

## PERFORMANCE MEASUREMENT ATTRIBUTION

This class is two full days devoted to this increasingly important topic. Attendees walk away with practical knowledge, are able to calculate performance attribution and interpret the results. There are no prerequisites for this course (although we recommend completing the Fundamentals of Performance Measurement class), and there is no advanced preparation required. This class is taught at the intermediate/advanced level.

### COURSE OBJECTIVES:

- **Performance Attribution Concepts** – Understand the fundamentals concepts of attribution, and how they're applied to investing. Learn the criteria for attribution systems.
- **Equity Attribution** – Develop an appreciation for the differences between the two "Brinson" models. Understand the various effects and how they're derived, including interaction.
- **Multi-currency Attribution** – Understand the key differences between naïve currency attribution, and the more extensive Karnosky-Singer model. Appreciate the basic requirements of the Karnosky-Singer model.
- **Multi-period Attribution** – Learn why arithmetic attribution is "linking challenged," and requires the use of a linking model to extend the results across time. Gain insights into several of the more common models.
- **Arithmetic vs. Geometric Attribution** – Gain an appreciation for the differences between these two approaches, and the benefits and shortcomings of each.
- **Holdings vs. Transaction-based Attribution** – Learn the key differences between these two approaches. Become familiar with the often overlooked disadvantages of the holdings-based model.
- **Applicability** – Understand the fundamental role of attribution, and how its implementation can vary, depending on the type of management (e.g., a long-only vs. hedge fund manager) or perspective (e.g., models for plan sponsors).

In addition to receiving a student guide that contains the details of the class presentation, each student receives supporting reference material to take back with them including:

- A *Performance, Attribution and Risk Measurement Reference Guide*, a handy pocket reference.
- Copies of selected articles from *The Journal of Performance Measurement*®.
- A calculator for students to work through hands on exercises.

### TEACHING STAFF

**David Spaulding, DPS, CIPM** David is an internationally recognized authority on investment performance measurement. He's the CEO of The Spaulding Group, Inc., and founder and publisher of *The Journal of Performance Measurement*®. Dave is an author, contributing author, and coeditor of close to ten books on performance measurement. He earned his B.A. in Mathematics from Temple University, his M.S. in Systems Management from the University of Southern California, his M.B.A. in Finance from the University of Baltimore, and his doctorate in finance and International Economics from Pace University.

**John D. Simpson, CIPM** John has been with The Spaulding Group since 2005. During this time he has conducted software verifications for several clients, verifications (both GIPS and non-GIPS) for dozens of firms, and training (both in-house and open enrollment, on many occasions) for numerous clients. In addition, he developed the firm's CIPM prep courses. He was a coauthor of *The Spaulding Group's Guide to the Performance Presentation Standards*, second edition. He has served on various industry and GIPS committees. Prior to joining The Spaulding Group, John spent 20 years with Integrated Decision Systems, which was a New York-based software vendor that provided portfolio accounting and performance measurement solutions to the investment industry (IDS was acquired by CheckFree). John holds a B.S. in Applied Mathematics from UCLA, where he was a member of their 1987 NCAA national championship volleyball team.



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## FUNDAMENTALS OF PERFORMANCE MEASUREMENT

## PERFORMANCE MEASUREMENT ATTRIBUTION

### TRAINING COURSES

CE Qualified Activity  CFA Institute

The Spaulding Group is registered with CFA Institute & NASBA as an approved provider of professional development programs.



# FUNDAMENTALS OF PERFORMANCE MEASUREMENT

This course provides attendees with a core grounding in the tools and techniques used to calculate investment performance. Students are taken through practical examples and given ample opportunity for firm-specific questions. The class is conducted over two full days. Students walk away with a working knowledge of the concepts that define performance measurement. There are no prerequisites for this class and there is no advanced preparation required. This class is taught at the basic level.

## COURSE OBJECTIVES:

- **Performance Measurement Concepts** – Develop a solid grounding on what performance measurement is all about.
- **Rate of Return Calculations** – Learn the various formulas to derive performance, understand the impact of cash flows and learn about time- and money-weighting. Students also learn about geometric linking, annualization, and much more.
- **Benchmarks** – Gain insights into the primary performance measurement benchmarks (indexes, peer groups, absolute, and custom) and the importance of each.
- **Risk Measurement** – Learn the importance of risk measurement and the various formulas available.
- **Performance Attribution** – Develop an appreciation and understanding of attribution.
- **The Performance Presentation Standards** – (GIPS). Establish fundamental knowledge about the Global Investment Performance Standards, its history, and its many concepts and requirements.

