

# PERFORMANCE PERSPECTIVES

with David Spaulding



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OCTOBER 2009

Since 1990, The Spaulding Group has had an increasing presence in the money management industry. Unlike most consulting firms that support a variety of industries, our focus is on the money management industry.

Our involvement with the industry isn't limited to consulting. We're actively involved as members of the CFA Institute (formerly AIMR), the New York Society of Security Analysts (NYSSA), and other industry groups. Our president and founder regularly speaks at and/or chairs industry conferences and is a frequent author and source of information to various industry publications.

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For additional information about The Spaulding Group and our services, please visit our web site or contact Chris Spaulding at [CSpaulding@SpauldingGrp.com](mailto:CSpaulding@SpauldingGrp.com)

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## GETTING A “GRIP” ON GIPS<sup>1</sup>

A hedge fund client asked us to derive several risk statistics for them. In the course of this engagement they asked us a variety of seemingly reasonable questions. We thought it worth sharing some of these with you, as you may find some of this enlightening.

*What is alpha?*

Alpha, like a few other terms our industry uses, has multiple meanings. In its simplest case it means excess return:<sup>2</sup>

$$\text{Alpha} = R_P - R_B$$

That is, the portfolio return minus the benchmark return. We also call this “active return,” as it reflects the results of the portfolio manager's decisions.



Jensen's alpha, on the other hand, takes beta into consideration:

$$\text{Jensen's Alpha} = (\bar{r}_P - \bar{r}_f) - \beta(\bar{r}_B - \bar{r}_f)$$

As I often explain in our propaedeutic<sup>3</sup> performance course, in a bull market one simple strategy to outperform the index would be to load up on high-beta stocks, which would be predicted (from CAPM) to outperform the market: what skill is there in this? Jensen's alpha, in a way, strips away the predicted impact from beta; leaving what might be interpreted as the result of manager skill (i.e., to see potential return that will be derived beyond what comes with beta).

Because “alpha” is so often thrown around without any qualification, it may be necessary to ask the speaker what they mean. This can be risky (pardon the pun), as they may not know and may not like being put on the spot. But should that be your concern? I would say “no.” If they say “alpha,” you, as the hearer, have the right to know what they mean by it. And simply asking “do you mean ‘excess return’ or ‘Jensen's alpha’?” should do the trick.

Sometimes the context will reveal their intent. For example, when one speaks of “portable alpha,” I would suggest that they probably mean Jensen's alpha. In this context we're usually dealing with hedge funds which, because they are usually not highly correlated with benchmarks, are seen as sources of (Jensen's) alpha.

*How do we “annualize” alpha?*

For this I turned to my colleague, Bruce Feibel of Eagle Investment Systems. I hold Bruce in high regard when it comes to virtually “all things risk-related,” as he demonstrated his acumen for this topic in his book, *Investment Performance Measurement*

1 For my “blog” readers, yes, I took this up briefly this month. But, as promised there I want to go to greater depth on this topic and the newsletter is quite a fitting place for this.

2 Further to this point of terms having multiple meanings, some refer to excess return as portfolio return minus risk free return, which is also called risk premium!

3 Sorry...this is my “word of the day.” As per Dictionary.com, it means “pertaining to or of the nature of preliminary instruction; introductory to some art or science.”

