

**The CIPM Program
2010 Expert Study Sessions**

Ethical and Professional Standards (Study Session I)

The candidate should be able to evaluate situations and apply the provisions of the CIPM Association Code of Ethics and Standards of Professional Conduct in specific situations.

Study Session I: Ethical and Professional Standards..... 2

Performance Evaluation: Measurement, Attribution, and Appraisal (Study Sessions II–VII)

The candidate should be able to explain and apply methodologies for calculating time-weighted and money-weighted returns, returns of portfolios that contain futures and options, and returns of multicurrency portfolios; explain the factors that enter benchmark selection decisions; calculate and evaluate commonly used *ex post* risk measures; conduct performance attribution analyses of equity and fixed-income portfolios, and interpret the results; and explain and justify performance appraisal processes.

Study Session II: Performance Evaluation: Measurement..... 3

Study Session III: Performance Evaluation: Benchmark Analysis..... 5

Study Session IV: Performance Evaluation: Risk Analysis 7

Study Session V: Performance Evaluation: Attribution – Equities and Futures 9

Study Session VI: Performance Evaluation: Attribution – Fixed-Income..... 11

Study Session VII: Performance Evaluation: Appraisal..... 13

Global Investment Performance Standards (GIPS®) (Study Sessions VIII–XII)

The candidate should be able to assess claims of compliance with the GIPS standards, recommend corrective actions in the event of non-compliance, and evaluate verification procedures.

Study Session VIII: GIPS Standards: Foundations..... 15

Study Session IX: GIPS Standards: Composite Construction 17

Study Session X: GIPS Standards: Disclosures and Presentations..... 18

Study Session XI: GIPS Standards: Real Estate and Private Equity 19

Study Session XII: GIPS Standards: Verification and the Advertising Guidelines..... 21

We may provide a reading and indicate those parts that are not required as “optional.” The CIPM exam is based only on the required segments, and the optional segments are provided only when they might help you better understand the required segments (by seeing the required material in its full context).

Study Session I: Ethical and Professional Standards

Purpose of the Study Session

The CIPM Principles curriculum introduced ethical reasoning and presented the provisions of the CIPM Association Code of Ethics and Standards of Professional Conduct. At the Expert level, you are expected to demonstrate your ability to recognize ethical issues that you may encounter and to apply the ethical principles and standards governing your professional conduct.

This study session makes use of the ninth edition of the CFA Institute Standards of Practice Handbook (2005) to focus on applications of the Code and Standards and recommended procedures for complying with them. The study session also presents guidance for Section VII of the Standards, “Responsibilities as a CIPM Association Member or CIPM Candidate.”

Reading Assignments

1. CIPM Association Code of Ethics and Standards of Professional Conduct (CFA Institute, 2006).
2. CFA Institute Standards of Practice Handbook, 9th ed., (CFA Institute, 2005).
3. CIPM Association Guidance for Standard VII (CFA Institute, 2006).

Learning Outcome Statements

- A. state the provisions of the CIPM Association Code of Ethics and Standards of Professional Conduct;
- B. apply the CIPM Association Code of Ethics and Standards of Professional Conduct in specific circumstances;
- C. evaluate procedures for complying with the CIPM Association Standards of Professional Conduct;
- D. explain the individual’s responsibilities as a candidate or member, including references to membership in the CIPM Association, the CIPM designation, and candidacy in the CIPM program; and
- E. evaluate circumstances, identify violations, and formulate appropriate corrective actions based on the CIPM Association Code of Ethics and Standards of Professional Conduct.

Study Session II: Performance Evaluation: Measurement

Purpose of the Study Session

The CIPM Principles curriculum presented the calculation of time-weighted and money-weighted rates of return, including methods for estimating time-weighted returns for periods in which external cash flows occur.

The present study session opens with a review of time-weighted and money-weighted return calculations (first reading) and discusses the practical implications of return compounding (second reading). The study session then introduces rate-of-return calculation methodologies for portfolios containing derivatives (third reading) and for investments denominated in foreign currencies (fourth reading). It also considers the factors that give rise to prior period adjustments and the related performance measurement policy issues (fifth reading).

