Public School Employees' Retirement System (PSERS)

Investment Fund Managers and Fees

Senate Finance Committee Hearing
10:00 AM, October 18, 2017
Room 8EA East Wing

Introduction

Good Afternoon Chairman Hutchinson, Chairman Blake, and members of the Senate Finance Committee.

I am PSERS' Chief Investment Officer James H. Grossman Jr.

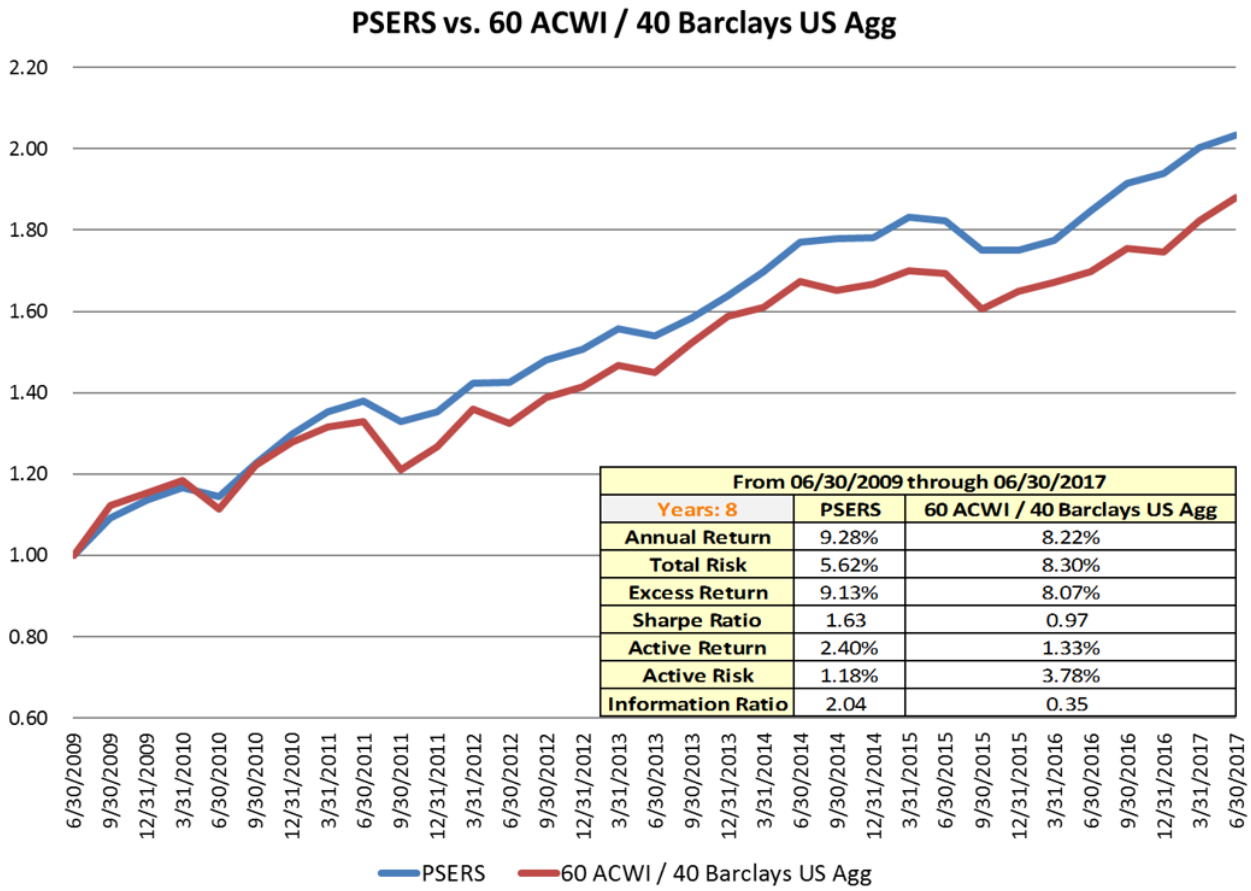
My colleagues and I welcome the opportunity to be here today to discuss with you PSERS' use of investment fund managers and the establishment of related investment fees.

