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, we focus 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.

Our clients appreciate our industry focus. We understand their business, their needs, and the opportunities to make them more efficient and competitive.

For additional information about The Spaulding Group and our services, please visit our web site or contact Chris Spaulding at

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DOES MODIFIED DIETZ *REALLY* WORK ON A DAILY BASIS?

You're no doubt familiar with the Modified Dietz formula:

$$R = \frac{EMV - BMV - C}{BMV + WC}$$

where:
   R = return
   EMV = Ending Market Value
   BMV = Beginning Market Value
   C = Cash Flow
   W = Weighting factor.

There are two versions of the weighting factor formula, one for start-of-day (SOD) and one for end-of-day (EOD):

$$W_{SOD} = \frac{CD - D + 1}{CD} \qquad W_{EOD} = \frac{CD - D}{CD}$$

where:
   CD = number of calendar days in the period
   D = day of flow.

Some have applied the Modified Dietz on a daily basis, where the weighting factor equals one if it's start-of-day treatment and zero if end-of-day treatment. Okay, simple enough.

If a firm elects to go with either a daily calculation method or to revalue the portfolio at the time of cash flows, will Modified Dietz work? Let's first recall the rule that's in the GIPS®[1]: "For periods beginning 1 January 2010, firms must value portfolios *on the date* of all large external cash flows."[2]

Now pay close attention to the highlighted words: *on the date* of all large external cash flows. While we're discussing the Modified Dietz formula here, we're actually addressing this language. Let's see an example to understand where I'm heading.

The simplest way to address this is with a security-level return.[3]

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1 While I don't necessarily think that what's in GIPS should be the only way we do things, these standards do offer guidance which many refer to, even when we're not dealing with a GIPS-specific issue.

2 Global Investment Performance Standards. February 2005. {Paragraph 2.A.2.b., page 10.}

3 By now you're hopefully familiar with my disdain for time-weighted returns for sub-portfolio returns; never-the-less, this example is helpful to explain what I'm getting at.

- We begin with a portfolio that started the period with 100 shares of XYZ valued at $10 per share (beginning market value of $1,000).

- The manager decides to purchase an additional 100 shares when the price drops to $8.

- At the close of the day the price has gone up to $11.

- What's our return?

If we use the Modified Dietz formula and assume start-of-day treatment we have the following:

$$R_{ModDietz} = \frac{EMV - BMV - C}{BMV + WC} = \frac{2200 - 1000 - 800}{1000 + 800} = 22.22\%$$

Clearly a cash flow of this magnitude required revaluation **on the date** of the cash flow, and that's what we did; we revalued the portfolio using the prior night's closing value ($10 per share). But also recall that time-weighting is supposed to eliminate the effects of cash flows…but have we?

I would suggest that we should revalue the portfolio **at the time** of the cash flow. That is, to revalue the portfolio when the flow actually occurs…at least in this type of scenario.

I would prefer to use the True Daily Rate of Return formula:

$$R = \prod_{i=1}^{n} \frac{EMV_i}{BMV_i} - 1$$

If we apply this formula to our example we get:

$$R_{TrueDaily} = \prod_{i=1}^{n} \frac{EMV_i}{BMV_i} = 1 = \frac{800}{1000} \times \frac{2200}{1600} - 1 = 10\%$$

The difference between our two results (22.22% vs. 10%) is significant, no doubt. The True Daily return is arguably more accurate, since we've eliminated the effect of the flow (the additional purchase) and only reflect the change in the market value that day (from $10 to $11 per share).

Being realistic, how easy is it to revalue a portfolio at the time of a cash flow? Probably impossible; thus, we either use the value of the portfolio at the start-of-the-day or at the end-of-the-day, whichever convention applies. But I would suggest that it also means that the Modified Dietz is still approximating the true return.

The ideal is to revalue when flows occur. If you insist on using time-weighting for sub-portfolio returns, then ideally you revalue whenever a purchase or sale is made (which should be a more trivial undertaking).

I would not suggest that we change the language in GIPS to "For periods beginning 1 January 2010, firms must value portfolios **at the time** of all large external cash flows" because that would be extremely challenging. But if you're able to do this, that would be ideal.

IT'S ALL GREEK TO ME

I've observed that when formulas are presented with lots of Greek symbols, they tend to appear more abstruse. What do you think?

For example, if you saw this:

$$\delta = \frac{\lambda - \omega - \sum \tau}{\omega + \sum \kappa\tau}$$

would you be as comfortable grasping it as if you saw this?

$$R = \frac{EMV - BMV - \sum C}{BMV + \sum WC}$$

When I was an undergrad Math major, I knew my Mu's from my Nu's, and my Pi's from my Psi's, but no more. And I think that's part of the problem…if I see a Greek character (ζ, for example), unless I know what it is, I can't say it and therefore can't easily grasp it.

