

THE ALPHA OF ASSET ALLOCATION

As of September 30, 2026



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Executive Summary

For fifty years, one empirical question has divided the investment industry: does performance come mainly from picking the right securities, or from setting the right weights across asset classes? Several academic sources suggest that asset class weightings can have a meaningful impact on portfolio performance. Indeed asset allocation decisions can be more impactful than security selection in some cases. This paper reviews the evidence, beginning with Gary Brinson, Randolph Hood, and Gilbert Beebower's landmark 1986 finding that asset allocation policy explains the great majority of a portfolio's return variability through time, and the decades-long debate over what that finding does and does not mean. It surveys the major schools of asset allocation in practice today, from the simplicity of a fixed 60/40 stock-bond mix to the complexity of discretionary and systematic global macro, and identifies a handful of models that are both theoretically sound and practical to implement. It closes with concrete implications for a \$1 billion wealth manager serving roughly 200 families, where the evidence suggests that issues related to asset allocation, including governance, behavioral discipline, and appropriately-scaled complexity — not manager or security selection — are the highest-value uses of time.

1. Security Selection or Asset Allocation: Which Matters More?

The modern debate begins with Gary Brinson, Randolph Hood, and Gilbert Beebower's 1986 study, "Determinants of Portfolio Performance." BHB decomposed the quarterly returns of 91 large U.S. pension asset allocators over 1974–1983 into three components: investment policy (the asset allocator's average, or long-term, asset-class weights, held passively), market timing (deviations from those policy weights), and security selection (the choice of individual securities within each asset class). Regressing each asset allocator's actual returns against the return of a hypothetical passive portfolio holding only its own average policy weights, they found that policy explained roughly 93.6 percent of the variation in a typical asset allocator's quarterly returns, with active timing and selection contributing comparatively little — and, once fees were considered, often subtracting value. Gary Brinson, Brian Singer, and Gilbert Beebower extended the analysis to 82 pension plans over 1977–1987 in a 1991 follow-up and reached the same conclusion: asset allocation policy is the overwhelmingly dominant contributor to total return, and active decisions did little on average to improve on it.

That finding is one of the most cited — and most misunderstood — statistics in finance. The 93.6 percent figure is the R^2 of a time-series regression: it describes how much of a single asset allocator's own return varies from quarter to quarter in step with its broad policy mix. It does not say that 93.6 percent of the level of an asset allocator's return, or of one asset allocator's return relative to another's, is explained by allocation. William Jahnke's 1997 critique, pointedly titled "The Asset Allocation Hoax," argued that the investment industry had stretched BHB's narrow statistical finding into a much broader and unsupported claim that asset allocation is the primary determinant of an investor's outcome relative to other investors or to their own goals.

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Roger Ibbotson and Paul Kaplan's 2000 study, "Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance?" resolved much of the disagreement by showing that BHB, Jahnke, and other commentators were simply answering different questions with the same data. Using return data from a balanced sample of asset allocators, Ibbotson and Kaplan found that about 90 percent of the variability of a typical asset allocator's returns across time is explained by its policy — confirming BHB — while only about 40 percent of the variation in returns across different asset allocators is explained by differences in their policies, and on average about 100 percent of the level of an asset allocator's return is explained by the level of its policy return. Ninety percent, 40 percent, and 100 percent are all correct answers, each to a different question.

A further refinement came from Jason Xiong, Roger Ibbotson, Thomas Idzorek, and Peng Chen in their 2010 paper "The Equal Importance of Asset Allocation and Active Management." They showed that a large share of the return variability BHB attributed to "policy" is really attributable to market movement common to essentially every asset allocator — that is, simply being invested in stocks and bonds at all, rather than an asset allocator's particular mix of the two. Once that common market component is stripped out, the incremental explanatory power of an asset allocator's specific policy weights, as distinct from active management, is considerably smaller than the headline 90 percent figure implies. The honest summary: being invested, and being roughly right about the broad mix, dominates outcomes; being precisely right about the mix helps further; and selecting individual securities within an asset class matters too, but least of the three, for a portfolio that is otherwise reasonably diversified.

One distinction is important. Asset allocation can dominate the behavior of a portfolio without implying that actively changing those allocations will reliably generate alpha. Strategic policy determines much of a portfolio's underlying market exposure, or beta. Allocation alpha is the incremental value created by varying those weights successfully, after accounting for risk, costs, and implementation. The evidence suggests that this second task is considerably harder.

2. Quantifying the Relative Importance

Ibbotson and Kaplan's three-way answer is itself the most direct available quantification: roughly 90 percent of a given asset allocator's return variability over time, about 40 percent of the variation among different asset allocators, and on average essentially all of the level of return, trace back to policy rather than active decisions. Two further frameworks help explain why the split falls out this way in practice.

