The Hidden Cost of Bad Timing: How Investors Sabotage Their Own Returns



FLEXTION It's about *time*.

"You're either part of the solution or you're part of the problem."

- ELDRIDGE CLEAVER

For over 40 years in asset management, I've observed a recurring pattern that few want to admit: the investment industry thrives on cycles—not just market volatility, but the predictable ebb and flow of client assets. And while most conversations focus on the market's ups and downs, the real tragedy lies elsewhere—in investors' self-inflicted wounds.

Here's the uncomfortable truth: most clients do not experience the full performance of the strategies they invest in. Why? Because their allocation decisions are consistently mistimed, chasing performance at the peak and abandoning strategies during downturns.

As a portfolio manager, I witnessed this firsthand. Strong performance would attract a flood of new assets, only for those same investors to experience disappointment when returns inevitably moderated. Consultants, marketers, compliance officers and due diligence analysts would then swoop in to "fix" the situation, pulling assets at exactly the wrong moment.



This isn't a one-off problem. It's systemic. Research proves it.

For three decades, DALBAR's Quantitative Analysis of Investor Behavior has revealed a disturbing pattern: the average investor underperforms nearly every asset class, losing 200 to 600 basis points annually. The 2023 numbers are even starker: equity fund investors underperformed the S&P 500 by 5.5%, while bond investors trailed aggregate benchmarks by 2.6%. And this trend isn't improving.

The data reveals an even deeper pattern. Jessie Livermore's AIAE indicator, later corroborated by Raymond Micaletti in *Towards a Better Fed Model*, highlights the persistent and detrimental nature of these investment decisions. Analyzing equity allocations and forward 10-year stock returns from 1951 to 2013, the findings reveal a clear negative slope—indicating that investor allocations are inversely related to actual returns. This insight is distinct from, yet closely linked to, the 85.3% correlation. Together, these results demonstrate that 85.3% of the lower returns investors' experience can be attributed to this inverse relationship. In other words, as investors increase their exposure to equities, their returns tend to decline, with a predictive accuracy of 85.3%.

Put simply, the collective behavior of investors has become the most reliable predictor of underperformance.

This pattern isn't just a frustrating quirk of human behavior—it's a structural failure. Investors, driven by emotion and herd mentality, repeatedly misjudge both the probability of improving performance and the expected returns. And the industry has done little to fix it.

Here's where the disruption begins. A solution doesn't lie in chasing the next hot strategy or tweaking benchmarks—it lies in breaking the cycle of bad decisions. This starts with rethinking how we approach allocation and educating investors to resist the gravitational pull of fear and greed. It's not easy, but it's necessary.

The question isn't whether this problem is solvable. It's whether we're brave enough to disrupt the status quo and address the structural flaws head-on. The data is clear, and so is the opportunity: a smarter, more disciplined approach to investing can unlock the returns that investors are leaving on the table.

But first, we need to admit the system is broken—and start building a better one.



Figure 1. U.S. AIAE indicator vs. subsequent 10-year annualized U.S. stock market returns, December 31, 1951 to March 31, 2013.



Recognizing that the key drivers of investor underperformance are primarily the actions of participants in the system is a critical first step in finding solutions.

As Benoit Mandelbrot highlighted in *The Misbehavior of Markets*, financial systems mimic biological ones—volatility isn't an external force, but an endogenous result of human behavior. Daniel Kahneman's insights in *Thinking, Fast and Slow* further clarify this phenomenon, showing how our intuitive "System One" thinking leads to predictable errors: we overweight recent data, underestimate mean reversion, prefer feel–good narratives and obsess over rare, highly unlikely events.

Mandelbrot and Kahneman provide a clear framework for understanding the behavioral and quantitative flaws that perpetuate what's commonly referred to as the "Behavior Gap." This gap is no accident—it's the result of three interrelated conditions that systematically mislead investors:

()] The Overestimation Problem

Investors consistently overestimate their ability to identify outperforming funds or managers, ignoring the harsh probabilities of the investment landscape. Since 1929, fewer than 50% of stocks outperform annually and the median stock return is negative. Meanwhile, only about 30% of managers beat their benchmarks over extended periods. Compounding the issue, markets spend 85% of the time recovering from previous dips, not reaching new highs. Yet investors persist in chasing exceptionally rare returns, leading to futile "manager churn" and wasted opportunities.



