

STUDY SESSION

19

Performance Evaluation

Performance evaluation addresses three questions that are essential in evaluating the results of the portfolio management process:

- What was the portfolio's performance?
- Why did the portfolio produce the observed performance?
- Was the portfolio's performance due to luck or skill?

These questions are answered by performance measurement, performance attribution, and performance appraisal, respectively. The information developed in performance evaluation provides key inputs to a) assessing compliance with investment policy and progress toward achieving client goals, b) determining whether an investment manager's performance has been consistent with the manager's stated investment discipline, and c) deciding whether to hire, retain, or dismiss an investment manager.

The Global Investment Performance Standards (GIPS®) contain ethical and professional standards for presenting investment performance to prospective clients. These guidelines provide for standardized performance calculation and presentation among investment managers, enabling investors to objectively compare manager return histories and evaluate performance. This study session provides a grounding in the requirements and recommendations of GIPS.

READING ASSIGNMENTS

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| Reading 36 | Evaluating Portfolio Performance
by Jeffery V. Bailey, CFA, Thomas M. Richards, CFA, and
David E. Tierney |
| Reading 37 | Overview of the Global Investment Performance Standards
by Philip Lawton, PhD, CFA, CIPM |

LEARNING OUTCOMES**READING 36. EVALUATING PORTFOLIO PERFORMANCE**

The candidate should be able to:

- a** demonstrate the importance of performance evaluation from the perspective of fund sponsors and the perspective of investment managers;
- b** explain the following components of portfolio evaluation: performance measurement, performance attribution, and performance appraisal;
- c** calculate, interpret, and contrast time-weighted and money-weighted rates of return and discuss how each is affected by cash contributions and withdrawals;
- d** identify and explain potential data quality issues as they relate to calculating rates of return;
- e** demonstrate the decomposition of portfolio returns into components attributable to the market, to style, and to active management;
- f** discuss the properties of a valid performance benchmark and explain advantages and disadvantages of alternative types of benchmarks;
- g** explain the steps involved in constructing a custom security-based benchmark;
- h** discuss the validity of using manager universes as benchmarks;
- i** evaluate benchmark quality by applying tests of quality to a variety of possible benchmarks;
- j** discuss issues that arise when assigning benchmarks to hedge funds;
- k** distinguish between macro and micro performance attribution and discuss the inputs typically required for each;
- l** demonstrate and contrast the use of macro and micro performance attribution methodologies to identify the sources of investment performance;
- m** discuss the use of fundamental factor models in micro performance attribution;
- n** evaluate the effects of the external interest rate environment and active management on fixed-income portfolio returns;
- o** explain the management factors that contribute to a fixed-income portfolio's total return and interpret the results of a fixed-income performance attribution analysis;
- p** calculate, interpret, and contrast alternative risk-adjusted performance measures, including (in their *ex post* forms) alpha, information ratio, Treynor measure, Sharpe ratio, and M^2 ;
- q** explain how a portfolio's alpha and beta are incorporated into the information ratio, Treynor measure, and Sharpe ratio;
- r** demonstrate the use of performance quality control charts in performance appraisal;
- s** discuss the issues involved in manager continuation policy decisions, including the costs of hiring and firing investment managers;
- t** contrast Type I and Type II errors in manager continuation decisions.

READING 37. OVERVIEW OF THE GLOBAL INVESTMENT PERFORMANCE STANDARDS

The candidate should be able to:

- a** discuss the objectives, key characteristics, and scope of the GIPS standards and their benefits to prospective clients and investment managers;
- b** explain the fundamentals of compliance with the GIPS standards, including the definition of the firm and the firm's definition of discretion;
- c** explain the requirements and recommendations of the GIPS standards with respect to input data, including accounting policies related to valuation and performance measurement;
- d** discuss the requirements of the GIPS standards with respect to return calculation methodologies, including the treatment of external cash flows, cash and cash equivalents, and expenses and fees;
- e** explain the requirements and recommendations of the GIPS standards with respect to composite return calculations, including methods for asset-weighting portfolio returns;
- f** explain the meaning of "discretionary" in the context of composite construction and, given a description of the relevant facts, determine whether a portfolio is likely to be considered discretionary;
- g** explain the role of investment mandates, objectives, or strategies in the construction of composites;
- h** explain the requirements and recommendations of the GIPS standards with respect to composite construction, including switching portfolios among composites, the timing of the inclusion of new portfolios in composites, and the timing of the exclusion of terminated portfolios from composites;
- i** explain the requirements of the GIPS standards for asset class segments carved out of multi-class portfolios;
- j** explain the requirements and recommendations of the GIPS standards with respect to disclosure, including fees, the use of leverage and derivatives, conformity with laws and regulations that conflict with the GIPS standards, and noncompliant performance periods;
- k** explain the requirements and recommendations of the GIPS standards with respect to presentation and reporting, including the required timeframe of compliant performance periods, annual returns, composite assets, and benchmarks;
- l** explain the conditions under which the performance of a past firm or affiliation must be linked to or used to represent the historical performance of a new or acquiring firm;
- m** evaluate the relative merits of high/low, range, interquartile range, and equal-weighted or asset-weighted standard deviation as measures of the internal dispersion of portfolio returns within a composite for annual periods;
- n** identify the types of investments that are subject to the GIPS standards for real estate and private equity;
- o** explain the provisions of the GIPS standards for real estate and private equity;
- p** explain the provisions of the GIPS standards for Wrap fee/Separately Managed Accounts;
- q** explain the requirements and recommended valuation hierarchy of the GIPS Valuation Principles;

- r** determine whether advertisements comply with the GIPS Advertising Guidelines;
- s** discuss the purpose, scope, and process of verification;
- t** discuss challenges related to the calculation of after-tax returns;
- u** identify and explain errors and omissions in given performance presentations and recommend changes that would bring them into compliance with GIPS standards.