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# Persistent Coincidental Prediction

## Why Momentum + Risk Parity May Work Without Predicting the Future

*Evidence from 154 Years of Asset Returns, 39 Years of Mutual Fund Data, and 4,228 Parameter Combinations*

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*The performance results shown reflect a combination of **hypothetical back-tested data and live trading results**. Performance prior to November 1, 2021, is back-tested and does not represent actual client returns. Performance from November 1, 2021, onward reflects live results. Performance is shown on a **gross-of-fees basis** unless otherwise indicated. **Past performance, whether actual or back-tested, is not a guarantee of future results**, and no representation is being made that any investment will or is likely to achieve profits or losses similar to those shown.*

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## Executive Summary

This paper lays out the evidence behind the Acanto Adaptive All Asset 8 (8A) strategy — a rules-based tactical allocation model that combines two of the most durable ideas in finance: **Momentum** and **Risk Parity**. It was built because the old playbook stopped working. In 2022, stocks fell. Bonds fell. The classic 60/40 portfolio — the bedrock of retirement planning — lost 23%. There was nowhere to hide inside the conventional framework. The 8A was designed to solve that problem.

The central thesis is deliberately modest: *you do not need to predict the future to protect capital and generate competitive risk-adjusted returns*. You need only observe what is already working and follow. Each month, every asset in a diversified universe is ranked by trailing momentum. The top-ranked assets are selected and weighted using risk parity. The strategy adapts to whatever the market is doing now — not what a model says it should be doing based on correlations that may no longer hold.

The evidence spans four independent tests:

**1. 154 years, 4 macro assets.** Using U.S. equities, bonds, cash, and gold (post-1971) from 1871 to 2026, simple momentum rotation produced competitive risk-adjusted returns with dramatically shallower drawdowns than buy-and-hold equities. The signal worked through two world wars, the Great Depression, stagflation, and every crisis since.

**2. 22 ETFs, 18 years.** Across four variants (selecting the top 6, 7, 8, or 9 assets), the averaged result: 11.43% CAGR, 1.10 Sharpe Ratio, -10.44% maximum drawdown — compared to the S&P 500's 11.01% CAGR with a -46.33% maximum drawdown. Similar return. One-quarter the risk.

**3. 4,228 parameter combinations.** An exhaustive grid search confirms the strategy is not curve-fit. The broad region around the current configuration consistently produces high Sharpe Ratios and low drawdowns.

**4. 39 years of mutual funds.** Using six plain-vanilla funds available in any 401(k), the adaptive model nearly matched the Vanguard 500 on return while cutting maximum drawdown nearly in half.

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## 1. Introduction: Why This Problem Matters

Drawdown is not just a portfolio problem. It is a human problem.

Everyone knows the math: a 50% drawdown requires a 100% gain just to get back to your old balance. Maybe that recovery takes three years. Maybe it takes a decade. Maybe younger earners can dollar-cost average on the way down, though many eventually stop "throwing good money after bad." But for someone living off that portfolio, the damage is compounded.

Spending through the decline means less capital left to recover, which makes the climb back even harder, if it happens at all. Withdrawals during a long bear market do not just worsen the arithmetic. They compound the heartache.

A 50% decline in a retirement portfolio does not merely halve a number on a statement. It forces a 63-year-old couple to recalculate whether four decades of saving will still support the life they planned. It compels a widow to choose between preserving capital and maintaining her standard of living. It turns a father's college fund into a source of anxiety rather than pride. With pensions disappearing and most retirees depending on stock-and-bond portfolios for survival, the problem of drawdown is worth trying to solve on the most basic human level.

The behavioral research is clear on this. Kahneman and Tversky showed that investors feel losses roughly twice as intensely as equivalent gains [2]. The probability of panic selling

increases nonlinearly with drawdown depth. A 10% decline is uncomfortable. A 30% decline triggers survival instincts. A 50% decline — which the S&P 500 has delivered twice in the last 25 years — can permanently alter an investor's relationship with risk.

I will call out any advisor or YouTuber who tells retirees to stay fully invested in equities because "the average recovery takes only two years." *Average*. The dot-com crash took seven years to recover. The 2008 financial crisis took five and a half. For millions of Americans, those were not temporary setbacks — they were lost decades that ruined retirements, forced people back to work, and destroyed the financial plans they had spent lifetimes building. Averages are comforting in a textbook. They are meaningless to the 60-year-old watching half their savings evaporate in real time.

And then came 2022, which delivered a verdict that many investors had long feared but few had planned for. The S&P 500 fell 18.2%. But this time, the traditional safe haven failed too. Long-term Treasury bonds lost 30%. The classic 60/40 balanced portfolio lost 23.3% [1]. For the first time in a generation, there was nowhere to hide inside the conventional allocation framework. Ray Dalio's widely respected All Weather portfolio, with its 55% fixed allocation to bonds, lost nearly 20%.

For five years I have been deploying what I have learned works. For thirty-five years before that, I watched — from hedge fund trading desks, from options selling operations, from executing third-party trading systems, from my own advisory practice — as investors, including myself, panicked at exactly the wrong times. To borrow the crypto lingo, a severe drawdown has a way of turning "diamond hands" into "paper hands." For a retiree or pre-retiree, that is not a joke. It can mean selling near the bottom, delaying retirement, or going back to work. Finding a systematic way to approach investing — one that removes the human impulse to react emotionally to drawdowns — is why I am writing this paper.

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## 2. The Coincidence Idea

The word "coincidental" is chosen deliberately. A coincidence is something that happens without planning or intention — an alignment that occurs by chance rather than by design. That is exactly what momentum rotation does. At each monthly rebalancing, the strategy measures which assets *happen* to be performing well right now. It does not ask why. It does not try to determine whether the trend will continue. It simply observes the coincidence of current outperformance and allocates accordingly.

The remarkable finding — supported by over a century of data — is that this coincidence is **persistent**. Assets that are outperforming over the trailing three-to-six months tend to continue

outperforming over the subsequent one-to-three months. This is the momentum anomaly first documented by Jegadeesh and Titman in 1993 [4] and subsequently confirmed across virtually every asset class, geography, and time period studied [5].

The strategy combines three elements:

**All-asset momentum** identifies what is already working across a broad universe of asset classes. Each month, every asset is ranked by a blended momentum score using trailing returns over multiple lookback periods.

**Risk parity weighting** ensures that no single volatile asset dominates the portfolio. Each selected position is sized inversely proportional to its trailing realized volatility, so that each contributes approximately equal risk.

**Monthly adaptation** means the portfolio is never static. It adjusts to whatever the market is doing right now, rather than relying on assumptions about what it should be doing based on historical correlations.

This is the behavioral advantage of the approach: the investor does not need to believe in a forecast. They only need to accept that what is currently working has a better-than-even chance of continuing to work for one more month. That is a far lower bar than predicting the future — and it is a bar that 154 years of data suggest is consistently cleared.