There are really three main reasons for active investment management:

- Active management can increase returns on investment over passively managed (indexed) funds at reasonable cost to the Fund.
- Active management is the way to access certain market exposures, such as private equity and private real estate.
- Active management can increase diversification with the goal of managing risk.

The use of both internal and external investment professionals has generated substantial benefits for PSERS. Over the past ten years, these professionals have added over $4.9 billion in additional value, net of all fees and costs, over PSERS Board Policy Index. A Policy Index is simply a benchmark used by the Board against which the performance of the investment portfolio can be measured. A simple policy benchmark would be what is commonly known as a 60/40 portfolio benchmark, which includes a 60% weight to an equity index, such as the MSCI All-Country World Index, and a 40% weight to a bond index, such as the Barclays Aggregate Bond Index. Over the past 15 years, these professionals added $11.2 billion in additional value to the Fund. Again, this incremental value is net of all fees and costs. In essence, PSERS spends money on investment management fees to make money, making the investment management fees an investment in and of themselves.

Since the Great Recession, PSERS has outperformed a global 60/40 portfolio while taking significantly less risk as shown in the chart below. The chart below depicts the growth of $1 invested on June 30, 2009 in both PSERS and a global 60/40 portfolio. At the end of this period, the $1 invested in PSERS portfolio, net of all fees and costs, would have grown to $2.03 while the $1 invested in the 60/40 portfolio, excluding any fees or costs, would have grown to $1.88. While this may seem like a small advantage, it amounts to billions of dollars in additional assets that PSERS has to pay benefits.



From 06/30/2009 through 06/30/2017		
Years: 8	PSERS	60 ACWI / 40 Barclays US Agg
Annual Return	9.28%	8.22%
Total Risk	5.62%	8.30%
Excess Return	9.13%	8.07%
Sharpe Ratio	1.63	0.97
Active Return	2.40%	1.33%
Active Risk	1.18%	3.78%
Information Ratio	2.04	0.35

About PSERS

Established in 1917, the Public School Employees' Retirement System (PSERS) is a multi-employer, governmental public employee retirement system that provides retirement benefits to public school employees of the Commonwealth. Today, the PSERS Fund is the 15th largest public pension fund in the nation with assets of approximately $53.5 billion with a membership of approximately 260,000 active, contributing employees and over 223,000 retirees.

The PSERS Board, consisting of fifteen members, is an independent administrative board of the Commonwealth. The members of the Board, as trustees of the Fund, have exclusive control and management of the Fund and full power to invest assets of the Fund.

PSERS employs 37 highly credentialed investment professionals who advise and assist the Board.

PSERS Investment Office Credentials	
Credential	**# of Employees**
Chartered Financial Analyst (CFA) Designation	10
Certified Public Accountant (CPA)	7
Chartered Alternative Investment Analyst (CAIA) Designation	2
Financial/Professional Risk Manager (FRM/PRM)	2
Masters of Business Administration (MBA)	14
Certified Treasury Professional (CTP)	2
Certified Property Manager (CPM) Designation	1
Juris Doctor (J.D.)	1

The Beginning – Asset Allocation

One of the most important responsibilities of the Board is to annually review and approve the long-term asset allocation of the Fund. Understanding the use of investment managers begins with an understanding of the asset allocation. The Board consults with its actuary, investment consultants, and PSERS' own investment professionals to formulate the asset allocation plan. The asset allocation establishes the amount of risk the Fund is able and willing to take and is structured with the goal of achieving a return of 7.25% over the long run (20-30 year periods).

Diversification

The asset allocation is diversified in a way that provides PSERS the best opportunity to achieve its long-term investment objectives with the least amount of risk. Diversification is achieved by investing in various asset classes that will behave differently in various economic environments. Well-diversified portfolios are better able to weather inevitable market turmoil and downturns that occur from time to time, such as the tech bubble of 2000 or the financial crisis of 2008.

