The Greenwich Roundtable

Behavioral Finance: Psycho Emotional Perspectives on Investing
Thursday, May 15, 2003 at 8:00 a.m.

WD: Thank you for this opportunity to share some of my explorations in behavioral finance. The ancient Greeks developed a system of medical diagnosis which they called semiotics. In the financial context, the market is our patient and our occupational hazard is to diagnose market disequilibrium. Our job, essentially, is to diagnose the symptoms or the errors of the markets. Human beings have always been trying to interpret the behaviors around them, whether it was the habits of the wooly mammoth, the exchange of beads, or changes in options volatility. My view is that behavioral finance is partly just a rediscovery of our basic competitive motivations, our common sense and perhaps our common cunning.

Contrary to opinion in popular investment philosophy, which pre-dates modern behavioral finance theory is really quite ill-defined. It's been a convenient catch-all for a variety of perspectives about out-smarting the herd. Of course, all successful investors are contrarians by default. In order to do better than the crowd, one has to be ahead of it. There is a persistent behavioral thread which stretches from ancient human knowledge through the market lore of contrary opinion all the way to behavioral finance. When Homer spoke of Wiley Odysseus, he was talking about our hard-wired human characteristic for trying to outwit our competitors.

Plato's famous allegory of "The Cave" is an equally apt illustration of these ideas. The projections of Wall Street continue to seduce us. The herd is still fascinated with the shadows on the cave wall, or perhaps fascinated by the pixels on their Bloomberg screen. Adam Smith, the pop star of economics, also known as the invisible hand man, came by his behavioral ideas from the Physiocrats and the Philosophes of France who preceded him.

These ideas have always existed and have always been borrowed or passed on precisely because human motivations are immutable. There's no difference between Adam Smith's invisible hand, John Maynard Keynes's animal spirits, and the idea of a Mr. Market. These are all descriptions of the same mysterious motivations of man and the marketplace.

Let's fast forward to Kahneman and Tversky who I'll refer to as the prospectors, since they mined the early behavioral ore. Their prospect theory officially initiated the study of economic man rather than of economics. When we study man, we suddenly enter the realm of psychology.

Behavioral finance is not about price-to-earnings multiples or the behavior of distressed securities. Rather, it is about the study of distressed securities traders, who I think we've all been from time to time. To paraphrase the ancient dictum of "man is the measure of all things," we might say: "man is also the measure of all markets." Thus, any and all information regarding man -- from anthropology to perhaps even zoology -- may provide new fodder for behavioral finance.

We can send a man to the moon and we have mastered the genetic code. We have language, mechanics and knowledge of these things. But please tell me or show me

any equally precise language mechanics or knowledge of the market. It doesn't exist. We are woefully in the dark about markets and teenage daughters in particular! This is the dirty, little secret of the dismal science: there is no cohesive economic science about making money in the market.

Robert Rubin said, "Everything I have experienced suggests that at core, economic conditions and markets are grounded in the human psyche." That's Robert Rubin. The reason why we have so little experience, so little expertise in markets, is because of the persistent denial of the psychological component.

We are taught to believe that markets can be understood from a purely rational perspective. We are, in fact, all primarily steeped in a Cartesian conceptualization of financial culture. Rene Descartes came down rather heavily on the mind side of the mind/body problem when he concluded, "I think, therefore I am." This may explain, in part, the preference for rational markets.

Perhaps the peak in this one-sided cognitive concept of efficient markets and man as a purely rational, economic robot reached its acme in what I called, the “Wrong Term Capital” hedge fund bubble, in which the best of the mathematical rationality team managed to lose the majority of the investors' money. If that didn't signal the end of the efficiency era, the dot com bubble which I called E*greed, certainly did.

So how do we proceed? New strides in behavioral finance, in my view, lie in the direction of cognitive science. My research initiative has been to look at the cognitive structure of man as a guide to the markets. And the primary fact of cognitive science, and the simplest one, is that man is composed of three distinct brains which perform three distinct functions.

Now, market analysis to date has generally mirrored the bi-polar duality of Descartes. There are the fundamentals on one side, very definitely opposed by the Technicals on the other side. Something may be missing. The missing link is what I have coined as the Psychologicals. The Psychologicals are how we feel about the market. This is quite distinct from the Fundamentals which are what we think about the market, and still distinct from the Technicals, which are how we act in the market.