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### 3. Why Buy-and-Hold Breaks Down for Real People

The standard defense of buy-and-hold investing rests on a simple observation: over long periods, equities have delivered superior returns, and the investor who stays fully invested captures those returns. This is correct as a matter of arithmetic. It is inadequate as a matter of human behavior. And it is dishonest as a matter of timeframes — because the "long period" required to recover from a major drawdown can exceed the investor's remaining working years.

| Event                               | S&P 500 Decline | 60/40 Decline | Recovery Time (S&P) |
|-------------------------------------|-----------------|---------------|---------------------|
| Dot-Com Crash (2000–2002)           | -49%            | ~-20%         | ~7 years            |
| Global Financial Crisis (2007–2009) | -57%            | ~-35%         | ~5.5 years          |
| 2022 Rate Shock                     | -18.2%          | -23.3%        | ~2 years            |

*Table 1: Major drawdowns and recovery times. Sources: S&P 500 total return data; 60/40 calculated as 60% SPY / 40% TLT.*

In each case, the standard advice was to hold. In each case, a significant number of investors did not. They sold near the bottom, locked in losses, and either re-entered the market too late to

capture the recovery or never re-entered at all. This is not a failure of discipline. It is a predictable consequence of human psychology confronting losses that feel existential.

The 2022 episode was particularly instructive because it broke the one assumption that underpinned virtually every balanced portfolio: that stocks and bonds move in opposite directions during crises. When both fell simultaneously, the 60/40 portfolio — the bedrock allocation recommended by virtually every major advisory firm — offered no protection.

The case for an adaptive strategy is straightforward: if an investor cannot tolerate a 30–50% drawdown — and most retirees and pre-retirees cannot — then the allocation framework needs a mechanism for responding to changing conditions. Buy-and-hold does not have one. Momentum rotation does.

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## **4. The Simplest Evidence: 4 Assets, 154 Years**

The strongest defense against accusations of cherry-picking is to test the strategy on the longest possible dataset with the fewest possible assets. Beginning in 1871, only three investable asset classes existed with reliable return data: U.S. equities (proxied by the S&P Composite Index from Robert Shiller's dataset [6]), U.S. government bonds (10-year Treasury yields converted to total returns), and cash equivalents (short-term Treasury bills). In 1971, when gold became freely traded following the end of the Bretton Woods system, the universe expanded to four assets.

Using these assets with a simple momentum rotation — selecting the top-performing assets over a blended lookback period and rebalancing monthly with equal weighting — the strategy produced results that are difficult to dismiss.

| Variant                   | Description                               | CAGR  | Vol   | Sharpe | Sortino | Max DD | vs S&P |
|---------------------------|-------------------------------------------|-------|-------|--------|---------|--------|--------|
| <b>1 of N</b>             | Pure momentum — 100% in single best asset | 11.2% | 11.4% | 0.72   | 0.79    | -52.9% | +1.9%  |
| <b>2 of N</b>             | Top two assets, equal-weighted            | 8.4%  | 6.6%  | 0.80   | 0.98    | -24.6% | -0.9%  |
| <b>3 of N</b>             | Top three assets, equal-weighted          | 6.2%  | 5.5%  | 0.58   | 0.62    | -38.9% | -3.1%  |
| S&P U.S. Equity Composite | Buy-and-hold U.S. equities (Shiller)      | 9.3%  | 14.0% | 0.49   | 0.47    | -81.8% | —      |
| 60/40 Balanced            | Static 60% stocks / 40% bonds             | 7.7%  | 8.5%  | 0.56   | 0.54    | -61.0% | -1.6%  |
| Equal-Weight Universe     | Buy-and-hold all available assets equally | 6.1%  | 5.1%  | 0.59   | 0.61    | -38.0% | -3.2%  |

The "1 of N" variant — always holding the single best-performing asset — delivered 11.2% CAGR over 154 years, outperforming the S&P U.S. Equity Composite's 9.3% with lower volatility (11.4% vs 14.0%) and a Sharpe ratio of 0.72 vs 0.49. The "2 of N" variant achieved the highest risk-adjusted returns of any variant, with a Sharpe of 0.80 and Sortino of 0.98 — reflecting its ability to capture momentum while limiting downside. Its maximum drawdown of -24.6% compares favorably to the S&P's -81.8% and the 60/40's -61.0%. Even the "3 of N" variant outperformed the static 60/40 balanced portfolio on a risk-adjusted basis. Critically, the equal-weight universe benchmark — holding all assets passively — returned only 6.1%, confirming that the momentum ranking itself, not the asset mix, drives the excess return.

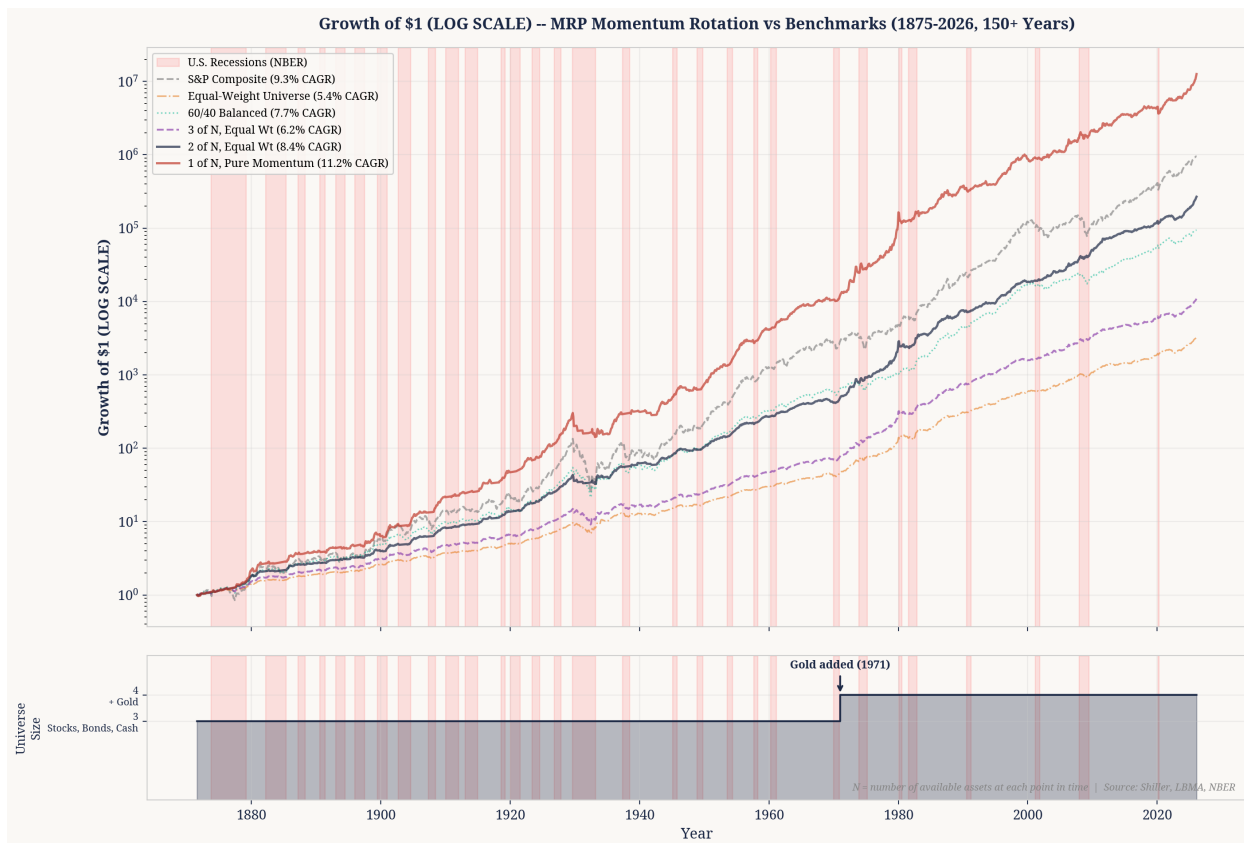


Figure 1: Growth of \$1 — MRP Momentum Rotation vs Benchmarks, 1875–2026 (LOG SCALE). The lower panel shows the expanding asset universe: 3 assets (Stocks, Bonds, Cash) from 1871, expanding to 4 (adding Gold) in 1971. Source: Shiller, LBMA, NBER.