Reading Assignments

1. “Portfolio Return Measurement,” Ch. 2, *Quantitative Methods for Investment Analysis*, 2nd ed., Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle, (CFA Institute, 2004).
2. “Return Compounding: Essential Insights and Practical Implications,” Timothy P. Ryan, *Journal of Performance Measurement*, vol. 7 no. 3 (Spring 2003).
3. “Measuring Investment Returns of Portfolios Containing Futures and Options,” John C. Stannard, *Journal of Performance Measurement*, vol.1 no. 1 (Fall 1996).
4. “Global Performance Evaluation,” Ch. 12, *Global Investments*, 6th ed., Bruno Solnik and Dennis McLeavey, (Pearson Education Inc., 2009).
5. “Adjustments to Prior Period Returns,” David Spaulding and Stefan Illmer, *Journal of Performance Measurement*, vol. 7 no. 4 (Summer 2003).

Learning Outcome Statements

Reading Assignment #1 (“Portfolio Return Measurement”) – The candidate should be able to:

- A. compare and contrast time-weighted and money-weighted rate of return calculation methodologies;
- B. calculate and explain time-weighted and money-weighted rates of return;
- C. calculate and explain annualized rates of return;

Reading Assignment #2 (“Return Compounding: Essential Insights and Practical Implications”) – The candidate should be able to:

- D. explain the concept of returns as wealth multipliers and devastators with order, magnitude, and direction;
- E. calculate the return required to restore the beginning market value of an investment after a given series of positive and negative returns or to achieve a target return for the entire measurement period;
- F. state the implications of return compounding for investment management;

Reading Assignment #3 (“Measuring Investment Returns of Portfolios Containing Futures and Options”) – The candidate should be able to:

- G. adjust beginning-of-period and end-of-period asset market values and intraperiod income to reflect the impact of futures contracts;
- H. calculate notional stock and cash market values and returns, and hedged portfolio returns for portfolios containing futures contracts;
- I. calculate the hedge ratio (delta) of an option and conclude whether the option is in-the-money, at-the-money, or out-of-the-money;
- J. distinguish between the full exposure and partial exposure methods of valuing options;
- K. adjust beginning-of-period and end-of-period asset market values and intraperiod income to reflect the impact of options;
- L. calculate notional stock and cash market values and returns, and hedged portfolio returns for portfolios containing options;

Reading Assignment #4 (“Global Performance Evaluation”) – The candidate should be able to:

- M. calculate base currency returns for investments denominated in local currencies;
- N. calculate the capital gain, yield, and currency components of a total return ;
- O. explain the effect of compounding currency and market movements on a foreign investment;

Reading Assignment #5 (“Adjustments to Prior Period Returns”) – The candidate should be able to:

- P. identify and characterize common causes of discrepancies between managers’ and custodians’ accounting data; and
- Q. summarize the issues that affect prior period adjustments.

Study Session III: Performance Evaluation: Benchmark Analysis

Purpose of the Study Session

The marketplace offers a wide range of competing indexes for many asset classes. Rather than attempting to provide up-to-date descriptions of all their characteristics, the CIPM curriculum discusses the factors that investment professionals should take into account when selecting benchmarks.

The CIPM Principles curriculum explained the role of benchmarks in performance evaluation, described the types of benchmarks, and presented the properties of valid benchmarks and the tests of benchmark quality.

In the present study session, the first reading, *Benchmarks and Investment Management*, discusses benchmarking in the context of modern portfolio theory, describes the trade-offs involved in the construction and maintenance of US equity benchmarks, and evaluates the relative merits of liability-based and capitalization-weighted benchmarks.

The second reading, “Strategy Benchmarks,” presents strategy benchmarks (also known as custom benchmarks) as more appropriate than published benchmarks for investment managers using specialized investment strategies.

