

PRACTICE PROBLEMS

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1. Company C manages money for both retail and institutional clients. There are two autonomous groups within Company C: “Company C Institutional Investment Management,” which manages institutional assets, and “Company C Retail Investors,” which manages retail assets. How should Company C define itself as a firm to comply with the GIPS standards?
2. Firm A is a multinational investment firm, with offices around the world including Japan, Australia, the United Kingdom, and the United States. Although all of its offices are part of the global parent, each office is registered with the appropriate national regulatory authority and each is held out to clients and potential clients as a distinct business entity. Firm A (US) claims compliance with the GIPS standards. What should the definition of the firm disclosure be?
3. The GIPS standards do **not** require firms to value portfolios in accordance with:
 - A. the definition of fair value.
 - B. composite-specific valuation policies.
 - C. generally accepted principles of financial accounting.
4. For periods beginning on or after 1 January 2011, firms must **not** value portfolios:
 - A. when objective, observable market prices are unavailable.
 - B. more frequently than required by the composite-specific valuation policy.
 - C. as of the last business day of the month unless it is the calendar month-end.
5. Firm A claims compliance with the GIPS standards. It maintains hard copies of the records supporting compliance for three years and discards all records older than three years in an effort to save office space. The performance reported on all its composite presentations shows five years of history. Is the firm in compliance with the GIPS standards?
6. Use the information in the following table to answer this question (amounts in €):

Date	Market Value	External Cash Flow	Market Value Post Cash Flow
31 December 1997	200,000		
31 January 1998	208,000		
16 February 1998	217,000	+40,000	257,000
28 February 1998	263,000		
22 March 1998	270,000	–30,000	240,000
31 March 1998	245,000		

Calculate the rate of return for this portfolio for January, February, March, and the first quarter of 1998 using revaluing for large cash flows methodology (assume “large” is defined as greater than 5%).

7. A European equity composite contains three portfolios. For convenience, the cash flow weighting factors are presented below.

	Cash Flow Weighting Factor	Portfolio (€ millions)		
		A	B	C
Fair value as of 31 July		74.9	127.6	110.4
External cash flows:				
8 August	0.742		–15	
12 August	0.613	7.5		
19 August	0.387		–5	15
Fair value as of 31 August		85.3	109.8	128.4

- A. Calculate the returns of Portfolio A, Portfolio B, and Portfolio C for the month of August using the Modified Dietz formula.
- B. Calculate the August composite return by asset-weighting the individual portfolio returns using beginning-of-period values.
- C. Calculate the August composite return by asset-weighting the individual portfolio returns using a method that reflects both beginning-of-period values and external cash flows.
8. Convenable Capital Management manages an equity portfolio for the Flender Company. Cash held in the portfolio is invested by the Flender’s existing custodial bank. Must Convenable include cash and cash equivalents in the portfolio return calculations?
- A. Yes.
- B. No; the cash is not invested by Convenable.
- C. No; Convenable does not have discretion over the selection of the custodian.
9. Under the GIPS standards, the *most* accurate statement is that actual direct trading expenses do **not** include:
- A. spreads from internal brokers.
- B. brokerage commissions.
- C. custody fees charged per transaction.
10. Can a firm include a single portfolio in more than one of the firm’s composites?

- 11.** Barry Smith Investment Management (Barry Smith) specializes in balanced account management for midsize pension plans. On 12 March 2006, a contribution of \$2,265,000 is made to Dennett Electronics' Pension Plan, which is included in Barry Smith's Balanced Tax-Exempt Composite. This is the only external cash flow for March. Barry Smith invests the contribution on 13 March. The pension plan's portfolio had a fair value of \$16,575,000 at the beginning of March. For the purpose of calculating portfolio performance, how should Barry Smith handle the external cash flow? Assume that Barry Smith has adopted a large cash flow policy as of 1 January 2006, all external cash flows are assumed to take place at the end of day, and the 12 March 2006 cash flow meets the definition of "large".
- 12.** In March 2007, Smith & Jones Asset Management, a GIPS-compliant firm, introduced a new technical analysis model that management believed would be a powerful tool in tactical asset allocation. After extensive back-testing, Smith & Jones began to use the model to manage actual "live" portfolios in June 2007, and managers constructed a composite composed of actual, fee-paying, discretionary portfolios managed in accordance with the model. In 2010, after three very successful years of managing client funds in this way, management decided that because the actual performance of live portfolios validated the performance of the model, it should present the simulated performance of the model through the back-testing period to prospective clients. Smith & Jones proceeded to link the back-tested returns to the actual performance of the composite and presents 3-, 5- and 10-year performance as a continuous record to prospects. Does this practice comply with the GIPS standards?
- 13.** A charitable foundation transfers securities in kind to Taurus Asset Management Ltd. to fund a new private equity portfolio. Taurus estimates that, after liquidating the transferred securities, it will take five months to invest the foundation's assets in privately held companies. Which statement *best* describes a requirement of the GIPS standards? Taurus must include the foundation's portfolio in the appropriate private equity composite:
- A.** on a timely and consistent basis.
 - B.** when the assets are substantially invested.
 - C.** as of the beginning of the next full measurement period.
- 14.** Ord Capital Management, an investment management firm that claims to comply with the GIPS standards, manages a global equity portfolio for a pension plan sponsored by Chimie bio-industrielle. On 15 April, the plan sponsor notifies Ord that the firm will be terminated as of the end of the month and instructs the manager to stop trading immediately. Ord should include the Chimie portfolio in the historical returns of the composite to which it belongs up to:
- A.** 31 March.
 - B.** 15 April.
 - C.** 30 April.
- 15.** Southwest Capital Advisors LLC manages a fixed-income composite in accordance with an enhanced indexing strategy which makes strategic use of high-yield and emerging market bonds in addition to investment grade bonds issued in developed markets. The Merrimack Company, a family office, has a portfolio that is included in the firm's fixed-income enhanced indexing composite. Merrimack informs Southwest in writing that, due to changes in its investment policy, the portfolio can no longer hold high-yield or emerging market bonds. In accordance with the GIPS standards, Southwest decides to switch the Merrimack portfolio to another composite. The historical performance of the portfolio must be:
- A.** reflected in both composites.

- B. switched to the new composite.
- C. retained in the enhanced indexing composite.

The following information relates to Questions 16–18

Belltower Investment Management defines its core-plus fixed-income composite as containing all discretionary portfolios over \$10 million that are invested in accordance with a strategy that includes domestic high-yield debt in addition to US government and agency securities and investment-grade bonds issued by US corporations. The composite benchmark is 75% Bloomberg Barclays Capital US Government/Credit Index and 25% Bloomberg Barclays Capital US High Yield Index, rebalanced monthly.

