

# Private Investments and Performance Implications from a Fund Sponsor's Perspective

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## Overview

As fund sponsors continue to look for timelier and more precise performance calculations for their investment programs, many have come to realize that increased exposure to private investments often leads to less timely and less precise performance information. Typically, fund sponsors report performance on a monthly basis and often want daily valuations to be able to report true time-weighted returns. With most private investments, not only are there no daily or monthly valuations, but the quarterly valuations are lagged usually two to three months after their valuation date. Most private investment managers are evaluated on an Internal Rate of Return (IRR) from inception basis and not on a time-weighted basis. Fund sponsors find it difficult to reconcile returns due to methodology, timing, and frequency differences.

This paper outlines what BNY Mellon Asset Servicing considers to be the best practices of reporting performance for private investments and marketable assets. We will address the need for different performance methodologies and the need for timely and accurate performance information.

BNY Mellon Asset Servicing's Performance & Risk Analytics product line is responsible for \$9.6 trillion in assets under measurement<sup>1</sup> and calculates performance for over 14,000 Limited Partnership (LP) positions for our clients every quarter.

<sup>1</sup> As of December 2007.

## Private Equity Manager Performance

The standard for evaluating private equity managers is an IRR from inception. Private equity is an asset class for which the Global Investment Performance Standards (GIPS) does not recommend/require a time-weighted rate of return. The time-weighted return methodology equal weights each time period regardless of each period's invested amount. The stated reason for evaluating fund investment managers on a time-weighted basis is that the manager typically does not control how much they manage. Cash flows, both in and out, are usually directed from the fund sponsor. This is not the case with private equity managers. Private equity managers control the timing of the cash flows via capital calls and distributions. The other important reason why time-weighted returns are not necessarily a good measure is that it is very difficult to value private companies. Bad valuations can create bad time-weighted returns. An IRR calculation ultimately does not rely on valuations once a partnership distributes everything, but of course until everything is distributed the IRR methodology relies on the last valuation to calculate a return. Therefore, the time displacement that uses the least amount of the imprecise valuations is an IRR from inception for private equity. Exhibit 1 illustrates the difference between an IRR calculation and a time-weighted calculation.

### Exhibit 1 — Single Partnership

Single Partnership			
Date	Valuation	Contribution	Monthly Return
9/30/2007	10,000,000.00		0.00
10/22/2007		1,000,000.00	
10/31/2007	11,000,000.00		0.00
11/30/2007	11,000,000.00		0.00
12/31/2007	14,000,000.00		27.27
1/31/2008	14,000,000.00		0.00
2/29/2008	14,000,000.00		0.00
3/4/2008		2,000,000.00	
3/31/2008	11,000,000.00		-31.63
TWR 10/1/07 to 3/31/08			-12.984
IRR 10/1/07 to 3/31/08			-17.84

## Real Estate Manager Performance

Real estate investments are another asset class for which an IRR calculation may be more appropriate than a time-weighted return. If a real estate manager has structured the investment vehicle so that the manager controls the timing of the investments and the investments have the same valuation issues as private equity, an IRR from inception may be a better measure of the manager's performance. If the fund sponsor controls the timing of the flows to the manager and fair value of the assets is more readily available a time-weighted return may be the better return to use. According to the Interpretive Guidance to the GIPS Standards Real Estate provisions, real estate managers are advised to present both the time-weighted return and the since inception IRR.

## Total Performance

Assuming the fund's asset allocation includes private equity and public market managers, fund sponsors may encounter a reporting dilemma. Fund sponsors need to report IRRs from inception for private equity and time-weighted returns for public market managers. In most cases, time-weighted returns are reported with time displacements such as month, year-to-date, 1 year, three year, five year, etc. The dilemma is how to handle composites. At the total fund level, private equity will need to be combined with public market managers. The Global Investment Performance Standards (GIPS) advocated by the CFA Institute were created to provide investment firms with guidance on how to calculate and report their investment results to prospective clients. However, they do not offer guidance on how a fund sponsor should create composites across asset types. Since an IRR and a time-weighted return are different calculations, a consistent roll-up requires fund sponsors to make a choice. Without cash flows, a time-weighted return and an IRR are identical. Therefore if cash flows are small relative to the overall value, the difference between an IRR and a time-weighted return should be small, as outlined in Exhibit 2.

