



Albert C. Boris, III
Managing Director, Investments

Thoughts for Investors

Winter Newsletter to Clients

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“Clear? Huh! Why a 4-year-old child can understand this report. Run out and find me a four-year-old child. I can’t make head or tail out of it!”

– Groucho Marx

The Performance Comparison Trap – Part II; the “Apples to Apples Comparison”,

In an earlier newsletter, I wrote about some of the pitfalls of performance comparison. Rather than looking at what someone else earned (or claims to have earned) investors should concentrate on whether their investments are meeting their goals. In this newsletter I would like to reiterate that point and remind investors of a second pitfall of comparing performance. I refer to this problem as the “Apples to Apples Comparison Trap”. It involves measuring performance via “time-weighted” versus “dollar-weighted” rate of return calculations. Let me be perfectly clear at the outset. I realize the importance of comparison to investors for whom managing investments is not a full-time job. The purpose of this newsletter is to make investors aware that “comparison” techniques are akin to “rules-of-thumb” and I want to make investors aware of the limitations.

“Those are my principles. If you don’t like them I have others”

– Groucho Marx

Suppose you made an investment over two years. You invested \$1000 in the first year and received a 100% return. You liked that return so much that in year two you invested an additional \$8000 in the same investment. Alas in year two you received a (-10%) return. If, at the end of the two years, you critiqued your

performance via the mandated “traditional” methodology, “time-weighted” rate of return, you would be a happy investor. It would be reported to you that you earned a 34.2% annualized rate of return on your initial investment! Wait a minute you say. A 100% return on \$1000 invested in the first year yields a \$1000 gain and a (-10%) return on \$10,000 invested in the second year (\$8000 invested plus the \$2000 carried over from year one) yields a \$1000 loss. \$1000 gain plus \$1000 loss equals \$0 gain by the end of the second year. How, you ask, is this a 34.2% rate of return? Easy explanation, it was calculated using a “time-weighted” rate of return. Most of the performance numbers you see reported in newspapers or on the internet or by consultants or financial planners are “time-weighted” rates of return.

“Time-weighted” rate of return is the rate of return of a fixed amount of money calculated from a “start” date to an “end” date. For example, suppose you are retiring today and you wanted to know “what was the ‘rate of return’ on the first dollar I ever invested in my 401(k)?” To answer this you would calculate a “time-weighted” rate of return. Besides wanting to know the effectiveness of the investment(s) you picked, you might also want to know whether you should have made a different investment years ago. That comparison is possible because you can pick any other investment and calculate the rate of return that \$1 (or any multiple) would have earned. Simply insert the same starting and ending dates. If you wanted to compare the rate of return on your first \$1 of 401(k) investment to what that \$1 would have earned over the same period of time in the S&P 500 Index, or the Wilshire 5000 Index, or the Lehman Intermediate Bond Index, or any one of hundreds or thousands of mutual funds, money

managers, or other alternative investment possibilities – it is only an “apples to apples” comparison if you use the “time-weighted” rate of return of each alternative investment to the “time-weighted” rate of return of the investment you chose. So in our above example you must use your 34.2% “time-weighted” rate of return calculation to make a comparison.

“Who are you going to believe, me or your own eyes?”

– Groucho Marx

But that is not “really” what I earned, you say! If I earned \$0 after two years, isn’t my rate of return 0%? Is this a Wall Street scam? No. In order to be a fair “apples to apples” comparison, regulators require performance be reported to you based on “time” alone.

What you really want to know, I suspect, is your rate of return based on when you initiated the investment, the total time during which you invested, and the amount of money you invested. That calculation is called a “dollar-weighted” rate of return, and yes, in the above example the “dollar-weighted” rate of return is 0%. While very different, it is in my opinion, a more accurate calculation of what you are getting from your investments.