Reading Assignments

1. “Origins, Uses, and Characteristics of U.S. Equity Benchmarks,” “Using Benchmarks to Measure Performance,” “The Evolution of MPT and the Benchmarking Paradigm,” “Critiques of Benchmarking and a Way Forward,” Chs. 1–2, 4, 6, *Benchmarks and Investment Management*, Laurence B. Siegel, (Research Foundation of CFA Institute, 2003).
2. “Strategy Benchmarks,” David E. Kuenzi, *Journal of Portfolio Management* (Winter 2003).

Learning Outcome Statements

Reading Assignment #1 (“*Benchmarks and Investment Management*”) – The candidate should be able to:

- A. explain the various uses of benchmarks;
- B. justify the use of market capitalization-weighting in benchmark construction;
- C. compare and contrast the principal trade-offs in building and maintaining broad-capitalization indexes of the US equity market;
- D. critique the position that portfolio managers should seek to maximize the information ratio, defined as pure alpha per unit of active risk;
- E. summarize the historical development of benchmarking in the context of modern portfolio theory;

- F. evaluate arguments in favor of liability-based vs. market capitalization-weighted benchmarks;

Reading Assignment #2 (“Strategy Benchmarks”) – The candidate should be able to:

- G. explain the concept of normal (neutral) weights;
- H. distinguish between published benchmark-centered investment disciplines and manager strategy investment disciplines;
- I. explain why strategy benchmarks are more appropriate for manager strategy investment disciplines;
- J. describe benchmark selection/creation and risk controls in the general framework of an institutional investment process; and
- K. explain the impact of benchmark selection on attribution analysis and the calculation of tracking error and information ratios.

Study Session IV: Performance Evaluation: Risk Analysis

Purpose of the Study Session

As a CIPM candidate, you are not expected to master the field of investment risk analysis, a highly advanced and specialized discipline in its own right. You should, however, have a firm grasp of the traditional *ex post* risk measures typically employed in appraising performance. In addition, you should be able to apply techniques developed to analyze risk in the increasingly important arena of hedge fund investing.

The CIPM Principles curriculum introduced commonly used risk measures, including Jensen's alpha, the Treynor ratio, the Sharpe ratio, M^2 , and the information ratio. The first reading in this study session reviews the Sharpe ratio and the information ratio, explains tracking error, and presents the calculation and interpretation of downside risk measures, including the Sortino ratio.

The second reading, "Measuring the Volatility of Hedge Fund Returns," introduces the Calmar and Sterling ratios and addresses issues in the evaluation of hedge fund risks.

The third reading, "Risk Management," introduces value at risk—or VAR, as it is commonly known—and presents three techniques for estimating VAR (the analytical, historical, and Monte Carlo methods).

Reading Assignments

1. "Downside Risk," "Relative Risk," "Absolute Risk-Adjusted Return," "Downside and Relative Risk-Adjusted Return", Chs. 10–13, *Investment Performance Measurement*, Bruce J. Feibel, (Wiley, 2003).
2. "Measuring the Volatility of Hedge Fund Returns," Douglas S. Rogers and Christopher J. Van Dyke, *Journal of Wealth Management* (May 2006).
3. "Risk Management," Ch. 9, Don M. Chance, Kenneth Grant, and John Marsland, *Managing Investment Portfolios: A Dynamic Process*, 3rd ed., John L. Maginn, Donald L. Tuttle, Dennis W. McLeavey, and Jerald E. Pinto, eds. (CFA Institute, 2007).

Learning Outcome Statements

Reading Assignment #1 ("*Investment Performance Measurement*") – The candidate should be able to:

- A. explain the concepts of annualized standard deviation, non-normal distribution, semi-deviation, and minimum acceptable return;
- B. calculate and evaluate shortfall risk, expected downside value, and downside deviation;

- C. calculate and evaluate tracking risk (tracking error);
- D. calculate, compare, and contrast the Sharpe, Sortino, and information ratios;
- E. evaluate the principles underlying the Capital Asset Pricing Model;

Reading Assignment #2 (“Measuring the Volatility of Hedge Fund Returns”) – The candidate should be able to:

- F. critique the applicability of standard deviation in measuring the investment risk of a hedge fund;
- G. interpret the skewness and kurtosis of a distribution of returns;
- H. calculate and explain the concept of maximum drawdown;
- I. calculate, compare, and contrast the Calmar ratio and Sterling ratio;
- J. explain the qualitative factors that may be necessary to supplement quantitative analysis in an appraisal of hedge fund risks;

