## Behavioral Alpha and *Stock Market Maestros*

Over the last two years, we've had the chance to learn about [Essentia Analytics'](#) Behavioral Alpha Benchmark®. Behavioral Alpha is a framework for financial advisors and capital allocators to use when selecting funds and investment managers. I met Essentia's founder, Clare Flynn Levy, while she was working with author Lee Freeman-Shor to provide an analytical framework for his second book, *Stock Market Maestros: The winning habits, strategies, and mindsets of the world's best investors*. This *Growth Factor* explains Behavioral Alpha and provides a preview of the book.

In 2015, Lee wrote *The Art of Execution*, which uses investment manager case studies to define investor archetypes. Assassins cut losers quickly; Hunters average down intelligently; Rabbits freeze in the headlights; Raiders take profits too quickly; and Connoisseurs let winners run. The book is a cult classic in value investing circles. In July 2025 — ten years after its publication — the book was reviewed in an episode of one of my favorite podcasts, *We Study Billionaires* with Clay Finck.[1]

Things became interesting in 2024 when the authors contacted me to see if I'd be interested to have my trade data analyzed by Essentia. Based on the Needham Aggressive Growth Fund's performance and its 2022 and 2024 Lipper Awards, they considered me a candidate for *Stock Market Maestros*. They had analyzed thousands of funds' performance to build a shortlist of 70. I thought that, at the very least, I would learn from the analysis of my trades.

Based on my Behavioral Alpha scores, I was selected as one of the 11 Stock Market Maestros included in the book. Extensive interviews followed. Lee pursued a line of questioning reaching back to my roots; I worked in a lumberyard during high school and college, and my path to Wall Street was anything but direct. It is humbling to be included. I think of the incredible investors and managers I've learned from during my years on Wall Street and in industry - these mostly private individuals are the real Maestros. I am fortunate to have been in a position to learn, even when those lessons were expensive and difficult.

In their book, Lee and Clare have identified factors that helped me understand my own performance — insights that individual and professional investors may also find helpful. *Stock Market Maestros* is available for pre-order on [Amazon](#) and [Harriman House,](#) with a release date of March 3. [2]

## Essentia Analytics and Behavioral Alpha

Behavioral Alpha is the excess investment return that results from mitigating the hidden biases in an investor's decision-making process. Clare began her career at Deutsche Asset Management (formerly Morgan Grenfell) in London, where she managed over $1 billion in pension equities. She founded a hedge fund and a fintech company before starting Essentia Analytics in 2013. Driven by a lack of data to aid her own investing and a belief that manager evaluation tools could be improved, her vision was to combine trade data, daily index performance, and machine learning to measure investment skill. Her work demonstrated that high Behavioral Alpha scores correlate with outperformance, helping managers and investors alike understand specific strengths and weaknesses.

While we currently use standardized 1, 3, 5, and 10-year performance periods, Modern Portfolio Theory (MPT) statistics, and Brinson analyses from FactSet, Behavioral Analytics goes a step further by identifying seven decision types:

1. Stock picking: Choosing which stocks to buy.
2. Entry timing: Deciding when to start a position.
3. Sizing: Determining position size relative to the portfolio.
4. Scaling in: Adding to a position after the initial purchase.
5. Size adjusting: Modifying size before beginning to exit.
6. Scaling out: Reducing or exiting in steps.
7. Exit timing: Deciding when to fully exit.

These generate a Hit Rate (the percentage of decisions that add value), a Payoff Ratio (average gain on good decisions vs. average loss on losers), and Decision Alpha (which decision types drive or drag performance). Combined, these form the aggregate Behavioral Alpha Score.

In February 2025, Essentia and Morningstar announced that Morningstar will incorporate these metrics into its Direct Platform.[3] There may come a time when allocators ask as much about Behavioral Alpha as they do about 3 and 5-year performance.

