DIAMOND HILL

INVESTED IN THE LONG RUN

The Inner Game of Investing

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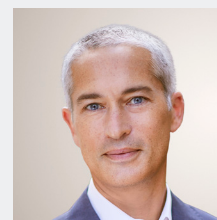
The Judging Mind

Tennis has been an important part of my life. I was a competitive junior player growing up in Ohio and (just barely) good enough to play at the Division One college level. I still play regularly, but more of my time on the court these days is spent hitting with my kids rather than being locked in heated competitive battles. When I watch elite college and pro players, I often find myself awed by their physical skills; the ability of top players to hit with a combination of power, spin and control is remarkable. However, I have learned that analyzing a player's strokes isn't a reliable predictor of competitive outcomes. Success in a match is not solely dependent on physical talents. The ability to regulate emotion and focus on executing each shot without attaching undue importance to the outcome of individual points is a critical skill that enables players to reach peak performance.

Veteran tennis players of all ability levels recognize the inner critic in their minds as a key constraint to achieving optimal results. Tim Gallwey wrote "The Inner Game of Tennis" in 1974, and fifty years later, it is still recognized as one of the premier sports psychology books of all time. Gallwey posits that tennis consists of two games: the outer game, focused on technique and physical capabilities, and the inner game, waged inside our heads. He describes the inner game as "the game that takes place in the mind of the player, and it is played against such obstacles as lapses in concentration, nervousness, self-doubt, and self-condemnation. In short, it is played to overcome all habits of the mind which inhibit excellence in performance." According to Gallwey, the best performance on the court comes from letting our intuitive physical skills and acquired knowledge shine without interference from our judging mind.

It is easy to identify the players who are struggling with a toxic inner dialogue. During the warmup before a match, their strokes are fluid, with a full follow-through after impact, and their service toss is relaxed, with full extension of the tossing arm as the hand releases the ball. But once the match starts, the stress of competition leads to self-criticism and self-doubt. Increased muscle tension causes deceleration of the racket head after contact, causing a shortened follow-through rather than hitting through the ball. Muscle tension in the tossing arm during the serve prevents full extension of the arm, causing early release of the ball, low tosses, and short serves landing in the net. The changes are easy to identify and painful to watch.



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Central to Gallwey's advice is cultivating what mindfulness experts call non-judgmental awareness. The best players observe their thoughts and feelings in the moment but do not become entangled in them. Attaching judgments to our thoughts tends to interfere with our ability to execute to our fullest capabilities in the moment. In his recent commencement address at Dartmouth College, tennis great Roger Federer explained:

> In tennis, perfection is impossible. In the 1,526 singles matches I played in my career, I won almost 80% of those matches. Now, I have a question for you: what percentage of the POINTS do you think I won in those matches? Only 54%. Here's why I am telling you this. When you're playing a point, it is the most important thing in the world. But when it's behind you, it's behind you. This mindset is really crucial because it frees you to fully commit to the next point and the next one after that with intensity, clarity and focus.[1]

Investors also must conquer the inner game to realize the full potential of their intellectual capital and deliver value-added results to clients. Ben Graham recognized the inner game of investing in chapter 8 of "The Intelligent Investor," which famously introduced the parable of Mr. Market. That chapter addresses how an investor should behave in the face of market fluctuations.

Graham focuses the reader's attention on the "double status" of holders of marketable shares, who can be thought of as both a silent partner in a private business and holders of a piece of paper that can be redeemed at a moment's notice. The value of the shareholder's proportional interest in a private business is determined by the fundamentals of the business, the valuable assets it owns, and the cash flows it will produce over its remaining life. However, the shareholder's option to liquidate may be worth nothing if Mr. Market is feeling dour or have tremendous worth if Mr. Market is in a more ebullient mood. Winning the inner game of investing requires that investors recognize their double status as holders of marketable shares and adopt the proper perspective in dealing with Mr. Market's wild swings. Investors who worry about every price fluctuation, whether Mr. Market knows something they do not, are destined to wallow in self-doubt. Will they lose their job if Mr. Market's bid is lower again tomorrow? Will their colleagues question their wisdom if they continue to own shares that have traded down significantly? Mr. Market preys on the judging mind, eroding investors' ability to maintain non-judgmental awareness and execute what is within their control. Like the tennis player fully committed to the next point and the one after, investors must focus on the fundamentals of each business they underwrite and dispassionately reassess with each new piece of information.

Graham's creation of Mr. Market brings the inner game of investing to life, making it clear that rational investors should maintain an evenhandedness in the face of their volatile partners' offers. Yet the asset management industry has provided abundant evidence over the 75 years since "The Intelligent Investor" was first published that the inner game continues to provide a formidable challenge for many investors.

Retail investors have consistently earned lower returns than the underlying funds in which they invest, largely due to the stresses inflicted by the inner game. Individual investors and their advisors feel pressure to keep up with their neighbors in the hottest-performing funds, and conversely, they fear being exposed as the owner of an underperforming fund. As a result, we see the aphorism "buy low and sell high" turned on its head, with individual investors churning out of funds that have performed poorly (sell low) and buying those that have recently excelled (buy high).

