Volume 6, No. 11

# Senior Consultant

The Voice of the Investment Management Consultant

## A Virtual Reality Without Peers

*Ron Surz, President, PPCA, Inc.*

It's the 21st century, and much that had been science fiction is no longer fiction – space travel, wireless communications, flat screen TVs and the like. Virtual reality is one such benefit of our technological evolution. Strap on your head tracker, grab your data gloves, mount your virtual reality POD, and you're ready for an experience that you cannot have in the real world. Blast into outer space in your private rocket ship or go dinosaur hunting in Tanzania. The possibilities are limitless. You are master of the universe.

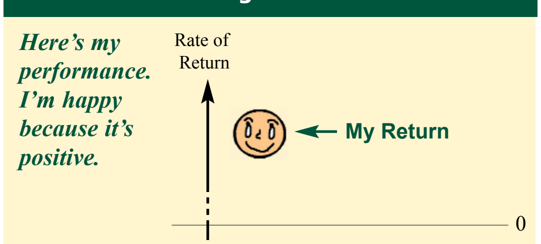
Virtual reality has even entered the realm of financial decision-making. Investment manager performance is fairly and accurately evaluated against a custom simulated universe, a task that cannot be achieved in the real world. The real world cannot clone your investment manager over and over again to create a 21st century peer group. A virtual reality construct called Portfolio Opportunity Distributions (PODs) can and does create this pure and unbiased backdrop for evaluating your investment manager. You are master of your manager's investment universe.

But let's not leap too far into the 21st century too quickly. After all, this century is just underway. In the following, we show how and why real world performance evaluations have not and cannot work. The virtual reality solution called PODs is the only approach that does work. It's a story told in pictures, so you should find it entertaining.

### The Real World Approach

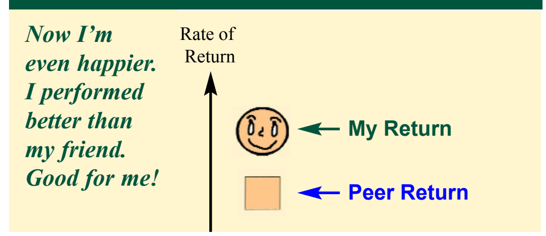
In the real world, I start with my performance result, my rate of return, as shown in Figure 1. I'm pleased that I have earned a positive rate of return but can't help wondering if I could have done better. Is my portfolio's performance good or bad?

**Figure 1.**



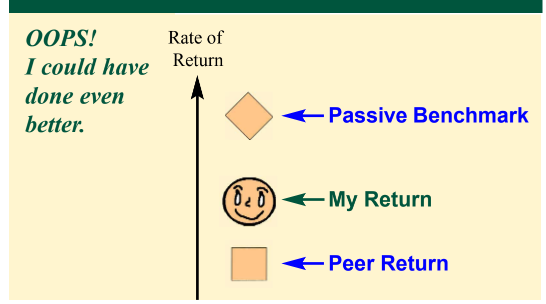

I talk to a friend and find out that he had a lower rate of return. So now I'm really happy. Can you tell that my smile is bigger in Figure 2?

**Figure 2.**



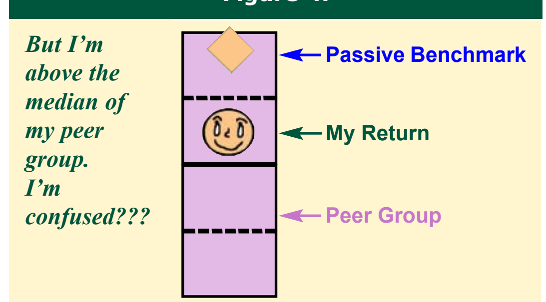

But another friend tells me that she invests in an index fund, and it performed much better than me (Figure 3). Color me confused.

**Figure 3.**




So I go to my consultant, who tells me that there are dozens of managers like my manager and shows me the picture in Figure 4. I am above the average, or median, manager so that's good. But wait. Most of the managers, including mine, performed worse than the passive alternative. I'm more confused now than ever, but my consultant straightens me out. I'm above median, so I performed well, and my happy face is