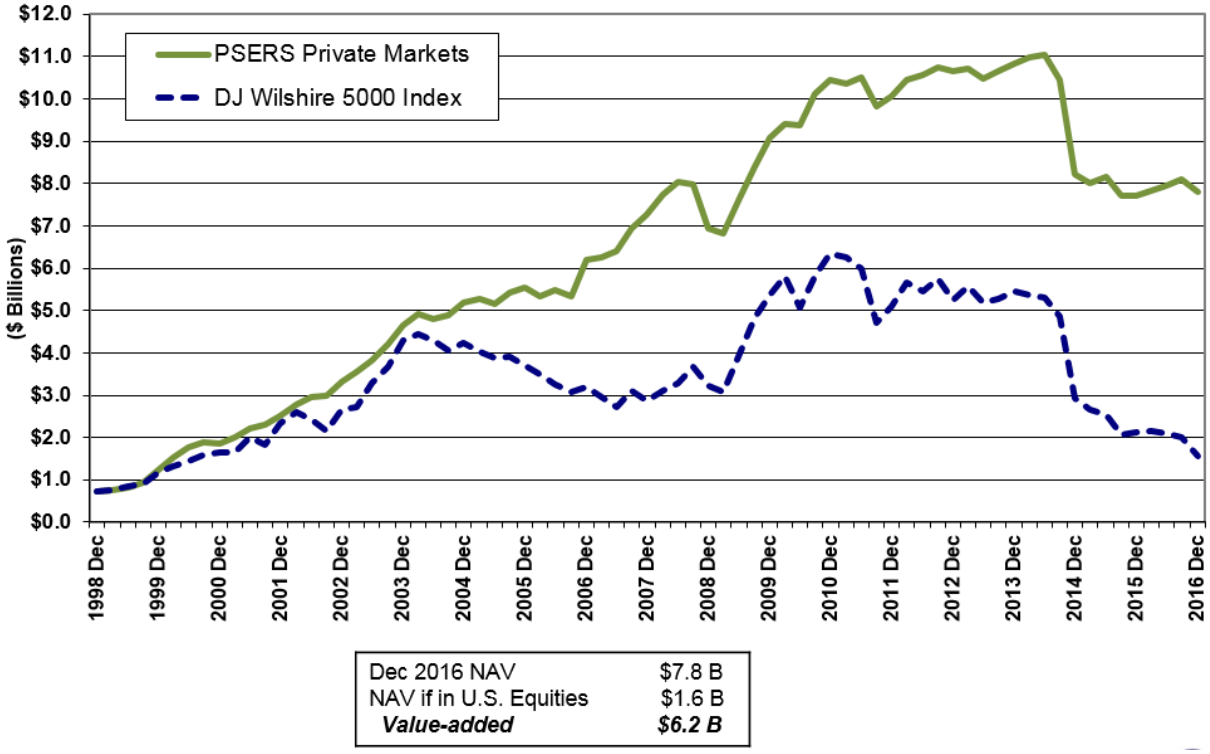
Asset allocation is an active decision that all investors must make. Over 80% of the risk all investors take is driven by this one decision, which includes which asset classes to invest in, the selection of benchmarks, as well as the amount of capital to invest in each asset class. Long-term success or failure is largely determined by this decision.

Implementation of the Asset Allocation

Once the asset allocation is set, then the assets have to be invested. PSERS investments are made by investment professionals, either internal or external. Some asset classes PSERS invests in can be

managed employing a low cost, so-called "passive" or index approach while others cannot. For example, the allocation to U.S. equities (stocks) can be either invested in a low cost, passively managed index portfolio, such as the S&P 500 index, or it can be actively managed in an effort to improve upon the returns of the passively managed index portfolio benchmark. PSERS also has an allocation to private equity, which is an investment in illiquid, not publicly traded companies. Examples of private companies in the U.S. include Pennsylvania companies such as 84 Lumber, Giant Eagle, Sheetz and Wawa. Private equity can only be invested in through active managers because no low cost index exists for these types of investments. PSERS has over $7.5 billion invested in private equity.

As shown in the following chart, PSERS Private Equity (Private Markets) program generated $6.2 billion more since its inception than equivalent investments in the U.S. equity market as represented by the Dow Jones Wilshire 5000 Index would have earned.



Passive Investment

Passive investment strategies form the basis that PSERS uses to attain market exposure in many public market asset classes. The advantage of passive strategies, such as indexing, is that they are generally very inexpensive to implement. If an investor solely uses passive strategies, however, performance will be limited to general market performance with little or no potential for excess earnings and potentially higher risk due to a lack of diversification.

