

Union College Endowment

An Analysis and Evaluation of Investment Strategy and Performance

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for the Budget Committee, AAUP Chapter, Union College
May 2022 update

ADDENDUM: Some Questions/Comments Addressed

A. Is "**S&P 500 as a benchmark**" an appropriate one?

a. This is a widely used benchmark. Even Union itself used it in response to my report last year. [See the Gerber-Taylor Report (no author, no date), p. 3, which was distributed to the faculty in March 2021.]

b. The underlying situation is even worse than presented in my update/"Key Points." One could accept lower performance than S&P 500 provided the **risk profile** of Union's portfolio were better. But, in fact, it is worse. For every single year from 2003, Union's risk profile (as calculated, for example, by the Sharpe Index) is worse than that of an S&P 500 index fund.

B. Should we not consider "**performance relative to peer institutions**"?

a. This does not make sense either based on principles of economics/finance or based on logic. Union and its peers have the same access to financial markets as others. Financial markets are not segmented. If Union and its peers were indeed restricted to operate only in a segment of financial markets, then this kind of comparison with peer institutions would make sense. But that is not the case.

b. Comparing Union to its "peer institutions" might simply replicate potential mistakes that they might be making. Whereas comparing Union to a widely used market benchmark like S&P 500, or some other index, gives Union some measure of the collective underperformance as made by endowment managers like ours.

C. **Investment management fees are "rather tricky"/costly/difficult to produce**

a1. For FY2000 through FY2019, fees are readily available from Union's annual audits done by KPMG.

a2. For FY2020, I requested them from Michele Gibson, the then VPFA; she provided them.

a3. For FY2021, Scott Jones, the current VPFA, declined to give me the number in spite of my repeated requests. It is, of course, quite possible that the fee numbers suddenly became difficult to produce" in FY2021.

b. The College needs to use expenses (fees, incentive fees, etc.) as a basis to calculate *net* returns. It does report *net* returns. It seems that it would be mathematically impossible to calculate net returns without knowing gross returns and expenses. Therefore, the figure for fees must be available to net out the gross returns.

D. Should we not consider "**longer term correlations between performance and fees**"?

I have examined both short-term and long-term performance, as well as both risk vs. return. For any starting year from 2003 on, Union's long-term performance is worse than S&P's **both** in terms of risk **and** return. Please see the appended document for a sampling of my simulations.

E. Finally, over the past two years or so, the following have examined my research in this area and have corroborated it:

- Six professors in the fields of economics, finance, taxation, law, and accounting,
- One hedge fund manager/owner in NYC,
- One senior financial analyst in NYC,
- One CPA,
- One author with several peer-reviewed articles in *The Journal of Portfolio Management* and *The Journal of Investing*.

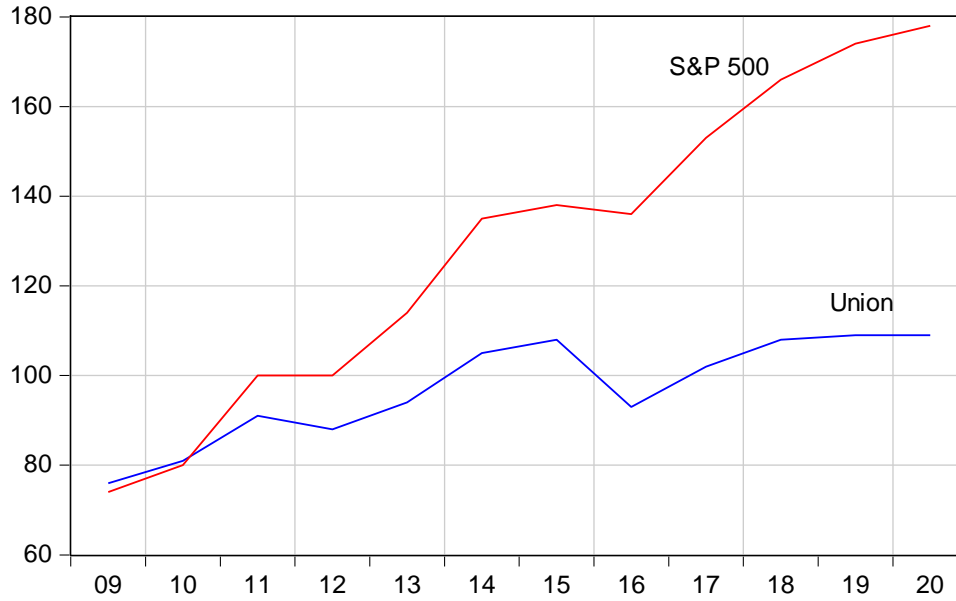
More generally, the extensive bibliography that I have supplied, provides a wider context, both from the perspective of practitioners and academic scholars.

