STUDY SESSION

1

Ethical and Professional Standards

The readings in this study session set forth the provisions of the CIPM Association Code of Ethics (the Code) and Standards of Professional Conduct (the Standards) and illustrate the practical application of the Code and Standards in investment practice.

CIPM candidates and members of the CIPM Association are subject to the Code and Standards. The Code articulates the ethical principles governing the investment profession. The Standards set forth the responsibilities of covered persons in the areas of professionalism; integrity of capital markets; duties to clients; duties to employers; investment analysis, recommendations, and action; conflicts of interest; and responsibilities as a CIPM Association member or CIPM candidate.

Note: The CIPM Association Code and Standards are based on the CFA Institute Code of Ethics and CFA Institute Standards of Professional Conduct. This study session makes use of the 10th edition of the CFA Institute *Standards of Practice Handbook* (SOPH) to focus on applications of the Code and Standards and recommended procedures for complying with them. The SOPH states in the Preface that it "is intended for a diverse and global audience." Although the guidance, recommendations, and applications provided in the SOPH supplement the CFA Institute Code and Standards, this reading can be used in parallel with the CIPM Association Code and Standards as well. Recognizing that the following list is not exhaustive, the following exchanges may help with understanding the reading:

SOPH Terminology		**CIPM Association Code & Standards Application**
CFA Institute	→	CIPM Association
CFA	→	CIPM
Members and Membership	→	Pertains to the CIPM Association
Candidates and Candidacy	→	Pertains to the CIPM program
Designation	→	Pertains to the Certificate in Investment Performance Measurement (CIPM) designation
Exams	→	CIPM exams
CFA marks	→	CIPM marks ("Certificate in Investment Performance Measurement" or "CIPM")
Charter/Charterholders	→	Certificate/Certificants or Certificate Holders

READING ASSIGNMENTS

1 CIPM Association Code of Ethics and Standards of Professional Conduct
2 *Standards of Practice Handbook*, Tenth Edition

LEARNING OUTCOMES

READING 1. CIPM ASSOCIATION CODE OF ETHICS AND STANDARDS OF PROFESSIONAL CONDUCT

The candidate should be able to:

a describe the investment profession;
b explain the relationship between ethics and the law;
c state and explain the provisions of the CIPM Association Code of Ethics and Standards of Professional Conduct;
d determine potential violations of the CIPM Association Code of Ethics and Standards of Professional Conduct and select appropriate preventive or corrective actions.

READING 2. *STANDARDS OF PRACTICE HANDBOOK*, TENTH EDITION

STUDY SESSION

2

Overview and Return Measurement

Fund sponsors use the techniques of performance evaluation to assess investment results relative to investment objectives, to determine the sources of returns, and to evaluate investment managers. Investment managers apply the techniques of performance evaluation to assess the effectiveness of various elements of their research and decision-making processes. For both fund sponsors and investment managers, performance evaluation is a productive feedback and control mechanism.

The first reading provides an overview of performance evaluation. The second reading examines return measurement as the foundation of all subsequent performance analysis.

READING ASSIGNMENTS

3 Performance Evaluation: An Introduction
by Stefan J. Illmer, PhD, and Dimitri Senik, CFA

4 Performance Evaluation: Rate-of-Return Measurement
by Carl R. Bacon, CIPM, David R. Cariño, PhD, and Arin Stancil, CFA, CIPM

LEARNING OUTCOMES

READING 3. PERFORMANCE EVALUATION: AN INTRODUCTION

The candidate should be able to:

a describe the feedback role of performance evaluation in the overall investment management process;

b describe how information provided by performance evaluation is useful to a variety of stakeholders;

c describe the major components of investment performance evaluation, including the questions they address;

d describe the factors that determine the specific characteristics of performance evaluation output;

e describe the scope of the performance evaluation process and its major activities, including how these activities are interrelated;

f explain ethical concerns related to investment performance presentations.

READING 4. PERFORMANCE EVALUATION: RATE-OF-RETURN MEASUREMENT

The candidate should be able to:

a explain the treatment of investment income (e.g., dividends and interest) in calculating holding period rates of return;

b calculate and interpret the holding period rate of return on a stock or bond investment;

c calculate and interpret a portfolio rate of return;

d calculate the home currency equivalent of a non-domestic rate of return and explain a decomposition of the home currency equivalent return;

e calculate and interpret rates of return that result from short positions and leveraged positions;

f distinguish between book value and market value, realized and unrealized gains and losses, trade date accounting and settlement date accounting, and show how these elements are treated in determining the asset values to be used in calculating rates of return;