Reading Assignment #3 (“Risk Management”) – The candidate should be able to:

- K. interpret value at risk (VAR) and its role in measuring overall and individual position market risk;
- L. determine, compare, and contrast the analytical (variance–covariance), historical, and Monte Carlo methods for estimating VAR and discuss the advantages and disadvantages of each;
- M. discuss the advantages and limitations of VAR and extension and supplements to it (e.g., cash flow at risk, earnings at risk, tail value at risk);
- N. compare and contrast the various types of stress testing and discuss the advantages and disadvantages of each; and
- O. evaluate the results of stress tests.

Study Session V: Performance Evaluation: Attribution – Equities and Futures

Purpose of the Study Session

The CIPM Principles curriculum introduced single-period, single-currency arithmetic micro attribution. The present study session is the first of two study sessions devoted to more advanced techniques of attribution analysis.

The first reading is a preamble to the mathematical notations employed by the second reading. The excerpts from the second reading, “Practical Portfolio Performance Measurement and Attribution”, extend arithmetic attribution to multiple evaluation periods and presents smoothing algorithms that have been developed to make subperiod attribution effects add up to the effects for the entire period under consideration. It also presents geometric excess return attribution as an alternative approach, and it introduces multicurrency attribution analysis. The reading also discusses further attribution issues, such as holding-based (buy/hold), security-level, and off-benchmark (zero-weight sector) attribution.

The third reading, “Performance Attribution with Short Positions,” presents a performance attribution methodology for analyzing single-currency long/short investment strategies measured against benchmarks and market-neutral strategies measured against the risk-free rate.

Building on the framework set forth in one of the source readings presented in the study session Performance Evaluation: Measurement, the fourth reading addresses performance attribution for single-currency portfolios that contain derivatives. The study session focuses on the suggested treatment of futures contracts.

Reading Assignments

1. “Introduction to Carl Bacon’s Notation” (CFA Institute, 2006).
2. “Performance Attribution,” “Multi-currency Attribution,” “Multi-period Attribution,” “Further Attribution Issues,” Chs. 5, 6, 8, 9, “*Practical Portfolio Performance Measurement and Attribution*,” 2nd ed., Carl Bacon, (Wiley, 2008).
3. “Performance Attribution with Short Positions,” Jose Menchero, *Journal of Performance Measurement* (Winter 2002/2003).
4. “Measuring Investment Returns of Portfolios Containing Derivatives: Part II – Performance Attribution,” John C. Stannard, *Journal of Performance Measurement*, vol. 3 no. 3 (Spring 1997).

Learning Outcome Statements

Reading Assignment #1 and #2 (“*Practical Portfolio Performance Measurement and Attribution*”) – The candidate should be able to:

- A. calculate the value-added by asset allocation, security selection, and interaction using the Brinson and Fachler arithmetic attribution model;
- B. calculate the value-added by asset allocation and security selection using geometric excess return attribution;
- C. calculate and explain multiperiod arithmetic attribution factors using the smoothing algorithms devised by Cariño and GRAP;
- D. calculate and explain multiperiod attribution effects using geometric excess return attribution;
- E. compare and contrast the arithmetic and geometric approaches to performance attribution;
- F. calculate and explain the asset allocation, security selection, and currency management effects using Karnosky and Singer’s approach to multicurrency attribution;
- G. calculate and explain naïve currency attribution effects using geometric multicurrency attribution;
- H. state the advantages and disadvantages of holding-based (buy/hold) attribution and transaction-based attribution;
- I. calculate and explain security-level attribution effects;
- J. calculate and explain off-benchmark (zero-weight sector) attribution effects;

Reading Assignment #3 (“*Performance Attribution with Short Positions*”) – The candidate should be able to:

- K. explain selling securities short and purchasing securities on margin;
- L. calculate and explain security-level and sector-level weights and returns with short positions;
- M. contrast the impact on long and short portfolios of underweighting and overweighting sectors relative to the benchmark;
- N. calculate and explain benchmark-relative attribution analysis for long/short strategies, and evaluate the results;
- O. calculate and explain attribution analysis for market-neutral strategies benchmarked against the risk-free rate, and evaluate the results;

Reading Assignment #4 (“*Measuring Investment Returns of Portfolios Containing Derivatives: Part II – Performance Attribution*”) – The candidate should be able to:

- P. explain the use of notional adjustments in attribution analysis for portfolios containing futures; and
- Q. calculate attribution effects for a portfolio containing futures contracts.