Union vs. S&P 500

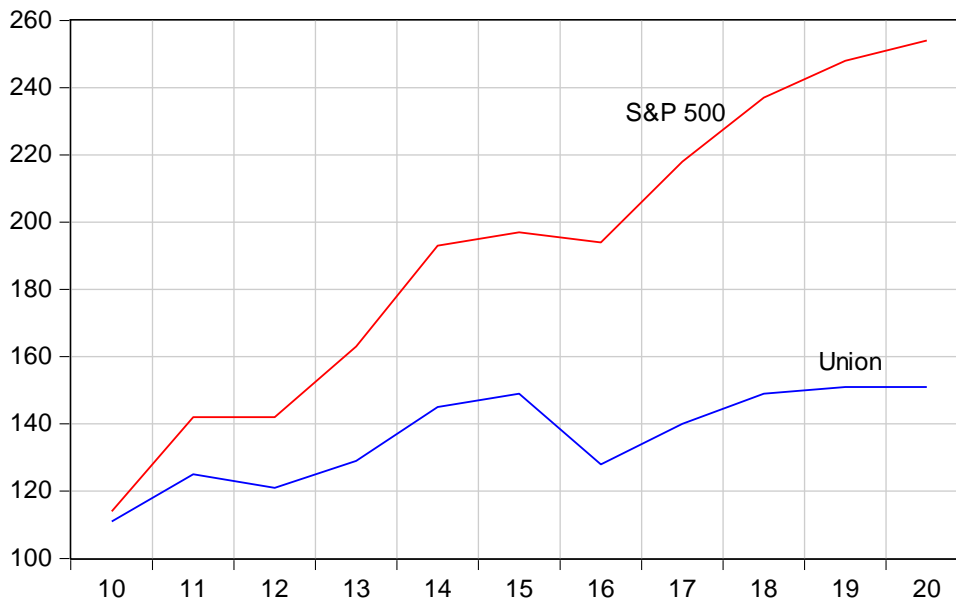
Eshragh Motahar, Professor of Economics
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Using Gerber|Taylor's own data and methodology, we get the following performance profiles for different starting years. For every simulation, Union investments performed significantly worse than S&P 500, both in terms of return *and* risk.

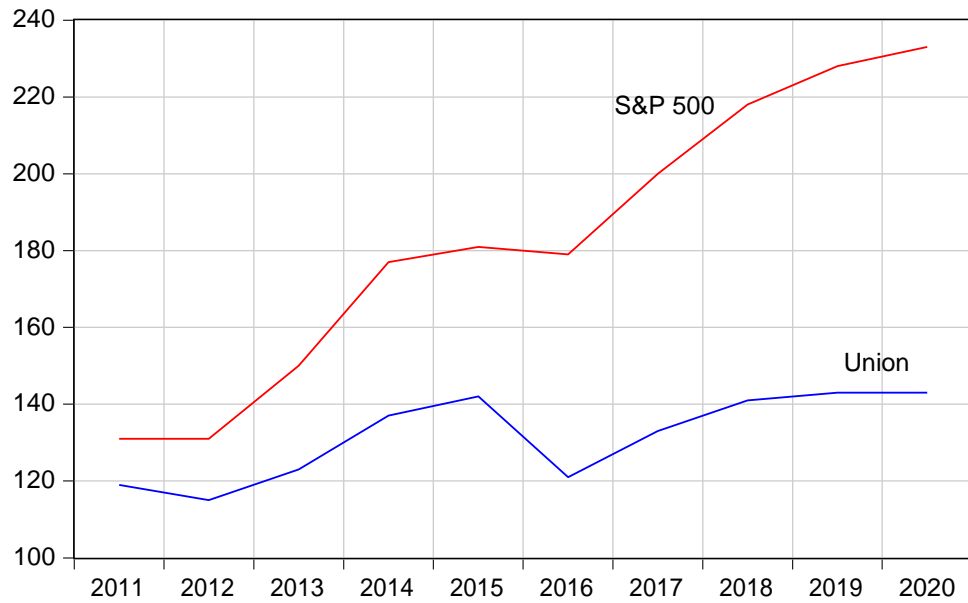
2009-2020. By June 30, 2020, S&P 500's performance was 63% better than Union's.