## Needham Aggressive Growth Fund's Behavioral Alpha Score

In a preview titled "From Lumberyard to Wall Street: The Investing Lessons of John Barr,"[4] Lee and Clare highlighted three of the Fund's scores. These claims result from Essentia's analysis, not Needham Funds'. Past performance is no guarantee of future results.

Overall Behavioral Alpha Score: 56.0 (based on 3 years of data to June 30, 2024). Scores over 50 indicate that an investor has demonstrated skill compared to what would have been achieved by chance or an index fund.

Hit Rate: 49% (5 years to June 30, 2024). This means over half of my decisions underperformed the index. However, a Journal of Investing study found that only 23% of managers had a Hit Rate over 50%.[5] A main conclusion of *Stock Market Maestros* is that Hit Rate does not dictate results; the payoff from those decisions does.

Payoff Ratio: 288% (5 years to June 30, 2024). While 63% of managers add more value on winners than they lose on losers (a ratio above 100%), my score of 288% is at or near the highest in their universe. This Payoff Ratio is consistent with my "Hidden to Quality Compounder" investment process and low turnover. I let winners run and keep losers small. In *Growth Factor 43:* The Power of Long-Term Leadership: The Needham Aggressive Growth Fund's Super Seven,[6] I wrote about 17 companies that contributed over 80% of our outperformance over the years.

Of course, nothing works all the time; we highlighted some of our mistakes in that Growth Factor and during the interview for the book. As outlined above, the Overall Behavioral score, including the payoff ratio and hit rate, refers to the specific period to which the statistic is correlated. All metrics are derived from daily holdings data of the Needham Aggressive Growth Fund, during the associated period, and are calculated based on returns relative to the Russell 2000 Growth Index.

## Summary

I believe the Essentia Analytics Behavioral Alpha framework may add value to an allocator's decision-making process. It is a tool that complements traditional performance metrics, performance-based volatility, and Modern Portfolio Theory. It may also help investors understand and improve their biases and investment processes. *Stock Market Maestros* uses Essentia's framework and extensive interviews to tell the stories of successful investors.

[1] https://podcasts.apple.com/us/podcast/tip736-how-the-best-investors-execute-w-clay-finck/id928933489?i=1000716753077

[2] https://www.amazon.com/Stock-Market-Maestros-strategies-investors/dp/1804091464

[3] https://www.essentia-analytics.com/essentia-news-and-media/morningstar-essentia/

[4] https://www.essentia-analytics.com/book-preview-lumberyard/#:~:text=Barr%20%7C%20Essentia%20Analytics-,From%20Lumberyard%20to%20Wall%20Street%3A%20The%20Investing%20Lessons%20of%20John,March%202026%20(Preorder%20now)

[5] The Behavioral Alpha Benchmark: Assessing Active Portfolio Managers Based on Skill, Not Past Performance. Chris Woodcock, Isaac Kelleher-Unger and Snezana Pejic, The Journal of Investing, Theory & Practice for Fund Managers. Volume 33, Issue 5, 2024

[6] https://www.needhamfunds.com/growth-factor/the-power-of-long-term-leadership-the-needham-aggressive-growth-funds-super-seven/

## Needham Funds Quick Links:

The Growth Factor

Manager Commentary & Insights

Prospectuses & Fact Sheets

## Definitions & Disclosures

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The Russell 3000® Index measures the performance of the largest 3,000 US companies representing approximately 96% of the investable US equity market, as of the most recent reconstitution. The Russell 3000 Index is constructed to provide a comprehensive, unbiased and stable barometer of the broad market and is completely reconstituted annually to ensure new and growing equities are included. The Russell 2000 Growth Index includes those Russell 2000 Index companies with higher price-to-value ratios and higher forecasted growth values. An investor cannot invest directly in an index. Needham & Company, LLC is a wholly owned subsidiary of The Needham Group, Inc. Needham & Company, LLC, member FINRA/SIPC, is the distributor of The Needham Funds, Inc.

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