

PERFORMANCE PERSPECTIVES

with David Spaulding



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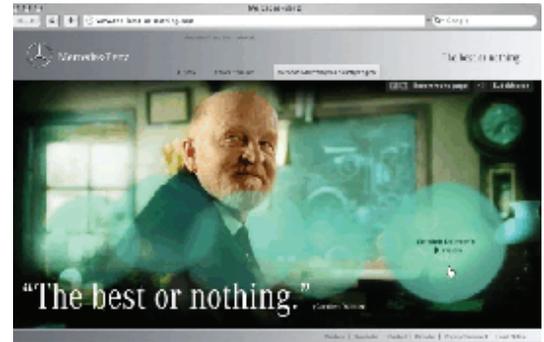
THE BEST AT ALL TIMES IS OUR GOAL

Mercedes-Benz has a new slogan: “The best or nothing. That is what drives us.” I wish we had thought of this, as it reflects our view about what we offer to our clients.

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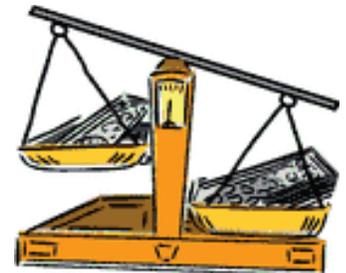
If we ever fail to deliver, we hope we'll be told so that we can correct and improve.



IT'S TIME TO ABANDON THE AGGREGATE METHOD FOR COMPOSITE RETURNS

I have been on a bit of a bandwagon of late in my blog on the subject of the aggregate method to derive composite returns. Recall that there are three approaches to calculate composite returns for GIPS® (Global Investment Performance Standards) purposes:

- **asset-weighted:** use the beginning market value to asset weight the constituent returns
- **asset-weighted plus weighted flows:** use the beginning market value, plus weighted flows, to asset weight the constituent returns
- **aggregate method:** pretend the entire composite is a portfolio.



To be quite honest and candid, I hadn't given the aggregate method much thought until quite recently. In our *Fundamentals of Performance Measurement* course we spend some time discussing the GIPS standards and these methods. And the examples we use show no hint of a problem with the aggregate method. However, as a result of some recent research, I've concluded that the method is potentially quite flawed. I will step through this in some detail so as to make my case.

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The Journal of Performance Measurement®:

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Performance Outsourcing 2010 – Broadening the Debate

– Mark Goodey and Jim Trotter

GIPS 2010: Highlights of Forthcoming Changes

– Todd Juillerat

Extreme Risk Analysis

– Lisa Goldberg, Michael Hayes,
Jose Menchero, Indrajit Mitra

Determining the Optimal Benchmark Indices for a Domestic Equity Returns-Based Style Analysis

– David Blanchett

Advocating a Trade/Strategy Approach to Attribution

– Jem Tugwell

Handling intraperiod new accounts

Not many GIPS-compliant firms introduce new accounts into a composite mid period, though I'm aware that this is occasionally done, and it can make sense if the strategy is so liquid that it takes only a day or two to get the account invested.

A few years ago I conducted a study for Bear Stearns.¹ It wasn't GIPS-related, but had a similar *look and feel*.² They were aggregating accounts in order to report the return on the “family” or “household.” They had previously used an *asset-weighted plus cash flow* approach, but had shifted to the aggregate method. The results they obtained were often nonsensical, however. At first I didn't understand why there was a problem, as I thought of the methods as essentially being equivalent. Well, here is an example of what they discovered:

	Case with new account added					Asset-wtd		Asset wtd + wtd cf	
	BMV	Mid-pd CF	Mid-pd MV	EMV	ROR	Weight	Wtd ROR	Weight	Wtd ROR
A	250,000	0	242,000	260,000	4.00%	1.0000	0.0400	0.6667	0.0267
B	0	250,000	250,000	255,000	2.00%	0.0000	0.0000	0.3333	0.0067
Total	250,000	250,000	492,000	515,000			4.00%		3.33%
Aggregate Method			Revalue for flow =		1.33%				

Table 1

Simple example, yes? We begin with only one account and mid period add a second. Account A has a return for the full month while account B has a return for only the last half of the month. The aggregate return is significantly lower than both; how can this possibly be? The asset weighted plus cash flow approach takes into account the introduction of the new account, while the basic asset-weighted approach doesn't, but clearly these returns make more sense.

