OVERVIEW OF THE GLOBAL INVESTMENT PERFORMANCE STANDARDS

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1 INTRODUCTION

The Global Investment Performance Standards (the GIPS® standards) fulfill an essential role in investment management around the world. They meet the need for consistent, globally accepted standards for investment management firms in calculating and presenting their results to potential clients.

The Standards are based on the ideals of fair representation and full disclosure of an investment management firm’s performance history. Firms that claim compliance with the GIPS standards must adhere to rules governing not only rate-of-return calculations but also the way in which returns are displayed in a performance presentation. They are further required to make certain disclosures and are encouraged to make others, assisting the user in interpreting and evaluating the reported returns. Potential and existing clients are assured that the information shown in a GIPS-compliant performance presentation reasonably reflects the results of the presenting firm’s past investment decisions. They are also assured that the returns are calculated and presented on a consistent basis and that they are objectively comparable to those reported by other firms rightfully claiming compliance with the Standards.

This reading comprehensively presents the requirements and recommendations of the 2010 version of the GIPS standards. In addition to presenting the Standards, the reading explains the rationale and application of specific provisions, with particular attention to implementation issues. Section 2 provides background information on the need for the GIPS standards, their history, their governance, and the objectives and key characteristics of the Standards. Section 3 covers the provisions of the GIPS standards. Section 4 explains the GIPS Valuation Principles, Section 5 reviews the GIPS Advertising Guidelines enabling firms to claim compliance with the GIPS standards in advertisements that do not accommodate compliant performance presentations, and Section 6 describes verification procedures. Section 7 considers other issues relevant to the Standards, and Section 8 summarizes the reading’s main points.

2 BACKGROUND OF THE GIPS STANDARDS

The GIPS standards, which offer significant advantages to investors and investment management firms, evolved from earlier efforts to improve the reliability of performance information and to standardize calculation methodologies. In this part of the reading, we will explain the benefits of the GIPS standards, recount their historical development, and introduce the governance body responsible for developing and interpreting the Standards. We will also give an overview of the GIPS standards.

2.1 The Need for Global Investment Performance Standards

In their current state, the GIPS standards are so broadly accepted and endorsed in the investment industry that it is worthwhile to recall the reasons they were developed in the first place. The total economic cost of defining, promulgating, interpreting, implementing, updating, monitoring, and validating claims of compliance with these voluntary ethical standards is substantial. Why have investment industry participants seen fit to incur such costs? What are the benefits?

To appreciate the value of industry-wide performance presentation standards, consider some of the many ways in which unscrupulous employees might attempt to gather and retain

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1 CFA Institute and the CIPM® program gratefully acknowledge the contributions of W. Bruce Remington, CFA as co-author of the original (2005) version of this reading.
assets by misrepresenting a firm’s historical record in the Standards’ absence. In communicating with a prospective client, they could

- present returns only for the best-performing portfolios as though those returns were fully representative of the firm’s expertise in a given strategy or style;
- base portfolio values on their own unsubstantiated estimates of asset prices;
- inflate returns by annualizing partial-period results;
- select the most favorable measurement period, calculating returns from a low point to a high point;
- present simulated returns as though they had actually been earned;
- choose as a benchmark the particular index the selected portfolios have outperformed by the greatest margin during the preferred measurement period;
- portray the growth of assets in the style or strategy of interest so as to mask the difference between investment returns and client contributions; or
- use the marketing department’s expertise in graphic design to underplay unfavorable performance data and direct the prospect’s attention to the most persuasive elements of the sales presentation.

Some of the foregoing examples are admittedly egregious abuses. They are not, however, farfetched. In the late 1980s, before performance presentation standards became widely accepted, a groundbreaking committee of the Financial Analysts Federation (a predecessor organization of CFA Institute) reported that investment advisors were “left to their own standards, which have been varied, uneven, and, in many instances, outright irresponsible and dishonest.” The investment management industry remains highly competitive, and people whose careers and livelihoods depend on winning new business want to communicate their firm’s performance in the most favorable light (as they certainly should). The GIPS standards are ethical criteria designed simply to ensure that the firm’s performance history is fairly represented and adequately disclosed. Indeed, employees who are pressured to misrepresent their firm’s investment results can and should cite the GIPS standards.

Without established, well formulated standards for investment performance measurement and presentation, the prospective client’s ability to make sound decisions in selecting investment managers would be impaired. Individual investors and their advisors, as well as pension plan sponsors, foundation trustees, and other institutional investors with fiduciary responsibility for asset pools, need reliable information. The GIPS standards give them greater confidence that the returns they are shown fairly represent an investment firm’s historical record. The Standards also enable them to make reasonable comparisons among different investment management firms before hiring one of them. Evaluating past returns is only one dimension of the manager selection process, but it is an important one, and the due diligence legally and ethically expected of fiduciaries cannot be satisfied without it.

Global standards for performance presentation, including the requirement that a firm show each composite’s investment returns alongside the returns of an appropriate benchmark, can lead to an informative discussion about the firm’s investment decision-making process. The prospective client might ask, for instance, why the composite outperformed the benchmark in

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2 The Committee for Performance Presentation Standards (1987, p. 8).
3 A “composite” is formally defined as an “aggregation of one or more portfolios managed according to a similar investment mandate, objective, or strategy.” The construction of composites is discussed in detail later.
some periods and not in others, inviting the firm’s spokespersons to explain past returns and to
describe how the investment product is positioned for the future.

It must be stressed in this context that reviewing properly calculated, fully disclosed
historical results does not exempt the prospective client from a thorough investigation of the
candidate firm’s background, resources, and capabilities for the mandate under consideration.
Due diligence in selecting an investment manager includes, among many other important
elements, examining a firm’s regulatory history, the experience and professional credentials of
its decision makers, the soundness of its investment philosophy, the nature of its investment and
operational risk controls, and the independence of its service providers. At a minimum, however,
the firm’s representatives should be able to explain the sources of its past returns reasonably,
credibly, and insightfully in light of the firm’s investment philosophy and decision-making
process as well as the then-prevailing capital market environment.

The Standards’ benefits to prospective and existing clients are clear. What, if any, are the
benefits to the investment management firms incurring the substantial expenses required to
achieve and maintain compliance with the GIPS standards?

There is, first, an incalculable benefit to the investment management industry as a whole.
The development of well founded, thoughtfully defined performance presentation standards is a
great credit not only to the vision of certain professionals and organizations but, above all, to the
leadership of the investment management firms that were the early adopters. At present,
widespread adherence to the GIPS standards may help restore the industry’s credibility, which
was severely damaged by the discovery of numerous fraudulent investment schemes in the
aftermath of the financial crisis that followed the collapse of the subprime mortgage loan and
credit default swap markets in 2008. The GIPS standards may reassure investors about compliant
firms’ veracity in the area of investment performance reporting, especially if they have been
verified. Verification, discussed below, refers to an investment firm’s voluntarily engaging an
independent third party to test the firm’s performance measurement and composite construction
procedures in order to bring additional credibility to the firm’s claim of compliance with the
GIPS standards.

The practical benefits to individual firms facing the initial and ongoing expenses of GIPS
compliance have increased over time. In some markets, the Standards are so well accepted by
plan sponsors and consultants that non-compliance is a serious competitive impediment to a
firm’s winning new institutional business. Requests for proposals (RFPs) in manager searches
routinely ask if the responding firm is in compliance with the GIPS standards and if the firm has
been independently verified. In addition, the global recognition the GIPS standards have gained
helps the compliant firm to compete in international markets because prospective clients should
value the ability to equitably compare its investment performance to that of local GIPS-
compliant firms. Compliance with the GIPS standards has appropriately been characterized as
the investment management firm’s passport to the international marketplace.

Because the GIPS standards reflect best practices in the calculation and presentation of
investment performance, firms may also realize internal benefits. In the course of implementing
the Standards, they might identify opportunities to strengthen managerial controls. The discipline
of reviewing portfolio guidelines and defining, documenting, and adhering to internal policies in
support of compliance may generally improve the firm’s oversight of investment operations.
Similarly, technological enhancements designed to provide valid calculation input data and

4 Competence in evaluating compliance with the GIPS standards is a major curriculum element in the Certificate in
Investment Performance Measurement (CIPM®) program.
presentation elements, such as dispersion statistics, may improve the quality of information available to the firm’s investment decision makers.

Only investment management firms may claim compliance with the GIPS standards. Consultants, software houses, or third-party performance measurement providers such as custodians may not claim to be GIPS-compliant. Moreover, investment firms may claim to be compliant only on a firm-wide basis (Provision I.0.A.4). GIPS compliance cannot be claimed only for some of an investment firm’s products, nor for specific composites. A firm’s claim of compliance signifies, among other things, that the firm’s performance measurement data inputs, processes, and return calculation methodology conform to the prescribed guidelines and that all of the firm’s fee-paying discretionary portfolios have been assigned to at least one composite.

2.2 The Development of Performance Presentation Standards

Investors have been keeping track of their wealth for as long as capital markets have existed. The industry standards for performance measurement and presentation as we know them today, however, have resulted from developments that began in the late 1960s and gathered speed in the 1990s.

Peter O. Dietz published his seminal work, *Pension Funds: Measuring Investment Performance*, in 1966. The Bank Administration Institute (BAI), a U.S.-based organization serving the financial services industry, subsequently formulated rate-of-return calculation guidelines based on Dietz’s work.

In 1980, Wilshire Associates joined with a number of custodial banks to establish the Trust Universe Comparison Service (TUCS), a database of portfolio returns organized for use in peer group comparisons, and the members established standards for computing returns in order to ensure comparability.

The direct lineage of the current Global Investment Performance Standards starts with the voluntary guidelines for the North American marketplace defined by a committee of the Financial Analysts Federation. The Committee for Performance Presentation Standards (CPPS) published a report in the September/October 1987 issue of the *Financial Analysts Journal*. The committee’s recommendations notably included using a time-weighted total return calculation; reporting performance before the effects of investment management fees; including cash in portfolio return calculations; reaching agreement with the client in advance on the starting date for performance measurement; selecting a risk- or style-appropriate benchmark for performance comparisons; and constructing and presenting accurate, asset-weighted composites of investment performance. The committee strongly recommended that the Financial Analysts Federation disseminate and attempt to impose performance presentation standards for investment management organizations.

Another milestone was the development of the Association for Investment Management and Research (AIMR) Performance Presentation Standards (AIMR-PPS®). AIMR, founded in January 1990 when the Financial Analysts Federation merged with the Institute of Chartered Financial Analysts, subsequently became CFA Institute. In 1990, as one of its first actions, the

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5 The GIPS standards refer to the investment management firm claiming compliance as the FIRM. This reading uses boldface type for terms that are defined in the GIPS Glossary (Section V of the Global Investment Performance Standards).

6 Following a Preface and an Introduction, the GIPS standards have four chapters: I. Provisions of the Global Investment Performance Standards; II. Valuation Principles; III. Advertising Guidelines; and IV. Verification. (See Exhibit 1.) This reading cites the GIPS standards by giving the chapter followed by section and provision identifiers.

7 CPPS (1987, pp. 8–11).
AIMR Board of Governors endorsed the AIMR-PPS standards. The Board also established the AIMR Performance Presentation Standards Implementation Committee to review the proposed Standards and to seek industry input prior to formal implementation. The AIMR-PPS standards were implemented, and the first edition of the *AIMR Performance Presentation Standards Handbook* was published in 1993.

Acting independently, the Investment Management Consultants Association (IMCA) also issued performance measurement guidelines in 1993. IMCA endorses the GIPS standards, which apply to investment firms. The IMCA standards complement the GIPS standards with guidelines for investment consultants in analyzing data obtained from investment managers in the course of manager searches as well as in reporting, monitoring, and analyzing performance results.  

In 1995, AIMR formed the Global Performance Presentation Standards Subcommittee, reporting to the Implementation Committee, to address international performance issues and to develop global standards for presenting investment performance. The following year, AIMR revised the AIMR-PPS standards, stipulating new requirements, such as the inclusion of accrued income in bond market values in both the numerator and the denominator of return calculations, and presenting new recommendations, such as the use of temporary accounts for significant cash flows. In 1997, AIMR released the second edition of the *AIMR Performance Presentation Standards Handbook* incorporating these and other changes.

In 1998, after circulating several preliminary drafts among industry participants, the Global PPS Subcommittee released the Global Investment Performance Standards for public comment. The AIMR Board of Governors formally endorsed the GIPS standards early in 1999 and established the Investment Performance Council (IPC) later that year to manage the further development and promulgation of the GIPS standards.

The IPC consisted of approximately 36 members from a variety of fields within the global investment industry representing 15 countries. From 1999 to 2006, the IPC focused on its principle goal: to have all countries adopt the GIPS standards as the standard for investment firms seeking to present historical investment performance.

The IPC strongly encouraged countries without an investment performance standard in place to accept the GIPS standards as the local norms, either in English or in a Translation of GIPS (TG).

Due to local regulation or to well-accepted practice, some countries have additional requirements over and above those set forth in the GIPS standards. In these cases, the IPC promoted an approach designated as a “Country Version of GIPS” (CVG). The country would adopt the GIPS standards as their core standards, supplemented by additional provisions as necessary to meet local requirements. If the CVG included any differences that could not be justified on the basis of regulatory stipulations or widely recognized practice, the local sponsor (typically a professional association) was required to provide a transition plan for eliminating the differences within a specified period. In 2001, the AIMR-PPS standards were adopted by the AIMR Board of Governors and the IPC as the U.S. and Canadian version of GIPS. The first edition of *The Global Investment Performance Standards (GIPS) Handbook* was published in 2002 in a loose-leaf format to accommodate changes and additions to the Standards with the passage of time.

In February 2005, the IPC revised the GIPS standards and created a single global standard for investment performance reporting. The revised Standards granted all CVG-

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compliant firms reciprocity for periods prior to 1 January 2006, such that their CVG-compliant
history will satisfy the GIPS requirement, discussed below, to show at least a five-year track
record in performance presentations.

The IPC was superseded by the GIPS Executive Committee (EC) and the GIPS Council
in 2005. (We discuss the governance of the GIPS standards below.) Working in close
collaboration with its technical subcommittees, ad hoc working groups, and representatives
of the GIPS country sponsors, the EC undertook a comprehensive review of the Standards’
requirements, recommendations, and guidance that led, with substantial industry input, to the
2010 version of the GIPS standards.

The present reading is based on the 2010 edition of the GIPS standards, which notably
includes new risk-related provisions intended to provide investors with a more comprehensive
view of a firm’s performance. The effective date for the 2010 GIPS standards is 1 January 2011.

2.3 Governance of the GIPS Standards
The GIPS Executive Committee (EC), a standing committee of the CFA Institute Centre for
Financial Market Integrity, is the decision-making body responsible for developing and
implementing the provisions of the Global Investment Performance Standards. The EC has nine
members, including its Executive Director and the chairs of four technical subcommittees, the
GIPS Council, and three regional investment performance subcommittees.

The Interpretations Subcommittee, which seeks to clarify the GIPS standards through
interpretations that effectively respond to new issues presented by the global investment
industry, is responsible for ensuring the integrity, consistency and applicability of the GIPS
standards. Firms claiming compliance with the GIPS standards must also comply with all
applicable interpretations and guidance.

The Investment Manager Subcommittee, Investor/Consultant Subcommittee, and
Verification/Practitioner Subcommittee are forums for understanding GIPS-related issues faced
by investment management firms, investors and their representatives, and verifiers and third-
party service providers, respectively. Their perspectives are shared with the Executive
Committee, the Interpretations Subcommittee, and other EC Subcommittees in order to ensure a
consistent understanding and to improve the quality of the GIPS standards.

The EC established the GIPS Council to facilitate the involvement of all country sponsors
in the ongoing development and promotion of the Standards. (As of this writing, there are 32
endorsed GIPS country sponsors.) In addition, the EC established Regional Investment
Performance Subcommittees (RIPS) under the GIPS Council to represent the interests of the
countries within regions and encourage national and regional support in the development,
 promulgation, and maintenance of the GIPS standards. There are RIPS for the Americas; Europe,
the Middle East, and Africa (EMEA); and Asia Pacific.

The EC also has a Nominations Committee that is responsible for developing a fair and
objective selection process for the electable members of the EC and its standing subcommittees,
and a Promotion and Awareness Subcommittee charged with formulating clear, consistent
messages to educate key stakeholders about the benefits of the GIPS standards.

The GIPS EC is supported by a dedicated team of CFA Institute staff members under the
leadership of the Executive Director.

2.4 Overview of the GIPS Standards
To orient the reader, we present the Table of Contents of the Global Investment Performance
Standards in Exhibit 1. The Preface recapitulates the historical development of the Standards,
which we presented somewhat more extensively above. The Introduction, to which we now turn,
provides extensive information about the Standards. Rather than paraphrasing and commenting on every point made in the Introduction, we will highlight certain concepts in the following paragraphs.

Exhibit 1
Table of Contents
GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS®)
As Adopted by the GIPS Executive Committee

PREFACE

INTRODUCTION

I. PROVISIONS OF THE GLOBAL INVESTMENT PERFORMANCE STANDARDS
   0. Fundamentals of Compliance
   1. Input Data
   2. Calculation Methodology
   3. Composite Construction
   4. Disclosure
   5. Presentation and Reporting
   6. Real Estate
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   8. Wrap Fee/Separately Managed Account (SMA) Portfolios

II. VALUATION PRINCIPLES

III. ADVERTISING GUIDELINES

IV. VERIFICATION

V. GLOSSARY

Appendix A: Sample Compliant Presentations
Appendix B: Sample Advertisements
Appendix C: Sample List of Composite Descriptions

The Introduction to the GIPS standards articulates the Standards’ objectives: “The establishment of a voluntary global investment performance standard leads to an accepted set of best practices for calculating and presenting investment performance that is readily comparable among investment firms, regardless of geographic location. These standards also facilitate a dialogue between investment firms and their existing and prospective clients regarding investment performance.” Because the Standards are global, prospective clients engaged in an evaluation of competing investment firms’ historical performance know that rates of return have been calculated in accordance with a common set of valuation principles and methodological guidelines. In addition, because they presumably understand the firms’ GIPS-compliant basis for valuing assets and calculating returns, prospective clients can proceed directly to a discussion of how the historical results were achieved. This dialogue can help them assess the quality of the asset managers’ thinking and the consistency of their investment process in past market conditions.
The Introduction additionally sets forth the goals of the GIPS Executive Committee. They are to establish industry-wide best practices for calculating and presenting performance information; to obtain worldwide acceptance of a common performance measurement and presentation standard based on the principles of fair representation and full disclosure; to promote the use of accurate and consistent performance data; to encourage fair, global competition for all markets without creating barriers to entry for new investment management firms; and to foster the notion of industry self-regulation on a global basis. Performance presentation standards thoughtfully and carefully designed by well-informed industry participants who are committed to the ethical principles of fairness and full disclosure may serve to moderate the need for expanded regulatory intervention in this area.

The Introduction also has an Overview section that states certain key characteristics of the GIPS standards. Among them is the proposition that the Global Investment Performance Standards are ethical standards intended to ensure fair representation and full disclosure of an investment firm’s performance. As ethical standards, they are voluntary. Firms that freely choose to comply with the GIPS standards, however, must apply them with the goal of full disclosure and fair representation. This goal is likely to require more than bare compliance with the minimum requirements—for instance, when specific performance situations arise on which the Standards are silent or open to interpretation. In such cases, disclosures other than those required by the Standards may be necessary, and supplemental information may contribute to a full explanation of the performance.

The GIPS standards apply to investment management firms, not to individuals. (We will return to the definition of the firm for the purpose of compliance with the Standards.) In order to promote fair representations of performance, the GIPS standards require firms to include all actual fee-paying, discretionary portfolios in aggregates, known as composites, that are defined by investment mandate, objective, or strategy. Relying on the integrity of input data, the Standards require firms to use certain calculation methods and to make certain disclosures along with the firm’s performance; when the GIPS standards conflict with local law or regulation, the Standards obligate firms to comply with the local requirements and to make full disclosure of the conflict in the performance presentation.

The GIPS standards consist of requirements, which must be followed in order for a firm to claim compliance, and recommendations, which are optional but should be followed because they represent best practice in performance presentation. The Introduction explicitly states that firms must comply with all applicable requirements, including not only the codified provisions of the GIPS standards but also any updates, Guidance Statements, interpretations, Questions & Answers, and clarifications published by CFA Institute and the GIPS Executive Committee. These materials are available on the GIPS website (www.gipsstandards.org) and in the GIPS Handbook. The GIPS standards will continue to evolve as the industry tackles additional areas of performance measurement and recognizes the implications of new investment strategies, instruments, and technologies.

The Introduction comments as well on the extent of the historical performance record to be minimally included in compliant presentations. The GIPS standards require firms to show investment performance for a minimum of five years, or since the inception of the firm or composite if either has existed for less than five years. After presenting at least five years of GIPS-compliant history, the firm must add annual performance each subsequent year building to a minimum of 10 years. In general, firms may link non-GIPS-compliant performance to their GIPS-compliant performance so long as only GIPS-compliant returns are presented for periods
after 1 January 2000 and the firm discloses the periods of non-compliance. In the case of private equity, real estate, and wrap fee/separately managed account (SMA) composite presentations, firms must also comply with Sections 6, 7, and 8, respectively, of Chapter I in the GIPS standards; these sections became effective 1 January 2006. We will consider them below.

We have remarked that firms must meet all the requirements set forth in the GIPS standards. There can be no exceptions. As stated in the part of the Introduction headed “Compliance,” firms must accordingly take all steps necessary to ensure that they have met all the requirements before claiming compliance with the GIPS standards. Moreover, firms are encouraged to implement adequate internal controls and to conduct periodic compliance checks to confirm the validity of compliance claims. The GIPS Executive Committee strongly recommends that firms be verified.

As previously mentioned, the effective date for the 2010 GIPS standards is 1 January 2011. In other words, GIPS-compliant presentations that include performance for periods that begin on or after 1 January 2011 must be prepared in accordance with the 2010 version of the Standards.

The Introduction includes a section subtitled, “Implementing a Global Standard,” which recognizes the vital part that local sponsoring organizations play in the effective implementation and ongoing administration of the GIPS standards within their countries. Country sponsors link the GIPS EC and the local markets in which investment managers conduct their business. In addition to supporting the adoption of the Standards, country sponsors will ensure that their country’s interests are taken into account as the governing body continues to develop the Standards. The GIPS standards also encourage regulators to recognize the benefit of investment management firms’ voluntary compliance with standards representing global best practices, to consider taking enforcement action on firms that falsely claim compliance with the GIPS standards, and to advocate independent verification.

Finally, the Introduction closes by restating the vitally important role of country sponsors and identifying the endorsed GIPS country sponsors who represented 32 countries as of 31 December 2009.

### Implementation (1)

**Management Commitment.** Senior management’s stated commitment to the spirit and objectives of the Standards and steadfast willingness to invest the necessary time and resources are essential for a firm to achieve compliance with the GIPS standards. The implementation effort is most likely to succeed if senior management makes achieving compliance a high priority; clearly communicates the importance of the initiative throughout the firm; oversees the preparation of a comprehensive project plan; and establishes an adequate budget, with particular attention to consulting and information systems requirements.

Some firms may wrongly assume that implementation of the GIPS standards involves “re-crunching” a few numbers and reformatting performance presentation tables. In fact, achieving compliance is a complex, challenging, and potentially expensive undertaking. Merely adopting the GIPS standards as a means of passing the initial screening in RFP competitions may lead to shortcuts that ultimately compromise the firm’s application of the Standards, deprive it of valuable internal benefits, and needlessly expose it to reputational and regulatory risk.

A firm must also have a high level of commitment from its compliance, investment management, operating, and marketing staff. Achieving and maintaining compliance with the GIPS standards typically involves an investment firm’s portfolio accounting, market data
services, information technology, portfolio management, marketing, and compliance groups, as well as the performance measurement team. It is a complex process for investment management organizations to define and document policies, gather and validate input data, calculate rates of return, construct and maintain meaningful composites, and present investment results in accordance with the GIPS standards. Careful planning with the active participation of diverse organizational units is a critical element of the implementation project.

3 PROVISIONS OF THE GIPS STANDARDS

We turn now to the specific provisions of the GIPS standards. Chapter I, Provisions of the Global Investment Performance Standards, presents firm-wide requirements and recommendations in subsections addressing the fundamentals of compliance, input data, calculation methodology, composite construction, disclosures, and presentation and reporting. In addition, the Standards include particular provisions for three special cases: real estate, private equity, and wrap fee/SMA portfolios. Exhibit 2 contains an excerpt from the GIPS standards introducing each of these topics.

Exhibit 2
CONTENT OF THE GLOBAL INVESTMENT PERFORMANCE STANDARDS

0. Fundamentals of Compliance: Several core principles create the foundation for the GIPS standards, including properly defining the firm, providing compliant presentations to all prospective clients, adhering to applicable laws and regulations, and ensuring that information presented is not false or misleading. Two important issues that a firm must consider when becoming compliant with the GIPS standards are the definition of the firm and the firm’s definition of discretion. The definition of the firm is the foundation for firm-wide compliance and creates defined boundaries whereby total firm assets can be determined. The firm’s definition of discretion establishes criteria to judge which portfolios must be included in a composite and is based on the firm’s ability to implement its investment strategy.

1. Input Data: Consistency of input data used to calculate performance is critical to effective compliance with the GIPS standards and establishes the foundation for full, fair, and comparable investment performance presentations. For periods beginning on or after 1 January 2011, all portfolios must be valued in accordance with the definition of fair value and the GIPS Valuation Principles in Chapter II.

2. Calculation Methodology: Achieving comparability among investment management firms’ performance presentations requires uniformity in methods used to calculate returns. The GIPS standards mandate the use of certain calculation methodologies to facilitate comparability.

3. Composite Construction: A composite is an aggregation of one or more portfolios managed according to a similar investment mandate, objective, or strategy. The composite return is the asset-weighted average of the performance of all portfolios in the composite. Creating meaningful composites is essential to the fair presentation, consistency, and comparability of performance over time and among firms.
4. Disclosure: Disclosures allow firms to elaborate on the data provided in the presentation and give the reader the proper context in which to understand the performance. To comply with the GIPS standards, firms must disclose certain information in all compliant presentations regarding their performance and the policies adopted by the firm. Although some disclosures are required for all firms, others are specific to certain circumstances and may not be applicable in all situations. Firms are not required to make negative assurance disclosures (e.g., if the firm does not use leverage in a particular composite strategy, no disclosure of the use of leverage is required). One of the essential disclosures for every firm is the claim of compliance. Once a firm meets all the requirements of the GIPS standards, it must appropriately use the claim of compliance to indicate compliance with the GIPS standards. The 2010 version of the GIPS standards includes a revised compliance statement that indicates if the firm has or has not been verified.

5. Presentation and Reporting: After constructing the composites, gathering the input data, calculating returns, and determining the necessary disclosures, the firm must incorporate this information in presentations based on the requirements in the GIPS standards for presenting investment performance. No finite set of requirements can cover all potential situations or anticipate future developments in investment industry structure, technology, products, or practices. When appropriate, firms have the responsibility to include in GIPS-compliant presentations information not addressed by the GIPS standards.

6. Real Estate: Unless otherwise noted, this section supplements all of the required and recommended provisions in Sections 0–5 in Chapter I. Real estate provisions were first included in the 2005 version of the GIPS standards and became effective 1 January 2006. The 2010 version of the GIPS standards includes new provisions for closed-end real estate funds. Firms should note that certain provisions of Sections 0–5 in Chapter I of the GIPS standards do not apply to real estate investments or are superseded by provisions within Section 6 in Chapter I. The provisions that do not apply have been noted within Section 6 in Chapter I.

7. Private Equity: Unless otherwise noted, this section supplements all of the required and recommended provisions in Sections 0–5 in Chapter I. Private equity provisions were first included in the 2005 version of the GIPS standards and became effective 1 January 2006. Firms should note that certain provisions in Sections 0–5 in Chapter I of the GIPS standards do not apply to private equity investments or are superseded by provisions within Section 7 in Chapter I. The provisions that do not apply have been noted within Section 7 in Chapter I.

