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The Mind of the Investor

“What do I know?”

— Michel de Montaigne
French Essayist
1537-1592

We are fortunate to be in this business. The compensation is generous. Few businesses offer intellectual challenge of a constantly shifting playing field. Strategies that worked splendidly for years or even decades can fail spectacularly when applied in the wrong environment. Investors therefore are confronted with two harsh realities:

1. The only certainty is that there is no certainty.
2. Despite uncertainty, we must act.

These harsh realities are compounded by the frighteningly high stakes of the game we are playing.¹ Our clients have entrusted to their money managers wealth that has been accumulated by the efforts of individuals over many years, often spanning generations. We are fiduciaries.

But how are we to discharge such awesome responsibilities? How are we to make decisions confronted with unrelenting risk and uncertainty? Successful investors share a number of mindsets and character traits. Homo Investus (my term for the Investing Man) is a breed apart.

The Problem of Knowledge – How Should We Think?

The most fundamental aspect of the mind of the investor is the ability to think probabilistically rather than deterministically. Determinism, as the term is commonly understood, is the idea that every event is necessitated

by antecedent events and conditions, in other words, cause and effect.² We are conditioned from childhood to believe in cause and effect. Indeed, most professions are built around deterministic thought. We as a society do not want our engineers or architects to think probabilistically; otherwise our buildings would fall down.

Deterministic thinking fails in investing for several reasons:

1. The world is complicated; cause and effect can be very difficult to identify.
2. If cause and effect can be identified, they are frequently confused.
3. The future is uncertain. Randomness, in the form of events that are impossible to anticipate, intrudes regularly.

For the investor, successful decisions are a matter of weighing probabilities. Hence the investor like the professional gambler must constantly search for favorable odds and must appreciate the role of time. A difference between gambling and investing is that gamblers face explicit posted odds; investors must learn to read the implicit odds by discerning the expectations built into security pricing at any given point in time. Perhaps the most common error in investing is the failure to distinguish between company fundamentals and the expectations built into the stock price.

¹Some may object to the characterization of money management as a “game.” I use the term “game” in the sense of game theory, a branch of mathematics which is the study of strategic, interactive decision making among rational individuals.

²Determinism, from a philosophical point of view, is a metaphysical doctrine (i.e. a claim about reality) rather than an epistemological one (a claim about what we know). Hence, I am using the term somewhat loosely.



The role of time is also not well understood. Competence in a probabilistic endeavor is impossible to judge over the short run. Over the long run, a proper thought pattern applied in a disciplined process will lead to good results; over the short run, randomness can intrude leading to disappointing results.

Separating luck from skill in the short run is impossible.

Turning back to probability weighting, academics have identified three ways of estimating probability:

1. Frequency Assessment.
2. Propensity Assessment.
3. Subjective Assessment.

In assessing frequencies, investors gather up as large a sample as possible of the appropriate data and assume past outcomes will accurately foreshadow future outcomes. Dogmatically applied, this approach frequently ends badly because such comparisons are only relevant in static environments. In the real world, the playing field shifts, black swans appear and distribution tails fatten....and fortunes are lost.

Propensity assessment is a way of estimating probabilities in the physical world and is not of much use to investors. One can examine a die and determine there is a 1 in 6 chance of rolling a 3. If only our world were so simple.

Subjective probability assessment must be used when investors can't draw upon relevant history. Who could have anticipated in this current cycle that companies such as Fannie Mae, Freddie Mac and AIG would be effectively nationalized? Yet investors skilled in subjective probability assessment could and did conclude that the evolving situation was dangerous and that the randomness was likely to be of the negative variety.

Successfully gauging probability in the market is tough. The fundamental cognitive skill is synthesis. Investors must be able to combine disparate facts into a coherent whole. The CFA Institute uses the analogy of a mosaic to describe this process. Pure reasoning is much less important than skilled synthesis.

More on "How are We to Think?"

Aristotle tells us, "Man is a social animal." Investors, on the other hand, must be independent thinkers, a trait that goes against our inherently social nature and desire for acceptance. In our world, the desire for conformity drives a phenomenon known as herding. The animal

kingdom offers a perfect example of herding behavior—the gazelle in the middle of the pack is not the one eaten by the lion pride.

Perhaps the best example of human herding behavior is the childhood game *follow the leader*. Examples of follow the leader behavior by investors are numerous, but one of the most recent and spectacular is the Madoff Ponzi scheme. Press reports have documented the herding aspect of many investors victimized in this tragic episode. Incredibly, little due diligence was performed by many investors who were thrilled to be among the select group of Madoff investors.

Herding behavior by investors leads to what might be termed "the paradox of crowds." Crowds of investors are frequently right but disastrously wrong at turning points. Within the past decade investors have seen two bubbles form of epic proportions: the tech bubble and the real estate finance bubble. In both cases, fortunes were made in the lead up to the turn. Overconfidence among institutional investors and retail investors was rampant. Magazine covers were graced with "Masters of the Universe." Then it ended. Jobs were lost, reputations were ruined and a great deal of investor wealth evaporated.

A critical component to avoiding this trail of tears is independent thought, easy to write about but devilishly difficult to employ.

Inductive Reasoning: A Process Fraught With Danger

According to the *Stanford Encyclopedia of Philosophy*, inductive logic is a system of reasoning that extends deductive logic, where the premises logically entail and guarantee the conclusion,³ to less than certain inferences. The best a good inductive argument can do is provide some degree of support for the conclusion. While investors must reason inductively, the process is fraught with danger. For many years, biologists thought that all swans were white because every observed swan was white. Then a black swan was discovered in Australia and this negated our justified belief, itself based on millions of observations, that all swans are white. An even starker portrayal of the problem of induction is Bertrand Russell's chicken.⁴

Faced with such intellectual snares, is it any wonder that Montaigne threw up his hands metaphorically and said "What do I know?" the quote that opens this essay. But all is not lost. The mind of the investor turns to another branch of philosophy for aid in reasoning inductively, that

³Example: All men are mortal. Socrates is a man. Therefore, Socrates is mortal.

