PERFORMANCE PERSPECTIVES
with David Spaulding

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ATTRIBUTION ON INTERACTION

I keep thinking of topics that I need to write more in-depth articles on…just need to find the time. But in the mean time, I'll take advantage of this forum to *float* another idea and see what the reaction might be. The topic: attribution on interaction.

Interaction is almost like those three topics we're not supposed to discuss: religion, politics, and sex. You'll find that there are generally three camps:

1. Those who say it's a mistake for it to be there, so hide it
2. Those who insist that we provide visibility into it
3. Those who are confused about it and are looking for direction.

I must confess that I used to be in the first camp, so-to-speak. I saw nothing wrong with "hiding it." And how do we hide it? Well, perhaps we should see where it comes from, by looking at a familiar graphic, based on the Brinson models.

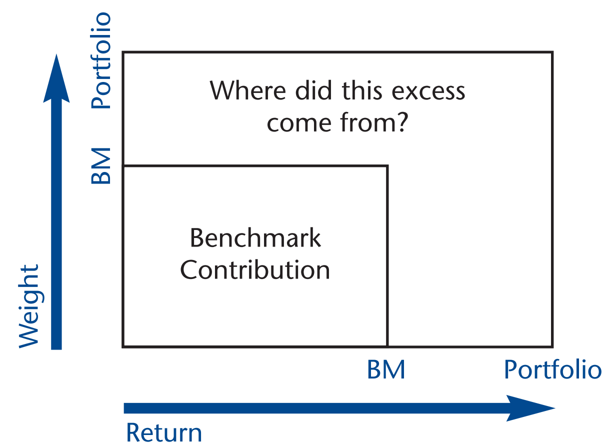

Figure 1

We'll begin with Figure 1, which shows the portfolio return vs. the benchmark's return (shown here as the benchmark contribution). In relative attribution, we seek to find the excess return, thus the space that's unaccounted for by the benchmark.

Figure 2 breaks this area down into the area we're familiar with. The Interaction Effect is derived from the *interaction* of the allocation and selection decisions. Thus, we have as a formula:

$$InteractionEffect = (w - \overline{w}) \times (r - \overline{r})$$

where

w = weights
r = returns
overbar is used for benchmark; absence of overbar means portfolio.

The Journal of Performance Measurement®:

UPCOMING ARTICLES

A General Approach for Linking Arithmetic Attribution Results Over Time
– *Mikael Broberg*

Fixed Income Attribution: A Unified Framework Part 1
– *Bernard Murira and Hector Sierra*

Is Sharpe Ratio Still Effective?
– *Yasuaki Watanabe*

Risk Attribution
– *Philippe Grégoire and Herve van Oppens*

Do Stock Indexes Have Abnormal Performance?
– *Bruce Costa and Keith Jakob*

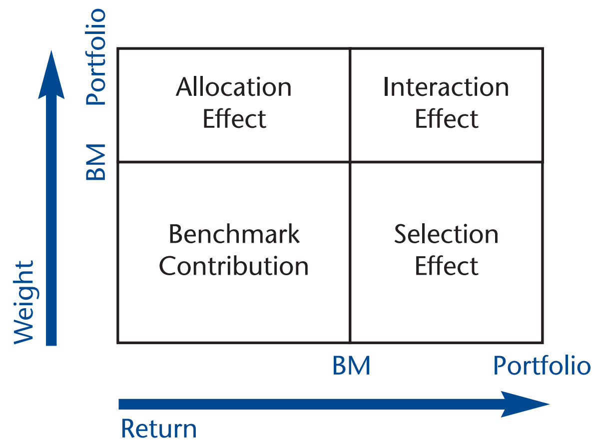

Figure 2

If we want to "eliminate" the interaction effect, we can substitute the portfolio weight for the benchmark weight in the selection effect formula[1]; i.e., instead of:

$$SelectionEffect = \overline{w} \text{ x } (r - r)$$

we have:

$$SelectionEffect = w \text{ x } (r - \overline{r})$$

This results in our figure 3.