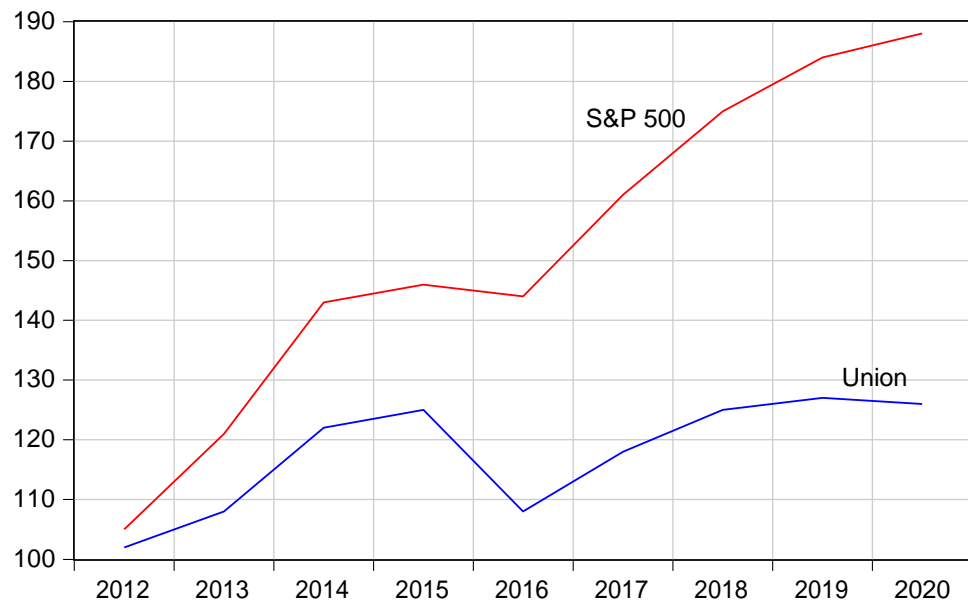
2010-2020. By June 30, 2020, S&P 500's performance was 68% better than Union's.



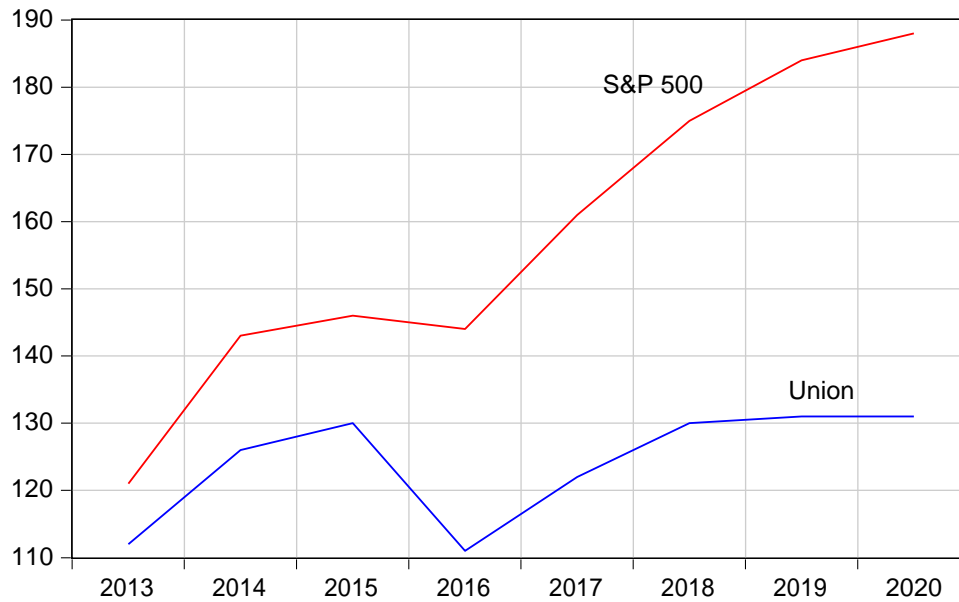
2011-2020. By June 30, 2020, S&P 500's performance was 63% better than Union's.