# The Journal of Performance Measurement®:

## UPCOMING ARTICLES

### Determining the Optimal Mutual Fund Style

#### Classification Methodology

– *David M. Blanchett, CFA and  
Craig Israelson, Ph.D.*

### 101 Ways to Measure Performance

– *Philippe Cogneau, and  
Georges Hübner*

### Risk Attribution

– *Philippe Grégoire, Ph.D.*

### Refining the Sharpe Ratio

– *Craig L. Israelsen, Ph.D.,  
Brigham Young University*

### On Turning Three: Reflections on the CIPM® Program

– *Philip Lawton, CFA, CIPM,  
CFA Institute*

### Performance Analytics Systems

#### – In House or Vendor Package

– *Kyle Ringrose, CFA,  
Wilson HTM Investment Group*

### A Global Investment Attribution Analysis Based on a Symmetrical Arithmetic Attribution Model

– *Yuri Shestopaloff, Ph.D.,  
SegmentSoft Inc.*

### A Comparison of Plan Sponsor Attribution Methodologies: Multi-Level Brinson Attribution vs. Macro Attribution

– *John D. Simpson, CIPM,  
The Spaulding Group, Inc.*

(Wiley, 2003). To put it simply, all risk measures should be arithmetically compounded; translation: returns geometrically compound, while risk measures don't. Or, as Bruce so aptly puts it "Risk compounds, but not in the same way as returns. We usually use a series (most times monthly) of arithmetic returns to calculate ex-post risk statistics. For example, the standard deviation of these returns is the most commonly reported risk measure. The result of the usual standard deviation calculation is a standard deviation of monthly arithmetic returns. To put this standard deviation on an annual equivalent, we multiply it by the square root of 12. Why? To get an annual arithmetic equivalent return, we'd multiply the monthly average by 12. To get an annual arithmetic equivalent variance, we'd multiply the monthly variance by 12. Because standard deviation is the square root of variance, we multiply the standard deviation of the monthly returns by the square root of 12."

Taking this further, we know, through experience, that excess returns don't compound. This question came up in an in-house class this month and the inquirer wanted to know why this was the case. Well, the simple answer is, "because it is." Returns compound; excess returns don't.<sup>4</sup> We can have identical excess returns from varying portfolio/index returns; the portfolio and index returns will compound at their variously unique rates, while the identical excess returns would all compound in the same manner, so how would one expect to achieve results that relate specifically to the different return scenarios?<sup>5</sup> As is often the case, an example works best.

The accompanying table provides four examples where the monthly excess returns are identical; but notice how each scenario's returns vary across the six months. Consequently, the six-month linked returns for the index and portfolio are quite different, resulting in very different arithmetically derived (i.e., portfolio minus index) excess returns, while the compounded returns match. Hopefully this is sufficient to make my case.

	Jan	Feb	Mar	Apr	May	Jun	
Portfolio	0.40%	0.60%	0.35%	0.40%	0.30%	2.07%	
Index	0.20%	0.30%	0.15%	0.20%	0.70%	1.56%	
	0.20%	0.30%	0.20%	0.20%	-0.40%	0.50%	Linked excess returns
						0.51%	Excess return differences
Portfolio	2.00%	4.50%	6.70%	3.10%	9.90%	28.87%	
Index	1.80%	4.20%	6.50%	2.90%	10.30%	28.22%	
	0.20%	0.30%	0.20%	0.20%	-0.40%	0.50%	Linked excess returns
						0.65%	Excess return differences
Portfolio	15.00%	19.00%	20.00%	22.00%	30.00%	160.45%	
Index	14.80%	18.70%	19.80%	21.80%	30.40%	159.28%	
	0.20%	0.30%	0.20%	0.20%	-0.40%	0.50%	Linked excess returns
						1.17%	Excess return differences
Portfolio	30.00%	40.00%	50.00%	60.00%	70.00%	642.56%	
Index	29.80%	39.70%	49.80%	59.80%	70.40%	639.66%	
	0.20%	0.30%	0.20%	0.20%	-0.40%	0.50%	Linked excess returns
						2.90%	Excess return differences

Okay, and so what do we do with Jensen's alpha when we want to show an "annualized version"? As per Bruce Feibel, we simply multiply the result by 12. This is an arithmetic approach, which, I believe, recognizes two facts: one, risks don't geometrically compound; two, excess returns don't geometrically compound.<sup>6</sup>

<sup>4</sup> Because I don't wish to be criticized by my friend Carl Bacon, I'll point out that geometric excess returns DO compound; arithmetic don't.

<sup>5</sup> I'll confess that even I can't follow what I just wrote...kind of confusing.

<sup>6</sup> Our client advised us that a well known software vendor geometrically compounds Jensen's alpha. First, there are no hard-and-fast, universally agreed upon rules for risk measures, so it's often important to determine how the presenter calculates them. This is one reason why GIPS® requires firms to have their calculation methods documented. Second, I will shortly reach out to this vendor to discuss this and to try to persuade them to alter their approach.

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### *Periodicity...what to use?*

Should we use days, months, years, or what to derive our risk statistics?

An argument can be made that years is best as it eliminates the "noise"<sup>7</sup> that we get from more frequent valuations. However, in order to have any value we need a sizable number of returns: I'd suggest at least 30. How many managers have 30 years of returns? And even if they do, can they actually say they managed the same way 30 years ago as they do today? In many cases the answer would be "no." But if you have 30 or more and want to use years, "God bless you." But for most firms and individuals, this probably won't work.

How about days? We can easily come up with lots and lots of days, right? Yes, but they're typically TOO noisy for our purposes.

Consequently, it is most common to use months. For many risk statistics you'll see that we use a trailing 36 month period: 36 months provides an acceptable level of representation and is fairly recent to provide greater meaning.