8. Wrap Fee/Separately Managed Account (SMA) Portfolios: Unless otherwise noted, this section supplements all of the required and recommended provisions in Sections 0–5 in Chapter I. Firms should note that certain provisions in Sections 0–5 in Chapter I of the GIPS standards do not apply to wrap fee/SMA portfolios or are superseded by provisions within Section 8 in Chapter I. The provisions that do not apply have been noted within Section 8 in Chapter I.
3.1 Fundamentals of Compliance

Section I.0, “Fundamentals of Compliance,” opens with bedrock imperatives: Firms must comply with all the requirements of the GIPS standards as well as all applicable laws and regulations regarding the calculation and presentation of performance, and—tacitly recognizing that firms which are arguably in technical compliance might still find ways to misrepresent investment results—they must not present performance or performance-related information that is false or misleading. (Provisions I.0.A.1–3.) Furthermore, the GIPS standards must be applied on a firm-wide basis (Provision I.0.A.4); firms cannot claim to be in compliance with the Standards with regard only to certain of the asset classes, investment strategies, products, or composites that fall within the definition of the firm.

The fundamentals of compliance stipulate that firms must document the policies and procedures used in establishing and maintaining compliance with the GIPS standards and that the stated policies and procedures must be applied consistently. Provision I.0.A.5 specifically mentions that the firm’s policies and procedures for ensuring the existence and ownership of client’s assets must be documented; this is a requirement introduced in the 2010 version of the Standards. We will see that the policies and procedures to be documented notably include but are not limited to the firm’s definition of discretion; the criteria for including portfolios in specific composites; the timing of the inclusion and exclusion of new and terminated portfolios, respectively; the treatment of cash flows; and the firm’s policies, procedures, and methodologies for valuing investments. The firm’s error correction policies and procedures must also be documented.

Completing and updating the firm’s documentation of performance-related processes and procedures may prove to be one of the signal contributions the GIPS implementation project makes to effective operations management. Because preparing proper documentation is always less urgent than other business matters, it is not uncommon for refinements in policies and, especially, changes in the way tasks are accomplished to be explained, if at all, only in e-mails and memoranda that are not integrated into manuals or handbooks. Over time, the existing documentation can become inadequate or downright inaccurate. Implementing the GIPS standards may help managers assemble resources and allocate time to upgrading their documentation. Oftentimes, too, the effort to document longstanding policies and procedures leads to the identification of actions that might easily be taken to improve controls or achieve efficiencies.

As we have already indicated, no exceptions to the Standards are permitted; the firm cannot represent that it is in compliance with the GIPS standards “except for” anything, or make any other statements that might indicate partial compliance. Moreover, statements characterizing the calculation methodology used in a composite presentation as being in accordance or in compliance with the GIPS standards are prohibited. Statements referring to the performance of a single, existing client as being “calculated in accordance with the Global Investment Performance Standards” are also prohibited except when a GIPS-compliant firm reports the performance of an individual portfolio to the existing client. (Provisions I.0.A.6–8.)

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9 This includes any updates, Guidance Statements, interpretations, Questions & Answers (Q&As), and clarifications published by CFA Institute and the GIPS Executive Committee, which are available on the GIPS standards website (www.gipsstandards.org) as well as in the GIPS Handbook.

10 See the GIPS Guidance Statement on Error Correction.

11 It merits emphasis that only investment firms can claim to be in compliance with the GIPS standards, and such claims are legitimate only if all the requirements have been met. Accordingly, software developers and third-party performance measurement providers may not claim compliance with the Standards.
Provisions I.0.A.9–11 of the Standards spell out other fundamental responsibilities of GIPS-compliant firms. First, firms are expected to “make every reasonable effort” to provide all prospective clients with a compliant presentation. In other words, firms cannot choose to whom they want to present GIPS-compliant performance. (The Standards clarify that a firm will have met this requirement if a prospect has received a compliant presentation within the previous 12 months.) In addition, firms must provide a list of composite descriptions to any existing or prospective client asking for such information, and they must provide upon request a compliant presentation for any composite listed. Discontinued composites must remain on the list for at least five years after their termination date.

To comply with the GIPS standards, a firm must be an investment firm, subsidiary, or division held out to clients or potential clients as a distinct business entity (Provision I.0.A.12; emphasis added). The GIPS Glossary entry defines a distinct business entity as a “unit, division, department, or office that is organizationally and functionally segregated from other units, divisions, departments, or offices and that retains discretion over the assets it manages and that should have autonomy over the investment decision-making process.” Possible criteria for identifying a distinct business entity are the organization being a legal entity, having a distinct market or client type, or using a separate and distinct investment process.

The way in which the investment management organization is held out to the public is a key factor in defining the firm. For example, if a unit of a larger company specializes in providing investment management services to private clients, and is marketed as a specialist in meeting the investment needs of high-net-worth individuals and family offices, then that organizational unit might qualify as a “firm” for the purpose of GIPS compliance. Certainly, however, the unit’s entitlement to be considered a firm under the GIPS standards could be justified if it additionally were incorporated as a subsidiary and had its own dedicated financial analysts, portfolio managers, and traders located in a separate building or area of the company and reporting through a separate chain of command to the parent organization’s senior management.

Implementation (2)

Defining the Firm. For small investment management boutiques, defining the firm may be a relatively easy task, but it can prove challenging for large firms or subsidiary companies.

Consider the case of a super-regional bank whose trust department consists of two separate and distinct divisions, Personal Trust and Institutional Trust. The personal trust division, called Eastern National Bank Personal Trust Services, offers investment management to private individuals and families. The institutional trust division, called Eastern Institutional Asset Advisors, serves tax-exempt non-profit organizations including pension funds and charitable foundations; it does not solicit or handle non-institutional business. Each division has its own investment management team, traders, marketing department, administrative personnel, and accounting department. After a few years of operating in this manner, the institutional investment unit decides to achieve compliance with the GIPS standards, but the personal trust department makes a business decision not to implement the Standards. The institutional investment division may nonetheless be in position to become GIPS-compliant because it holds itself out to customers as a distinct business unit, with its own autonomous investment management, research, trading, and administrative team.

Based on the information provided, the institutional trust division seems to satisfy the conditions for defining itself as a firm for the purpose of compliance with the GIPS standards.
Sample language might be, “The firm is defined as Eastern Institutional Asset Advisors, the institutional asset management division of Eastern National Bank.”

On the other hand, if both divisions were to use the same investment process, approved security list, style models, etc., and merely divided assets between personal and institutional accounts, then neither division alone could compellingly claim compliance. If the senior investment personnel of the personal trust division had authority to dictate the institutional trust division’s investment strategy or tactical asset allocations, or to mandate the investment of institutional clients’ funds in specific securities, then the institutional trust division would likely not qualify as a distinct business unit having autonomy over the investment decision-making process and discretion over the assets it manages. If the two divisions were organizationally segregated but shared the same trading desk, the institutional trust division would have to determine whether its decision-making autonomy is compromised by the trading arrangement—if the traders merely fill the portfolio manager’s orders, then the institutional trust division arguably remains autonomous, but if the traders actively participate in the identification of misvalued securities, a greater impediment to the autonomy argument would exist.

Defining the firm in such a situation calls for the scrupulous exercise of professional judgment, with due attention to the ethical objectives of the Global Investment Performance Standards.

In view of the complexity of modern organizational structures, it may require judgment to determine if a given unit properly meets the definition of a firm. The decision has immediate and lasting practical consequences, however. Because the GIPS standards apply firm-wide, the definition of the firm will determine the extent of the initial implementation and ongoing compliance activities. It also establishes the boundaries for determining total firm assets. (As we will see, the presentation and reporting requirements of the GIPS standards include displaying the percentage of total firm assets represented by a composite or the amount of total firm assets at the end of each annual period). The phrase total firm assets refers to the aggregate fair value of all assets (whether or not discretionary or fee-paying) for which a firm has investment management responsibility. Total firm assets include assets managed by subadvisors that the firm has authority to select, and the performance of assets assigned to a subadvisor must be reflected in a composite provided the firm has discretion over the selection of the subadvisor. (Provisions I.0.A.13–14.)

The fundamentals of compliance include two further requirements. First, a firm that has been defined for the purposes of the GIPS standards may very well undergo subsequent changes in its corporate structure or organizational design. However, changes in a firm’s organization are not permitted to lead to alteration of historical composite results. Indeed, we may put it down as a general rule that, apart from correcting errors, historical composite results are not to be altered. Second, when a GIPS-compliant firm engages in joint marketing activities with other firms, the compliant firm must be distinguished from the other firms, and the marketing communication must make clear which firm is claiming compliance. (Provisions I.0.A.15–16.)

Recall that the GIPS standards consist of requirements, which must be followed without exception in order for a firm to claim compliance, and recommendations, which are optional but

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12 See the GIPS Guidance Statement on Definition of the Firm.
13 For periods prior to 1 January 2011, total firm assets must be the aggregate of the market value of all discretionary and non-discretionary assets under management within the defined firm. We address the difference between “market value” and “fair value” in Section 4.
represent best practice in performance presentation. The requirements described above are accompanied by four recommendations (Provisions I.0.B.1–4), the first of which is simply that firms should comply with the Standards’ recommendations.

The leading substantive recommendation is that firms should be verified. Firms should adopt the broadest, most meaningful definition of the firm. The Standards recommend that the scope of the definition should encompass all offices operating under the same brand regardless of their geographical location and the actual name of the individual investment management companies. We may observe that defining the firm as broadly as possible reduces the likelihood of confusion among investors and regulators over the intended applicability of a claim of compliance.

Finally, firms should annually provide each existing client a GIPS-compliant presentation for any composite in which the client’s portfolio is included. Firms that act upon this recommendation will have to be prepared to explain to some clients why their portfolio’s return falls below the composite average; while this may be a difficult conversation, their explanation may lead the client to a better understanding of the firm’s investment process and, perhaps, the impact of the client’s constraints. (See the discussion of investment discretion below.)

3.2 Input Data
Before turning to time-weighted total return calculations, we will discuss the necessary input data. We observed above that accurate input data are a key characteristic of the GIPS standards. In fact, the Standards rely on the integrity of input data, because correct rates of return obviously cannot be computed from incorrect asset values and transaction records. Accurately calculated results presuppose accurate inputs.

The standards for input data are laid out in Provisions I.1.A.1–7 (requirements) and I.1.B.1–4 (recommendations). The first requirement is basic: All data and information necessary to support all items included in a compliant presentation must be captured and maintained. The need for a firm to obtain the inputs required for compliant rate-of-return calculations and performance presentations is self-evident, although not always easily accomplished. “Maintaining” or storing the data and information, as required by the GIPS standards, is sound business practice, similar to documenting the firm’s performance-related policies and procedures. Only if the historical input data have been kept, and are retrievable, can return calculations be replicated for clients in the event that questions arise, as well as for regulators and verifiers.

There are three central input data concepts having to do with asset valuations. First, for periods beginning on or after 1 January 2011, portfolios must be valued in accordance with the definition of fair value and the GIPS Valuation Principles (Provision I.1.A.2), not cost or book values. Second, trade-date accounting is required for periods beginning 1 January 2005 (Provision I.1.A.5). Third, accrual accounting must be used for fixed-income securities and all other assets that earn interest income (Provision I.1.A.6). Let us consider each of these provisions in turn.

Fair value supersedes market value, a subtly narrower concept that figured in earlier versions of the GIPS standards. We will summarily introduce fair value here and reprise the concept in a fuller treatment of the GIPS Valuation Principles below. Fair value reflects the

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14 See also the GIPS Guidance Statement on Record Keeping.
15 Portfolio valuations must be based on market values (not cost basis or book values) for periods prior to 1 January 2011. The GIPS Glossary defines market value as the price at which investors can buy or sell an investment at a given time multiplied by the quantity held, plus accrued income.
amount at which an investment could be exchanged in a current arm’s length transaction between willing parties acting knowledgeably and prudently. Accordingly, fair value must include earned income. Under the GIPS standards, valuations must represent the objective, observable, unadjusted quoted market prices for identical investments in active markets on the measurement date, if available; in the absence of prices that satisfy those criteria, valuations must represent the firm’s best estimate of the market value, determined in accordance with the GIPS Valuation Principles.

In this context, it merits mention that cost is pertinent to performance measurement only insofar as it reflects an investment’s beginning value. Book value, an accounting convention, is also irrelevant. (Roughly speaking, a financial asset’s book value is its cost adjusted for the accretion of income and the amortization of any discount or premium.) For performance measurement, as opposed to financial or tax accounting, it does not matter whether gains and losses are realized or unrealized. Along with investment income, the significant factors are the magnitude and direction of change in the assets’ aggregate fair value over the measurement period.

The GIPS standards require that firms use trade-date accounting for the purpose of performance measurement for periods beginning 1 January 2005 (Provision I.1.A.5). This requirement is related to the mandatory use of fair values. A portfolio manager makes purchase and sale decisions based on current market conditions. (Even holding a security may be considered an investment decision, continuously renewed, to “buy” the security, or equivalently not to sell it and reinvest the proceeds in another security, at the current value.) The final objective of performance measurement is to quantify the value added by investment management, and the portfolio manager’s determinations to buy or hold undervalued securities and to sell overvalued securities reflect her appraisal of those securities’ relative attractiveness at the time of her decisions.

For the purposes of the GIPS standards, under trade-date accounting the “transaction is reflected in the portfolio on the date of the purchase or sale, and not on the settlement date.” Settlement—the actual exchange of a security for cash at the price agreed on when the trade was executed—may take place days later. Settlement-date accounting is defined as “recognizing the asset or liability on the date when the exchange of cash and investments is completed.” If the trade and settlement dates straddle the end date of a performance measurement period, then return comparisons between portfolios that use settlement-date accounting, on one hand, and benchmarks or portfolios that use trade-date accounting, on the other, may be invalid. Thus, the principle behind requiring trade-date accounting is to ensure that no significant lag occurs between a trade’s execution and its reflection in the portfolio’s performance. For compliance with the GIPS standards, the trade-date accounting requirement is considered to be satisfied if assets and liabilities are recognized within three days of entering into the transaction.

The GIPS standards also stipulate that accrual accounting must be used for fixed-income securities and all other assets that earn interest income (Provision I.1.A.6). This provision is also related to the fair valuation of assets. When a conventional bond is sold, it will be exchanged for cash in an amount that reflects not only the agreed-upon price of the instrument but also the seller’s entitlement to interest earned but not yet paid. Similarly, for GIPS-compliant performance, interest income on an asset that is held in a portfolio must be recognized as it is earned versus when it is received. Accordingly, interest income earned but not yet received must

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16 Note, however, that cost or book values and realized gains and losses are pertinent for after-tax performance calculations, discussed later.
be included in the value of fixed-income securities and all other assets that accrue interest income. With respect to dividend-paying equities, the GIPS standards recommend that dividends be accrued as of the ex-dividend date (Provision I.1.B.3).

In addition to the key valuation-related provisions explained above, the input data requirements of the GIPS standards specify the frequency and timing of portfolio valuations (Provisions II.1.A.3–4). Exhibit 3 presents the pertinent requirements. Note that the requirements change as of 1 January 2010 (not 2011). These changes were included in the 2005 version of the GIPS standards, but their effective date was deferred until 1 January 2010 so as to afford firms adequate lead time to accommodate them.

**Exhibit 3**

<table>
<thead>
<tr>
<th>Frequency and Timing of Portfolio Valuations</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Periods…</td>
</tr>
<tr>
<td>Prior to 1 January 2001</td>
</tr>
<tr>
<td>Beginning on or after 1 January 2001</td>
</tr>
<tr>
<td>Beginning on or after 1 January 2010</td>
</tr>
</tbody>
</table>

An external cash flow is capital (cash or investments) that enters or exits a portfolio. The Standards do not quantify the level of large cash flows; firms are required to define portfolio- or composite-specific amounts or percentages that constitute large external cash flows. Later in this reading, we examine the potentially distorting effect of cash flows on rate-of-return calculations.

Provision 1.A.3.c further specifies that portfolios must be valued no more frequently than required by the valuation policy. The objective of this provision is to prohibit firms from arbitrarily selecting the most advantageous sub-periods over which to tout their performance. For example, a portfolio might have achieved an extraordinary rate of return from a low valuation point on the 12th of one month to a high point on the 23rd of another month. Although the performance may very well be calculated correctly on the basis of incontrovertibly fair values, it is not readily comparable to the returns earned by other portfolios over the same idiosyncratic timeframe, and it may not reflect the portfolio’s results as of the end of standard measurement periods. Thus, it might be historically accurate but nonetheless misleading.

The Standards additionally require that, for periods beginning on or after 1 January 2006, the firm’s composites, and necessarily the portfolios within the composites, must have consistent beginning and ending annual valuation dates. Unless the composite is reported on a non-calendar fiscal year, the beginning and ending valuation dates must be at calendar year-end or on the last business day of the year (Provision I.1.A.7).

The Standards governing input data also include three recommendations that we have not previously mentioned. First, the Standards recommend that firms value portfolios, not merely when large cash flows occur, but on the date of all external cash flows (Provision I.1.B.1).

Second, valuations should be obtained from a qualified independent third party (Provision I.1.B.2). Certainly, a firm’s judicious selection of asset-pricing sources is a key element in achieving the fair representation of investment performance. When consultants and custodial banks providing performance measurement services to institutional clients reconcile the
rates of return they calculate with those reported by their clients’ investment managers, valuation differences frequently surface as the primary cause of variances that exceed tolerance ranges. Managers sometimes challenge the custodian’s valuations, contending that their daily transactional activity gives them better information about market-clearing prices than the custodian can derive secondhand from commercial market data services. Whatever the merits of this argument in specific cases, the fact remains that ascertaining the most correct asset values is essential for the fair representation of performance. In addition, switching from one source to another so as to improve stated performance at the end of a reporting period is ethically indefensible.

Third, the Standards related to input data also recommend that, when presenting net-of-fees returns, firms should accrue investment management fees (Provision I.1.B.4). We discuss net-of-fees return calculations below. As a practical matter, the GIPS standards’ input data requirements and recommendations have critically important implications for the design of a firm’s performance measurement system, including its interface with the firm’s portfolio accounting system. Management must be conclusively assured that portfolio valuations are performed properly and that all the data needed to substantiate the information contained in GIPS-compliant performance presentations are captured and maintained.

**Implementation (3)**

*Input Data.* Typically, the firm’s portfolio accounting system is the primary source of data inputs to the performance measurement system. (The accounting system may itself have automated feeds from other sources, including the trading system for security transactions and external data services for market prices.) What we may call “performance accounting”—the compilation of data inputs for rate-of-return calculations—differs from financial accounting, however, and the differences must be recognized when designing an interface between the portfolio accounting system and the performance measurement system. For instance, book values and the distinction between realized and unrealized capital gains and losses are necessary for financial accounting but inappropriate or irrelevant for before-tax performance measurement. Investment management fees may require special treatment. A net-of-fees return is defined as the gross-of-fees return reduced by investment management fees, including performance-based fees and carried interest (the general partners’ portion of the profits earned on a fund’s investments). If investment management fees are paid directly from the client’s account, they must be treated as external cash flows for gross-of-fees return calculations; if they are not paid directly from the client’s account, they must be attributed to the portfolio and deducted for net-of-fees performance calculations. In order to meet the requirements—and, optimally, the recommendations—of the GIPS standards for input data, calculation methodology, composite construction, and performance presentation and reporting, the firm must comprehensively address these and many other accounting- and system-related issues.

### 3.3 Calculation Methodology: Time-Weighted Total Return

The GIPS standards mandate the use of a total rate of return, called total return for short (Provision I.2.A.1). Total return is the most comprehensive and accurate expression of investment results because it reflects the change in portfolio value during the measurement period, taking into account not only income but also realized and unrealized gains and losses. (Recall from our discussion of input data that, for performance measurement, it does not matter whether gains and losses are transactionally realized. What matters is the change in fair value.)
In other words, total return captures both the return from investment income and the return from capital gains or losses.

In the simplest case, when no external cash flows (i.e., client-initiated additions to or withdrawals from invested assets) occur during the period, calculating total return is straightforward:

\[ r_t = \frac{V_1 - V_0}{V_0} \]  

where \( r_t \) is the total return for period \( t \), \( V_1 \) is the full fair value of the portfolio, including cash and accrued income, at the end of the period; and \( V_0 \) is the portfolio’s fair value, including cash and accrued income, at the beginning of the period. (Recall that the requirement to include accrued interest income in the values of fixed-income securities appears in Provision I.1.A.6, and the recommendation that accrual accounting should be used for dividends as of the ex-dividend date appears in Provision I.1.B.3. We discuss the requirement to include cash, and cash equivalents, below.) Formula 1 assumes that income received remains in the portfolio, and expresses return as the ratio of the change in fair value during the period to the fair value at the start of the period. Despite its extreme simplicity, the total return formula shown above produces a perfectly accurate representation of investment results in a single period with no external cash flows. As we will see, this formula is also used to calculate subperiod results under the intraperiod valuation method when external cash flows occur.

Most portfolios, of course, do have external cash flows. A pension fund, for example, routinely has additions to capital in the form of employer and employee contributions, as well as withdrawals to meet current liabilities. The fund’s investment advisors, therefore, expect to see transfers into and out of the portfolios they manage on behalf of the beneficiaries. In evaluating an investment firm, the effect of such contributions and withdrawals should be removed from the return calculation because the timing and amount of external cash flows are typically controlled not by the firm but by the client (in this case, the pension plan sponsor). Because performance measurement attempts to quantify the value added by investment decisions, the GIPS standards require the use of time-weighted rates of return, or approximations to time-weighted rates of return, to eliminate the impact of external cash flows on the return calculation.17

Provision I.2.A.2 specifies the use of time-weighted rates of return that adjust for external cash flows. For periods beginning on or after 1 January 2005, firms must approximate rates of return that adjust for daily weighted external cash flows, and we have seen that for periods beginning 1 January 2010, firms must value portfolios on the date of all large external cash flows. (We will return to the definition of “large” external cash flows below.) Provision I.2.A.2 also holds that, for periods beginning on or after 1 January 2001, firms must calculate portfolio returns at least monthly; for earlier periods, firms may calculate portfolio returns quarterly.

The most accurate way to calculate a total return for a measurement period in which external cash flows occur is to value the portfolio whenever an external cash flow occurs, compute a subperiod return, and geometrically chain-link subperiod returns expressed in relative form according to the following formula:

\[ r_{net} = (1 + r_{t,1}) \times (1 + r_{t,2}) \times ... \times (1 + r_{t,n}) - 1 \]  

17 See the GIPS Guidance Statement on Calculation Methodology.
where \( r_{t_{\text{twr}}} \) is the time-weighted total return for the entire period and \( r_{t,1} \) through \( r_{t,n} \) are the subperiod returns. We explicitly point out that Provision I.2.A.2 requires periodic returns to be geometrically linked—that is, converted to relative form \((1 + r)\) and multiplied—according to the firm’s composite-specific policy.

For example, consider a portfolio with a beginning value of $100,000 as of 31 May, a value of $109,000 on 5 June (including a cash contribution of $10,000 received that day), and an ending value of $110,550 on 30 June. Consider that the first subperiod ends and the second begins on the cash flow date, such that the ending value for subperiod 1 is $99,000 ($109,000 less the contribution of $10,000) and the beginning value for Subperiod 2, including the contribution, is $109,000. The portfolio’s true time-weighted return using the intraperiod valuation method is 0.41 percent, computed as follows:

\[
rt_{\text{twr}} = (1 + r_{t,1}) \times (1 + r_{t,2}) - 1 = [1 + (-0.01)] \times (1 + 0.0142) - 1
\]

\[
= 1.0041 - 1 = 0.0041 = 0.41\%
\]

Geometric linking, as shown here, is correct (and required by the GIPS standards) because returns are compounded and so are not additive but multiplicative.

Assuming the input data are valid, the intraperiod valuation method illustrated above gives truly accurate total returns. Accordingly, for periods beginning on or after 1 January 2010, the GIPS standards require firms to calculate returns by geometrically linking periodic returns before and after large cash flows and, as we saw when reviewing the provisions related to input data, the Standards recommend that portfolios be valued on the date of all external cash flows. For earlier periods, however, estimation methods can be used.

For periods prior to 1 January 2005, cash flows can be assumed to occur at the midpoint of the measurement period. The Original Dietz method reflects this midpoint assumption:

\[
r_{\text{Dietz}} = \frac{V_t - V_0 - CF}{V_0 + (CF \times 0.5)}
\]

where \( CF \) is the net external cash flow for the period.

Using the same example, the Original Dietz formula gives a return of 0.52 percent:
The formula for estimating the time-weighted rate of return using the Modified Dietz method is

\[
\begin{align*}
\rho_{\text{Dietz}} &= \frac{V_f - V_0 - CF}{V_0 + (CF \times 0.5)} \\
&= \frac{110,550 - 100,000 - 10,000}{100,000 + (10,000 \times 0.5)} = 0.0052 = 0.52% \\
\end{align*}
\]

A time-weighted total return calculation that adjusts for daily weighted cash flows is required for periods beginning on or after 1 January 2005. Examples of acceptable approaches are the Modified Dietz method and the Modified Internal Rate of Return (Modified IRR) method, both of which weight each cash flow by the proportion of the measurement period it is held in the portfolio.

The formula for estimating the time-weighted rate of return using the Modified Dietz method is

\[
\rho_{\text{ModDietz}} = \frac{V_f - V_0 - CF}{V_0 + \sum_{i=1}^{n} (CF_i \times w_i)}
\]

where \(\sum_{i=1}^{n} (CF_i \times w_i)\) is the sum of each cash flow multiplied by its weight and \(CF = \sum CF_i\). The weight \((w_i)\) is simply the proportion of the measurement period, in days, that each cash flow has been in the portfolio:

\[
w_i = \frac{CD - D_i}{CD}
\]

where \(CD\) is the total number of calendar days in the period and \(D_i\) is the number of calendar days from the beginning of the period that cash flow \(CF_i\) occurs. (Note that this formula assumes that cash flows occur at the end of the day.)\(^{18}\) In our example, there is a $10,000 contribution on 5 June so \(D_i = 5\), and there are 30 days in June, so \(CD = 30\). The proportion of the measurement period that the $10,000 is in the portfolio is thus

\[
w_i = \frac{CD - D_i}{CD} = \frac{30 - 5}{30} = \frac{25}{30} = 0.83
\]

Applying the Modified Dietz formula to the same example gives a return of 0.51 percent:

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\(^{18}\) Cash flows can also be assumed to occur at the beginning of the day. In that case, the weight factor is adjusted to add another day to the period of time the cash flow is in the portfolio: \(w_i = (CD - D_i + 1)/CD\). It is incumbent upon the firm to establish a policy to weight external cash flows consistently.
The Modified IRR method is another estimation approach acceptable prior to 1 January 2011. This method determines the internal rate of return (IRR) for the period, adjusted to take into effect the timing of cash flows. The Modified IRR is the value of \( r \) that satisfies the following equation:

\[
V_1 = V_0 + \sum_{i=1}^{n} (CF_i \times w_i) = 110,550 - 100,000 - 10,000 \\
100,000 + [10,000 \times (25/30)]
\]

\[
= 0.0051 = 0.51\%
\]

The Modified IRR method differs from the original internal rate of return method in that the exponent is the proportion of the measurement period that each cash flow is in the portfolio. Therefore, while the original IRR is a money-weighted return, the Modified IRR approximates a time-weighted return.

3.4 Return Calculations: External Cash Flows

In the previous section, different methodologies for calculating a rate of return from a single set of input data gave different answers. To recapitulate:

**Inputs:**
- Fair value on 31 May: $100,000
- Cash flow on 5 June: + $10,000
- Fair value on 5 June: $109,000 (after the cash flow)
- Fair value on 30 June: $110,550

**Solutions:**
- True time-weighted return: 0.41 percent
- Original Dietz method: 0.52 percent
- Modified Dietz method: 0.51 percent
- Modified IRR method: 0.51 percent

In this particular example, the estimated rates of return given by the Modified Dietz and Modified IRR methods are nearly the same as the estimated return calculated by the Original Dietz method, which assumes that the external cash flow occurred at midmonth. However, the
external cash flow causes the day-weighted estimates (0.51 percent) to vary by 10 basis points from the true time-weighted return (0.41 percent).