The 154-year test reveals the strategy's most important property: **regime indifference**. The momentum signal worked during the classical gold standard era (1871–1914), through two world wars, the Great Depression, the postwar boom, the stagflation of the 1970s, the secular bull market of 1982–2000, the dot-com crash, the Global Financial Crisis, and the COVID pandemic. No single economic theory explains all of these regimes. No forecasting model could have predicted them. But the coincidental observation of what was working at each rebalancing date was sufficient to navigate all of them.

## 5. Stress Tests Across Starting Points

A fair way to test any strategy is to start from the worst possible moments — the points where an investor would have been most unlucky to begin. If the strategy survives these adversarial tests, it provides stronger evidence than any single backtest.

## The Gold Era: 1971–2026 (55 Years)

Beginning in 1971, when gold became freely traded and the universe expanded to four assets, the momentum rotation strategy had access to a genuine diversifier for the first time. The results over this 55-year period demonstrate the benefit of a broader opportunity set.

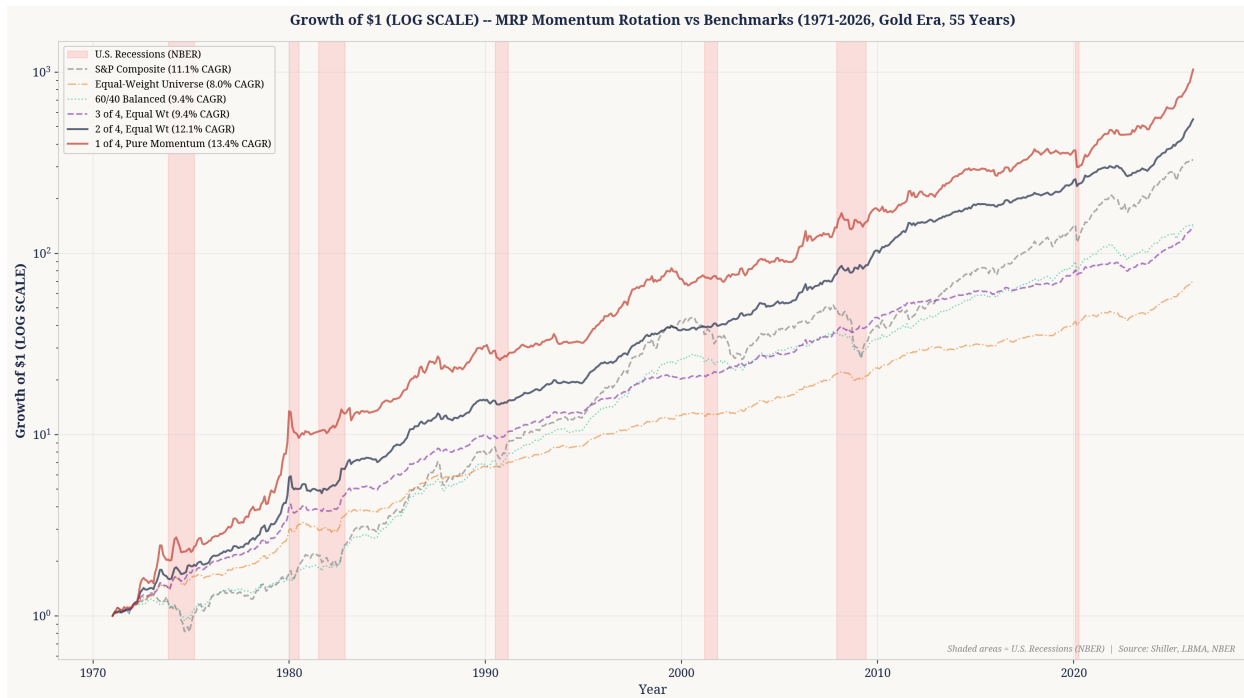


Figure 2: Growth of \$1 — MRP Momentum Rotation vs Benchmarks, 1971–2026 (LOG SCALE). The addition of gold as a fourth asset improved the strategy's ability to rotate away from equities during the 1970s stagflation. Source: Shiller, LBMA, NBER.

## The Modern Era: 1980–2026 (46 Years)

Starting in January 1980 represents one of the most challenging entry points for any momentum strategy. Gold had just peaked at \$850/oz following the Hunt Brothers silver squeeze, and the momentum signal would have been drawn to precious metals at exactly the wrong moment. Despite this adversarial start, the strategy recovered and delivered competitive risk-adjusted returns over the subsequent 46 years.

The 1980 start date also coincides with the beginning of the great bond bull market, as Paul Volcker's Federal Reserve drove interest rates to historic highs before beginning a four-decade decline. A momentum strategy with access to bonds could capture this secular trend, rotating into fixed income during equity corrections and back into stocks during recoveries. The "2 of 4" variant, holding the top two momentum assets, delivered 10.6% CAGR from 1980 —

competitive with the S&P U.S. Equity Composite's 12.1% but with meaningfully lower drawdowns during the 1987 crash, the 2000–2002 bear market, and the 2008 financial crisis.

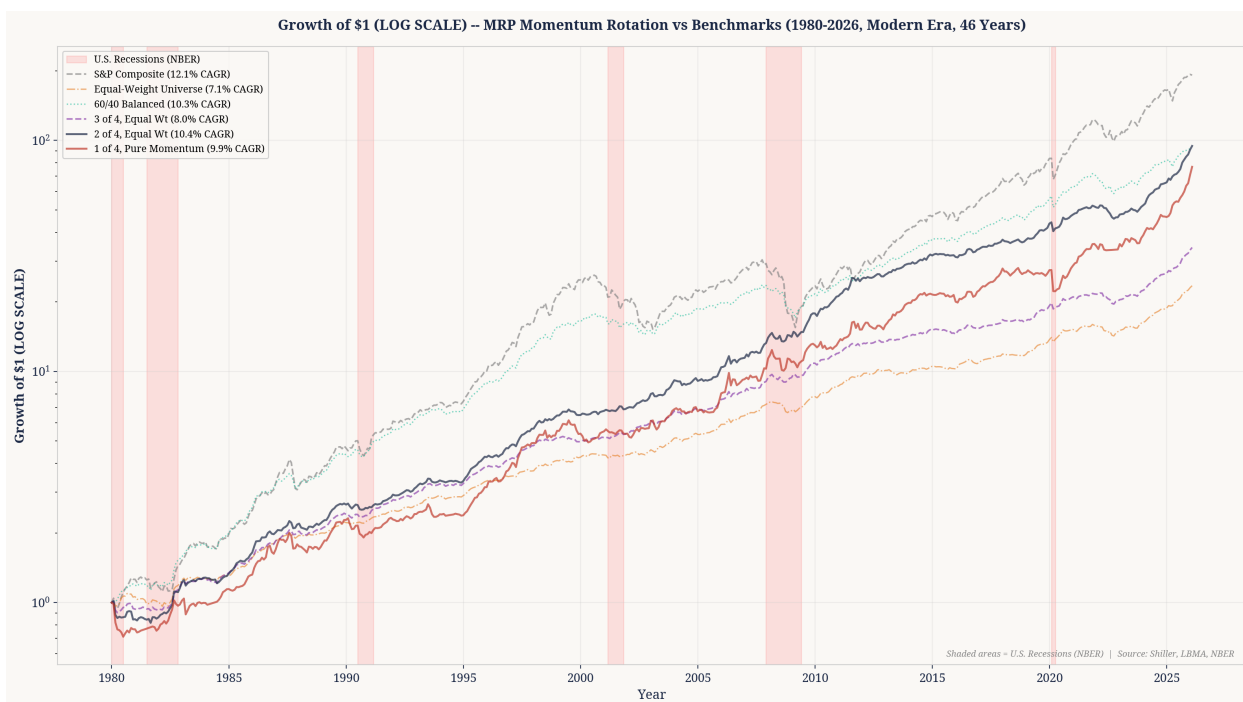


Figure 3: Growth of \$1 — MRP Momentum Rotation vs Benchmarks, 1980–2026 (LOG SCALE). Starting at the gold peak — the worst possible entry for a momentum strategy — the model still delivered positive risk-adjusted returns.

