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BRIEFING »

Return Appearances

Performance Measures Leave Some Investors Seeing Double

Sometimes it seems the investment industry has more returns than a department store on the day after Christmas. Total return, net return, relative return, risk-adjusted return – these are just a few of the measuring sticks used to evaluate portfolio gains and losses.

With so many rulers flashing around, it's easy to become bewildered about exactly what is being measured – and why. This is particularly true when the portfolio in question is your own, and the numbers in your account statement are telling two radically different stories about how well – or badly – you've been doing.

When confusion strikes, it's often because investors are comparing the time-weighted return on their portfolio with the dollar-weighted return. Both figures are reported in the quarterly monitors sent to Morgan Stanley Smith Barney advisory clients.

Investors who don't understand the difference between the two measures might think someone is trying to pull a fast one on them. It isn't uncommon for the time-weighted return to differ considerably from the dollar-weighted return for the same portfolio over the same period. The time-weighted return could even show a gain when the dollar-weighted return shows a loss. So which numbers are right?

Actually, they're both correct. They're just not measuring the same things in the same way.

RETURN TO SENDER

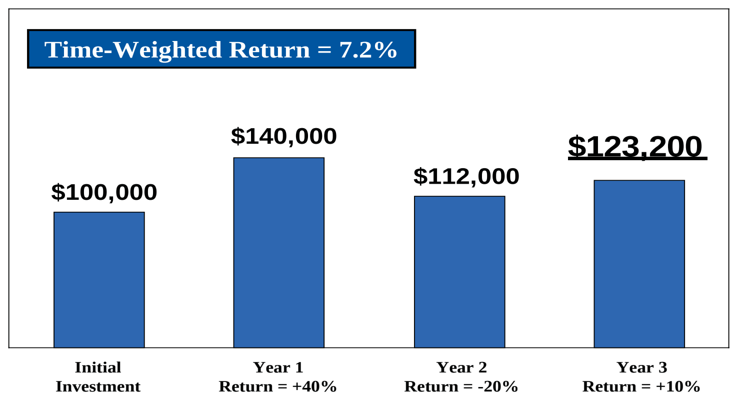
The point of this double-barreled system is to account for the fact that what the market gives isn't necessarily what investors get. You can't control the market, but you do control how much money you invest in the market, and when you invest it. Those decisions can have a powerful impact on portfolio performance.

To understand why, consider the two charts on this page. The first shows the growth of a $100,000 investment over three years, assuming the annual returns shown under each year. These would be the returns on the assets the portfolio is invested in – a basket of U.S. large-cap stocks, for example.

Under these conditions, calculating the investor's returns is relatively easy: The time-weighted and the dollar-weighted returns are the same as the market's return. The growth of the portfolio over the entire period is annualized – that is, converted to a single rate of return that would produce the same amount of growth if repeated in all three years. In the example shown in the first chart, that rate would be 7.2%.

In other words, a $100,000 investment that grew 7.2% in the first year, 7.2% in the second year, and 7.2% in the third year would create a portfolio worth a little over $123,200 – the same as the portfolio shown in the chart. The market and the portfolio would have both grown by an equal amount.

» GROWTH OF $100,000 INVESTMENT



Source: Morgan Stanley Smith Barney

» TIMING IS EVERYTHING

	Investor 1		Investor 2	
	Investment	Year-End Portfolio Value	Investment	Year-End Portfolio Value
Year 1 (+40%)	$80,000	$112,000	$20,000	$28,000
Year 2 (-20%)	$20,000	$105,600	$80,000	$86,400
Year 3 (+10%)	$0	$116,100	$0	$95,040
Time-Weighted Return	7.2%		7.2%	
Dollar-Weighted Return	5.5%		-2.3%	

Source: Morgan Stanley Smith Barney

GO WITH THE FLOWS

Of course, life is rarely that simple. An investor may add money to or withdraws money from an account many times over the life of a portfolio. The timing of these cash flows can have a big impact on investment performance.

The second chart on this page demonstrates this. It compares the experiences of two hypothetical investors over the same three-year period shown in the first chart, assuming they both earn the market return.

Both investors start with $100,000. But while the first investor puts $80,000 into the market at the beginning of the first year, and $20,000 at the beginning of the next year, the other investor does exactly the opposite: He or she starts by investing $20,000, then adds $80,000 in the second year.

As you can see, the time-weighted return on both portfolios is the same: 7.2%. However, the difference in portfolio growth is considerable. The first investor ends up with a $16,100 gain, while the second investor loses almost $5,000. This is because the second investor had relatively little money in the market in year one, when returns were strongly positive, but almost as much money in year two, when returns were sharply negative.

