

DATE: November 5, 2020

SUBJECT: Proposed Tail Risk Mitigation Strategy Policy

TO: Members of the Board

FROM: Joseph W. Sheva, CPA, FRM gws

Senior Risk and Compliance Manager

At the November 12, 2020 Investment Committee meeting, the Investment Office (IO) will recommend that the Board adopt a Tail Risk Mitigation Strategy Policy. The Policy was drafted at the request of Board members following the July 31st Investment Committee Meeting during which Board members were provided a presentation on naïve Tail Risk Hedging by the IO. This presentation was a follow-up to previous Board educational presentations made on the subject by outside experts during the March 2019 and March 2020 Investment Committee meetings. The Policy was proposed at the October 8, 2020 Investment Committee meeting at which time the Board voted to revisit the Policy during the November 12, 2020 Investment Committee meeting. Subsequent to that meeting Board members requested that the Policy's fixed annual spending amount be reduced from 25 basis points (0.25%) of the Fund's Net Asset Value, as defined within the Policy, to 12.5 basis points (0.125%). That is the only change to the Policy presented at the October 8, 2020 Investment Committee meeting.

Highlights within the Policy include:

- Establishing a strategy with an explicit mandate of providing protection against significant equity market drawdowns;
- Spending each year a fixed annual amount that is set at the beginning of each fiscal year at 12.5 basis points (0.125%) of the Fund's Net Asset Value, as defined within the Policy; and
- Managing the strategy in an active manner in order to monetize any gains as a result of these drawdowns and redeploying those proceeds into other asset classes while maintaining some level of protection.
- The spending amount is expected to be applied as evenly as market circumstances permit.
- Due to the fixed nature of the budget, the desired level of protection might not be achievable in all market environments. As of the date of this memo, protection is expensive and therefore cost/benefit considerations will be prudently considered as the strategy begins to be implemented. In addition, at the Budget amount defined in this Policy, it is expected that the program can generally hedge half of the Public Market Equity beta contributed by public markets.

PSERS has experience with tail risk mitigation strategies. We have used an external manager within the Absolute Return allocation since 2011 and the LIBOR Plus allocation since 2015. Also, the IO ran internally a pilot S&P 500 tail risk hedging program from February 2017 to March 2019. Finally, the internal team tasked with managing the strategy has significant experience prior to PSERS managing the instruments utilized in such a program. It is expected that the fully

mature program will feature both an internally managed portion and an externally managed portion in order to provide a comprehensive and diversified program.

Consistent with the new Policy process utilized in the first quarter of 2020, the Board was provided the Tail Risk Mitigation Strategy Policy for a one-week review and written comment period during the week of September 21st, along with a review period from October 9th through October 23rd The final Policy was revised based on recommendations of Board members. Attached are a memo from Aon, the Board's investment consultant, and a memo from Cohen Milstein Sellers & Toll PLLC, the Board's Fiduciary Counsel, regarding the policy development process, as provided at the October 8th Investment Committee meeting.

If you have any questions or comments, please contact me at 717-720-4632.