I was quite dumbfounded by this until it struck me that the problem was the revaluation of the first account because of the new account coming in. While the standards at the time recommended revaluation, it was of portfolios in order to segment periods to completely eliminate the impact of cash flows. But why do we have to do this with the composite, since the manager isn't managing the composite but managing the two accounts? The introduction of the second account has absolutely nothing to do with the first. My conclusion at the time: don't revalue for new accounts added mid period. I didn't concern myself with whether the aggregate method failed completely and didn't do any further investigation.



Recently another client brought a similar case to me: this time, they had a large account which essentially split into two. They allocated the assets in such a way that the spun off account resembled the strategy from the start, and they therefore wanted to introduce it immediately into the composite. This event occurred mid period and the results that were obtained from their performance system appeared to be erroneous. When I learned who their vendor was I immediately recognized the problem: the vendor uses the aggregate

¹ Because of their demise I am comfortable mentioning their name as the client.

² I wrote about this case previously in our November 2006 issue. I suggest you review that for all the details.

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method and they had the option "to revalue" turned on. The cure: turn it off! But, is this sufficient? And so, I revisited the earlier case and looked at the aggregate method without revaluing. As you can see from Table 2 if we don't revalue we obtain the same result as we get with the most basic approach, which is clearly an improvement over the revaluation method.

Case with new account added						Asset-wtd		Asset wtd + wtd cf	
	BMV	Mid-pd CF	Mid-pd MV	EMV	ROR	Weight	Wtd ROR	Weight	Wtd ROR
A	250,000	0	242,000	260,000	4.00%	1.0000	0.0400	0.6667	0.0267
B	0	250,000	250,000	255,000	2.00%	0.0000	0.0000	0.3333	0.0067
Total	250,000	250,000	492,000	515,000			4.00%		3.33%
Aggregate Method					Revalue for flow =			1.33%	
					Don't revalue for flow =			4.00%	

Table 2

A colleague suggested the following example as proof that the aggregate method (with revaluation) is perfectly fine:

Another case with new account added						Asset-wtd		Asset wtd + wtd cf	
	BMV	Mid-pd CF	Mid-pd MV	EMV	ROR	Weight	Wtd ROR	Weight	Wtd ROR
A	250,000	0	225,000	249,975	-0.01%	1.0000	-0.01%	0.6667	-0.01%
B	0	250,000	250,000	277,750	11.10%	0.0000	0.00%	0.3333	3.70%
Total	250,000	250,000	475,000	527,725			-0.01%		3.69%
Aggregate Method					Revalue for flow =			-0.01%	
					Don't revalue for flow =			7.39%	

Table 3

We see that the first account's value dropped by 10%; this was followed after the flow with an 11.10% positive return, which nets to -0.01 percent. The second account also achieved an 11.10% return for the second half of the month. He felt that the asset-weighted plus weighted flow result (3.69%) was wrong because it included the impact of the new account, and that the aggregate with revaluation result (-0.01%) which matches the first account's with no impact from the second is correct. But how can this be? Why would I add an account mid period if I didn't want its performance to have an impact on the composite's return? If I didn't want this to happen then I would wait until month-end to add it. The aggregate method, as well as the basic asset-weighted method, fail to do this.³

It's a fact that the standards permit mid period entry of new accounts; and I believe that it's also incontrovertible that if a firm takes advantage of this option, they surely want its result to have some influence on the composite's result. This is only achieved with the asset-weighted plus weighted flow method in this case.

