Alternative Investments

This 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

LEARNING OUTCOMES

READING 42. PRIVATE REAL ESTATE INVESTMENTS

The candidate should be able to:

a classify and describe basic forms of real estate investments;

b describe the characteristics, the classification, and basic segments of real estate;

c explain the role in a portfolio, economic value determinants, investment characteristics, and principal risks of private real estate;

d describe commercial property types, including their distinctive investment characteristics;

e compare the income, cost, and sales comparison approaches to valuing real estate properties;

f 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;

g calculate the value of a property using the direct capitalization and discounted cash flow valuation methods;

h compare the direct capitalization and discounted cash flow valuation methods;

i calculate the value of a property using the cost and sales comparison approaches;

j describe due diligence in private equity real estate investment;

k discuss private equity real estate investment indexes, including their construction and potential biases;

l explain the role in a portfolio, the major economic value determinants, investment characteristics, principal risks, and due diligence of private real estate debt investment;

m calculate and interpret financial ratios used to analyze and evaluate private real estate investments.

READING 43. PUBLICLY TRADED REAL ESTATE SECURITIES

The candidate should be able to:

a describe types of publicly traded real estate securities;

b explain advantages and disadvantages of investing in real estate through publicly traded securities;

c explain economic value determinants, investment characteristics, principal risks, and due diligence considerations for real estate investment trust (REIT) shares;

d describe types of REITs;

e justify the use of net asset value per share (NAVPS) in REIT valuation and estimate NAVPS based on forecasted cash net operating income;

f describe the use of funds from operations (FFO) and adjusted funds from operations (AFFO) in REIT valuation;

g compare the net asset value, relative value (price-to-FFO and price-to-AFFO), and discounted cash flow approaches to REIT valuation;

h calculate the value of a REIT share using net asset value, price-to-FFO and price-to-AFFO, and discounted cash flow approaches.

READING 44. PRIVATE EQUITY VALUATION

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 distinguish between the characteristics of buyout and venture capital investments;

d describe valuation issues in buyout and venture capital transactions;

e explain alternative exit routes in private equity and their impact on value;

f explain private equity fund structures, terms, valuation, and due diligence in the context of an analysis of private equity fund returns;

g explain risks and costs of investing in private equity;

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;

A Note on Valuation of Venture Capital Deals: (Appendix 44)

j calculate pre-money valuation, post-money valuation, ownership fraction, and price per share applying the venture capital method 1) with single and multiple financing rounds and 2) in terms of IRR;

k demonstrate alternative methods to account for risk in venture capital.

READING 45. COMMODITIES AND COMMODITY DERIVATIVES: AN INTRODUCTION

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 future 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.