While I was working on my MBA, I had the pleasure of teaching undergraduate courses at night. One semester I taught a business math course and I suggested that mathematicians like to use characters such as $\int$, Σ, and Π to partly intimidate the uninitiated. Greek letters are just another way to do this.

Now, there are clearly some places where Greek is needed … standard deviation, for example, where we typically see σ (lower case Sigma) employed. But that's something a lot of folks are familiar with. But why use Greek if we don't have to? I'm sure someone can come up with a rational reason, so perhaps I'm just venting…as always your thoughts are welcome.[4]

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4 To show some sensitivity to political correctness, I should point out that my remarks in no way show any dislike for Greeks (the people) … some of my best friends are Greek. I even have a brother-in-law who's Greek! It's just the letters that I'd like to see less of.

THE NAME GAME

Okay, it's official. The AIMR-PPS® Implementation Committee has finally changed its name. Now we know that we haven't had an AIMR for quite some time, but given the pending (and now official) convergence of the various country standards, having an interim name change didn't make a lot of sense. But now that the AIMR-PPS are essentially no more, the committee that oversaw them needed a new name, and we have one: North American Investment Performance Committee (NAIPC). Since there is no longer an AIMR-PPS, you may wonder what this group will do; well, it will represent the interests of the North American investment community, with Neil Riddles serving as its first chair.

COMMENTS FROM READERS

You know how we love to hear from you; here is something that came in after last month's newsletter was distributed:

I just read the June 2006 edition of Performance Perspectives. First, let me thank you for the vote of confidence. It is greatly appreciated.

On the IRR for attribution on the stock level, I agree with all of your points. I would just add one more. Most attribution is done versus the index. When using the TWRR, the stock and index always have the same return. For the individual stock, the IRR is much more useful.

I should also mention that my suggestion that a quote I offered came from Shakespeare was affirmed by one of our readers…thanks!

CORRECTION…EXPANSIONS

Last issue we mentioned that Neil Riddles represents the US on the GIPS Country Council; while this is true, it's only partly true…he also represents Canada! Congratulations, again.

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

DATE	EVENT	LOCATION	DEADLINE TO REGISTER
August 8-9	Introduction to Performance Measurement Training	Sydney, Australia	August 4
August 10-11	Performance Measurement Attribution Training	Sydney, Australia	August 4
August 21-22	CGIPS/ CIPM Principles Preparation Class	Los Angeles, CA (USA)	August 16
August 24-25	CGIPS/ CIPM Principles Preparation Class	Princeton, NJ (USA)	August 18
August 28-29	CGIPS/ CIPM Expert Preparation Class	Los Angeles, CA (USA)	August 23
August 30-31	CGIPS/ CIPM Expert Preparation Class	Princeton, NJ (USA)	August 25
September 12-13	Introduction to Performance Measurement Training	Boston, MA (USA)	September 4
September 12-13	CGIPS/ CIPM Principles Preparation Class	Chicago, IL (USA)	September 6
September 14-15	Performance Measurement Attribution Training	Boston, MA (USA)	September 4
September 14-15	CGIPS/ CIPM Principles Preparation Class	Boston, MA (USA)	September 8
September 18-19	Introduction to Performance Measurement Training	Los Angeles, CA (USA)	September 11
September 20-21	Performance Measurement Attribution Training	Los Angeles, CA (USA)	September 11
October 9-10	Introduction to Performance Measurement Training	New York, NY (USA)	October 2
October 11-12	Performance Measurement Attribution Training	New York, NY (USA)	October 2
October 18	Fixed Income Attribution Symposium FIA	Philadelphia, PA	October 17
October 23-24	Introduction to Performance Measurement Training	Dallas, TX (USA)	October 16
October 25-26	Performance Measurement Attribution Training	Dallas, TX (USA)	October 16
November 9-10	Performance Measurement Forum	Milan, Italy	November 3
November 14-15	Introduction to Performance Measurement Training	Portland, OR (USA)	November 7
November 16-17	Performance Measurement Attribution Training	Portland, OR (USA)	November 7
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

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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:

August 8-9, 2006 – Sydney, Australia

September 12-13, 2006 – Boston, MA

September 18-19, 2006 – Los Angeles, CA

October 9-10, 2006 – New York, NY

October 23-24, 2006 – Dallas, TX

November 14-15, 2006 – Portland, OR

December 5-6, 2006 – Chicago, IL

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August 10-11, 2006 – Sydney, Australia

September 14-15, 2006 – Boston, MA

September 20-21, 2006 – Los Angeles, CA

October 11-12, 2006 – New York, NY

October 25-26, 2006 – Dallas, TX

November 16-17, 2006 – Portland, OR

December 7-8, 2006 – Chicago, IL

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