or on the land appreciating in value. A is incorrect because offices are less speculative than land. Offices are typically leased, and office rents provide a stream of future cash flows. C is incorrect because land with utilities and building permits approaches something having a commercial value based on a projected stream of future cash flows.

6 A is correct. A real estate equity fund is a private market investment vehicle that holds hundreds of commercial properties that are diversified by geography, property type, and vintage year (year the purchase was made). B is incorrect because a real estate investment trust (REIT) is an investment through public rather than private markets. A REIT is a company that mainly owns, and in most cases operates, income-producing real estate. C is incorrect because a real

estate limited partnership is a private market investment vehicle that typically focuses on a smaller number of commercial properties, such as the construction of a housing subdivision or an apartment complex.

7 A is correct. Investments in private equity funds are private market investments. Thus, they are illiquid investments. B and C are incorrect because real estate investment trusts and commodity futures contracts are both traded on public exchanges. Thus, they are more liquid investments.