

STUDY SESSION

12

Portfolio Management

This study session introduces the concept of a portfolio approach to investments. The needs of individual and institutional investors are each examined, along with the range of available investment solutions. The three main steps in the portfolio management process (planning, execution, and feedback) are outlined. A discussion of risk management, including the various types and measures of risk, follows and a risk management framework is provided. Common portfolio risk and return measures and the introduction of modern portfolio theory—a quantitative framework for asset pricing and portfolio selection—come next. The session ends with coverage of the portfolio planning and construction process, including the development of an investment policy statement.

READING ASSIGNMENTS

Reading 39	Portfolio Management: An Overview by Robert M. Conroy, DBA, CFA, and Alistair Byrne, PhD, CFA
Reading 40	Risk Management: An Introduction by Don M. Chance, PhD, CFA, and Michael E. Edleson, PhD, CFA
Reading 41	Portfolio Risk and Return: Part I by Vijay Singal, CFA
Reading 42	Portfolio Risk and Return: Part II by Vijay Singal, CFA
Reading 44	Basics of Portfolio Planning and Construction by Alistair Byrne, PhD, CFA, and Frank E. Smudde, CFA

LEARNING OUTCOMES**READING 39. PORTFOLIO MANAGEMENT: AN OVERVIEW**

The candidate should be able to:

- a** describe the portfolio approach to investing;
- b** describe types of investors and distinctive characteristics and needs of each;
- c** describe defined contribution and defined benefit pension plans;
- d** describe the steps in the portfolio management process;
- e** describe mutual funds and compare them with other pooled investment products.

READING 40. RISK MANAGEMENT: AN INTRODUCTION

The candidate should be able to:

- a** define risk management;
- b** describe features of a risk management framework;
- c** define risk governance and describe elements of effective risk governance;
- d** explain how risk tolerance affects risk management;
- e** describe risk budgeting and its role in risk governance;
- f** identify financial and non-financial sources of risk and describe how they may interact;
- g** describe methods for measuring and modifying risk exposures and factors to consider in choosing among the methods.

READING 41. PORTFOLIO RISK AND RETURN: PART I

The candidate should be able to:

- a** calculate and interpret major return measures and describe their appropriate uses;
- b** describe characteristics of the major asset classes that investors consider in forming portfolios;
- c** calculate and interpret the mean, variance, and covariance (or correlation) of asset returns based on historical data;
- d** explain risk aversion and its implications for portfolio selection;
- e** calculate and interpret portfolio standard deviation;
- f** describe the effect on a portfolio's risk of investing in assets that are less than perfectly correlated;
- g** describe and interpret the minimum-variance and efficient frontiers of risky assets and the global minimum-variance portfolio;
- h** explain the selection of an optimal portfolio, given an investor's utility (or risk aversion) and the capital allocation line.

READING 42. PORTFOLIO RISK AND RETURN: PART II

The candidate should be able to:

- a** describe the implications of combining a risk-free asset with a portfolio of risky assets;
- b** explain the capital allocation line (CAL) and the capital market line (CML);
- c** explain systematic and nonsystematic risk, including why an investor should not expect to receive additional return for bearing nonsystematic risk;
- d** explain return generating models (including the market model) and their uses;
- e** calculate and interpret beta;
- f** explain the capital asset pricing model (CAPM), including its assumptions, and the security market line (SML);
- g** calculate and interpret the expected return of an asset using the CAPM;
- h** describe and demonstrate applications of the CAPM and the SML;
- i** calculate and interpret the Sharpe ratio, Treynor ratio, M^2 , and Jensen's alpha.

READING 43. BASICS OF PORTFOLIO PLANNING AND CONSTRUCTION

The candidate should be able to:

- a** describe the reasons for a written investment policy statement (IPS);
- b** describe the major components of an IPS;
- c** describe risk and return objectives and how they may be developed for a client;
- d** distinguish between the willingness and the ability (capacity) to take risk in analyzing an investor's financial risk tolerance;
- e** describe the investment constraints of liquidity, time horizon, tax concerns, legal and regulatory factors, and unique circumstances and their implications for the choice of portfolio assets;
- f** explain the specification of asset classes in relation to asset allocation;
- g** describe the principles of portfolio construction and the role of asset allocation in relation to the IPS.