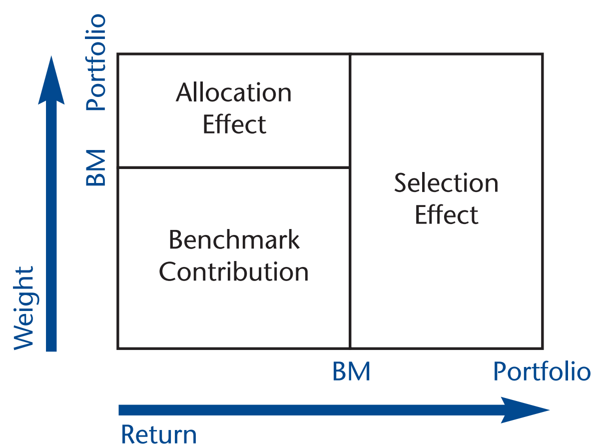

Figure 3

As you can see, we haven't *eliminated* the interaction effect; we've simply assigned it to the selection effect. But is this a good idea? Well, it definitely saves us from having to explain what it means…but does this justify our action? I'd say in general, no.

It's interesting that some have said that "if you're a bottom up manager, you should" do this; that is, include the interaction effect with selection. Why? Where's the rationale / justification for this?

1 An alternative would be to substitute the portfolio return for the benchmark return in the allocation formula; in this case, interaction would be grouped with the allocation effect.

Let's examine two simple cases:

	Portfolio Weight	Benchmark Weight	Overall Benchmark Return	Portfolio ROR	Benchmark ROR	Allocation	Selection	Interaction
Technology	5%	10%	2%	4%	3%	-0.15%	0.10%	-0.05%
Banks	4%	8%	2%	3%	4%	-0.16%	-0.08%	0.04%

Please note that we calculated these returns using the Brinson-Fachler model.

What do you see when you look at the technology sector? The manager under-weighted a sector with a benchmark return (3%) that exceeded the benchmark's return. That's not considered to be a good idea, thus we see an allocation effect of -0.15 percent. We also observe that the manager outperformed the benchmark (4% to 3%). Because of the under-weighting and outperformance, our interaction effect is negative. If we were to combine this effect with selection (as some would recommend), we would penalize that decision by 5 bps ... is this fair? After all, the poor interaction actually stemmed from the allocation decision, didn't it? Under this scenario, wouldn't it be more appropriate to include it with allocation (if you're going to combine it somewhere)?

The second example again shows a poor allocation decision (under-weighting a sector with above average performance), but this time our portfolio return is below the benchmark (3% vs. 4%); and as a result, the selection effect is negative. When we combine the allocation and selection decisions, our interaction is positive ... at least we did something right! Seriously, this is one of those "funny" parts of interaction, when both the selection and allocation weighting are negative a positive interaction effect is born. If we combine it with selection we're improving its effect; but wouldn't it be better to allocate it across both selection and allocation? Why should only selection benefit from this slight improvement?

My point is that to blindly place it with selection (or even allocation) is not necessarily the best idea. While we haven't yet seen any *interaction attribution models*, we can see that their development shouldn't involve "rocket science" (we'll take a stab at a basic one in the article that will be published next year).

Your thoughts?

"YOU HAD ME AT 'HELLO'"[2]

At our recent Fixed Income Attribution Symposium, Steve Campisi gave a talk where he touched on the topic of *precision vs. accuracy*. How precise is precise enough? I've also touched on this in the past.

Well, shortly before Steve's presentation I was speaking with an individual from a very large asset manager. I asked him how much money they had under management ("AUM") and he said "1 trillion, 46 billion,…" and he was beginning to give me the latest figure for millions…well, he had **me** at "hello"! At those heights, do we really need to know the precision of millions?

2 In case it's not obvious, think Dorothy in the movie *Jerry Maguire*

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.