Recent history has not been a reliable guide for future returns. Morningstar's annual "Mind the Gap" study of dollar-weighted returns documents a one- to two-percentage point gap between investors' returns and total returns generated by the funds they invested in over a 10-year window.[2] The inner game determines how effectively investment acumen is translated into returns. The Morningstar study, and others like it, suggests the inner game costs retail investors as much as one-sixth the return they would have earned if they had simply bought and held.

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[1] https://home.dartmouth.edu/news/2024/06/2024-commencement-address-roger-federer
[2] https://www.morningstar.com/funds/are-you-leaving-money-table-your-funds-returns

Sophisticated institutional investors have not entirely avoided the costs of the inner game. Both institutional consultants and investment managers, like portfolio managers and analysts, struggle to protect themselves and their clients from the judging mind. While individual investors' inner game obstacles are focused on keeping up with their neighbors, institutional investors' challenges revolve primarily around career risk. For the institutional consultants responsible for allocating large pools of money, the primary objective is to ensure that returns are never "too bad," which means not straying too far from well-established benchmarks and limiting downside risk where possible.

An important secondary motivation is to demonstrate skill and, consequently, the importance of maintaining the sponsor's current spending on resources. Unfortunately, demonstrating skill in the investment industry can take many years, while corporate budgeting decisions tend to happen on shorter time horizons. Not surprisingly, there is evidence that asset allocators make some logical career-preserving decisions over intermediate-term time horizons of one to five years.

One large study of institutional selection and termination decisions found that investment managers are frequently fired after periods of significant underperformance and replaced with managers who delivered considerable outperformance in the one to three years before hiring.[3] This behavior demonstrates to employers that their consultants identify worrisome underperformance and take decisive action by hiring logical replacements. The problem is that the new managers hired in the study did not deliver excess returns over subsequent periods, and the terminated managers often delivered improved results.

Portfolio managers and analysts operate downstream from the institutional consultants and feel the career risk at plan sponsors trickle down in the form of shorter-than-optimal time horizons and narrow style benchmarking. In a survey of investment management firms conducted by the CFA Institute, nearly 80% of respondents said that career risk due to underperformance is a factor at their firms. The largest percentage of respondents (28%) said that between one to two years was when job security would start to be an issue.[4] Underperformance over shorter time horizons of up to five years should be an expectation for anyone looking to deliver differentiated results over the long term. According to a Baird study of the best investment managers over 10-year holdings periods, nearly all the top managers (97%) experience significant underperformance over a three-year period.[5]

Attempting to manage career risk over short time horizons is akin to losing the last point and letting it impact the next point and the one after that. Even if you have the requisite skill to deliver value-added results for clients over the long run, you've taken yourself out of the competition by losing the inner game. The obvious solution for those worried about near-term underperformance is to craft a portfolio that looks very similar to the benchmark, and there is evidence that more managers have migrated in that direction over the past several decades. The drift away from highly differentiated portfolios is a natural, if not optimal, response to the intense focus on relative performance that has become routine within the industry over this period.

In one prominent academic study, the proportion of funds with high active share (>= 80%) declined significantly from 1980 to 2013,[6] alongside the rapid adoption of style benchmarks that further limit investors' opportunity sets.

There is a cascading of career risk through the institutional asset management business from the plan sponsor and its advisors down to the portfolio manager and analyst. The pressures imposed by this system have increased dramatically over the past 50 years with the growth of a significant industry that supports the benchmarking and measurement of performance across ever more narrow asset classes. The result is an institutional performance derby, where everyone is trying, first and foremost, to avoid falling too far behind over intermediate time horizons, with the surest path to survival being imitation.

Career risk is real, and for many, the unpredictable cost of bearing more of it can't be tolerated. However, the impact of career risk on long-term returns is also real, and those investors who can chart a different course and more fully capitalize on their accumulated intellectual capital stand to benefit.

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[3]Goyal, Amit and Wahal, Sunil. The Selection and Termination of Investment Management Firms by Plan Sponsors. Journal of Finance, 2008, vol. 63, issue 4, 1805-1847.
[4]https://blogs.cfainstitute.org/investor/2016/06/17/the-investment-risk-youve-never-calculated/
[5]Baird Asset Manager Research. The Truth About Top-Performing Money Managers. 2014.
[6]Petajisto, Antti. Active Share and Mutual Fund Performance. SSRN. 1/17/2013.

For example, when Yale's long-time Chief Investment Officer, David Swensen, started down a path focused on heavy equity exposure and deprioritized liquid assets, it was highly unconventional and undoubtedly exposed Swensen to career risk. It has become commonplace today to hear institutions refer to the Yale Model as a paragon of foundation/endowment management. Yale and other endowments that were early adherents of Swensen's approach reaped the benefits of a logical, well-researched but unconventional investment approach. As the Yale model has become a more popular approach to foundation/endowment management, outsized returns are likely no longer available from a similar shift in asset allocation.