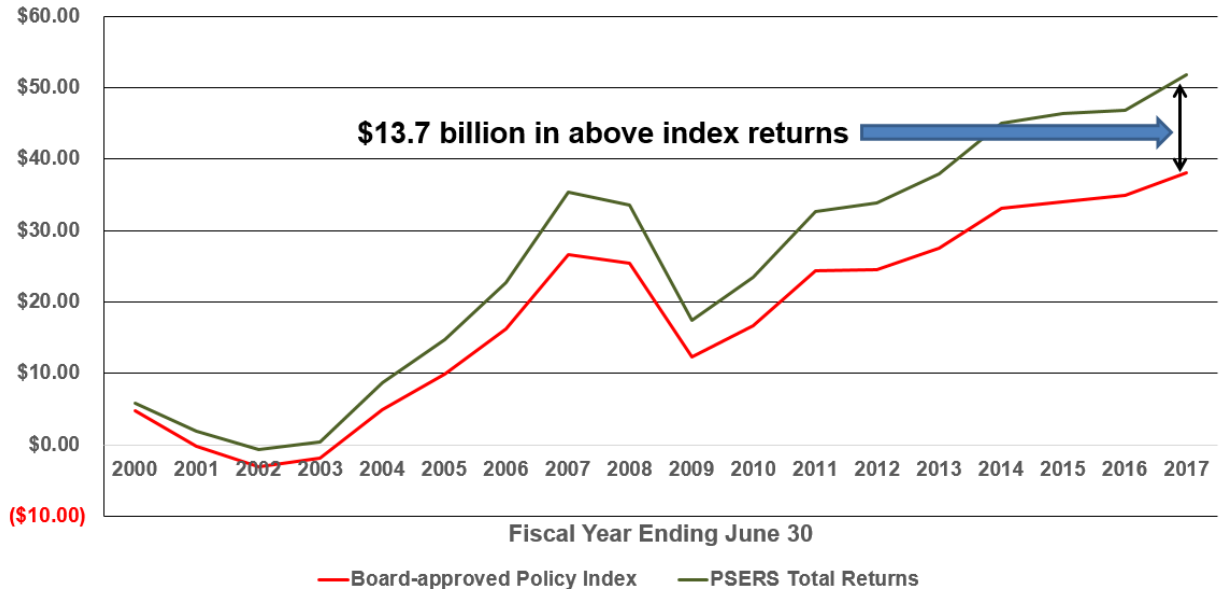
Active Investment

The primary reasons to employ active management are to achieve a better return (net of fees) than would be possible with a similar passive strategy and/or to provide fund diversification. The disadvantages of active strategies include being more expensive to implement than passive strategies and the risk that they may underperform passive strategies.

Active vs. Passive – How to Decide

When deciding to use an active strategy over a passive strategy, investors should ask one simple question: "Do the benefits justify the cost?." PSERS regularly measures the performance of active strategies relative to alternative passive strategies. In cases where PSERS is not receiving investment earnings from its active strategies in excess of alternative passive strategies, when all investment fees and costs are taken into account, capital is redeployed either to other active strategies or to passive strategies. If PSERS determines that the active managers are not meeting or exceeding expectations as a group, the Fund would exit active strategies altogether and move to a purely passive implementation.

Since 2000, PSERS has generated $13.7 billion, net of all fees and costs, in above index returns as a result of active management as shown in the chart below (amounts in billions).



A Real World Example – Active Beats Passive

For example, this past year PSERS had three large-cap Non-U.S. equity managers under contract who were managing approximately 47% ($2.7 billion) of this allocation. The other 53% ($3.1 billion) was managed internally in a low cost index portfolio by one of PSERS's in-house investment professionals. The three large-cap external managers last year generated a net of fee return of 22.32% vs. the passive index return of 20.45%. This equated to outperformance of $38.4 million, net of all fees and cost. Could we have saved fees and passively managed these assets internally? Absolutely, and at no incremental cost. However, this would have resulted in lower net of fee returns and actually would have cost PSERS over $26 million in lost performance.