William Sharpe's 1992 "Asset Allocation: Management Style and Performance Measurement" introduced returns-based style analysis, still the standard practical tool for decomposing a manager's realized returns into a set of asset-class exposures plus a residual selection return. Sharpe's guiding heuristic — "if it acts like a duck, assume it's a duck" — lets an analyst infer an asset allocator's effective asset mix directly from its return history, without needing to see its holdings, and then attribute performance to that mix versus everything left over.

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Richard Grinold's "fundamental law of active management," developed with Ronald Kahn, offers a structural explanation for why the leftover, security-selection piece tends to be small. The law states that a manager's achievable information ratio is approximately the product of the manager's information coefficient (skill in forecasting individual security returns) and the square root of the portfolio's breadth (the number of independent bets available). Because most active managers have modest forecasting skill and limited effective breadth — individual security bets within one asset class are typically correlated with one another rather than independent — the value that security selection can realistically add is structurally bounded. The dispersion in long-run average returns between whole asset classes (the equity risk premium over cash or high-grade bonds, for example) is large and persistent; the dispersion among competently chosen securities or managers within a single asset class, after fees, is comparatively narrow and far less predictable — a point consistent with Mark Carhart's finding that asset allocator outperformance rarely persists once expenses are taken into account.

3. Schools of Asset Allocation: From 60/40 to Global Macro

Approaches to setting the asset mix span a wide range of complexity. What follows is not an exhaustive list but a representative spectrum, roughly ordered from simplest to most complex.

- Strategic, fixed-weight portfolios (60/40 and its relatives) — Harry Markowitz's 1952 mean-variance framework in "Portfolio Selection" formalized the diversification insight underlying a fixed stock-bond mix. A 60/40 portfolio is a specific, unoptimized point on that frontier, valued for its simplicity and historically reasonable risk-adjusted returns. Its central weakness is risk concentration: because equities are several times more volatile than high-grade bonds, roughly 90 percent of the total risk in a typical 60/40 portfolio comes from the 60 percent equity sleeve alone, despite its minority dollar weight — the concern that motivated the risk parity school discussed below.
- The endowment, or "Yale," model — David Swensen's Pioneering Portfolio Management, first published in 2000, documented the approach he and Dean Takahashi built at Yale: an equity bias combined with a heavy allocation to illiquid alternatives — private equity, venture capital, hedge funds, and real assets — intended to harvest an illiquidity premium and diversify away from public equity beta. Under Swensen's 36-year tenure the endowment compounded at roughly 13 percent annually, outperforming a traditional 60/40 benchmark by about 4 percentage points per year. The model's returns depend heavily on privileged access to capacity-constrained, top-quartile private managers and on permanent, patient capital — conditions that are specific to a small number of large, well-resourced institutions.
- Risk parity ("All Weather") — Pioneered by Bridgewater Associates' All Weather strategy in 1996 and named by Edward Qian in a 2005 white paper, risk parity allocates capital so that each asset class contributes equally to total portfolio risk rather than equally to dollar exposure. Because bonds are far less volatile than equities, achieving risk parity typically requires leveraging the bond sleeve so its risk contribution matches equities'. The goal is a portfolio that is robust across growth and inflation regimes, rather than one that implicitly bets on a single regime the way a fixed 60/40 mix does.

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- Bayesian, view-based tilting (Black-Litterman) — Fischer Black and Robert Litterman's 1992 "Global Portfolio Optimization" starts from the market-implied equilibrium expected returns backed out of global CAPM weights, then blends in the investor's own specific views, each with an explicit confidence weighting, using a Bayesian framework. This addresses a well-known flaw of naive mean-variance optimization: when fed noisy historical return estimates directly, it tends to produce extreme, concentrated, and unstable portfolio weights. Black-Litterman is prized in practice precisely because its output stays close to sensible market weights unless the investor holds a genuine, well-specified view.
- Tactical asset allocation — Shifts weights around a strategic policy based on a signal, most commonly long-horizon valuation (the multi-year asset-class return forecasts associated with GMO and Jeremy Grantham) or price trend and momentum (see our companion white paper, "Momentum: A Review," and the time-series momentum work of Tobias Moskowitz, Yao Hua Ooi, and Lasse Pedersen). Tactical overlays are more active and higher-turnover than a strategic policy and depend on the manager having a genuine, persistent forecasting edge to justify the added complexity and cost.
- Discretionary and systematic global macro — The most complex school. Discretionary global macro, in the tradition of George Soros and Stanley Druckenmiller, makes concentrated, top-down bets across currencies, rates, and equity indices based on a manager's macroeconomic judgment. Systematic and high-frequency variants — commodity trading advisors and quantitative macro funds — trade the same asset classes using rules-based signals on much shorter holding periods. Both require the largest operational infrastructure of any school discussed here, and the high-frequency variants in particular are the most technology-intensive, in exchange for return streams that are typically less correlated with either stocks or bonds.