16. The core-plus fixed-income composite includes a portfolio managed on behalf of the Avonfield Academy endowment fund. The trustees of Avonfield inform Belltower in writing that, due to a change in investment policy, the endowment fund is no longer permitted to hold below-investment-grade securities. Belltower determines that henceforth the Avonfield portfolio should be included in the core fixed-income composite, rather than the core-plus fixed-income composite. The historical record of the portfolio must be:
- A. included in both composites.
 - B. kept in the core-plus fixed income composite.
 - C. excluded from the core-plus fixed income composite.
17. After an extended period of rising interest rates, the market value of Hartford Special Machinery Company's core-plus fixed-income portfolio falls below the composite minimum of \$10 million. The Hartford portfolio remains below the composite-specific minimum asset level for nine months until the client makes an additional contribution that brings it back above \$10 million in assets. Belltower must:
- A. temporarily switch the Hartford portfolio to the firm's miscellaneous composite.
 - B. include the Hartford portfolio in the core-plus fixed income composite in all measurement periods.
 - C. exclude the Hartford portfolio from the core-plus fixed income composite for the period it was below the minimum asset level.
18. Kingswood Manufacturing Company, a core-plus fixed-income client, informs Belltower in writing that, in the future, all security transactions must be approved in advance by Kingswood's controller. The *most likely* consequence is that Belltower must prospectively exclude the Kingswood portfolio from:
- A. all composites.
 - B. total firm assets.
 - C. the core-plus fixed-income composite only.
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- 19.** Midwest National Bank manages a domestic equity portfolio for the Springfield Municipal Employees' Retirement Fund (SMERF), a mature defined-benefit pension plan. The SMERF portfolio belongs to Midwest's Institutional Equity composite. The composite description states, "Portfolios included in the Institutional Equity composite are actively managed for long-term capital appreciation." SMERF's investment policy statement includes the following provisions:

All security transactions must be approved in advance by the SMERF Investment Committee. SMERF anticipates making regular net withdrawals in substantial amounts from the portfolio to meet pension liabilities. SMERF staff will prepare a schedule of withdrawals at the beginning of each fiscal year. The portfolio manager must manage liquidity so as to disburse funds in accordance with the withdrawal schedule.

In view of these restrictions, discuss whether Midwest National Bank can justify including the SMERF portfolio in the composite.

- 20.** Which statement *most accurately* expresses a requirement of the GIPS standards?
- A.** Non-fee-paying portfolios must not be included in composites.
 - B.** All actual fee-paying discretionary portfolios must be included in at least one composite.
 - C.** All actual fee-paying discretionary portfolios must be included in one and only one composite.
- 21.** A fixed-income portfolio is *most likely* to be considered non-discretionary if the client's investment policy states that:
- A.** securities held at a gain must not be sold.
 - B.** the average credit quality must be investment grade.
 - C.** securities held in the portfolio must be issued in developed markets.
- 22.** What is the minimum number of portfolios that a composite must contain to comply with the GIPS standards? Must a firm disclose the number of portfolios in a composite?
- 23.** Firms that claim to comply with the GIPS standards must disclose the use of a sub-advisor and the:
- A.** identity of the sub-advisors.
 - B.** period the sub-advisors were used.
 - C.** investment strategies employed by the sub-advisors.
- 24.** Gravite Asset Management started managing tax-efficient fixed income portfolios in January 1999. However, because the firm initially did not have a suitable portfolio accounting system, accrued income was not included in market valuations until June 1999. Under the GIPS standards, if Gravite presents the performance of the tax efficient fixed income composite since inception, it must:
- A.** disclose the period of non-compliance.
 - B.** bring the non-compliant returns into compliance.
 - C.** estimate the return including accrued income in the first half of 1999.

25. The GIPS standards require firms to disclose the presence, use, and extent of leverage, derivatives, and short positions if material, including a description of the:

- A. characteristics of the instruments.
- B. composite's net exposure to systematic risk.
- C. firm's risk management policies and procedures.

26. Bentwood Institutional Asset Management has been managing equity, fixed-income, and balanced accounts since 1986. The firm became GIPS-compliant on 1 January 2001 and prepared composite performance presentations for the 1996-2000 period. Fixed-income performance was poor prior to 2001, when a new team of managers was brought on board. When Christopher Cooper joins Bentwood as marketing director in June 2006, he suggests showing performance starting with calendar 2001, the first year that performance started to improve. He proposes to show composites with returns for the five calendar years 2001 through 2005. Does this course of action comply with the GIPS standards?

27. It is 2011. Bristol Capital Management is the intermediate global fixed-income manager for the Jarvis University endowment fund. Bristol has prepared the performance report shown below. James Chan, consultant to Jarvis University, reviews the report and tells the fund's investment committee that the report does not meet the minimum requirements of the GIPS standards.

Identify *four* omissions that prevent the Bristol Capital Management performance report from being in compliance with GIPS standards. Also identify *four* items included in the Bristol Capital Management performance report (other than omissions) that do not comply with GIPS standards.

Year	Gross-of-Fees Return (%)	Benchmark Return (%)	Number of Portfolios	Composite Dispersion (%)	Composite Assets; End of Period (\$ millions)	Percent of Firm Assets	Total Firm Assets (\$ millions)
2006	12.7	10.7	8	6.6	512	21	2,438
2007	9.5	7.2	12	4.7	780	23	3,391
2008	2.1	1.5	22	6.5	1,250	27	4,629
2009	14.2	14.1	25	3.0	1,425	32	4,453
2010	4.9	6.1	29	1.9	1,712	32	4,891
1Q 2011	7.1	5.9	34	4.4	1,994	37	5,389

(Returns for 1Q 2011 are annualized.)

Bristol Capital Management has prepared and presented this report in compliance with the Global Investment Performance Standards (GIPS®), except for the use of cash-basis accounting for the recognition of interest income. Allied Verification, Ltd. has verified the Bristol Capital Management Intermediate Global Fixed Income Composite.

Notes:

- 7. Bristol Capital Management is an independent investment management firm founded in November 1999.
- 8. Performance results are presented before investment management and custodial fees.
- 9. Portfolio valuations are computed quarterly and are denominated in US dollars.
- 10. Bristol Capital Management uses derivative products to enhance portfolio returns.
- 11. All accounts worth more than \$1 million that are invested in the Intermediate Global Fixed Income strategy are included in the composite at the beginning of the first full quarter under management.
- 12. The Intermediate Global Fixed Income composite includes several non-fee-paying accounts.

The following information relates to Questions 28–30

Tidewater Investment Management's performance presentation for its large cap US value composite is shown below.