Study Session VI: Performance Evaluation: Attribution – Fixed-Income

Purpose of the Study Session

This is the second of two study sessions devoted to advanced topics in attribution analysis. The present study session focuses on fixed-income attribution. Although the performance measurement industry has developed a range of fixed-income attribution methodologies, the readings in this study session have been chosen to strengthen the candidate's grasp of fundamental concepts.

The Fong-Pearson-Vasicek approach, which was introduced in the Principles curriculum, employs a series of portfolio repricings to partition the components of fixed-income returns.

The methodology presented by Campisi makes use of more readily available portfolio and benchmark characteristics such as current yield and duration for an alternative decomposition of returns. When approaching this reading, please be aware that the article illustrates each step of the attribution process but it does not furnish all the input data necessary for the reader to calculate the attribution effects. The supplement included in the reading assignments for this study session contains annotated worksheets showing greater detail for each stage of the analysis.

van Breukelen presents a fixed-income attribution approach for a top-down investment management process in which the key decisions are the choice of overall duration, the allocation of assets to markets, and the selection of individual securities. van Breukelen's approach further breaks out the return contribution of currency allocations. The assigned readings include a supplement containing a set of annotated worksheets as an aid to understanding van Breukelen's attribution methodology.

Reading Assignments

1. "Bond Performance: Analyzing Sources of Return," Gifford Fong, Charles Pearson, and Oldrich Vasicek, *Journal of Portfolio Management* (Spring 1983).
2. "Primer on Fixed Income Performance Attribution," Stephen Campisi, *Journal of Performance Measurement*, vol. 4 no. 4 (Summer 2000).
3. Supplement to Stephen Campisi, "Primer on Fixed Income Performance Attribution" (CFA Institute, 2006).
4. "Fixed Income Attribution," Gerard van Breukelen, *Journal of Performance Measurement*, vol. 4 no. 4 (Summer 2000).
5. Supplement to Gerard van Breukelen, "Fixed Income Attribution" (CFA Institute, 2006).

Learning Outcome Statements

Reading Assignment #1 (“Bond Performance: Analyzing Sources of Return”) – The candidate should be able to:

- A. distinguish between external market conditions and the manager’s investment decisions;
- B. distinguish between the two components of the effect of the external macro interest rate environment: interest rate level and interest rate change;
- C. distinguish among the three components of the management contribution: the returns from maturity management, sector/quality management (spread/quality management), and security selection;
- D. calculate and evaluate fixed-income portfolio performance in the Fong-Pearson-Vasicek attribution framework;

Reading Assignments #2 and #3 (“Primer on Fixed Income Performance Attribution”) – The candidate should be able to:

- E. state the critical differences between stocks and bonds, and compare and contrast the appropriate performance attribution approaches for equity and fixed-income portfolios;
- F. explain the sources of fixed-income returns in the Campisi framework;
- G. calculate the income return and the treasury, spread, and selection effects of a fixed-income portfolio in comparison with an appropriate benchmark;
- H. evaluate portfolio performance, given the results of an attribution analysis conducted in the Campisi framework;

Reading Assignments #4 and #5 (“Fixed Income Attribution”) – The candidate should be able to:

- I. explain how van Breukelen uses reference portfolios in fixed-income attribution analysis;
- J. calculate the contributions to value-added returns from the overall duration decision, market allocation, issue selection, and currency allocation; and
- K. evaluate portfolio performance, given the results of an attribution analysis conducted in the van Breukelen framework.