### *Annualizing beta*

Should we or can we annualize beta? Well, we can annualize beta by multiplying each of the months in our population by 12. However, the result of this is that the covariance and variance adjust in a proportionate fashion, causing us to get the exact same result.

Well, we annualize the Sharpe ratio, standard deviation, and other risk metrics by multiplying by the square root of 12, why not do this for beta? As Carl Bacon so aptly put it, "Beta is the slope of the regression equation – it makes absolutely no sense to annualize it." Meaning, beta is beta. That's it.

I recall an episode of Green Acres where someone had purchased a replica of Venus de Milo. Of course it came with no arms, and the receiver complained, suggesting that it must have been damaged in shipment, and so some compensation was provided. While how this applies to this subject may not be perfectly clear, I do see a parallel in that some firms may "annualize" beta by multiplying by the square root of 12 because that's what the report recipients want to see, but just like adding arms to Venus doesn't make sense, the same applies here, too.



VENUS VICTRIX,  
L'original de la Vénus de Milo, au cours de Février 1820,  
donné au Musée de Paris par M. le Comte de Baux  
un Antiquaire à Constantinople.

## FROM OUR READERS

From Neil Riddles:

*Dave,*

*As always, I enjoyed this month's [September's] newsletter. I have to disagree with your conclusions on performance examinations*

*You stated that performance examinations catch firms "cooking the books," or intentionally falsifying calculations. They also catch firms that are not capable of accurately calculating their performance and composites.*

<sup>7</sup> "Noise" can refer to a few things, including inaccuracies which often exist in daily valuations and the excessive volatility which might appear, which is often smoothed out over a monthly basis.

## KEEP THOSE CARDS & LETTERS COMING

We appreciate the occasional e-mail we get regarding our newsletter. Occasionally, we hear positive feedback while at other times, we hear opposition to what we suggest. That's fine. We can take it. And more important, we encourage the dialogue. We see this newsletter as one way to communicate ideas and want to hear your thoughts.

The reason I feel that performance examinations are worthwhile are twofold. First, my experience is that many non-performance professionals assume that verification checks the calculation of the numbers. While I have never seen a survey of consultants/plan sponsors, I would bet that a majority believe verification includes what is done for a performance examination. Secondly, I believe that performance examinations are likely to be viewed positively by a regulator.



Regards,  
Neil

As you might expect I offered a response:

We DO check calculations as part of the verification. I agree they can be viewed "positively," but are they then worth the cost if that's all they're being used for? The regulator shows up once every 4-5-6 years, but you pay THOUSANDS of dollars EVERY year for an examination!?!?!?

From Michael Pfaff:

Dave,

How are you? Your [August] newsletter made me think about error correction a little more closely. We currently have a manager client that is drafting their error correction policy of which we are preparing to implement. The client has composites where there are presentations shown for the composite in different currencies. If there is a material change in the composite returns, it may or may not impact each of the composite returns shown for each currency. Even if all the currencies moved in tandem, due to rounding and where the old returns are for each currency, some may materially move 0.1% and others may not.

USD 3.10% revised to 3.14%; presentation return is still 3.1% (1 dec shown)  
EUR 3.12% revised to 3.16%; presentation return is now 3.2% (1 dec shown)

Several of your peers have said that material changes should only be considered in the base currency of the composite.

I am not sure if I am comfortable with this. So, if a US-based firm with a composite with a base currency in USD, has a material change only occur to the EUR presentation results for those investors, then how can there be no need to disclose and/or redistribute the EUR presentation for those investors? Is this really the spirit of GIPS?

Could you please offer your take on this?

Thanks,  
Mike

My response:

Mike,

Interesting question. To paraphrase the philosopher Forrest Gump, "material is, as material does." If a firm is in the habit of converting their returns to other currencies, and if the conversion results in a material error because of a correction, then a disclosure would be necessary.