4. Effective, Easy-to-Understand Models

Sophistication and effectiveness are not the same thing. Several of the most robust approaches in the literature are also among the simplest to explain to a client.

- Naive (1/N) diversification — Victor DeMiguel, Lorenzo Garlappi, and Raman Uppal's 2009 study, "Optimal Versus Naive Diversification," tested 14 optimized allocation models against simple equal-weighting across seven real-world datasets and found that none of the optimized models consistently beat naive 1/N out of sample on Sharpe ratio, certainty-equivalent return, or turnover — because estimation error in expected returns and covariances swamps the theoretical benefit of optimization. The practical lesson is consistent with the Brinson and Ibbotson-Kaplan findings above: for an investor without a genuine edge in forecasting returns, a simple, broadly diversified fixed-weight mix is a very hard benchmark to beat after costs. The magnitude of the estimation problem is striking. Under DeMiguel, Garlappi, and Uppal's calibration, a conventional sample-based mean-variance strategy would require roughly 3,000 months of data for 25 assets, and 6,000 months for 50 assets, before it could be expected to outperform 1/N. The precise numbers are less important than the implication. Estimating optimal portfolio weights with sufficient precision in real time is extraordinarily difficult.

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- Equal-risk-contribution weighting — A low-parameter improvement on 1/N that keeps its main virtue — no return forecasts required — while weighting by inverse volatility, or by full equal-risk-contribution as formalized by Sébastien Maillard, Thierry Roncalli, and Jérôme Teiletche in 2010, so that no single volatile asset class dominates total portfolio risk. It requires only volatility and correlation estimates, which are considerably more stable and estimable than expected returns. Even these more estimable inputs are not constants. Stock-bond correlations have shifted materially across economic regimes, while correlations among international equity markets have historically increased in bear markets. This creates another challenge for optimization: the diversification relationships an allocator relies upon can change precisely when they matter most.
- Momentum as a simple, effective allocation signal — As discussed at length in our companion white paper, “Momentum: A Review,” one of the simplest rules available to an allocator is also one of the best-documented: favor whatever has been working, in whatever direction it has been working, over the trailing several months, and avoid whatever has not. Time-series momentum, formalized by Tobias Moskowitz, Yao Hua Ooi, and Lasse Pedersen in 2012, requires no expected-return or covariance estimation of the kind that undermines naive mean-variance optimization — only an asset’s own trailing sign of return — and has been shown to work broadly across equities, bonds, currencies, and commodities. Because the rule is entirely mechanical and easy to state to a client (“stay with what is working; step away from what is not”), it is one of the more approachable tools available for tilting a strategic policy mix.
- Black-Litterman as a practical middle ground — As discussed above, Black-Litterman is the natural one-step-up from naive or risk-based models for an investor who does hold specific views: it avoids the extreme, corner-solution portfolios that unconstrained mean-variance optimization produces from noisy inputs, while still allowing genuine convictions to move the portfolio away from market-like weights.
- Goal-based, mental-accounting portfolios — Hersh Shefrin and Meir Statman’s Behavioral Portfolio Theory, developed through the 1980s and formalized in 2000, and later extended into a practical optimization framework by Sanjiv Das, Harry Markowitz, Jonathan Scheid, and Meir Statman in 2010, split the total portfolio into sub-portfolios matched to specific goals — a safety reserve, lifestyle spending, growth, legacy — each with its own risk budget and time horizon, rather than presenting a single mean-variance-optimal blend. The approach can be mathematically similar in aggregate to a single optimized portfolio, but is behaviorally easier for clients to understand and, critically, to stick with through a drawdown.
- Life-cycle glide paths — Used throughout target-date fund design, glide paths mechanically shift the growth/safety mix as a fixed function of time horizon. They are simple, transparent, and well validated for goal-based accumulation, though Robert Merton’s 2014 critique in “The Crisis in Retirement Planning” notes that a purely age-based glide path ignores an individual’s actual balance sheet, income, and risk capacity — a caveat worth carrying into any simplified model.

5. Practical Implications for a Hypothetical Wealth Manager

Now let’s consider a firm that manages \$1 billion of client assets across 200 families and thus has an average relationship of roughly \$5 million — a useful anchor for translating the research above into a concrete operating model.