Performance Chasing Ensures Disappointment

The obsession with recent returns virtually guarantees underperformance. Investors make allocations based on short-term averages, expecting those results to persist, but they earn the subsequent marginal results instead. Mathematically, they are buying the first derivative of performance but living through the second derivative, where mean reversion takes hold. This dynamic creates an inverse correlation between returns and allocations. trapping investors in a cycle of lofty expectations and disappointing outcomes.

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The Industry Amplifies Emotional Traps

The asset management industry reinforces these mistakes. Marketing budgets, compliance checks, and due diligence attention follow short-term performance, amplifying human tendencies to crave certainty and comfort. This feedback loop drives flows into recently successful funds at precisely the wrong time, creating an inverse relationship between investor activity and subsequent returns.

These factors culminate in systemic errors in estimating probabilities and expected returns. But at the heart of the issue lies a simple, often overlooked truth: errors in timing.

Timing is often dismissed as unhelpful or impossible, but this criticism applies mainly to broad market timing, which we agree should be avoided. However, timing at the implementation level—when and how investors allocate within markets—is critical to outcomes. Unfortunately, even the rise of index funds and quantitative solutions hasn't eliminated the destructive impact of poor timing decisions.

We believe the core problem is that investors are using the wrong framework for time. Traditional fund and manager performance analysis relies on linear "clock time," using historical rolling periods that fail to account for the nonlinear, mean-reverting nature of markets. Mandelbrot's concept of "market time," where time speeds up or slows down in relation to volatility, offers a far more accurate lens. As he famously stated, "If time is money, then the currency of Wall Street needs reform."

Here's the issue: linear time deceives investors. For example, a manager's extraordinary two-year outperformance will significantly boost their 3–, 5–, 7–, and 10-year results in clock time, creating the illusion of consistent excellence. Investors interpret this as an average they can expect, but in practice, they end up buying at the peak and selling at the trough.

To fix this, we must shift from a linear time metric to a probabilistic scale grounded in market time.

This shift isn't just a theoretical exercise—it's a fundamental reframing of how we understand and engage with markets.

In our example, rather than blindly trusting annualized returns, we would compare the recent performance to the manager's historic track record and return frequency distribution. By doing so, we would see that such exceptional returns occur only 3% of the time hardly a basis for long-term expectations.

This shift isn't just a theoretical exercise—it's a fundamental reframing of how we understand and engage with markets. And if investors continue to rely on the flawed construct of clock time, they're not just misjudging probabilities—they're playing a rigged game. Mandelbrot's insights revealed a fascinating duality in investments: they show both mean-reverting and trend-following behaviors, depending on the "market time" frame in question. In our own stock selection models, we've observed that while value and momentum factors are inversely correlated, their combination can dramatically improve the timing and precision of decisions. Building on this insight, we propose that integrating a trend measure of fund or manager relative performance alongside mean regression-based probability estimates offers a powerful new framework for better decision-making.

Consider a common scenario: an advisor recommends allocating funds to a manager with an exceptional five-year annualized return. If Mandelbrot and Kahneman were in the room, they'd likely pose two uncomfortable questions:

- Why didn't you recommend this manager five years ago?
- How often has this manager delivered returns as high as the current performance?

These are the questions our process and toolkit aim to answer. By quantifying both the probability of future performance and the momentum dynamics of past success, we have created a methodology that moves beyond surface-level metrics.

In addition to our probability-based approximations of expected relative returns, we have used our non-linear framework to develop a robust toolkit for deeper analysis of manager performance. Unlike traditional MPT-based metrics, our approach incorporates a dynamic evaluation of batting averages, upside and downside capture, return asymmetry, consistency and volatility—accounting for both trend dynamics and mean reversion. By shifting away from static, linear assessments, this methodology provides a more accurate and actionable view of a manager's true performance potential.



Testing the Hypothesis

Initial In-Sample Testing

An initial test was conducted on 100 randomly selected equity funds with an equity allocation above 90%. The model showed an 81% success ratio, confirming the hypothesis and validating the chosen metrics of success.

Parameter	Count	Percent
Total Funds	100	-
Hit Ratio greater than or equal to 70%	81	81.0%
Hit Ratio less than 70%	19	19.0%

Out-of-Sample Testing

The model was then tested on the entire sample of 4,117 funds under strict criteria. The overall success ratio was 77.65%, in line with the in-sample results.

