TIME-WEIGHTED AND MONEY-WEIGHTED RATES OF RETURN

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Investment industry regulators have made a significant move to enhance transparency for investors regarding the method in which performance returns are reported. We see this as a positive for the industry and, ultimately, the investor.

Burgundy's reporting has always been transparent. For instance, your reporting has included your portfolio's *after-fee* return in both dollar terms and as a percentage of your portfolio over a variety of periods, including the quarter, the year and since inception. This type of detailed reporting will continue without any changes.

To date, the performance of your investment portfolio at Burgundy has been reported as a time-weighted rate of return, which is the industry standard. The regulators now require that a *money-weighted* rate of return be presented on an annual basis and, for this reason, we will be distributing an additional annual account report starting January 2017.

Regardless of the formula used to calculate rates of return, your actual dollar return that we present will, of course, be unchanged. Having said this, it is important to clarify: what is the difference between time-weighted and money-weighted return calculations?

Time-weighted rate of return **IS NOT** sensitive to the impact of cash flows.

Money-weighted rate of return **IS** sensitive to the impact of cash flows.

TIME-WEIGHTED AND MONEY-WEIGHTED RATES OF RETURN

A time-weighted rate of return (TWRR) measures a return over a period of time, up to a specified date (typically a month- or quarter-end), and ignores the impact of cash flows. It is not sensitive to the timing of any contributions to or withdrawals from the portfolio. For this reason, it is the industry standard, and it continues to be the most appropriate tool for evaluating the performance of your investment manager because it provides the manager's (or fund's) performance regardless of the timing of investor contributions or withdrawals.

A money-weighted rate of return (MWRR), also known as the internal rate of return or IRR, is sensitive to an individual's cash flows. Returns may vary based on the timing of investor contributions and withdrawals. In other words, your return fluctuates depending on how much money you have invested at any given point in time; the return places greater emphasis on performance in periods when the dollar amount invested is highest. As a result, the MWRR is a more accurate measure of your own unique investing experience. However, since the timing of a contribution or withdrawal can have a meaningful impact on your rate of return, this method presents challenges when assessing your performance relative to other investments or market indices that do not have any cash flows.

WATCH OUR VIDEO: CRM2, TIME-WEIGHTED & MONEY-WEIGHTED RATES OF RETURN

LEARNING OBJECTIVES:

1. Changes in regulatory requirements
2. Definitions: time-weighted vs. money-weighted rates of return
3. What does this mean for you?

Example

To illustrate the difference between time-weighted and money-weighted rates of return, consider two hypothetical portfolios, both with the same asset value and invested in the same Fund. The only difference between the two portfolios is the timing of cash contributions:

- **Charles** invests $4 million in Fund ABC. He invests the entire value on January 1.
- **Lauren** invests $3 million in Fund ABC on January 1. She later sells a property and invests her $1 million proceeds on June 30.

For the calendar year, Fund ABC returned 7%; however, during the year, the pattern of returns was not linear, as outlined in the following table:

	Jan. 1 to Jun. 30	Jul.1 to Dec. 31	Full Calendar Year (TWRR)
Fund ABC	6%	1%	7%

Let's see how the difference in timing of Charles' and Lauren's investments affects their portfolio returns:

	Jan. 1 Deposit	Jun. 30 Deposit	Dec. 31 Value of Portfolio	TWRR	MWRR
Charles	$4 M	-	$4.28 M	7%	7%
Lauren	$3 M	$1 M	$4.22 M	7%	6%

Charles' Portfolio: the return in this case is simple; the portfolio was fully invested during the year with no contributions or withdrawals. The $4 million invested on January 1 is now worth $4.28 million. This growth of $280,000 is consistent with the 7% return of the Fund. In this case, the return is 7% regardless of the return calculation used.

Lauren's Portfolio: significant cash deposits or withdrawals will lead to differences when looking at money-weighted versus time-weighted returns. While Lauren's time-weighted return is 7%, consistent with the return of Charles' portfolio and Fund ABC, her money-weighted return is 6%.

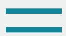
WHY THE DIFFERENCE?

The time-weighted return is not affected by cash flows, while the money-weighted return is and its calculation places a greater emphasis on periods when the account value was higher.

Lauren's portfolio was largest during the second half of the year, when returns were lower.

The initial $3,000,000 investment participated in the return for the full year, 7%, therefore earning $210,000 in gains ($3,000,000 x 7%).

The June 30 deposit of $1,000,000 only participated in the performance for the second half of the year, 1%, therefore earning $10,000 in gains ($1,000,000 x 1%).



In total, Lauren's portfolio posted a gain of $220,000 for the year ($210,000 gain on first deposit + $10,000 gain on second deposit).

The money-weighted return of the total portfolio works out to 6%. It is a complex calculation but, to simplify, if we consider the gain of $220,000 on Lauren's portfolio which was, on average, $3.5 million[1] throughout the year, we can generally understand the 6% return ($220,000/$3.5 million = ~6%).

[1] Lauren's dollar amount invested was $3 million for the first half of the year and $4 million for the second half of the year, for an average of approximately $3.5 million.

As you can see, the money-weighted return reflects the unique investment experience of the client rather than the performance of the investment manager or Fund itself. The timing of Lauren's additional investment slightly reduced her money-weighted return (compared to her time-weighted return) since she contributed to her account after experiencing meaningful gains.

In the inverse scenario, if the Fund had a greater return in the second half of the year, she would have experienced a higher money-weighted return than her time-weighted return.

REMAIN FOCUSED ON THE LONG TERM

The time-weighted return calculation continues to be the most appropriate tool for comparing and assessing investment managers and, as such, your quarterly reporting from Burgundy will remain unchanged. Going forward, we will also provide the money-weighted performance data on an annual basis.

The aforementioned example illustrates that incidental cash flows can result in differences between your time-weighted and money-weighted rates of return. Investing in high-quality businesses at attractive valuations remains the best way, in our opinion, to grow capital over time. We do not recommend that investors become too concerned with the timing of any cash movements within their portfolio. It is also important to understand that the longer a portfolio is invested, the more the two return calculations will converge. The purpose here is to simply illustrate how the two measures differ.

If you would like to discuss this or other topics pertaining to your investment portfolio, please do not hesitate to contact your Investment Counsellor. B

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