Some, no doubt, want this kind of detail. To simply say "we have 1 trillion under management" or "we have 1 trillion, 46 billion" would be deemed an inaccurate statement, since we know the number can't possibly be exactly these values. But then there's the rest of us who find these values accurate enough.

There is no doubt that there are at least two camps here, so being aware of what each expects and being able to deliver is the challenge.

FROM A READER

"I wanted to comment that I particularly enjoyed this month's newsletter. I look forward to learning more about Morningstar's approach, per your reference. I totally agree that the vast majority of plan sponsors are not looking at and considering their returns. And you're spot-on with recommending the new GIPS Handbook to people – I've found it to be immensely useful. The discretionary/nondiscretionary often causes confusion, so it would be great to see an interpretation from CFA Institute staff. I certainly also appreciated the 9/11 tribute. You may know I routinely forward your letter to colleagues at our firm and affiliated companies around the world, and I was quite proud to do so with the inclusion of your special note on this topic. The coming few days will likely be quite emotional for Americans (and those who embrace our ideals). I am impressed by the memorial you managed to arrange in your local community."

CONGRATS!

We have two special events to celebrate / acknowledge with this issue.

First, a wedding! Our older son, Christopher, got married September 8th!

October 5th saw the birth of Patrick Fowler's second child, Michael!

Lots to be thankful for at The Spaulding Group!

THE SPAULDING GROUP'S 2006 INVESTMENT PERFORMANCE MEASUREMENT CALENDAR OF EVENTS

DATE	EVENT	LOCATION	DEADLINE TO REGISTER
November 9-10	Performance Measurement Forum	Milan, Italy	November 3
Nov. 30 - Dec. 1	Performance Measurement Forum	Orlando, FL (USA)	November 24
December 5-6	Introduction to Performance Measurement Training	Chicago, IL (USA)	December 1
December 7-8	Performance Measurement Attribution Training	Chicago, IL (USA)	December 1

For Additional information on any of our 2006 events, please contact Christopher Spaulding at 732-873-5700

Stay Tuned to next month's newsletter for a complete listing of our 2007 Calendar of Events.

Save The Date!

The Journal of Performance Measurement®
Fifth Annual International

PMAR

Performance Measurement, Attribution & Risk

Conference

May 15th - 16th, 2007

TRAINING...

Gain the Critical Knowledge Needed for Performance Measurement and Performance Attribution

TO REGISTER:

Phone: 1-732-873-5700
Fax: 1-732-873-3997
E-mail: info@SpauldingGrp.com

NATIONAL REGISTRY OF CPE SPONSORS

The Spaulding Group is registered with CFA Institute as an Approved Provider of professional development programs. These programs (Introduction to Performance Measurement & Performance Measurement Attribution) are eligible for PD credit hours as granted by CFA Institute.

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 5-6, 2006 – Chicago, IL

15 CPE Credits upon course completion

CFA INSTITUTE PROFESSIONAL DEVELOPMENT QUALIFIED ACTIVITY 12 CREDIT HOURS

The Spaulding Group is registered with CFA Institute as an Approved Provider of professional development programs. This program is eligible for 12 PD credit hours as granted by CFA Institute.

PERFORMANCE MEASUREMENT ATTRIBUTION

A day and a half devoted to this increasingly important topic. The Spaulding Group, Inc. invites you to attend Performance Measurement Attribution on these dates:

December 7-8, 2006 – Chicago, IL

11 CPE Credits upon course completion

CFA INSTITUTE PROFESSIONAL DEVELOPMENT QUALIFIED ACTIVITY 10 CREDIT HOURS

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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 CGIPS/CIPM program. To date, over 1,500 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 training in-house, at their facilities. This saves our clients the cost to transport 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 on David's second book Investment Performance Attribution (McGraw-Hill, 2003).

For as little as 10 people your firm can hold a Spaulding Group training session. And you can have the training customized to meet your unique needs.