g explain the major bases for calculating rates of return: nominal versus real, gross-of-fees versus net-of-fees, pre-tax versus post-tax, and leveraged versus cash basis;

h explain and demonstrate discrete and continuous compounding;

i convert rates of return to an annual basis and explain when annualization is or is not appropriate;

j compare arithmetic and geometric mean rates of return;

k explain arithmetic and geometric bases for calculating excess returns;

l calculate and interpret money-weighted and time-weighted rates of return;

m describe unit value pricing;

n explain and illustrate the issues raised by external cash flows for performance evaluation;

o explain major approximation methods to a true time-weighted rate of return;

p compare the methods used to calculate the composite returns of an investment manager;

q explain the condition of consistency in calculating the time-weighted rates of return of portfolio segments and the overall portfolio.

STUDY SESSION

3

Return Attribution and Benchmark Analysis

Return attribution is a set of techniques used to identify the sources of excess return of a portfolio against its benchmark in order to understand the consequences of active management decisions. "Return attribution" is often used interchangeably with "performance attribution" by practitioners. However, the first reading and the CIPM custom curriculum define performance attribution to include "return attribution" and "risk attribution." Risk attribution is introduced in the next study session.

Return attribution involves the selection of appropriate benchmarks. The second reading discusses the theory and practice of benchmark selection.

READING ASSIGNMENTS

5 Return Attribution
by Carl R. Bacon, CIPM, and Marc A. Wright, CFA

6 Introduction to Benchmarks
by C. Mitchell Conover, PhD, CFA, CIPM, Daniel Broby, FSIP, and David R. Cariño, PhD

LEARNING OUTCOMES

READING 5. RETURN ATTRIBUTION

The candidate should be able to:

a explain the purpose of return attribution and its role in the investment decision process;

b distinguish between return attribution and return contribution analysis;

c distinguish between return attribution and risk attribution;

d describe the attributes of an effective attribution process;

e analyze the sources of performance of a portfolio using the Brinson–Hood–Beebower and Brinson–Fachler models;

f calculate and interpret arithmetic allocation, selection, and interaction attribution effects;

g explain the use of an interaction effect, including its advantages and disadvantages;

h calculate and interpret geometric allocation, selection, and interaction attribution effects;

i describe returns-based, holdings-based, and transactions-based attribution, including the advantages and disadvantages of each;

j distinguish between the effects of sponsors' and managers' investment decisions;

k calculate and interpret attribution analysis at different levels: plan sponsor, portfolio manager, country, industrial sector, and individual security;

l interpret the results of a factor model–based return attribution analysis;

m compare Brinson models (asset-grouping models) with factor models of attribution, including the advantages and disadvantages of each;

n explain why the standard Brinson approach may not be suitable for fixed-income strategies;

o describe the different types of fixed-income attribution models and interpret the results of a fixed-income attribution analysis;

p explain the inputs necessary for a holdings-based and a transactions-based return attribution analysis and the problems associated with each;

q explain possible causes of residuals in attribution analysis;

r calculate and explain off-benchmark (zero-weight sector) attribution effects

READING 6. INTRODUCTION TO BENCHMARKS

The candidate should be able to:

a define the term "benchmark" and distinguish between benchmarks and market indexes;

b describe how benchmarks are used in return attribution and performance appraisal;

c distinguish among types of benchmarks;

d explain desirable properties of benchmarks in the context of performance attribution;

e explain a portfolio's positions in terms of a market index's security positions, benchmark positions, style tilts, and active positions;

f identify and explain tests of benchmark quality;

g compare the theoretical advantages and disadvantages, data requirements, and costs of using each type of benchmark;

h interpret peer universe box charts;

i explain uses of asset class indexes;

j compare market-capitalization-weighting, equal-weighting, price-weighting, and fundamental-weighting index construction schemes, including their advantages and disadvantages;

k describe the purpose and effects of float adjustment of market capitalization indexes;

l explain the tradeoffs in constructing asset class indexes;

m describe classifications of equity investing styles and the construction of associated equity style indexes;

n explain bond market sectors and the construction of associated bond style indexes;

o describe the steps in constructing a (security-based) custom benchmark;

p describe the impact of benchmark misspecification on attribution and appraisal analysis;

q recommend and justify the choice of a benchmark for a portfolio given a description of portfolio objectives and management processes.

STUDY SESSION

4

Risk Measurement, Risk Attribution, and Security Characteristics

Having covered return measurement and return attribution in earlier study sessions, the first reading of this study session introduces risk measurement and risk attribution.

The second reading explains how performance professionals can use portfolio characteristics analysis in monitoring managers' implementation of their equity investment mandate, conducting holdings-based style analysis, and determining the sources of return.

