

## STUDY SESSION

# 16

## Portfolio Management (2)

**T**his study session begins by identifying and explaining the ties between the real economy and financial markets, including effects on asset values. The “fundamental pricing equation” is presented as a basic pricing framework for financial instruments. The asset prices of risk-free debt, risky debt, public equities, and real estate are shown to be affected via the business cycle’s impact on risk-free rates, the yield curve, inflation, and risk premiums. Analysis of active portfolio management follows, including a discussion of active risk and active return (Sharpe, information ratios). The fundamental law of active management is presented along with several investment applications. The session concludes with an overview of how securities trading supports the investment process. This reading discusses direct and indirect costs of trading, developments in electronic trading and the effects on transaction costs and market fragmentation, and the risks posed by electronic trading and how regulators control them.

### READING ASSIGNMENTS

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|-------------------|--|
| <b>Reading 42</b> | Economics and Investment Markets<br>by Andrew Clare, PhD, and Thomas F. Cosimano, PhD  |
| <b>Reading 43</b> | Analysis of Active Portfolio Management<br>by Roger G. Clarke, PhD, Harindra de Silva, PhD, CFA, and<br>Steven Thorley, PhD, CFA |
| <b>Reading 44</b> | Trading Costs and Electronic Markets<br>by Larry Harris, PhD, CFA  |

**LEARNING OUTCOMES****READING 42. ECONOMICS AND INVESTMENT MARKETS**

The candidate should be able to:

- a** explain the notion that to affect market values, economic factors must affect one or more of the following: 1) default-free interest rates across maturities, 2) the timing and/or magnitude of expected cash flows, and 3) risk premiums;
- b** explain the role of expectations and changes in expectations in market valuation;
- c** explain the relationship between the long-term growth rate of the economy, the volatility of the growth rate, and the average level of real short-term interest rates;
- d** explain how the phase of the business cycle affects policy and short-term interest rates, the slope of the term structure of interest rates, and the relative performance of bonds of differing maturities;
- e** describe the factors that affect yield spreads between non-inflation-adjusted and inflation-indexed bonds;
- f** explain how the phase of the business cycle affects credit spreads and the performance of credit-sensitive fixed-income instruments;
- g** explain how the characteristics of the markets for a company's products affect the company's credit quality;
- h** explain how the phase of the business cycle affects short-term and long-term earnings growth expectations;
- i** explain the relationship between the consumption hedging properties of equity and the equity risk premium;
- j** describe cyclical effects on valuation multiples;
- k** describe how economic analysis is used in sector rotation strategies;
- l** describe the economic factors affecting investment in commercial real estate.

**READING 43. ANALYSIS OF ACTIVE PORTFOLIO MANAGEMENT**

The candidate should be able to:

- a** describe how value added by active management is measured;
- b** calculate and interpret the information ratio (*ex post* and *ex ante*) and contrast it to the Sharpe ratio;
- c** describe and interpret the fundamental law of active portfolio management, including its component terms—transfer coefficient, information coefficient, breadth, and active risk (aggressiveness);
- d** explain how the information ratio may be useful in investment manager selection and choosing the level of active portfolio risk;
- e** compare active management strategies, including market timing and security selection, and evaluate strategy changes in terms of the fundamental law of active management;
- f** describe the practical strengths and limitations of the fundamental law of active management.

**READING 44. TRADING COSTS AND ELECTRONIC MARKETS**

The candidate should be able to:

- a** explain the components of execution costs, including explicit and implicit costs;
- b** calculate and interpret effective spreads and VWAP transaction cost estimates;
- c** describe the implementation shortfall approach to transaction cost measurement;
- d** describe factors driving the development of electronic trading systems;
- e** describe market fragmentation;
- f** identify and contrast the types of electronic traders;
- g** describe characteristics and uses of electronic trading systems;
- h** describe comparative advantages of low-latency traders;
- i** describe the risks associated with electronic trading and how regulators mitigate them;
- j** describe abusive trading practices that real-time surveillance of markets may detect.