Dave



## THE SPAULDING GROUP'S 2009-2010 INVESTMENT PERFORMANCE MEASUREMENT CALENDAR OF EVENTS

DATE	EVENT	LOCATION
November 12-13, 2009	Performance Measurement Forum	Rome, Italy
November 19, 2009	Trends in Attribution Symposium (TIA III)	New Brunswick, NJ (USA)
December 3-4, 2009	Performance Measurement Forum	Orlando, FL (USA)
December 8-9, 2009	Introduction to Performance Measurement Training	New Brunswick, NJ (USA)
December 9-10, 2009	Performance Measurement Attribution Training	New Brunswick, NJ (USA)
February 16-17, 2010	Introduction to Performance Measurement Training	Los Angeles, CA (USA)
February 18-19, 2010	Performance Measurement Attribution Training	Los Angeles, CA (USA)
March 22-23, 2010	Introduction to Performance Measurement Training	Boston, MA (USA)
March 24-25, 2010	Performance Measurement Attribution Training	Boston, MA (USA)
April 20-21, 2010	Introduction to Performance Measurement Training	Chicago, IL (USA)
April 22-23, 2010	Performance Measurement Attribution Training	Chicago, IL (USA)
May 17-18, 2010	Introduction to Performance Measurement Training	New York, NY (USA)
July 12-16, 2009	Performance Measurement Boot Camp	New Brunswick, NJ (USA)
September 27-28, 2010	Introduction to Performance Measurement Training	Boston, MA (USA)
September 29-30, 2010	Performance Measurement Attribution Training	Boston, MA (USA)
October 19-20, 2010	Introduction to Performance Measurement Training	San Francisco, CA (USA)
October 21-22, 2010	Performance Measurement Attribution Training	San Francisco, CA (USA)
November 16-17, 2010	Introduction to Performance Measurement Training	Chicago, IL (USA)
November 18-19, 2010	Performance Measurement Attribution Training	Chicago, IL (USA)
December 7-8, 2010	Introduction to Performance Measurement Training	New Brunswick, NJ (USA)
December 9-10, 2010	Performance Measurement Attribution Training	New Brunswick, NJ (USA)

*For additional information on any of our 2009 events, please contact Christopher Spaulding at 732-873-5700*

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**TIA**

Trends In Attribution

**SYMPOSIUM**

*November 19, 2009*

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#### INTRODUCTION TO PERFORMANCE MEASUREMENT

A unique introduction to Performance Measurement specially designed for those individuals who require a solid grounding in all aspects of performance measurement. The Spaulding Group, Inc. invites you to attend Introduction to Performance Measurement on these dates:

December 8-9, 2009 – New Brunswick, NJ	September 27-28, 2010 – Boston, MA
February 16-17, 2010 – Los Angeles, CA	October 19-20, 2010 – San Francisco, CA
March 22-23, 2010 – Boston, MA	November 16-17, 2010 – Chicago, IL
April 20-21, 2010 – Chicago, IL	December 7-8, 2010 – New Brunswick, NJ
May 17-18, 2010 – New York, NY	

15 CPE & 12 PD Credits upon course completion

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#### PERFORMANCE MEASUREMENT ATTRIBUTION

Two full days devoted to this increasingly important topic. The Spaulding Group, Inc. invites you to attend Performance Measurement Attribution on these dates:

December 9-10, 2009 – New Brunswick, NJ	September 29-30, 2010 – Boston, MA
February 18-19, 2010 – Los Angeles, CA	October 21-22, 2010 – San Francisco, CA
March 24-25, 2010 – Boston, MA	November 18-19, 2010 – Chicago, IL
April 22-23, 2010 – Chicago, IL	December 9-10, 2010 – New Brunswick, NJ

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#### IN-HOUSE TRAINING

The Spaulding Group has offered in-house training to our clients since 1995. Beginning in 1998, we formalized our training, first with our Introduction to Performance Measurement class and later with our Performance Measurement Attribution class. We now also offer training for the CIPM program. To date, over 2,000 individuals have participated in our training programs, with numbers increasing monthly.

We were quite pleased when so many firms asked us to continue to provide in-house training. This saves our clients the cost transporting their staff to our training location and limits their time away from the office. And, because we discount the tuition for in-house training, it saves them even more! We can teach the same class we conduct to the general market, or we can develop a class that's suited specifically to meet your needs.

The two-day introductory class is based on David Spaulding's book, *Measuring Investment Performance* (McGraw-Hill, 1997). The attribution class draws from David's second book *Investment Performance Attribution* (McGraw-Hill, 2003). The two-day Advanced Performance Measurement Class combines elements from both classes and expands on them.

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THE JOURNAL OF PERFORMANCE MEASUREMENT'S  
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# TRENDS IN ATTRIBUTION SYMPOSIUM

THE HELDRICH HOTEL, NEW BRUNSWICK, NJ  
NOVEMBER 19, 2009

Attribution is the **hottest** area in performance measurement today

On November 19, 2009 we will hold our Third Annual International Trends in Attribution Symposium (TIA). This is an entire day focused on the important topic of attribution.

We have assembled notable speakers with excellent topics to provide you with the conceptual as well as practical information you require to better address the expanding realm of attribution. This focused event will provide important information that is essential to you and your firm. Attend and you will gain greater insights, discover opportunities and methodologies, and learn of the latest theories about this hugely important topic.