READING ASSIGNMENTS

7 Risk Measurement and Risk Attribution
by Frances Barney, CFA, C. Mitchell Conover, CFA, CIPM, and Philippe Grégoire, CFA

8 Equity Portfolio Characteristics in Performance Analysis
by Stephen C. Gaudette, CFA, and Philip Lawton, CFA, CIPM

LEARNING OUTCOMES

READING 7. RISK MEASUREMENT AND RISK ATTRIBUTION

The candidate should be able to:

a distinguish between non-financial and financial risk and explain types of each kind of risk;

b describe the objectives of risk measurement and risk attribution;

c compare the following classifications of market risk: *ex ante* versus *ex post*, stand-alone versus portfolio, idiosyncratic versus systematic, absolute versus relative, and symmetric versus asymmetric;

d describe and interpret return data sets with respect to their implications for market risk;

e calculate, interpret, and critique the following measures of dispersion: variance, standard deviation, mean absolute deviation, and tracking risk;

f calculate and interpret beta;

g calculate, interpret, and critique the following measures of downside risk: semi-variance, target semi-variance, semi-standard deviation, and target semi-standard deviation;

h calculate, interpret, and critique drawdown, average drawdown, maximum drawdown, and largest individual drawdown;

i describe and interpret value at risk and stress tests and explain the strengths and weaknesses of each;

j describe choices in estimating value at risk;

k describe equity and bond characteristics and valuation metrics that are related to risk;

l recommend appropriate risk measures with respect to specified objectives;

m interpret risk attribution analyses;

n describe the relationship between risk attribution and return attribution and explain considerations in selecting a risk attribution approach.

READING 8. EQUITY PORTFOLIO CHARACTERISTICS IN PERFORMANCE ANALYSIS

The candidate should be able to:

a identify and explain the uses of portfolio characteristics analysis in performance evaluation;

b calculate the mean of a distribution that includes outliers and evaluate the various methods in doing so;

c calculate the weighted arithmetic mean and the weighted harmonic mean of a portfolio using security-level characteristic values;

d calculate and interpret the following equity characteristics: economic sector and industry membership; beta; debt-to-equity (D/E) ratio; return on equity (ROE); market capitalization; price-to-book (P/B) ratio; price-to-earnings (P/E) ratio; dividend yield (D/P); price-to-sales (P/S) ratio; price-to-cash flow (P/CF) ratio; relative strength; liquidity; and volatility;

e classify characteristics as macroeconomic, company fundamental, and company share-related;

f determine the investment style of a portfolio, given pertinent data such as the market capitalization, price-to-earnings (P/E) and price-to-book (P/B) ratios, dividend yield (D/P), and growth characteristics of the portfolio and one or more style indexes;

g compare holdings-based and returns-based style analysis;

h compare single-factor and fundamental multifactor attribution models.

STUDY SESSION

5

Performance Appraisal

Fund sponsors are concerned with whether a manager has displayed investment skill, as opposed to luck, and whether the manager is likely to sustain the ability to outperform an appropriate benchmark consistently over time.

This reading introduces appraisal measures based on beta and standard deviation as measures of risk. Note that this reading uses "performance evaluation" in the sense of "performance appraisal."

Some appraisal measures have been referred to by variety of names. The Sharpe ratio is also known as the Sharpe measure, excess return to variability, and reward to variability. The Treynor measure is also known as the Treynor ratio and excess return to non-diversifiable risk. Jensen's alpha is also known as alpha, differential return, and Jensen's differential performance index. This list is not exhaustive; however, if the reader understands how a measure is defined, no confusion should arise.

READING ASSIGNMENT

9 Evaluation of Portfolio Performance

Modern Portfolio Theory and Investment Analysis, 8th edition, by Edwin J. Elton, Martin J. Gruber, Stephen J. Brown, and William N. Goetzmann

LEARNING OUTCOMES

READING 9. EVALUATION OF PORTFOLIO PERFORMANCE

The candidate should be able to:

a contrast beta and standard deviation as measures of portfolio risk;

b compare one parameter performance measures based on beta and standard deviation;

c compare approaches to measuring market timing including the Treynor and Mazuy procedure;

d explain the use of multi-index models in performance appraisal.

STUDY SESSION

6

Manager Selection

Manager selection is closely related to performance appraisal, as both are concerned with the identification of investment skill. Manager selection involves a range of other considerations, including compensation arrangements, client servicing and communication, and stability as an organization. An investor may have a choice of investment vehicles with distinct liquidity, cost, and tax implications for a given investment purpose (e.g., obtaining broad exposure to an equity market). The readings in this study session provide a first orientation to these issues.

