The Impact of Management Fees on Pension Fund Value

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Executive Summary:

At Comptroller Stringer's request, the Bureau of Asset Management (BAM) analyzed the total dollar impact of active management fees on the value of the New York City public pension funds over the last 10 years. This required a three-step process: First, BAM staff analyzed total Fund performance before and after fees. Second, analysts imputed the total dollar effect of fees on the Funds over the past ten years. Third, analysts isolated the portion of performance that is due to external manager results vs. benchmark returns.[1]

While the Funds grew at a healthy rate in excess of 6.5% for the ten years ended December 31, 2014, this analysis found that, once all fees have been deducted from investment results, external managers fell more than $2.5 billion dollars short of benchmark returns over the ten year period.

- After removing the positive contribution from asset allocation (a trustee/BAM decision), the combination of private and public asset class manager net of fees performance resulted in a shortfall vs. benchmark of $2.5 billion over the ten year period.

- Managers of private asset classes such as private equity, hedge funds and real estate fell $2.6 billion short of target benchmarks after fees.

- Over the same period, managers of public asset classes exceeded benchmark returns by an estimated $40 million, even after the impact of fees is assessed. Notably, the impact of fees offset more than 95% of the $2.063 billion in gross (of fees) value added vs. benchmark by public market classes.

- These results provide substantial rationale for Comptroller to work with the boards to re-think the Funds' approach to active management and decision making across the five pension systems.

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[1] Performance is measured against a policy benchmark specific to each asset class.

Background:

The City's five public pension funds (New York City Police Pension Fund, New York City Fire Department Pension Fund, Teachers' Retirement System of the City of New York, New York City Employees' Retirement System, and New York City Board of Education Retirement System) all employ a combination of active and passive investments, each with targeted objectives, or benchmarks, against which performance can be measured.

Calculating the total impact of active management fees on value, system-wide, for 10 years, necessitated a painstaking top down analysis. Data was not readily available due to the past practice of reporting private market investments net of fees, and public market investments gross of fees.

This analysis estimated the impact of fees over ten years using available data.[2] As a result of this exercise BAM will modify its practice of reporting information inconsistently and performance net of fees will be clearly disclosed in a readily accessible, transparent way.

Findings:

The table below illustrates value added vs. benchmark over the past 10 years. If the Funds earned returns at the benchmark levels, with identical estimated net annual cash flows, the Funds would have grown from $88.675 billion to $158.955 billion.

As the Funds reported, before public market fees and after private market fees, the same $88.675 million grew to $159.190 billion — a net gain of $235 million vs. benchmark over the period.

However, substituting time weighted returns that are net of fees for both public and private asset classes would have left the Funds $1.788 billion shy of the benchmark end point.

Therefore, the total impact of public market fees is $2.023 billion (the gap between $0.235 billion in the black, and $1.788 billion in the red).

Combined Systems	12/31/2004 AUM[3] ($ Bil.)	12/31/2014 AUM ($ Bil.)	2014 Variance vs. Benchmark
Benchmark Portfolio Adjusted for Estimated Cash Flows	$88.675	$158.955	
Pension Funds[4] Before Public Market Fees, After Private Market Fees	$88.675	$159.190	+$0.235 Bil.
Pension Funds – Net After Estimated Public and Private Fees	$88.675	$157.167	- $1.788 Bil.

[2] BAM staff estimated the ten-year cumulative dollar impact of fees using top down public market fee rates from the appendices of the quarterly reports from 2005-2013; bottom up fees for private markets from internal analysis by BAM for 2014 (non-public information); and estimated total annual net cash flows.

[3] Assets Under Management.

[4] This panel shows the results as reported. Because past reports show public assets gross of fees, and private assets net of fees, public market fees must be deducted to view performance on a consistent basis. This is why a Pension Funds - Net calculation is provided in the bottom panel.

The following table shows the management effect (impact of managers' performance relative to the established benchmark) and the asset allocation effect (the impact of over/underweight in particular asset classes; a decision BAM and the trustees make).

While asset allocation differences vs. target allocations resulted in gains of an estimated $725 million, external managers cost the Funds $2.513 billion in value vs. benchmark.

Net Value Added – Asset Allocation	$0.725 Billion
Net Value Added – External Managers	-$2.513 Billion
Total Value Added	-$1.788 Billion

After fees, active public market investments delivered a modest $40 million above benchmark to the Funds over 10 years, while private market investments wiped away those gains and much more, costing a total of $2.553 billion, for a net loss of $2.513 billion when compared to the benchmark.

Net Value Added – Public Markets	$0.040 Billion
Net Value Added – Private Markets	- $2.553 Billion
Total Value Added	- $2.513 Billion

The chart below details private market performance. While opportunistic fixed income, hedge funds, and infrastructure funds may show promise, these investments are new, and have a limited track record.

Private real estate and private equity represented the bulk of the shortfall vs. benchmark, and these numbers reflect the full ten year period reviewed. This includes the bull markets that preceded the financial crisis, the recession, and the subsequent recovery.

Asset Class	Total Value Added
Opportunistic Fixed Income	**$0.061 billion**
Hedge Funds	**$0.051 billion**
Infrastructure	**$0**
Private Real Estate	**- $0.934 billion**
Private Equity	**- $1.734 billion**
Net Value Added – Private Assets	**- $2.55 billion**

Limited Partnerships in private asset classes should also be evaluated on a dollar weighted or internal rate of return (IRR) basis. This is due to the fact that general partners have discretion on the timing of cash flows in and out of the Funds. The chart that follows shows the dollar weighted return of private partnerships since their inception. The second column shows returns net of all fees and incentives (cumulative IRR) from the inception of each program to the end of 2014.

The next column compares each partnership to the return the Funds would have gotten if equivalent investments were made in the public markets (PME) with exactly the same cash flow pattern.

A risk premium to asset classes that have additional risk characteristics is added to the underlying public index used. For example, for private equity investments, the PME is Russell 3000 Index returns plus 300 basis points.

The last column shows the percentage of funds in column one that have cumulative IRRs exceeding their PME IRR (i.e. the percentage of investments that beat the corresponding benchmark.

	# of Funds *	Cum IRR*	PME IRR	% above PME
Private Equity Funds	181	9.6%	13.1%	25%
Private Real Estate Funds	47	6.9%	8.2%	28%
Opportunistic Fixed Income	14	13.0%	6.1%	86%

* Funds used across all five systems. Excludes results for funds in 2012, 2013 and 2014 vintages with less than 50% of assets drawn.
** Excludes performance fees.

Conclusions:

1. In the aggregate, external managers failed to add substantial value to the five NYC pension funds over the ten-year period studied. The results in private asset classes, where fees are higher, are much worse than in public asset classes, relative to their respective benchmarks. However, most of the gross value relative to benchmark in the public market asset classes was consumed by manager fees.

2. To maximize value for the 715,000 beneficiaries and the taxpayers of the City of New York, this model must be rethought.