To appreciate the potentially distorting impact of external cash flows on estimated time-weighted rates of return, consider Exhibits 4 through 6. The exhibits depict a “market index” with a value of 100 as of 31 May, and the data below each exhibit represent portfolios with a value of $100,000 on 31 May and contributions of $10,000 received on 5 June (on the left-hand side) and 15 June (on the right-hand side). In flat and steadily rising or falling markets (illustrated in Exhibit 4 and Exhibit 5), the timing of the cash flows has a relatively modest impact on the accuracy of the estimates. We can observe this phenomenon by comparing the true time-weighted returns with those calculated using the Modified Dietz method. (Note that the Modified Dietz method is mathematically equivalent to the Original Dietz method when the cash flow occurs at the midpoint of the measurement period.) When markets are volatile, however, as illustrated in Exhibit 6, large external cash flows may have a material impact on the accuracy of the estimated return. The reader should work through these examples using the formulas for the true time-weighted return and the Modified Dietz method. The calculations for the first example, on the left-hand side of Exhibit 4, were shown above.

Exhibit 4
Impact of Cash Flows in a Flat Market

<table>
<thead>
<tr>
<th>Returns</th>
<th>31-May Fair Value</th>
<th>$100,000</th>
<th>31-May Fair Value</th>
<th>$100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1.00%</td>
<td>5-Jun Fair Value</td>
<td>$99,000</td>
<td>-0.93%</td>
<td>15-Jun Fair Value</td>
</tr>
<tr>
<td></td>
<td>Contribution</td>
<td>$10,000</td>
<td></td>
<td>Contribution</td>
</tr>
<tr>
<td></td>
<td>Total FairValue</td>
<td>$109,000</td>
<td></td>
<td>Total Fair Value</td>
</tr>
<tr>
<td>1.42%</td>
<td>30-Jun Fair Value</td>
<td>$110,550</td>
<td>1.35%</td>
<td>30-Jun Fair Value</td>
</tr>
<tr>
<td>0.41%</td>
<td>Modified Dietz</td>
<td>0.51%</td>
<td>0.41%</td>
<td>Modified Dietz</td>
</tr>
</tbody>
</table>

Source: Paula Gehr

Exhibit 5
Impact of Cash Flows in a Steadily Rising Market
Exhibit 6
Impact of Cash Flows in a Volatile Market

Returns
31-May Fair Value $100,000 31-May Fair Value $100,000
-5.00% 5-Jun Fair Value $102,000 4.00% 15-Jun Fair Value $104,000
Contribution $10,000 Contribution $10,000
Total Fair Value $112,000 Total Fair Value $114,000
5.88% 30-Jun Fair Value $118,588 3.85% 30-Jun Fair Value $118,385
8.00% Modified Dietz 7.93% 8.00% Modified Dietz 7.99%

Source: Paula Gehr
The GIPS standards require firms to formulate and document composite-specific policies for the treatment of external cash flows and to adhere to those policies consistently. (Provision I.2.A.2 reads in pertinent part, “External cash flows must be treated according to the firm’s composite-specific policy.”) Each policy should describe the firm’s methodology for computing time-weighted returns and the firm’s assumptions about the timing of capital inflows and outflows. If it is the firm’s rule to revalue portfolios on the date of all external cash flows, as the GIPS standards recommend, then the firm should also state that policy.

As we have previously remarked, the Standards offer no quantitative definition of large external cash flows. Taking into account the liquidity of the market segments or asset classes and the nature of the investment strategy, firms must make their own determinations for each composite. For example, a relatively high percentage of portfolio value might be easily deployed in a developed equity market, while a lower percentage of portfolio value might be deemed the appropriate criterion for a large external cash flow in a comparatively illiquid emerging debt market.

A composite-specific policy may define a “large” external cash flow in terms of an amount or a percentage. Whatever definition a firm adopts, it must document the policy and follow it without exception. If a portfolio receives a large external cash flow, as defined for the composite in which the portfolio is included, the firm is not at liberty to omit the revaluation on the grounds that the market was not especially volatile during the measurement period. Inconsistent applications of firm policies constitute a breach of the GIPS standards.

**Implementation (4)**

_**Return Calculation Policies.**_ The GIPS standards state, “Firms must calculate time-weighted rates of return that adjust for external cash flows. Both periodic and sub-period returns must be geometrically linked. External cash flows must be treated according to the firm’s composite – specific policy.” (Excerpted from Provision I.2.A.2). The Standards also state that, for periods beginning on or after 1 January 2010, portfolios must be valued on the date of all large cash flows, and that firms must define large cash flow for each composite to determine when the portfolios in that composite must be valued. (Excerpted from Provision I.1.A.3). Here are examples of internal policy statements addressing these elements:

- **Portfolio return calculation methodology:** “Eastern Institutional Asset Advisors calculates each portfolio’s time-weighted rate of return on a monthly basis. For periods beginning on or after 1 January 2010, portfolios are valued when large cash flows occur; in earlier periods, monthly returns are calculated using the Modified Dietz method. Returns for longer measurement periods are computed by geometrically linking the monthly returns.”

- **Large external cash flows:** “Eastern Institutional Asset Advisors revalues portfolios that belong to the Large-Cap Domestic Equity composite when capital equal to 10 percent or more of fair value as of the end of the most recent measurement period is contributed or withdrawn. Intraperiod portfolio valuations are based on quoted security market values provided by the client’s custodian.”

3.5 _**Additional Portfolio Return Calculation Provisions**_

The GIPS standards for calculation methodology include further provisions directly affecting portfolio returns. (We will discuss the calculation-related guidelines for composites in a later section.)

Previously mentioned but not explained, one requirement is that returns from cash and cash equivalents held in portfolios must be included in total return calculations (Provision
A primary purpose of performance measurement is to enable prospective clients and, by extension, their consultants to appraise an investment management firm’s results. Within the constraints established by a client’s investment policy statement (IPS), active managers often have discretion to decide what portion of a portfolio’s assets to hold in cash or cash equivalents. In other words, the cash allocation decision may be at least partially under the manager’s control, and thus return calculations must reflect the contribution of the cash and cash equivalents to investment results.

Consider the case of an institutional investor such as a defined-benefit pension plan sponsor. The structure of the sponsor’s investment program is, generally, based on an asset allocation study or, preferably, an asset/liability study identifying the optimal mix of asset classes to meet the fund’s financial objectives at an acceptable level of risk. The sponsor retains investment management firms to invest the fund’s assets in specific markets in accordance with the study results. For example, within the domestic equity allocation, the sponsor might hire one firm to invest a certain portion of the fund’s assets in small-cap growth stocks and another firm to invest a portion in large-cap value stocks. The sponsor expects the managers to remain fully invested in their mandated market sectors at all times. The sponsor’s IPS may, however, allow the managers to hold some amount (e.g., up to 5 percent of portfolio assets) in cash and cash equivalents, if only to accommodate frictional cash thrown off in the process of buying and selling securities. (The client will usually define “cash equivalents,” for example, as money market instruments and fixed income securities with less than one year to maturity.) In this case, it is up to the manager to decide how much cash to hold, up to 5 percent of assets.

The total portfolio return will be higher or lower depending on how much cash the manager holds and how the equity and money markets perform relative to one another during the measurement period. A few simple scenarios based on actual historical U.S. market returns will illustrate these points. First, in a rising equity market, cash positions reduce overall portfolio returns; the higher the cash position, the lower the portfolio return. This relationship is illustrated in Exhibit 7, in which increasing the cash position (represented here by U.S. Treasury bills) from 1 percent to 5 percent of portfolio assets reduces the portfolio return for a three-month period by 26 basis points (0.26 percent).

Exhibit 7
Illustration of the Effect of Cash Holdings in Rising Markets

<table>
<thead>
<tr>
<th></th>
<th>1% Held in Cash</th>
<th>5% Held in Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Return</td>
<td>Weight</td>
</tr>
<tr>
<td>Broad U.S. equity market index</td>
<td>99%</td>
<td>6.57%</td>
</tr>
<tr>
<td>U.S. Treasury bills</td>
<td>1%</td>
<td>0.26%</td>
</tr>
<tr>
<td>Total portfolio</td>
<td>100%</td>
<td>6.51%</td>
</tr>
</tbody>
</table>

In contrast, a higher cash position improves the portfolio return in a falling market. Exhibit 8 illustrates this result, whereby increasing the percentage of the portfolio held in cash from 1 percent to 5 percent boosts the three-month portfolio return by 11 basis points (0.11 percent).

Exhibit 8
Illustration of the Effect of Cash Holdings in Declining Markets

<table>
<thead>
<tr>
<th></th>
<th>1% Held in Cash</th>
<th>5% Held in Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Return</td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In contrast, a higher cash position improves the portfolio return in a falling market. Exhibit 8 illustrates this result, whereby increasing the percentage of the portfolio held in cash from 1 percent to 5 percent boosts the three-month portfolio return by 11 basis points (0.11 percent).
Note that cash and cash equivalents must be included in the total return calculation even if the cash is not actually invested by the same person or group. The amount of cash available for short-term investment is more important to overall portfolio results than the money market manager’s success in outperforming the short-term market. For the rising and falling equity markets described above, Exhibit 9 illustrates the relative impact of the portfolio manager’s increasing the cash allocation from 1 percent to 5 percent and the money market trader’s simultaneously achieving excess returns 50 basis points (0.5 percent) higher than Treasury bill returns. The portfolio manager’s cash allocation decision has a substantially greater effect on overall portfolio returns than does the money market trader’s proficiency in selecting attractive short-term investments.

### Exhibit 9

**Impact of Cash on Portfolio Returns**

<table>
<thead>
<tr>
<th>Weight</th>
<th>Return</th>
<th>Weight</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad U.S. equity market index</td>
<td>99%</td>
<td>–2.39%</td>
<td>95%</td>
</tr>
<tr>
<td>U.S. Treasury bills</td>
<td>1%</td>
<td>0.45%</td>
<td>5%</td>
</tr>
<tr>
<td>Total portfolio</td>
<td>100%</td>
<td>–2.36%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The GIPS standards further require that returns be calculated after the deduction of actual—not estimated—trading expenses (Provision I.2.A.4). Trading expenses are costs incurred in the purchase or sale of investments, and the performance calculation must include them because these expenses must be paid in order to execute the investment strategy. The GIPS Glossary defines **trading expenses** as the costs of buying or selling investments and notes that these costs typically take the form of brokerage commissions or spreads from either internal or
external brokers. Commissions are explicit costs, generally a negotiated amount per share of common stock bought or sold, intended to compensate the broker, as the investor’s agent, for arranging and settling trades. Bid–ask spreads are the difference between the price at which a dealer, acting for his firm’s account, is willing to buy a security from a seller and the price at which he is willing to sell the security to a buyer. From the investor’s perspective, the spread is the cost of immediacy or liquidity, and it compensates the dealer for both the cost of operations and the risk of adverse selection (the possibility that a well-informed trader has better information than the dealer has about the fundamental value of a security in the dealer’s inventory). Actual trading expenses are necessary input data for GIPS-compliant rate-of-return calculations.

It merits mention in this context that, as the GIPS Glossary makes clear, custody fees should not be considered direct trading expenses, even when they are charged on a per-transaction basis. From a performance measurement perspective, although trading costs are unavoidably part of executing an investment strategy, they will naturally be higher in a portfolio with relatively greater turnover. External cash flows, whether inbound or outbound, will occasion a higher-than-normal volume of security transactions, but on an ongoing basis, a manager generally has control over portfolio turnover. A firm’s trading capabilities will also affect its level of execution costs. Although it is not a matter of compliance with the GIPS standards, the investment manager has an ethical and fiduciary responsibility to achieve best execution on behalf of clients. If a client’s directed brokerage program requires the firm to channel trades through approved brokers, regular communication with the client is in order. Returning to the GIPS standards, there are additional requirements when trading expenses cannot be broken out of bundled fees, that is, combined fees, which may include any mix of management, trading, custody, and/or other administrative charges. The GIPS Glossary cites all-in fees and wrap fees as examples of bundled fees. All-in fee arrangements are common when a single company offers diverse services such as asset management, brokerage, and custody. Wrap fees are specific to an investment product, namely a wrap-fee account (frequently called a separately managed account, or SMA), whereby a sponsoring firm typically engages other firms as subadvisors and service providers. When trading expenses are inextricable, the gross return must be reduced by the entire amount of the bundled fee or by that portion of the bundled fee that includes the direct trading expenses. Specifically, when calculating returns gross of investment management fees, the entire bundled fee or the portion of the bundled fee that includes trading expenses must be deducted. When calculating returns net of investment management fees, the entire bundled fee or the portion(s) of the bundled fee that include the investment management fee and the trading expenses must be deducted. These requirements are presented in Provisions I.2.A.5.a–b, where it is twice reiterated that the use of estimated trading expenses is not permitted.

Finally, it remains to address a recommendation of the GIPS standards pertinent to portfolio return calculations. Provision I.2.B.1 recommends that returns be calculated net of non-reclaimable withholding taxes on dividends, interest, and capital gains. Some countries allow certain kinds of investors to recoup a portion of withholding taxes by filing claims. Withholding taxes subject to reclamation should be accrued until such time as they are actually recovered, and

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20 For a comprehensive treatment of these topics, the interested reader is referred to Larry Harris (2003).
21 The CFA Institute Centre for Financial Market Integrity addresses this and many related issues in its “Trade Management Guidelines” and “Soft Dollar Standards,” available on the CFA Institute website.
22 We present additional provisions of the GIPS standards related to wrap fee portfolios in Section 3.17.
withholding taxes that cannot be recovered should be treated like other transaction costs and deducted from the portfolio before returns are calculated.

### 3.6 Composite Return Calculation Provisions

The notion of a composite is central to the GIPS standards. Because composite returns purport to convey the firm’s investment results for a given investment mandate, objective, or strategy, proper composite construction is essential to achieving the Standards’ ethical aims, the fair representation and full disclosure of the firm’s performance.

A composite may be thought of as a combined account composed of similar portfolios in proportion to their weights as a percent of the composite’s total assets. Accordingly, the composite return is the asset-weighted average of the returns of all the individual constituent portfolios. The GIPS standards prescribe the asset-weighting methods for composite return calculations.

Standard I.2.A.6 reads, “Composite returns must be calculated by asset-weighting the individual portfolio returns using beginning-of-period values or a method that reflects both beginning-of-period values and external cash flows.” Let us explore these methods in an example. Exhibit 10 displays the beginning asset values of four portfolios that, taken together, constitute a composite. The exhibit also shows the external cash flows experienced by each portfolio during the month of June. (We have seen Portfolio A before.) For completeness, the exhibit also shows each portfolio’s ending fair value.

#### Exhibit 10

A Composite Including Four Portfolios: Weighted External Cash Flows

<table>
<thead>
<tr>
<th>Cash Flow Weighting Factor</th>
<th>Portfolio (§ Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td><strong>Beginning assets (31 May)</strong></td>
<td>100.00</td>
</tr>
<tr>
<td><strong>External cash flows:</strong></td>
<td></td>
</tr>
<tr>
<td>5 June</td>
<td>0.83</td>
</tr>
<tr>
<td>8 June</td>
<td>0.73</td>
</tr>
<tr>
<td>17 June</td>
<td>0.43</td>
</tr>
<tr>
<td>24 June</td>
<td>0.20</td>
</tr>
<tr>
<td>29 June</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Ending assets (30 June)</strong></td>
<td>110.55</td>
</tr>
</tbody>
</table>

Beginning assets + Weighted cash flows | 108.30 | 107.63 | 112.94 | 112.10 | 440.97 |

Percent of total beginning assets | 23.00% | 22.40% | 25.97% | 28.63% | 100.00% |

Percent of total beginning assets + Weighted cash flows | 24.56% | 24.41% | 25.61% | 25.42% | 100.00% |

Note: Weighted cash flows reflect two-decimal-place precision in the weighting factors.

Determining the percentage of total composite assets held in each portfolio at the beginning of the measurement period is straightforward. Portfolio A had a beginning fair value of $100,000, and all four portfolios combined had a beginning fair value of approximately
$435,000, so the percentage held by Portfolio A is 100/434.81 = 0.23 = 23%. As we will show in a moment, under a method reflecting only beginning-of-period values, we can calculate the composite return by multiplying the individual portfolio returns by the percentage of beginning composite assets held in each portfolio and summing the products.

Determining the return impact of portfolios based on beginning assets and weighted external cash flows is a little more complex. The weighting factor, however, is already familiar from our discussion of the Modified Dietz rate-of-return calculation. Each external cash flow is weighted in proportion to percentage of the time it is held in the portfolio during the measurement period. Recall formula 5:

\[
W_i = \frac{CD - D_i}{CD}
\]

where \(CD\) is the total number of calendar days in the period and \(D_i\) is the number of calendar days since the beginning of the period when cash flow \(CF_i\) occurs. Exhibit 10 showed the weighting factor computed to two decimal places with this formula for each of the days in the measurement period (the month of June) on which external cash flows occur that affect any of the portfolios in the composite. The exhibit also showed the weighted external cash flows under the two methods discussed. For the method incorporating weighted external cash flows, the sum of beginning assets and weighted external cash flows, \(V_p\), is calculated as:

\[
V_p = V_0 + \sum_{i=1}^{n} (CF_i \times w_i)
\]

(7)

where \(V_0\) is the portfolio’s beginning value and \(\sum_{i=1}^{n} (CF_i \times w_i)\) is the sum of each portfolio’s weighted external cash inflows and outflows. Note that the right-hand side in formula 7 is the denominator of the Modified Dietz formula (see formula 4).

The composite return is the weighted-average return of the individual portfolios that belong to that composite. Under the “beginning assets” weighting method, the composite return calculation is

\[
r_C = \sum \left[ r_{pi} \times \frac{V_{0,pi}}{\sum_{pi=1}^{n} V_{0,pi}} \right]
\]

(8)

where \(r_C\) is the composite return, \(r_{pi}\) is the return of an individual portfolio \(i\), \(V_{0,pi}\) is the beginning value of portfolio \(i\), and \(\sum_{pi=1}^{n} V_{0,pi}\) is the total beginning fair value of all the individual portfolios in the composite. In other words, the composite return is the sum of the individual portfolio returns weighted in proportion to their respective percentages of aggregate beginning assets.

Under the alternate “beginning assets plus weighted cash flows” method, the return calculation uses the individual portfolios’ \(V_p\), computed above, in place of \(V_{0,pi}\):
\[ r_c = \sum \left( r_{pi} \times \frac{V_{pi}}{\sum V_{p}} \right) \]  

(9)

Exhibit 11 supplies each individual portfolio’s return for the month of June and presents the composite returns resulting from these two weighting methods.

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Percent of Beginning Assets</th>
<th>Percent of Beginning Assets + Weighted Cash Flows</th>
<th>Return for Month of June</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>23.00%</td>
<td>24.56%</td>
<td>0.51%</td>
</tr>
<tr>
<td>B</td>
<td>22.40%</td>
<td>24.41%</td>
<td>0.28%</td>
</tr>
<tr>
<td>C</td>
<td>25.97%</td>
<td>25.61%</td>
<td>0.32%</td>
</tr>
<tr>
<td>D</td>
<td>28.63%</td>
<td>25.42%</td>
<td>1.36%</td>
</tr>
</tbody>
</table>

Composite Return:
- Based on beginning assets 0.65%
- Based on beginning assets + Weighted cash flows 0.62%

Under the “beginning assets” weighting method, the composite return shown in Exhibit 11 is:

\[
r_C = (0.0051 \times 0.23) + (0.0028 \times 0.224) + (0.0032 \times 0.2597) + (0.0136 \times 0.2863) = 0.0065 = 0.65%\]

Similarly, the composite return under the “beginning assets plus weighted cash flows” method is:

\[
r_C = (0.0051 \times 0.2456) + (0.0028 \times 0.2441) + (0.0032 \times 0.2561) + (0.0136 \times 0.2542) = 0.0062 = 0.62%\]

Mathematically astute performance analysts may already have discerned another valid way to compute composite returns under a method that correctly reflects both beginning-of-period values and external cash flows. Beginning assets and intraperiod external cash flows can be summed and, treating the entire composite as though it were a single portfolio, the return can be computed directly with the Modified Dietz formula. Paying attention to the direction of the cash flows, this approach can be illustrated with data from Exhibit 10, using formula 4:

\[
r_{\text{ModDietz}} = \frac{V_1 - V_0 - CF}{V_0 + \sum_{i=1}^{n} (CF_i \times w_i)}
\]

\[
r_c = \frac{429.55 - 434.81 - 25 - (-15) - (-5) - (-6.5) - (-6.5)}{440.97} = \frac{2.74}{440.97} = 0.0062 = 0.62%\]
In the interest of ensuring that firms present composite returns with reasonable accuracy, the GIPS standards specify the required frequency of asset weighting. Provision I.2.A.7 states that for periods beginning on or after 1 January 2010 composite returns must be calculated by asset weighting the individual portfolio returns at least monthly, and Provision I.2.B.2 recommends that the same be done for earlier periods. The less frequently the asset-weighting exercise is conducted, the greater the likelihood that composite returns will inaccurately reflect the constituent portfolios’ aggregate performance. We will encounter this issue again, and illustrate the potential for returns to drift away from mathematically precise computations, when we discuss custom benchmark rebalancing.

3.7 Constructing Composites I—Qualifying Portfolios

In order to prevent firms from presenting only their best-performing portfolios to prospective clients, the GIPS standards require firms to include all portfolios that meet certain criteria in at least one composite. The first requirement for composite construction reads, “All actual, fee-paying, discretionary portfolios must be included in at least one composite.” It goes on to clarify that non-fee-paying portfolios may be included in a composite (with appropriate disclosure) provided that they are discretionary, but non-discretionary portfolios must not be included in a firm’s composites. (Provision I.3.A.1).

### Implementation (5)

**Composite Construction: Portfolio Documentation.** The GIPS standards require that all data and information necessary to support all items included in a compliant presentation must be captured and maintained (Provision I.1.A.1). At the outset of the implementation project, it is useful to develop a complete list of the firm’s accounts. The list can then be used to check that all documentation such as investment management contracts, custody agreements, investment policy statements (IPS), and compliance documents are available and up to date. This exercise creates a good opportunity for managers and administrative staff to confirm that portfolios are discretionary and to verify target asset mixes, acceptable asset ranges, account size, tax status, investment restrictions, and other characteristics pertinent to the portfolios’ assignment to composites. It is also advisable to conduct a formal review and update of the master account list annually. Doing so will help ensure that documentation is kept current and that portfolios are assigned to the correct composites, particularly if clients have modified portfolio mandates and constraints during the year. The review will also point out the need for the creation of new composites if a significant number of accounts no longer fit into existing composites or if a new investment strategy is launched.

A key term in this requirement is “discretionary.” If an actual, fee-paying portfolio is discretionary, it must be included in at least one composite; if it is not discretionary, it must not be included in any composite. A portfolio is discretionary if the manager is able to implement the intended investment strategy. For example, the manager of a fully discretionary domestic mid-cap value portfolio is free to purchase any stock issued in the investor’s home country that meets the pertinent market capitalization and style criteria. The firm might define mid-cap stocks as those whose market capitalization falls within a certain range. Similarly, the firm might define value stocks in terms of their price-to-earnings multiple, price-to-book ratio, dividend yield, or

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24 This definition of discretion is taken from the GIPS Guidance Statement on Composite Definition.
other characteristics intended to distinguish them from growth stocks. In line with best practice, the firm and the client will agree in advance that the portfolio’s investment objective is to outperform a specified benchmark that is an appropriate measure of success in the domestic mid-cap market. For instance, the firm might construct a custom benchmark that is acceptable to the client, or the firm and the client might agree to use a commercially available index that mirrors the domestic mid-cap market.

If the client imposes restrictions on the manager’s freedom to make investment decisions to buy, hold, and sell securities so as to carry out the investment strategy and achieve the portfolio’s financial objectives, then the manager must consider whether the portfolio is in fact discretionary. In general, restrictions that impede the investment process to such an extent that the strategy cannot be implemented as intended may be presumed to render the portfolio non-discretionary.

Investors commonly set forth investment restrictions in investment policy statements (IPS). In addition to articulating the investor’s overall financial objectives, an IPS normally expresses a number of constraints intended to limit the investment risks to which the assets are exposed. For example, the IPS may limit an individual equity portfolio’s economic sector exposure to a certain percentage of portfolio assets or a certain relationship to the comparable benchmark weight: “No portfolio shall hold more than 15 percent of assets or 125 percent of the corresponding benchmark weight, whichever is greater, in any given sector, such as consumer discretionary stocks or information technology stocks.” A fixed-income portfolio may be constrained to hold no securities rated below investment grade and to maintain the portfolio’s weighted-average duration within a specified range, such as 75 percent to 125 percent of the benchmark duration. These restrictions are intended to preserve the portfolios from losses in value due to inadequate sector diversification, excessive credit quality risk, or unacceptable levels of interest rate risk.

Clearly, in addition to ensuring that the benchmark is appropriate, investors must be careful to formulate constraints that achieve their intended risk-control objectives without unduly impairing the portfolio managers’ ability to act on their professional judgment regarding the relative attractiveness of sectors and securities. In other words, a well-written IPS meets the client’s need for risk mitigation while respecting the portfolio manager’s discretion. The manager is well advised to discuss with the client any restrictions that are incompatible with the intended investment strategy. Upon accepting the investment management assignment, however, the portfolio manager is ethically bound by the client’s stated policies. Moreover, investment management agreements often incorporate the IPS, so the portfolio manager may also be legally required to comply with properly communicated client-specified constraints.

In some cases, the client’s investment constraints may impinge on the portfolio manager’s flexibility. A personal investor might prohibit investment in securities issued by companies operating in industries she considers socially unacceptable, such as alcohol, tobacco, or gaming. A corporate client might prohibit the sale of company stock, or a foundation might similarly ban the sale of “sentimental holdings,” securities issued by the company in which its founder made a fortune. Additionally, legal restrictions may apply. For instance, a public fund might be statutorily precluded from investing in non-domestic securities. None of these constraints automatically renders a portfolio non-discretionary. Rather, in these and other cases, the portfolio managers must determine whether or not they have scope to execute the investment strategy. It may be appropriate to classify a portfolio as discretionary despite the presence of
restrictions (such as the prohibition of alcohol, tobacco, or gaming stocks cited above) and to include it in a composite with other, similarly constrained portfolios.

**Implementation (6)**

**Defining Discretion.** The Standards require that all actual fee-paying discretionary portfolios be included in at least one composite. The key words here are actual, fee-paying, and discretionary. Stated in simple terms, every account that meets these criteria has to be included in at least one composite. Because discretion is one of the key variables that determine inclusion in or exclusion from a composite, a firm implementing the GIPS standards must have a clear, written definition of discretion. The GIPS Guidance Statement on Composite Definition defines discretion as “the ability of the firm to implement its intended strategy,” and counsels, “If documented client-imposed restrictions significantly hinder the firm from fully implementing its intended strategy the firm may determine that the portfolio is non-discretionary.” The Guidance Statement, available on the GIPS standards website, offers a starting point for the firm’s internal definition of discretion. The firm’s documented policy on discretion should help practitioners judge whether a specific portfolio is discretionary and decide how to handle portfolios deemed wholly or partially non-discretionary. The firm must consistently apply its definition of discretion.

A client could insist that the manager retain specific holdings that might or might not otherwise be held in a portfolio. For example, the client could direct that legacy holdings with a low cost basis must not be sold due to the adverse tax consequences of realizing large gains. In such cases, retaining the asset in the portfolio may skew performance, and—whether the impact is favorable or unfavorable in any given measurement period—the outcome would not reflect the results of the manager’s actual discretionary investment management. If holding the assets hinders the ability to implement the intended strategy, either the entire portfolio should be considered non-discretionary and removed from the firm’s composites or the individual assets should be moved to a different, non-discretionary account and the remaining assets for which the manager has full discretion should be retained in (or added to) the composite. Alternately, the firm might include a materiality threshold in its policy, enabling it to consider a portfolio discretionary if the non-discretionary assets consist of less than a certain percentage of portfolio assets.

