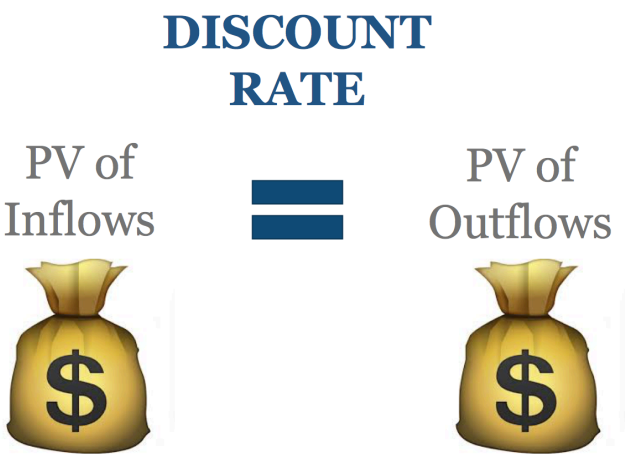
PRIVATE EQUITY INVESTMENTS: WHAT YOU SEE IS NOT ALWAYS WHAT YOU GET

Measuring private investments can be tricky. Managers typically draw down capital to make investments over irregular intervals, making traditional return calculations hard to use. Returns are calculated using alternative methods, with the most widely used being internal rate of return (IRR). While it is used by many, it can be misleading and not paint the whole picture.

FINDING COMMON GROUND

All returns for traditional investments in a portfolio are calculated on a time-weighted return basis, also known as the geometric return. This return ignores the magnitude of cash flows and calculates returns over time, where each time period carries the same weight in the calculation. This proves to be a problem for private investments because the drawing down of capital to fund purchases and the subsequent return of capital when they are sold are not consistent and can have serious effects on an investor's return. To solve this problem, our industry primarily measures private investments with the IRR. This calculation is the discount rate needed to make the present value of the cash outflows equal to the present value of the cash inflows. Using this method to measure performance allows investors to compare investments with very different cash flows. Although it solves the cash flow problem, it fails to answer two critical questions: how much was made and how long did it take?



The best way to illustrate the shortcomings of the IRR for measuring returns is to walk through an example. Consider two investments that deploy $1,000,000 each. The first draws capital over 4 years and has an IRR of 17.7% over a 10-year life. The second invests over 1 year and has an IRR of 39.5% over a 5-year life. Which one would you choose? At first blush, the second investment appears to have the best return. Looking a little deeper at the cash flows (see **Figure 1**), we see that the first investment yields $1,600,000 in proceeds, while the second returns $600,000. Was the second investment really the optimal choice?

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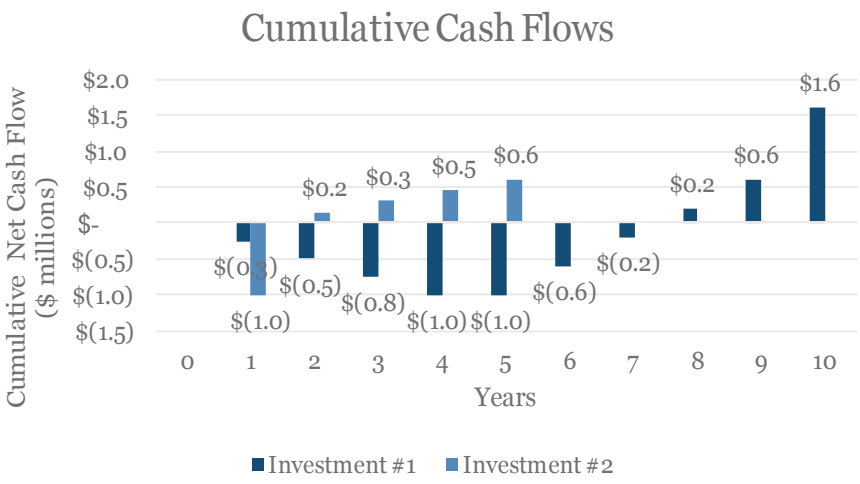
FIGURE 1



Other Private Equity Return Calculations

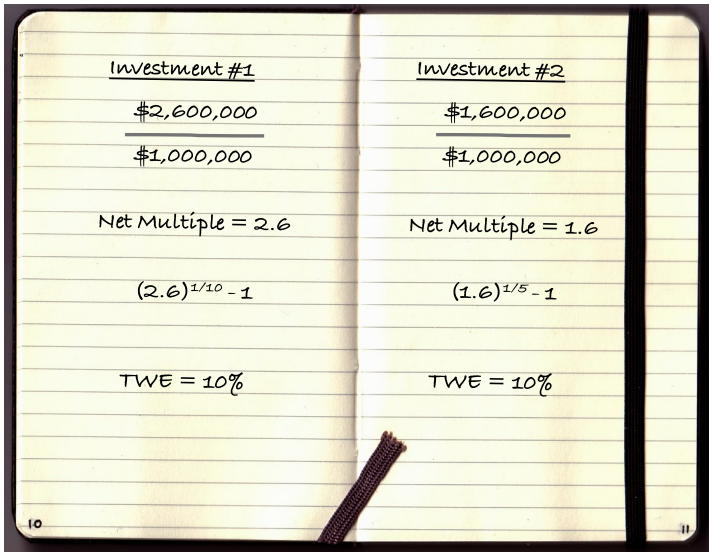
- **Public Market Equivalents** – calculates the IRR of public markets. This is done by applying the cash flows of a private investment and using the public market returns. This method essentially converts public market returns to an IRR.
- **Modified Internal Rate of Return** – modifies the IRR calculation in that it assumes a different reinvestment rate. IRR assumes the reinvestment of positive cash flows earns the same return as the investment, which can be overly optimistic.

