An Endowment Asked Us for Some Advice

Victor Haghani and James White[1]
January 15, 2026

Introduction

Many of our friends (and one of your authors) sit on the advisory boards and investment committees of university endowments, charitable foundations, or family trusts. Several have recently asked us what big recommendations we'd make for their institution's investing process. The purpose of these institutions is typically to provide resources to beneficiaries over very long, multigenerational time horizons. We like Professor John Campbell's description of an endowment as "a promise of vigorous immortality" (Campbell 2011). Given this context, we have lots of suggestions! But we think there are two in particular which we believe are minimally disruptive, feasible to implement, and which could have a materially positive impact on the investment process.

Throughout this note, we'll use an endowment as an example, but all our suggestions hold equally for foundations, family trusts, and other similar pools of capital.

[1] Thank you to Richard Dunn, Robin Wigglesworth, and Ludovic Phalippou. This is not an offer or solicitation to invest, nor are we tax experts and nothing herein should be construed as tax advice. **Past returns are not indicative of future performance.**

I. Track expected risk-adjusted real return

The first of our suggestions is that at each board meeting, participants should review and discuss the level and changes in the *expected long-term risk-adjusted real return* of the endowment. This is the primary investment metric that endowments should be trying to maximize. Alternatives like maximizing expected real return (with no risk adjustment) would lead to excessive risk-taking, while maximizing risk/reward metrics like Sharpe ratio would likely lead to taking too little risk, as the highest Sharpe ratio investments are typically available in limited size.

The expected risk-adjusted real return equals the expected real return of the portfolio minus the cost of the risk borne, and the cost of risk is the product of two components: the expected variability of portfolio returns and the endowment's level of risk-aversion.

Estimating Expected Real Return

There are no perfect ways to forecast long-term real returns, but for many markets there are robust methods broadly accepted by both academics and practitioners. For example, looking at the long-term return forecasts for US equities issued by over a dozen large financial institutions, the range is pretty tight. There's variability and a few outliers, but it's clear that most forecasters are using similar methods to arrive at their forecasts. For broad equity markets, the most commonly accepted method is to use cyclically-adjusted earnings yield (and variants thereof) as the forecast metric for long-term real return. You can find more information here on our preferred earnings-yield measure for broad equities.

Estimating portfolio volatility

The next component - expected variability - poses some real but surmountable challenges for endowments with significant allocations to private assets. We suggest using public market proxies for each private investment - e.g. leveraged investments in small-cap publicly traded stocks[2] can reasonably represent a portfolio of private equity investments. This method generates a more realistic estimate of the expected variability of these assets compared to relying on the overly smooth valuations that characterize most private asset return series.

Calibrating risk-aversion

The final component - the degree of risk-aversion - might seem to pose a larger challenge. Few investors of any stripe (our readers not included!) have experience calibrating even their own risk-aversion, much less that of an institution. Fortunately, our experience is that, with a little guidance, most sophisticated investors actually do quite well calibrating their own risk-aversion (see here for more information, or in *The Missing Billionaires*, Ch. 12). The calibration procedure for an endowment with knowledge of its own spending priorities and constraints is not all that different from that of an individual, though more people (trustees, staff, etc) may be involved in the assessment process.

---

[2] With care given to choosing the most appropriate small-cap index - the differences between US and non-US, and value vs growth are significant.

Let's say the process results in a degree of risk-aversion consistent with an optimal allocation to the risky asset of about 80% given an opportunity set of a risk-free asset with a 2% real return, and a portfolio of risky assets offering a 4% risk premium with 16% variability.[3] In this case, we'd say the investor has a coefficient of constant relative risk-aversion of 2, a pretty typical value we've found among our clients and friends.[4]

Then the real expected return, with 20% in the risk-free asset and 80% in the risky asset, is:

$$20\% \times 2\% + 80\% \times (2\% + 4\%) = 5.2\%$$

And the expected risk-adjusted real return, with the coefficient of risk-aversion of **2** in bold, is:

$$5.2\% \ - \frac{1}{2}(2)(80\% \times 16\%)^2 = 5.2\%$$

How this can lead to better outcomes

Providing the investment committee with this additional metric may seem relatively inconsequential. However, over time, we believe it would change behavior in several important and beneficial ways:

First, it would help the endowment think more clearly about its sustainable spending power given current market conditions. Neither the safe asset return nor the expected return of the portfolio are the right metrics for assessing how much the endowment can sensibly spend over time. Reinforcing the link between investment and spending policies is beneficial in calibrating risk-aversion and responsibly setting the endowment's overall risk level.

