

Commonwealth of Pennsylvania Public School Employees' Retirement System

DATE: January 7, 2009

SUBJECT: Oppenheimer Capital Recommendation

TO: Members of the Board

FROM: James H. Grossman, Jr., CPA, CFA
Managing Director of External Public Markets, Risk & Compliance

At the Finance Committee meeting in January, staff and Wilshire will recommend the retention of Oppenheimer Capital to manage a \$200 million portfolio in their Structured Alpha strategy. This strategy invests in listed options on the S&P 500 Index, Russell 2000 Index, and the Nasdaq 100 Index. They purchase and sell puts and calls with typical durations ranging from 20 to 75 days. They are looking to exploit the tendency of implied volatility being greater than realized volatility. The portfolio will be structured with an expected return target is 12.5% and a target tracking error of 7.5%. The proposed mandate is a complement to our other options overlay mandate managed by Acorn Derivatives. This strategy will be implemented through a single-entity LLC and included in the absolute return allocation.

Included for your review are a brief synopsis prepared by staff, Wilshire's recommendation, and Oppenheimer's presentation. Representatives of Oppenheimer Capital will be here to make a presentation to the Finance Committee on January 21, 2010.

If you have any questions or comments prior to the meeting, please contact me at 717-720-4703.



Memorandum

Date: January 7, 2010

To: James H. Grossman, Jr., CFA
Managing Director of External Public Markets, Risk and Compliance
Pennsylvania Public School Employees' Retirement System

From: William G. Bensusan, Jr., CFA
Managing Director
Wilshire Associates Incorporated

A handwritten signature in black ink, appearing to read 'Bill Bensusan'.

Marlin D. Pease, CFA
Managing Director
Wilshire Associates Incorporated

A handwritten signature in black ink, appearing to read 'Marlin Pease'.

Re: Oppenheimer Capital Structured Alpha

The purpose of this memorandum is to provide background information and a recommendation to the Pennsylvania Public School Employees' Retirement System ("PSERS") to retain Oppenheimer Capital Management ("OpCap") for an equity index options based mandate. The product offering ("Structured Alpha") will utilize listed options on US equity market indices to construct option spread positions using both puts and calls. Structured Alpha is designed to exploit option spread inefficiencies that exist as a result of supply/demand factors, the participation of non-return motivated participants (hedgers) and participants seeking to express investment emotion (fear/greed). Additionally, index option spread mispricing occurs due to inefficient relationships between implied and realized volatility in the index options market. The OpCap Structured Alpha strategy represents a complimentary exposure to Acorn Derivatives, which is an existing options manager with a long-term relationship with PSERS. Structured Alpha would be included in the absolute return category of the PSERS investment program. Wilshire believes OpCap and its parent, Allianz Group, is a high quality, institutional organization with the requisite skill set to manage the proposed mandate.

Organization

OpCap is an independently operated investment unit of Allianz Global Investors, an asset management arm of Allianz Group. As one of the largest financial institutions in the world, the Allianz Group offers financial services in more than 70 countries. Allianz Global Investors has organized a consortium of asset managers that include PIMCO, RCM, NFJ Investment Group, Nicholas-Applegate and Oppenheimer Capital. Combined assets under management for Allianz Global Investors are approximately \$1.5 trillion. OpCap has approximately \$8.5 billion under management. Approximately \$2.1 billion is managed in options strategies by the OpCap team.



Investment Approach

US equity index options on the S&P 500 Index, the NASDAQ 100 Index and Russell 2000 Index – both put and call options and both long and short positions – are used exclusively to implement the Structured Alpha strategy. The approach is based on proprietary statistical model that is designed to evaluate the historical pattern of index option pricing behavior in order to generate a range of probable outcomes. A “profit zone” is created using listed index options to create a payoff diagram. The model then determines which specific index options to use to implement the strategy. A team of three portfolio managers, three research analysts, three equity traders and two risk managers are responsible for product implementation. The OpCap team does not deviate from this investment approach or manipulate the findings of the proprietary statistical model. The strategy is highly liquid, fully funded and fully collateralized.

Fund Structure

The PSERS exposure to the Structured Alpha product will be organized as a single entity, limited liability corporation (“LLC”). In other words, PSERS will be the only investor in this fund structure. All costs associated with establishing the LLC will be absorbed by OpCap. The account will be fully funded with 75% invested in collateral (90 Day T-Bills) and 25% will remain in cash as a cushion in the event of an unexpected spike in volatility or other shock to the system. The LLC structure will 1) not be subject to lock up period, 2) provide daily liquidity and 3) be fully transparent.