Study Session VII: Performance Evaluation: Appraisal

Purpose of the Study Session:

Recognizing that distinguishing between skill and luck is problematic, performance appraisal addresses the question whether a fund sponsor should hire, or retain, an investment manager.

The CIPM Principles curriculum explained the problem of noise in performance track records, presented the principles of manager continuation policies, and described the use of quality control charts in testing the null hypothesis that managers have no skill. The present study session moves from a statistical to a more conceptual treatment of performance appraisal from the perspective of the fund sponsor or investment consultant.

John Minahan, the author of the first reading, argues that critically examining a manager's investment philosophy can help determine whether the manager is a true alpha-generator. In the second reading, John Meier addresses performance appraisal from the viewpoint of institutional investors responsible for directing and monitoring diversified, multiple-asset class, multiple-manager funds. In this total fund perspective, Meier presents a case study that integrates analytical approaches presented throughout the CIPM curriculum, including performance measurement relative to benchmarks and peer groups, portfolio characteristics analysis, performance attribution, and *ex post* risk analysis. Meier focuses on determining whether managers are doing what is expected of them. In the third reading, Russell Olson considers when it is appropriate to terminate a manager.

Reading Assignments:

1. "The Role of Investment Philosophy in Evaluating Investment Managers: A Consultant's Perspective on Distinguishing Alpha from Noise," John R. Minahan, *Journal of Investing* (Summer 2006).
2. "Investment Performance Appraisal," John P. Meier, (CFA Institute, 2009).
3. "Managing Investment Managers," Ch. 6, *The Independent Fiduciary*, Russell L. Olson, (Wiley, 1999).

Learning Outcome Statements:

Reading Assignment #1 ("The Role of Investment Philosophy in Evaluating Investment Managers: A Consultant's Perspective on Distinguishing Alpha from Noise") – The candidate should be able to:

- A. distinguish between "alpha generators" and "alpha pretenders";
- B. define the concept of an investment philosophy;
- C. demonstrate how to analyze a manager's investment philosophy;

D. judge whether specific managers pass the “investment philosophy test”;

Reading Assignment #2 (“Investment Performance Appraisal”) – The candidate should be able to:

- E. explain the role of the client’s investment policy statement (IPS) in the process of monitoring and evaluating managers;
- F. demonstrate the use of performance triangles vs. benchmarks in assessing a manager’s track record;
- G. justify the use of peer group comparisons in the manager monitoring and evaluation process, given that manager universes are not valid benchmarks;
- H. identify and evaluate evidence that a manager may be deviating from the stated investment philosophy, strategy, and/or decision making process; and

Reading Assignment #3 (“Managing Investment Managers”) – The candidate should be able to:

- I. evaluate circumstances in which it may be appropriate to terminate a manager.

Study Session VIII: GIPS Standards: Foundations

Purpose of the Study Session

At the Expert level, you will build upon what you learned at the Principles level about the required and recommended provisions of the GIPS standards by learning how to apply them in practice. This study session presents and illustrates the application of the Standards, including pertinent GIPS Guidance Statements, related to fundamentals of compliance, input data, calculation methodology, and error correction.

Reading Assignments

1. GIPS Handbook, 2nd ed., (CFA Institute, 2006).
2. Global Investment Performance Standards (GIPS®), (CFA Institute, 2005).
3. GIPS Guidance Statement on Definition of the Firm (Revised 2006).
4. GIPS Guidance Statement on Recordkeeping Requirements (2007).
5. GIPS Guidance Statement on Calculation Methodology (Revised 2006).
6. GIPS Guidance Statement on the Treatment of Significant Cash Flows (Revised 2006).
7. GIPS Interpretive Guidance for Fees Provisions (Revised 2006).
8. GIPS Guidance Statement on Error Correction (2008).

Learning Outcome Statements

Note: The Guidance Statements are integral to the GIPS standards. All references to the GIPS standards in the learning outcome statements should be understood to include the Guidance Statements identified in the reading assignments for this study session.