Second, giving attention to a *real, risk-adjusted* expected return would likely lead to a recognition that long-term inflation-protected bonds (TIPS) are the lowest-risk asset available. This risk-adjusted perspective matches a classic asset-liability analysis: endowments' liabilities represent real, inflation-adjusted spending extending far into the future. By extension, both Treasury bills and long-term nominal Treasury bonds are riskier alternatives - though generally still less risky than equity markets.

Third, we hope that the endowment would, over time, become less focused on returns relative to peers. Expected risk-adjusted real return would become the most important focal point of the managers, rather than realized past returns which typically owe a large degree of their outcomes to randomness and are a backward-looking measures of success.

---

[3] Measured as the annual standard deviation of returns

[4] To link the optimal risky-asset allocation to risk-aversion, we use the Merton share: $\hat{\kappa} = \frac{r_{rp}}{\gamma\sigma^2}$, where r_{rp} is the risk premium, γ is the coefficient of risk-aversion and $\hat{\kappa}$ is the optimal fraction to invest in the risky asset. With the numbers above: $80\% = \frac{4\%}{2 \times 16\%^2}$

II. Produce better reporting on private investments

The most common metric most investors hear about with respect to private investments is their IRR (internal rate of return). Of course, all Finance 101 courses explain the potential pitfalls inherent in the IRR calculation. Our suggestion is to provide reporting on private investments which shows the history of their annual returns, together with the value of the investments each year. This allows a weighted-average annual return to also be calculated, and allows more direct comparison to public market investments. This enhanced reporting should generally give a more realistic picture of past performance and naturally brings risk into the investment analysis.

While few private investment managers provide these metrics to the public, investors can encourage managers to provide them internally - and even if a manager doesn't provide them, the endowment team should be able to produce them. We recognize that there are practical complexities which must be dealt with in making the figures useful and comparable across other private and public investment alternatives, but we are confident these are manageable, and in any case, this will be a significant improvement over flawed IRR data.

A refresher on some of the problems with IRR[5]

Imagine that a private equity manager invested $30 million 50 years ago which, after four years, paid out $100 million, as it was both a great investment and they were able to refinance the purchase on favorable terms. Then, 50 years from the original investment, there is a final sale generating a payout of $200 million.

The PE firm might report that their investment return was a 10x multiple of money invested, which is misleading as it doesn't take the time frame of the cash-flows into account. Hence the use of the IRR (Internal Rate of Return) metric, which does take time into account, but has other pretty big problems of its own.

The IRR in this example is 35.1% per annum. The $200 million final payout is virtually irrelevant to the IRR calculation because the assumption of the IRR calculation is that all cash flows are discounted at the IRR. The present value of $200 million discounted at the 35.1% IRR is just $50, or 0.00003% of its end value. If the investor received $1 billion at the end instead of $200 million, the IRR would still be 35.1%. It would take a $100 billion payout at the end to move the IRR, and then just to 35.2%.[6]

Many observers note that the "return" in "internal rate of return" is misleading, and some suggest renaming it "internal discount rate." That IRR is not a "return" number is clear when we consider that if it were, the $100 million payout 46 years ago earning the "return" of the IRR would have grown to *$100 trillion*, three-times the size of the entire U.S. GDP!

---

[5] Illustration borrowed from Phalippou (2024). Also see Harris et al. (2012) which observes that when using IRR metrics, more than 50% of private equity managers can claim to be in the top quartile.

[6] Phalippou shows that prominent private equity firms' reported IRRs, as per their 10-K filings with the SEC, of their life-to-date investing change by at most 0.1% from year to year, a sign that the example we're discussing here has some realism to it.

An alternative to IRR would be to show the year-by-year return based on an annual valuation of the investment and taking account of cash-flows in or out. In the above example, let's assume that after four years, when the $100 million is paid out, the residual value of the investment is $20 million, which then grows to $200 million over the ensuing 46 years. Each year's valuation will matter to the calculation, but let's assume a constant growth rate between cash flows. The average annual return would be 8.0%, rather than the IRR figure of 35.1%.[7]

Also, while we're at it, let's have an annual reporting of fees paid. Benjamin Franklin's salutary admonition that "A penny saved is two pennies earned" is a valuable reminder that $1 of riskless savings in fees is the equivalent of $2 earned by taking risk to generate extra return.

Looking further ahead

Limit investments to those with estimable expected returns and risk

Eventually, we hope that a focus on long-term expected return and risk estimation will encourage endowment management to consider limiting their investment universe to asset classes and strategies for which prospective expected returns and risks can be reasonably estimated. That still leaves plenty of the investing universe, and avoiding investments whose expected returns rely exclusively on past returns will improve the accuracy and confidence in forward-looking assessments of the spending capacity of the endowment.