Source: Shiller, LBMA, NBER.

## Dot-Com Peak: March 2000–2026

Starting at the absolute peak of the dot-com bubble tests whether momentum rotation can protect capital when equities enter a prolonged bear market. The S&P 500 lost 49% over the subsequent two and a half years and did not recover its March 2000 level until 2007 — only to fall again in the Global Financial Crisis.

The momentum rotation strategy navigated this period by doing exactly what the signal prescribed: as equity momentum deteriorated, the model rotated into bonds and cash, which were outperforming on a trailing basis. When gold began trending in 2002–2003, the strategy captured that move as well. The "1 of N" pure momentum variant delivered 11.1% CAGR from the March 2000 peak — outperforming the S&P U.S. Equity Composite's 8.1% over the same period while avoiding the deepest drawdowns. The key insight is that the strategy did not predict the dot-com crash; it simply observed that equities had stopped being the best-performing asset and rotated accordingly.

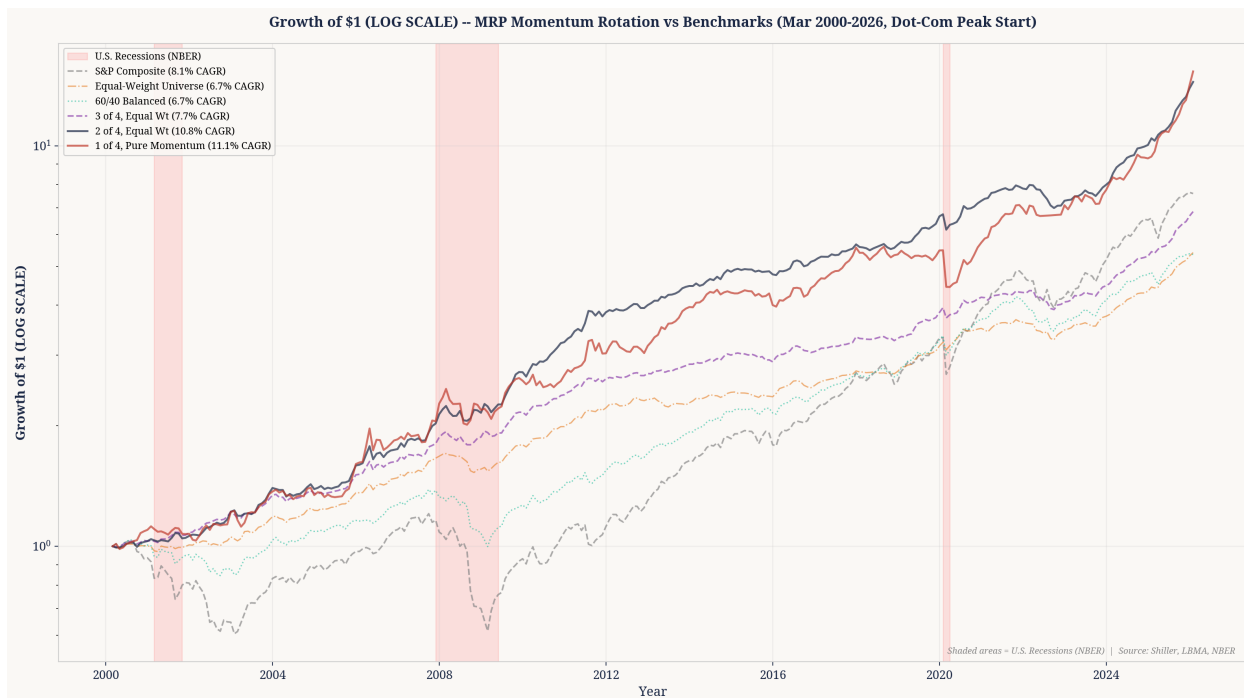


Figure 4: Growth of \$1 — MRP Momentum Rotation vs Benchmarks, March 2000–2026 (LOG SCALE). Starting at the dot-com peak, the momentum strategy avoided the worst of the equity decline by rotating into bonds and cash. Source: Shiller, LBMA, NBER.

## GFC Peak: October 2007–2026 (With 8A Overlay)

The October 2007 start date is particularly significant for two reasons. First, it represents the absolute peak before the worst financial crisis since the Great Depression — the S&P 500 would lose 56% over the next 17 months. Second, it marks the beginning of the period where we can compare the 4-asset research model with the actual Acanto 8A implementation using 22 ETFs.

The green line in Figure 5 shows the 8A Default Current Model — the composite record combining backtest (pre-November 2021) and live performance (post-November 2021) — delivering 12.6% CAGR alongside the research model variants. During the GFC itself, the momentum signal rotated into Treasury bonds and cash as equity momentum collapsed, limiting drawdowns to a fraction of the market's decline. The strategy then captured the subsequent recovery by rotating back into equities as their momentum turned positive in mid-2009.