GIPS Requirements

This initial review got me thinking more about this method. And so, I visited the GIPS website to check out the Q&As that deal with the new requirement to revalue. An October 2009 post reads:

³ Given these findings you might wonder why I'm not also calling for the banning of the basic asset-weighted approach. Perhaps I should, but I don't because it's understood to be less accurate, while there's a perception with some that the aggregate is actually the most accurate: in reality, it's the least accurate. And while there are times when it doesn't produce the desired result, at least they're not as grossly misleading as what we are finding in these examples with the aggregate approach.

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“Beginning 1 January 2010, firms must create a large cash flow policy for each composite. The large cash flow policy must be created on a prospective basis, and must be consistently applied. Firms calculating composite performance using the aggregate return method must create a large cash flow policy at both the composite level and the portfolio level. The large cash flow policy does not have to be the same for both the composite and its portfolios.

“For example, assume a firm's policy is to revalue portfolios for external cash flows that exceed 10% of the portfolio's beginning market value. The firm must then determine how the revaluation of one portfolio within the composite will impact the composite calculation. The firm could adopt a policy whereby the entire composite is revalued if the cash flow that triggered the portfolio revaluation exceeds a certain monetary amount or a percentage of the composite's assets. Another possible option would be for the firm to adopt a policy whereby the entire composite is revalued if any portfolio within the composite is revalued.

“Although portfolio-level returns are not used when calculating composite-level returns under the aggregate method, portfolio-level returns are used when calculating the measure of dispersion of individual portfolio returns, a required disclosure in the compliant presentation.”

As you can see, we're required to revalue composites for large flows. This, to me, is hugely problematic when dealing with situations as described above. I therefore strongly recommend that the answer be modified so as to exclude cases where the firm is introducing new accounts within a month.

Aggregate method explored in general

Not being satisfied, I decided to explore this matter further.

First, does revaluing help in cases other than when the large flow is the result of a new account? Table 4 shows two cases where we have three accounts, one with a large flow which can cause a revaluation.

In the first case the failure to revalue produces a return that appears to be excessive. When we revalue, the return improves, but it's still quite different than what we obtain using the asset-weighted approaches.

Case #1						Asset-wtd		Asset wtd + wtd cf	
	BMV	Mid--pd CF	Mid-pd MV	EMV	ROR	Weight	Wtd ROR	Weight	Wtd ROR
A	100,000	0	101,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
B	100,000	0	102,000	105,000	5.00%	0.3333	0.0167	0.3175	0.0159
C	100,000	30,000	95,000	136,000	3.36%	0.3333	0.0112	0.3651	0.0123
Total	300,000	30,000	298,000	345,000			4.12%		4.08%
					Revalue for flow =	4.48%			
					Don't revalue for flow =	4.76%			
Case #2						Asset-wtd		Asset wtd + wtd cf	
	BMV	Mid--pd CF	Mid-pd MV	EMV	ROR	Weight	Wtd ROR	Weight	Wtd ROR
A	100,000	0	95,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
B	100,000	0	95,000	105,000	5.00%	0.3333	0.0167	0.3175	0.0159
C	100,000	30,000	95,000	136,000	3.36%	0.3333	0.0112	0.3651	0.0123
Total	300,000	30,000	285,000	345,000			4.12%		4.08%
Aggregate Method					Revalue for flow =	4.05%			
					Don't revalue for flow =	4.76%			

Table 4

In the second case, where we force the portfolios to behave identically at the mid period point, the revaluation clearly improves the situation. In seeing these I began to wonder if the aggregate method has any value, though. Okay, in this second case the return seems acceptable, but this is only because we forced the accounts to move in lockstep. We know that portfolios within a composite don't necessarily behave this way, and that perhaps the first case is more likely to occur, which results in what are arguably improper and overstated returns.

The problem with these cases is that it is still difficult to know whether the asset weighted approaches are the right ones or if the aggregate methods' are. And so, I decided to construct a scenario where it should be even clearer.

Table 5 shows a similar scenario, but taken even further with all three accounts having identical returns for the month: 4 percent. To me this says that the only valid composite return must have to also be 4 percent. Can anyone possibly argue with this? You'd be surprised!