During this past year, PSERS outperformed its policy benchmarks in 13 of 15 different asset classes. This means that the managers, after fixed and profit sharing fees, were able to exceed the benchmarks established for them. Over the past five years, PSERS outperformed its policy benchmarks in 11 of 13 different asset classes. We believe that the benefits of active management justify the costs, both in terms of increased returns and portfolio diversification.

Below is an example of how active management can add value over the long run. The table below is from one of PSERS' non-U.S. equity managers (Marathon Asset Management) showing their performance since PSERS hired them in 1990. Since inception, net of all fees and costs, Marathon earned for PSERS a cumulative return of 1,124% vs. the passive policy index (MSCI ACWI ex-U.S. Index) cumulative return of 411%, essentially tripling the amount of assets PSERS would have had if we invested the assets in a low cost, passive index. While not every active management arrangement yields such outstanding results, I refer back to the aggregate of these arrangements yielding $13.7 billion (net) above the comparable index return.

Portfolio performance

Market value June 2017	USD 1,041,124,135
Market value May 2017	USD 1,042,398,753
Performance inception date	31 December 1990

Cumulative periods	Portfolio gross %	Portfolio net %	B'mark %	Difference %
Current month	-0.10	-0.12	0.31	-0.41
Year to date	14.86	14.66	14.10	0.76
Since inception	1239.78	1124.16	410.53	829.25

Annualised periods

	Portfolio gross %	Portfolio net %	B'mark %	Difference %
1 Year	21.07	20.65	20.45	0.20
2 Years	5.92	5.51	3.98	1.53
3 Years	3.01	2.65	0.80	1.85
4 Years	7.71	7.34	5.68	1.66
5 Years	10.28	9.91	7.22	2.69
6 Years	6.83	6.46	3.24	3.22
7 Years	10.00	9.63	6.66	2.97
8 Years	10.63	10.25	7.13	3.12
9 Years	5.81	5.45	2.03	3.42
10 Years	4.43	4.06	1.17	2.89
11 Years	6.84	6.48	3.52	2.96
12 Years	8.46	8.09	5.39	2.70
13 Years	9.21	8.84	6.24	2.60
14 Years	11.11	10.74	7.93	2.81
15 Years	10.15	9.78	7.07	2.71
16 Years	9.71	9.34	6.06	3.28
17 Years	8.52	8.16	4.01	4.15
18 Years	9.05	8.69	4.75	3.94
19 Years	9.29	8.93	5.05	3.88
20 Years	8.87	8.51	5.12	3.39
21 Years	9.10	8.74	5.49	3.25
22 Years	9.57	9.21	5.84	3.37
23 Years	9.27	8.91	5.67	3.24
24 Years	9.83	9.46	6.13	3.33
25 Years	10.43	10.06	6.68	3.38
26 Years	10.07	9.70	6.40	3.30
Since Inception	10.29	9.91	6.35	3.56