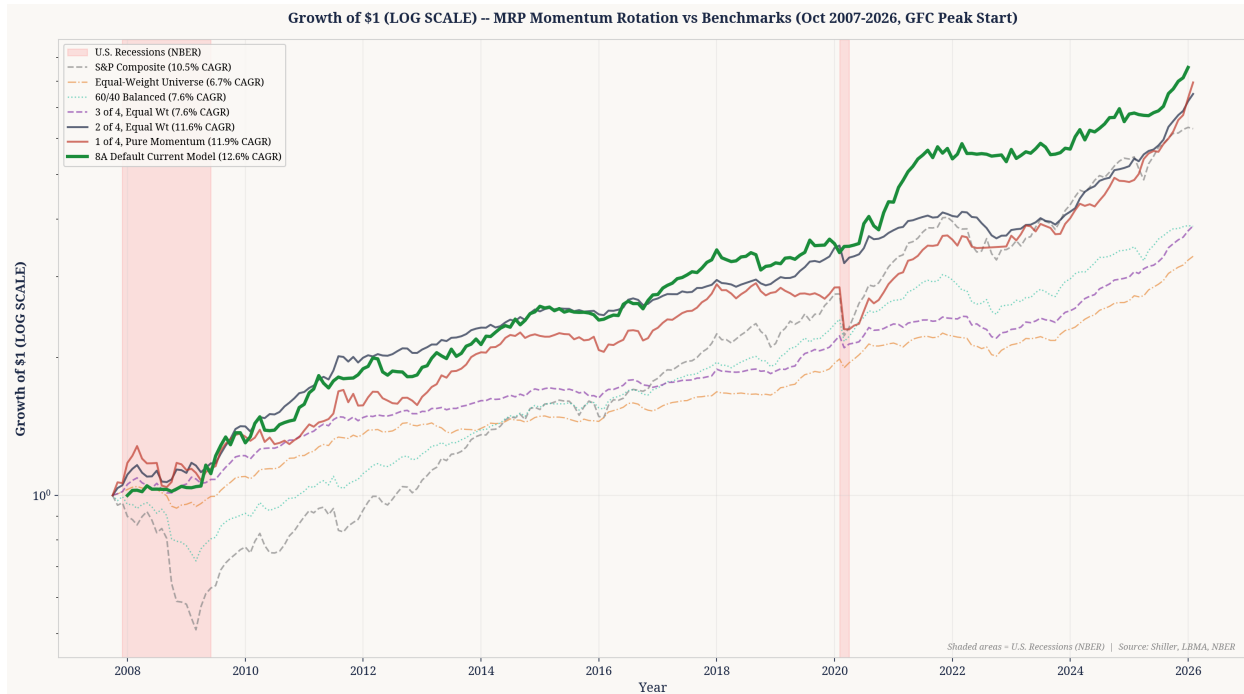


Figure 5: Growth of \$1 — MRP Research Model and 8A Default Current Model vs Benchmarks, Oct 2007–2026 (LOG SCALE). The green line shows the actual 8A implementation tracking alongside the research model, validating the transition from concept to practice. Source: Shiller, LBMA, NBER, Portfolio Visualizer, Acanto LLC.

The convergence between the 4-asset research model and the 22-ETF implementation is notable. Despite using entirely different universes, data sources, and weighting methodologies (equal weight for the research model, risk parity for the 8A), both arrive at similar risk-adjusted outcomes. This suggests that the core momentum signal — not the specific implementation details — is driving the results.

## 6. The 8A Implementation: 22 ETFs, 18 Years

The Acanto 8A strategy as currently implemented uses a universe of 22 exchange-traded funds spanning eight asset classes: U.S. equities (QQQ, SPY, DIA, MDY, VBR, VTI, XLF, XLE), international equities (VEU, VPL), fixed income (TLT, IEF, SHY, BIL), real assets (GLD, SLV, DBC), real estate investment trusts (AMT, PSA, EQIX, WELL), and select alternatives.

To demonstrate that the results are not dependent on a single configuration, I tested four variants — selecting the top 6, 7, 8, and 9 assets — using identical momentum scoring and risk parity weighting. The backtest covers January 2008 through March 2026.

| Variant                   | CAGR          | Volatility    | Sharpe      | Sortino     | Max Drawdown   | Worst Year    |
|---------------------------|---------------|---------------|-------------|-------------|----------------|---------------|
| Top 6 Assets              | 11.48%        | 11.36%        | 1.01        | 1.91        | -13.88%        | -7.56%        |
| Top 7 Assets              | 11.49%        | 10.84%        | 1.06        | 2.03        | -11.07%        | -6.45%        |
| Top 8 Assets              | 11.60%        | 10.18%        | 1.14        | 2.17        | -10.36%        | -3.66%        |
| Top 9 Assets              | 11.07%        | 9.70%         | 1.14        | 2.19        | -8.17%         | -6.09%        |
| <b>Average (6/7/8/9)</b>  | <b>11.43%</b> | <b>10.37%</b> | <b>1.10</b> | <b>2.10</b> | <b>-10.44%</b> | <b>-4.44%</b> |
| S&P 500                   | 11.01%        | 15.64%        | 0.62        | —           | -46.33%        | -36.81%       |
| Vanguard Balanced (60/40) | 7.88%         | 10.27%        | 0.60        | —           | -30.22%        | -22.16%       |

Table 2: Performance comparison of 8A variants vs benchmarks, Jan 2008–Mar 2026. Source: Portfolio Visualizer.  
Gross of fees, no transaction costs modeled.

The pattern is clear and consistent. All four variants beat the S&P 500 on risk-adjusted return by a wide margin. All four cut maximum drawdown by 70–83% relative to the S&P 500. The variation across configurations is modest: CAGR ranges from 11.07% to 11.60%, Sharpe from 1.01 to 1.14, and maximum drawdown from -8.17% to -13.88%. Similar return. A fraction of the risk.

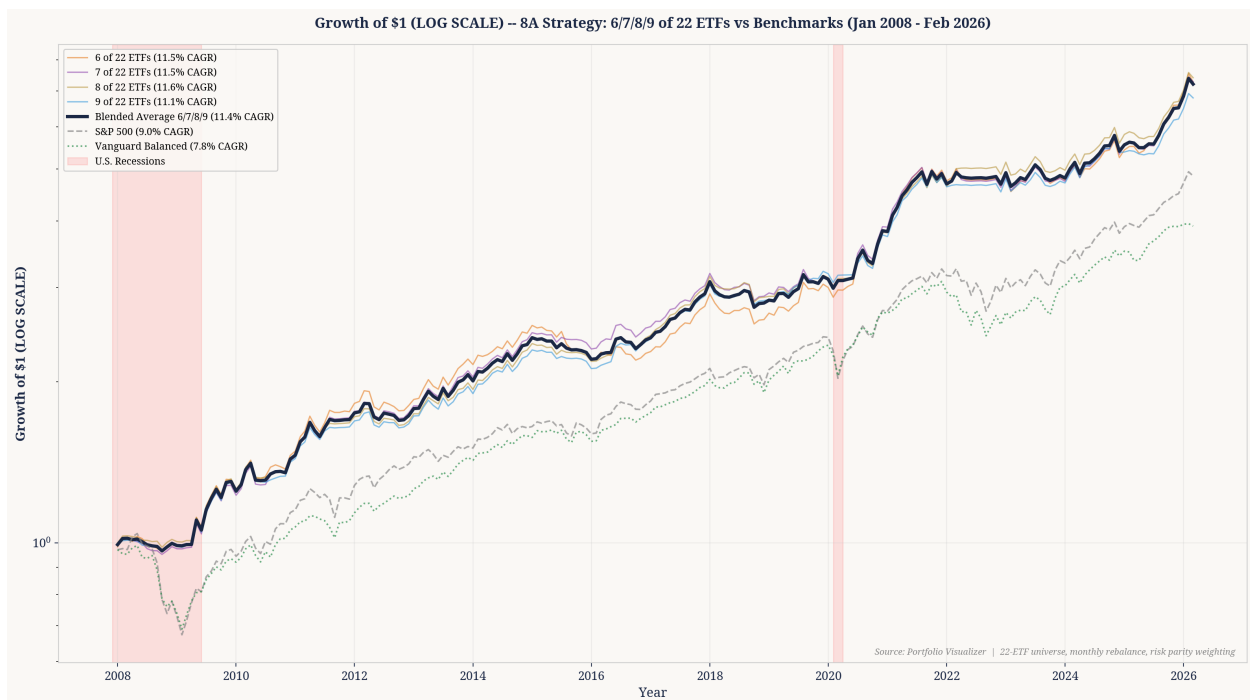


Figure 6: Growth of \$1 — 6A, 7A, 8A, and 9A Variants with Blended Average vs Benchmarks, 2008–2026 (LOG SCALE). All four variants cluster tightly, demonstrating that the strategy's value is not dependent on a single parameter choice. Source: Portfolio Visualizer.

The value proposition is clearest during market crises — precisely the moments when traditional allocations fail and investor behavior deteriorates.

**2008 Global Financial Crisis.** The S&P 500 lost 36.8%. The 60/40 portfolio lost approximately 22%. The Acanto 8A strategy returned +4.7%, having rotated into long-term Treasury bonds (TLT) and gold (GLD) — not because it predicted the financial crisis, but because those assets had already begun outperforming as equities weakened in late 2007 and early 2008.