Large-Cap US Value Composite Composite Creation Date: 1 July 2001 (\$ in millions)

Period	Composite Return %	Composite Median Return %	Benchmark Return %	Internal Dispersion	Number of Accounts	Total Composite Assets (\$)	Total Firm Assets (\$)
2005	6.37	6.52	6.14	1.54	15	922.4	9,752.3
2004	12.03	11.97	12.73	2.37	17	985.6	9,889.9
2003	26.52	26.74	26.01	4.05	19	1,028.3	10,779.5
2002	−19.06	−18.11	−21.52	3.97	22	1,354.8	11,845.3
2001	−12.00	−8.51	−12.16	2.13	27	1,227.5	11,253.6

Notes:

- Tidewater Investment Management has prepared and presented this report in compliance with the Global Investment Performance Standards (GIPS®).
- For the purposes of compliance with the GIPS standards, the firm is defined as all institutional accounts managed by Tidewater Investment Management. A complete list and description of all the firm's composites is available upon request.
- The strategy of the US Large Cap Value Composite (formerly the Core Domestic Equity Composite) is to invest in US large cap value equity securities. The composite consists of all fee-paying and non-fee-paying discretionary accounts with a minimum market value of \$5 million.
- The benchmark for periods beginning 1 January 2003 is a custom security-based benchmark that is rebalanced to target sector weights monthly. The benchmark for periods prior to 1 January 2003 is the Russell 1000® Value Index.
- Between 25% and 35% of the assets contained in the composite in 2001 and 2002 were carved out of portfolios managed according to the firm's Large Cap Value Balanced style.
- For new clients acquired in periods starting 1 January 2004, Tidewater charges a bundled fee of 1.0% on assets up to \$10 million and 0.85% on assets in excess of \$10 million. The bundled fee includes investment management and administrative fees.
- Additional information regarding policies for calculating and reporting returns is available upon request.

(There are numerous errors and omissions in Tidewater's performance presentation. The following questions do not address all of them.)

28. Tidewater's performance presentation for the large cap US value composite fails to comply with the GIPS standards because it does **not** present:

- A. cumulative composite and benchmark returns.
- B. the percentage of the total firm assets represented by the composite.

- C. the percentage of composite assets represented by non-fee-paying portfolios.
29. Tidewater's performance presentation *most likely* fails to comply with the GIPS standards because it does **not** disclose the:
- A. custom benchmark weights and components.
 - B. presence, use, and extent of leverage or derivatives.
 - C. date and reasons for the change in the composite name.
30. In order to comply with the GIPS standards, Tidewater's disclosures related to fees must include the:
- A. fee schedule for periods prior to 1 January 2004.
 - B. investment management and administrative fees on a segregated basis.
 - C. bundled fee portfolios as a percentage of composite assets for each annual period.
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31. At Firm T, Manager D is responsible for Firm T's Emerging Market Composite. Although Manager D makes all the investment decisions for the portfolios in the composite, Manager D is supported by Firm T's research department and trading desk. Firm U is seeking to establish an emerging market investment strategy and hires Manager D to join Firm U. Can Firm U link the historical performance of Manager D while at Firm T to the performance of its new strategy and comply with the GIPS standards?

The following information relates to Questions 32–35

Techno Investment Partners serves as general partner in a limited partnership whose strategy is to invest in privately owned software companies with innovative products designed to improve productivity in the service sector of the economy. The investment results of the limited partnership are presented in the firm's GIPS-compliant Service Productivity Enhancement Software (SPES) composite.

Paul Reid, a performance analyst, is updating the SPES composite performance presentation through the end of the third year since inception. The information shown in Exhibit 1 is taken from one of Reid's worksheets.

Exhibit 1. SPES Composite Data as of the End of Year 3 (\$ in millions)

Paid-In Capital	Invested Capital	Cumulative Distributions	Realization Multiple (DPI)	PIC Multiple	Ratio of Residual Value to Paid in Capital (RVPI)
20.0	16.6	2.5	0.13	0.80	0.99

32. The market value of the SPES composite is *closest* to:
- A. \$16.6 million.

- B. \$19.8 million.
- C. \$20.2 million.
33. The SPES composite's investment multiple (TVPI) is *closest* to:
- A. 0.13.
- B. 0.86.
- C. 1.12.
34. What percentage of the limited partners' paid-in capital has been returned to them?
- A. 13%
- B. 15%
- C. 80%
35. The limited partnership's committed capital is *closest* to:
- A. \$16.6 million.
- B. \$20.4 million.
- C. \$25.0 million.
-
36. Bugle Capital Advisors places an advertisement for its Targeted Maturity Composite in major newspapers on 30 April. The advertisement includes the GIPS Advertising Guidelines compliance statement and presents annualized composite and benchmark returns for the 1-year, 3-year, and 5-year periods ended 31 December. Does the advertisement satisfy the requirements of the GIPS Advertising Guidelines?
- A. Yes.
- B. No; it omits the period-to-date return.
- C. No; it omits five years of annual returns.
37. Which of the following is *least likely* to be considered an advertisement for the purposes of the GIPS Advertising Guidelines?
- A. A letter addressed to prospective clients.
- B. Written material used in one-on-one presentations.
- C. A quarterly report e-mailed to multiple existing clients.
38. Greene Springs Asset Management complies with the GIPS standards but has not been verified. The firm wishes to prepare an advertisement that includes a claim of compliance. Which of the following is the correct wording of the GIPS compliance statement for advertisements?
- A. "Greene Springs Asset Management claims compliance with the Global Investment Performance Standards (GIPS®)."

- B. "Greene Springs Asset Management claims compliance with the Global Investment Performance Standards (GIPS®). The firm's compliance has not been independently verified."
- C. "Greene Springs Asset Management claims compliance with the Global Investment Performance Standards (GIPS®). A list of composite descriptions is available upon request."

The following information relates to Questions 39–42

Amelia Gordon, the head of compliance at Herrschaft Asset Management Corporation, is examining an advertisement that promotes the firm's fundamental value strategy. The advertisement is shown in Exhibit 1.

Exhibit 1. "Herrschaft. Master the market."

Herrschaft Asset Management Fundamental Value Composite Performance				
	3 Months Ended 31 March 2006	Periods Ended 31 December 2005		
		1 Year	3 Years (Annualized)	5 Years (Annualized)
Composite	5.51%	14.56%	22.03%	5.17%
Custom Benchmark	5.35%	14.72%	21.47%	4.86%

- Herrschaft Asset Management Corporation meets all applicable requirements of the Global Investment Performance Standards (GIPS®).
- Herrschaft Asset Management Corporation is a registered investment advisory firm offering a full suite of equity and fixed-income products for individuals and institutions.
- The Fundamental Value Composite contains all discretionary portfolios that are invested in accordance with Herrschaft's proprietary fundamental value strategy.
- Portfolios in the Fundamental Value Composite may include futures solely to equitize portfolio cash during inflows and outflows. Futures are not used to add leverage to the portfolio.
- To receive a complete list and description of Herrschaft Asset Management Corporation's composites, contact Jules Arnauld at (212) 555-0000 or write Herrschaft Asset Management Corporation, 1250 15th Avenue, New York, NY or jarnauld@herrschaftam.com

39. Which of the following statements is *most* accurate? Herrschaft's advertisement does **not** meet the requirements of the GIPS Advertising Guidelines because it fails to disclose:

- A. a description of the benchmark.
- B. the benchmark construction rules.
- C. how often the benchmark is rebalanced.