Recognizing that degrees of discretion exist, the firm must consider the interactions among client-directed constraints, the portfolio’s strategy or style, and the investment process, notably including the financial instruments employed. For example, a client’s investment policy might proscribe the use of derivative securities such as futures, swaps, and options. In this case, the firm must consider whether the restriction is pertinent. To take up the example of the domestic mid-cap stock portfolio again, the fact that the client prohibits the use of derivatives may be irrelevant if the manager simply buys, holds, and sells common stocks. If the use of derivative securities is central to the firm’s implementation of the investment mandate, however, then the client’s policy may render the portfolio non-discretionary.

In some cases, the pattern of external cash flows might make a portfolio non-discretionary. For example, if a client frequently makes large withdrawals, perhaps on a regular schedule, the portfolio managers might have to maintain such a high level of liquidity that they cannot truly implement the investment strategy as they do for other portfolios with a similar stated investment mandate, objective, or strategy.
All actual portfolios that are fee-paying and discretionary must be included in at least one composite; no portfolios that are not actual may be included in any composite. The Standards state that composites must include only actual assets managed by the firm (Provision I.3.A.2). Firms must not link the performance of simulated or model portfolios with actual performance (Provision I.3.A.3). In the process of developing, testing, and refining new investment strategies, firms frequently construct model portfolios and use historical security prices to simulate hypothetical performance in past measurement periods. Composites cannot include simulated, backtested, or model portfolios that don’t have genuine holdings. (The GIPS Guidance Statement on the Use of Supplemental Information states that model, hypothetical, backtested, or simulated returns can be shown as supplemental information but cannot be linked to actual composite returns.)

On the other hand, if the firm actually created and managed portfolios with its own assets—sometimes called seed money—it could include them from inception in appropriate composites (or, more likely, construct new composites reflecting the new strategies), subject to a presentation and reporting requirement related to the inclusion of non-fee-paying portfolios in composites (see provision I.5.A.6, discussed later). The Standards recommend that firms disclose if a composite contains proprietary assets (Provision I.4.B.8).

To summarize the criteria for including portfolios in composites: All actual, fee-paying, discretionary portfolios must be included in at least one composite. Actual, discretionary portfolios that are non-fee-paying may be included in appropriate composites, but neither non-discretionary nor non-actual portfolios may be included in any composite.

### 3.8 Constructing Composites II—Defining Investment Strategies

Defining and constructing meaningful composites is a vital step toward achieving the ideal of fair representation and the goal of providing prospective clients with useful comparative information. Under the GIPS standards, composites must be defined according to similar investment objectives and/or strategies; composites must include all portfolios that meet the composite definition as documented in the firm’s policies and procedures; and the full composite definition, including detailed criteria that determine the assignment of portfolios to the composite, must be made available upon request (Provision I.3.A.4). Well-defined composites will be objectively representative of the firm’s products and consistent with the firm’s marketing strategy. To promote comparability, it is beneficial for firms to take into account how other firms characterize similar products.

The GIPS Guidance Statement on Composite Definition suggests a hierarchy that may be helpful for the firm considering how to define composites. Firms are not required to define their composites according to each level of the suggested hierarchy.

<table>
<thead>
<tr>
<th>Investment Mandate</th>
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</thead>
<tbody>
<tr>
<td>Asset Classes</td>
</tr>
<tr>
<td>Style or Strategy</td>
</tr>
<tr>
<td>Benchmarks</td>
</tr>
<tr>
<td>Risk/Return Criteria</td>
</tr>
</tbody>
</table>

A composite based on the investment mandate bears a summary product or strategy description, such as “Global Equities.” This may be an entirely acceptable composite definition as long as no significant strategic differences exist among the portfolios included in the composite. It is a guiding principle of composite definition that firms are not permitted to include portfolios with different investment mandates, objectives, or strategies in the same composite.
A composite based on the constituent portfolios’ asset class, such as “equity” or “fixed income,” may also be acceptable; however, asset classes are broadly inclusive, and, because generic descriptions are not very informative, asset class composites should be offered only if they are legitimately and meaningfully representative of the firm’s products.

In order to afford investors a better understanding of the nature of a composite, the firm may use an asset-class modifier indicating the composite’s investment style or strategy. For example, equity portfolios may be restricted to a specific economic sector such as telecommunication services. Stocks issued by corporations competing in the same economic sector are presumably affected more or less the same way by exogenous factors such as changes in raw material prices, consumer demand, or the general level of interest rates.

Equity portfolios might also be actively managed to a defined style. A nine-box style matrix widely used by investment consultants in asset allocation studies and performance evaluations classifies portfolios by capitalization (large cap, midcap, and small cap) and by style (value; core, also called neutral, market oriented, or blend; and growth). In addition, some capital market index providers offer capitalization- and style-based indices. Although the construction methodologies for such indices must be carefully considered, they may serve adequately as market-based performance benchmarks for portfolios managed in conformity with these categories. Stocks assigned to one category may move more or less together, and one category may have favorable performance relative to the equity market as a whole while another category underperforms the broad market. For instance, the investment performance of portfolios managed to a small-cap growth strategy may vary considerably from the results achieved by large-cap value portfolios, depending on whether large-cap or small-cap stocks and growth or value stocks are in favor during a given measurement period.

A portfolio may be assigned to one of the style matrix categories based on the money-weighted averages of pertinent characteristics of the portfolio’s holdings. For example, a portfolio holding stocks with an average market capitalization of USD 2 billion along with a relatively high price-to-earnings multiple, a relatively high price-to-book ratio, and a relatively low dividend yield, would likely be identified as a midcap growth portfolio. Alternately, the portfolio’s historical monthly or quarterly returns might be regressed against the returns of pertinent capital market indices to determine which style-specific benchmarks best explain the portfolio’s performance. Evaluating the comparative merits of these approaches falls outside the scope of this reading. Suffice it to say that, given the widespread acceptance of these categories, a firm may meaningfully and usefully define composites with reference to the capitalization range and the style in which the constituent portfolios are managed.

Implementation (7)

Defining Composites. One of the greatest challenges in implementing the GIPS standards is devising the set of composites that will most meaningfully represent the firm’s products. The Standards require each and every actual, fee-paying, discretionary portfolio to be included in at least one composite, and composites to be defined according to similar investment criteria (i.e., mandates, objectives and/or strategies). What appears to be a straightforward exercise—defining composites and assigning portfolios to them—may prove rather difficult in practice.

A useful guideline is to build a set of composites that will accurately represent the firm’s distinct investment strategies. With too few composites, a firm risks overlooking significant

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25 For a more complete discussion, see Stephen C. Gaudette and Philip Lawton (2007).
differences and lumping diverse portfolios together into a single, overly broad composite subject to a wide dispersion of portfolio returns. With too many composites, in addition to unnecessarily augmenting administrative expense, the firm runs the risk of creating narrowly defined groupings that are too much alike in investment strategy, contain too few accounts or assets to be useful, or compromise client confidentiality.

Assuming that the implementation team has already defined the “firm” and “discretion” and compiled a master list of portfolios, here is a common-sense strategy for reaching agreement on composite definitions.

1. Review the firm’s organizational structure and investment process to see if distinctive strategies can be readily identified. For instance, an equity advisor might have units specializing in one or more active management strategies as well as index fund construction and quantitatively driven enhanced indexing.

2. Review the firm’s existing marketing materials, supplemented if possible by marketing materials from competitors and by recently received requests for proposals (RFPs). The objective is to determine how the industry defines products similar to those the firm offers.

3. Referring to the hierarchy presented in the GIPS Guidance Statement on Composite Definition, construct a provisional framework using descriptive captions to identify possible composites.

4. Taking into account the clients’ investment policies, test how well the firm’s actual, fee-paying, discretionary portfolios would fit the provisional framework. The inevitable identification of exceptions—that is, the discovery that portfolios that must be included in some composite do not really fit any—will lead to the redefinition of proposed composites or the creation of new composites. Several iterations may be needed.

5. Review the proposed set of composites for compliance with the Standards.

6. Document the composite definitions in detail, and circulate the definitions for final review by all affected parties within the firm.

Of course, the most effective process for defining composites may differ from one firm to another in view of variables such as organizational structure, culture, and investment strategies, among other factors. Nonetheless, composite definitions have lasting consequences, and it is highly desirable to have a plan for reaching consensus.

Firms may also define composites based on the portfolios’ benchmarks, as long as the benchmarks reflect the investment strategy and the firm has no other composites with the same characteristics. This approach is particularly appropriate if the portfolios are limited to holding stocks that are held in the index.

Finally, portfolios sharing distinctive risk/return profiles may reasonably be grouped together. For example, enhanced index funds with benchmark-specific targeted excess returns and tracking error tolerances might fall into natural groups.

Fixed-income composites can likewise be meaningfully and usefully defined in many dimensions. For example, composites might conform to asset classes or market segments such as government debt, mortgage-backed securities, convertible bonds, or high-yield bonds; investment strategies such as fundamental credit analysis, sector rotation, or interest rate anticipation; or investment styles such as indexing or core-plus. However a firm chooses to define the composites representing its investment products, they must be composed of portfolios managed in accordance with similar investment strategies or objectives.
3.9 Constructing Composites III—Including and Excluding Portfolios

The GIPS standards governing composite construction hold that composites must include new portfolios on a timely and consistent basis after the portfolio comes under management (Provision I.3.A.5). Firms are required to establish, document, and consistently apply a policy of including new portfolios in the appropriate composites on a timely basis. Preferably, new portfolios should be included as of the beginning of the next full performance measurement period after the firm receives the funds. For example, if a portfolio is funded on 20 May and the firm calculates composite returns monthly (as indeed it must for periods beginning on or after 1 January 2001)\(^\text{26}\), optimally the composite should include the new portfolio as of the beginning of June. It may take time to invest the assets of a new portfolio in accordance with the desired investment strategy, however, particularly when the portfolio is funded in kind (that is, with securities other than cash and cash equivalents) and the assets have to be redeployed, or when the securities to be purchased are relatively illiquid (e.g., in emerging markets). Accordingly, the Standards give firms some discretion to determine when to add the new portfolio to a composite. In such cases, the firm should establish a policy on a composite-by-composite basis and apply it consistently to all new portfolios.

In addition to winning new business, firms routinely lose relationships. Under the GIPS standards, a firm must include a terminated portfolio in the historical performance of the appropriate composite up to the last full measurement period that the portfolio was under management (Provision I.3.A.6). In many cases, the firm loses its discretion over the portfolio upon being notified of a pending termination. The client may instruct the firm to stop buying securities immediately and to commence the liquidation of holdings in preparation for an outbound cash transfer on a specified date. Alternately, the client may halt trading and transfer control of the portfolio to a transition management organization to facilitate moving assets to a new firm. When the firm being terminated thus loses its discretion over the portfolio, it should include the portfolio in the composite through the last full measurement period prior to notification of termination. To use the same example, if a firm that calculates performance monthly is informed on 20 May that its management contract is being terminated effective 31 May, and is instructed to stop trading forthwith, then the firm should include the portfolio in its composite through 30 April. In any event, it is incumbent upon the GIPS-compliant firm to have defined and documented its policies governing the removal of terminated portfolios from composites and, of course, to apply those policies consistently.

**Implementation (8)**

*Adding, Removing, and Switching Portfolios.* GIPS-compliant firms must have written policies setting forth when portfolios may be added to or removed from composites. These policies should be composite-specific. For a firm that reports composite performance monthly, a policy statement could read as follows:

“All new portfolios funded with cash or securities on or before the 15th day of the month shall be added to the appropriate composite at the beginning of the following month. All new portfolios funded with cash or securities after the 15th day of the month shall be added to the appropriate composite at the beginning of the second month after funding. All portfolios shall be deemed ‘non-discretionary’ on the date notice of termination is received and removed from the composite at the end of the month prior to notification. The historical performance of terminated portfolios shall remain in the appropriate composite.”

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\(^{26}\) Provision I.2.A.2.a.
Policies like the sample above allow firms a reasonable amount of time to implement the strategy without delaying inclusion of the portfolio in the appropriate composite. Each firm should develop a policy that conforms to its own investment process while meeting the GIPS standards’ requirement to include portfolios in composites on a timely basis. The firm’s policy for adding or removing portfolios should also include language strictly limiting the switching of portfolios from one composite to another, in accordance with Provision I.3.A.7. Here is a sample statement for a policy:

“Portfolios shall not be moved from one composite to another unless the composite is redefined or documented changes in the client’s guidelines require restructuring the portfolio in such a way that another composite becomes more appropriate. The portfolio shall be removed from the original composite at the end of the last calendar month before the event causing the removal occurred and shall be added to the appropriate new composite at the beginning of the calendar month following the date on which the portfolio is substantially invested. The historical performance of the portfolio shall remain in the appropriate composite.”

The GIPS standards also stipulate that portfolios cannot be switched from one composite to another unless documented changes in the portfolio’s investment mandate, objective, or strategy or the redefinition of the composite make it appropriate. The historical performance of the portfolio must remain with the original composite (Provision I.3.A.7). This is an important provision; if the Standards permitted firms to transfer portfolios from one composite to another at will, an unethical firm might identify and exploit opportunities to improve the reported performance of selected composites by re-populating them with the portfolios whose investment results were most advantageous during the measurement period.

The Standards spell out the only two conditions under which portfolios can be reassigned. First, a portfolio can be switched from one composite to another if the client revises the mandate, objective, or strategy governing the investment of portfolio assets and the guideline changes are documented. For instance, a client might decide to modify the portfolio mandate from midcap value to large-cap value, or from domestic equity to global equity, with a corresponding change in the benchmark, while retaining the same investment advisor to restructure and manage the “same” portfolio in accordance with the new strategy. Or perhaps a client might decide to allow the use of derivative securities, previously prohibited, triggering a change in the investment strategy and making it suitable to assign the portfolio to a composite made up of portfolios that use derivatives.

Second, a portfolio can be reassigned to another composite if the original composite is redefined in such a way that the portfolio no longer fits it. Generally, if a strategy evolves over time, it is most appropriate to create a new composite; accordingly, the redefinition of an existing composite should be a highly unusual event. (See the related requirement stated in Provision I.3.A.4, where it is also asserted that the Standards do not permit changes to composites to be applied retroactively.) To repeat, if a portfolio is switched from one composite to another as permitted only in these two situations—a pertinent, documented change in the portfolio’s investment mandate, objective, or strategy, or a redefinition of the composite—then the historical record of the portfolio must remain in the composite to which it was originally assigned.

In the event of significant external cash flows, the GIPS standards recommend that firms use temporary new accounts rather than temporarily removing entire portfolios from

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27 The GIPS standards distinguish between large and significant cash flows. “Large” denotes the level at which the firm determines that an external cash flow may distort performance if the portfolio is not valued. “Significant”
composites (see Provision I.3.B.2). Firms adopting this direct approach channel incoming cash and securities to a temporary account that is not included in any composite until the cash has been fully invested in accordance with the intended strategy. The timing of the temporary new account’s integration into the existing portfolio and the composite should be governed by the firm’s composite-specific policy on the inclusion of new portfolios. Relatedly, when the client initiates a large capital withdrawal, the firm moves cash and securities in the desired amount to a temporary account until it liquidates the securities. The transfer is treated as an outflow in calculating the portfolio’s time-weighted total return.

This theoretically appropriate means of handling significant external cash flows is recommended but not required, in part because current technology does not readily allow for the establishment of temporary new accounts. Firms may be compelled to temporarily remove portfolios from composites when significant external cash flows occur. Provision I.3.A.10 addresses this situation. It states that firms wishing to remove portfolios from composites in cases of significant cash flows must define what they mean by “significant” on an *ex ante*, composite-specific basis and must consistently follow the composite-specific significant cash flow policy. We also refer the reader to the GIPS Guidance Statement on the Treatment of Significant Cash Flows for further information and direction on this practically important topic.

The GIPS provisions for composite construction additionally address the issue of minimum asset levels. A firm might decide that a particular composite will not include any portfolios whose value is below a specified level, on the grounds, for instance, that the investment strategy can be fully implemented only for portfolios above a certain size. The Standards rule that if a firm sets a minimum asset level for portfolios to be included in a composite, the firm must not include portfolios below that asset level in that composite. In other words, the policy, once established, must be followed consistently (Provision I.3.A.9). The same provision further states that any changes to a composite-specific minimum asset level must not be applied retroactively.

The GIPS Guidance Statement on Composite Definition notes that portfolios may drop below a composite-specific minimum asset level because of client withdrawals or depreciation in value. If a firm establishes a minimum asset level for a composite, it must document its policies regarding how portfolios will be treated if they fall below the minimum. The Guidance Statement counsels firms to specify in their policies the basis for evaluating portfolios against a composite’s minimum asset level (for instance, a firm might use beginning value, ending value, or beginning value plus cash flows, etc.). In order to curtail the movement of portfolios into and out of composites, the Guidance Statement recommends that firms consider establishing a valuation threshold and a minimum time period for applying the policy. For example, the firm might establish a range of ±5 percent of the minimum asset level and a condition that portfolios must remain above or below the minimum asset level for at least two periods before they are added to or removed from the composite. If a portfolio is removed from a composite, its prior performance must remain in the composite. The firm must determine if the portfolio that has been removed meets any other composite definition and include it in the appropriate composite in a timely and consistent manner.

As previously noted, Provision I.3.A.9 also stipulates that any adjustments to a composite-specific minimum asset level cannot be applied retroactively. This requirement can create a problem when capital market movements cause portfolios’ values to fall below the stated
minimum. For example, the total market value of the Dow Jones Wilshire 5000 Index was approximately USD 12.1 trillion at the end of February 2008. Over the ensuing twelve months, the index had a return of –43.3 percent, representing a loss of shareholder value in excess of USD 5 trillion. If a firm’s composite had a minimum portfolio asset level of $50 million, a portfolio initially valued at $85 million that experienced a comparable decline would no longer qualify for inclusion in the composite. Under the Standards, the portfolio would have to be removed from the composite when its value fell below the minimum asset level. Although the magnitude of the drop in the broad U.S. equity market during this period was extreme, firms are well advised to consider the risk of having to exclude portfolios from composites with minimum asset levels. The minimum asset level can be changed prospectively, subject to disclosure (see Provision I.4.A.19), but not retroactively.

The Standards also recommend that firms should not present a composite presentation to a prospective client who is known not to meet the composite’s minimum asset level (Provision I.3.B.1). It is to be presumed that the firm has sound reasons for establishing a minimum asset level for a given strategy. Accordingly, it would be unsuitable for a firm to solicit funds from a prospect with insufficient investable assets for that particular strategy.

3.10 Constructing Composites IV—Carve-Out Segments
The GIPS standards codify the proper treatment of asset class segments “carved out” of multiple-strategy portfolios.  

In discussing the requirements surrounding the calculation methodology, we recognized that returns from cash and cash equivalents held in portfolios must be included in total return calculations (Provision I.2.A.3), and we examined the impact of short-term investments on equity portfolio results in “up” and “down” markets. The requirement that cash and cash equivalents be taken into account in portfolio and composite return calculations is based on the fundamental principle of fair representation: A composite that did not include tactical and frictional cash positions would not fairly represent investment performance to a prospective or existing client. This principle carries over to the inclusion of portfolio segments in composites. Provision I.3.A.8 states that, for periods beginning on or after 1 January 2010, a carve-out must not be included in a composite unless the carve-out is managed separately with its own cash balance. For example, the stock portion alone of a portfolio consisting of stocks, bonds, and cash cannot be included in an equity composite as though it were a stand-alone discretionary portfolio.

Carve-out segments are also addressed in the provisions for disclosure and for presentation and reporting. For periods prior to 1 January 2010, if carve-outs are included in a composite, firms must disclose the policy used to allocate cash to the carve-outs (see Provision I.4.A.23). In addition, for periods beginning on or after 1 January 2006 and ending before 1 January 2011, if a composite includes carve-outs, the compliant presentation must include the percentage of the composite that is composed of carve-outs as of each annual period-end (see Provision I.5.A.5).

| Implementation (9) |

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28 See the GIPS Guidance Statement on Treatment of Carve-Outs.
29 For periods prior to 1 January 2010, if carve-outs were included in a composite, cash must have been allocated to the carve-out in a timely and consistent manner. The GIPS Guidance Statement on the Treatment of Carve-Outs describes some acceptable cash allocation methodologies.
**Carve-Out Segments.** Equilibrium Capital Advisors, a firm specializing in balanced portfolios, maintains a number of multi-class composites constructed according to strategic asset mix ranges. For example, among other multi-class composites, Equilibrium Capital Advisors has a Standard Balanced Account Composite composed of portfolios with a strategic asset allocation target of 50 percent equity and 50 percent fixed income; a Conservative Balanced Account Composite composed of portfolios with a 35/65 equity/fixed income strategic mix; and an Aggressive Balanced Account Composite composed of portfolios with an 80/20 equity/fixed income strategic mix. In order to control transaction expenses by reducing the frequency of portfolio rebalancing, the target mixes are accompanied by 5 percent tolerance ranges. For instance, the Aggressive Balanced Account Composite is permitted to vary from 75/25 to 85/15 equity/fixed income mixes.

The equity segments of all the balanced composites are managed in accordance with a single strategy by the Equity Markets Group under the leadership of John Boyle, and the fixed income segments of the balanced composites as well as all cash and cash equivalent positions are managed by the Fixed Income Markets Group. Boyle wants to create a new equity composite composed of the equity segments of the multi-class portfolios. Can such a composite be constructed in compliance with the GIPS standards?

Provision I.3.A.8 states that, for periods beginning on or after 1 January 2010, carve-outs cannot be included in a composite unless the carve-out is managed separately with its own cash balance. In the case of Equilibrium Capital Advisors, it appears that the cash generated in the course of equity and fixed-income investment management is pooled, and short-term investing is conducted for the balanced portfolio as a whole. The equity segments of the firm’s balanced portfolios are not managed separately with their own cash balances. Accordingly, Equilibrium must not create the composite that Boyle would like to have.

### 3.11 Disclosure

The GIPS standards advance the ideals of fair representation and full disclosure. We will consider the presentation and reporting provisions shortly. Before doing so, however, we will cite the numerous required and recommended disclosure provisions. The reader will already be familiar with many of these topics from previous sections, so we will discuss most items here only briefly. For ease of exposition, we have grouped the disclosure provisions by subject area.

A firm may claim compliance once it has satisfied all the requirements of the GIPS standards, including those we will present later in this reading. The precise wording of the claim of compliance is laid down as a disclosure requirement in Provision I.4.A.1. The wording differs depending upon whether or not a firm has been verified. A firm that is verified must use the exact wording of the following two-paragraph compliance statement in all compliant presentations (and only in compliant presentations): 

“[Insert name of firm] claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. [Insert name of firm] has been independently verified for the periods [insert dates]. The verification report(s) is/are available upon request.

“Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis, and (2) the firm’s policies
and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.\textsuperscript{30}

A firm that has not been verified must use the following statement, again, always and only in compliant presentations:

“[Insert name of firm] claims compliance with the Global Investment Performance Standards (GIPS\textsuperscript{®}) and has prepared and presented this report in compliance with the GIPS standards. [Insert name of firm] has not been independently verified.”

A firm that is verified may additionally choose to have the verifier conduct a more specifically focused performance examination of a particular composite performance presentation. Provision I.4.A.1 also provides the exact wording of the two-paragraph compliance statement that must be used in compliant performance presentations of composites that have been examined:

“[Insert name of firm] claims compliance with the Global Investment Performance Standards (GIPS\textsuperscript{®}) and has prepared and presented this report in compliance with the GIPS standards. [Insert name of firm] has been independently verified for the periods [insert dates].

“Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis, and (2) the firm’s processes and procedures are designed to calculate and present performance in compliance with the GIPS standards. The [named] composite has been examined for the periods [insert dates]. The verification and examination report(s) are available upon request.”

Several provisions concern disclosures related to the GIPS-compliant firm. The definition of the “firm” used to determine the firm’s total assets and firm-wide compliance is a required disclosure (Provision I.4.A.2). A clear explanation of the way in which the firm is defined enables the prospective client to understand precisely which investment organization (or unit of a larger entity) is presenting results, is claiming compliance, and will be responsible for managing the client’s assets if hired. If a firm is redefined, it must disclose the date, describe the redefinition, and explain the reason (Provision I.4.A.16). If a parent company contains multiple firms, the Standards recommend that each firm within the parent company should disclose a list of the other firms contained within the parent company (Provision I.4.B.5).

Firms are further required to disclose all significant events that would help a prospective client interpret the compliant presentation (Provision I.4.A.14). For example, a firm must advise the prospective client if past results in a given strategy were achieved by a star portfolio manager who has left the firm, or if key members of the research team supporting the strategy have resigned. Firms must also disclose if the performance from a past firm or affiliation is linked to the performance of the firm (Provision I.4.A.35). For periods beginning on or after 1 January 2006, firms must disclose the use of a subadvisor or subadvisors and the periods in which one or more subadvisors were used (Provision I.4.A.25), and for earlier periods they should disclose the use of a sub-advisor and the periods a sub-advisor was used (Provision I.4.B.7).

Other provisions have to do with disclosures related to composites. In a compliant performance presentation, firms must disclose the composite description,\textsuperscript{31} which must contain

\textsuperscript{30} The claims of compliance given in this section may be used only on compliant performance presentations. Different wording for compliance claims in advertisements is stipulated in the GIPS Advertising Guidelines, discussed later in this reading.

\textsuperscript{31} The GIPS standards distinguish between \textit{definitions} and \textit{descriptions} of composites. A composite definition sets forth detailed criteria that determine the assignment of portfolios to composites, whereas a composite description provides general information regarding the investment mandate, objective, or strategy of the composite. The GIPS Glossary entry for composite description states, “The composite description may be more abbreviated than the
sufficient information to allow a prospective client to understand the key characteristics of the composite’s investment mandate, objective, or strategy (Provision I.4.A.3). It is not enough merely to have a broadly indicative name such as “Growth and Income Composite,” which might mean one thing to one user and something else to another; the provision requires that prospective clients be given a reasonably informative explanation, however concise, setting forth the composite’s salient features. For example, a “Growth and Income Composite” composed of balanced portfolios or “accounts” managed on behalf of individuals might be described in these terms: “The Growth and Income Composite includes taxable balanced accounts with assets greater than $100,000. The accounts are managed to a strategic asset allocation target of 50 percent equity and 50 percent fixed income within a tactical range of 10 percent. The equity segments are invested in large-capitalization common stocks. The fixed income segments of the individual accounts are invested in investment-grade instruments including U.S. government and agency securities, corporate bonds, and mortgage-backed securities. The benchmark for this strategy is a blended index made up of 50 percent Standard & Poor’s 500 Stock Index and 50 percent Barclays Capital U.S. Aggregate Bond Index.” Appendix B of the GIPS standards includes other examples of composite descriptions.

Firms must also disclose the composite creation date (Provision I.4.A.10), the date on which the firm first grouped one or more portfolios to form the composite. This is not necessarily the earliest date for which composite performance is reported. If a firm has redefined a composite, the firm must disclose the date of, description of, and reason for the change (Provision I.4.A.17). Similarly, firms must disclose any changes to a composite’s name (Provision I.4.A.18).

The availability upon request of the firm’s list of composite descriptions is a required disclosure (Provision I.4.A.11). This information enables prospective clients to determine if the composite they have been shown is the most appropriate for their needs and to request compliant performance presentations of any other composites of interest. Recall that the list must include not only all of the firm’s current composites but also any that have been discontinued within the last five years (see Provision I.0.A.10). GIPS Appendix C provides a sample list of composite descriptions.

The preceding requirements apply to all composites. Further requirements apply in certain cases. First, firms must disclose the minimum asset level, if any, below which portfolios are not included in a composite, as well as any changes to the minimum asset level (Provision I.4.A.19). Second, as previously noted, if in periods prior to 1 January 2010 carve-outs are included in a composite, firms must disclose the policy used to allocate cash to the carve-outs (Provision I.4.A.23). Third, if the firm has adopted a significant cash flow policy for a specific composite, then the firm must disclose how it defines significant cash flows for that composite and the periods to which the definition applies (Provision I.4.A.32). The Standards recommend that firms should disclose if a composite contains proprietary assets (Provision I.4.B.8).