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As an added incentive, we are giving away The Spaulding Series' latest book: *Classics in Investment Performance Measurement* to the first 10 paid registrants.

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# AGENDA: THURSDAY, NOVEMBER 19, 2009

7:15 - 8:15 AM	<b>REGISTRATION: CONTINENTAL BREAKFAST</b>
8:15 - 8:30 AM	<b>WELCOME</b> <i>David D. Spaulding, CIPM, The Spaulding Group, Inc.</i>
8:30 - 9:30 AM	<b>RISK ATTRIBUTION FOR PORTFOLIOS WITH STRATEGIC ASSET ALLOCATION</b> <i>Philippe Grégoire, Ph.D., Orfival</i> <ul style="list-style-type: none"><li>• Tactical asset allocation</li><li>• Diversification and allocation effect</li><li>• Selection effect</li></ul>
9:30 - 10:15 AM	<b>PERFORMANCE ATTRIBUTION FOR YIELD CURVE INSENSITIVE DEBT SECTORS</b> <i>Timothy P. Ryan, The Hartford Investment Management</i> <ul style="list-style-type: none"><li>• Introduce the concept of return neutralized weight analysis</li><li>• Apply this attribution approach to yield curve insensitive debt sectors</li><li>• Quickly extend this approach to yield-curve sensitive markets</li><li>• Present, by example, the material and compelling benefits this analysis has over the standard attribution formulas</li></ul>

10:15 - 11:00 AM	<b>MORNING BREAK</b>
11:00 - 11:45 AM	<b>FAST ATTRIBUTION</b> <i>John D. Simpson, CIPM, The Spaulding Group, Inc.</i> <i>Timothy R. Ryan, The Hartford Investment Management</i> <i>Stephen Campisi, CFA, Intuitive Performance Solutions</i> <i>David D. Spaulding, CIPM, The Spaulding Group, Inc.</i> <ul style="list-style-type: none"><li>• This innovative panel approach of attribution experts and practitioners will tackle a host of topics in an exciting lightning round, which is sure to provide you with insightful perspectives, ideas and opinions</li></ul>



11:45 - 12:45 PM	<b>LUNCH BREAK</b>
12:45 - 1:45 PM	<b>GLOBAL ATTRIBUTION</b> <i>Ed Rackham, Ph.D., Wilshire Analytics</i> <ul style="list-style-type: none"><li>• Construction of a global multi-factor attribution model</li><li>• Attribution of portfolio returns using a multi-factor model</li><li>• Analysis of global portfolio returns</li></ul>
1:45 - 2:45 PM	<b>FACTOR VS. DECISION BASED ATTRIBUTION</b> <i>Stephen Campisi, CFA, Intuitive Performance Solutions</i> <ul style="list-style-type: none"><li>• Contrasting the two major approaches to attribution</li><li>• How factors are handled</li><li>• Why decisions-based may make more sense</li></ul>

2:45 - 3:15 PM	<b>AFTERNOON BREAK</b>
3:15 - 4:00 PM	<b>ASSET OWNERS AND ATTRIBUTION: A CASE STUDY</b> <i>Greg Stewart, BNY Mellon Asset Servicing</i> <i>Frances Barney, BNY Mellon Asset Servicing</i> <ul style="list-style-type: none"><li>• How asset owners use attribution at all levels</li><li>• Quantify the impacts of fund level versus manager level decisions</li><li>• How to use attribution as an investment manager monitoring tool</li></ul>
4:00 - 4:45 PM	<b>BALANCED ATTRIBUTION</b> <i>David D. Spaulding, CIPM, The Spaulding Group, Inc.</i> <ul style="list-style-type: none"><li>• Why is it so hard? (it isn't!)</li><li>• Understanding what we are truly measuring</li><li>• Getting the numbers to make sense</li></ul>
4:45 - 5:00 PM	<b>CONFERENCE WRAP-UP &amp; CONCLUSION</b> <i>David D. Spaulding, CIPM, The Spaulding Group, Inc.</i>

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Total: \_\_\_\_\_ attendees at a cost of: \$ \_\_\_\_\_

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### TERMS & CONDITIONS

Conference Fee: Includes all sessions, lunch and documentation.

Cancellations: Cancellations received in writing before November 1, 2009 will be subject to a service charge of \$159.00. After this date, the full conference fee will be charged and no refunds given.

It may be necessary for reasons beyond the control of the organization to alter the content and timing of the program or the identity of the speakers. This contract is subject to United States Law.

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