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**John Nofsinger on
creative memory, collective mood**

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STEAMROLLED



John Nofsinger Frames the Behavioral Finance Counter Revolution

BY CHRISTINA GROTHEER

Given the hair-raising twists and turns of the market in recent years, it seems only fair to ask, “Who’s in control here?” While efficient market proponents would have you believe that this is all part of the plan, a growing number of investment professionals are looking to behavioral finance to explain some of the vagaries of today’s global marketplace. Still, the answers don’t come easy. “Just because you know that the market is overvalued or even undervalued doesn’t mean you can make money on it right away,” warns John Nofsinger, Ph.D., finance professor at Washington State University and an expert in the psychology of investing. “Sometimes you just can’t trade against sentiment.”

What first got you interested in applying psychology to investing?

When I was doing my doctoral dissertation, behavioral finance still wasn’t as well accepted. The traditional thought was that people behaved in a very rational way because money was involved. But my anecdotal observation of looking at life is that, when money is involved, it’s no better than when love is involved. People are very emotional, and, in many instances, that drives their decisions. So, I became interested in learning how people *really* behave and how that compares to what we expected them to do.

What are some common misconceptions about behavioral finance?

Well, first of all, behavioral finance is at a very early stage. A lot of people want to jump to how they can make money with it, and how one can avoid making all these mistakes. But, in reality, we’re still trying to learn what mistakes we make, when we make them, and why. We haven’t gotten to work much on how to avoid them. In fact, it’s unclear that some are really all that avoidable. Some biases occur when we get more experienced and more sophisticated, but other biases may go away when we get more sophisticated. You know, everyone wants to make money — especially on the folly of others — but we’re still in the discovery phase, I think.

Could you mention a few biases that people tend to display?

One of the biases that most strongly affects investors is what we call the representativeness bias. This bias is a mental shortcut that tells us that things that represent an opinion in one area must represent an opinion in a similar area. For example, if people like to work for a company and think it makes a good product, it’s considered a good company. But a good company is not necessarily a good *investment*. The stock price could be very high compared to its relative value. But people say that if it represents a good company it therefore must represent a good investment.

We see the representativeness bias in many, many different ways. When people ask me about a stock, often one of the first things they say is, “Well, it’s gone up 20 percent.” Like the direction of the past represents what it’s going to do next. They’re very interested in the stock because it has already gone up. Unfortunately we like to buy low, not buy high.

We also have the familiarity bias, where we believe that things that are familiar to us are better and less risky than things that are not familiar to us. So, we tend to invest in US companies if we live in the United States. We tend to invest in local companies — companies that are headquartered near us. Taken down to the individual level, I think this is one of the main factors for people putting so much of their retirement money into their company stock.

Surveys show that people think that their company’s stock is less risky than holding the S&P 500 index. Obviously diversification at the S&P 500 level is huge compared to owning only one company. But they think that their company is less risky and will have a higher performance because they are much more familiar with it.

What is the most surprising aspect of economic theory that behavioral finance has proven to be untrue?

The idea that we have access to all this information and we can effectively process it is, I think, totally inaccurate. Do we at least do a reasonable job of processing the small amount of information we do have? I think we’re even finding the answer to that is no. Behavioral finance is showing that the brain uses methods of shortcutting to make a financial decision without having to do the full analysis. Other factors can influence that shortcut — it could be how you’re feeling, your mood, or your emotions — and we end up getting to the answer without doing much analysis at all.

But we think we’ve done analysis, right?

Oh, of course we think we’ve done analysis. And the problem

BY SENTIMENT

seems to be worse the harder and more uncertain the question we're asking is. If you ask what your favorite color is, that's pretty specific and somebody probably already knows that. But when we get into the finance world, the questions have a lot of uncertainty, a lot of risk. A lot is unknown, and it's exactly that kind of environment where we're more likely to take this shortcut and fail to do the complete analysis that we should.

I was surprised to learn that behavioral finance is a 25-year-old field.

It is an old field. However, it started as a couple of founding fathers 25 years ago who worked extremely hard trying to get their message out. About five or 10 years ago, it really took off. Now, hundreds of academics and even more practitioners have become interested. But, those first 15 years or so, it was quite the minority view.

Any perspective on what took so long?