In our first example (case #3), at mid period the three accounts behave slightly differently. Both asset weighted methods achieve the correct returns of 4 percent; but the two aggregate methods (revaluing or not revaluing) overstate the returns by 43 and 71 bps respectively. In case 4, I again force the accounts to behave identically at mid period: each is down by 5 percent. And again, the asset-weighted methods provide us with the correct return for the composite: 4 percent. In this case, the revaluation provides us with the accurate result as well, which is something to be pleased with, while the non-revaluation method doesn't. This suggests that to revalue will, in general, improve the aggregate method, though we know from our earliest examples involving new accounts that there is at least one exception to this.

Case #3						Asset-wtd		Asset wtd + wtd cf	
	BMV	Mid--pd CF	Mid-pd MV	EMV	ROR	Weight	Wtd ROR	Weight	Wtd ROR
A	100,000	0	101,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
B	100,000	0	102,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
C	100,000	30,000	95,000	136,840	4.00%	0.3333	0.0133	0.3651	0.0146
Total	300,000	30,000	298,000	344,840			4.00%		4.00%
Aggregate Method					Revalue for flow =	4.43%			
					Don't revalue for flow =	4.71%			
Case #4						Asset-wtd		Asset wtd + wtd cf	
	BMV	Mid--pd CF	Mid-pd MV	EMV	ROR	Weight	Wtd ROR	Weight	Wtd ROR
A	100,000	0	95,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
B	100,000	0	95,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
C	100,000	30,000	95,000	136,840	4.00%	0.3333	0.0133	0.3651	0.0146
Total	300,000	30,000	285,000	344,840			4.00%		4.00%
Aggregate Method					Revalue for flow =	4.00%			
					Don't revalue for flow =	4.71%			

Table 5

Our final case (Table 6) is quite similar to what we have in Table 5, though the mid period returns are slightly different. Again, I force the ending results to all equal 4.00 percent. We again see how the aggregate method, even with revaluation, results in an overstatement.

	BMV	Mid--pd CF	Mid-pd MV	EMV	ROR	Asset-wtd		Asset wtd + wtd cf	
						Weight	Wtd ROR	Weight	Wtd ROR
A	100,000	0	101,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
B	100,000	0	100,000	104,000	4.00%	0.3333	0.0133	0.3175	0.0127
C	100,000	30,000	99,000	135,520	4.00%	0.3333	0.0133	0.3651	0.0146
Total	300,000	30,000	300,000	343,520			4.00%		4.00%
Aggregate Method					Revalue for flow =	4.10%			
					Don't revalue for flow =	4.29%			

Table 6

Bottom line - so what does this mean?

The aggregate method has been a permitted way to derive composite returns since at least the early 1990s, and I never paid it much attention. I am now convinced that it will more often than not result in erroneous results and therefore shouldn't be permitted.

The evidence I provide here is pretty clear, that its results can be bogus and perhaps always are, though perhaps not to this extent. Only when everything works out perfectly will it provide us with the right answer; and yet, the two asset-weighted methods, especially when we include weighted flows, provide us with more accurate returns.

Consider this: GIPS now requires firms to revalue portfolios for large cash flows; and why is this? To improve their accuracy. GIPS no longer allows the allocation of carve-outs; and why was this done? Because the GIPS Executive Committee apparently believed that this allocation provided less than accurate results. Effective next January, private equity managers must capture cash flows on a daily basis; again, why? To improve accuracy. So the message is clear: we want more accurate returns. Then why would we continue to permit a method to be used which is clearly flawed?

What is the composite return to represent? As my colleague, John Simpson recently pointed out in a message to me:

Interestingly (at least to me), the guidance for GIPS provision 2.A.3 is a little uneven in discussing the three composite return methods (asset-weighted, asset-weighted plus cash flows, aggregate).

It starts with (what is, arguably) the strong statement that "The objective in calculating the composite's return is to use a method that will produce the same value as if the assets of all the individual portfolios in the composite are aggregated and a return is calculated for the one 'master portfolio.'"

