Ethical and Professional Standards

LEARNING OUTCOMES

CFA Institute Code of Ethics and Standards of Professional Conduct

The candidate should be able to:

- □ explain the relationship between ethics and laws and regulations
- □ state and explain the provisions of the CFA Institute Code of Ethics and Standards of Professional Conduct
- □ determine potential violations of the CFA Institute Code of Ethics and Standards of Professional Conduct and select appropriate preventive or corrective actions

Performance Measurement

LEARNING OUTCOMES

Topics in Return Measurement

The candidate should be able to:

- □ calculate and interpret rates of return of long–short, short extension, and market-neutral investment portfolios
- □ define economic (notional) exposure and notional return
- □ describe the notional market value approach to calculating returns to portfolios including forwards, futures, swaps, or options
- □ determine the effects on portfolio return of specified positions in forwards, futures, swaps, and options
- □ calculate and interpret economic exposures and notional returns of portfolios including forwards, futures, swaps, or options
- □ calculate and interpret the returns to unhedged and partially hedged multicurrency portfolios
- □ describe the problem of zero or near-zero market value denominators (e.g., in currency overlay portfolios)

Topics in Data Integrity

The candidate should be able to:

- □ explain common causes of performance discrepancies between the investment manager and the custodian
- □ explain common causes of performance discrepancies between NAV-based performance and end-of-day time-weighted performance
- □ describe best practices for maintaining composite data in order to ensure the composite provides a reliable representation of the investment strategy

Performance Attribution

LEARNING OUTCOMES

Strategy Benchmarks: From the Investment Manager's Perspective

The candidate should be able to:

- □ explain the concept of normal (neutral) weights
- □ distinguish between published benchmark-centered investment disciplines and manager strategy investment disciplines
- □ explain why strategy benchmarks are more appropriate for manager strategy investment disciplines
- □ describe benchmark selection/creation and risk of an institutional investment process
- □ describe the impact of benchmark selection on attribution analysis and the calculation of tracking error and information ratios

Topics in Return Attribution

The candidate should be able to:

- □ calculate and interpret return attribution results for portfolios containing short positions
- □ calculate and interpret return attribution results for portfolios containing futures or options
- □ calculate and interpret the asset allocation, security selection, and currency allocation effects in a multi-currency portfolio using the Karnosky–Singer approach
- □ calculate and interpret the asset allocation, security selection, and currency allocation effects in a multi-currency portfolio using a geometric methodology when returns are not continuously compounded

- ◻ describe why interest rate differentials matter in multi-currency return attribution
- ◻ contrast arithmetic and geometric multi-period attribution analysis
- ◻ describe problems associated with multi-asset attribution analysis, including analysis of balanced portfolios and portfolios combining liquid and illiquid assets

Introduction to Fixed-Income Attribution

The candidate should be able to:

- ◻ describe the three major approaches to fixed-income attribution (exposure decomposition—duration based, yield curve decomposition—duration based, and yield curve decomposition—full repricing)
- ◻ compare the three major approaches to fixed-income attribution in terms of associated decision-making processes, typical users, operational considerations, and limitations
- ◻ describe and evaluate the three major approaches to fixed-income attribution in terms of their implementation, output, interpretation, and appropriate applications by various users
- ◻ analyze and interpret the output of a fixed-income attribution analysis

Performance Appraisal

LEARNING OUTCOMES

Topics in Performance Appraisal

The candidate should be able to:

- □ describe considerations in distinguishing investment skill from luck in an investment record
- □ analyze mistakes in performance appraisal
- □ demonstrate the use of quality control charts in performance appraisal
- □ evaluate how benchmark and factor selection affect performance appraisal and the consequences of selecting an incorrect benchmark
- □ evaluate how cash holdings can affect performance appraisal
- □ describe limitations of relying on historical performance data in performance appraisal
- □ describe characteristics of superior active managers
- □ justify the selection of one or more appraisal measures
- □ describe techniques for evaluating strategies with non-linear returns
- □ analyze the skill of an active manager

Equity Style Analysis: Beyond Performance Measurement

The candidate should be able to:

- □ describe how characteristic-based analysis provides a deeper understanding of a manager's strategy
- □ explain how characteristic-based analysis can be used to evaluate a manager's investment philosophy and risk tolerance
- □ explain how characteristic-based analysis can be used to compare the performance of large cap growth managers