Parameter	Count	Percent
Total Number of Funds	4117	-
Hit Ratio greater than or equal to 70%	3197	77.65%
Hit Ratio less than 70%	920	22.35%
Average Hit Ratio	-	73.08%
Average Hit Buy Ratio	-	73.61%
Average Hit Sell Ratio	-	72.73%
Average Annualized Returns for Buy Signal	-	2.23%
Average Annualized Returns for Sell Signal	-	-2.16%

Out-of-Sample Results by Asset Class

Equity Funds: The model was highly effective, achieving an 84.89% success ratio—with average Buy Signal relative returns at 2.74% and Sell effectiveness of 2.62%— for a total added return of 5.36%, exceeding the average fee requirement of any active manager. The results indicate that equities exhibit clearer trends and probabilities than fixed-income assets.

Parameter	Count	Percent
Total Number of Funds	3329	-
Hit Ratio greater than or equal to 70%	2826	84.89%
Hit Ratio less than 70%	50	15.11%
Average Hit Ratio	-	78.01%
Average Hit Buy Ratio	-	76.94%
Average Hit Sell Ratio	-	79.08%
Average Annualized Returns for Buy Signal	-	2.74%
Average Annualized Returns for Sell Signal	-	-2.62%



Fixed Income Funds: The model was less effective, with a hit ratio of 47.1% and average Buy Signal relative returns at 1.73%. This is likely due to the number of bond funds designed to mimic a specific benchmark. The model was significantly more effective in active bond strategies.

Parameter	Count	Percent
Total Number of Funds	788	-
Hit Ratio greater than or equal to 70%	371	47.1%
Hit Ratio less than 70%	417	52.9%
Average Hit Ratio	-	68.2%
Average Hit Buy Ratio	-	70.3%
Average Hit Sell Ratio	-	66.4%
Average Annualized Returns for Buy Signal	-	1.73%
Average Annualized Returns for Sell Signal	-	-1.70%

Exclusion Disclaimers:

Parameter	Count	Percent
Abnormal Relative returns	6	0.0%
Data Errors	6	0.0%
Insufficient Data	1322	10.0%
Single Signal	200	1.5%

Data Considerations and Exclusions

- Single Signal: In cases where our strategy has generated only one active signal, we exclude it from back-test metrics to maintain accuracy and prevent look-ahead bias.
- Insufficient Data: Any dataset with less than six years of data is excluded, as it violates our original assumptions.
- Abnormal Relative Returns: Some cases exhibit unusually large relative returns, often due to an unsuitable benchmark. This mismatch can distort signal returns and impact performance analysis.
- Data Errors: If critical information—such as performance data or asset class mapping—is missing, the back-test cannot be conducted.

These exclusions highlight genuine data limitations, reinforcing that no dataset is entirely flawless.

Conclusions

Our analysis demonstrates that combining probability estimates with trend dynamics has the potential to significantly improve investor timing decisions. Here's what we found:

Turning Losses Into Gains

Historically, investors lose returns due to poor timing. However, by applying this methodology consistently, we saw the potential to convert these losses into meaningful gains.

Broad Effectiveness

The backtest showed effective results in over 70% of active stock and bond funds. Where results were inconclusive, the unpredictable and unstable return patterns of certain managers served as a powerful elimination tool.

Low Risk of Harm

Given the consistent and material losses experienced by the average investor, it is highly unlikely that this methodology would exacerbate poor decision–making. In fact, it stands as a safeguard against the emotional and behavioral traps investors fall into

Ultimately, our approach doesn't aim for perfection—because perfection is an illusion in a world of market uncertainty. Instead, it strives to replace the current system of being precisely wrong with a system that is approximately right.

Better timing decisions aren't just a theoretical improvement—they're a practical revolution. And when implemented consistently, they have the potential to transform active strategies from a game of chance into a game of skill.

Because in the end, if you're using the wrong kind of time, you'll always be late to the returns.

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About the Author

Paul Ehrlichman, Flextion's CEO and CIO, has over four decades of experience in portfolio management, leveraging fundamental and quantitative research to develop investment processes and strategies that enhance client returns and manage risks in volatile markets. He has led equity teams focused on global and international value strategies, serving a diverse client base that includes individuals, pension funds, and endowments at several leading global asset managers.

Flextion is a breakthrough platform for evaluating fund strategy returns, helping investors identify managers at a pivotal turning point—those poised to outperform after a period of underperformance. Designed by seasoned portfolio managers, Flextion bridges the gap between "clock time" and "market time," empowering investors to unlock long-term value and uncover hidden performance potential.

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