The candidate should be able to:

- A. describe and explain the fundamental responsibilities of the firm with regard to the GIPS standards;
- B. evaluate definitions of the firm and determine if they comply with the GIPS standards;
- C. evaluate the firm's definition of discretionary assets in accordance with the GIPS standards;
- D. calculate total firm assets in accordance with the GIPS standards;

- E. judge whether claims of compliance with the GIPS standards are valid and/or correctly worded;
- F. demonstrate and evaluate the application of the GIPS standards related to record keeping;
- G. evaluate applications of the GIPS standards related to input data;
- H. demonstrate the calculation and presentation of portfolio and composite returns in accordance with the GIPS standards;
- I. distinguish between “large” and “significant” external cash flows, and judge the appropriateness of excluding portfolios from composites when significant external cash flows occur in accordance with the GIPS standards;
- J. demonstrate and evaluate the treatment of fees in portfolio return calculations and performance presentations in accordance with the GIPS standards; and
- K. demonstrate and evaluate the application of the GIPS standards related to error correction.

Study Session IX: GIPS Standards: Composite Construction

Purpose of the Study Session

Among the most fundamental issues to be addressed in achieving compliance with the GIPS standards are the definition of the firm, the firm's definition of discretion, and the definition of the composites that represent the firm's investment strategies. This study session focuses on applying the GIPS standards related to discretion, the construction and maintenance of composites, and the treatment of segments carved out of multiple asset class portfolios for inclusion in single asset class composites.

Reading Assignments

1. Global Investment Performance Standards (GIPS®), (CFA Institute, 2005).
2. GIPS Handbook, 2nd ed., (CFA Institute, 2006).
3. GIPS Guidance Statement on Composite Definition (Revised 2006).
4. GIPS Guidance Statement on the Treatment of Carve-Outs (Revised 2006).

Learning Outcome Statements

Note: The Guidance Statements are integral to the GIPS standards. All references to the GIPS standards in the learning outcome statements should be understood to include the Guidance Statements identified in the reading assignments for this study session.

The candidate should be able to:

- A. analyze composites and judge if they are constructed and maintained in accordance with the GIPS standards;
- B. evaluate the classification of portfolios as discretionary or non-discretionary in accordance with the GIPS standards;
- C. evaluate composite definitions and descriptions;
- D. judge the appropriateness of including portfolios in defined composites in accordance with the GIPS standards;
- E. judge whether portfolios should be included in or excluded from composites, and determine the appropriate timing of any change.
- F. demonstrate and evaluate the application of the GIPS standards related to carve-out segments; and
- G. apply the GIPS standards to composites that have been terminated or merged with other composites.

Study Session X: GIPS Standards: Disclosures and Presentations

Purpose of the Study Session

Fair representation and full disclosure of performance are the ethical principles upon which the GIPS standards are based. This study session focuses on the provisions of the Standards related to disclosures and presentation and reporting. It also incorporates GIPS Guidance Statements on performance record portability—using or linking performance from a past firm or affiliation—and on supplemental information, defined as any performance-related information included as part of a GIPS-compliant performance presentation that supplements or enhances the required and/or recommended disclosure and presentation provisions of the GIPS standards.

Reading Assignments

1. Global Investment Performance Standards (GIPS®), (CFA Institute, 2005).
2. GIPS Handbook, 2nd ed., (CFA Institute, 2006).
3. GIPS Guidance Statement on Performance Record Portability (Revised 2006).
4. GIPS Guidance Statement on the Use of Supplemental Information (Revised 2006).

Learning Outcome Statements

Note: The Guidance Statements are integral to the GIPS standards. All references to the GIPS standards in the learning outcome statements should be understood to include the Guidance Statements identified in the reading assignments for this study session.

The candidate should be able to:

- A. formulate policies and procedures in accordance with the GIPS standards related to disclosures and performance presentations;
- B. identify errors and omissions in disclosures and presentations, and recommend changes that would bring them into compliance with the GIPS standards;
- C. evaluate the portability of performance track records from a past firm or affiliation;
- D. determine whether information should be considered supplemental information for the purpose of GIPS compliance; and
- E. explain how the GIPS Guidance Statement on supplemental information applies in given cases.