⁴Russell cited the barnyard chicken. Every morning the farmer comes out with a bag of feed. After years of this pattern, the chicken reasons that the farmer is his friend. One day the farmer comes into the barnyard not with a feed bag but with an ax, demonstrating the faulty inductive reasoning of the chicken.



of skepticism. Skepticism is the mind set that refers to an approach toward accepting or rejecting new information.

Investors are bombarded daily with assertions by so-called experts. A healthy dose of skepticism is imperative because on any given subject, so-called experts can be found who argue persuasively for diametrically opposed positions. Sadly, the trusting soul is unlikely to enjoy a long career in money management.

How then are we to think? Three principles stand out:

1. We must think probabilistically.
2. We must think independently.
3. We must think skeptically.

The Problem of Conduct – How Are We to Act?

Establishing proper modes of thought is critical to successful investing but our clients do not pay us to sit in the philosopher's armchair; we are paid to put those mindsets to work managing their money making the best judgments we are able. Aristotle taught us in the *Nicomachean Ethics* that virtue is a habit; establish good habits and to do otherwise seems unnatural. So too is successful investing a matter of good habits. In no particular order, save for the first point, here are some important habits of successful investors:

- **Act with Integrity.** Always tell the truth. Always.
- **Recognize Your Realm of Competence is Small.** The sad fact is that there is a rather small realm where we really know what we are talking about. Perhaps it was this thought that inspired Peter Lynch, the highly successful mutual fund manager to famously observe "Buy what you know." While investors must deal with imperfect knowledge and understanding, recognize that your ability to assess probabilities diminishes the further removed from your core expertise the decision rests.
- **Act with Self-Knowledge.** The field of Behavioral Finance has seen many important advances in understanding the biases that shape our actions. Among the most important are loss aversion and myopia. Losses cause regret roughly double the pleasure than equivalent gains provide. The more frequently investors evaluate their positions and portfolio, the more frequently they see losses, compounding their loss aversion thereby compromising decision-making.
- **Beware of Heuristics.** Heuristics are rules of thumb that enable us to rapidly come to a solution that is thought to be close to the best possible answer. But heuristics represent a problem of induction minefield. Many investment heuristics were badly discredited in

the recent financial crisis and their blind practice by unwitting managers led to large losses. "Don't fight the Fed" is one such heuristic; "Diversification will always save you" is another. These heuristics failed investors horribly in the most recent cycle.

- **Act with Humility.** Is your track record luck or skill? Social scientists have shown that people consistently overrate their abilities. Large majorities of drivers rate their skills "above average." Overconfidence manifests itself by considering a range of possible outcomes that is too narrow. Modeling a downside case for a stock is an important analytical exercise; just don't be surprised if your stock goes crashing through your downside target.
- **Be Reflective.** Admit your mistakes. Learn from them. Saying "I was wrong" is very difficult. Making excuses comes naturally.
- **Use Time to Your Advantage.** All probabilistic endeavors involve patience and staying power. Be willing to sit still.
- **Protect Your Mental Health.** To have staying power you must maintain mental health or the stress will ultimately corrode your thought process. Figure out coping methods that work for you, be it yoga, exercise, red wine, poetry, whatever. Nip stress in the bud by not looking at performance reports too frequently. Daily monitoring of performance increases stress because you are only observing the variability of the portfolio not the underlying return pattern.
- **Maintain Intellectual Curiosity.** Never stop learning. The world will keep changing. Investors must change with the world. One's thought process must remain supple.
- **Utilize diverse information sources.** Ideally your information sources would be unbiased, but bias is everywhere, particularly political bias. Read the *Wall Street Journal* and the *New York Times* every day to ensure you are getting both sides of the story. Read the *Financial Times* or the *Economist* for the international perspective. Then form your opinion.
- **Figure out whose judgment you can trust.** Everyone has opinions, it seems. But some opinions are more informed than others. Listen carefully to the opinions of individuals who have demonstrated a pattern of good judgment and then make your own call. Tune out the opinions of those with demonstrably poor judgment.
- **Mind Pascal's Wager.** The mathematician and philosopher Blaise Pascal (1623-1662) postulated that the optimal strategy was to believe in God. If God exists, the believer is rewarded. If God does not exist, the believer is no worse off than the non-believers who



were right all along. But if God exists, what happens to the non-believers whose bet went bad? As theology, Pascal's wager is questionable, but as a principal for investors its insight is invaluable. If the investor can not tolerate the worst case downside, the investment should not be made no matter how small the risk of the disaster scenario.

Implications

Money management is an exercise with very different success factors than most businesses. Generally successful business people are control- and action-oriented people. Good investors, on the other hand, recognize that they must anticipate and react to their environment, not attempt to control it. Moreover, a bias toward action can also be counter-productive. High turnover portfolios are seldom top performing portfolios. A good day at the office for a serious investor is one spent reading research and looking out the window thinking.

Successful investors are a breed apart from most successful business people. As a result, good investment people can be hard to manage. The independent streak so necessary for success can rub others the wrong way. Good organizations and well informed clients recognize that quality investors are hard to find and that tolerance of quirky behavior is likely to be rewarded the next time a black swan swims by.

A handwritten signature in black ink, appearing to read "John", written in a cursive style.

John O'Connor
May, 2009

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