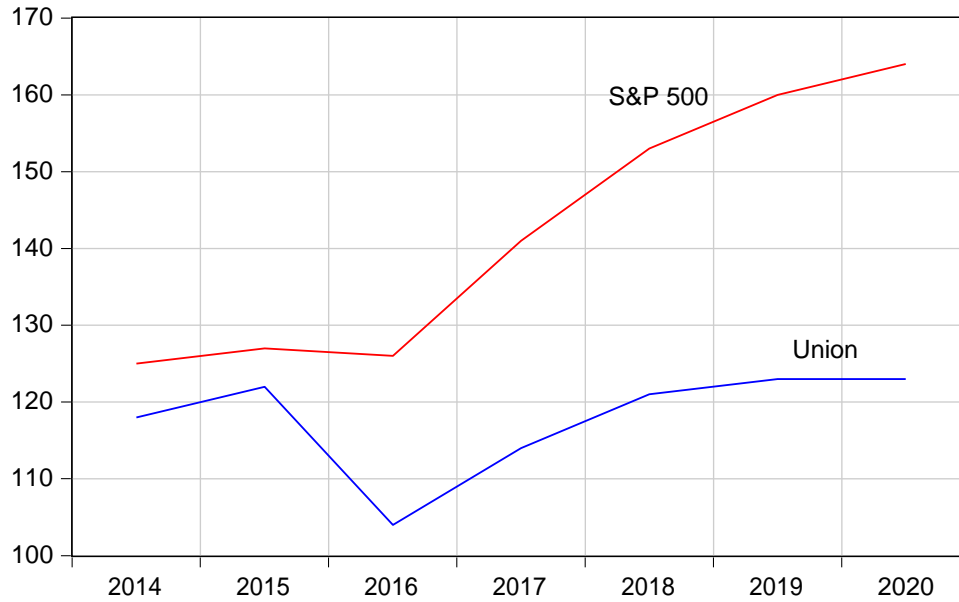
2012-2020. By June 30, 2020, S&P 500's performance was 49% better than Union's.



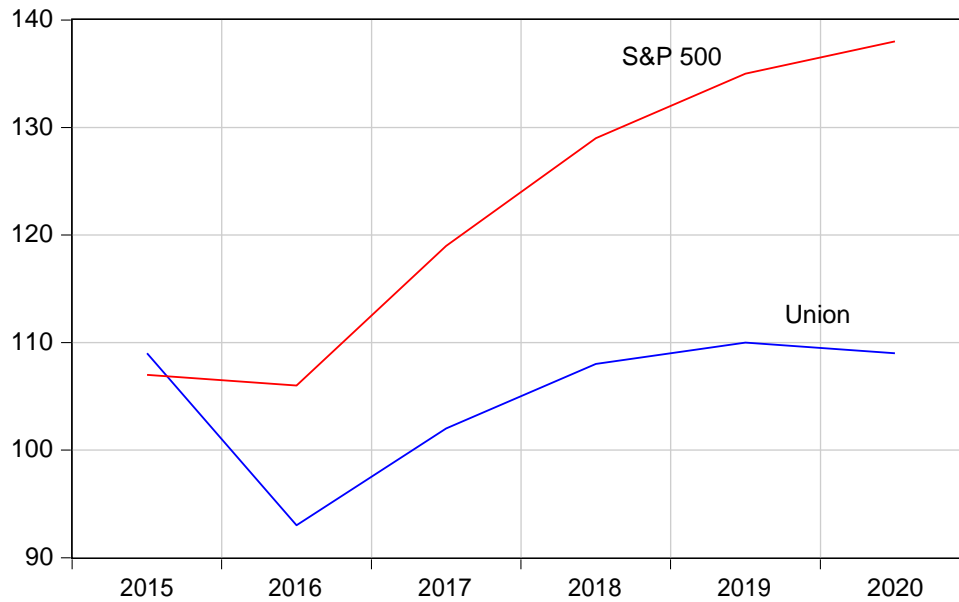
2013-2020. By June 30, 2020, S&P 500's performance was 43% better than Union's.