In addition to receiving a student guide that contains the details of the class presentation, each student receives supporting reference material to take back with them, including:

- A complimentary copy of *The Handbook of Investment Performance: A user's Guide*, Second Edition by David Spaulding, CIPM (TSG Publishing, 2011)
- *The Spaulding Group's Performance, Attribution and Risk Reference Guide*, a handy pocket reference.
- A copy of the GIPS standards, and because this is a hands on class, students receive a calculator, too!

15 CPE & 12 PD Credits upon course completion

CE Qualified Activity  CFA Institute

CFA Institute has approved this program, offered by The Spaulding Group, for 12 CE credit hours. If you are a CFA Institute member, CE credit for your participation in this program will be automatically recorded in your CE tracking tool.



# FUNDAMENTALS OF PERFORMANCE MEASUREMENT

Our courses are highly interactive and “real world.” Students are afforded the opportunity to present and discuss issues that they may be wrestling with or have uncovered. Exercises are provided throughout each class to give students the chance to try out the various formulas and techniques to which they’ve been introduced. In addition, the instructor uses case studies and real life examples to enhance the material and make the concepts more relevant.

## AGENDA DAY 1

### BACKGROUND

- What is performance measurement?
- A brief history of performance

### RATES OF RETURN

- Time-weighting vs. Money-weighting
- Internal Rate of Return
- Mid-point and Modified Dietz
- Unit Value Method
- “True” Daily Returns
- Geometric linking
- Annualization

### BENCHMARKS

- Absolute, market indexes, and peer groups
- Pros and cons

### RISK

- What is Risk?
- A review of the common measures, including standard deviation, Sharpe Ratio, Treynor Ratio, Information Ratio, Tracking Error, and VAR
- Risk monitoring and management

## AGENDA DAY 2

### ATTRIBUTION

- The Three Laws of Attribution
- A review of the Brinson Hood Beebower and Brinson-Fachler models
- Currency attribution
- Arithmetic vs. Geometric
- Multi-period Attribution
- Fixed Income Attribution

### PERFORMANCE PRESENTATION STANDARDS

- Detailed review of the Global Investment Performance Standards (GIPS®)
- Composite construction
- Calculations
- Discretion
- Points of confusion

### THE PERFORMANCE MEASUREMENT PROFESSIONAL/ THE PERFORMANCE MEASUREMENT ORGANIZATION

- Staff / Organization characteristics / trends

# PERFORMANCE MEASUREMENT ATTRIBUTION

## AGENDA DAY 1

### PERFORMANCE ATTRIBUTION CONCEPTS

- What performance attribution is and how it’s used

### CONTRIBUTION

- As a form of attribution/alternative formulas

### EQUITY ATTRIBUTION

- The first two laws of attribution
- A review of the common equity models: Brinson Hood Beebower and Brinson-Fachler

### GEOMETRIC VS. ARITHMETIC

- What’s the difference?
- A review of a geometric implementation of Brinson-Fachler

### HOLDINGS VS. TRANSACTIONS-BASED

- How do they differ?
- Pros and cons of each

### FIXED INCOME ATTRIBUTION

- Fixed income concepts and why equity models don’t work for bonds.
- A review of various fixed income models

### BALANCED ATTRIBUTION

- Bringing equity and fixed income together

## AGENDA DAY 2

### CURRENCY ATTRIBUTION

- A review of two approaches to global attribution, including the Karnosky-Singer model

### MULTI-LEVEL ATTRIBUTION

- A review of the common approaches

### OTHER ATTRIBUTION CONCEPTS

- Additional ways to gain insights into the sources of the return

### MULTI-PERIOD ATTRIBUTION

- The third law of attribution
- A review of five approaches to linking effects over time, including the Cariño (Logarithmic) and Menchero (Optimized) approaches

### PLAN SPONSORS & ATTRIBUTION

- A review of macro and multi-tier attribution

### OTHER FACTORS TO CONSIDER

- Daily vs. Monthly/Sector vs. Security

### HEDGE FUND ATTRIBUTION

- Why it’s different and how to provide

### USING THE RESULTS

- How to use what the models provide

### FINDING AN ATTRIBUTION SYSTEM

- The special needs of attribution

### THE FUTURE OF ATTRIBUTION

- To what do we look forward?