

Commonwealth of Pennsylvania Public School Employees' Retirement System

DATE: January 7, 2009

SUBJECT: Mariner Investment Group, LLC 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 Mariner Investment Group, LLC, to manage up to \$250 million in a residential mortgage-backed securities (RMBS) portfolio. Mariner is an organization that we have been following since late 2007 and have met with numerous times on a variety of products. In the middle of 2009, we met with the Galton team at Mariner (Galton is a specific investment management team within Mariner) and reviewed their process and technological platform for managing RMBS portfolios. What caught our attention was the experience of the team they have assembled as well as the robustness of their proprietary technological platform for evaluating RMBS securities. Mark Heppenstall, Managing Director of Fixed Income, reviewed their technological platform with Galton and has run some of his existing RMBS through their system for detailed analytics. His assessment is that their technology platform is a clear differentiator for them in managing RMBS. In addition, the portfolio management team has experience in originating, servicing, securitization, portfolio management, and trading RMBS. We believe that Mariner represents an important strategic relationship in managing a RMBS portfolio for PSERS as well as assisting internal fixed income staff with robust RMBS analytics.

Included for your review are a brief synopsis prepared by staff, Wilshire's recommendation, and Mariner's presentation. Representatives of Mariner 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.

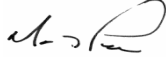


Memorandum

Date: January 7, 2010

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

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

Marlin D. Pease, CFA 
Managing Director
Wilshire Associates Incorporated

Re: Mariner Investment Group, LLC

The purpose of this memorandum is to provide background analysis and recommend Mariner Investment Group, LLC to manage a Residential Mortgage-Backed Securities (“RMBS”) portfolio that will serve a strategic role in the PSERS investment program. Wilshire believes that Mariner is an institutional firm with deep resources, unique / proprietary systems and a qualified investment team.

Organization

Mariner Investment Group, LLC (“Mariner”) is an SEC Registered Investment Advisor founded by William J. Michaelcheck in 1992. Mariner has \$6 billion in total assets under management and the firm employs 161 staff globally. Mariner is associated with other investment advisors and provides substantive support services to these “Associated Advisors” in exchange for a percentage of the advisor’s revenues. The Associated Advisors have approximately \$3.7 billion in assets under management. Galton Capital Group is one of the Associated Advisors and the Galton team will be responsible for this strategy. RMBS are the sole focus of the Galton team.

Investment Approach

Mariner consists of seasoned mortgage professionals with experience spanning the entire mortgage process (origination to securitization to servicing). The key competitive advantage of this team is their unique technology platform that integrates a variety of sources of publicly available information (First American Housing Services, Moody’s Economy.com, Loan Performance and Intex) to facilitate the quick decisions that are required when investing in seasoned mortgages. The integration of structuring tools and models along with

the comprehensive data (86%+ of non-agency bonds are available in the system) enables a consistent relative value analysis of all bonds processed.

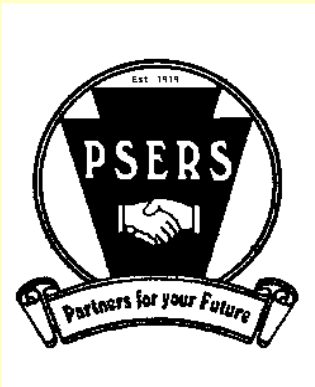
As an example of the value added through this integrated technology system, Mariner has incorporated their knowledge of the origination process and of specific originators into a screening system to enable additional analysis based on the specific originators. Mariner believes that originators follow different underwriting procedures, leading to distinct differences in the resulting performance of the mortgage pool. Mariner has quantitatively and qualitatively ranked the largest originators in the universe and can incorporate that information in real time when presented with an opportunity to purchase a mortgage investment. Wilshire believes that this provides Mariner with a unique, and not easily replicable, advantage over other top tier providers.

Mariner would require a minimum of \$100 million for a separate account to construct a diversified portfolio of 30 to 40 securities. For a portfolio with more favorable liquidity characteristics, Mariner proposed a return target of 10% to 12%. In addition, Mariner believes a modest amount of leverage could be considered for utilization in the higher quality securities.

