

## Exclusive Interview with Michael Mauboussin

We are pleased to bring you our recent interview with Michael Mauboussin, Chief Investment Strategist of Legg Mason Capital Management.

**The Manual of Ideas:** Tell us how you got started in finance.

**Michael Mauboussin:** I joined Drexel Burnham Lambert straight out of college in 1986. It was an 18-month program that had a great mix of training and hands-on experience—we rotated through all aspects of the firm including trading, investment banking, research and operations. I figured even if it didn't work out I'd have a good exposure to Wall Street and some sense of what I'd like to do.

The area that seemed the best fit with my personality was equity research. My breakthrough was getting hired as the food industry analyst at First Boston (now Credit Suisse) in 1992. A great deal of my focus in the early days of my research career was on valuation. I was deeply inspired by Al Rappaport's book, *Creating Shareholder Value*. The principles Al laid out were very consistent with what I had learned at Drexel and remain the cornerstone of my thinking today. One of my career highlights was writing the book, *Expectations Investing*, with Al. That book basically took the principles of creating shareholder value and applied them to the world of investing.

Around the mid-1990s, I started to expand my reading, including a fair bit on evolutionary theory. That led naturally into more reading on psychology including Daniel Kahneman and Amos Tversky's seminal work on heuristics and biases. I also learned about complex adaptive systems, a focal point of the research at the Santa Fe Institute in New Mexico. I felt strongly that each of these areas had a lot to contribute to an investment process.

**MOI:** Explain the challenges you're trying to address through your research. What is the "multi-disciplinary" approach to investing and why is it necessary?

**Mauboussin:** At the end of the day, successful investing is about buying something for less than it's worth. Saying it somewhat differently, the idea is to always look for gaps between fundamentals—for example, the financial performance of a company—and expectations, which is the stock price. While that may be stating the obvious, the devil is in the details. How do you know that price and value are misaligned? Why are markets inefficient? What makes it so difficult to go against the crowd?

I have come to believe in the mental models approach to investing. This approach has most famously been articulated and advocated by Charlie Munger. The basic idea is that it is really helpful to understand the big ideas from multiple disciplines. You might think of these ideas, or models, as tools in your mental toolkit. So when you face a vexing problem, you have access to lots of tools to solve it and one of them is likely to work.

The alternative is to go through the world with a narrow range of knowledge. When a problem arises that you understand, you'll nail it. But there'll be a lot of problems you won't be equipped to solve. The challenge with a multi-disciplinary approach is that it requires constant learning. Most people aren't willing or able to put in the time. That's fine. But to me there appears to be a high correlation between intellectual curiosity and success in the investment business. Many great investors spend their days reading and thinking.

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**MOI:** In your book *Think Twice* you argue that the right process for making decisions conflicts with how our minds work. When faced with complexity, our brains revert to simplified patterns that obscure better approaches. What are some of the default patterns to which investors are prone to succumb?

**Mauboussin:** Investors succumb to a number of mistakes, but I'll highlight a couple in particular. The first comes from a paper by Kahneman and Tversky called "*On the Psychology of Prediction.*" The core idea is that when you make a prediction, you can consider the individual circumstances of the case and/or the base rate. In the first case, you're taking the information you have and combining it with your own view of things. Psychologists call this the "inside view." Consideration of the base rate basically means you ask the question: "when others have been in this situation before, what happened?" This is known as the "outside view." Kahneman and Tversky showed that for most decisions, people rely too much on the inside view and not enough on the outside view.

Let me give you an example. A couple of years ago, an analyst did a bottom-up analysis of Amazon.com and suggested the company could grow 25% compounded annually, off a \$20 billion starting revenue number, for ten years. This is the inside view. The outside view would ask how many companies have grown at that rate for that long off that base in history. As you might guess, the number is tiny. So the inside view often gives a projection that's too optimistic, although it's certainly possible that it's too pessimistic as well.

The second mistake, which is somewhat related, is a failure to understand reversion to the mean. What's funny is that most investors think they understand the concept, but when you look at the aggregate behavior, mistakes around reversion to the mean consistently show up. For instance, investors consistently buy a fund, or even an asset class, after it's done well or sell after a spell of poor performance. In the aggregate, these actions lead to dollar-weighted returns that are lower than the stated returns. While it's not too surprising that this would be true for individual investors, it's also true for institutions.