The Standards include both required and recommended disclosures regarding valuations. For periods prior to 1 January 2010, firms must disclose if portfolios are not valued as of calendar month-end or the last business day of the month (Provision I.4.A.26). For periods

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32 As previously noted, the Standards do not permit changes to composite definitions to be applied retroactively (Provision I.3.A.4).
beginning on or after 1 January 2011, firms must disclose if portfolio investments are valued using subjective unobservable inputs, as described in the GIPS Valuation Principles, that are material to the composite (Provision I.4.A.27) and if the composite’s valuation hierarchy materially differs from the hierarchy that is recommended in the GIPS Valuation Principles (Provision I.4.A.28). (We will discuss the GIPS Valuation Principles later in this reading.) Firms should disclose the key assumptions used to value portfolio investments (Provision I.4.B.4), and they should disclose material changes to valuation policies or methodologies (Provision I.4.B.1). For periods prior to 1 January 2011, firms should disclose the use of subjective unobservable inputs for valuing portfolio investments if the investments so valued are material to the composite (Provision I.4.B.6).

Firms must also disclose that policies for valuing portfolios, calculating returns, and preparing compliant presentations are available upon request (Provision I.4.A.12). To cite obvious examples, GIPS-compliant firms should be prepared to respond to prospective clients’ questions about their valuation methods and sources, return calculation methodology, or treatment of large external cash flows. The Standards recommend, but do not require, that firms disclose material changes in calculation policies and/or methodologies (Provision I.4.B.2).

Firms must disclose the currency used to express performance (Provision I.4.A.7). For periods beginning on or after 1 January 2011, firms must also disclose and describe any known material differences in the exchange rates or valuation sources used among the portfolios within a composite and between the composite and the benchmark (Provision I.4.A.21); for earlier periods, only differences in exchange rates (not in valuation sources) need be disclosed. When debating materiality, firms would do well to bear in mind the ethical ideal of full disclosure. If there is internal disagreement over the significance of an item, it seems advisable to disclose the pertinent facts so as to allow prospective clients and their consultants to take them into consideration.

Firms must disclose relevant details of the treatment of withholding tax on dividends, interest income, and capital gains, if material, and, if the information is available, they must also disclose if benchmark returns are net of withholding taxes (Provision I.4.A.20).

In view of their importance for evaluating performance, it is not surprising that benchmarks are subject to disclosure requirements. Firms must disclose the description of the benchmark (Provision I.4.A.4) and, if a custom benchmark or a combination of multiple benchmarks is used, the firm must disclose the benchmark components, weights, and rebalancing process (Provision I.4.A.31). For example, a firm might construct a custom security-based benchmark composed of securities that conform to the firm’s investment process and the composite’s strategy. Or, as another example, a firm’s balanced composite might have a blended benchmark reflecting the strategic asset mix with reference to which the portfolios are managed. The benchmark in this case might be constructed by weighting well-chosen capital market indices with desirable characteristics such as asset class representativeness and investability.

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**Implementation (10)**

*Benchmark Presentation.* Eastern Institutional Asset Advisors presents the performance of a Global Balanced Composite. The strategic asset mix of the portfolios in the composite is 50 percent U.S. equity, 10 percent international equity, 35 percent U.S. fixed-income securities, and 5 percent cash. The composite has a blended benchmark composed of capital market indices weighted in accordance with the strategic asset allocation. Eastern Institutional Asset Advisors places the following disclosure on the Global Balanced Composite’s performance presentation:
The benchmark for the Global Balanced Composite is composed of 50 percent S&P 500, 10 percent MSCI EAFE Index, 35 percent Barclays Capital U.S. Aggregate Bond Index, and 5 percent U.S. Treasury bills. The benchmark is rebalanced monthly.

The frequency of benchmark rebalancing can affect the reported returns for an annual period. Exhibit 12 displays one calendar year’s data for the Global Balanced Composite described in Implementation (10). The blended benchmark return for the year is calculated first on a monthly and then on a quarterly basis for the purpose of comparison.
Exhibit 12
Illustration of Rebalancing Policies

<table>
<thead>
<tr>
<th>Blended benchmark weights</th>
<th>Domestic Equity Index</th>
<th>International Equity Index</th>
<th>Domestic Fixed Income Index</th>
<th>Cash Equivalents Index</th>
<th>Blended Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50%</td>
<td>10%</td>
<td>35%</td>
<td>5%</td>
<td></td>
</tr>
</tbody>
</table>

**Monthly Rebalancing**

<table>
<thead>
<tr>
<th>Month</th>
<th>Domestic Equity Index</th>
<th>International Equity Index</th>
<th>Domestic Fixed Income Index</th>
<th>Cash Equivalents Index</th>
<th>Blended Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>–1.46%</td>
<td>–3.96%</td>
<td>0.79%</td>
<td>0.15%</td>
<td>–0.84%</td>
</tr>
<tr>
<td>February</td>
<td>–1.93%</td>
<td>0.61%</td>
<td>0.96%</td>
<td>0.13%</td>
<td>–0.56%</td>
</tr>
<tr>
<td>March</td>
<td>3.76%</td>
<td>5.56%</td>
<td>–1.65%</td>
<td>0.15%</td>
<td>1.87%</td>
</tr>
<tr>
<td>April</td>
<td>–6.06%</td>
<td>0.76%</td>
<td>1.90%</td>
<td>0.16%</td>
<td>–2.28%</td>
</tr>
<tr>
<td>May</td>
<td>–0.74%</td>
<td>1.65%</td>
<td>0.85%</td>
<td>0.16%</td>
<td>0.10%</td>
</tr>
<tr>
<td>June</td>
<td>–7.12%</td>
<td>–4.41%</td>
<td>0.74%</td>
<td>0.14%</td>
<td>–3.74%</td>
</tr>
<tr>
<td>July</td>
<td>–7.79%</td>
<td>–9.21%</td>
<td>1.19%</td>
<td>0.15%</td>
<td>–4.39%</td>
</tr>
<tr>
<td>August</td>
<td>0.66%</td>
<td>0.00%</td>
<td>1.75%</td>
<td>0.14%</td>
<td>0.95%</td>
</tr>
<tr>
<td>September</td>
<td>–10.87%</td>
<td>–10.43%</td>
<td>1.59%</td>
<td>0.16%</td>
<td>–5.91%</td>
</tr>
<tr>
<td>October</td>
<td>8.80%</td>
<td>4.87%</td>
<td>–0.45%</td>
<td>0.15%</td>
<td>4.74%</td>
</tr>
<tr>
<td>November</td>
<td>5.89%</td>
<td>4.56%</td>
<td>–0.02%</td>
<td>0.16%</td>
<td>3.40%</td>
</tr>
<tr>
<td>December</td>
<td>–5.87%</td>
<td>–2.86%</td>
<td>2.08%</td>
<td>0.12%</td>
<td>–2.49%</td>
</tr>
<tr>
<td>Linked monthly returns</td>
<td>–22.09%</td>
<td>–13.50%</td>
<td>10.11%</td>
<td>1.78%</td>
<td>–9.30%</td>
</tr>
</tbody>
</table>

**Quarterly Rebalancing**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Domestic Equity Index</th>
<th>International Equity Index</th>
<th>Domestic Fixed Income Index</th>
<th>Cash Equivalents Index</th>
<th>Blended Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>First quarter</td>
<td>0.27%</td>
<td>2.00%</td>
<td>0.08%</td>
<td>0.43%</td>
<td>0.38%</td>
</tr>
<tr>
<td>Second quarter</td>
<td>–13.39%</td>
<td>–2.09%</td>
<td>3.53%</td>
<td>0.46%</td>
<td>–5.65%</td>
</tr>
<tr>
<td>Third quarter</td>
<td>–17.27%</td>
<td>–18.68%</td>
<td>4.60%</td>
<td>0.45%</td>
<td>–8.87%</td>
</tr>
<tr>
<td>Fourth quarter</td>
<td>8.45%</td>
<td>6.52%</td>
<td>1.60%</td>
<td>0.43%</td>
<td>5.46%</td>
</tr>
<tr>
<td>Linked quarterly returns</td>
<td>–22.08%</td>
<td>–13.49%</td>
<td>10.11%</td>
<td>1.78%</td>
<td>–8.98%</td>
</tr>
</tbody>
</table>

In this example, the monthly calculation produces a blended benchmark return of –9.30 percent for the year, while the quarterly calculation (using the same input data) produces a return of –8.98 percent for the year. There is a difference of 32 basis points (0.32 percent) between the full-year benchmark returns under the two rebalancing methods. Once established, the firm must apply its benchmark rebalancing policy consistently, without regard to the ex post impact on the composite’s relative performance in any annual period.

If the firm determines that no appropriate benchmark for the composite exists, the firm must disclose why no benchmark is presented (Provision I.4.A.29). If the firm changes the benchmark, the firm must describe the change, disclose the date it became effective, and explain the reason for the change (Provision I.4.A.30). The Standards recommend that firms disclose
material differences between the composite strategy and the strategy represented by the benchmark (Provision I.4.B.3).

Numerous provisions address the topic of fees. The GIPS Glossary defines the gross-of-fees return as the return on investments reduced by any trading expenses incurred during the period and the net-of-fees return as the gross-of-fees return reduced by the investment management fees (including performance-based fees and carried interest). When presenting gross-of-fees returns, firms must disclose if they deduct any other fees in addition to the actual trading expenses (Provision I.4.A.5). Similarly, when presenting net-of-fees returns, firms must disclose if any other fees are deducted in addition to the actual trading expenses and the investment management fee; in addition, firm must disclose if model or actual investment management fees are used and if returns are net of performance-based fees (Provision I.4.A.6). The firm must also disclose the fee schedule appropriate to the compliant presentation (Provision I.4.A.9). As explained in the GIPS Glossary, the term “fee schedule” refers to the firm’s current schedule investment management fees or bundled fees relevant to the particular compliant presentation. If a composite contains portfolios with bundled fees, firms must also disclose the various types of fees that the bundled fee includes (Provision I.4.A.24).

As we will see when examining the provisions of the GIPS standards related to presentation and reporting, firms must report a measure of the internal dispersion of the returns of the individual portfolios within a composite. Because there are different ways to convey dispersion, the Standards require firms to disclose which measure of internal dispersion they present (Provision I.4.A.8).

It is an important, albeit challenging, provision that firms must disclose the presence, use, and extent of leverage, derivatives, and short positions, if material. The disclosure must include a description of the frequency of use and characteristics of the instruments sufficient to identify risks (Provision I.4.A.13). As a practical matter, it is admittedly difficult to explain in writing the use of leverage or derivative securities and the attendant risks of their use, especially for the benefit of prospective clients who may not have been exposed previously to complex investment strategies. (Short selling is somewhat easier to explain.) A clear explanation, however, will help prospective clients interpret the historical performance and evaluate the additional risk resulting from the use of leverage or derivatives. Adequate disclosure, as required by the GIPS standards, includes a description of the investment characteristics of these financial instruments and an account of the way in which they are used.

For example, a fixed income manager might use interest rate futures contracts as an efficient and economical means of adjusting the sensitivity of corporate bond portfolios to anticipated changes in the general level of interest rates. The firm might provide the following description of its use of derivatives: “Crystal Capital routinely uses U.S. Treasury bond futures contracts to change the portfolios’ modified duration. Because of their call features and credit risk, the corporate bonds held in the portfolio may experience price changes that do not closely match movements in the U.S. Treasury bond futures contracts, resulting in portfolio valuations that differ from the targeted outcome.”

33 See also the GIPS Guidance Statement on Fees Provisions.
34 Performance-based investment management fees are typically contingent upon the portfolio’s exceeding a prescribed level of return, either absolutely or in comparison with a benchmark. Carried interest, commonly used in private equity and real estate investing, refers to the profits allocated to general partners from the profits made by the investment vehicle.
Two disclosure provisions pertain to performance presentations. Firms must disclose if the presentation conforms with laws or regulations that conflict with the requirements of the GIPS standards. The manner in which any laws or regulations conflict with the Standards must also be disclosed (Provision I.4.A.22). For any performance presented for periods prior to 1 January 2000 that does not comply with the GIPS standards, firms must disclose the periods of non-compliance (Provision I.4.A.15.)

We will see when reviewing the presentation and reporting provisions that the 2010 version of the GIPS standards requires firms to present, for each annual period, the annualized three-year ex post standard deviation of monthly composite and benchmark returns and, if appropriate, another measure of risk. (See the discussion of Provision I.5.A.2 below.) There are two required disclosures having to do with this presentation requirement. First, firms must disclose if the three-year annualized ex post standard deviation for the composite and/or the benchmark is not presented because 36 monthly returns are unavailable (Provision I.4.A.33). Second, if the firm determines that the standard deviation is not a relevant or appropriate measure, and accordingly presents another risk measure, then the firm must disclose this decision. Specifically, the firm must describe why ex post standard deviation is not relevant or appropriate, describe the additional risk measure presented, and explain why the additional measure was selected (Provision I.4.A.34).

Meeting the objectives of fair representation and full disclosure may call for providing more information than the GIPS standards minimally require. Practitioners are well advised to prepare compliance checklists to ensure that the disclosure requirements and, where feasible, the recommendations of the GIPS standards are met for the firm as a whole and for each composite presented. We turn now to the provisions for presentation and reporting.

3.12 Presentation and Reporting Requirements

The ethical ideals of fair representation and full disclosure culminate in GIPS-compliant performance presentations. In this section, we will focus on the required elements of performance presentations prepared in accordance with the GIPS standards.

For each GIPS-compliant composite presented, the Standards require that firms show at least five years of annual performance (less if the firm or composite has been in existence for a shorter period), and that the GIPS-compliant performance record must then be extended each year until 10 years’ results have been presented. The core elements of a GIPS-compliant performance presentation additionally include composite and benchmark annual returns for all years; the number of portfolios (if six or more); the amount of assets in the composite; either the percentage of the firm’s total assets represented by the composite or the amount of total firm assets at the end of each period; and a measure of internal dispersion of individual portfolio returns for each annual period if the composite contains six or more portfolios for the full year. For composites with an inception date on or after 1 January 2011, when the initial period is less than a full year, firms must present returns from the composite inception date through the initial annual period-end. For example, if a composite has an inception date of 1 April 2011, the performance presentation as of 31 December 2011 will cover the nine-month period 1 April–31 December 2011. Similarly, for composites with a composite termination date of 1 January 2011 or later, firms must present returns from the last annual period-end through the composite

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35 Annual returns are normally presented for calendar years, but they may be presented for other annual periods if the composite is reported on a non-calendar fiscal year. See Provision I.1.A.7 above.
termination date. The requirements listed in this paragraph are set forth in Provisions I.5.A.1.a–i. Some of them are straightforward; others call for comment or explanation.

We have previously remarked on the importance of selecting appropriate benchmarks in order to interpret historical results and to conduct meaningful performance evaluations. We have also made note of certain benchmark-related disclosure requirements. A vitally important presentation and reporting requirement is set forth in Provision I.5.A.1.e: The total return for the benchmark must be presented for each annual period. To be entirely clear, this provision states that the benchmark must reflect the composite’s investment mandate, objective, or strategy.

The Standards mandate reporting for each annual period a measure of internal dispersion of the returns earned by individual portfolios in the composite. (Provision I.5.A.1.i.) This important requirement is intended to allow users to see how consistently the firm implemented its strategy across individual portfolios. A wide range of results should prompt the recipient of the performance presentation to inquire about possible causes of the variability of returns to portfolios that are purportedly managed in accordance with the same strategy. It may suggest, among many other possibilities, that the composite is defined too broadly to provide meaningful information.

The dispersion of the annual returns of individual portfolios within a composite can be measured in various ways. The GIPS Glossary entry for internal dispersion mentions several acceptable methods. Let us refer to the data in Exhibit 13, showing the beginning values (in euros) and the annual rates of return earned by the 14 portfolios that were in a German equity composite for the full year 20XX. (Note that only those portfolios in the composite for the entire year are included in the calculation of a dispersion measure.) The portfolios presented in Exhibit 13 are arrayed in descending order of returns.

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Beginning Value</th>
<th>20XX Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>€118,493</td>
<td>2.66%</td>
</tr>
<tr>
<td>B</td>
<td>€79,854</td>
<td>2.64%</td>
</tr>
<tr>
<td>C</td>
<td>€121,562</td>
<td>2.53%</td>
</tr>
<tr>
<td>D</td>
<td>€86,973</td>
<td>2.49%</td>
</tr>
<tr>
<td>E</td>
<td>€105,491</td>
<td>2.47%</td>
</tr>
<tr>
<td>F</td>
<td>€112,075</td>
<td>2.42%</td>
</tr>
<tr>
<td>G</td>
<td>€98,667</td>
<td>2.38%</td>
</tr>
<tr>
<td>H</td>
<td>€92,518</td>
<td>2.33%</td>
</tr>
<tr>
<td>I</td>
<td>€107,768</td>
<td>2.28%</td>
</tr>
<tr>
<td>J</td>
<td>€96,572</td>
<td>2.21%</td>
</tr>
<tr>
<td>K</td>
<td>€75,400</td>
<td>2.17%</td>
</tr>
<tr>
<td>L</td>
<td>€77,384</td>
<td>2.07%</td>
</tr>
<tr>
<td>M</td>
<td>€31,264</td>
<td>1.96%</td>
</tr>
<tr>
<td>N</td>
<td>€84,535</td>
<td>1.93%</td>
</tr>
</tbody>
</table>

The GIPS Glossary defines internal dispersion as “a measure of the spread of the annual returns of individual portfolios within a composite” and indicates that acceptable measures
include high/low, range, and the equal-weighted or asset-weighted standard deviation of portfolio returns. Using the data in Exhibit 13, we will consider each of these measures in turn.

The simplest method of expressing internal dispersion for an annual period is to disclose the highest and lowest returns earned by portfolios that were in the composite for the full year. In the case of the German equity composite, the highest return was 2.66 percent and the lowest was 1.93 percent. As an alternative, the high/low range—the arithmetic difference between the highest and the lowest return—might also be presented. In this case it was 0.73 percent, or 73 basis points. In either form, the high/low disclosure is easy to understand. It has, however, a potential disadvantage. In any annual period, an outlier—that is, one portfolio with an abnormally high or low return—may be present, resulting in a measure of dispersion that is not entirely representative of the distribution of returns. Although they are more difficult to calculate and to interpret, other measures may convey better information.

The standard deviation of returns to portfolios in the composite is another acceptable measure of internal dispersion. As applied to composites, standard deviation measures the cross-sectional dispersion of returns to portfolios in the composite. Standard deviation for a composite in which the constituent portfolios are equally weighted is

$$S = \sqrt{\frac{\sum_{i=1}^{n} (r_i - \bar{r}_c)^2}{n-1}}$$

(10)

where $r_i$ is the return of each individual portfolio, $\bar{r}_c$ is the equal-weighted mean or arithmetic mean return to the portfolios in the composite, and $n$ is, as before, the number of portfolios in the composite. Applying Equation 11 to the portfolio data given in Exhibit 13, assuming equal weighting, the standard deviation proves to be 23 basis points (0.23 percent). If the individual portfolio returns are normally distributed around the mean return of 2.32 percent, then approximately two-thirds of the portfolios will have returns falling between the mean plus the standard deviation (2.32% + 0.23% = 2.55%) and the mean minus the standard deviation (2.32% – 0.23% = 2.09%).

The standard deviation of portfolio returns is a valid measure of internal dispersion. Most spreadsheet programs include statistical functions to facilitate the calculation of equal-weighted standard deviations, and many prospective clients will have at least a passing acquaintance with the concept.

Some firms prefer to present the asset-weighted standard deviation rather than the equal-weighted standard deviation. The formula for the asset-weighted standard deviation of individual portfolio returns within a composite is:

$$S_{aw} = \sqrt{\frac{\sum_{i=1}^{n} [(r_i - \bar{r}_{proxy})^2 \times w_i]}{n-1}}$$

(11)

where $\bar{r}_{proxy}$ is the asset-weighted mean return of portfolios 1 through $n$ (see Formula 12); $w_i$ is the weight of portfolio $i$, calculated as the ratio of the beginning value of portfolio $i$ to the total

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36 The use of both $n$ and $n-1$ in the denominator can be supported. If $n$ were used in calculating the standard deviation of returns for the example presented in the text, the result would be 22 basis points (0.22%).
beginning value of the assets of portfolios 1 through \( n \), that is, \( w_i = \frac{v_{0,i}}{v_{0,\text{Total}}} \); and the sum of the weights \( w_i \) through \( w_n \) is 1.

\[
\bar{r}_{\text{proxy}} = \sum_{i=1}^{n} (w_i \times r_i)
\]  

(12)

Applying Formulas 11 and 12 to the data given in Exhibit 13, we find that the asset-weighted standard deviation is 21 basis points (0.21 percent).

Although the Glossary does not explicitly mentioned it, the interquartile range—the difference between the returns in the first and third quartiles of the distribution—is also an acceptable measure of internal dispersion. Quartiles divide the distribution of returns into quarters, such that 25 percent of the observations fall at or above the first quartile and 25 percent fall at or below the third quartile. If the distribution were divided into percentiles, the first quartile would contain observations at or above the 25th percentile, and the third quartile would contain observations at or above the 75th percentile. The quartiles for the German equity composite are shown in Exhibit 14.

<table>
<thead>
<tr>
<th>Exhibit 14</th>
<th>Quartile Distribution of German Equity Portfolio Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interquartile Range</td>
<td></td>
</tr>
<tr>
<td>First Quartile (3 Portfolios)</td>
<td>25th percentile Return = 2.50%</td>
</tr>
<tr>
<td>Second Quartile (4 Portfolios)</td>
<td>Median Return = 2.355%</td>
</tr>
<tr>
<td>Third Quartile (4 Portfolios)</td>
<td>75th percentile Return = 2.145%</td>
</tr>
<tr>
<td>Fourth Quartile (3 Portfolios)</td>
<td></td>
</tr>
</tbody>
</table>

The quartile breakpoints indicated in Exhibit 14 are located by determining the returns at the 25th, 50th, and 75th percentiles (the 50th percentile is the median). The \( y \)th percentile is defined as the point above which \( y \) percent of observations lie. The location of percentiles (and thus quartile breakpoints) is approximate in small data sets. An approximation for the position of a percentile \( y \) in an array with \( n \) entries sorted in descending order is:

\[
L_y = (n + 1) \frac{y}{100}
\]

(13)

For example, the German equity composite presented in Exhibit 13 contains 14 portfolios (\( n = 14 \)) listed in descending order of return. Using formula 13, the approximate location of the 25th percentile (\( y = 25 \)) is between the third and the fourth portfolio:
The value of the return at the 25th percentile is found by linear interpolation. The third portfolio, identified only as Portfolio C in Exhibit 13, had a return of 2.53 percent, and the fourth, Portfolio D, had a return of 2.49 percent. Reflecting the “0.75” in “3.75,” the return at the interpolated 25th percentile is below that of Portfolio C by three-quarters of the distance between the returns earned by Portfolio C and Portfolio D, respectively. Let us call \( r_{25} \) the value of the return at the 25th percentile. Then:

\[
 r_{25} = 0.0253 - [0.75 \times (0.0253 - 0.0249)] = 0.0253 - 0.0003 = 0.025 = 2.50\%
\]

Through the same process of linear interpolation, we find that the return at the 75th percentile is 2.145 percent. With these values in hand, calculating the interquartile range is straightforward. It is the spread, or the arithmetic difference, between the returns at the 25th and the 75th percentiles. In the case of the German equity composite, the interquartile range is 2.5 percent minus 2.145 percent, or approximately 36 basis points (0.36 percent).

The interquartile range, then, represents the length of the interval containing the middle 50 percent of the data. Because it does not contain the extreme values, the interquartile range is not exposed to the risk of being skewed by outliers. However, prospective clients may be unfamiliar with the interquartile range as a measure of dispersion. When disclosing which measure of internal dispersion is used, as required by Provision I.4.A.8, firms might wish to include a definition of the interquartile range. For instance, the disclosure might read, “The measure of internal dispersion of the returns earned by portfolios that were included in the composite for the full year is the interquartile range, the spread between portfolio returns at the 25th and 75th percentiles.”

Note that the GIPS standards do not limit firms to using one of the measures of internal dispersion introduced above. A firm may prefer another way of expressing composite dispersion. The method chosen should, however, fairly represent the range of returns for each annual period.

The 2010 version of the GIPS standards newly requires that firms present information about the historical variability of composite and benchmark returns. Specifically, Provision I.5.A.2.a states that, for periods ending on or after 1 January 2011, firms must present, as of each annual period end, the three-year annualized \textit{ex post} standard deviation (using monthly returns) for the composite and the benchmark. The rationale is to give prospective clients an indication of the risk of an investment strategy as executed by the firms under consideration. Because all GIPS-compliant performance presentations include the same risk measure, and that measure is based upon historical experience rather than subjective inputs, the Standards allow for some degree of comparability among firms that claim compliance.

However, standard deviation assumes that returns are normally distributed, and so it may not be the most suitable risk measure for every investment strategy. Accordingly, Provision I.5.A.2.b states that, if the firm determines that the three-year annualized \textit{ex post} standard deviation is not relevant or appropriate, the firm must present an additional three-year \textit{ex post} measure of risk for the composite and the benchmark. The periodicity of the composite and the benchmark must be identical; for instance, if the chosen measure of historical composite risk is calculated using monthly returns, then the equivalent measure of benchmark risk must also be based upon monthly returns.
We observed in reviewing the disclosure provisions that, for any performance presented for periods prior to 1 January 2000 that does not comply with the GIPS standards, the firm must disclose the periods of non-compliance (Provision II.4.A.15). Firms may link non-compliant performance so long as only compliant returns are presented for periods beginning on or after 1 January 2000 (Provision I.5.A.3).

The GIPS provisions for presentation and reporting state that returns for periods of less than one year must not be annualized (Provision I.5.A.4). Extrapolating partial-year returns by annualizing them would amount to a prediction about investment results for the rest of the year.

In our discussion of composite construction (Provision I.3.A.8) and required disclosures (Provision I.4.A.23), we mentioned the practice of “carving out” or extracting performance data on a single asset class included in a multiple-asset class strategy for inclusion in a single-asset-class composite. A related presentation and reporting requirement exists. Under Provision I.5.A.5, for periods beginning on or after 1 January 2006 and ending prior to 1 January 2011, if a composite includes carve-outs, the presentation must include the percentage of composite assets that is composed of carve-outs as of the end of each annual period. The Standards do not require firms to disclose what percentage of composite assets was composed of carve-outs for periods falling outside the 2006–2010 timeframe.

Another requirement of the GIPS standards for presentation and reporting addresses the inclusion of non-fee-paying portfolios in composites. We saw when discussing the requirements for composite construction that all actual, fee-paying, discretionary portfolios must be included in at least one composite. Provision I.3.A.1 goes on to state that non-fee-paying discretionary portfolios may be included in a composite (with appropriate disclosures). For example, in the interest of public service or community relations, a firm might waive the investment management fee on a charitable organization’s portfolio, or a firm might use its own or its principals’ capital to implement a new investment strategy. Provision I.5.A.6 stipulates that if a composite contains any non-fee-paying portfolios, the firm must present, as of the end of each annual period, the percentage of the composite assets represented by the non-fee-paying portfolios. In addition, if a composite contains portfolios with bundled fees, firms must present for each annual period shown the percentage of composite assets that are bundled-fee portfolios (Provision I.5.A.7).

The “portability” of past performance is a complex and sometimes contentious subject, but Provision I.5.A.8 summarizes the explicit conditions under which performance of a past firm or affiliation must be linked to or used to represent the historical performance of a new or acquiring firm. The conditions, which apply on a composite-specific basis, are that (1) substantially all the investment decision makers are employed by the new or acquiring firm, (2) the decision-making process remains substantially intact and independent within the new or acquiring firm, and (3) the new or acquiring firm has records that document and support the reported performance. If a GIPS-compliant firm acquires another firm or affiliation, the firm is given one year to bring any non-compliant assets into compliance.

Appendix A of the GIPS standards contains several sample GIPS-compliant performance presentations. We have reproduced one of them in Exhibit 15.