Study Session XI: GIPS Standards: Real Estate and Private Equity

Purpose of the Study Session

Real estate and private equity investments have distinctive characteristics which set them apart from other asset classes. In order to meet the needs of prospective real estate and private equity clients, there are applicable requirements and recommendations that supplement and/or override the general provisions of the GIPS standards. This study session focuses first on the Standards for real estate and then on those pertaining to private equity.

Reading Assignments

1. Global Investment Performance Standards (GIPS®), (CFA Institute, 2005).
2. GIPS Interpretive Guidance for Real Estate (Revised 2006).
3. Real Estate Return Formulas (CFA Institute, 2009).
4. GIPS Interpretive Guidance for Private Equity (Revised 2006).

Learning Outcome Statements

Note: The Guidance Statements are integral to the GIPS standards. All references to the GIPS standards in the learning outcome statements should be understood to include the Guidance Statements identified in the reading assignments for this study session.

The candidate should be able to:

- A. determine whether investments are subject to the provisions of the GIPS standards related to real estate;
- B. judge whether real estate composites are constructed in compliance with the GIPS standards;
- C. evaluate the classification of real estate portfolios as discretionary or non-discretionary;
- D. explain the GIPS standards related to the sources and frequency of real estate valuations;
- E. explain and demonstrate the calculation of real estate returns, including the income return and capital return components of total return, in accordance with the GIPS standards;
- F. identify errors and omissions in real estate disclosures and presentations, and recommend changes to bring them into compliance with the GIPS standards;
- G. explain the private equity valuation principles of the GIPS standards;
- H. judge whether private equity composites are constructed in compliance with the GIPS standards;

- I. calculate and explain the Since Inception Internal Rate of Return (SI-IRR) in accordance with the GIPS standards related to private equity;
- J. calculate and explain the investment multiple (TVPI), realization multiple (DPI), ratio of paid-in capital to committed capital (PIC), and ratio of residual value to paid-in capital (RVPI) in accordance with GIPS standards related to private equity; and
- K. identify errors and omissions in private equity disclosures and performance presentations, and recommend changes to bring them into compliance with the GIPS standards.

Study Session XII: GIPS Standards: Verification and the Advertising Guidelines

Purpose of the Study Session

The primary purpose of verification is to provide assurance that a firm claiming compliance with the GIPS standards has adhered to the Standards on a firm-wide basis. Verification tests whether the firm meets all the composite construction requirements and whether the firm's processes and procedures are designed to present performance results in compliance with the GIPS standards. The first part of this study session presents guidance on verification engagements, performance evaluation, and verifier independence.

The GIPS Advertising Guidelines are ethical standards for firms that claim compliance with the GIPS standards and/or present performance information in advertisements that do not accommodate a GIPS-compliant performance presentation. The second part of this study session reviews the GIPS Advertising Guidelines.

Reading Assignments

1. Global Investment Performance Standards (GIPS®), (CFA Institute, 2005).
2. GIPS Handbook, 2nd ed., (CFA Institute, 2006)
3. GIPS Guidance Statement on Verification (Revised 2006).
4. GIPS Guidance Statement on Performance Examinations (2006).
5. GIPS Guidance Statement on Verifier Independence (2006).

Learning Outcome Statements

Note: The Guidance Statements are integral to the GIPS standards. All references to the GIPS standards in the learning outcome statements should be understood to include the Guidance Statements identified in the reading assignments for this study session.

The candidate should be able to:

- A. determine whether a verifier has complied with the required pre-verification and verification procedures set forth in the GIPS standards;
- B. distinguish between firm-wide verification and detailed examinations of investment performance presentations in accordance with the GIPS standards;
- C. explain the procedures for conducting performance examinations in accordance with the GIPS standards;
- D. explain the guiding principles for assessing verifier independence, and judge whether specific non-verification services are likely to impair the independence of verifiers in accordance with the GIPS standards;

- E. define advertisements in accordance with the GIPS standards;
- F. determine whether advertisements comply with the GIPS Advertising Guidelines; and
- G. recommend changes that would bring noncompliant advertisements into compliance with the GIPS Advertising Guidelines.