Throughout your life, you will undoubtedly be accumulating savings, investing those savings, withdrawing and spending those investments, replacing and investing more savings, over and over again. That’s life! In addition, you will often knowingly and mostly unknowingly “short-circuit” the whole savings and investing process. Unexpected family medical expenses, expected (and unexpected) educational expenses, and impulse purchases all conspire to derail your plans for saving and investing your money. In addition, your emotions also dictate the timing and amount of your saving and investing. In other words, you may end up “buying high” with more money when you are positive about the stock market and “selling low” and withdrawing funds from the stock market when you are concerned. That’s life too! Yet to compare your performance to the performance of other potential investments, in an “apples to apples” manner, you need to adjust for all the variations and

interruptions of your cash flows into your investments. Unfortunately, it is very difficult to calculate what the rate of return would have been on, say, an investment in the S&P 500 Index had it included all your specific cash flow variations and interruptions. Furthermore, imagine having to do it for every investor and different investments! Finally, imagine every day recalculating “dollar-weighted” rates of return and printing them in the newspapers or putting them on websites so that everyone is looking at an “apples to apples” comparison. That is why the convention on investment performance is to report “time-weighted” not “dollar-weighted” rates of return.

When I explain the difference between the two calculations of rates of return and why investors normally see “time-weighted” rate of return calculations their eyes light up. Invariably their comment is, “that’s why the ‘bottom line’ account value on my statement never ‘seems’ to ‘match’ my reported performance”. Indeed this observation has been widely reported and occurs because “bottom line” value is a function of a “dollar-weighted” rate of return. Many investors forget the major impact that cash flows (deposits and withdrawals) and the timing of these cash flows have on their “real” performance. Also keep this distinction in mind if you are thinking of changing investments in your 401(k) or other portfolios. Your performance, and ultimate investment success, may be more a function of your actions than deficiencies in the performance of your investments!

In summary, quite a bit of attention has been paid by regulators and consultants with regard to creating a methodology for measuring performance and allowing comparison among investments. Unfortunately all this work has not, in my opinion, helped investors achieve their goals. In fact, I would argue that trying to use an inherently flawed performance-measuring method has distracted many investors from taking advantage of the past bull market. Continuing to use a flawed methodology will assure that many investors fail to take advantage of the next bull market. Recall the latest investment craze to collapse - real estate.

If the two-year investment in my above example was your investment in real estate, then in reality you are sitting with \$0 total gain. Yet you are reading and getting jealous about someone else in another real estate investment which got a 34.2% rate of return. Might commodities be the next example?

If you are an investor with a variety of investments at a number of investment firms, and dependent upon a consultant's "time-weighted" rate of return calculation. Stop spending so much time trying to compare your performance to other investors or investments. Stop changing investments so often. Instead, concentrate on whether you are meeting your goals. If you are meeting your goals then maybe there is nothing wrong with your investments. If you are not meeting your goals ask yourself if the fault truly lies with your investments or with your actions! Alternately, if you are dead set on comparing you can just invest once and not add or subtract any funds. Then a "time-weighted" rate of return calculation will accurately reflect your true return.

The most successful investors I work with have long ago realized the effect that the timing and amount of deposits and withdrawals, and emotion have on their investment performance. They use this knowledge to their advantage. They not only "buy low" and "sell high", they add more to their portfolios during pessimistic times and less when most everyone seems optimistic or euphoric about the stock market. They realize that the only true measure of investment performance is how much you earn over time and dollars invested. They realize that a "dollar-weighted" rate of return is the most accurate calculation of performance even if that means they can only compare their performance against their goals. Note I didn't say anything about whether they are earning the maximum possible return. That involves increasing risk, and that is a discussion for another newsletter.

"Time wounds all heels."

– Groucho Marx

AUDI PARTEM ALTERAM

Hear the Other Side

The Boris-Kaplan Group // 1735 Market Street, Suite 1400 // Philadelphia, PA 19103 // T 215.563.2300
www.alexbrown.com/boriskaplan

If you would like to discuss the topic of this newsletter, or our team's approach to investing, please feel free to contact us by email at al.boris@alexbrown.com.

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