How can the time-weighted return be the same for both investors? Because time-weighted returns are calculated without regard to the flow of money into and out of an account. This is done by measuring the growth of the portfolio between each cash transaction, then linking those results to create a single rate of return that covers the entire period.

Time-weighted returns are by far the most common performance measures in everyday use. For example, they are what the Wall Street Journal and other financial publications report for returns on stock indices such as the Dow Jones Industrial Average.

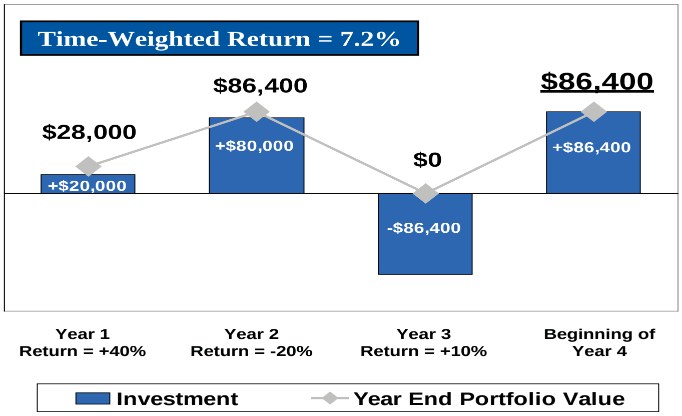
The reason is obvious: Time-weighted returns show how the market has performed, not how any particular investor has done. The Journal's job is to report the former, not the latter.

Of course, that doesn't tell you how well your portfolio is doing. Will you be able to retire when you want? Will you have the tuition money for your future Phi Beta Kappa?

To know the answers to those questions, investors need to look at the dollar-weighted returns on their portfolios. They measure both what the market has been doing and what the investor has been doing. And in the table on page 2, we see that the first investor did reasonably well. Her dollar-weighted return is somewhat lower than the time-weighted return, but much better than the second investor's 2.3% dollar-weighted loss.

Why? Because the first investor made the shrewd (or lucky) decision to put more money in her portfolio after the first year, when the market return was negative. This helped her reap more of the benefit from years two and three, when market returns were strongly positive.

» RETURNS FAVOR THE LONG-TERM INVESTOR



Source: Morgan Stanley Smith Barney

TIME TO WASTE

This brings us back to an important point: When it comes to long-term portfolio performance, timing is critical. To see why, look at the chart above. It shows the growth of a portfolio over the same three years shown in the first two charts, assuming the same market returns.

This time, however, the flow of money into and out of the portfolio reflects an all-too-common pattern:

- First, the investor puts a modest sum of money into the market.
- The market has a good year, prompting the investor to invest a much larger sum.
- After suffering through a down year, the nervous investor gives up and pulls his or her money back out of the market – "just until things settle down."

The chart on this page is for illustrative purposes only and does not reflect any actual investment. The investment returns depicted herein represent historical gross performance with no deduction for investment management fees or transaction costs. Actual returns will be reduced by expenses that may include management fees and costs of transaction.

- After the market recovers, the investor puts money back into his or her portfolio.

In this case, because the investor tried and failed to "time" the market successfully, the ending value of his or her portfolio has been cut to $86,400, even though the time-weighted return remains the same as in the previous two examples.

JUDGMENT CALL

Managed money investors have particular reason to pay close attention to the difference between time-weighted and dollar-weighted returns. It can help them figure out how much of the credit (or blame) for their investment performance should go to themselves – and how much rightfully belongs to their portfolio managers.

The manager's job is to buy and sell stocks or other securities within a particular asset class or investment style. The investor's job is to develop a sensible long-term investment strategy and stick to it – avoiding emotional or ill-conceived decisions that can reduce returns.

Because an investor's cash-flow decisions can have such a big impact on portfolio growth, it isn't fair to hold portfolio managers responsible for them. Otherwise, a manager lucky enough to have their clients invest large sums right before a major market upturn would be able to claim exceptional performance –even though the manager's skill had nothing to do with it.

That's why time-weighted returns, and only time-weighted returns, are used to report manager performance. In fact, it's required under the guidelines of the CFA Institute, a professional standard-setting organization of the investment industry.

Bottom line: investors need to take both performance measures into account. If your time-weighted returns consistently trail an appropriate market benchmark over an extended period, you may need to take a hard look at your portfolio manager. But if your dollar-weighted returns consistently lag your manager's time-weighted returns – well, you probably don't need to look further than a mirror to find the source of your problem.

For more information about investment returns – or if you have questions about any of the other items on your quarterly monitor – just call your Morgan Stanley Smith Barney Financial Advisor. He or she will be happy to help.