40. Which of the following statements is *most* accurate? Herrschaft's advertisement does **not** meet the requirements of the GIPS Advertising Guidelines because it fails to:
- A. present five years of annual composite returns.
 - B. present a measure of dispersion of individual portfolio returns.
 - C. disclose whether performance is shown gross or net of investment management fees.
41. Herrschaft's compliance statement does **not** meet the requirements of the GIPS Advertising Guidelines. The correct statement is:
- A. Herrschaft Asset Management Corporation claims compliance with the Global Investment Performance Standards (GIPS®).
 - B. Herrschaft Asset Management Corporation has prepared and presented this report in compliance with the Global Investment Performance Standards (GIPS®).
 - C. Herrschaft Asset Management Corporation has prepared and presented this advertisement in compliance with the Advertising Guidelines of the Global Investment Performance Standards (GIPS®).
42. Which of the following statements is *most* accurate? Herrschaft's advertisement does **not** satisfy an applicable requirement of the GIPS Advertising Guidelines because it fails to include all salient features in its description of the:
- A. firm.
 - B. composite strategy.
 - C. extent and use of leverage and derivatives.

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43. It is *most* accurate to say that verification:
- A. makes the claim of compliance more credible.
 - B. certifies that the firm has adequate internal controls.
 - C. ensures the accuracy of specific composite presentations.
44. Renner, Williams & Woods decides to have its equity and balanced composites verified. Because the firm has only a handful of fixed-income accounts and does not present fixed-income management results in marketing materials shown to prospects, management decides that it would be a waste of time and money to hire a verification firm to verify such a small composite. Is it possible for Renner, Williams & Woods to obtain a firm-wide verification that covers only the equity and balanced composites?

The following information relates to Questions 45 and 46

Excedent Asset Management hires Maven Performance Consulting, Inc. to verify its claim of compliance with the GIPS standards.

Excedent offers equity and fixed-income portfolio management services to US-based institutional clients. Maven's services include customized training programs, technology and operational consulting, and GIPS verification.

At the outset of the verification process, Maven reviews Excedent's performance-related policies and procedures. The verifier also obtains a list of open and closed accounts for all composites for the years under examination.

While the verification is still in progress, Excedent asks Maven to serve as its technology consultant for the selection and implementation of a new fixed-income performance measurement and attribution system.

45. Which statement *most* accurately describes a requirement of the GIPS standards? Maven must be satisfied that Excedent's composite benchmarks are:
- A. free from systematic bias.
 - B. consistently applied over time.
 - C. unambiguous, investable, and measurable.
46. Maven asks Excedent to provide the account agreements for certain open and closed accounts. Reviewing the selected account agreements is *least likely* to be useful in determining whether:
- A. Excedent's treatment of taxes, tax reclaims, and tax accruals are correct.
 - B. Excedent has appropriately classified accounts as discretionary or non-discretionary.
 - C. the accounts' objectives are consistent with the definitions of the composites in which they are included.

SOLUTIONS

1. The GIPS standards encourage firms to adopt the broadest, most meaningful definition of a firm. Company C should consider defining itself to include the assets managed by both the institutional entity and the retail entity for the purposes of claiming compliance with the GIPS standards. However, Company C could define the two autonomous entities as separate firms if each subsidiary is held out to clients and potential clients as a distinct business unit. (See Section 3.1 of the reading.)
2. Sample Disclosure: "Firm A is defined as an independent management firm with offices in Japan, Australia, the United Kingdom, and the United States. Firm A (US) is a subsidiary of Firm A serving US clients. Firm A also has subsidiaries in the United Kingdom, Australia, and Japan." (See Section 3.1 of the reading.)
3. C is correct. Provision 1.1.A.2 states that, for periods beginning on or after 1 January 2011, portfolios must be valued in accordance with the definition of fair value, and Provision 1.1.A.3 states in pertinent part that firms must value portfolios in accordance with the composite-specific valuation policy. The GIPS standards do not require firms to adhere to the principles of financial accounting. (See Section 3.2 of the reading.)

4. B is correct. Provision 1.1.A.3.c states that portfolios must be valued “no more frequently than required by the valuation policy.” The definition of fair value includes the statement, “In the absence of an objective, observable, unadjusted quoted market price for an identical investment in an active market on the measurement date, the valuation must represent the firm’s best estimate of the market value.” Provision 1.1.A.4 states, “For periods beginning on or after 1 January 2010, firms must value portfolios as of the calendar month end or the last business day of the month.” (See Section 3.2 of the reading.)
5. No. A firm must maintain data necessary to support a firm’s claim of compliance. Because Firm A presents five years of performance history, it must maintain the records to support the firm’s five-year history and all other relevant data on the firm’s composite presentations. Because the Standards require firms to build a ten-year performance history, the firm must continue to maintain the records to support the firm’s eventual ten-year performance history. (See Section 3.2 of the reading.)
6. January:

$$R_{\text{Jan}} = (208,000 - 200,000)/200,000 = \mathbf{4.00\%}$$

February:

$$R_{\text{Feb1-15}} = (217,000 - 208,000)/208,000 = 4.33\%$$

$$R_{\text{Feb16-28}} = (263,000 - 257,000)/257,000 = 2.33\%$$

$$R_{\text{Feb1-28}} = [(1 + 0.0433) \times (1 + 0.0233)] - 1 = \mathbf{6.76\%}$$

March:

$$R_{\text{Mar1-21}} = (270,000 - 263,000)/263,000 = 2.66\%$$

$$R_{\text{Mar22-31}} = (245,000 - 240,000)/240,000 = 2.08\%$$

$$R_{\text{Mar1-31}} = [(1 + 0.0266) \times (1 + 0.0208)] - 1 = \mathbf{4.80\%}$$

Quarter 1:

$$R_{\text{QT1}} = [(1 + 0.0400) \times (1 + 0.0676) \times (1 + 0.0480)] - 1 = \mathbf{16.36\%}$$

(See Section 3.3 of the reading.)