I think that it took time for various revolutions in the field to play out. Fifty years ago, rocket scientists came into the field of finance and they began to mathematically model everything. That led to some wonderful tools: capital asset pricing, efficient market and portfolio theories, and an understanding of how to hedge risks. But, that process needed a very well described person that they could easily mathematically model. It made sense that this person would maximize wealth, be risk averse, and other assumptions that may not be accurate.

It took a long time for that revolution to occur. Then about halfway through it, about 25 years ago, we started to get the counter revolution. Their message was, "We're going a little too far in some instances, and we need to step back and ask what people are really doing. It may not be convenient for our models but what are they really doing?" And it did take some time for that idea to catch on.

Is behavioral finance considered mainstream yet?

Well, in the academic world, I would say that behavioral finance has become a respected field to study. Just like you could study corporate finance or banking. I think it will eventually evolve such that there will be no behavioral finance. I think that everybody will consider behavioral

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aspects in whatever finance they're studying. If I'm looking at corporate finance and how managers should decide which capital budgeting projects to take, behavioral finance will be a part of that decision instead of being a separate field like it is now. It will become integrated into all of finance. I think that is the way we're going, but we're a long way from being there.

What made you decide to write a behavioral finance textbook?

Well, in teaching investments out of the textbook, I got continually frustrated that we were always making assumptions that I believed to be wrong. I was teaching my students great tools to use in their analysis, but I knew that in many instances they would not bother to use the tools because they would end up shortcutting to their decisions.

If you look at almost all of our investment textbooks,



there is nothing about the psychology of investing.

There may be one little chapter about inefficient markets, and not all books even have that. So, I started to put together additional information to try to show my students where the dangers are and to help them avoid the biases, if possible. Basically, I had this small textbook already written for my own class, and I decided that other students probably wanted to know this as well.

The Psychology of Investing states that investment professionals tend to invest in the familiar, among other biases. Were you surprised by this?

Absolutely. Originally, I had the thought that if people were better trained, had better information, they would overcome those biases, even without really knowing they existed. But what we're finding is, that's not true. In fact, some people say, "Well, I understand, and I've created a sophisticated model," and they put too much confidence in their analysis. Then they are shocked to find that it failed. Level of sophistication has the potential to *increase* your biases or cognitive errors in some cases.

In your research, have you found professional investors to be more or less likely to see their own behavioral tendencies than your average individual investor?

That is a hard question. I think that there are more instances where professional investors must face the music. You know, it's their job and they often have to say, "OK, we made a mistake and how did it happen?" They have a better chance of finding the root answer, since they have to figure out what went wrong in order to try to improve, or they're not going to be professional investors for very long. [laughs]

If things are going badly for us as individuals, we just ignore it. Individual investors also blame other things. For example, if I buy something and the price goes up, it was because I made a good decision. If I buy something and the price goes down, it's not my fault. The market went down. The CEO was lousy. I had bad advice.

So that's a tendency for individual investors, but the professionals have to find out why they made errors and then try to avoid them in the future.

Would it be safe to say that investment professionals have a doubly difficult job between avoiding their personal biases and also having to help clients do the same?

I would say that when you combine your own biases and those of your clients, it more than doubles the difficulty. Even if you're overcoming your biases it may be very hard to



overcome your clients' biases. If you're not overcoming your biases and you are being swept away in the mood or the emotions of the moment, your clients probably are too — even more so — and then you're *really* going to be encouraged to make bad decisions.

So given this double layer of complexity, how can the principles of behavioral finance help investment professionals?

The first thing to do is to understand the cognitive errors and the psychological biases that we know about: What are they? How do they affect me? When are they going to affect me? The next thing to do is to try to come up with some ways to overcome those biases. As an example, we don't want to sell a loser. I don't know how many people have told me, "You know, if that stock would just go back up to what I paid for it, I'd sell it." Right. We just do not want to sell at a loss. That's a behavioral bias that we have.

Knowing about it helps, but we've got to do a little more than that. Every now and then we have to analyze all of our positions with the knowledge that we're psychologically predisposed to hold. We've got to tell ourselves to create an argument for selling. And, if you cannot come up with a good reason to sell, then maybe you should be holding it. But, if there are a lot of good reasons to sell, maybe you should be selling.

How does news about the economy versus other news affect investor trading?

When individual news comes out about a company that we own and it's negative news, then we tend to hold the company. We don't sell it, because we feel very close to that decision. Our biological response is to tell ourselves we just haven't given it enough time.

Now, on the other hand if we buy a stock and then stock prices fall in general, we still feel bad about making that decision, but we can blame someone else. You know, it was an act of God, so I don't feel as bad about selling at that point.