**MOI:** Institutionalization has compounded principal/agent problems. Buffett talks about the "institutional imperative." Are your prescriptions for better decision-making destined to fall on deaf ears in the context of financial intermediation and escalating principal/agent problems?

**Mauboussin:** You need three types of edge to do well as a long-term investor: analytical, behavioral, and organizational. And you're right, at the core of the organizational edge is being able to manage principal/agent problems.

The core issue is that there can be a tension between delivering long-term excess returns to your fund holders (Charlie Ellis calls this the "profession") and creating revenues and profits for the money-management firm (Ellis calls this the "business"). The profession tends to be contrarian, long-term oriented, and valuation-based. The business tends to focus on what's hot, is short-term oriented, and momentum-based.

Over the last four or five decades the pendulum has swung from the profession to the business. We see evidence of this with the greater incidence of closet indexing. Active share—a measure of how different a portfolio is from its benchmark—has been drifting lower since the 1980s, indicating that portfolios today look more like their benchmarks than they did back then.

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But let me say that money management clients have some culpability in this, too. Investors appear to be less patient than they used to be and that has an impact on an investment firm's ability to make long term-oriented decisions. The goal is to have the time horizons of the investors and the investment firm align. Easy to say but hard to achieve in practice.

**MOI:** Understanding behavioral finance concepts such as “overconfidence” and “loss aversion” may equip investors to deal with the emotional challenges of investing. However, even if one can master emotional biases, the application of corrective tools in any given situation is likely too much to ask of the average human. What emotional biases are typically the hardest to shake off?

**Mauboussin:** Your point is extremely well taken. It's one thing to know about the biases and another thing altogether to manage them effectively. That said, I do think there are some practices that you can weave into your process that can be helpful. For example, be aware of the outside view and make sure you implement it into your thinking. Or maintain the discipline to consider every situation probabilistically and keep an investment journal so as to track your thinking and give yourself honest feedback.

The biases that are hardest to shake off, I believe, are the confirmation bias and anchoring. The confirmation bias says that once we've made a decision we seek confirming information and disregard or discount disconfirming information. Most of us have a strong need to feel like we're right, and hence naturally seek information that proves our point.

Anchoring is also pernicious. The idea is that we tend to anchor on figures that may be arbitrary. For instance, if you ask people to write down the last four digits of their phone number and then ask them to estimate the number of doctors in Manhattan, you'll find a strong correlation between low phone numbers and low estimates and high phone numbers and high estimates. You can then explain what's going on to the group. And then you can rerun a variation of the experiment and get a similar result.

The good news is that you don't need to weed out every one of your biases to do fine over time. But the more ways you can find to be aware of and manage your biases, the better off you're likely to be.

**MOI:** To what extent do quantitative investment methods offer a remedy to investors who cannot master their emotions? For example, what is your view of Joel Greenblatt's “Magic Formula” approach to investing?

**Mauboussin:** There have been certain empirical regularities that we've seen in markets over the long term—for example, value beats growth and small cap beats large cap. But these patterns are very sensitive to starting and stopping points. Had you invested in small caps in 1982 believing they would deliver superior returns to large caps, you would have had a couple of tough decades. And value struggled mightily in the late 1990s.

To me, the value of Greenblatt's formula is that it identifies high-quality companies at cheap prices. If you can do that over time, you should be fine. So anything that can steer you toward stocks that have low expectations relative to the company's fundamental prospects is useful.

**MOI:** It seems that many emotional biases can be classified under the headings of “greed” and fear.” Buffett's advice is to be fearful when others are greedy and

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greedy when others are fearful. While many investors will agree with Buffett’s advice—be greedy when others are fearful, and vice versa — few act on it. How do you explain this phenomenon in the context of investors’ choices and the nature of a “complex adaptive system” such as the stock market?

**Mauboussin:** This is a great question. The stock market is a canonical example of a complex adaptive system. These systems have three features: heterogeneous agents, interaction that leads to emergence, and a global system that has properties and features that are distinct from the underlying agents. In other words, crowds are wise under certain conditions and you can’t understand markets by talking to investors within the market.