7. A. Portfolio returns:

$$r_A = \frac{85.3 - 74.9 - 7.5}{74.9 + (7.5 \times 0.613)} = \frac{2.9}{79.5} = 0.0365 = 3.65\%$$

$$r_B = \frac{109.8 - 127.6 - (-15) - (-5)}{127.6 + (-15 \times 0.742) + (-5 \times 0.387)} = \frac{2.2}{114.535} = 0.0192 = 1.92\%$$

$$r_C = \frac{128.4 - 110.4 - 15}{110.4 + (15 \times 0.387)} = \frac{3}{116.205} = 0.0258 = 2.58\%$$

- B. To calculate the composite return based on beginning assets, first determine the percent of beginning composite assets represented by each portfolio; then determine the weighted-average return for the month:

$$\text{Beginning composite assets} = 74.9 + 127.6 + 110.4 = 312.9$$

$$\text{Portfolio A} = 74.9/312.9 = 0.239 = 23.9\%$$

$$\text{Portfolio B} = 127.6/312.9 = 0.408 = 40.8\%$$

$$\text{Portfolio C} = 110.4/312.9 = 0.353 = 35.3\%$$

$$\begin{aligned} r_{\text{Comp}} &= (0.0365 \times 0.239) + (0.0192 \times 0.408) + (0.0258 \times 0.353) \\ &= 0.0257 = 2.57\% \end{aligned}$$

- C. To calculate the composite return based on beginning assets plus cash flows, first use the denominator of the Modified Dietz formula to determine the percentage of total beginning assets plus weighted cash flows represented by each portfolio, and then calculate the weighted-average return:

$$\text{Beginning composite assets} + \text{Weighted cash flows} = [74.9 + (7.5 \times 0.613)] + [127.6 + (-15 \times 0.742) + (-5 \times 0.387)] + [110.4 + (15 \times 0.387)] = 79.5 + 114.535 + 116.205 = 310.24$$

$$\text{Portfolio A} = 79.5/310.24 = 0.256 = 25.6\%$$

$$\text{Portfolio B} = 114.535/310.24 = 0.369 = 36.9\%$$

$$\text{Portfolio C} = 116.205/310.24 = 0.375 = 37.5\%$$

$$\begin{aligned} r_{\text{Comp}} &= (0.0365 \times 0.256) + (0.0192 \times 0.369) + (0.0258 \times 0.375) \\ &= 0.0261 = 2.61\% \end{aligned}$$

A mathematically equivalent method consists simply in summing beginning assets and intra-period external cash flows, treating the entire composite as though it were a single portfolio and then computing the return directly with the Modified Dietz formula.

$$\begin{aligned} r_{\text{Comp}} &= \frac{323.5 - 312.9 - (-15 + 7.5 + 10)}{312.9 + [(-15) \times 0.742 + 7.5 \times 0.613 + 10 \times 0.387]} \\ &= 0.0261 = 2.61\% \end{aligned}$$

8. A is correct. Provision 1.2.A.3 states, "Returns from cash and cash equivalents held in portfolios must be included in all return calculations." Lawton writes, "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." Whether the custodian is selected by the client or the manager is pertinent to the calculation of total firm assets but irrelevant to this question. (See Section 3.5 of the reading.)
9. C is correct. The GIPS Glossary defines trading expenses as "the actual costs of buying or selling investments" and states, "These costs typically take the form of brokerage commissions, exchange fees and/ or taxes, and/ or bid-offer spreads from either internal or external brokers. Custodial fees charged per transaction should be considered custody fees and not trading expenses." (See Section 3.5 of the reading.)
10. Yes. The Standards state that firms must include all actual, discretionary, fee-paying portfolios in at least one of the firm's composites. If the portfolio meets the defined criteria for inclusion in more than one composite, the firm must include the portfolio in all the firm's appropriate composites. For example, a firm may have a large-cap composite and a large-cap growth composite. If the firm manages a portfolio that meets the criteria for inclusion in the large-cap composite as well as the large-cap growth composite, the firm must include the portfolio in both composites. (See Section 3.7 of the reading.)

- 11.** Barry Smith must have a documented, composite-specific policy for the treatment of external cash flows and must compute time-weighted total returns that adjust for external cash flows. For periods beginning 1 January 2005, rate-of-return approximation methods must adjust for cash flows on a day-weighted basis (I.2.A.2). Accordingly, Barry Smith must use a return-calculation methodology that adjusts for daily-weighted external cash flows, such as the Modified Dietz method. However, the 12 March 2006 contribution to the Dennett portfolio represents 13.67 percent of the portfolio's value, and it may be classified as a large external cash flow. Barry Smith must establish in advance a policy for the treatment of external cash flows for the Balanced Tax-Exempt composite. "Large" external cash flows may distort approximated returns. (See Sections 3.2, 3.5, and 3.9 of the reading.)

The 2010 version of the Standards includes a recommendation to value portfolios on the date of "all" external cash flows. This recommendation is effective for periods beginning on or after January 1, 2011 (I.1.B.1). As Barry Smith has adopted a large cash flow policy as of 1 January 2006 and assumes all external cash flows take place at the end of the day, given that the 12 March 2006 cash flow meets the definition of "large", the firm must value the portfolio as of the end of the day on 12 March 2006. Barry Smith would then compute sub-period returns for the March partial periods before and after the cash flow and link them to calculate a true time-weighted rate of return for the month of March. Alternately, if Barry Smith had adopted a "significant" cash flow policy for this composite and the 12 March cash flow met this definition, the firm would either determine that this entire portfolio be excluded from the composite for the month of March or treat the cash flow as a temporary new account (I.3.B.2).

- 12.** Smith & Jones may not claim to be in compliance with the GIPS standards if model performance is linked to actual performance. The GIPS standards state that composites must include only actual assets under management within the defined firm, and they expressly prohibit linking the performance of simulated or model portfolios with actual performance (I.3.A.3). (See Section 3.7 of the reading.)
- 13.** A is correct. Provision I.3.A.5 states, "Composites must include new portfolios on a timely and consistent basis after each portfolio comes under management." In this case, it is expected to take an extended period to invest the new client's assets in accordance with the composite strategy. Assuming Taurus complies with the GIPS standards, its documented policy would provide for the inclusion of new private equity portfolios in the composite on a timely basis. For example, Taurus's policy may require new portfolios to be included in the composite as of the first full measurement period that the assets are fully invested. Taurus must apply its policy consistently. (See Section 3.9 of the reading.)
- 14.** A is correct. Provision I.3.A.6 states, "Terminated portfolios must be included in the historical performance of the composite up to the last full measurement period that each portfolio was under management." The last full measurement period that the Chimie bio-industrielle portfolio was under the management of Ord Capital Management was the month of March. (See Section 3.9 of the reading.)
- 15.** C is correct. Provision I.3.A.7 states, "Portfolios must not be switched from one composite to another unless documented changes to a portfolio's investment mandate, objective, or strategy or the redefinition of the composite makes it appropriate. The historical performance of the portfolio must remain with the original composite." (See Section 3.9 of the reading.)
- 16.** B is correct. Provision I.3.A.7 states, "Portfolios must not be switched from one composite to another unless documented changes to a 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.*" (Emphasis added.) (See Section 3.9 of the reading.)