### Exhibit 2 — Sample Private Equity Program

Private Equity Program			
Date	Valuation	Contribution	Monthly Return
9/30/2007	517,900,000.00		0.00
10/22/2007		1,000,000.00	
10/31/2007	518,900,000.00		0.00
11/30/2007	518,900,000.00		0.00
12/31/2007	521,900,000.00		0.58
1/31/2008	521,900,000.00		0.00
2/29/2008	521,900,000.00		0.00
3/4/2008		2,000,000.00	
3/31/2008	518,900,000.00		-0.9547
TWR 10/1/07 to 3/31/08			-0.382
IRR 10/1/07 to 3/31/08			-0.390

### Recommended Calculations for Fund Performance

As a performance calculator for over \$9 trillion, with clients who have significant exposure to private investments, BNY Mellon Asset Servicing recommends:

- ▶ Calculating time-weighted returns at the total composite level.
- ▶ Reporting major asset classes using time-weighted methodology as these numbers support the total fund level. Reporting public market managers' time-weighted returns is appropriate.
- ▶ Providing supplemental IRR from inception calculations for individual LPs rather than displaying time-weighted returns at the LP level.

## Lagged Valuations

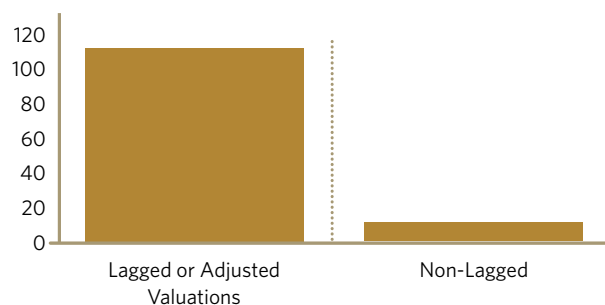
The next issue is how to report the correct valuations in the correct time frame. The purist would say wait until all valuations are received and then performance can be calculated. Unfortunately there is no pure information on private investments. Although most private asset managers report a value two-three months after the previous quarter-end, the question remains how precise are the valuations. The Burgiss Group's Private Informant® service tracks and reports on over 15,000 underlying companies of venture capital and buyout funds to investors. Of those 15,000 companies, 43.2 percent were held at cost as of September 2007. Based on this information, almost half of the LPs within a fund could be valued at cost. For a precise return calculation, the assets would need to be sold or distributed to ascertain a true value. Since most LPs are designed to last ten years or longer, waiting for the precise number is not the answer. Perhaps waiting three months for the best available number from the general partner, to calculate performance for the LP, is more reasonable?

Although it might make sense at the individual LP level to wait three months to calculate performance, waiting that long to calculate total fund performance is not desirable. One alternative is to report performance numbers each month and when the valuations are received, recalculate prior months' performance — although having performance numbers constantly change is also problematic.

BNY Mellon Asset Servicing believes reporting lagged valuations adjusted for cash flows is the most practical way to report rolled up time-weighted performance. The advantage of this method allows the accounting valuations to match the performance valuations. Based on how most of our clients report their performance returns, our clients agree with our recommended approach. We surveyed our U.S. client base and of the 137 clients with significant exposure to private investments, 87 percent of them report their private investments using lagged valuations for their official performance records. The 137 clients represent over \$900 billion in assets with an average of 17 percent allocated to private investments. Exhibit 3 demonstrates that the clients with heavier exposure to private investment are more likely to use non-lagged performance calculations.

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**Exhibit 3 — Survey of Clients Lagged or Non-Lagged by Number of Funds**

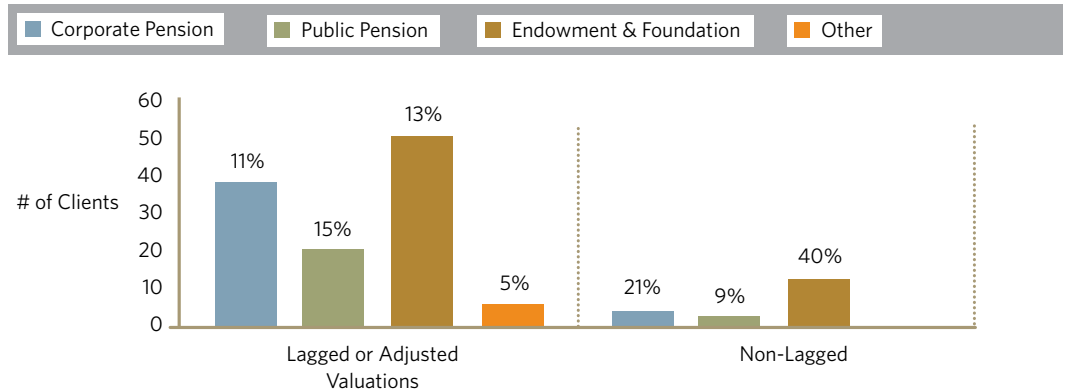


### Exhibit 3a — Lagged Valuations

	# of Clients	Total Fund Net Asset Value (in millions)	Private Investments Net Asset Value (in millions)	Average Percentage of Private Investments
Lagged or Adjusted Valuations	119	\$804,592	\$101,623	12%
Non-Lagged	18	\$135,419	\$33,840	26%
Percentage Lagged or Adjusted Valuations	87%	85%	78%	

Our survey also identified various trends across our client base (Exhibit 4). Endowment and Foundation clients have the highest percentage of clients using non-lagged valuations (25 percent). Clients with heavier exposure to private investments use non-lagged valuations in each client type except for Public Pension Funds. There were only two Public Pension Funds that use non-lagged; one fund had close to 20 percent exposure to private investments and the other had a very small allocation.