But here’s the key: the market needs to meet certain conditions in order to be efficient. The investors have to have diversity (think fundamental and technical, short-term and long-term, etc.), there must be an aggregation mechanism to bring together the information of investors, and there must be well-functioning incentives. When all three are in place, markets are efficient—and I mean that in a textbook sense.

The essential challenge for investors is figuring out when markets are inefficient, and the answer is when one or more of the conditions for efficiency are violated. By far the most likely to go is diversity. Rather than operating independently, our views tend to correlate. We become uniformly bullish (spring 2000) or uniformly bearish (spring 2009). In fact, you can say that the moment of maximum bullishness defines the market top while maximum bearishness defines the market bottom.

So this is why Buffett’s advice is so good but so hard. The point when there’s a valuation extreme is precisely the point when the emotional pull—in the wrong direction—is strongest.

**MOI:** In *More Than You Know: Finding Financial Wisdom in Unconventional Places* you draw on a range of fields such as gambling and biology to pinpoint parallels to investment challenges and the workings of the market. What can investors learn from poker players or the average “member” of an ant colony?

**Mauboussin:** Investing is a probabilistic field, similar to fields such as poker or sports team management. You can also observe that some people in these fields do better than others. So the question is: what are the best in each of these fields doing that distinguishes them from the average person in those fields?

I think it boils down to three things. First, they focus on process and not outcomes. In other words, they make the best decisions they can with the information they have, and then let the outcomes take care of themselves. Second, they always seek to have the odds in their favor. Finally, they understand the role of time. You can do the right thing for some time and it won’t show up in results. You have to be able to manage money to see another day—that is, preserve options for future play—and take a long-term view.

From the ants you realize the colony has behaviors that are distinct from the underlying ants. You can’t understand the colony by talking to the ants. Hopefully, the similarity to the market is apparent. If you want to understand the market, look at asset prices. Don’t bother listening to the pundits. Market prices—whether you think they are right or wrong—convey useful information.

**MOI:** You have long advocated the importance of investment process over outcome. What are the essential building blocks of a good investment process?

**Mauboussin:** There are three components. The first is analytical. This means that you should always seek gaps between fundamentals and expectations. Like most things, it's easy to say but hard to do. I'd also include position sizing under the analytical heading. Lots of firms spend time finding what they believe are mispriced securities but allocate less time to figuring out how big those positions should be within the portfolio. Both overbetting and underbetting are suboptimal, and lots of portfolios do one or the other.

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The second component is behavioral. This covers much of what we've discussed. The idea is that we all operate with certain heuristics—rules of thumb—and that predictable biases emanate from those heuristics. Learning about those biases is really important but what's even more important is weaving methods into your process to manage or mitigate the biases. Another piece of the behavioral component is what I call the “Mr. Market mindset.” This refers to the metaphor that Ben Graham used, and Warren Buffett popularized, to define a proper attitude toward markets. In short, Mr. Market is an accommodating fellow in the sense that he always provides bids and offers but also suffers wild emotional swings, from ebullience to depression. The important point to remember is that Mr. Market is there to serve you, not to inform you. You can take advantage of him when he's foolish but it's important to avoid getting swayed by his moods.

The final component is organizational. The goal is to minimize conflict between principals and agents. For an investment firm, this means always putting the interests of investors first. Naturally, a healthy business is essential to nurturing the profession of investing. But markets must precede marketing in the minds of the individuals running the firm.

**MOI:** What is the key mistake that keeps investors from reaching their goals?

**Mauboussin:** The biggest mistake is a failure to distinguish between fundamentals and expectations. Using a metaphor from the racetrack, the idea is that you make money only when you find a discrepancy between a horse's chances and the betting odds. What's important is that almost everyone thinks that they are doing this, but very few actually do.

So when things are going well, people tend to buy and when they are going poorly, they tend to sell. They don't separate fundamentals and expectations. These are really two distinct aspects of an investment, and they must be kept separate. Unfortunately, our emotions cause us to allow them to bleed together.

**MOI:** What investment-related resources have you found particularly useful?

**Mauboussin:** You mean besides The Manual of Ideas? My investment-related reading probably isn't very different than most. I find the Economist useful and certainly try to listen to what great investors have to say. But most of the ideas I get are from reading outside the world of investing—even in tangential fields like gambling. There are lots of great ideas out there and the fact is, most of them relate back to investing in one way or another.