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Exhibit 15

37 Non-discretionary portfolios, on the other hand, cannot be included in a firm’s composites under the GIPS standards.

38 See the GIPS Guidance Statement on Performance Record Portability.
Sample 1 Investment Firm claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Sample 1 Investment Firm has been independently verified for the periods 1 January 2000 through 31 December 2010. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm’s policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

Notes:
1. Sample 1 Investment Firm is a balanced portfolio investment manager that invests solely in U.S.-based securities. Sample 1 Investment Firm is defined as an independent investment management firm that is not affiliated with any parent organization. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.
2. The Balanced Growth Composite includes all institutional balanced portfolios that invest in large-cap U.S. equities and investment-grade bonds with the goal of providing long-term capital growth and steady income from a well-diversified strategy. Although the strategy allows for equity exposure ranging between 50–70%, the typical allocation is between 55–65%. The account minimum for the composite is $5 million.
3. The custom benchmark is 60 percent YYY U.S. Equity Index and 40 percent ZZZ U.S. Aggregate Bond Index. The benchmark is rebalanced monthly.
4. Valuations are computed and performance is reported in U.S. dollars.
5. Gross-of-fees returns are presented before management and custodial fees but after all trading expenses. Composite and benchmark returns are presented net of non-reclaimable withholding taxes. Net-of-fees returns are calculated by deducting the highest fee of 0.83 percent from the monthly gross composite return. The management fee schedule is as follows: 1.00 percent on the first $25 million; 0.60 percent thereafter.
6. This composite was created in February 2000. A complete list of composite descriptions is available upon request.
7. Internal dispersion is calculated using the equal-weighted standard deviation of annual gross returns of those portfolios that were included in the composite for the entire year.
8. The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. The standard deviation is not presented for 2002 through 2010 because monthly composite and benchmark returns were not available, and is not required for periods prior to 2011.
3.13 Presentation and Reporting Recommendations

In addition to the requirements explained above, the GIPS standards include recommended practices in the presentation and reporting of investment results.

Provision I.5.B.1.a recommends that firms present gross-of-fees returns, that is, returns reduced only by trading expenses incurred during the period and not by any other charges. It is fitting to reduce returns by trading expenses so as to take into account the firm’s ability to execute a strategy efficiently. More or less directly comparable to benchmark returns, gross-of-fees returns are useful for prospective clients who wish to evaluate a firm’s investment skill without regard to investment management fees, which may be negotiable, or administrative fees, which may not be under the manager’s control. (Administrative fees, defined as all fees other than trading expenses and the investment management fee, could include custody, accounting, auditing, consulting, performance measurement, and legal fees, among others.) Although investors only receive net-of-fees returns, gross-of-fees returns enable them to appraise a firm’s investment results in comparison with an appropriate benchmark and to reach tentative conclusions about a firm’s skill relative to other managers with similar strategies.

Provision I.5.B.2.a recommends that, in addition to the required annual returns, firms should present cumulative composite and benchmark returns for all periods. Cumulative returns are calculated by geometrically linking historical returns in accordance with Formula 2 (reprinted here for convenience).

\[
rt_{twr} = (1 + r_{t,1}) \times (1 + r_{t,2}) \times \ldots \times (1 + r_{t,n}) - 1
\]

For instance, using Formula 2 and the data given in Exhibit 15, we find that the composite’s cumulative gross-of-fees return was 40 percent and the cumulative benchmark return was 28.1 percent for the 2002–2011 period.

Recall that the Standards require composite returns to be calculated on an asset-weighted basis (Provision I.2.A.6). Provision I.5.B.2.b recommends that firms present equal-weighted mean and median returns for each composite. These composite returns may provide useful information to prospective clients, particularly if the required dispersion measure has been calculated on an equal-weighted basis.

The GIPS standards also recommend that performance presentations include returns for quarterly and/or monthly time periods (Provision I.5.B.2.c). Relatedly, the Standards also recommend that GIPS-compliant presentations be updated quarterly (Provision I.5.B.9).

The Standards also recommend that annualized composite and benchmark returns be presented for periods longer than 12 months (Provision I.5.B.2.d). (We have observed, of course, that returns for periods shorter than one year must not be annualized.) As expressed in Formula 14, annualized returns are calculated by taking the \(n\)th root of chain-linked returns, where \(n\) is the number of years in the period.

\[
r_{ann} = \sqrt[n]{(1 + r_{t,1}) \times (1 + r_{t,2}) \times \ldots \times (1 + r_{t,n}) - 1}
\]

(14)

For instance, the sample GIPS-compliant presentation shown above covers the 10-year period 2002 through 2011. Applying Formula 14 to the cumulative returns calculated above, we find that the annualized gross-of-fees return for the composite during that 10-year period was
approximately 3.42 percent, and the annualized return for the benchmark during the same period was approximately 2.5 percent.

We saw above that, for periods ending on or after 1 January 2011, the Standards require firms to present the annualized three-year \textit{ex post} standard deviation of composite and benchmark returns. There are four related recommendations. Provision I.5.B.3 recommends that the same measures be presented for earlier annual periods. Provisions I.5.B.4–5 state that the corresponding annualized composite and benchmark total returns should be shown for each period the standard deviation is presented, and vice-versa. Provision I.5.B.6 recommends that firms present additional relevant composite-level \textit{ex post} risk measures. In sum, the Standards strongly advocate offering prospective clients relevant quantitative information they can use to evaluate the riskiness of the investment strategy represented by a composite.

We saw when reviewing the provisions related to disclosure that, for any non-compliant performance presented for periods prior to 1 January 2000, firms are required to disclose the periods of non-compliance (Provision I.4.A.15). The GIPS standards for presentation and reporting encourage firms that have presented the required five years of compliant historical performance to comply for all historical periods (Provision I.5.B.8). This recommendation does not relieve firms of the requirement to add annual performance on an ongoing basis to build a ten-year compliant track record. Indeed, Provision I.5.B.7 states that firms should present more than ten years of annual performance in the compliant presentation.

3.14 Introduction to the Real Estate and Private Equity Provisions

The GIPS standards codify the treatment to be accorded real estate and private equity, two major asset classes with distinctive characteristics. In general, the main GIPS standards apply to real estate and private equity as well; however, the Standards lay down certain exceptions to the main provisions and set forth separate, additional requirements and recommendations for these two asset classes.

Real estate and private equity investments can be structured in many different ways. In order to demarcate the scope of the asset-class-specific provisions, the GIPS standards specify the types of investments that are \textit{not} considered real estate. Publicly traded real estate securities (such as real estate investment trusts, or REITs) and commercial mortgage-backed securities (CMBSs) are subject to the general provisions rather than to the real estate provisions of the GIPS standards. Also excluded from the real estate provisions are private debt investments, including commercial and residential loans, where the expected return is solely related to contractual interest rates without any participation in the economic performance of the underlying real estate. The GIPS Glossary complements this definition by listing the types of investments that \textit{are} considered real estate, namely, investments in wholly or partially owned properties; commingled funds, property unit trusts, and insurance company separate accounts; unlisted, private placement securities issued by private real estate investment trusts (REITs) and real estate operating companies (REOCs); and equity-oriented debt (e.g., participating mortgage loans) or any private interest in a property where some portion of return to the investor at the time of investment is related to the performance of the underlying real estate.

Similarly, the \textbf{private equity} provisions pertain to private equity investments made by fixed life, fixed commitment vehicles, including \textbf{primary fund vehicles} (which make direct investments rather than investing in other fund vehicles), \textbf{funds of funds} (which predominately invest in \textbf{closed-end funds} and may opportunistically make direct investments), and \textbf{secondary fund vehicles} (which buy interests in existing fund investment vehicles). A closed-end fund, as defined in the GIPS Glossary for purposes of the real estate and private equity provisions, is a
type of investment vehicle where the number of investors, total **committed capital**, and life are fixed; it is not open for subscriptions and/or redemptions.\(^{39}\) Private equity **open-end** or **evergreen** funds, which allow for ongoing investment and redemptions, remain subject to the main GIPS standards.

The real estate and private equity provisions were first included in the GIPS standards in 2005 and became effective 1 January 2006.\(^{40}\) Unless otherwise stated, the following requirements and recommendations are effective 1 January 2011. Real estate investing and private equity investing are highly specialized areas of expertise, and the GIPS standards governing them are necessarily complicated. In the following sections, we will consider principal concepts and major provisions of the pertinent Standards. This discussion is not an exhaustive treatment of these complex topics.

### 3.15 Real Estate Provisions

**Fair values** are central to calculating returns on real estate assets, and accordingly the GIPS standards for input data\(^{41}\) and disclosures\(^{42}\) include provisions related to valuation procedures. For periods beginning on or after 1 January 2011, firms must value real estate investments in accordance with the definition of fair value and the GIPS Valuation Principles ( Provision I.6.A.1); for earlier periods, firms must value real estate investments at market value as defined in the 2005 version of the Standards. Firms are not required to determine the value of real estate assets as frequently as they must value portfolios composed of more-liquid securities in accordance with the general provisions of the GIPS standards. For periods beginning on or after 1 January 2008, real estate investments must be valued at least quarterly, and for periods beginning on or after 1 January 2010 they must be valued as of each quarter end or the last business day of each quarter (Provisions I.6.A.2–3); for earlier periods, real estate investments must be valued at least once every 12 months.

In the absence of transactions, however, managers’ internal estimates of values may be based on debatable assumptions. Accordingly, the Standards further require firms to have valuations conducted periodically by independent, credentialed experts. Specifically, provision I.6.A.4 states that for periods prior to 1 January 2012 real estate investments must have an external valuation at least once every 36 months. For periods beginning on or after 1 January 2012 real estate investments must have an external valuation at least once every 12 months unless client agreements stipulate otherwise; in that case, they must have an external valuation at least every 36 months (or more frequently if required by the client agreement).

Provision I.6.A.5 goes on to state that external valuations must be performed by an independent external **professionally designated, certified or licensed commercial property valuer/appraiser**. In markets where specialists with appropriate credentials are unavailable, the firm must take steps to ensure that it uses only well-qualified, independent property valuers or appraisers. Common-sense steps might include considering the appraiser’s pertinent experience in the local market with the kind of properties to be independently valued. In accordance with the

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\(^{39}\) There are special provisions for real estate closed-end funds.


GIPS standards for real estate presentation and reporting, firms must present as of each annual period end the percentage of composite assets valued using an external valuation during the annual period (Provision I.6.A.16.b).

The Standards also include particular rate-of-return calculation requirements\(^\text{43}\) for real estate. For periods beginning on or after 1 January 2006, portfolio returns after the deduction of actual transaction expenses incurred during the period must be calculated at least quarterly (Provisions I.6.A.6–7). For periods beginning on or after 1 January 2011, income returns and capital returns (known as component returns) must be calculated separately using geometrically linked time-weighted rates of return (Provision I.6.A.8). Composite and component returns must be calculated by asset-weighting the individual portfolio returns at least quarterly (Provision I.6.A.9). Let us define these terms and look at the calculations.

Total return, income return, and capital return are all calculated based on capital employed, computed by adjusting the beginning capital for time-weighted cash flows that occur during the measurement period. Conceptually, we can adjust for weighted cash flows in the same way that we adjust beginning composite assets for external cash flows (see the treatment of Provision I.2.A.6). On the model of Formula 7, we can compute capital employed, here designated \(C_E\), as follows:

\[
C_E = C_0 + \sum_{i=1}^{n} (CF_i \times w_i)
\]

where \(C_0\) is the beginning capital. Note that the capital employed does not include any component returns earned during the measurement period.

The capital return, also known as the capital appreciation return or the appreciation return, is calculated by dividing the capital employed (\(C_E\)) into the change in value during the measurement period minus capital expenditures (\(E_C\)) plus net sales proceeds (\(S\)), as shown in Formula 16.

\[
r_c = \frac{(V_i - V_0) - E_C + S}{C_E}
\]

The classification of outlays as “capital expenditures” is subject to accounting rules, but capital expenditures may broadly be characterized as costs incurred to acquire and improve real assets. In contrast to costs that are expensed immediately, capital expenditures for long-lived improvements are added to the value of the asset.

The income return is calculated by dividing capital employed into investment income earned during the period (\(Y_A\)) minus non-recoverable expenditures (\(E_N\)), interest expense on debt (\(I_D\)), and property taxes (\(T_P\)). Non-recoverable expenditures are items not reimbursed by tenants, such as leasing and financing costs, maintenance, and major repairs. With the variables thus defined, the expression for income return is

\[
r_I = \frac{Y_A - E_N - I_D - T_P}{C_E}
\]

\(^\text{43}\) The following calculation methodology provisions do not apply to real estate: I.2.A.2.a, I.2.A.4, and I.2.A.7.
The single-period total return for real estate, then, is the sum of the component returns:

\[ r_T = r_C + r_I \quad (18) \]

Exhibit 16 displays a composite’s income return, capital return, and total return for the four quarters of the year 20XX. The full-year returns are calculated by chain-linking the quarterly returns for each series.

**Exhibit 16**

**Real Estate Total Return: An Illustration**

<table>
<thead>
<tr>
<th></th>
<th>Income Return</th>
<th>Capital Return</th>
<th>Total Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>First quarter</td>
<td>2.15%</td>
<td>–0.52%</td>
<td>1.63%</td>
</tr>
<tr>
<td>Second quarter</td>
<td>2.20%</td>
<td>0.59%</td>
<td>2.79%</td>
</tr>
<tr>
<td>Third quarter</td>
<td>2.17%</td>
<td>0.75%</td>
<td>2.92%</td>
</tr>
<tr>
<td>Fourth quarter</td>
<td>2.10%</td>
<td>0.91%</td>
<td>3.01%</td>
</tr>
<tr>
<td>20XX</td>
<td>8.90%</td>
<td>1.73%</td>
<td>10.75%</td>
</tr>
</tbody>
</table>

With this method, which is required under Provision I.6.A.8, the income return and the capital return added together equal the total return for each quarter but the component returns for the full year (as they will appear in the performance presentation) do not sum to the total return. Such an outcome may have to be explained to prospective clients who are unfamiliar with real estate return calculations.

The provisions related to real estate disclosures require firms to disclose the calculation methodology used for component returns. In particular, the disclosure must indicate when the firm calculates component returns in separate series using chain-linked time-weighted rates of return (Provision I.6.A.10.f). In addition, the disclosure must state, for periods prior to 1 January 2011, if the firm adjusts the component returns to make the sum of the income return and the capital return equal to the total return (Provision I.6.A.10.g). The firm may have had a practice of forcing the component returns, taken together, to equal the total return (for example, by representing the annual income return as the difference between the total return and the capital return). This dubious practice cannot be continued for periods beginning on or after 1 January 2011 and, as noted, its use for earlier periods must be disclosed. To reiterate, for periods beginning on or after 1 January 2011, component returns must be chain-linked separately.

In an earlier section, we discussed the definition of “discretion” under the main GIPS standards. The GIPS provisions for disclosure associated with real estate performance presentations require firms to provide a description of discretion (Provision I.6.A.10.a). Real estate portfolios are considered discretionary if the firm has sole or primary responsibility for major investment decisions.44

Among other disclosure requirements, performance presentations for real estate investments must include disclosures about the methods and frequency of valuations. These requirements are set forth in Provisions I.6.A.10.b–e. In each compliant presentation, firms must disclose the internal valuation methodologies used to value real estate investments for the most recent period. For example, among other conventional approaches, the firm might capitalize the

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income generated by a property, using an income capitalization rate imputed or “extracted” from
the market based on the net operating income and sale prices of similar properties; or the firm
might base the valuation of the subject property directly on the reported sale prices of
comparable nearby properties, with adjustments to reflect differences in the properties’ location,
features, or condition.\textsuperscript{45} For periods beginning on or after 1 January 2011, firms must disclose
material changes to valuation policies and/or methodologies and any material difference between
an external valuation and the valuation used in performance reporting, along with the reason for
the difference. Firms must also disclose the frequency of independent, external valuations by
appropriately credentialed valuers or appraisers. The GIPS Valuation Principles, which are
discussed below, include additional requirements and recommendations specifically related to
valuing real estate investments.

The GIPS presentation and reporting standards\textsuperscript{46} for real estate specify that firms must
present component returns in addition to total returns. In addition, component returns must be
clearly identified as gross-of-fees or net-of-fees. (Provision I.6.A.14.) For real estate and private
equity return calculations, the gross-of-fees return is the return on investments reduced by
transaction expenses incurred during the period. Transaction expenses include all legal, financial,
advocacy, and investment banking fees related to buying, selling, restructuring, and recapitalizing
portfolio investments. As with the main provisions of the GIPS standards, the net-of-fees return
is the gross-of-fees return reduced by investment management fees. When presenting real estate
gross-of-fees returns, firms must disclose if any fees other than actual transaction expenses are
deducted, and when presenting net-of-fees returns, they must disclose if any fees other than
investment management fees and transactions expenses are deducted (Provisions I.6.A.12–13).
For periods beginning on or after 1 January 2006, the effective date of the real estate provisions,
firms must not link non-GIPS-compliant performance to their GIPS-compliant performance
(Provision I.6.A.15). For any performance presented for periods prior to 1 January 2006 that
does not comply with the GIPS standards, firms must disclose the periods of non-compliance

The Standards related to real estate presentation and reporting stipulate that each
compliant performance presentation of a composite that includes more than five portfolios must
contain a specific measure of internal dispersion, namely, the high and low annual time-weighted
rate of return for the individual portfolios in the composite (Provision I.6.A.16.a).

In addition to the foregoing requirements, the Standards offer recommendations
pertaining to real estate input data, disclosures, and presentation and reporting. For periods prior
to 1 January 2012, real estate investments should be externally valued by an independent,
professionally credentialed property valuer or appraiser at least once every 12 months, and
external valuations should be as of the end of the annual period (Provisions I.6.B.1–2). Firms
should also disclose the basis of accounting for the portfolios in the composite, for instance, U.S.
Generally Accepted Accounting Principles (GAAP) or International Financial Reporting
Standards (IFRS), and they should disclose and explain material differences, as of the end of
each annual period, between the valuations used in performance reporting, on one hand, and
financial reporting, on the other (Provisions I.6.B.3–4). The Standards further recommend that
for periods prior to 1 January 2011 firms should disclose material changes to valuation policies
and/or methodologies (Provision I.6.B.5). The Standards recommend that firms present both

\textsuperscript{45} These and other appraisal techniques are explained in Shilling (2002).

\textsuperscript{46} The following presentation and reporting provisions do not apply to real estate: I.5.A.1.i, I.5.A.2, I.5.A.3, I.5.B.3,
gross-of-fees and net-of-fees returns, the percentage of the total value of composite assets that are not real estate, as defined, at the end of each annual period, and component returns of the benchmark, if available (Provisions I.6.B.6–8).

The 2010 GIPS standards for real estate set forth further requirements and recommendations for real estate closed-end fund composites, including significant provisions related to calculation methodology. In addition to time-weighted rates of return, firms must calculate annualized since inception internal rates of return (SI-IRR) using quarterly cash flows at a minimum (Provisions I.6.A.17–18). We will encounter SI-IRR again in connection with the private equity provisions, where it is also a required element.

An internal rate of return is the discount rate that sets an investment’s net present value equal to zero; expressed another way, it is the discount rate that equates the present value of an investment’s cost with the present value of its benefits. The cost is the capital the client invests; the benefits are the distributions the client receives plus the investment’s value at the end of the measurement period. Mathematically, we calculate the annualized internal rate of return from the value of $r$ that solves the following formula:

$$V_0 = \frac{CF_1}{(1+r)} + \frac{CF_2}{(1+r)^2} + \cdots + \frac{V_N}{(1+r)^N}$$

(19)

where $V_0$ represents the initial investment (the beginning value), the terms $CF_i$, $CF_2$, and so on represent interim cash flows, and $V_N$ represents the ending value. For simplicity, Formula 19 assumes equally spaced end-of-period cash flows. In this formula, $r$ is a subperiod return; when annualized, it is the internal rate of return.

Of course, the investor may make more than one capital contribution. With attention to the direction (the sign) of the cash flows, we can restate the formula for the internal rate of return as follows:

$$\sum_{i=0}^{N} \frac{CF_i}{(1+r)^i} = 0$$

(20)

where $CF_i$ is the cash flow for the period $i$ and $N$ is the total number of periods. In Formula 20, a negative $CF_i$ represents a net cost or outflow to the investor and a positive $CF_i$ represents a net distribution or inflow to the investor; $CF_0$ and $CF_N$ incorporate $V_0$ and $V_N$, respectively, in Formula 19. This formulation accommodates multiple contributions or capital calls (cash inflows to the portfolio) and distributions (cash outflows from the portfolio) over the entire inception-to-date timeframe. By setting the sum of the present values of cash inflows and outflows equal to zero, the formula effectively defines $r$ as the discount rate that makes the present value of the cost equal the present value of the benefits.

An example may make the calculation more clear. Let us consider the investment from the perspective of the client who funds the real estate portfolio and receives benefits in the form of cash distributions during the measurement period and ownership of fairly valued assets as of the end of the period. For this example, Exhibit 17 shows the timing and amount of the quarterly cash flows. The portfolio’s real estate assets are valued as of the end of the second year, so the since-inception performance measurement period is eight quarters.

Exhibit 17
### Data for an IRR Calculation

<table>
<thead>
<tr>
<th>Date</th>
<th>Quarter</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial investment</td>
<td>31 December Year 0</td>
<td>0</td>
</tr>
<tr>
<td>Additional investment</td>
<td>30 June Year 1</td>
<td>2</td>
</tr>
<tr>
<td>Distribution received</td>
<td>31 March Year 2</td>
<td>5</td>
</tr>
<tr>
<td>Distribution received</td>
<td>30 September Year 2</td>
<td>7</td>
</tr>
<tr>
<td>Ending value</td>
<td>31 December Year 2</td>
<td>8</td>
</tr>
</tbody>
</table>

The client’s experience can be expressed graphically, as in Exhibit 18, with the ending value reflected as a cash flow. Note that in some periods, no cash flows occur.

### Exhibit 18

Using the data in Exhibit 17 as inputs to Formula 20, we find through an iterative trial-and-error process that the quarterly discount rate \( r \) is approximately 2.53 percent. Exhibit 19 validates this result. The present value factor applied to each cash flow is \( 1/(1 + r)^i \), where \( r \) is the discount rate and \( i \) is the sequential number of the subperiod. For instance, the present value factor applied to the cash distribution of $12,665 paid out on 31 March of Year 2, the fifth quarter, is

\[
\frac{1}{(1 + 0.0253)^5} = 0.88256
\]

Exhibit 19 shows that 2.53 percent is the quarterly discount rate that sets the sum of the present values of the cash flows from inception through the end of the measurement period equal to zero. The GIPS real estate provisions require us to annualize the since-inception internal rate of return. To annualize a return that was computed on a quarterly basis, we calculate \( (1 + r)^4 - 1 \), so the SI-IRR earned in this example is 10.51 percent.

### Exhibit 19
### Demonstration that the Computed IRR is Correct

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash Flow</th>
<th>Period</th>
<th>Present Value Factor</th>
<th>Present Value (r = 2.53%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 December Year 0</td>
<td>–150,000</td>
<td>0</td>
<td>1</td>
<td>–150,000</td>
</tr>
<tr>
<td>30 June Year 1</td>
<td>–100,000</td>
<td>2</td>
<td>0.95126</td>
<td>–95,126</td>
</tr>
<tr>
<td>31 March Year 2</td>
<td>12,665</td>
<td>5</td>
<td>0.88256</td>
<td>11,178</td>
</tr>
<tr>
<td>30 September Year 2</td>
<td>11,130</td>
<td>7</td>
<td>0.83954</td>
<td>9,344</td>
</tr>
<tr>
<td>31 December Year 2</td>
<td>274,300</td>
<td>8</td>
<td>0.81883</td>
<td>224,605</td>
</tr>
<tr>
<td><strong>Total (does not equal zero due to rounding)</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

As noted, firms must use quarterly cash flows at a minimum in calculating the SI-IRR for closed-end real estate fund composites. In other words, $CF_i$ must reflect the net cash flow for a period no longer than a quarter. (It is recommended in Provision I.6.B.9 that daily cash flows be used in calculating SI-IRR). Firms must disclose the frequency of cash flows used in the SI-IRR calculation (Provision I.6.A.21).

The GIPS provisions for composite construction require closed-end real estate fund composites to be defined by **vintage year** as well as investment mandate, objective, or strategy, and to keep the composite definition consistent throughout the life of the composite (Provision I.6.A.19). The vintage year is useful information for prospective clients who wish to establish the comparability of different composites. There is a related disclosure requirement: Firms must disclose the vintage year of the composite and how the vintage year is defined (Provision I.6.A.22). The GIPS Glossary mentions two methods of determining the vintage year: the year that capital is first **drawn down** or called from investors, and the year when the first committed capital from outside investors is closed and legally binding.

The provisions related to presentation and reporting for real estate closed-end funds require firms to present the composite’s net-of-fees SI-IRR through the end of each annual period. For periods beginning on or after 1 January 2011, when the initial period is less than a full year, firms must present the net-of-fees SI-IRR through the end of the initial annual period; in this case, the SI-IRR must not be annualized. For periods ending on or after 1 January 2011, firms must present the net-of-fees SI-IRR through the composite’s **final liquidation date**. (Provision I.6.A.23.) Firms must also disclose the final liquidation date for liquidated composites (Provision I.6.A.20).

Firms must also present the SI-IRR of the benchmark as of each annual period end. In addition to reflecting the composite’s investment mandate, objective, or strategy, the benchmark must have the same vintage year and be presented for the same time period as the composite (Provision I.6.A.26). Given that the benchmark SI-IRR must be presented, firms may also find it advantageous to present the composite’s gross-of-fees SI-IRR. However, if shown, the gross-of-fees SI-IRR of the composite must be presented for the same period of time the net-of-fees SI-IRR is presented (Provision I.6.A.24).

Firms are required to present information about the financial history and status of real estate closed-end funds as of the end of each period. Specifically, they must present the composite’s cumulative **committed capital** (the capital pledged to the investment vehicle), since-inception **paid-in capital** (the amount of committed capital that has been drawn down),

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47 In parallel with the main provisions of the GIPS standards, firms must initially present at least five years of performance (or performance from the firm’s inception or the composite’s inception date if they have been in existence less than five years), and must present an additional year of performance each subsequent year.
and since-inception distributions. Firms must also report certain multiples or ratios for each annual period presented. One of them is the ratio of total value to since-inception paid-in capital (TVPI, also called the investment multiple). TVPI gives prospective clients information about the value of the composite relative to its cost basis. For the purpose of the TVPI calculation, total value can be determined by adding since-inception distributions to date to the end-of-period residual value. Firms must also report the ratio of since-inception distributions to paid-in capital (DPI, also called the realization multiple); the ratio of since-inception paid-in capital to committed capital (the PIC multiple); and the ratio of residual value to since-inception paid-in capital (RVPI). These requirements are set forth in Provision I.6.A.25.

3.16 Private Equity Provisions

The GIPS provisions for private equity use technical terms that may be unfamiliar to the performance measurement generalist. Although considerably simplified for brevity, an overview of the private equity investment process may facilitate understanding of the Standards’ requirements and recommendations.

Let us take for an example a venture capital fund organized as a limited partnership, one of many investment structures used in the private equity market. A venture capital firm identifies an emerging industry, develops the fund concept, and secures commitments from investors who pledge to pay in a certain amount of capital over a certain period of time, often three to five years. In this structure, a venture capital firm will serve as general partner, and the investors will be limited partners. The general partner screens early stage companies’ business plans, identifies the most promising enterprises, and conducts in-depth analysis and due diligence on the quality of their management, the legal status of their intellectual property rights, and the prospective demand for their products, among many other factors. The general partner then negotiates deals with the companies that pass scrutiny and places capital calls drawing down the limited partners’ committed capital for investment in the portfolio companies. There may be multiple capital calls to meet each company’s cash requirements in accordance with the terms of the deal. As the fund matures, the general partner harvests the portfolio companies (for instance, by taking them public) and distributes the proceeds to the limited partners. With this background in mind, let us turn to the GIPS standards for private equity.