SOURCE: HIGHLAND ASSOCIATES

Another way to evaluate the two investments is to calculate the net multiple on a fund. This is the amount of total dollars received back divided by the total dollars drawn. In other words, the higher the multiple, the higher the return to the investor. In our example, the multiple of the first investment is 2.6. The multiple of the second is 1.6. This would mean that the first investment is the better one, which conflicts with the answer given by IRR. Using the net multiple tells us how much, but there is no way to answer which time period was more beneficial. These measures fail to answer both of our critical questions: (1) how much did we earn and (2) how long did it take?

TIME-WEIGHTED EQUIVALENT: CAPTURING HOW MUCH *AND* HOW LONG

By reviewing many thousands of private deals, we have crafted a proprietary method of comparison. We call it the time-weighted equivalent (TWE). This method takes the amount received back by the investor and looks at the time it takes to achieve that multiple, thus calculating the equivalent time-weighted return. It's not just how much you receive, but how long it takes to get it. Using this method, we can see that the first investment achieved a 2.6 multiple over 10 years, which is a 10% TWE. The second investment earned 1.6 over 5 years, which also is a 10% TWE. That tells us that these two investments are equal.



THE MEASUREMENT IN PRACTICE

An example of how a private investment manager would show IRR is illustrated in **Figure 2**. This format shows that the manager's funds have produced some strong results, as the net IRRs have exceeded 10% in 4 out of 5 incidents.

FIGURE 2

as of March 31, 2015 *(in millions)*	Inception Date	Size	Contributions	Distributions	Total Value	Net Multiple	Net IRR
Mature Funds							
Fund One	Mar 1999	$324	$322	$728	$732	2.3x	15%
Fund Two	Jun 2001	1,061	869	2,708	2,725	3.1x	27%
Fund Three	Oct 2003	1,812	1,398	2,411	2,778	2.0x	13%
Fund Four	Oct 2006	7,525	6,851	6,195	10,694	1.6x	8%
Still Investing							
Fund Five	Mar 2012	2,611	2,839	835	3,832	1.3x	21%

SOURCE: HIGHLAND ASSOCIATES

Our preferred comparison is to calculate TWE for each of the funds' IRRs and compare them to our underwriting standards (see **Figure 3**). This will allow us to see if investing in these private funds was advantageous and if we were rewarded for the risks. We look at private investments and seek to earn a minimum return of 10% TWE. We feel this compensates us for the illiquidity risk we take to make these investments. Of the five funds, only Fund Two had a TWE close to our hurdle, but even then it fell short. The TWE approach provides us with a more complete evaluation of the various investments. On an IRR basis, it appears to be the answer to our desire for higher returns, but in reality, it is an impostor.

FIGURE 3

as of March 31, 2015 *(in millions)*	Inception Date	Size	Contributions	Distributions	Total Value	Net Multiple	Net IRR	Net TWE	Change in Return
Mature Funds									
Fund One	Mar 1999	$324	$322	$728	$732	2.3x	15%	5%	-10%
Fund Two	Jun 2001	1,061	869	2,708	2,725	3.1x	27%	9%	-18%
Fund Three	Oct 2003	1,812	1,398	2,411	2,778	2.0x	13%	6%	-7%
Fund Four	Oct 2006	7,525	6,851	6,195	10,694	1.6x	8%	6%	-2%
Still Investing									
Fund Five	Mar 2012	2,611	2,839	835	3,832	1.3x	21%	9%	-12%

SOURCE: HIGHLAND ASSOCIATES

HOW MUCH AND HOW LONG: WHY IT MATTERS

At Highland we incorporate both traditional and alternative investments as we construct portfolios to meet a client's overall objective. This means it is vitally important for us to compare different asset classes on the same footing. That allows us to understand the risk/return trade-offs in the portfolio and direct assets to the best opportunity. This is where TWE becomes a valuable tool. It puts private investments on the same footing as the rest of the portfolio and allows us to make better decisions.

Our experience with measuring private investments over the past two decades has lead us to focus on TWE instead of IRR. We believe this measure is the only one that forces managers in private investments to answer the most important questions: how much did we make and how long did it take us to earn it? Only when we answer these questions do we truly understand whether an investment puts us in a position to be paid for the risk we are taking.

- IRR does not provide the actual realized annual return on the investments.
- IRR tells you how well the manager does with the capital employed. However, it does not tell you anything about how promptly the committed capital was allocated.
- The most important questions are how much did the investor commit, how much was returned to the investor, and over how long of a time period.

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AUTHOR:

R. SCOTT GRAHAM, CFA
CHIEF INVESTMENT OFFICER

HIGHLAND

HIGHLAND ASSOCIATES
2545 HIGHLAND AVENUE SOUTH, SUITE 200
BIRMINGHAM, ALABAMA 35205
P. 1-800-405-7729 OR (205) 933-8664 F. (205) 933-7688