Our reaction to the world depends a lot on what kind of mood we're in.

But if it is the only company that went down in the industry, then that was clearly a bad decision, and we don't want to have to face the fact. So we just ignore it, and hold it for longer.

Recently, you expressed surprise that more people aren't talking about the SEC investigating IBM. Why is that?

I would take behavioral finance one step further and say that we all have a collective opinion about these things. In the late 1990s, there were companies going bankrupt, companies that had fraudulent accounting, companies that were restating earnings, and we didn't care because we were making a lot of money, and we felt good. There would be a news story about those things, but it wasn't the lead 6:00 news story every night.

Then, the stock market bubble popped and prices went down. Suddenly, when a company comes out with fraud news in this environment, we are incredibly upset. We're calling our US senators and representatives. In response, they are moved to make many laws all through 2002. Yet, what we are terribly upset about are the same problems at companies, the same fraud, as before.

And now today, we've gotten to a point where the stock market's up 20 percent or 10 percent, whichever index you want to measure. We're starting to feel good again, so some news about an investigation into IBM or fraud at Freddie Mac is not getting us as fired up as it was last year. We're feeling better because we've made a little money recently. Our reaction to the world depends a lot on what kind of mood we're in.

It's fascinating how collective it seems to be — that so many people appear to feel the same way at the same time.

There does appear to be a mood. And, exactly how it changes or why it changes we don't know yet. But, I think just identifying that there's some sort of a collective emotion that affects our individual decisions is a huge change from the traditional finance view over the last four or five decades.

Doesn't this shred the efficient market hypothesis?

Yeah. I mean, the original idea was that if a few people get a little overly emotional and make some bad decisions, there are a lot of smart people out there who will trade against them and profit from their folly. The irrational will end up going broke. There won't be too many of these people because they won't survive.

The problem is that it's the other way around: Most of us are making decisions that have psychological biases. And we drive the market. The people who try to trade against us are often the ones who don't survive. Say in 1997, you knew that there was this bubble occurring, and you tried to keep shorting the market. You would have gone broke before you were eventually proven right. And so, sometimes you just can't trade against sentiment. It'll just steamroll you over.

What is your stance regarding market efficiency?

I would describe it a little differently. I think that finding

great firms and undervalued ones is very difficult cross-sectionally. That is, finding one company is a bad investment and another one is a good investment. However, I think that over time you can definitely find the market undervalued or overvalued. I would say that there might be some more time-series implications rather than cross-sectional implications.

Why don't we do a better job of learning from the past?

We don't learn that well from the past for several reasons. One of them is that our actual memory of the past changes. It's an adaptive mechanism that we all want to feel good about ourselves. And so, the things that would make us feel bad about ourselves are often softened a little in memory, and the things that are successful are more strongly remembered. I think that causes us to repeat some of the same mistakes.

A lot of people made money in the late '90s with emotional investing — just seeing what the latest, hottest news

was on a stock and going with it — and they got burned in the crash. Well, now that stocks are picking up again and the NASDAQ seems to be on a tear, you see a lot of those behaviors starting to occur again. It's like they forgot that they got burned, and all they remember is all the good times when they were making a lot of money.

Critics have complained that behavioral finance doesn't tell people how to beat the market. Is this a fundamental flaw in the field?

Well, I would say that you will be a winner if you can beat your own negative tendencies. If you can overcome the bad decisions that we tend to make, then you are a winner whether or not you beat someone else or you beat the market.

Second of all, behavioral finance is still at a very young stage. I wouldn't say that the Wright Brothers didn't have a very good airplane because it wouldn't go across the Atlantic Ocean and carry 500 people. You know, it was at a very young stage in its development, and I would say the same for behavioral finance. We may get to the point where it can be used to beat the market, but we have a long way to go. //

Christina Grotheer is a contributing editor and an editorial consultant to CFA Magazine.

He may be young, but a list of behavioral finance books and articles published by John Nofsinger, Ph.D., would more than fill this page.

A finance professor at Washington State University in Pullman, Wash., USA, Nofsinger is the author of four books, including *The Psychology of Investing* — acknowledged as the first behavioral finance textbook; *Investment Madness*; *Investment Blunders*; and *Infectious Greed: Restoring Confidence in America's Companies*. Widely acknowledged as one of the world's leading experts in investor psychology and behavioral finance, Nofsinger has been quoted in numerous financial media.