Calendar years

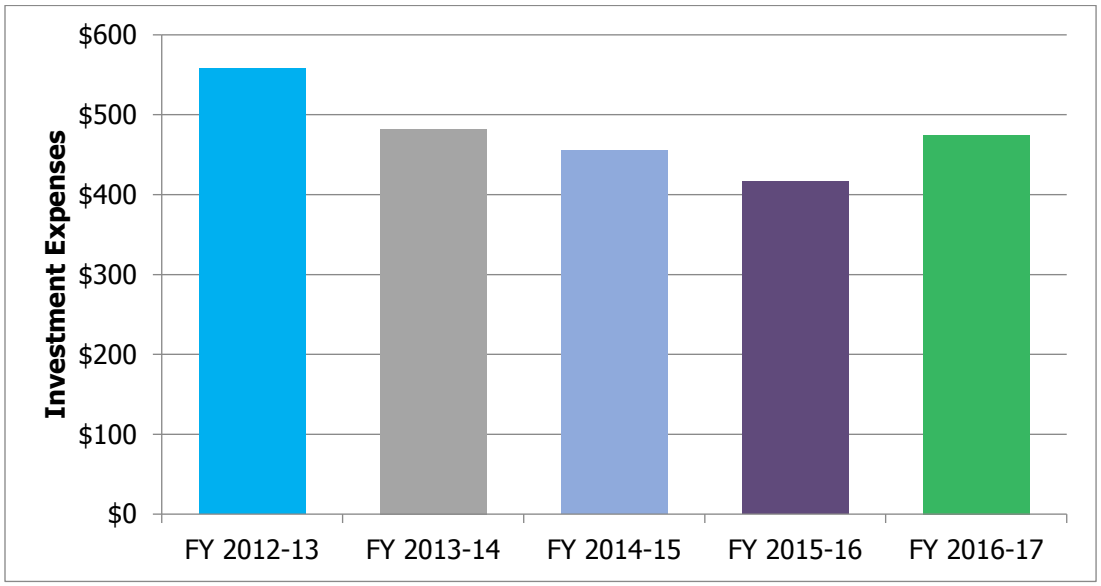
	Portfolio gross %	Portfolio net %	B'mark %	Difference %
2016	1.57	1.15	4.50	-3.35
2015	3.60	3.31	-5.66	8.97
2014	-5.01	-5.32	-3.87	-1.45
2013	26.15	25.76	15.29	10.47
2012	19.23	18.82	16.83	1.99
2011	-8.92	-9.23	-13.71	4.48
2010	17.98	17.57	11.15	6.42
2009	34.98	34.50	41.45	-6.95
2008	-40.14	-40.38	-45.33	4.95
2007	17.96	17.57	17.12	0.45
2006	29.64	29.26	27.16	2.10
2005	16.11	15.72	17.11	-1.39
2004	25.34	24.95	21.36	3.59
2003	48.23	47.77	41.41	6.36
2002	-3.55	-3.86	-14.42	10.56
2001	-11.35	-11.63	-19.69	8.06
2000	-5.34	-5.63	-15.09	9.46
1999	37.87	37.44	30.34	7.10
1998	8.70	8.35	20.33	-11.98
1997	0.53	0.21	2.06	-1.85
1996	13.45	13.08	6.36	6.72
1995	11.71	11.33	11.55	-0.22
1994	11.37	10.94	8.06	2.88
1993	46.54	45.96	32.94	13.02
1992	-7.41	-7.78	-11.85	4.07
1991	16.01	15.55	12.50	3.05

A Word on Fees

PSERS aggressively negotiates fees with all of its partnerships and managers. PSERS endeavors to structure fee arrangements that align the interests of the investment manager with those of PSERS. Managers earn sensible fees to cover reasonable overhead costs. Profit sharing fees are also negotiated in numerous instances to competitively incentivize investment managers who generate superior returns. Fair and effective fee structures promote an entrepreneurial mindset, reward outstanding long-term performance, and enable firms to attract and retain investment talent. In a very good year where managers generate strong, above benchmark returns, the fees from profit sharing will increase which is a positive outcome for the System. Conversely, when fees fall due to weak or negative performance relative to benchmark, that is a negative outcome for PSERS. This past year, PSERS active managers had a very good year and profit sharing fees increased from $36.6 million to $82.4 million due to above benchmark returns.

PSERS negotiates more attractive deal terms due to its size and bargaining power on most, but not all, of its investments. High quality, top tier managers typically have an overwhelming demand for their products and limited capacity. This reduces the ability of investors such as PSERS, or any other investor for that matter, to influence the deal terms. PSERS evaluates those instances on a case-by-case basis to verify if the benefits of investing with these high quality, top tier managers outweigh the costs.

Additionally, PSERS has embarked on an effort to reduce fixed management fees in exchange for higher profit sharing fees with an aim to increase the alignment of interests. This will have the effect of reducing management fees in years where the managers perform poorly. Conversely, when those managers do well, profit sharing fees will increase in good years. As a result, this will add volatility to the fees paid each year, but will provide a better alignment of interests.



Conclusion

Active management has generated substantial monetary benefits for the Fund, net of all fees and costs, over the long-term. Over the past 10 years, active management added over $4.9 billion in additional value, net of all fees and costs, relative to the Board's Policy Index. PSERS will continue to monitor the performance of each manager to ensure that benefits from the investment outweigh the costs. In closing, looking back on PSERS long-term performance, we believe the benefits have justified the costs incurred. That said, we will continue to vigilantly monitor each manager and, if the facts change, we will change.

Thank you again for the opportunity to appear before you today, and I will be happy to answer any questions you may have.