**2022 Rate Shock.** Both stocks and bonds fell simultaneously — the S&P 500 lost 18.2% and TLT lost 30%. The 60/40 portfolio and virtually every traditional balanced approach suffered double-digit losses. The Acanto 8A strategy limited its loss to -6.4% by rotating into cash equivalents (BIL, SHY), commodities (DBC), and energy (XLE) — the only assets with positive momentum during a period of rising rates and inflation.

In both cases, the strategy did not predict the crisis. It observed which assets were already working and allocated accordingly. This is coincidental prediction in its purest form.

## How Adaptive Allocation Works: 17 Years of Dynamic Rotation Across 8 Asset Classes

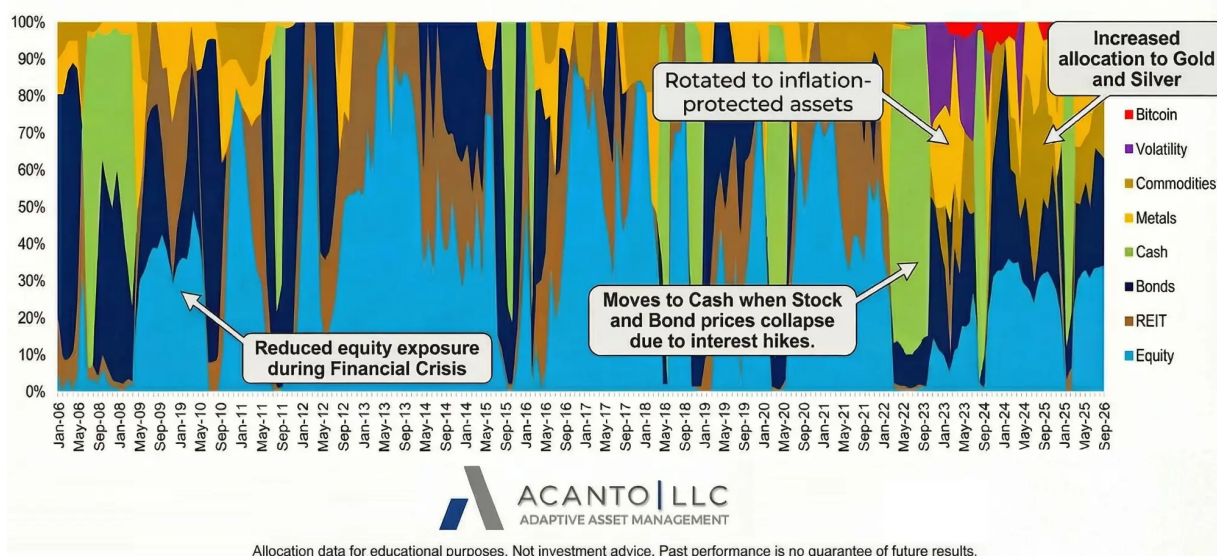


Figure 7: How Adaptive Allocation Works — 17 Years of Dynamic Rotation Across 8 Asset Classes. The stacked area chart shows how the strategy continuously adapts its allocation based on momentum signals, moving to defensive assets during crises and rotating back to equities during recoveries. Source: Acanto LLC.

The drawdown comparison below provides perhaps the most visceral illustration of the strategy's value. During the Global Financial Crisis, the S&P 500 fell 48.2% from peak to trough. The 60/40 balanced portfolio — the supposed safe harbor — lost 31.0%. The Acanto 8A strategy's maximum drawdown over the entire 18-year period was just 9.6%. During the 2022

rate shock, when stocks and bonds fell simultaneously, the pattern repeated: the S&P 500 and 60/40 both suffered significant declines while the 8A strategy limited losses through its rotation into cash equivalents and commodities.

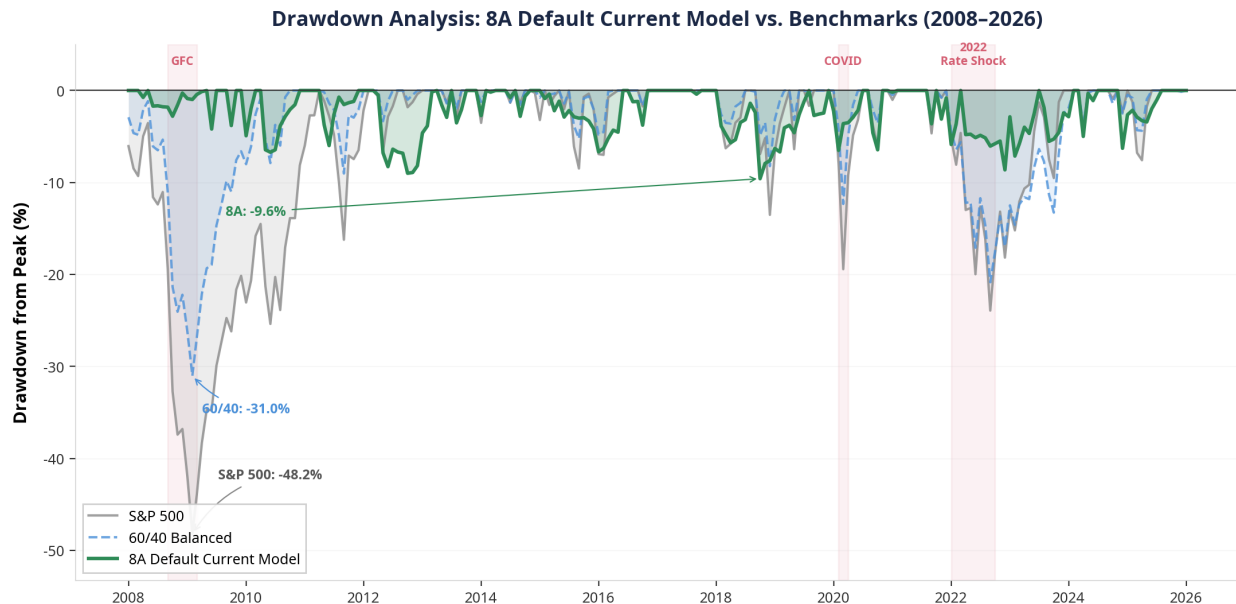


Figure 8: Drawdown from Peak — 8A Default Current Model vs. S&P 500 and 60/40 Balanced, 2008–2026. The S&P 500 fell 48.2% during the GFC while the 8A strategy never exceeded a 9.6% drawdown over the entire period. Shaded regions indicate major market stress events. Source: Portfolio Visualizer, Acanto LLC.

## 7. Risk Parity: The Second Layer

Momentum chooses the candidates. Risk parity helps size them intelligently.

A naive approach to momentum rotation would simply equal-weight the top-ranked assets. The problem is that a 12.5% allocation to short-term Treasuries (annualized volatility ~3%) contributes far less portfolio risk than a 12.5% allocation to silver (annualized volatility ~30%). Equal weighting ignores this tenfold disparity and allows the most volatile asset to dominate portfolio outcomes.

Risk parity addresses this by weighting each position inversely proportional to its recent realized volatility [7]. A low-volatility asset like short-term Treasuries receives a larger weight; a high-volatility asset like silver receives a smaller weight. The result is a portfolio where each holding contributes approximately equal risk, regardless of its absolute volatility level.