Recommendation

Wilshire recommends that PSERS invest up to \$250 million in a RMBS portfolio managed by Mariner within the opportunistic fixed income allocation of the PSERS investment program.

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



Opportunistic Fixed Income Allocation

Mariner Investment Group, LLC

January 7, 2010

See Page 7 for Disclaimer

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

Mariner Investment Group, LLC

Overview of Mariner Investment Group, LLC

- Founded in 1992
- Extensive Wall Street proprietary trading and risk management expertise
- Deep fixed income and credit experience
- \$6 billion in assets under management
- Mariner operates as a platform for various “boutiques”
 - Galton Capital Group is the residential mortgage-backed group
 - Caspian Capital Partners is the distressed and L/S corporate credit group
- Clients are approximately 90%+ institutional and include public and corporate pensions, endowments/foundations, hospital operating pools, family offices, and fund of funds
- Based in Harrison, NY with additional offices in New York City, Boston, Tokyo, and London
- Mariner employs 161 professionals

Mariner Investment Group, LLC

Investment Philosophy

- Seek strong absolute, risk-adjusted net returns
- Seek to implement strategies with “long option” mentality whereby downside risk is limited and upside reward can be multiples of downside risk
- Seek to preserve capital in stressful markets by being long “senior” securities outright or long “senior” securities and short “junior” securities
- Specialized portfolio managers that have deep experience in their respective fixed income sectors have an edge

Investment Team

- 4 senior investment professionals have approximately 90 years collective experience
- 10 investment professionals led by co-portfolio managers, Matt Whalen and Kevin Finnerty are fully supported by Mariner infrastructure
- Deep experience in RMBS analysis and securitization, managing mortgage originators and servicers, and trading and managing mortgage portfolios

Mariner Investment Group, LLC

Value Proposition

- Strong portfolio management team with deep backgrounds in RMBS across the entire business (origination, servicing, securitization, portfolio management, trading, etc.)
- Proprietary Technology
 - Platform is unique and has numerous proprietary analysis statistics
 - 100% developed in-house
 - Data is parsed, scrubbed and housed on-site
 - Deep analysis (loan level information) combined with efficient technology enables team to narrow investable universe in \$1.0 trillion+ RMBS market and spend time on value added credit analysis
 - Integrated framework for analysis, portfolio management, risk management, and trading
- Focused
 - Portfolio management team focused on managing portfolio - the back office, compliance, legal and other operational support is provided by Mariner
 - No outside focus on CDOs or other legacy RMBS issues

Mariner Investment Group, LLC

Performance

- Mariner Onshore Mortgage Fund I, LP Performance, net of fees
 - Launched January 1, 2009
 - Performance through November 2009: 28.19%
- Caspian Capital Partners, LP
 - Launched March 1, 1997
 - Annualized performance November 2009: 11.59%
 - Annualized risk: 4.68%

History with PSERS

- This would be the first portfolio with Mariner

Portfolio Use

- Staff intends to use this product in the opportunistic fixed income allocation.

Mariner Investment Group, LLC

Account Terms

- Management fee: TBD
- Performance Fee:
 - TBD
- Hurdle Rate: TBD
- High water mark: Yes
- Account Structure: Separate account to start; may move to customized LLC
- Custodian: BNY Mellon
- Lockup Period: None
- Liquidity: Daily
- Transparency: Full

Mariner Investment Group, LLC

Other

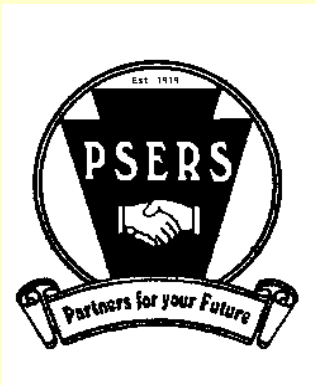
- Relationships with Wilshire: None
- Placement Agents: None
- Political Contributions in PA: None

Mariner Investment Group, LLC

Recommendation

- Staff, together with Wilshire Associates, recommends that the Board retain Mariner Investment Group, LLC to managed an opportunistic fixed income mandate in an amount within the target ranges established in Exhibit D of the Investment Policy Statement, Objectives and Guidelines.

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Opportunistic Fixed Income Allocation

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