There are two Standards related to input data.48 For periods ending on or after 1 January 2011, private equity investments must be valued in accordance with the definition of fair value and the GIPS Valuation Principles,49 and they must be valued at least annually (Provisions I.7.A.1–2). We will discuss the GIPS Valuation Principles in a later section of this reading.

The GIPS provisions related to calculation methodology50 state that firms must calculate annualized since-inception internal rates of return (SI-IRR)51 and that, for periods ending on or after 1 January 2011, the SI-IRR must be calculated using daily cash flows; for earlier periods, either daily or monthly cash flows may be used. Distributions of stock must be included as cash flows and valued at the time of distribution. (Provisions I.7.A.3–4).

All private equity returns must be calculated after the deduction of actual transaction expenses incurred during the period, and net-of-fees returns must be net of actual investment

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49 For earlier periods, private equity investments must be valued according to either the 2005 GIPS Private Equity Valuation Principles or the 2010 GIPS Valuation Principles.
51 We explained the SI-IRR calculation in connection with the real estate provisions.
management fees including **carried interest**, representing the profits on the investments of the investment vehicle that general partners are allocated (Provisions I.7.A.5–6). Fund of fund returns must be net of all underlying partnership and/or fund fees, including carried interest (Provision I.7.A.7).

The GIPS provisions for composite construction\(^{52}\) state that composite definitions must remain consistent throughout the life of the composite (Provision I.7.A.8). Primary fund vehicles must be included in at least one composite defined by vintage year and investment mandate, objective, or strategy (Provision I.7.A.9). Funds of funds must be included in at least one composite defined by vintage year of the fund of funds and/or investment mandate, objective, or strategy. (Provision I.7.A.10).

Specific disclosure requirements\(^{53}\) also apply for private equity. Firms must disclose the vintage year of each composite, how the vintage year is determined, and, where applicable, the **final liquidation date** (Provisions I.7.A.11–12). As one might expect, there are disclosure requirements pertaining to the valuation of composite investments. Firms must disclose their private equity valuation methodologies for the most recent period and, for periods ending on or after 1 January 2011, they must disclose any material changes to valuation policies and/or methodologies; disclosing such changes is recommended for earlier periods (Provision I.7.B.4). If the firm adheres to any industry valuation guidelines in addition to the GIPS Valuation Principles, it must disclose which guidelines have been applied. (Provisions I.7.A.13–15.) The GIPS Valuation Principles, which are explained below, set forth additional requirements and recommendations specifically related to valuing private equity investments.

There are also disclosure requirements related to calculations of composite returns. If daily cash flows are not used in the SI-IRR calculation for periods prior to 1 January 2011, then firms must disclose the frequency of the cash flows that are used (Provision I.7.A.17); recall that the SI-IRR must be calculated using either daily or monthly cash flows for periods prior to 1 January 2011. Firms must also disclose the periods of non-compliance when presenting non-GIPS-compliant SI-IRR for periods ending prior to 1 January 2006 (Provision I.7.A.20). Similarly to disclosure requirements of the main provisions of the GIPS standards, for gross-of-fees returns firms must disclose if any other fees are deducted in addition to transaction expenses, and for net-of-fees returns they must disclose if any fees other than transaction expenses and investment management fees are deducted (Provisions I.7.A.18–19).

Firms must disclose the calculation methodology used for the benchmark. Firms that choose to present a composite’s **public market equivalent** (PME) as a benchmark must disclose the index used in calculating it. (Provision I.7.A.16.) In this approach to benchmarking, firms apply the composite’s external cash flows to a hypothetical investment that earns the returns of a capital market index. By replicating the timing and amount of composite cash flows in a PME, firms can calculate the internal rate of return of a benchmark to which the composite’s SI-IRR is comparable.

Having reviewed the requirements for input data, calculation methodology, composite construction, and disclosure, we are in position to address the GIPS provisions for private equity presentation and reporting.\(^{54}\) Firms must present, and clearly identify, both the gross-of-fees and

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\(^{52}\) The following composite construction provisions do not apply to private equity: I.3.A.10 and I.3.B.2.


the net-of-fees SI-IRR of the composite through the end of each annual period. As elsewhere in the Standards, firms must initially present at least five years of performance (or, if fewer than five years, performance from the firm’s inception or the composite inception date), and each subsequent year they must present an additional year of performance. For periods beginning on or after 1 January 2011, when the initial period is shorter than a full year, firms must present the non-annualized gross-of-fees and net-of-fees SI-IRR through the initial annual period end. For periods ending on or after 1 January 2011, firms must present the gross-of-fees and net-of-fees SI-IRR through the composite’s final liquidation date. (Provision I.7.A.21.) Firms must also present the SI-IRR of the benchmark through the end of each annual period; in addition to representing the composite’s investment mandate, objective, or strategy, the benchmark must be the same vintage year and presented for the same time period as the composite (Provision I.7.A.24). Firms must not present non-GIPS-compliant SI-IRR for periods ending on or after 1 January 2006 (Provision I.7.A.28).

Several requirements apply specifically to fund of fund composites. First, for periods ending on or after 1 January 2011, if a fund of funds composite is defined only by its investment mandate, objective, or strategy, then firms must also present, as of the most recent annual period, the SI-IRR of the underlying investments aggregated by vintage year as well as other measures that are required by provision I.7.A.23 (see below). These measures must be presented gross of the fund of funds investment management fees. (Provision I.7.A.22). Second, if fund of funds composite is defined only by its investment mandate, objective, or strategy, and a benchmark is presented for the underlying investments, the benchmark must reflect the same strategy and have the same vintage year as the underlying investments (Provision I.7.A.25). Third, for periods ending on or after 1 January 2011, firms must present the percentage, if any, of fund of funds composite assets that is invested in direct investments (rather than fund vehicles) as of each annual period end (Provision I.7.A.26). It is recommended but not required that this percentage be presented for earlier periods (Provision I.7.B.6).

Correlatively, for periods ending on or after 1 January 2011, firms must present the percentage of primary fund vehicle composite assets that is invested in fund investment vehicles (rather than in direct investments) as of the end of each annual period (Provision I.7.A.27). It is recommended but not required that the same percentage be presented for earlier periods (Provision I.7.B.7).

For all private equity composites, firms must present, as of each annual period end, the cumulative committed capital, since-inception paid-in capital, and since-inception distributions. In addition, firms must present the following ratios: total value to since-inception paid-in capital (known as the investment multiple or TVPI); since-inception distributions to since-inception paid-in capital (called the realization multiple or DPI); since-inception paid-in capital to cumulative committed capital (the PIC multiple); and residual value to since-inception paid-in capital (the unrealized multiple or RVPI). (Provision I.7.A.23.) These ratios were considered above in connection with real estate closed-end funds.

Finally, there are some recommendations that we have not previously mentioned. Private equity investments should be valued at least quarterly; for periods ending prior to 1 January

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55 On the other hand, if the fund of funds composite is defined only by vintage year of the fund of funds, it is recommended but not required that firms present, for periods ending on or after 1 January 2011, the SI-IRR of the underlying investments aggregated by investment mandate, objective, or strategy, along with the other measures listed in provision I.7.A.23. These measures should be gross of the fund of funds investment management fees. (Provision I.7.B.5.)
2011, the SI-IRR should be calculated using daily cash flows; and firms should disclose and explain material differences between the valuations used in performance reporting and the valuations used in financial reporting as of each annual period end. (Provisions I.7.B.1–3.)

Just as with real estate investing, the intricacies of performance presentation in compliance with the GIPS standards for private equity reflect this field’s complexity. Of necessity, the introductory treatment given the subject here does not address many nuances or special circumstances that the practitioner may encounter. Further information about these specialized asset classes may be found in the GIPS Guidance Statements on Real Estate and Private Equity, both of which are available on the GIPS website (www.gipsstandards.org).

3.17 **Wrap Fee/Separately Managed Account (SMA) Provisions**

Wrap fee portfolios, also known as separately managed accounts (SMAs), are typically managed by investment management firms serving as sub-advisors to a sponsor who acts as the client’s investment advisor. The sponsor charges the client a single bundled fee which combines fees for various services such as investment management, trading, custody, and administrative functions. Such arrangements create complexities that are specifically addressed by the provisions of the GIPS standards governing the presentation of wrap fee/SMA performance.

The Standards for wrap fee portfolios or separately managed accounts apply to wrap fee/SMA performance presentations to existing and prospective wrap fee/SMA sponsors and prospective wrap fee/SMA clients if they present results for periods beginning on or after 1 January 2006. Moreover, these provisions apply to portfolios where there are bundled fees and a sponsor serves as an intermediary between an investment firm that claims to comply with the GIPS standards and the end user of the investment services. They do not apply to other types of bundled fee arrangements, nor are they applicable to model or overlay portfolios unless the firm has discretion to manage the actual individual portfolios.

It is imperative to note that the wrap fee/SMA provisions supplement the required and recommended provisions of the GIPS standards, that is to say, they are in addition to the fundamentals of compliance; the provisions for input data, calculation methodology, composite construction, disclosure, and presentation and reporting; and, if applicable, the provisions for real estate and private equity. Of special importance in this context is the requirement to capture and maintain all data and information necessary to support all items included in a compliant presentation (Provision I.1.A.1); recognizing that wrap fee/SMA portfolios are subject to the same level of verification as all other portfolios, firms may have to choose between relying upon the sponsor’s performance calculations and engaging in shadow accounting to track the wrap fee/SMA portfolios in their own performance measurement system. Also pertinent is the requirement to calculate returns after the deduction of the actual trading expenses incurred during the measurement period (Provision I.2.A.4). We saw earlier that, if the actual direct trading expenses cannot be identified and segregated from a bundled fee, returns must be reduced by the entire bundled fee or the portion of the bundled fee that includes the direct trading expenses (Provisions I.2.A.5.a–b). We also made note of disclosure and presentation requirements pertaining to composites that contain portfolios with bundled fees: Firms must disclose the types of fees that are included in the bundled fee (Provision I.4.A.24) and present the percentage of composite assets represented by portfolios with bundled fees as of the end of each annual period (Provision I.5.A.7).

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56 See the GIPS Guidance Statement on Wrap Fee/Separately Managed Account (SMA) Portfolios.
57 In the present context, a sub-advisory firm that engages in “shadow accounting” independently maintains a parallel set of portfolio accounting records to serve as the basis for calculating and presenting investment performance.
The first provision set forth in the wrap fee/SMA section of the GIPS standards has to do with composite construction. Provision I.8.A.1 requires firms to include the performance record of actual wrap fee/SMA portfolios in appropriate composites in accordance with the firm’s established portfolio inclusion policies (discussed in Section 3.9 above). Once established, the portfolios containing wrap fee/SMA portfolios must be used in the firm’s compliant presentations to prospective wrap fee/SMA clients.

**Implementation (11)**

*Defining Composites.* Firms may have both wrap fee/SMA portfolios and non-wrap fee/SMA portfolios that are managed in accordance with the same investment strategy. In this case, they must decide at the outset whether to include all of them in the same composite for performance presentations to non-wrap fee/SMA prospects or to define a separate composite that only contains the non-wrap fee/SMA portfolios. If they choose to include both types of portfolio in the same composite, their performance presentation will show larger composite assets. However, if they are unable to break out actual trading expenses from the sponsor’s bundled fee, then they must reduce the wrap fee/SMA portfolio returns by the entire amount of the bundled fee or the portion of the bundled fee that includes trading expenses. This may have a competitively disadvantageous result: A composite that contains both kinds of portfolio is likely to have lower gross-of-fees and net-of-fees returns than the composite would have if it only contained non-wrap fee/SMA portfolios. Firms must consider the trade-off between higher assets and lower returns when defining composites for presentation to non-wrap fee/SMA clients.

There are several disclosure-related provisions that apply to wrap fee/SMA composite presentations. For all compliant presentations that include periods before an actual wrap fee/SMA portfolio was included in the composite, the firm must disclose for each period that the composite does not contain actual wrap fee/SMA portfolios (Provision I.8.A.2). In addition, for any performance presented for periods prior to 1 January 2006 that does not comply with the GIPS standards, firms must disclose the periods of non-compliance (Provision I.8.A.3). Additional disclosure requirements pertaining to sponsor-specific performance presentations are explained below.

When firms present performance to prospective wrap fee/SMA clients, the composite must include all wrap fee/SMA portfolios, regardless of the sponsor, that are managed according to the composite’s investment mandate, objective, or strategy. In other words, firms must present “style-defined” composites to prospective wrap fee/SMA clients. (Provision I.8.A.5.) Moreover—and this is a key requirement—when firms present performance to prospective wrap fee/SMA clients, they must present the performance net of the entire wrap fee (Provision I.8.A.6). This provision applies regardless of the nature of the services covered by the wrap fee.

The Standards distinguish between style-defined composites that contain wrap fee/SMA portfolios, described in the preceding paragraph, and sponsor-specific wrap fee/SMA composites. Whether to report its investment results or to win additional business, a firm that serves as sub-advisor to a wrap fee/SMA sponsor may wish to prepare a GIPS-compliant performance presentation that includes only the sponsor’s wrap fee/SMA portfolios—in other words, a performance presentation of a sponsor-specific composite. When doing so, firms must disclose the name of the sponsor (Provision I.8.A.4.a) and, if the purpose of the presentation is to generate wrap fee/SMA business and does not include performance net of the entire wrap fee, the firm must disclose that the sponsor-specific presentation is only for the use of the named sponsor.
(Provision I.8.A.4.b). The intent of the last-mentioned provision is to discourage sponsors from redistributing purportedly GIPS-compliant performance presentations to prospective wrap fee/SMA clients without reducing returns by the entire wrap fee.

Finally, for periods beginning on or after 1 January 2006, firms must not link non-GIPS-compliant performance to their GIPS-compliant wrap fee/SMA performance (Provision I.8.A.7).

4 GIPS VALUATION PRINCIPLES

The GIPS standards are based on the ethical principles of fair representation and full disclosure. Recalling how rates of return are calculated, it is almost trivially apparent that meaningful performance measurement presupposes the validity of beginning and ending asset values. During the global financial crisis of 2008–2009, however, when market prices were unavailable for many hard-to-value securities, the investment industry and the accounting profession gave renewed attention to the issue of valuation. The International Accounting Standards Board (IASB), the Financial Accounting Standards Board (FASB), and others re-examined the notions of fair value and market value, and studied the problem of valuing assets in inactive markets. The GIPS Valuation Principles were developed in consideration of the work done by these organizations. Effective 1 January 2011, the GIPS standards require firms to apply a fair value methodology following the definition and requirements we are about to summarize.

The Standards define fair value as the amount at which an investment could be exchanged in a current arm’s length transaction between willing parties in which the parties each act knowledgeably and prudently. (In this context, the phrase “arm’s length” describes a transaction in which the parties are unrelated and acting in their own interests.) The valuation must be determined using the objective, observable, unadjusted quoted market price for an identical investment in an active market on the measurement date if this price is available;58 otherwise, the valuation must reflect the firm’s best estimate of the market value. Fair value must include accrued income. (Provision II.A, Fair Value Definition.)

In spelling out valuation requirements, the GIPS standards restate provisions and, in some cases, clarify the applicability of provisions we have encountered before. For periods beginning on or after 1 January 2011, portfolios must be valued in accordance with the definition of fair value and the GIPS Valuation Principles (Provision I.A.2). Firms must comply with all applicable laws and regulations regarding the calculation and presentation of performance (Provision 0.A.2) and, if a compliant presentation conforms with laws and regulations that conflict with the requirements of the GIPS standards, firms must disclose and describe the conflict (Provision I.4.A.22). Accordingly, firms must comply with applicable laws and regulations relating to valuation, and when there is a conflict they must disclose it. Firms must document their policies and procedures and apply them consistently (Provision 0.A.5); this requirement entails documenting and adhering to their valuation policies, procedures, methodologies, and hierarchy (and any changes to them). Firms must disclose that policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request (Provision I.4.A.12). For periods beginning on or after 1 January 2011, firms must disclose the use of subjective, unobservable inputs for valuing portfolio investments if the investments thus valued are material to the composite (Provision I.4.A.27), and they must disclose if a composite’s valuation hierarchy materially differs from the recommended hierarchy in the GIPS Valuation Principles (Provision I.4.A.28).

58 This requirement is reiterated in Provision II.B.2.
We have referred several times to the Standards’ recommended valuation hierarchy, which firms should incorporate into their valuation policies and procedures on a composite-specific basis. Articulated in Section C of the GIPS Valuation Principles, it is a hierarchy in the strong sense that, if the inputs described at one stage are unavailable or inappropriate, then firms should proceed to the next stage. As we have seen, investments must be valued using objective, observable, unadjusted quoted market prices for identical investments in active markets on the measurement date. If such prices are unavailable or inappropriate, investments should be valued using, in descending order, the bases spelled out in Provision II.C.1:

1. Objective, observable quoted market prices for similar investments in active markets.
2. Quoted prices for identical or similar investments in markets that are not active.
3. Market-based inputs other than quoted prices that are observable for the investment.
4. Subjective, unobservable inputs.

The GIPS Valuation Principles clarify that inactive markets include those in which there are few transactions for the investment, the prices are not current, or price quotations vary substantially over time and/or between market makers. Unobservable inputs reflect the firm’s assumptions about the assumptions market participants would use in pricing the investment—assumptions about assumptions. They should be developed using the best information available in the circumstances.

**Implementation (12)**

*Valuation Policies and Procedures.* Firms may enter transactions involving a wide range of financial instruments, including derivative securities, in many different markets. It is fitting, therefore, that the Standards not only require firms to document their valuation policies, procedures, methodologies, and hierarchies but also recommend that the valuation hierarchies be composite-specific. Normally, for investment strategies that employ plain-vanilla securities trading in robust markets, quoted prices are readily available. Other composites, however, may represent strategies that materially make use of securities that trade infrequently in relatively illiquid markets where values must be imputed or estimated. Real estate and private equity are obvious examples, but valuing investments in swaps, options, and other derivatives that are tied to underlying securities uniquely issued by specific companies may prove problematic, especially if the firm cannot refer to recent transactions in identical or similar assets.

Implementing the GIPS standards offers firms an opportunity to re-examine their valuation policies, procedures, and methodologies and to define valuation hierarchies reflecting the characteristics of the securities held in each composite and the markets in which the composite strategy is executed. For assets that are valued using quantitative models, it is useful to list input factors such as discount rates and risk-adjusted cash flow projections and to review the basis for estimating them. Portfolio managers, security analysts, quantitative analysts, and traders should participate in these discussions. Once established, the valuation policies must be documented, followed consistently, and made available to prospective clients upon request.

The Standards also set forth additional requirements pertaining to real estate valuations. Recalling that real estate investments must have an external valuation (Provision I.6.A.4), the GIPS Valuation Principles further require that the external valuation process adhere to practices of the relevant valuation governing and standard-setting body (Provision II.B.10). The GIPS Valuation Principles also state that the firm must not use external valuations where the valuer’s or appraiser’s fee is contingent upon the appraised value (Provision II.B.11). Clearly, such
financial arrangements would incentivize the appraiser to inflate the asset’s value. The GIPS Valuation Principles proceed to restate other requirements, chiefly having to do with disclosures, that we considered in the section on real estate investing above. They also include, however, some additional recommendations. Although appraisal standards may allow for a range of estimated values, the Standards recommend that a single value be obtained from external valuers or appraisers because only one value is used in performance reporting (Provision II.C.6). It is also recommended that the external appraisal firm be rotated every three to five years (Provision II.C.7).

Similarly, the GIPS Valuation Principles restate private equity disclosure requirements that we discussed earlier and add another requirement: The valuation methodology selected must be the most appropriate for a particular investment based on the nature, facts, and circumstances of the investment (Provision II.B.17). There is also a recommendation having to do with private equity valuations that we have not previously discussed. The following considerations should be incorporated into the valuation process: (a) the quality and reliability of the data used in each methodology; (b) the comparability of enterprise or transaction data; (c) the stage of development of the enterprise; and (d) any additional considerations unique to the enterprise (Provision II.C.12).

Fair representation means developing and adhering to policies and procedures designed to determine asset values as accurately as possible. Full disclosure means documenting those policies and providing the valuation-related information required by the GIPS standards—and, optimally, the recommended information as well—so that prospective investors can judge the reliability of reported performance.

5  GIPS ADVERTISING GUIDELINES

A firm may wish to claim that it complies with the GIPS standards in advertisements that do not accommodate fully compliant performance presentations. For instance, space may be limited, or the creative design and marketing message may not call for communicating investment results in full. To address this need, the Standards include requirements which apply to firms that already satisfy all the requirements of the GIPS standards on a firm-wide basis and claim compliance with the GIPS standards in an advertisement. Firms that choose to claim compliance in an advertisement must either follow the GIPS Advertising Guidelines—for convenience, we will refer to them as “the Guidelines” in this section—or include a compliant presentation in the advertisement.

The Guidelines do not replace the GIPS standards, nor do they in any way exempt firms from providing compliant presentations as the Standards require. Here as elsewhere, in cases where there is a conflict between applicable laws or regulations and the requirements of the Standards, firms must comply with the law or regulation. If an advertisement conforms with legal and/or regulatory requirements that conflict with the Standards or the Guidelines, firms must disclose this fact and disclose the manner in which they conflict (Provision III.B.13).

For the purpose of the Guidelines, advertisements include any written or electronic materials addressed to more than one prospective client, whether in newspapers, magazines, firm brochures, letters, media, websites, or any other form. Under this definition, “one-on-one” presentations and individual client reports are not considered advertisements. This rule applies on a relationship basis. Presentations and reports to a single prospective or existing client are not considered advertisements despite the fact that a number of people may be in attendance, such as
a board of trustees or the members of an investment committee. The Guidelines pertain to any written material disseminated more broadly to retain existing clients or solicit new clients.

**Implementation (13)**

*Communicating the GIPS Advertising Guidelines.* Applying the Guidelines affects the work of marketing and creative staff members who may be unfamiliar with the GIPS standards. The firm’s performance practitioners might conduct an educational session or workshop to present the Guidelines and discuss implementation with the marketing group, including copywriters and graphic designers, and with the firm’s legal or compliance experts. Here are some suggestions to facilitate the discussion:

- Explain that the GIPS standards are ethical standards for fair representation and full disclosure of investment performance.
- Describe in general terms the domains for which Standards have been developed (fundamentals of compliance, input data, calculation methodology, composite construction, disclosures, presentation and reporting, real estate, private equity, wrap fee/separately managed account portfolios, and verification, as well as advertising).
- Explain how the firm is defined.
- Distribute the firm’s list of composite descriptions.
- Explain how advertisements are defined for the purpose of the Guidelines.
- Explain the relationship between applicable laws and regulations and the Standards, including the Guidelines.
- Present the requirements and recommendations of the Guidelines in detail as they apply to advertisements in which the firm claims compliance with the GIPS standards and (1) does or (2) does not present performance.
- Review the sample advertisements provided in Appendix C of the Global Investment Performance Standards.
- Explain how supplemental information can be used in advertisements.
- Reach agreement on compliance review procedures for new advertising materials. Because information used in advertisements that are subject to the Guidelines must be taken or derived from GIPS-compliant performance presentations, it is advisable for both a legal or compliance professional and a member of the performance measurement group to approve new advertising materials.

*All* advertisements that state a claim of compliance must include a description of the firm and information about how to obtain a compliant presentation and, if desired, a list of the firm’s composite descriptions (Provision III. B.1–2). The required wording of the GIPS compliance statement for advertisements is: “[Name of firm] claims compliance with the Global Investment Performance Standards (GIPS®).” (Provision III.B.3).

Advertisements that not only state a claim of compliance but also present performance must disclose further information, as detailed below, and the relevant information must be taken or derived from a presentation that complies with the requirements of the GIPS standards. The required information includes, among other elements, the composite description (Provision III.B.4), an indication whether performance is shown gross of fees, net of fees, or both (Provision III.B.6), and the currency used to express returns (Provision III.B.10). In advertisements presenting performance information for periods prior to 1 January 2000 that does not comply with the GIPS standards, firms must disclose the periods of non-compliance (Provision III.B.12).
Advertisements that state a claim of compliance and present performance must also present one of the following sets of total returns:

a. one-, three-, and five-year annualized composite returns through the most recent period;
b. period-to-date composite returns in addition to one-, three-, and five-year annualized composite returns through the same period of time as presented in the corresponding compliant presentation; or
c. period-to-date composite returns in addition to five years of annual composite returns calculated through the same period of time as presented in the corresponding compliant presentation.

If the composite has been in existence for less than five years, firms must also present the corresponding returns since the composite inception date. Under option (a), for instance, if the composite has been in existence for four years, the firm must present the composite’s annualized one-year, three-year, and four-year returns. Whichever alternative is chosen, the period-end date must be clearly identified and returns for less than one year must not be annualized. These requirements are set forth in Provision III.B.5.a–c.

Advertisements asserting a claim of compliance with the GIPS standards must also disclose the benchmark description (Provision III.B.8) and present the benchmark total returns for the same periods as those for which composite performance is presented in the advertisement. The benchmark used in the advertisement must be the same benchmark presented in the corresponding compliant presentation. (Provision III.B.7.) If the firm determines no appropriate benchmark for the composite exists, it must disclose why no benchmark is presented (Provision III.B.9).

In advertisements stating compliance with the GIPS standards and presenting performance, firms must also disclose the presence, use, and extent of leverage, derivatives, and short positions, if material, including a description of the frequency of use and the characteristics of the instruments sufficient to identify risks (Provision III.B.11).

Firms may also include other information in advertisements that are subject to the Guidelines, provided it is not given greater prominence than the required information and it does not conflict with the GIPS standards. The Guidelines emphasize that firms must adhere to the principles of fair representation and full disclosure when advertising, and they must not present performance or performance-related information that is false or misleading.

As the sample advertisements in GIPS Appendix B demonstrate, it takes more space to detail the requirements of the Guidelines than to meet them.

6 VERIFICATION

Verification may be informally and unofficially characterized as a process in which an independent expert assesses a firm’s policies and procedures for constructing composites and calculating and presenting performance in light of the requirements of the GIPS standards.\footnote{The GIPS Glossary defines verification as “a process by which an independent verifier assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm’s policies and procedures are designed to calculate and present performance in compliance with the GIPS standards.”} Verification is intended to provide the firm and the users of its performance presentations greater confidence in its claim of compliance with the GIPS standards. Verification does not ensure the accuracy of any particular composite presentation. However, in addition to making the claim of

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compliance on a firm-wide basis more credible, the admittedly demanding verification process may benefit the firm in other ways: increased knowledge in the performance measurement team, consistently higher quality of performance presentations, improved internal processes and procedures, and potential marketing advantages. Above all, verification supports the guiding principles of fair representation and full disclosure of investment performance.

The Standards strongly encourage firms to undergo verification. Section IV of the GIPS standards reviews the scope and purpose of verification and sets forth the minimum procedures that verifiers must follow prior to issuing a verification report to the firm. The verification procedures attempt to strike a balance between ensuring the quality, accuracy, and relevance of performance presentations and minimizing the cost to firms.

**Implementation (14)**

*Selecting a Verification Firm.* Verification is a major undertaking, and it is crucial for the investment management firm to choose an independent verifier whose resources match the firm’s needs. At the outset of the selection process, the investment management firm approaching verification should consider the scope of its operations and the nature of its products. The requirements of a large investment management organization with a presence in markets around the world will differ from those of a firm operating in only a single country. Similarly, a hedge fund manager, a manager who engages in real estate or private equity investing, a quantitatively oriented manager whose investment strategies rely heavily on the use of derivative securities, or a manager who manages tax-aware portfolios for individuals may have more specialized requirements than a manager who manages funds for tax-exempt institutions such as pension plans and charitable foundations. These factors should be communicated to potential verifiers and reflected in the selection criteria.

Some organizations have standard request-for-proposal templates that can be adapted for specific purposes. The RFP should include a description of the issuing organization and a statement on the scope of the project. Firms investigating verifiers’ qualifications might consider conducting an internet search and initially asking RFP respondents for the following information:

- A description of the verification firm, including its history, ownership, and organizational structure; a description of the performance-related services it offers; and a representative list of verification assignments completed indicating the nature of the investment management firm verified (e.g., “institutional trust division of a regional bank”).
- An explanation of the firm’s approach to project management, sampling, and testing.
- The roles and biographies, including professional designations, of the verifiers who will be assigned to this project.
- Client references, including contact details, and information about the number of clients added and lost over some period of time (for instance, the last three years).
- The verification firm’s fee schedule.
- A preliminary project plan setting forth the major tasks and estimated timeframes for completion in view of the investment management firm’s organizational structure, product line, and clientele.

