

# STUDY SESSION

# 14

## Risk Management

**E**ffective risk management identifies, assesses, and controls numerous sources of risk in an effort to maintain an appropriate balance between the expected rewards and potentially negative outcomes associated with risks incurred. With the increasingly complex nature of investment management firms and investment portfolios, sophisticated risk management techniques have been developed to provide analysts with the necessary tools to properly measure and manage various risks.

This study session presents a framework for risk management, focusing on the concepts and tools for measuring and managing market risk and credit risk.

### READING ASSIGNMENTS

**Reading 27** Risk Management  
by Don M. Chance, PhD, CFA, Kenneth Grant, and John R. Marsland, CFA

### LEARNING OUTCOMES

#### READING 27. RISK MANAGEMENT

The candidate should be able to:

- a** discuss features of the risk management process, risk governance, risk reduction, and an enterprise risk management system;
- b** evaluate strengths and weaknesses of a company's risk management process;
- c** describe steps in an effective enterprise risk management system;
- d** evaluate a company's or a portfolio's exposures to financial and nonfinancial risk factors;

- e** calculate and interpret value at risk (VaR) and explain its role in measuring overall and individual position market risk;
- f** compare the analytical (variance–covariance), historical, and Monte Carlo methods for estimating VaR and discuss the advantages and disadvantages of each;
- g** discuss advantages and limitations of VaR and its extensions, including cash flow at risk, earnings at risk, and tail value at risk;
- h** compare alternative types of stress testing and discuss advantages and disadvantages of each;
- i** evaluate the credit risk of an investment position, including forward contract, swap, and option positions;
- j** demonstrate the use of risk budgeting, position limits, and other methods for managing market risk;
- k** demonstrate the use of exposure limits, marking to market, collateral, netting arrangements, credit standards, and credit derivatives to manage credit risk;
- l** discuss the Sharpe ratio, risk-adjusted return on capital, return over maximum drawdown, and the Sortino ratio as measures of risk-adjusted performance;
- m** demonstrate the use of VaR and stress testing in setting capital requirements.