- □ explain how characteristic-based analysis can be used to assess how a manager's strategy will perform in different market environments
- □ describe how characteristic-based analysis can be used to assess how a manager performed across multiple time periods

Manager Selection

LEARNING OUTCOMES

Investment Manager Selection: An Introduction

The candidate should be able to:

- ☐ describe how investment manager selection takes place in the context of the client's investment policy statement
- ☐ describe qualitative considerations in evaluating investment managers
- ☐ describe the components of a manager selection process, including due diligence
- ☐ contrast Type I and Type II errors in manager hiring and continuation decisions
- ☐ describe uses of style analysis in investment manager selection
- ☐ compare returns-based and holdings-based style analysis, including the advantages and disadvantages of each
- ☐ evaluate a manager's adherence to a stated investment philosophy and investment decision-making process
- ☐ describe uses of the upside capture ratio, downside capture ratio, maximum drawdown, drawdown duration, and up/down capture in evaluating managers
- ☐ describe uses of the "batting average" in evaluating managers
- ☐ evaluate a manager's investment philosophy and investment decision-making process
- ☐ evaluate the costs and benefits of pooled investment vehicles and separate accounts
- ☐ compare types of investment manager contracts, including their major provisions and advantages and disadvantages
- ☐ describe the three basic forms of performance-based fees
- ☐ analyze and interpret a sample performance-based fee schedule

Topics in Investment Manager Selection

The candidate should be able to:

- □ describe portfolio considerations in selecting investment managers
- □ describe points to cover in an investment manager interview and during an on-site visit to the investment manager's firm
- □ describe special considerations in the selection of equity portfolio managers
- □ describe special considerations in the selection of fixed-income portfolio managers
- □ describe special considerations in the selection of passive investment managers
- □ describe special considerations in the selection of hedge fund managers
- □ describe special considerations in the selection of private equity managers
- □ describe special considerations in the selection of real estate managers
- □ describe considerations in monitoring investment managers
- □ define style drift and judge whether style drift has occurred
- □ describe costs and other considerations in terminating and replacing investment managers

Case Studies in Investment Manager Selection

The candidate should be able to:

- □ recommend and justify the selection of a passive investment manager for a given asset class
- □ evaluate how an investment manager has been selected
- □ recommend and justify the selection of an active investment manager for a given asset class
- □ recommend and justify the selection of a hedge fund manager
- □ recommend and justify the selection of a private equity manager
- □ recommend and justify the selection of a real estate manager
- □ evaluate the selection of a replacement investment manager

Setting Weights for Active and Index Managers

The candidate should be able to:

- □ describe the components of the investor's utility function for manager selection
- □ explain why the investor's utility function for manager selection uses active return instead of total return
- □ describe approaches to incorporating risk into the manager selection process
- □ describe the optimal mix of managers
- □ describe how search and monitoring costs affect the manager selection process

The Dimensions of Active Management

The candidate should be able to:

- □ describe the components of total risk (market risk and pure active risk) and explain how these components are related to strategic asset allocation
- □ explain misfit risk (i) for a single active manager and (ii) for a portfolio of active managers chosen by an investor (*net* misfit risk)
- □ explain the calculation of the pure information ratio (i) for a single active manager and (ii) for a portfolio of active managers
- □ distinguish between active investment results that are under an investment manager's control and those that are under an investor's control
- □ explain the limitations of historical alphas, style boxes, and traditional active risk concepts for building a portfolio of managers
- □ describe how to estimate the inputs needed in the optimization process that leads to the efficient frontier of active managers
- □ explain why the manager optimization process favors lower active-risk managers

Investment Performance Presentation

LEARNING OUTCOMES

Global Investment Performance Standards

The candidate should be able to:

- □ explain the fundamentals of compliance with the GIPS standards, including the definition of the firm, calculating total firm assets, and the conditions under which an investment management firm can claim compliance
- □ evaluate the classification of portfolios as discretionary or non-discretionary in accordance with the GIPS standards
- □ evaluate the appropriateness of composite construction according to the GIPS standards, including (i) inclusion of new portfolios, exclusion of terminated portfolios, and moving portfolios between composites, (ii) treatment of portfolios with significant cash flows, and (iii) linked performance of model or simulated portfolios
- □ state the requirements and recommendations of the GIPS standards with respect to presentation and reporting
- □ state the requirements of the GIPS standards with respect to disclosures
- □ determine the portability of performance track records from a past firm or affiliation in accordance with the GIPS standards
- □ explain benefits of verification