- 17.** C is correct. Provision I.3.A.9 states in pertinent part, “If the firm sets a minimum asset level for portfolios to be included in a composite, the firm must not include portfolios below the minimum asset level in that composite.” Belltower must remove the Hartford portfolio from the core-plus fixed-income composite when the portfolio’s assets fall below the minimum, and return it to the composite when it once again qualifies for inclusion. A is incorrect because composites must be defined according to similar investment objectives and/or strategies; there should be no “miscellaneous” composite. (See Section 3.9 of the reading.)
- 18.** A is correct. The client’s prior approval authority for security transactions appears to render the portfolio non-discretionary. Provision I.3.A.1 states, in part, that “non-discretionary portfolios must not be included in a firm’s composites.” B is incorrect because, in accordance with Provision I.0.A.13, total firm assets must include all discretionary and non-discretionary assets managed by the firm. (See Sections 3.1 and 3.7 of the reading.)
- 19.** The GIPS standards prohibit including non-discretionary portfolios in composites. IPS restrictions do not necessarily render a portfolio non-discretionary. It is up to the investment management firm to define discretion and to determine whether it has the discretion to implement the investment strategy, given the restrictions of the IPS. In this case, however, it appears likely that SMERF’s policy requiring transactions to be approved in advance by the Investment Committee and the pension plan’s liquidity needs prevent Midwest National Bank from fully implementing the investment objective of achieving long-term capital appreciation through active management. If so, Midwest National Bank should classify the SMERF portfolio as non-discretionary and exclude it from all composites. (See Section 3.7 of the reading.)
- 20.** B is correct. Provision I.3.A.1 states, “All actual, fee-paying, discretionary portfolios must be included in at least one composite. Although non-fee-paying discretionary portfolios may be included in a composite (with appropriate disclosure), non-discretionary portfolios must not be included in a firm’s composites.” (See Section 3.7 of the reading.)
- 21.** A is correct. Such a restriction would most likely alter portfolio structure and would also be likely client specific. The restrictions in B and C are not necessarily client specific and could already be part of the investment strategy of the manager. (See Section 3.7 of the reading.)
- 22.** Under the Standards, there is no minimum or maximum number of portfolios that a composite may include. The Standards require that firms disclose the number of portfolios in each composite as of the end of each annual period presented, unless there are five or fewer portfolios (I.5.A.1f). (See Section 3.12 of the reading.)
- 23.** B is correct. Provision I.4.A.25 states, “For periods beginning on or after 1 January 2006, firms must disclose the use of a sub-advisor and the periods a sub-advisor was used.” (See Section 3.11 of the reading.)
- 24.** A is correct. “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 (I.4.A.15).” Provision I.5.B.8 recommends that firms comply with the GIPS Standards for all historical periods. (See Sections 3.11 and 3.13 of the reading.)
- 25.** A is correct. Provision I.4.A.13 states, “Firms must disclose the presence, use, and extent of leverage, derivatives, and short positions, if material, including a description of the frequency of use and characteristics of the instruments sufficient to identify risks.” (See Section 3.11 of the reading.)

26. The GIPS standards require that at least five years of GIPS-compliant performance be reported (or for the period since firm's inception or the composite inception date if the firm or the composite has been in existence less than five years). After presenting a minimum of five years of GIPS-compliant performance (or for the period since firm's inception or the composite inception date if the firm or composite has been in existence less than five years), the firm must present an additional year of performance each year, building up to a minimum of 10 years of GIPS-compliant performance (I.5.A.1a). Bentwood Institutional Asset Management could not drop the years prior to 2001 at the time Cooper suggests it do so. In addition to violating a specific requirement, Cooper's suggestion was not in the spirit of fair representation and full disclosure of performance. Technically, the firm will be able drop the early years of its composite presentation once it has established a 10-year GIPS-compliant record, as long as it continues to show at least the most recent 10 years. For instance, it will be able to show just the 10 calendar years 2001-2010 after the composite returns for 2010 become available. However, it is recommended that Bentwood show its entire GIPS-compliant performance record (I.5.B.7). (See Sections 3.12 and 3.13 of the reading.)

27. The report has a large number of omissions and errors.

Omissions that prevent the Bristol Capital Management performance report from being GIPS-compliant includes the following:

- The availability of a list of composite descriptions is not disclosed as is required (I.4.A.11).
- The availability of policies for valuing portfolios, calculating performance, and preparing compliant presentations is not disclosed (I.4.A.12).
- Although Bristol does disclose the use of derivatives, it appears that the firm has not included all the required disclosure in this area. The firm must disclose the presence, use, and extent of leverage, derivatives and short positions, if material, including a description of the frequency of use and characteristics of the instruments sufficient to identify risks (I.4.A.13).
- If the firm has included non-fee-paying portfolios in its composite, the percentage of the composite assets represented by non-fee-paying portfolios must be disclosed as of the end of each annual period (I.5.A.6).
- The composite creation date must be disclosed (I.4.A.10).
- Because the composite represents a global investment strategy, the presentation must include information about the treatment of withholding taxes on dividends, interest income, and capital gains, if material (I.4.A.20).
- Both a composite description and benchmark description must be disclosed (I.4.A.3-4).
- A fee schedule appropriate to the compliant presentation must be disclosed (I.4.A.9).

There are many items included in the Bristol Capital Management performance report that are *not compliant* with GIPS, including the following:

- The GIPS standards state that performance periods of less than one year must not be annualized, as Bristol does for the first quarter of 2011 (I.5.A.4).
- GIPS verification cannot be performed for a single composite as is stated in the presentation. Verification does not provide assurance about the performance of any specific composite. Firms must not state that a particular composite has been "verified" or make any claim to that effect (IV.A.3).