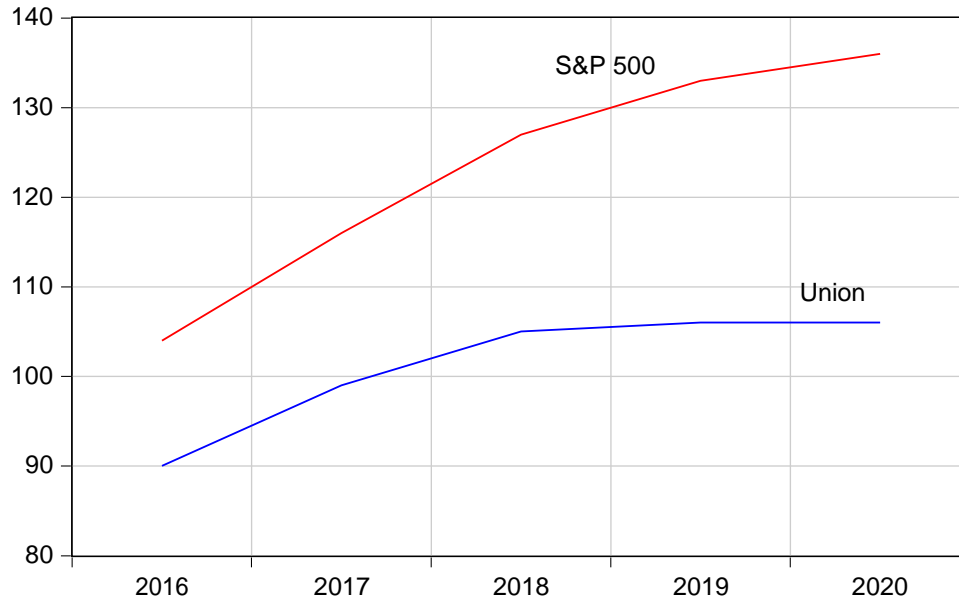
2014-2020. By June 30, 2020, S&P 500's performance was 34% better than Union's.



2015-2020. By June 30, 2020, S&P 500's performance was 26% better than Union's.



2016-2020. By June 30, 2020, S&P 500's performance was 28% better than Union's.



Union's Performance vs. S&P 500's

Rates of Return and Sharpe Ratios

2009-2020, 2010-2020, ..., 2016-2020

<i>Window</i>	<i>S&P's performance vs. Union's</i>	<i>Sharpe Ratios</i>	
		<i>Union</i>	<i>S&P</i>
FY09-20	63% better	0.31	0.59
FY10-20	68% better	0.84	1.45
FY11-20	63% better	0.79	1.38
FY12-20	49% better	0.68	1.44
FY13-20	43% better	0.75	1.57
FY14-20	34% better	0.64	1.46
FY15-20	26% better	0.48	1.63
FY16-20	28% better	0.38	1.63

Notes:

- a. All the underlying rates of return data are from G|T. We used the 10-Year Treasury Constant Maturity Rate (from FRED) as the "risk-free" return in calculating the Sharpe Ratios. The use of the 1-Year Treasury Constant Maturity Rate, or the 3-Month Treasury Constant Maturity Rate as alternative risk-free returns yield similar results. Thus, in this sense, our results are robust.
- b. "The Sharpe ratio characterizes how well the return of an asset compensates the investor for the risk taken. When comparing two assets versus a common benchmark [in our case the 10-year Treasury], the one with a higher Sharpe ratio provides better return for the same risk (or, equivalently, the same return for lower risk)."¹
- c. All simulations (using G|T's methodology) and calculations were performed by the author.
- d. The starting date of 2009 was chosen based on Ennis, Richard M., "Institutional Investment Strategy and Manager Choice: A Critique." *The Journal of Portfolio Management*, February 28, 2020, pp. 104-117.
- e. Simulations and calculations for windows as early as 2004-2020, for the Sharpe Ratio, and 2002-2020 for returns, yield similar results.
- f. The seeming narrowing of the performance gap, between S&P and Union, across the windows is driven by the law of compound interest.

- *Consistent with principles of transparency and accountability, all my spreadsheets and econometric workfiles are available upon request.*

¹ See Sharpe, William F., "The Sharpe Ratio," *The Journal of Portfolio Management*, 1994, pp. 49-58. For a quick reference, and the above quote, see, [Wikipedia](#).