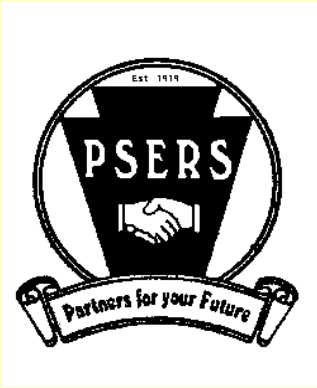
Staff has negotiated an attractive fee that includes no base management fee and a participation fee based on excess performance. The benchmark is a cash equivalents return measured by the Citigroup 90-Day Treasury Bill Index. The expected excess return or alpha is in 12.5% (net of fees) with a target volatility or risk of 7.5%.

Recommendation

The PSERS investment program is designed to have a strategic exposure to absolute return strategies. We believe the Structured Alpha product offers PSERS the opportunity to exploit index option spread inefficiencies with an established, well organized methodology. Additionally, the approach fits the return and risk objectives of the absolute return allocation.

Wilshire recommends that PSERS target an investment of \$200 million in the OpCap Structured Alpha strategy within the absolute return element of the PSERS investment program.

Please let us know if you have any questions regarding this recommendation.



Absolute Return Allocation

Oppenheimer Capital

January 7, 2010

See Page 7 for Disclaimer

James H. Grossman, Jr., CPA, CFA
Managing Director of External Public
Markets, Risk & Compliance

Oppenheimer Capital – Structured Alpha

Overview of Oppenheimer Capital

- Subsidiary of Allianz Global Investors
 - Other subsidiaries include PIMCO, Nicholas Applegate, and RCM
- \$8.3 billion in assets under management
- Firm manages in excess of \$2.1 billion in options strategies

Oppenheimer Capital – Structured Alpha

Investment Philosophy

- Options market is favorable area to pursue sustainable alpha potential
 - Option alpha is not zero-sum
- Implied volatility is a subjective forecast that reflects:
 - Fear and greed
 - Hedgers and other nonfinancial players
- Oppenheimer applies an objective forecast based on market history
 - Probabilities generated by proprietary statistical analysis
 - They stick to the data

Investment Team

- 3 portfolio managers, 3 research analysts, 3 equity traders, and 2 risk managers

Oppenheimer Capital – Structured Alpha

Value Proposition

- Utilize a unique combination of portfolio benefits
 - Alpha
 - Risk Management
 - Crash Protection
- Innovative alternative strategy offered by traditional managers

Oppenheimer Capital – Structured Alpha

Performance, net of fees

	2005*	2006	2007	2008	2009*
Class A	3.5%	12.0%	13.8%	-4.5%	10.1%

* - inception date of August 22, 2005

** - through November 30, 2009

History with PSERS

- Oppenheimer has not managed an account for PSERS since 1999 (U.S. equity portfolio)

Annualized Fund Returns and Volatility Since Inception (9/2005)

- Annualized Net Return: 7.9%
- Annualized Volatility: 5.6%
- Sharpe Ratio: 0.82

Portfolio Use

- Staff intends to use this product in the absolute return allocation.

Oppenheimer Capital – Structured Alpha

Account Terms

- Management fee: 0.0%
- Performance Fee:
 - 27% of excess performance on first \$100 million
 - 24% of excess performance on second \$100 million
 - 21% of excess performance on assets in excess of \$200 million
- Hurdle Rate: 90-day Treasury Bills
- High Water Mark: Yes
- Account Structure: Customized LLC
- Custodian: BNY Mellon
- Lockup Period: None
- Liquidity: Daily
- Transparency: Full
- Target Return and Volatility
 - 12.5% annualized net return
 - 7.5% volatility

Oppenheimer Capital – Structured Alpha

Other

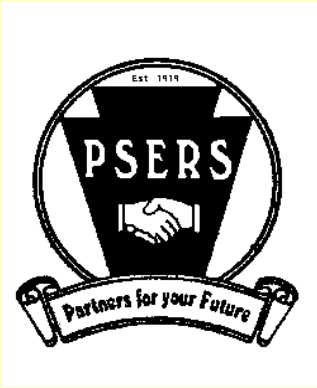
- Relationships with Wilshire: None
- Placement Agents: None
- Political Contributions in PA: None

Oppenheimer Capital – Structured Alpha

Recommendation

- Staff, together with Wilshire Associates, recommends that the Board retain Oppenheimer Capital to manage an absolute return mandate, Structured Alpha, in an amount within the target ranges established in Exhibit D of the Investment Policy Statement, Objectives and Guidelines.

DISCLAIMER: This document was presented to the Public School Employees' Retirement Board at the public meeting at which the Board acted on the resolution to which the information relates. The sole purpose for posting the presentation information on this website is to enable the public to have access to documents that were utilized at a public meeting of the Public School Employees' Retirement Board, and no other purpose or use is intended.



Absolute Return Fund Allocation

Oppenheimer Capital

January 7, 2010

See Page 7 for Disclaimer

James H. Grossman, Jr., CPA, CFA
Managing Director of External Public
Markets, Risk & Compliance