The "Wicked" Environment

Even if investors manage to quell their insecure minds and focus on evaluating the fundamental prospects of individual managers and businesses, another dimension to the inner game of investing makes it far more challenging than tennis. Behavioral psychologist Robin Hogarth has referred to tennis as a "kind" learning environment. There are clear rules, well-defined competitors, a beginning and end, and direct relationships between actions and outcomes. Within the realm of kind environments, Gallwey's approach to the inner game, combined with focused practice and competitive experience, maximizes potential. Others may have more innate talent, but for a given ability level, it is a winning strategy.

Investing, in contrast, is a "wicked" environment. As Hogarth and Emre Soyer describe in "The Myth of Experience," wicked environments are particularly challenging to navigate because our experience is not always a reliable guide. In the wicked world of investing, we cannot train our intuitions through countless hours of practice and expect superior outcomes because the terrain constantly shifts beneath us. There are new products, new competitors, new industries and complex interactions between variables. In a wicked environment, multiple factors influence outcomes, making it difficult to isolate the cause of success or failure. As a result, we tend to overestimate the value of experience, which can lead to biases and blind spots. Hogarth suggests that we actively question the reliability of our experience in a wicked environment, taking the time to reflect and ask whether there is information missing from our experience or irrelevant details that may bias our interpretation of events.

If Gallwey's "The Inner Game of Tennis" can be considered a reference manual for navigating the inner game within kind learning environments, Nobel laureate Daniel Kahneman's "Thinking, Fast and Slow" provides similar wisdom for wicked environments. Kahneman suggests that we have two distinct thinking systems. System 1 is fast, automatic and intuitive. It makes quick judgments and relies on heuristics and emotion. System 2 is deliberate and logical. It analyzes information carefully and makes calculated decisions. While both systems can be advantageous in certain circumstances, Kahneman highlights the many biases that can impact System 1 thinking and argues that the slow thinking of System 2 should be relied on more often. The mental shortcuts that System 1 relies on, such as anchoring and framing, rely heavily on our recent and vivid experiences and can be misleading in complex and unpredictable environments. Investors will be disappointed if they rely too heavily on their intuitions built upon past investment experiences.

The risk of overweighting experience may be especially relevant for value investors, who often invest in businesses with long histories of predictable cash flows and/or readily ascertainable asset values. Growth investors are likely more comfortable contemplating technological shifts and changes based on industry competition. Past investment successes can blind investors to information missing from their historical experience and leave them vulnerable.

Consider investors' experience in local newspaper companies over the last three decades. Once thought of as a near-perfect business model, with recurring revenues, high margins and no competition, local newspapers were ravaged by the proliferation of the internet. While it is tempting to look back and view their demise as obvious, these companies had decades of historical success navigating an evolving economy and abundant cash flows — data that System 1 minds quickly offered up as supporting evidence. Sustaining success in the inner game of investing over the long term requires managing our judging minds and maintaining an awareness of where our intuitive minds may lead us astray. Great investors get better over time; they build on their cumulative experience, but they are careful not to overweight that experience against the many other variables that can impact the success of an investment.

Final Thoughts

In the decades since I began playing tennis, training methods have improved, rackets are now constructed with nanofibers, and the accumulated knowledge of strategy and tactics available has exploded. However, the court is the same size, the net is still three feet high at the center of the court, and the inner game remains a constant that challenges even the most skilled athletes.

What about investing? As long as human beings are managing business, worried about keeping up with their neighbors, and intent on keeping their jobs, there will be an inner game of investing that presents enormous challenges for those looking to compound wealth for themselves and their clients. However, the investment landscape is constantly shifting, and with changes in computing technology like artificial intelligence on the horizon, we should expect even greater changes in the future.

Success in this "wicked" learning environment requires an inner game based on Gallwey's concept of non-judgmental awareness AND Kahneman's call for a deliberate and logical thinking mode rather than overreliance on intuition and imitation. This mindset provides a significant opportunity for investors who understand the true nature of competition and what it means to win over the long term. Roger Federer describes what it means to be an elite performer:

> You want to become a master at overcoming hard moments. That to me is the sign of a champion. The best in the world are not the best because they win every point. It's because they know they'll lose again and again and have learned how to deal with it.[7]

At Diamond Hill, we know we won't have the best returns over every time horizon; we know we will underperform over some periods. It's part of the process of successful long-term investing. It's happened in the past and will happen again, but we've learned how to deal with it and produce results that matter for our clients over the long run.

The views expressed are those of Diamond Hill as of June 2024 and are subject to change without notice. These opinions are not intended to be a forecast of future events, a guarantee of future results or investment advice. Investing involves risk, including the possible loss of principal. Past performance is not a guarantee of future results.

[7]https://home.dartmouth.edu/news/2024/06/2024-commencement-address-roger-federer