READING ASSIGNMENTS

10 Selecting Investment Managers for Individual Investors
The New Wealth Management: The Financial Advisors Guide to Managing and Investing Client Assets, by Harold Evensky, Stephen M. Horan, CFA, CIPM, and Thomas R. Robinson, CFA

11 Introduction
based on Chapter 1 in *Essays on Manager Selection*, by Scott D. Stewart, PhD, CFA

12 Can Investors Identify Skilled Asset Managers?
based on Chapter 2 in *Essays on Manager Selection*, by Scott D. Stewart, PhD, CFA

LEARNING OUTCOMES

READING 10. SELECTING INVESTMENT MANAGERS FOR INDIVIDUAL INVESTORS

The candidate should be able to:

a compare individual and pooled (comingled) investment vehicles;

b distinguish between individually managed accounts (IMAs), separately managed accounts (SMAs), and unified managed accounts (UMAs);

c describe the attributes of IMAs, SMAs, and UMAs from the client's and manager's perspectives;

d distinguish among the following types of pooled investment vehicles: open-end mutual funds, closed-end mutual funds, exchange-traded funds and notes, and private vehicles such as hedge funds;

e explain the following mutual fund investment styles: equity, fixed income, market capitalization, geography, and sector classifications;

f identify criteria for selecting independent information data providers;

g describe the steps of the manager screening and selection process;

h formulate and evaluate a manager screening and selection process;

i evaluate a manager's adherence to a stated philosophy and process.

READING 11. INTRODUCTION

The candidate should be able to describe how investment manager selection takes place in the context of the investment policy statement.

READING 12. CAN INVESTORS IDENTIFY SKILLED ACTIVE MANAGERS?

The candidate should be able to:

a describe the implications of the arithmetic of active management for returns on the average actively managed and passively managed dollar, before and after accounting for costs;

b describe the implications of the arithmetic of active management for the existence of active managers who outperform the market;

c describe the three requirements for investing successfully using active investment managers;

d describe the effects of transaction costs and asset size on alpha potential;

e describe two key empirical observations about the time-series and cross-sectional properties of alpha;

f describe key characteristics of successful investment managers.

STUDY SESSION

7

Investment Performance Presentation

Investment performance presentation (IPP) is a specific type of investment reporting that typically focuses on the presentation of investment performance as the outcome of investment management decisions. As discussed in the first reading, four factors determine in detail the type of performance presentation: The investment performance information to be communicated; the intended user of the presentation; the intended use of the presentation; and the preparer of the presentation.

Where the preparer of an IPP is an investment manager competing for clients and the intended user is a prospective client—by definition without first-hand experience with the manager—the potential for unfair or biased IPP would be substantial in the absence of compliance by managers with a set of presentation standards. The second reading explores the motivation for and value of Global Investment Performance Standards (GIPS®). The third and fourth readings provide further orientation to GIPS.

READING ASSIGNMENTS

13 Investment Performance Presentation: An Introduction
by Stefan J. Illmer, PhD

14 Beyond GIPS Compliance: Maximizing Value
by Iain W. McAra

15 Introduction to the Global Investment Performance Standards (GIPS)

16 Global Investment Performance Standards (GIPS)

LEARNING OUTCOMES

READING 13. INVESTMENT PERFORMANCE PRESENTATION: AN INTRODUCTION

The candidate should be able to:

a describe factors that determine the properties of an investment performance presentation;

b describe steps of an investment performance presentation process;

c describe the content and purposes of investment performance presentations when these presentations are classified by (i) type of process and (ii) type of performance evaluation information;

d explain differences between internal and external investment performance presentations.

READING 14. BEYOND GIPS COMPLIANCE: MAXIMIZING VALUE

The candidate should be able to:

a explain the benefits of adhering to the GIPS standards beyond the claim of compliance;

b explain the value added from being a GIPS compliant firm with respect to investors, intermediaries, investment managers, and regulators;

c explain the value added from being a GIPS compliant firm with respect to maintaining policies and procedures, conducting verification, and performance examinations.

READING 15. INTRODUCTION TO THE GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS)

The candidate should be able to:

a explain why the GIPS standards were created, what parties the GIPS standards apply to, and who is served by the standards;

b explain the construction and purpose of composites in performance reporting;

c explain the requirements for verification.

READING 16. GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS)

The candidate should be able to:

a describe the key features of the GIPS standards and the fundamentals of compliance;

b describe the scope of the GIPS standards with respect to an investment firm's definition and historical performance record;

c explain how the GIPS standards are implemented in countries with existing standards for performance reporting and describe the appropriate response when the GIPS standards and local regulations conflict;

d describe the nine major sections of the GIPS standards.