### Exhibit 4 — Lagged or Non-Lagged by Fund Type



Note: % of average allocation to private investments

Although a large percentage of our clients use lagged valuations, we recognize there is value in knowing what the return would have been had you waited the three months. In other words it would be great to have another set of performance returns that reported the valuations in their correct time period. Of course maintaining two sets of books has its drawbacks. Processing valuations twice means more work and possible discrepancies between the source information.

BNY Mellon Asset Servicing has a solution that can provide these two sets of returns —sourced from one consistent set of data. On our accounting system we process valuations using the most recent open accounting period. Typically that means LP valuations are posting two to three months after the valuation date. Our performance system has been enhanced so we can process the same valuation in two different ways. Using our standard performance calculation, the valuations are processed in the same time period as they appear within accounting. This ensures that the performance valuations tie to the accounting records. The second way we process the same valuation is to read the actual valuation date and process the valuation back to its correct valuation date and then calculate another set of returns. We would also recalculate all subsequent monthly returns. This new process provides our clients with two sets of returns that are processed automatically from one set of accounting data.

### **Frequency of Valuations**

Quarterly valuation frequencies present fund sponsors with additional challenges in reporting time-weighted return calculations. In order to calculate a time-weighted return for a given period when there is a material cash flow in the middle of the period, an appropriate methodology is to weight the cash flow by the amount of time it was held in the portfolio. For example, if a real estate manager receives additional funding intra-quarter, an appropriate calculation would be to reflect the appreciation and income of the fund divided by the combination of the previous quarter's ending value and the day weighted value of the cash flow that was in the portfolio for the quarter. For instance if a funding of \$1,000,000 was added to the portfolio on April 28th the day-weighted amount would be \$692,000 ( $\$1,000,000 \times (63/91)$ ) reflecting the 63 out of 91 days the funds were in the portfolio for that quarter. Although that calculation may be reasonable for the real estate manager to report, it once again creates a dilemma for the fund sponsor. Typically fund sponsors want to report their fund's performance monthly, and not wait until two to three months after the quarter ends or have performance numbers that are continually changing.

## Total Fund - Inconsistent Valuation Frequency

Even if a fund sponsor waits until valuations are reported, there is an inherent conflict in rolling up managers into composites with inconsistent valuation frequency with time-weighted return calculations. Time-weighted returns require valuations at every cash flow. Reporting a time-weighted return for the total fund or composite of managers then requires a value anytime there is a cash flow. At every cash flow each manager's asset value would roll up to the composite and a return would be calculated and linked to create the time-weighted return. If there is no current value at the time of the cash flow, fund sponsors must choose one of the following options:

- ▶ Use the best available asset value at the time of the calculation (typically lagged and adjusted for cash flows).
- ▶ Use the day weighting methodology from the example above for all the assets. Although day weighting is an acceptable approximation of time-weighted returns, with significant cash flows the returns can be skewed especially over a three-month period.
- ▶ Turn the quarterly returns into daily or at least monthly returns assuming a constant return derived from the quarterly return.

Each option has a certain arbitrariness to it. The first option — which BNY Mellon Asset Servicing recommends — has the advantage of not waiting for months before calculating returns. It also reflects the best available information when asset allocations are made in the fund.

## Conclusion

Increased exposure to private investments creates challenges for performance reporting. Different performance calculations, valuations frequencies and the timing of the valuations can create reconciliation issues and confusion. BNY Mellon Asset Servicing recommends that fund sponsors follow these guidelines when reporting funds holding both private investments and marketable investments:

- Calculate the official total return with a time-weighted methodology.
- The total fund market value should be calculated using adjusted lagged valuations.
- Report only the time-weighted composite return for private investment managers and not the time-weighted returns for individual private investments or their managers.
- Time-weighted composites with inconsistent valuation frequencies should use the best available values at the time of the calculations.

As an industry leader in performance measurement, we provide our clients with additional reporting to meet the unique needs generated from private investments.

- Supplemental reporting for non-lagged performance at the total fund level.
- Supplemental IRR calculations for individual managers or groupings for private equity and private real estate.
- Supplemental non-lagged time-weighted returns with quarterly day weighting to reconcile with real estate managers.

Although there are a number of different approaches on how to calculate and report performance with private assets and marketable assets, BNY Mellon Asset Servicing believes the above approach achieves the goal of providing timely and efficient results and insight.



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