This is not a new idea. The risk parity framework was formalized by Maillard, Roncalli, and Teiletche in 2010 and has been widely adopted by institutional investors — most notably by

Bridgewater's All Weather fund. But there is a critical difference. Traditional risk parity portfolios apply static weights to a *fixed* set of asset classes. They always hold bonds, always hold equities, always hold commodities — just sized by volatility. When bonds entered a multi-year drawdown from 2020 to 2023, a traditional risk parity portfolio was forced to carry a declining asset for years. The Acanto 8A avoids this trap because momentum decides *which* assets to hold in the first place. If bonds are losing, they drop out of the portfolio entirely. Risk parity only sizes what momentum has already selected — combining the diversification benefits of risk parity with the adaptability of momentum rotation.

The practical effect is significant. In the 22-ETF backtest, the momentum-plus-risk-parity combination produced a Sharpe Ratio of 1.10 (averaged across 6/7/8/9 variants), compared to approximately 0.60 for the Vanguard Balanced Fund using the same asset classes [3]. That improvement in risk-adjusted return comes entirely from the process — the selection and sizing rules — not from the specific assets in the universe.

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## 8. Robustness: 4,228 Parameter Combinations

A common critique of quantitative strategies is that they are "curve-fit" — optimized to look good on historical data but unlikely to perform in the future. This is a legitimate concern, and one I take seriously.

To address it directly, the Acanto 8A white paper presents an exhaustive grid search testing 4,228 unique parameter combinations across four dimensions:

| Parameter          | Range Tested          | Variations |
|--------------------|-----------------------|------------|
| Universe Size      | 5 to 21 assets        | 17         |
| Holdings Count     | 2 to 12 assets        | 11         |
| Lookback Blends    | 7 different schemes   | 7          |
| Volatility Windows | 1, 2, 3, and 6 months | 4          |

*Table 3: Parameter grid search dimensions. Source: Acanto LLC White Paper, February 2026 [3].*

The results demonstrate that the strategy's performance is not an artifact of a single parameter choice. The current Acanto 8A configuration ranks in the **99th percentile for Sharpe Ratio**, **98th percentile for Sortino Ratio**, and **100th percentile for Alpha Sharpe** among all 4,228 tested models. Critically, it also ranks in the **2nd percentile for maximum drawdown**, meaning only 2% of all tested configurations experienced a shallower worst decline.

But the more important finding is not where the current configuration ranks — it is that the broad region around it performs consistently well. As the 6/7/8/9 variant comparison demonstrates, moving from 6 to 9 holdings changes CAGR by only 0.53 percentage points and Sharpe by only 0.13. The strategy is not sitting on a narrow peak. It occupies a wide plateau where many reasonable configurations produce strong risk-adjusted returns.

Figure 9 below visualizes the full parameter space. Each dot represents one of 4,228 tested configurations, plotted by maximum drawdown (x-axis) and Sharpe Ratio (y-axis), with color indicating the selection ratio (the fraction of the universe held in the portfolio). The red star marks the current Acanto 8A configuration. The pattern is clear: the 8A sits on the efficient frontier — achieving among the highest Sharpe Ratios with the shallowest drawdowns of any tested combination. Concentrated portfolios (lower selection ratios, shown in red) tend to cluster in the lower-left with deeper drawdowns and lower Sharpe Ratios, while more diversified configurations occupy the upper-right.

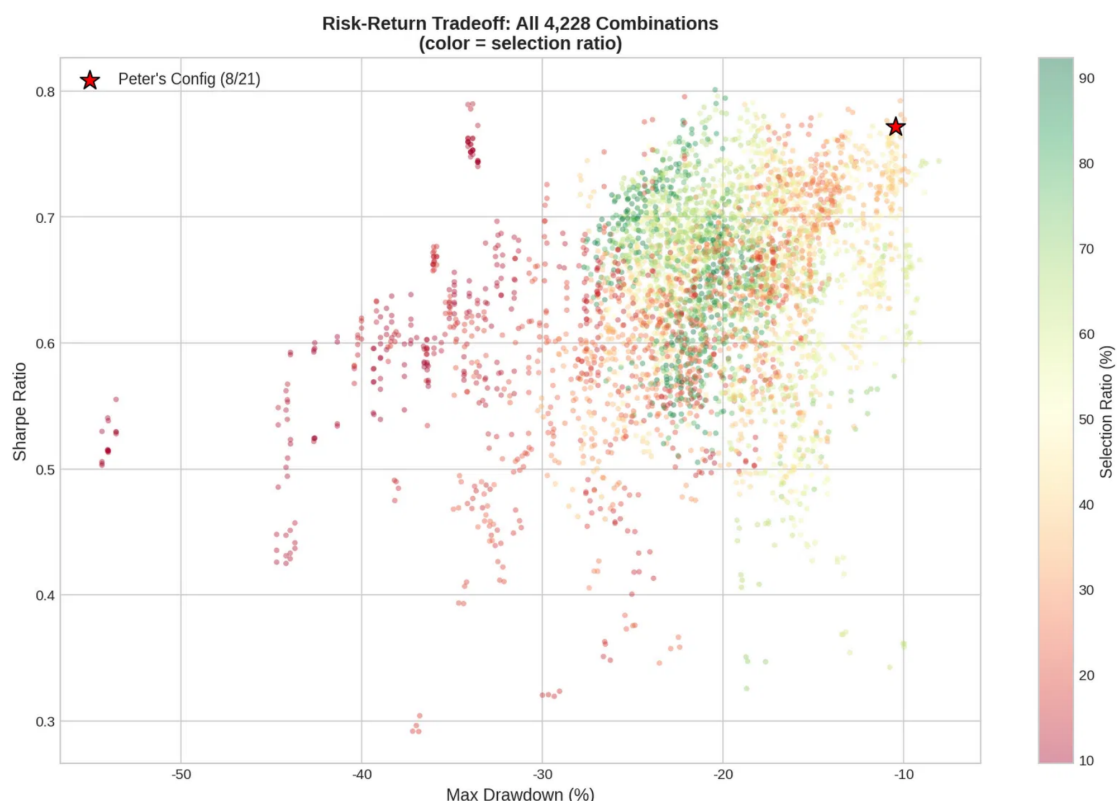


Figure 9: Risk-Return Tradeoff of All 4,228 Parameter Combinations. Each dot represents a unique configuration tested across lookback schemes, volatility windows, weighting methods, and universe sizes. The red star marks the current Acanto 8A configuration (8/21, risk parity), positioned on the efficient frontier. Color indicates selection ratio (top-N / universe size). Source: Acanto LLC grid search analysis.

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## 9. Mutual Fund Validation: Addressing the Implementation Objection

A reasonable objection to ETF-based backtests is that many of the ETFs used did not exist for the full test period, requiring synthetic or spliced data. To address this, I tested momentum rotation using six mutual funds with inception dates reaching back to the late 1980s: VUSTX (Vanguard Long-Term Treasury), VWUSX (Vanguard U.S. Growth), VWNFX (Vanguard Windsor II), FSAGX (Fidelity Select Gold), FBNDX (Fidelity Investment Grade Bond), and VWELX (Vanguard Wellington).

| Metric              | Adaptive Model (Top 2, RP) | Equal-Weight Portfolio | Vanguard 500 Index |
|---------------------|----------------------------|------------------------|--------------------|
| CAGR                | 10.90%                     | 9.09%                  | 11.03%             |
| Standard Deviation  | 12.10%                     | 10.51%                 | 15.10%             |
| Max Drawdown        | -28.56%                    | -27.20%                | -50.97%            |
| Sharpe Ratio        | 0.67                       | 0.59                   | 0.57               |
| Sortino Ratio       | 1.03                       | 0.92                   | 0.83               |
| S&P 500 Correlation | 0.60                       | —                      | 1.00               |

Table 4: Mutual fund validation, Jan 1987–Mar 2026. Source: Acanto LLC backtest using daily mutual fund NAV data. Gross of fees, no transaction costs modeled.