- For periods beginning on or after 1 January 2001, portfolios must be valued at least monthly. For periods beginning on or after 1 January 2010, portfolios must be valued on the date of all large cash flows. Bristol is valuing portfolios quarterly (I.1.A.3).
 - A firm must use the appropriate compliance statement as specified in the GIPS standards. There are no allowances for partial compliance. If a firm does not meet all the requirements of the GIPS standards, the firm must not represent or state that it is “in compliance with the Global Investment Performance Standards except for...” or make any other statements that may indicate partial compliance with the GIPS standards. Bristol’s use of the “except for” compliance statement violates the Standards (I.0.A.6) and the appropriate compliance statement has not been used (I.4.A.1).
 - The firm must disclose which measure of internal dispersion is presented (I.4.A.8).
 - The GIPS standards state that accrual accounting must be used for fixed-income securities and all other investments that earn interest income (I.1.A.6). Bristol states that it uses cash-basis accounting for the recognition of interest income.
- 28.** C is correct. The composite description indicates that the composite contains both fee-paying and non-fee-paying portfolios. GIPS Provision I.5.A.6 states, “If a composite includes non-fee-paying portfolios, the firm must present the percentage of composite assets represented by non-fee-paying portfolios as of each annual period end.” A is incorrect because the Standards recommend but do not require that firms present cumulative returns for all periods. B is incorrect because the Standards permit firms to present either the percentage of the total firm assets represented by the composite or the amount of total firm assets at the end of each annual period. (See Sections 3.12 and 3.13 of the reading.)
- 29.** A is correct. GIPS Provision I.4.A.31 states, “If a custom benchmark or combination of multiple benchmarks is used, the firm must disclose the benchmark components, weights and re-balancing process.” Tidewater discloses the frequency of custom benchmark rebalancing but does not describe the custom benchmark weights and components. B is not the best answer because the Standards require disclosure of the presence, use, and extent of leverage or derivatives only if the use of leverage or derivatives is material. C is incorrect because the Standards require only that firms disclose any changes to the name of a composite. Firms are not required to disclose the date and reasons for the composite name change. (See Section 3.11 of the reading.)
- 30.** C is correct. GIPS Provision I.5.A.7 states, “If a composite includes portfolios with bundled fees, the firm must present the percentage of composite assets represented by portfolios with bundled fees as of each annual period end.” The Standards do not require firms to disclose the fee schedule in effect for prior periods or the segregated components of bundled fees. (See Section 3.12 of the reading.)
- 31.** The firm must determine if the decision-making process remains intact (unchanged) in Firm U. If Firm U continues the original strategy of the composite with all of its continuing factors, appropriate disclosures are made and documentation is in place, the performance must be linked. (See Section 3.12 of the reading.)
- 32.** B is correct. The GIPS Glossary gives this definition of Residual Value (private equity and real estate): “The remaining equity that limited partners (or investors) have in an investment vehicle at the end of the performance reporting period.” The GIPS Glossary defines the RVPI (real estate and private equity) as “residual value divided by since inception paid-in capital”. Accordingly, the market value of the SPES composite can be estimated by multiplying the paid-in capital by the RVPI measure. The calculation is $\$20.0 \times 0.99 = \19.8 million. (See Section 3.15 of the reading.)

- 33.** C is correct. The GIPS Glossary defines the TVPI (real estate and private equity) as “total value divided by since inception paid-in capital.” The GIPS Glossary defines Total Value (real estate and private equity) as “residual value plus distributions”. Using the data given in Exhibit I, the simplest way to find TVPI is to add RVPI and DPI. The calculation is: $0.99 + 0.13 = 1.12$. Alternately, one can multiply the monetary amount of paid-in capital by RVPI to determine the residual value, add it to cumulative distributions, and divide the sum by paid-in capital. In this approach, the calculation is $[(20 \times 0.99) + 2.5]/20 = 1.12$. (See Section 3.15 of the reading.)
- 34.** A is correct. The GIPS Glossary defines the Realization Multiple (DPI) (real estate and private equity) as “since inception distributions divided by since inception paid-in capital”. The realization multiple (DPI) may be described as a measure of how much of the investors’ capital has been returned to them. Exhibit I displays the realization multiple (0.13 or 13%), and it can also be calculated by dividing cumulative distributions by paid-in capital. (See Section 3.15 of the reading.)
- 35.** C is correct. The GIPS Glossary defines the PIC Multiple (real estate and private equity) as “since inception paid-in capital divided by cumulative committed capital”. Accordingly, given paid-in capital of \$20 million and a PIC multiple of 0.80, committed capital is $\$20/0.80 = \25.0 . (See Section 3.15 of the reading.)
- 36.** B is correct. The GIPS Advertising Guidelines specify that advertisements that include a claim of compliance and that present performance results must include period-to-date composite performance results in addition to either one-, three-, and five-year annualized composite returns or five years of annual composite returns. (See Section 5 of the reading.)
- 37.** B is correct. The following definition of “advertisement” is provided in the GIPS Advertising Guidelines: “For the purposes of these guidelines, an advertisement includes any materials that are distributed to or designed for use in newspapers, magazines, firm brochures, letters, media, or any other written or electronic material addressed to more than one prospective client. Any written material, other than one-on-one presentations and individual client reporting, distributed to maintain existing clients or solicit new clients for a firm is considered an advertisement.” (See Section 5 of the reading.)
- 38.** A is correct. Chapter III.B.3 of the GIPS Advertising Guidelines provides the correct wording of the compliance statement that must be used in advertisements that include a claim of compliance. The advertisements must also state how prospective client can obtain a compliant presentation and/or the firm’s list of composite descriptions, but that disclosure is not a part of the GIPS compliance statement for advertisements. (See Section 5 of the reading.)
- 39.** A is correct. GIPS Provision III.B.8 states, “All advertisements that include a claim of compliance with the GIPS standards by following the GIPS Advertising Guidelines must disclose the following: The benchmark description.” (See Section 5 of the reading.)
- 40.** C is correct. GIPS Provision III.B.6 states, “All advertisements that include a claim of compliance with the GIPS standards by following the GIPS Advertising Guidelines must disclose the following: Whether returns are presented gross-of-fees and/or net-of-fees”. A is incorrect because GIPS-compliant advertisements may show either five years of annual composite returns or period-to-date, one-, three-, and five-year cumulative annualized composite returns. Herrschaft’s advertisement shows the latter. B is incorrect because the GIPS Advertising Guidelines do not require firms to present a measure of dispersion. (See Section 5 of the reading.)
- 41.** A is correct. Answer A presents the prescribed wording of the GIPS Advertising Guidelines compliance statement. (See Section 5 of the reading.)

42. B is correct. Herrschaft's description of the composite strategy is uninformative. It would most likely be possible for Herrschaft to provide a more satisfactory description without revealing its trade secrets. A is incorrect because the description of the firm is adequate. C is incorrect because Herrschaft states that derivatives are used solely for the purpose of efficient management of cash flows. GIPS Provision III.B.11 states, "All advertisements that include a claim of compliance with the GIPS standards by following the GIPS Advertising Guidelines must disclose the following: The presence, use, and extent of leverage, derivatives, and short positions, if material, including a description of the frequency of use and characteristics of the instruments sufficient to identify risks". Consequently, a description of the use and extent of leverage or derivatives is not required in this case. (See Sections 3.11 and 5 of the reading.)
43. A is correct. The GIPS standards state that verification "brings additional credibility to the claim of compliance" but that it "does not ensure the accuracy of any specific composite presentation." (IV, Verification.) The Standards do not indicate that verification attests to the adequacy of the firm's internal controls. (See Section 6 of the reading.)
44. Under the GIPS standards, 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 performance of any specific composite. Firms must not state that a particular composite has been "verified" or make any claim to that effect (See IV.A.3). A qualified verification firm would not accept an assignment from Renner, Williams & Woods to conduct verification only with regard to the firm's equity and balanced account composites while excluding the fixed-income composites from the scope of the verification. (See Section 6 of the reading.)
45. B is correct. GIPS Provision IV.B.2.a.vii states, "Verifiers must perform sufficient procedures to determine that: The composite benchmark reflects the investment mandate, objective, or strategy of the composite." (See Section 6 of the reading.)
46. A is correct. The account agreements are unlikely to shed light on whether the firm's treatment of taxes, tax reclaims, and tax accruals is correct. B is incorrect because GIPS Provision IV.B.2.b states, in part, "Verifiers must obtain a list of all portfolios. Verifiers must select portfolios from this list and perform sufficient procedures to determine that the firm's classification of the portfolios as discretionary or non-discretionary is appropriate by referring to the portfolio's investment management agreement and/or investment guidelines and the firm's policies and procedures for determining investment discretion." C is incorrect because GIPS Provision IV.B.2.c.iii states, in part, "Verifiers must...determine that: The portfolio's investment mandate, objective, or strategy, as indicated by the portfolio's investment management agreement, investment guidelines, portfolio summary, and/or other appropriate documentation, is consistent with the composite definition." (See Section 6 of the reading.)