**Figure 4.**



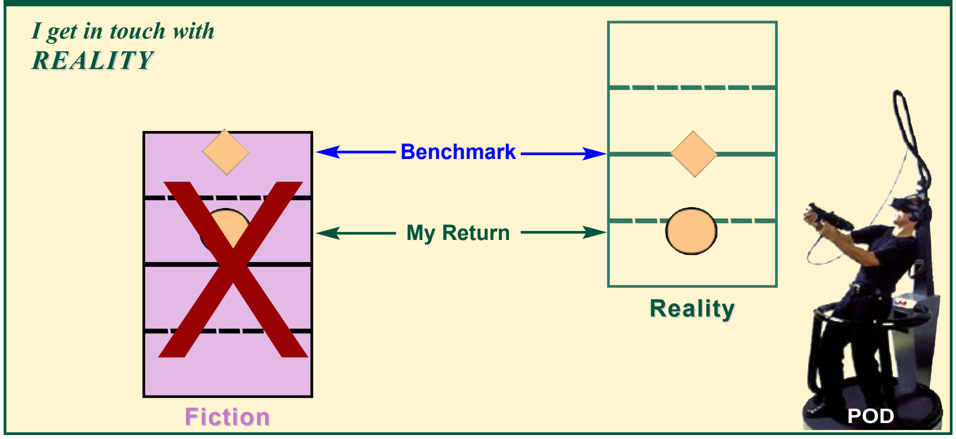

appropriately donned. *The consultant reminds me that he picked this manager and that I should be grateful for the favor. Color my consultant glowing.*

The next day I have lunch with my friend who owns the index fund and tell her of my joy at being above-median. But she just laughs and explains to me that the joke is on me and my fellow investors, most of whom would have been better off with the less expensive, passive index fund. If misery loves company, she tells me, then I have cause for joy. Otherwise, I need to get in touch with the fact that I have not been rewarded for the active management fees I have paid and that I ought to be considering damage control rather than blissfully denying the reality.

## The Reality

OK, so now I'm concerned about this manager, but how do I figure out if it's worth the time and effort to switch? My consultant's peer group doesn't help, but there is a possibility that the passive alternative holds the key. My manager has a benchmark, a portfolio that he is supposed to beat to earn his fee. The benchmark portfolio is a collection of stocks, each with a stipulated allocation. I could buy this benchmark passively for a low fee.

**Figure 5.**




Enter a new scientific peer group. This new virtual reality technology, called Portfolio Opportunity Distributions (PODs), creates all of the portfolios my manager could have selected on my behalf. It clones my manager over and over again by creating portfolios at random, consistent with my benchmark. The rest is classical statistics. I'm testing the hypothesis that my manager has no skill. If he falls in the lower decile of the entire opportunity set created by PODs, I accept the hypothesis at the 90% confidence level. Otherwise, I reject the hypothesis and consider hanging in there with this manager. Figure 5 shows the difference between the common practice and the real story. Please note that the

*Reality* as shown in Figure 5 cannot be created in the real world. It requires the tools of virtual reality to go where no peer group or index has gone before.

## The Point

The investment industry has been using peer groups for so long that no one thinks to question them, except for the occasional discussion about survivor bias, which seems to be the only bias that folks know and understand. In actuality, peer groups suffer from a collection of biases, only one of which is survivor bias, and each peer group has its own unique set of idiosyncratic distortions. As a result, the same performance number ranks differently against different peer groups, even when these peer groups are all for the same mandate, like large cap growth.

If there were a bias-free peer group, it still would not qualify as a valid benchmark. The Association for Investment Management and Research (AIMR) has embraced criteria set forth by the consulting firm of Richards and Tierney for investment performance benchmarks, summarized as follows:

1. **Unambiguous.** Names and weights of securities are clearly stated.
2. **Investable.** The option is available to forego active management in lieu of a passive alternative.
3. **Measurable.** The benchmark's return can be calculated on a reasonably regular basis.
4. **Appropriate.** The benchmark accurately represents the manager's approach.
5. **Reflective of current investment opinions.** The manager has current knowledge of the securities constituting the benchmark.
6. **Specified in advance.** The composition of the benchmark is agreed to and constructed prior to the start of all evaluation periods.

Traditional peer groups meet none of these criteria, except possibly number 3.

Performance evaluation is all about making a judgment as to whether performance is good or bad. This judgment ought to be made relative to a passive alternative. It doesn't matter how other managers in a particular peer group have fared, since they too should each be evaluated against their respective passive alternatives. Or put another way, if you don't like your ranking in one peer group, choose another peer group. What does matter is the degree of success or failure you've experienced relative to your benchmark. This can only be captured through the virtual reality known as Portfolio Opportunity Distributions. Better living through science.

So strap on your virtual reality gear and step up into POD virtual reality now, in time for your evaluations of investment performance through the end of 2003. Your POD virtual reality experience for 2003 can begin as early as the first week of January 2004, long before traditional peer group information is even compiled. It's an experience you really must have if you want the real story, and your unique story can be shared very quickly after year's end. There's no waiting for the *real* thing. ■

### About the Author

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**Notes**

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