Perhaps the most enduring truth in investing is "past returns are not indicative of future returns." This is even more problematic when past returns are plagued by selection and survivorship bias - that is, we only get to see the winning investment managers, as the unsuccessful ones disappear. When investment committees cannot form reasonable estimates of prospective returns and risks, it is better to rely on other investments, rather than trying to navigate the road ahead with eyes firmly fixed on the rear-view mirror.

Dynamic asset allocation

A more ambitious change in approach - for the more distant future - would be for endowments to adjust their asset allocation dynamically over time as the risk premium and risk level of risky assets change. When public equity expected excess returns are low, endowments could reduce equity exposure, and vice versa.

We acknowledge that the incentives and organizational realities of most endowment investment committees make dynamic asset allocation challenging to implement. Career risk, peer comparison

[7] A further useful refinement would be to weight the annual returns by the capital employed at the start of each year. This would reduce the reported average return to 7.3%. While this statistic is an improvement on IRR, it could still be misleading if year-to-year valuations are not accurate. For example, if the residual value of the investment 46 years ago were marked at $1 million instead of $20 million, then the average annual return would have been 14.1%, a lot lower than the 35.1% IRR, but still inflated if the $1 million was an under-estimate. Adding variability in year-to-year returns would require a higher average annual return to generate the investment's cash-flows after compensating for the volatility drag induced by that variability.

pressures, and committee composition all work against tactical shifts. However, we would hope that over time, confidence would grow in an approach grounded in expected return and risk, and investment committees would embrace sensible dynamic asset allocation even if peer endowments remain tied to mostly static allocations.

Incorporating future contributions

Some endowments expect significant future contributions. These contributions may be directly correlated with the performance of the broad economy, certain industries, and the overall stock market. Contributions may also be impacted by a perception of how the existing capital is being managed, not only in terms of realized returns, but also the perceived common sense and competence of the managers. Taking account of the expected value and dynamics of future contributions in how the existing wealth is managed is important, but also complex and challenging. We hope it is kept on the to-do list, though we expect our other suggestions can be more readily implemented.

Connecting the dots

Our main two suggestions are calls to supplement the information available to the managers and stewards of these long-horizon pools of capital. We would hope that modest suggestions of this type would not meet significant resistance. And we anticipate that the enhanced reporting we advocate will eventually and naturally lead to changes in investment behavior, which would not only foster better expected outcomes, but would also be long-lasting.

The concepts underlying our suggestions are straightforward, grounded in basic portfolio theory, and eminently practical. Most importantly, they align the committee's focus with the endowment's true objective: maximizing the sustainable resources available to beneficiaries over the long run.

We should add that all of the ideas discussed herein apply to many individuals and families, who also have long horizons. The need for endowments to take account of future contributions is akin to individuals needing to incorporate their human capital into decisions concerning their financial capital. And the discussion around investing in private assets is particularly topical, as at least in the U.S. there is a movement afoot to give all investors, large and small, access to these alternative asset classes. Individuals do face some added complexity, such as taxes and uncertain lifespan, but techniques for handling these are well understood, and we discuss them at some length in *The Missing Billionaires*.

Further Reading and References

- Ang, A., Chen, B., Goetzmann, W. and Phalippou, L. (2014). "Estimating Private Equity Returns from Limited Partner Cash Flows." Columbia Business School Research Paper No. 13-83. *SSRN*.
- Barberis, N. (2000). "Investing in the long run when returns are predictable." *Journal of Finance*.
- Brinson, G., Hood, R., and Beebower, G. (1986). "Determinants of portfolio performance." *Financial Analyst Journal*.
- Campbell, J. (2011). "Investing and Spending: The Twin Challenges of University Endowment Management." Forum Futures 2012: Exploring the Future of Higher Education, Forum for the Future of Higher Education.
- Haghani, V. and White, J. (2021). "Spending Like You'll Live Forever." *Elm Wealth.*
- Haghani, V. and White, J. (2023). *The Missing Billionaires: A Guide to Better Financial Decisions*. Wiley.
- Harris, R., Jenkinson, T., and Stucke, R. (2012). "Are Too Many Private Equity Funds Top Quartile?" *Journal of Applied Corporate Finance*.
- Ilmanen, A. (2020). "The Impact of Smoothness on Private Equity Expected Returns." *The Journal of Investing*.
- Merton, RC. (1971). "Optimum consumption and portfolio rules in a continuous-time model." *Journal of Economic Theory*.
- Merton, R. (1993). "Optimal Investment Strategies for University Endowment Funds." *University of Chicago Press*.
- Phalippou, L. (2024). "The Tyranny of IRR." *SSRN*.
- Swensen, D. (2009). *Pioneering portfolio management: an unconventional approach to institutional investment*. The Free Press.