

September 14, 2026

Ms. Bethany Rhodes
Executive Director
Ohio Retirement Study Council

Subject: Review of Return Discussion in *Retirement at Risk: The Political Economy of Public Pension Governance*

Dear Bethany:

The Journal of New Finance recently published an article "*Retirement at Risk: The Political Economy of Public Pension Governance*" from Mendenhall and Sutter (Volume 4 dated 6-19-2026). The article suggests that STRS staff are manipulating what the authors call "unaudited" ACFR return data, in order to inflate performance-based incentives. The author's concern is that there is a consistent (though not universal) pattern of the "Reported" return being larger than the "Audited" return.

Our conclusions from reading the letter:

- The article fails to demonstrate that STRS staff are manipulating return data to inflate performance-based incentives
- The article authors are comparing "gross" of expense returns with "net" of expense returns creating an automatic disparity.
- The two sets of returns discussed use different methodologies which are each appropriate for their own purposes and are not necessarily intended to be comparable.
- The authors designate a certain "approved" status on certain figures versus other figures but we question that distinction

We also read through Rudy Fichtenbaum's review. While we agree with his finding that the use and comparison of net and gross returns in the article is problematic, in addition we find that there are also several other important issues we present in this letter.

Below is our full review of the section of the article dealing with returns:

Audited Rate of Return:

This is the return computed by the pension actuary on the market value of assets contained in the annual actuarial report. This return was computed under a methodology referred to as a "Money-Weighted" calculation. A Money-Weighted approach computes the portfolio return for the year accounting for the timing and size of the cashflows throughout the year. This type of determination is appropriate for the fund to understand the overall return that occurred in the year. In this case the plan actuary also uses a simplified approach where cash flows are assumed to be made in equal amounts spaced evenly throughout the year and administrative expenses are deducted from returns.

Reported Rate of Return:

This figure was pulled from the annual ACFR for the plan. It is described in the ACFR as the “Time-Weighted” return on the plan assets before deducting for expenses. Time-Weighted returns are appropriate for measuring how well an investment manager did investing assets over a period of time. The result is the compound return the manager achieves ignoring the impact of cashflows (magnitude and timing). This type of return is typically used to evaluate how a particular investment manager performed against an index or other benchmark. It is the appropriate measure for manager/investment staff performance because it is independent of cash flow which they have no control over.

Example of Differences:

Money-Weighted and Time-Weighted computations will result in different rates of return. As an example consider a fund over a one year period, where the market is up sharply for the first half of the year but flat the second half:

- Value at January 1: \$1,000,000
 - Market gains 20% in six months
- Value at June 30: \$1,200,000
- Deposit on July 1: \$1,000,000
- Value on July 1 (after deposit): \$2,200,000
 - No market gain for six months
- Value on December 31: \$2,200,000

The Money-Weighted return is 13%

The Time-Weighted return is 20%

The return in dollars over the year is \$200,000 in either case, but the measurement of return is different depending on what the user is trying to assess.

- In the Money-Weighted example we are finding the return rate that the “average” fund balance would have to have to generate \$200,000.
- In the Time-Weighted example we are compounding a 20% return and a 0% return to get 20% for the year to determine how well our manager did with their investment decisions.

Purpose of Methods:

Time-Weighted returns are appropriate when evaluating an investment manager. It provides the return the manager was able to generate over the time period without having the timing and amount of cashflows influencing the outcomes. It is preferable, for this purpose, to use the returns after deducting any investment-related expenses, as the goal is typically to outperform a benchmark after any manager costs are accounted for. The authors of the article should have used the “Net Return” figure versus gross returns in their article.

The return computed by the actuary is an estimate and frequently will differ from the more precise amounts computed by investment consultants. This is primarily because the actuary uses net returns and the “money-weighted” method. This is also because the actuary is using simplifying assumptions (mid-year cashflows). The actuary’s figure is to provide a basis for whether the investment returns were

higher or lower than the actuarially assumed return for the year and not to evaluate how a manager is doing.

In the example above, the manager made 20% for the first half of year and none in the second half. Clearly 20% in total. But since the plan had more money in the second half of the year when returns were flat, the plan only earned 13% in total.

The authors of the article apply the label “audited” to the figures generated by the STRS pension actuary. Their basis for this is that the actuary’s report is incorporated into the annual financial statement for the plan which is certified by an auditor. It is not our understanding that an actual independent auditor would say that they have certified any particular number in an actuary’s report just because they have accepted it as part of their annual audit.

Conclusion:

The STRS “time-weighted” method and the actuarial “money-weighted” are both appropriate for their purposes. “Time-weighted” for measuring manager performance, and “Money-weighted” for measuring total return for actuarial purposes. The article confuses the issues.

We are Members of the American Academy of Actuaries and qualified to render this actuarial opinion. We are available to discuss these findings in more detail.

Sincerely,



William B. Fornia, FSA



Thomas Vicente, FSA, Bolton Partners

Cc: Jeff Bernard – ORSC
Linda Bournival – KMS