That statement is followed with a (somewhat) contradictory statement (acknowledgment?) that "... if a composite contains two portfolios, one of which is 10 times the size of the other, the rate of return for the larger portfolio should have more impact on the composite return than that of the smaller portfolio."

I would argue that the composite return is intended to convey how the manager did in executing their strategy, clear and simple. And they execute this strategy across accounts, not at the composite level. And therefore it should represent an asset-weighted average of the actual portfolios that make up the composite. The composite is not an account.⁴



⁴ Perhaps this should be our mantra: the composite is not an account, the composite is not an account, ...

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.

I will be sending a formal letter to the GIPS Executive Committee recommending that they consider dropping the aggregate method from the list of acceptable formulas to derive composite returns; recall that the Original Dietz, a previously acceptable method for account returns, was dropped in 2005, so we have a precedent for eliminating formulas which are deemed less accurate. I suspect that such a change would most likely have to be delayed until the next release of GIPS, which is fine, but it should be done. Second, I will ask them to modify the Q&A that is on the GIPS website to allow firms not to revalue if they use the aggregate method in the case of new accounts added mid period. It is quite clear that these results are spurious.

Some might feel that firms shouldn't be permitted to add accounts mid period. If the decision is made to disallow this going forward, that will be fine with me. However, compliant firms are not forbidden to do this today, and it's only logical that if a firm adds an account mid period, that its performance should contribute to the composite's overall return: this is achieved with the asset weighted method that includes weighted flows.

(Note: this is an admittedly very long newsletter piece and more rightly should be an article: perhaps it will be. But for now, it's my way of getting my views out quickly on this topic. Thank you for your patience and perseverance, and getting this far!)

A NEW HEAD OF THE CIPM PROGRAM

Philip Lawton has left the CFA Institute for a new venture and has been replaced as head of the CIPM program by his former sidekick, Todd Jankowski. Todd was formerly with Northwestern Mutual, and he and I served together on the GIPS Investment Performance Council for several years. I have great faith that the CIPM program is in excellent hands. Congratulations Todd and the best of luck! And best wishes to Philip.



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

DATE	EVENT	LOCATION
August 10-11, 2010	Fundamentals of Performance Measurement Training	New Brunswick, NJ (USA)
August 12-13, 2010	Performance Measurement Attribution Training	New Brunswick, NJ (USA)
August 23-24, 2010	CIPM™ Principles Exam Preparation Class	London, England (UK)
August 25-27, 2010	CIPM™ Expert Exam Preparation Class	London, England (UK)
September 13-14, 2010	CIPM™ Principles Exam Preparation Class	Los Angeles, CA (USA)
September 15-17, 2010	CIPM™ Expert Exam Preparation Class	Los Angeles, CA (USA)
September 20-21, 2010	CIPM™ Principles Exam Preparation Class	New Brunswick, NJ (USA)
September 22-24, 2010	CIPM™ Expert Exam Preparation Class	New Brunswick, NJ (USA)
September 27-28, 2010	Fundamentals of Performance Measurement Training	Boston, MA (USA)
September 29-30, 2010	Performance Measurement Attribution Training	Boston, MA (USA)
October 19-20, 2010	Fundamentals of Performance Measurement Training	San Francisco, CA (USA)
October 21-22, 2010	Performance Measurement Attribution Training	San Francisco, CA (USA)
November 16-17, 2010	Fundamentals of Performance Measurement Training	Chicago, IL (USA)
November 18-19, 2010	Performance Measurement Attribution Training	Chicago, IL (USA)
December 7-8, 2010	Fundamentals of Performance Measurement Training	New Brunswick, NJ (USA)
December 9-10, 2010	Performance Measurement Attribution Training	New Brunswick, NJ (USA)

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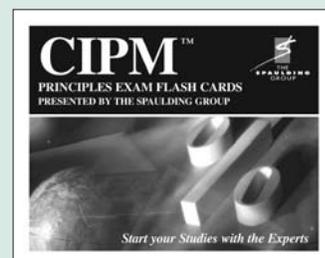
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