

# STUDY SESSION

# 14

## Alternative Investments

**T**his study session focuses on the following categories of alternative investments: real estate, private equity, and commodities. Real estate investments, both private and public, are described, and methods for analysis and evaluation are presented. Private equity, including venture capital and leveraged buyouts, is examined from the perspectives of a private equity firm evaluating equity portfolio investments and an investor considering participation in a private equity fund. The study session concludes with a discussion of commodities and commodity futures, including scenarios of contango and backwardation for futures prices.

### READING ASSIGNMENTS

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| <b>Reading 35</b> | Real Estate Investments<br>by Steven G. Bloom, CFA, Jeffrey D. Fisher, PhD, David Kruth, CFA,<br>Bryan D. MacGregor, PhD, MRICS, MRTPI, Ian Rossa O'Reilly,<br>CFA, and Anthony Paolone, CFA |
| <b>Reading 36</b> | Private Equity Investments<br>by Yves Courtois, CMT, MRICS, CFA, and Tim Jenkinson, PhD  |
| <b>Reading 37</b> | Introduction to Commodities and Commodity Derivatives<br>by David Burkart, CFA, and James Alan Finnegan, CAIA, RMA,<br>CFA   |

**LEARNING OUTCOMES****READING 35. REAL ESTATE INVESTMENTS**

The candidate should be able to:

- a** compare the characteristics, classifications, principal risks, and basic forms of public and private real estate investments;
- b** explain portfolio roles and economic value determinants of real estate investments;
- c** discuss commercial property types, including their distinctive investment characteristics;
- d** explain the due diligence process for both private and public equity real estate investments;
- e** discuss real estate investment indexes, including their construction and potential biases;
- f** discuss the income, cost, and sales comparison approaches to valuing real estate properties;
- g** compare the direct capitalization and discounted cash flow valuation methods;
- h** estimate and interpret the inputs (for example, net operating income, capitalization rate, and discount rate) to the direct capitalization and discounted cash flow valuation methods;
- i** calculate the value of a property using the direct capitalization and discounted cash flow valuation methods;
- j** calculate and interpret financial ratios used to analyze and evaluate private real estate investments;
- k** discuss types of REITs;
- l** justify the use of net asset value per share (NAVPS) in REIT valuation and estimate NAVPS based on forecasted cash net operating income;
- m** describe the use of funds from operations (FFO) and adjusted funds from operations (AFFO) in REIT valuation;
- n** calculate and interpret the value of a REIT share using the net asset value, relative value (price-to-FFO and price-to-AFFO), and discounted cash flow approaches; and
- o** explain advantages and disadvantages of investing in real estate through publicly traded securities compared to private vehicles.

**READING 36. PRIVATE EQUITY INVESTMENTS**

The candidate should be able to:

- a** explain sources of value creation in private equity;
- b** explain how private equity firms align their interests with those of the managers of portfolio companies;
- c** compare and contrast characteristics of buyout and venture capital investments;
- d** interpret LBO model and VC method output;
- e** explain alternative exit routes in private equity and their impact on value;
- f** explain risks and costs of investing in private equity;
- g** explain private equity fund structures, terms, due diligence, and valuation in the context of an analysis of private equity fund returns;

- h** interpret and compare financial performance of private equity funds from the perspective of an investor;
- i** calculate management fees, carried interest, net asset value, distributed to paid in (DPI), residual value to paid in (RVPI), and total value to paid in (TVPI) of a private equity fund.

## **READING 37. INTRODUCTION TO COMMODITIES AND COMMODITY DERIVATIVES**

The candidate should be able to:

- a** compare characteristics of commodity sectors;
- b** compare the life cycle of commodity sectors from production through trading or consumption;
- c** contrast the valuation of commodities with the valuation of equities and bonds;
- d** describe types of participants in commodity futures markets;
- e** analyze the relationship between spot prices and futures prices in markets in contango and markets in backwardation;
- f** compare theories of commodity futures returns;
- g** describe, calculate, and interpret the components of total return for a fully collateralized commodity futures contract;
- h** contrast roll return in markets in contango and markets in backwardation;
- i** describe how commodity swaps are used to obtain or modify exposure to commodities;
- j** describe how the construction of commodity indexes affects index returns.