NOTES

¹The Committee for Performance Presentation Standards (1987, p. 8).

²A "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.

³Competence in evaluating compliance with the GIPS standards is a curriculum element in the Certificate in Investment Performance Measurement (CIPM[®]) program.

⁴The 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).

⁵Following 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.

⁶CPPS (1987, pp. 8–11).

⁷For further information, see the IMCA Performance Reporting Guidelines (2010) on the Investment Management Consultants Association website at www.imca.org.

⁸This 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*.

⁹It merits emphasis that only investment management 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 GIPS standards.

¹⁰For 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.

¹¹Portfolio 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 any accrued income.

¹²Note, however, that cost or book values and realized gains and losses are pertinent for after-tax performance calculations, discussed later.

¹³Cash 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.

¹⁴The 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.

¹⁵For a comprehensive treatment of these topics, the interested reader is referred to Larry Harris (2003).

¹⁶CFA Institute addresses this and many related issues in its “Trade Management Guidelines” and “Soft Dollar Standards,” available on the CFA Institute website.

¹⁷See Provision I.5.A.6.

¹⁸For a more complete discussion, see Stephen C. Gaudette and Philip Lawton (2007).

¹⁹Provision I.2.A.2.a.

²⁰The 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” describes the level at which the firm determines that a client-directed external cash flow may temporarily prevent the firm from implementing the composite strategy.

²¹For 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.

²²The claims of compliance given in this section may be used only in compliant performance presentations. Different wording for compliance claims in advertisements is stipulated in the GIPS Advertising Guidelines, discussed later in this reading.

²³The GIPS standards distinguish between *definitions* and *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 composite definition but must include all key features of the composite and must include enough information to allow a prospective client to understand the key characteristics of the composite’s investment mandate, objective, or strategy.”

²⁴As previously noted, the GIPS standards do not permit changes to composite definitions to be applied retroactively (I.3.A.4).

²⁵Performance-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.

²⁶Annual 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 described earlier.

²⁷The 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%).

²⁸Non-discretionary portfolios, on the other hand, cannot be included in a firm’s composites under the GIPS standards.

²⁹There are special provisions for real estate closed-end funds.

³⁰Firms must not link non-GIPS-compliant real estate performance for periods beginning on or after 1 January 2006 to their GIPS-compliant performance (I.6.A.15). Firms must not present non-GIPS-compliant private equity performance for periods ending on or after 1 January 2006 (I.7.A.28). Any performance presented for periods ending prior to 1 January 2006 that does not comply with the GIPS standards must be disclosed in accordance with Provisions I.6.A.11 and I.7.A.20.

³¹The following input data provisions do not apply to real estate: I.1.A.3.a, I.1.A.3.b, I.1.A.4, and I.1.B.1.

³²The following disclosure provisions do not apply to real estate: I.4.A.5, I.4.A.6, I.4.A.15, I.4.A.26, I.4.A.33, and I.4.A.34.

³³The following calculation methodology provisions do not apply to real estate: I.2.A.2.a, I.2.A.4, and I.2.A.7.

³⁴These and other appraisal techniques are explained in [Shilling \(2002\)](#).

³⁵The 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, I.5.B.4, and I.5.B.5.

³⁶Firms 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. Please note that this requirement for real estate closed-end fund composites is in addition to the requirement to calculate time-weighted rates of return that adjust for external cash flows, and presenting such returns in a composite compliant performance presentation as required by Provision I.5.A.1.a

³⁷Please note that Provisions I.4.A.29-31 are not scoped out for real estate or private equity and so these disclosures are required, if applicable.

³⁸The following input data provisions do not apply to private equity: I.1.A.3.a, I.1.A.3.b, I.1.A.4, and I.1.B.1.

³⁹For earlier periods, private equity investments must be valued according to either the GIPS Private Equity Valuation Principles in the 2005 edition of the GIPS standards or the GIPS Valuation Principles in the 2010 edition of the GIPS standards.

⁴⁰The following calculation methodology provisions do not apply to private equity: I.2.A.2, I.2.A.4, I.2.A.6, I.2.A.7, and I.2.B.2.

⁴¹We explained the SI-IRR calculation in connection with the real estate provisions.

⁴²The following composite construction provisions do not apply to private equity: I.3.A.10 and I.3.B.2.

⁴³The following disclosure provisions do not apply to private equity: I.4.A.5, I.4.A.6.a, I.4.A.6.b, I.4.A.8, I.4.A.15, I.4.A.26, I.4.A.32, I.4.A.33, and I.4.A.34.

⁴⁴The following presentation and reporting provisions do not apply to private equity: I.5.A.1.a, I.5.A.1.b, I.5.A.1.c, I.5.A.1.d, I.5.A.1.e, I.5.A.1.i, I.5.A.2, I.5.A.3, I.5.B.2, I.5.B.3, I.5.B.4, and I.5.B.5.

⁴⁵On 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 (I.7.B.5.).

⁴⁶In 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.

⁴⁷This requirement is reiterated in item II.B.2 in the GIPS Valuation Principles.

⁴⁸The 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.”

⁴⁹The 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.

⁵⁰See Poterba (1999).

⁵¹Stein (1998) proposes a method for estimating a “full cost equivalent” portfolio value. Horan, Lawton, and Johnson (2008) define an after-tax performance measurement methodology that discounts future after-tax cash flows at an appropriate tax-adjusted and risk-adjusted discount rate.

⁵²From 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).

⁵³Stein, Langstraat, and Narasimhan (1999) suggest a method to approximate after-tax benchmark returns.

⁵⁴Price (2001) presents three increasingly accurate levels of approximation in constructing after-tax benchmarks from pretax indexes and describes the “shadow portfolio” approach to adjusting indexes for client-specific cash flows.

⁵⁵Price (1996) presents the logic and implications of this adjustment factor.