The reader is also referred to “Suggested Questions to Ask Prospective Verification Firms,” a paper published by the former Investment Performance Council (IPC). This resource, which is not considered a part of the Standards, is available on the GIPS standards website (www.gipsstandards.org)
Understanding the scope and purpose of verification, as described in Section IV.A of the Standards related to verification, is vitally important. Verification, which must be performed by a qualified and independent third party (IV.A.1), assesses whether (a) the firm has complied with all composite construction requirements of the GIPS standards on a firm-wide basis and (b) the firm’s policies and procedures are designed to calculate and present performance in compliance with the GIPS standards (IV.A.2). A verification report must opine that the firm meets these two criteria, and a firm must not state that it has been verified unless a verification report has been issued (IV.A.5). A single verification report is issued with respect to the whole firm; verification cannot be carried out on a composite and, accordingly, does not provide assurance about the investment performance of any specific composite. The Standards stress that firms must not state or imply that a particular composite has been “verified.” (IV.A.3.) A firm that is verified (as evidenced by a verification report) may additionally choose to have a detailed performance examination conducted on one or more specific composites, and it may state that a composite has been examined if a performance examination report has been issued for the specific composite (IV.C). The minimum initial period for which verification can be performed is one year, or from the firm’s inception date through the period-end if that timeframe is less than one year. The Standards recommend that verification cover all periods for which the firm claims compliance (IV.A.4).

We have seen that a firm that does not meet all the requirements of the GIPS standards may not claim compliance; the firm cannot represent that it is in compliance with the GIPS standards “except for” certain requirements (Provision I.0.A.6). We have seen, too, that firms must document their policies and procedures in writing (Provision I.0.A.5), and they must maintain all data and information necessary to perform the required calculations and to support a performance presentation (Provision I.1.A.1). After conducting the required verification procedures summarized below, however, a verifier may conclude that the firm is not in compliance with these or other requirements of the GIPS standards. In such situations, the verifier must provide a statement to the firm explaining why a verification report cannot be issued. The Standards clearly state that a verification report must not be issued when the verifier knows that the firm is not in compliance with the GIPS standards or the records of the firm cannot support a verification. (IV.A.8).

In setting forth the scope and purpose of verification, the GIPS standards address the question whether verifiers can rely upon the work of others. As part of the basis for an opinion, a principal verifier may accept the work of another verifier. The principal verifier may also choose to rely on the audit and/or internal control work done by an independent, qualified, reputable third party or by the verification firm itself. However, when deciding whether to rely on the work of another independent third party, the principal verifier must assess the qualifications, competency, objectivity, and reputation of the other party as well as the scope of that party’s work, including the time period, and the results of the procedures that were performed. In addition, the principal verifier must document the considerations taken into account in reaching a conclusion about the reliability of the other party’s work. The Standards instruct principal verifiers to exercise professional skepticism when making this decision. (IV.A.6.)

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60 See also the GIPS Guidance Statement on Verification.
61 The GIPS Guidance Statement on Verifier Independence defines the term independence in the context of verification and addresses potential independence issues. It is available on the GIPS standards website.
62 For further information, see the GIPS Guidance Statement on Performance Examinations.
Because verification is conducted on a firm-wide basis, verifiers must subject the entire firm to testing. (In applying this rule, verifiers may take two factors into account. First, as noted above, with due deliberation verifiers may place reliance on work performed by another qualified and reputable independent third party. Second, the Standards allow for verifiers to perform “appropriate alternative control procedures.”) However, verifiers may use a sampling methodology to conduct the required firm-wide testing. The minimum factors to be considered when selecting sample accounts include the number of composites at the firm, the number of portfolios in each composite, and the type of composites. In addition, verifiers must minimally take into account the total assets under management, the internal control structure at the firm, the number of years under examination, the computer applications used to calculate performance and to construct and maintain composites, the method of calculating performance, and whether the firm uses external performance measurement services. The selection of sample accounts for testing is a critical step in the verification process. If the verifier encounters errors or discovers that the firm’s record-keeping is deficient, a larger sample or additional verification procedures may be warranted. (IV.A.7.)

Section IV.A, Scope and Purpose of Verification, has one more requirement: The verification report must state that the verification has been conducted in accordance with the required verification procedures (IV.A.9), to which we now turn. Section IV.B, Required Verification Procedures, sets forth the minimum procedures that must be followed.

Under the heading “pre-verification procedures,” the Standards lay out what is initially required of verifiers. Specifically, verifiers must understand all the requirements and recommendations of the GIPS standards, including any updates, Guidance Statements, interpretations, Questions & Answers (Q&As), and clarifications published by CFA Institute and the GIPS Executive Committee. In addition, verifiers must be knowledgeable about laws and regulations regarding the calculation and presentation of performance, and they must consider any differences between these laws and regulations and the GIPS standards. Equipped with the foregoing expertise, verifiers must learn about the firm, including its corporate structure and how it operates, and they must understand the firm’s policies and procedures for complying with all applicable requirements and adopted recommendations of the Standards. It is emphasized that verifiers must not only obtain a copy of the firm’s GIPS-related policies and procedures but also ensure that all applicable policies and procedures are properly included and adequately documented. Finally, verifiers must understand the policies, procedures, and methodologies the firm uses to value portfolios and compute investment performance. (IV.B.1.a–e.)

### Implementation (15)

*Preparing for Verification.* The investment management firm undertaking verification should gather the following information. The verifiers may use this information to prepare a fee estimate and a project plan, and they will need it in the course of the review.

- Information about the firm, including its corporate structure and the types of investment product it manages.
- Sample performance presentations and marketing materials.
- All of the firm’s performance-related policies, such as the firm’s definition of discretion, the sources, methods, and review procedures for asset valuations, the time-weighted rate-of-return calculation methodology, the treatment of external cash flows, the computation of composite returns, the correction of errors, etc.
- The complete list of composite descriptions.
Having summarized the prerequisites, let us survey the verification procedures. Verifiers must perform sufficient procedures to determine that the firm satisfies certain fundamental requirements. They must determine that the firm has been and remains appropriately defined; total firm assets are appropriately calculated and disclosed; the firm’s list of composite descriptions is complete; the firm’s definition of discretion has been consistently applied over time; and the firm’s policies and procedures for ensuring the existence and ownership of client assets are appropriate and have been consistently applied. They must also determine that the firm has defined and maintained composites in compliance with the Standards; the firm’s policies and procedures for creating and maintaining composites have been consistently applied; all actual, fee-paying, discretionary portfolios are included in at least one composite; all portfolios are included in their respective composites at all times, and no portfolios that belong in a particular composite have been excluded; and the composite benchmark reflects the investment mandate, objective, or strategy of the composite. (IV.B.2.a.i–x.)

Verifiers must review selected portfolios to determine that the treatment of certain input data is consistent with the firm’s policies. The Standards specifically identify the classification of portfolio flows (for example, receipts, disbursements, dividends, interest, fees, and taxes) as one such item. Verifiers must similarly test the accounting treatment of the following items: income, interest, and dividend accruals and receipts; taxes, tax reclaims, and tax accruals; and purchases, sales, and the opening and closing of other positions. In addition, verifiers must look into the accounting treatment and valuation methodologies for investments, including derivatives. (IV.B.2.d.i–v.)

We have already stressed that verification does not provide assurance that specific composite returns are correctly calculated and presented. Nonetheless, testing the firm’s performance-related calculations is an important element of the verification process. Verifiers must determine that the firm has calculated and presented performance in accordance with the firm’s policies and procedures. In so doing, they must recalculate rates of return for selected portfolios and confirm that a return formula that meets the requirements of the Standards is used. Fees and expenses must be treated in conformity with the GIPS standards and the firm’s policies and procedures. Verifiers must also take a sample of composite and benchmark calculations to determine the accuracy of all required numerical data such as risk measures and internal dispersion. In addition, if a custom benchmark or a combination of multiple benchmarks is used, verifiers must take a sample of the firm’s benchmark data to determine that the calculation methodology has been correctly applied and the data used are consistent with the benchmark disclosure in the compliant presentation. (IV.B.2.e.i–iii.)

In order to validate the discretionary status of portfolios, verifiers must obtain a list of all portfolios, select portfolios for review, and perform sufficient procedures to determine that the
selected portfolios are appropriately classified as discretionary or non-discretionary. In making this determination, verifiers will refer to the firm’s policies and procedures related to investment discretion and the selected portfolios’ investment management agreements and/or investment guidelines. (IV.B.2.b.)

Testing the construction and maintenance of composites is central to the verification process. To this end, verifiers must obtain lists of all open portfolios, including both new and existing ones, and of all closed portfolios for all composites for the periods under study. They must select portfolios from these lists and conduct sufficient procedures to determine that the selected portfolios’ investment mandate, objective, or strategy (as appropriately documented, for example, by the investment management agreement, investment guidelines, or portfolio summary) is consistent with the composite definition. They must further determine that portfolios are completely and accurately included in composites by tracing selected composites from the investment management agreement and/or investment guidelines to the composites and vice-versa. Verifiers must also determine that portfolios sharing the same investment mandate, objective, or strategy are included in the same composite, and that the timing of portfolios’ inclusion in and exclusion from composites accords with the firm’s policies and procedures. Finally, verifiers must determine that portfolios’ movements from one composite to another are appropriate and consistent with the redefinition of the composite or documented changes to the investment mandate, objective, or strategy. (IV.B.2.c.i–vi.) Verifiers must review a sample of composite presentations to ensure that they include all the required information and disclosures. Moreover, the information and disclosures must be consistent with the firm’s documented policies and procedures, the firm’s records, and the results of the verifier’s procedures. (IV.B.2.f.)

Finally, under the GIPS standards, verifiers must maintain sufficient information to support all procedures performed in support of the verification report, including all significant judgments made and conclusions reached by the verifier. As part of the supporting documentation, verifiers must obtain a representation letter from the firm confirming that policies and procedures used in establishing and maintaining compliance with the Standards are as described in the firm’s documents and have been consistently applied throughout the periods being verified. The representation letter must confirm that the firm complies with the GIPS standards for the periods being verified, and it must also contain any other specific representations made to the verifier during the course of the verification engagement. (IV.B.2.g–h.)

We have remarked that verification alone, without a specifically focused performance examination, does not ensure that any particular presentation of composite performance meets the requirements of the GIPS standards or represents investment results fairly, completely, and accurately. However, a verification report issued by a verifier who meets or exceeds the minimum requirements summarized above lends additional credibility to the firm’s claim of compliance with the GIPS standards.

7 OTHER ISSUES

We have finished reviewing the 2010 version of the GIPS standards. In this part of the reading, we will introduce after-tax performance measurement issues and comment on ways to keep informed about future developments affecting the application of the GIPS standards.
7.1 After-Tax Return Calculation Challenges
The GIPS standards do not require compliant firms to present after-tax returns for composites made up of portfolios managed on a tax-aware basis. Many firms engage in investment management on behalf of taxable institutions, individuals, and family offices, however, and they market tax-aware strategies to prospective clients who wish to evaluate their performance. The interaction of complex regional tax codes with clients’ varied circumstances and objectives not only renders tax-aware investing extremely arduous but also complicates performance measurement for firms subscribing to the ethical principles of fair representation and full disclosure. In this section, we will discuss major issues surrounding after-tax performance evaluation and present fundamental concepts for after-tax return calculations. Although country-specific tax regulations vary widely, some principles of after-tax performance measurement apply universally.

In writing this section, we consulted the GIPS Guidance Statement for Country-Specific Taxation Issues, among other sources. However, in the interest of fully acknowledging and maintaining a unified, global standard, the GIPS Executive Committee decided to remove the tax-related guidance from the GIPS standards and to transfer responsibility for country-specific provisions and/or guidance to the GIPS country sponsors. Firms that comply with the Standards were encouraged to provide after-tax returns to prospective clients, but effective 1 January 2011, all after-tax performance reporting presented as part of a compliant presentation will be supplemental information and, as such, it will be subject to the requirements and recommendations of the GIPS Guidance Statement on the Use of Supplemental Information.

Let us first consider certain theoretical aspects and practical factors that make valid after-tax performance measurement, analysis, and evaluation problematic.

The timeframe in which estimated tax liabilities are assumed to be realized affects the after-tax rate of return. A preliquidation calculation method takes into account only the taxes realized during the measurement period. That is, the before-tax return is reduced by the taxes associated with investment income earned and gains and losses realized during the period. This calculation may understate the tax effect, however, because it does not recognize any tax liability or benefit for unrealized gains and losses embedded in the portfolio’s ending value. Although the securities in the portfolio are subject to future price-driven changes in value, and the tax-aware portfolio manager will take advantage of opportunities to offset gains with losses and to defer taxes, the preliquidation method entirely disregards the prospective tax effects that may result from the portfolio’s currently unrealized capital gains and losses. In other words, the preliquidation method effectively assumes that unrealized capital gains are untaxed.63

Another calculation method assumes that all taxes on unrealized gains are immediately payable as of the end of the measurement period. This method may overstate the tax effect, however, because in addition to disregarding future value changes affecting the actual tax liability, it neglects the time value of money. Portfolios are generally managed on an ongoing basis, and in the normal course of events, taxable gains and losses will be realized as securities are sold, and the proceeds distributed or reinvested, at an indeterminate pace over the planning horizon.

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63 See Poterba (1999).
For analytical purposes, we may derive potentially useful information from estimating the timing and amount of future tax assessments over suitably extended periods. Such estimates of the portfolio’s “true economic value,” however, necessarily rest on debatable assumptions about future returns, among other parameters, and at present no generally accepted guidelines exist for modeling prospective tax outcomes in a manner that ensures the methodological comparability warranted for performance reporting. After-tax returns calculated in accordance with the preliquidation and mark-to-liquidation methods reflect actual before-tax results achieved during the measurement period rather than projected investment experience. Given the known deficiencies of these latter methods, however, the prospective client must interpret after-tax returns with care.

We have seen that the historical cost of securities held in a portfolio is irrelevant to before-tax performance measurement, where assets are valued at fair value and no distinction is made between realized and unrealized gains and losses. The taxable cost basis of portfolio investments is used, however, in determining tax liabilities for the purpose of after-tax return calculations. In addition, different tax regulations and rates may apply depending on the length of the holding period and the types of securities held. Clients’ anticipated tax rates—the tax rates that guide the portfolio manager’s investment decisions—also vary, contingent on such factors as their level of income and the tax jurisdictions to which they belong. As a practical matter, therefore, substantially more extensive input data must be captured and managed to support reasonable after-tax performance calculations.

Not only is calculating after-tax portfolio returns intricate, selecting or devising appropriate performance benchmarks is also difficult. Valid before-tax benchmarks have certain properties. Among other attributes, they are unambiguous, investable, measurable, specified or agreed upon in advance, and consistent with the investment strategy or style of the portfolio or composite. After-tax benchmarks should have all the desirable properties of suitable before-tax benchmarks, and one more: They should additionally reflect the client’s tax status.

Financial services firms publish capital market indices representing a wide range of investment strategies and styles. Some providers calculate index returns net of withholding taxes on dividends, but at this writing none have published index returns fully reflecting imputed effects of taxation. Conceptually, given information on the constituent securities or the price and income return components, investment management firms could adjust reported before-tax index results to construct an after-tax benchmark. Adjusting standard before-tax indices is easier said than done, however. The adjustment methodology would have to incorporate the provider’s rules for constructing and rebalancing the original index (e.g., whether it is equal weighted, capitalization weighted, or float weighted), the taxable turnover of securities held in the index, and issuers’ corporate actions such as stock splits, as well as security-specific dividend and interest payments and price changes. A firm might formulate some simplifying assumptions to

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65 The interpretive guidance in Appendix A of the GIPS Guidance Statement for Country-Specific Taxation Issues includes an informative treatment of the “true economic value” method in application. See Section I, “Supplemental Return Calculation Methodologies.”

66 From an implementation perspective, the input data requirements and after-tax return calculation methodology have significant implications for the development or selection of portfolio accounting and performance measurement systems. See Rogers and Price (2002) and Simpson (2003).
lessen the data requirements and reduce the computational intensity introduced by these factors.\(^\text{67}\)

Alternatives to modifying standard before-tax indices include using mutual funds or exchange-traded funds as benchmarks, or developing customized shadow portfolios. Mutual funds and exchange-traded funds benchmarked to capital market indices are imperfect benchmarks because they are subject to fees, and their returns may deviate from those of the indices they emulate. The tax liabilities of mutual funds are affected by the portfolio manager’s security transactions and by the collective deposit and redemption activities of shareholders. Exchange-traded funds likewise have turnover, but they do not incur taxes as a result of other investors’ actions, so they may be better suited as benchmarks for after-tax performance evaluation.

Nonetheless, the investment management firm seeking a valid after-tax benchmark must address the fact that any one particular client’s tax experience depends not only on the rates at which her investment income and capital gains are taxed but also the cost of the securities and the sequence of cash flows in her portfolio. The firm that uses custom security-based benchmarks for performance evaluation is well positioned to simulate the tax impact of external cash flows on benchmark results. Firms that use standard indices for before-tax performance evaluation can simulate the effect of client-specific cash flows on estimated after-tax benchmark returns by assuming that the benchmark pays proportionately the same capital gains taxes for withdrawals as the actual portfolio and invests contributions at the cost basis of the index at the time the contribution is made.\(^\text{68}\) Alternately, firms can use mutual funds or exchange-traded funds to build shadow portfolios in which simulated purchases and sales are triggered by client-initiated cash flows. These approaches, however, are also data and computation intensive. Moreover, a customized shadow portfolio that works well for a single portfolio is unlikely to be useful for a composite made up of multiple client portfolios. Constructing valid benchmarks remains one of the greatest challenges in after-tax performance evaluation.

We have observed that performance measurement attempts to quantify the value added by a portfolio manager’s investment actions. Because managers should not be held accountable for factors beyond their control, the GIPS standards exclude non-discretionary portfolios from composites and prescribe time-weighted returns to eliminate the impact of external cash flows. Portfolio managers may be compelled to liquidate securities to meet client-directed withdrawals, however, and taxes may be realized as a result of the non-discretionary asset sales. Firms may wish to make an adjustment to remove the tax effect of non-discretionary capital gains. In effect, the adjustment adds back the hypothetical realized taxes that were not incurred at the manager’s discretion.\(^\text{69}\) To avoid creating a perverse incentive for the portfolio manager to maximize the adjustment credit by selecting highly appreciated assets for sale, the adjustment term should reflect the capital gains tax that would be sustained if all the securities in the portfolio were proportionately liquidated.

There is another situation in which client actions affect after-tax returns (in this case, favorably). The client may instruct a portfolio manager to realize tax losses to offset gains realized either within the portfolio or in other assets held outside the portfolio. For the client,

\(^{67}\) Stein, Langstraat, and Narasimhan (1999) suggest a method to approximate after-tax benchmark returns.

\(^{68}\) Price (2001) presents three increasingly accurate levels of approximation in constructing after-tax benchmarks from pretax indices and describes the “shadow portfolio” approach to adjusting indices for client-specific cash flows.

\(^{69}\) Price (1996) presents the logic and implications of this adjustment factor.
such “tax loss harvesting” reduces his tax liability on net capital gains. This practice is entirely consistent with the fundamental wealth management principle that investors should consider all their assets when making investment decisions. For the portfolio manager who has realized gains or who handles only a portion of the client’s assets, however, the non-discretionary directive to harvest tax losses improves reported after-tax results. Firms should disclose the percentage benefit of tax-loss harvesting for the composite if realized losses are greater than realized gains during the period. This suggestion implicitly assumes that tax benefits not used within the portfolio in the measurement period can be used outside the portfolio or in the future. The wealth benefit derived from tax loss harvesting may be computed by applying the appropriate capital gains tax rate to the net losses realized in the period; the percentage benefit may be calculated by dividing the money benefit by the simple average assets in the portfolio.

With this, we conclude the introduction to after-tax return calculations for individual portfolios. It is evident even from this abbreviated, non-mathematical presentation that after-tax performance measurement requires considerable expertise as well as extensive data and powerful technology, particularly when advancing from the portfolio to the composite level. After-tax performance measurement and analysis is both a science and an art: “The ‘scientific’ aspects are manifested in the discrete requirements and details, while the ‘artisanal’ aspects recognize that cash flows, substantial Unrealized Capital Gains, and composite definitions can have a significant impact on after-tax results.” Supplemental information, including tax efficiency measures not presented here, can materially assist prospective clients in evaluating a firm’s after-tax performance record.

### 7.2 Keeping Current with the GIPS Standards

At the beginning of this reading, we surveyed the evolution of performance presentation standards, marking as particularly noteworthy events the publication of Peter Dietz’s work in 1966 and the report of the Financial Analysts Federation’s Committee for Performance Presentation Standards in 1987. The Global Investment Performance Standards are now fairly comprehensive and well defined, the integrated product of thoughtful contributions from many academicians and practitioners committed to the ethical ideals of fair representation and full disclosure in reporting investment results. The revised GIPS standards issued in 2010 represent a significant advance in the globalization of performance presentation norms.

Nonetheless, the GIPS standards will continue to evolve over time to address additional aspects of performance presentation. Firms that claim compliance must meet all applicable requirements, including not only the provisions of the GIPS standards but also any updated information, Guidance Statements, interpretations, Questions & Answers (Q&As), and clarifications published by CFA Institute and the GIPS Executive Committee. Practitioners should visit the GIPS standards website frequently in order to stay informed about existing and new requirements and recommended best practices. CFA Institute and other organizations also offer publications and conduct conferences and workshops designed to help practitioners implement and maintain compliance with the GIPS standards.

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8 SUMMARY

The Global Investment Performance Standards meet the need for consistent, globally accepted standards for investment management firms in calculating and presenting their results to clients and potential clients. This reading has made the following points:

- The Global Investment Performance Standards are ethical standards that promote fair representation and full disclosure of an investment firm’s performance history.
- The GIPS standards were created and funded by CFA Institute (formerly known as the Association for Investment Management and Research, or AIMR) with the participation of many experts and local sponsorship from numerous industry groups. The GIPS Executive Committee is the governance body responsible for developing and interpreting the GIPS standards.
- The Standards include provisions for fundamentals of compliance, input data, calculation methodology, composite construction, disclosure, presentation and reporting, real estate, private equity, and wrap fee/separately managed account (SMA) portfolios, along with valuation principles, advertising guidelines, and verification requirements.
- Only investment management firms can claim compliance with the GIPS standards. The Standards must be applied on a firm-wide basis, and a firm may claim compliance only when it has satisfied all the requirements of the GIPS standards.
- Accrual accounting must be used for all assets that accrue interest income, and for periods beginning 1 January 2005, trade-date accounting must be used. For periods beginning on or after 1 January 2011, all portfolios must be valued in accordance with the definition of fair value and the GIPS Valuation Principles.
- Under the GIPS provisions for return calculation methodology, firms must calculate total returns that include returns from cash and cash equivalents and are reduced by actual trading expenses. For periods beginning 1 January 2005, if a firm uses approximated rates of return, it must adjust them for daily weighted cash flows. For periods beginning 1 January 2010, firms must value portfolios on the date of all large external cash flows.
- Large external cash flows can substantially distort the accuracy of estimated returns when markets are volatile. The GIPS standards require firms to document composite-specific policies for the treatment of external cash flows and to adhere to those policies consistently.
- Composites must be defined according to their investment mandate, objective, or strategy.
- All actual, fee-paying, discretionary portfolios must be included in at least one composite. Portfolios are discretionary if client-imposed restrictions do not prevent the firm from implementing the intended investment strategy.
- Composite returns must be calculated by asset-weighting the individual portfolio returns using beginning-of-period values or a method that reflects both beginning-of-period values and external cash flows.
- Firms must include new portfolios in composites on a timely and consistent basis. Terminated portfolios must be included in the historical performance of the appropriate composite up to the last full measurement period they were under management. A firm cannot switch portfolios from one composite to another unless documented changes to a portfolio’s investment mandate, objective, or strategy or the redefinition of a composite makes it appropriate.
- Beginning 1 January 2010, the returns of a single asset class (e.g., equities) carved out of a multiple asset class portfolio (e.g., a balanced account invested in equity and fixed-income...
securities) are not permitted to be included in single asset class composite returns unless the carved-out segment is actually managed separately with its own cash balance.

- The GIPS standards include detailed disclosure requirements related to the firm, performance calculations, benchmarks, fees, composites, composite performance presentations, and other items. Additional disclosures are also recommended.
- The GIPS provisions for presentation and reporting require that at least five years of compliant performance must initially be shown (or from inception if the firm or composite has been existence for a shorter period). The compliant performance record must then be extended each year until at least 10 years of results are presented.
- The GIPS standards specify required items to be contained in composite performance presentations, including annual composite and benchmark total returns for each annual period presented, the number of portfolios in the composite (if more than five) at annual period end, the amount of assets in the composite at annual period end, either the percentage of the firm’s total assets represented by the composite or the amount of total firm assets at the end of each annual period, a measure of dispersion of individual portfolio returns within the composite and, for periods ending on or after 1 January 2011, the three-year standard deviation of composite and benchmark returns. Other items may be required in certain cases, and additional items are recommended.
- Acceptable measures of dispersion include but are not limited to high/low, range, and standard deviation.
- Performance of a past firm or affiliation must be linked to or used to represent the historical record of a new firm or affiliation if all the following conditions are met: substantially all the investment decision makers are employed by the new or acquiring firm; the decision-making process remains substantially intact and independent within the new or acquiring firm; and the new or acquiring firm has records that document and support the reported performance.
- If a firm uses a custom benchmark or a combination of multiple benchmarks, it must disclose the benchmark components, weights, and rebalancing process. The frequency of rebalancing can affect the reported benchmark return.
- For periods beginning on or after 1 January 2008, real estate investments must be valued at least quarterly. For periods beginning on or after 1 January 2011, real estate investments must be valued in accordance with the definition of fair value and the GIPS Valuation Principles. Real estate investments must be valued by an external professionally designated, certified or licensed commercial property valuer or appraiser at least once every 36 months for periods prior to 1 January 2012 and, unless client agreements stipulate otherwise, at least annually thereafter.
- In addition to total return for real estate, firms must calculate the time-weighted returns of the income and capital appreciation components. For closed-end real estate composites, the Standards also require firms to present the net-of-fees since-inception internal rate of return (SI-IRR) through each annual period-end.
- For periods ending on or after 1 January 2011, private equity investments must be valued in accordance with the definition of fair value and the GIPS Valuation Principles, and the annualized SI-IRR must be calculated using daily cash flows.
- Performance presentations for private equity must include the annualized gross-of-fees and net-of-fees SI-IRR of the composite and the benchmark through the end of each annual period. The composite’s cumulative committed capital, since-inception paid-in capital, and since-inception distributions must be presented as of each annual period end.
• For closed-end real estate and private equity composites, firms must present as of each annual period end the investment multiple (the ratio of total value to since-inception paid-in capital, or TVPI), the realization multiple (the ratio of since-inception distributions to since-inception paid-in capital, or DPI), the PIC multiple (the ratio of since-inception paid-in capital to cumulative committed capital), and the ratio of residual value to since-inception paid-in capital (RVPI).

• Verification is a process by which an independent verifier assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm’s policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. A single verification report is issued for the entire firm; verification cannot be carried out for an individual composite. Firms that have been verified may choose to have a further in-depth examination of a specific composite presentation.

• The GIPS Advertising Guidelines allow a firm to claim compliance with the GIPS standards in an advertisement without presenting the compliant presentation. All advertisements stating a claim of compliance following the GIPS Advertising Guidelines must use the prescribed wording for the claim. Advertisements that state this claim of compliance and show performance results must also present additional information taken from a compliant performance presentation in the advertisement.

• Effective 1 January 2011, after-tax performance reporting will be supplemental to a compliant presentation and accordingly subject to the requirements and recommendations of the GIPS Guidance Statement on the Use of Supplemental Information.

REFERENCES