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- Redirect committee time toward policy, not picks — The properly-read lesson from Brinson-Hood-Beebower and Ibbotson-Kaplan is an organizational one: the analytical and governance time that most drives client outcomes is time spent setting and maintaining each family's investment policy statement, rebalancing bands, and consistent execution — not time spent debating which manager or security to select within an asset class.
- The Yale model does not scale down — A meaningful share of Yale's historical outperformance is attributed specifically to manager selection within its illiquid sleeves — access to capacity-constrained, oversubscribed top-quartile private equity and venture managers that typically carry \$10–50 million minimum commitments and are, in practice, reserved for a small number of large, branded institutional allocators. A firm with a \$5 million median relationship cannot write checks of that size into a single manager without dangerous concentration, and is unlikely to access the same tier of managers Yale does. Importing the full endowment model at this scale risks an under-diversified, second-tier-access alternatives sleeve. A better fit is a modest, diversified allocation to alternatives through feeder vehicles, funds-of-funds, or interval funds, sized as a satellite rather than the core of the portfolio.
- Make the liquid, low-cost strategic core the default — Consistent with the naive-diversification and risk-parity findings above, a broadly diversified, cheaply implemented strategic core — public equities across regions, high-grade and inflation-linked bonds, and modest real-asset exposure — is a defensible default for the large majority of the firm's assets, rather than a return the firm expects to generate through its own security selection or complex overlays.
- Use goals-based structuring as the client-facing model — Mental-accounting portfolios, per Shefrin, Statman, Das, Markowitz, and Scheid, map naturally onto a multi-family-office context: each of the 200 families can see its own safety, lifestyle, growth, and legacy buckets tied to its own goals and time horizon, which supports the behavioral-coaching conversation directly.
- Quantify the payoff of good process — Vanguard's Advisor's Alpha research, led by Francis Kinniry and coauthors, estimates that a specific set of practices — suitable asset allocation, cost-effective implementation (roughly 34 basis points), tax-aware asset location (0 to 75 basis points), disciplined rebalancing (roughly 26 basis points), an efficient spending-order strategy (0 to 110 basis points), and, above all, behavioral coaching (roughly 150 basis points) — are collectively worth about 3 percent in net client returns relative to a typical self-directed investor experience. Applied to a \$1 billion book, that is on the order of \$30 million a year in client value creation, which dwarfs what is realistically available from security selection at this scale — and it is delivered through relationship management and process, not investment genius.
- Treat rebalancing as a distinct, systematic source of value — Colleen Jaconetti, Francis Kinniry, and Yan Zilbering's research on rebalancing best practices shows that mechanically harvesting the drift back toward target weights, rather than letting winners run unchecked or losers become permanent, is itself a quantifiable source of value — and a 200-family operation with proper infrastructure is well suited to doing this systematically and consistently, which is exactly what the policy-setting work in the first point above makes possible. Rebalancing and momentum need not be contradictory. Rebalancing moves a portfolio back toward its current strategic target. A tactical model changes the target itself when a pre-specified signal warrants it. In both cases, the important feature is discipline. Portfolio changes are driven by a repeatable process rather than by an ad hoc reaction to markets.

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- Build versus buy — The capabilities described above can be expensive to build in-house: they require data infrastructure, a documented and tested rules engine, and ongoing quantitative oversight that a 200-family wealth manager may not wish to staff for directly.

Conclusion

The weight of fifty years of evidence, from Brinson, Hood, and Beebower through Ibbotson and Kaplan to Xiong, Ibbotson, Idzorek, and Chen, is that a portfolio's broad asset-class exposure, not the specific securities or managers chosen within it, explains the great majority of how a portfolio behaves through time — though the honest reading of that evidence is narrower and more nuanced than the "90 percent" headline number usually implies. The practical schools of asset allocation range enormously in sophistication, from a simple fixed-weight 60/40 to discretionary and systematic global macro, but the evidence on naive diversification and estimation error suggests that added complexity is worthwhile only when it is backed by a genuine, persistent edge in forecasting or in manager access. For a wealth manager serving a large number of mid-sized family relationships, the highest-value use of scarce time and complexity is not the pursuit of Yale-style, access-dependent alternative-manager alpha, which does not scale down, but rather a disciplined, well-governed asset-allocation policy, executed cheaply, rebalanced systematically, organized around each family's actual goals, and reinforced by the behavioral coaching that the evidence says is worth more, in net client dollars, than almost anything else on the menu.

That same logic argues against a single asset-allocation technique even within one family's own portfolio. Once a family's assets are organized into safety, lifestyle, growth, and legacy buckets along the lines of Shefrin and Statman's mental-accounting framework, there is no reason each bucket should be built the same way. A safety-reserve bucket is arguably best served by the simplest, most liquid strategic core discussed in Section 3; a lifestyle-spending bucket suits a glide-path-style approach that de-risks as spending needs approach; a growth bucket has the risk budget and time horizon to absorb a tactical or momentum overlay; and a legacy bucket, with the longest horizon and the least need for liquidity, is the one place within a \$1 billion, 200-family practice where a measured allocation to Yale-style illiquid alternatives might reasonably be considered, sized to each family's own capacity rather than imported wholesale. Matching the technique to the bucket, in other words, may matter as much as matching the bucket to the goal.

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