Two findings stand out. First, the adaptive model nearly matches the Vanguard 500 on CAGR (10.90% vs. 11.03%) while cutting maximum drawdown nearly in half (-28.56% vs. -50.97%). The Sharpe Ratio of 0.67 exceeds the Vanguard 500's 0.57, confirming that the risk-adjusted return is superior even when raw return is similar.

Second, the strategy achieves this with only six mutual funds — none of which are exotic, leveraged, or alternative. These are plain-vanilla funds available in virtually any 401(k) or IRA. The implication is that the momentum rotation process itself generates the alpha, not the specific instruments used.

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## 10. What the Strategy Is Seeing Now: March 2026

I want to be careful with this section. The strategy does not predict. It does not forecast. It observes. But what it is observing right now is worth discussing.

Over the past several months, the Acanto 8A has systematically exited its positions in broad U.S. equity indices — including SPY and QQQ. In their place, the strategy has rotated into gold, silver, commodities, foreign equities, and — more recently — small-cap value. The equity

momentum sleeve has also become more defensive, leaning away from the concentrated U.S. large-cap technology leadership that dominated the prior cycle.

This is not a single-month anomaly. The rotation has been building for roughly a year. The strategy began reducing U.S. equity exposure in mid-2025 and has progressively increased its allocation to real assets and international markets.

Over long periods of testing — including the 154-year asset-mix tests described earlier — there appear to be interesting patterns in the allocations themselves. In particular, when broad U.S. equity exposure falls below roughly 20% of the portfolio, that has often coincided with or preceded weaker equity environments, corrections, or more defensive market regimes. I present this as an observed historical pattern, not a guaranteed forecasting rule.

I do not pretend the model knows why this is happening. But when broad U.S. equity exposure shrinks, gold and silver stay persistent, foreign markets gain relative strength, and the equity momentum sleeve becomes more defensive, I pay attention. That is not proof of an imminent crash. But it is a combination I do not take lightly.

The strategy's current positioning reflects a meaningful change in market leadership — a warning sign worth respecting, not a definitive market call. Whether that change is temporary or structural, I cannot say. What I can say is that the strategy is doing exactly what it was designed to do: follow the money, wherever it flows. If U.S. equities recover their leadership, the momentum signal will rotate back. If they do not, the strategy will continue following whatever is working.

*That is the point of coincidental prediction. We follow. We do not predict. I am not that smart — and I am certainly not that lucky, especially with other people's money.*

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## 11. Limitations and Honest Disclosures

**Whipsaw risk.** A monthly rebalancing strategy can rotate into an asset class just as it reverses. The momentum signal is backward-looking by design, and there will be months when the strategy is wrong — when last month's winner becomes this month's loser. Over 154 years, the signal has been right more often than wrong, but "more often" is not "always."

**Backtested performance is not live performance.** The 154-year test, the mutual fund test, and the ETF backtest all use historical data with the benefit of hindsight. Real-time execution involves slippage, bid-ask spreads, and the psychological difficulty of following a systematic process during periods of stress. The live track record of the Acanto 8A strategy began in

November 2021 with dedicated accounts, and the live results — while consistent with the backtest — represent a shorter period.

**Taxes matter.** Monthly rebalancing generates short-term capital gains, which are taxed at ordinary income rates. The strategy is not tax-efficient and is best suited for qualified accounts — IRAs, 401(k)s, Roth IRAs — where tax consequences are deferred or eliminated. Investors in taxable accounts should discuss the tax implications with their advisor before implementing this approach.

**Suitability matters.** This strategy is not appropriate for all investors. It requires comfort with a systematic, rules-based process that may hold assets the investor does not understand or would not choose independently. A qualified advisor should review the client's complete financial situation, risk tolerance, and investment objectives before determining whether this strategy is suitable.

**The strategy can change.** Acanto LLC reserves the right to modify the universe, the parameters, or the methodology at any time. Markets evolve, and a responsible fiduciary must be willing to adapt the process when the evidence warrants it. Any material changes will be communicated to clients in advance.

**Past performance is no guarantee of future results.** This is not a legal formality. It is a statement I believe deeply. The 154-year track record is encouraging, but no amount of historical evidence can guarantee that the future will resemble the past. The strategy is designed to adapt to whatever comes next — but adaptation is not omniscience.

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## 12. Conclusion: Adaptation Over Prediction

After thirty-five years of chasing alpha — through hedge funds, investment banks, and independent advisory work — I have arrived at a conclusion that would have surprised my younger self: I trust adaptation more than prediction.

The central claim of this paper is modest. You do not need to predict the future to protect capital and generate competitive risk-adjusted returns. You need only a persistent coincidence — that assets which are currently outperforming tend to continue outperforming for one more month.

This coincidence has held across 154 years of asset class data spanning every conceivable economic regime. It has held across 39 years of mutual fund returns using plain-vanilla funds available in any retirement account. It has held across 4,228 parameter combinations, confirming that the result is structural rather than the product of a single optimized configuration.

And it has held during the two worst environments for traditional balanced portfolios in modern history — the 2008 Global Financial Crisis and the 2022 simultaneous stock-and-bond decline.

The strategy does not claim to be optimal. It does not claim to beat the S&P 500 in every year or every decade. It claims something more useful: that by systematically observing the present and adapting accordingly, an investor can participate meaningfully in rising markets while avoiding the catastrophic drawdowns that destroy both wealth and the willingness to stay invested.

For the millions of investors whose retirement savings sit in static allocations designed for a world that may no longer exist, the question is not whether momentum rotation is perfect. The question is whether it is better than holding and hoping.

One hundred and fifty-four years of evidence suggest that it is.

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## Disclosures

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**All investing involves risk, including the possible loss of principal. Past performance is no guarantee of future results.**

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## About the Author

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Founder & Chief Investment Officer: Acanto LLC



As the Chief Investment Officer of Acanto LLC, Peter brings over 35 years of experience in market analysis and financial planning to help clients navigate complexity with clarity and confidence. Peter finds the greatest satisfaction in solving complex financial challenges and bringing clarity to people's lives — particularly when thoughtful planning uncovers risks and opportunities they didn't realize existed.

With over 35 years of experience as a Fiduciary and Investment Advisor, Peter excels at solving complex problems. He has a long history of achieving excellent risk-adjusted returns through innovative strategies like Momentum, Risk Parity, and ESG data. Before founding Acanto LLC, he gained extensive experience at hedge funds, investment banks, and as an advisor to high-net-worth clients.

Peter holds an MBA from Columbia University, Series 65, 7, and 3 licenses, and is a Chartered Market Technician (CMT). Before entering finance in 1994, he earned a Master of Architecture from Tulane University, receiving the Tau Sigma Delta Award for Excellence. His thesis, "Ecology as the Common Denominator for Design," was published in the AIAS journal "CRIT" in 1990. When not helping Acanto's clients reach Complete Financial Clarity, he shares a passion for cycling, tennis, skiing, and volunteering at the local animal shelter. He is a proud supporter of [Waggle.org](https://www.waggle.org) and the [Jacksonville Humane Society](https://www.jacksonvillehumane.org).

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