We are all rational people, are we not? But we are also all irrational people. And we are also all instinctive people. These three functions are as present in markets as they are in man and are in a perpetual interplay. My innovation, which I call Triunity Theory, is a reflection of these three components.

The idea of irrationality may be considered the pith of behavioral finance. But what is it? For most people, irrationality has a negative connotation. It infers that feeling is taking precedence over thinking which is, of course, bad. Irrationality is considered fuzzy and unmanageable unless, of course, we are in love or our market position is suddenly making a lot of money.

Alan Greenspan, our fearless Fed leader said, "There is one important caveat to the notion that we live in a new economy, and that is human psychology -- which appears to be essentially immutable."

Okay -- but why aren't these immutable laws of psychology, whatever they are, in any graduate school curriculum? In order to quantify the psychological component of the market, I have proposed a basic unit of emotion which I call an "emotum" or "emota" in the plural. I have for some time conducted a polling process which very simply collects positive and negative emota from about 100 listening posts which represent what I call the semi-professional cast of investors. This sentiment database is the source for various semiotic sentiment studies. A white paper which Andreas Calianos and I wrote and are happy to share with anyone in the details, shows how a very simple sentiment model outperformed the S&P 500 by 257% from 1998 to 2003.

This is rather amazing. It is hard to believe that such a simple sentiment model could be so robust. But that is the point, after all. We like to believe in complex rational models and we don't -- any of us -- myself included, necessarily understand market emotions very well.

The sentiment model is based on the observation that price highs and price lows are characterized by quite different correlations between price and sentiment. This goes very much against the prevailing and parochial notion that fear and greed are the only two market emotions and that they are polar opposites.

The notion that investors must conquer their emotions is equally as absurd. In fact, it is impossible. We are always and will always be emotional. Irrationality rules, and it may have rules.

I define Fundamentals as being whatever market participants are thinking about the market. These ever-changing fundamental stories may be better described as being transient investment themes. The history of markets demonstrates that the extreme of every economic era is defined by a compelling concept that becomes so simple and so popular that it effectively becomes a slogan. Memetics, which is the study of the propagation of information, provides some insight into this phenomenon. A meme, similar to a gene, is an information code that is transmitted from person to person. The semiotics memetics model suggests that when these Transient Investment Themes enter the propaganda realm, they finally lose their power to attract new investors into their paradigm. This understanding has identified extremes such as the “Fantasia” deflationary climax in the fall of 1998, the E*Greed extreme of 2000, and what I call the "Equiphobia" extreme of recent months.

These themes can be identified and measured through what we call a slogan search. For instance, from January 2001 to April 2003, a slogan search for Iraq as a media headline had a negative 85% correlation with the S&P 500. In fact, extreme readings in the Iraq slogan corresponded almost exactly to the stock market lows of last October and in March of this year.

Memetics works and it makes ideas such as information cascades and viral propagations more practical. Now, there are many interpretations of what Technicals are. My own definition is quite different than moving averages or chart patterns. The Technicals are simply all of the physical facts or vital statistics of the market. All technical systems from Dow Theory to Elliott wave theory, etc., try to answer a simple question: what is the trend of the market.

I have made a direct study of market trends which I call Trend Duration Analysis. When we talk about the persistence of bidders or the exhaustion of sellers, we are all alluding to the physical nature of these attention spans in the market. The duration characteristics of market trends do demonstrate discrete, repetitive trend duration modes. The duration characteristics of market trends do demonstrate discrete repetitive trend duration modes. The duration characteristics of market trends do demonstrate discrete repetitive trend duration modes. Yes, the market repeats itself, too.

The essence of behavioral finance is this systemic repetition of habitual errors. These trending habits are the physical heuristics of the market. In the same way that memes are the metrics of the fundamentals and emota are the metrics of the Psychologicals, price bars are the metrics of the Technicals. These three functions of the market, with their metrics and models which I call Triunity Theory, may lead toward a more optimized behavioral finance which may be able to predict some of the markets some of the time.

The invisible hand does leave some fingerprints. The herd does leave footprints. The risk to the adulterated development of the behavioral finance school, however, is that there will be a rapid and probably vapid co-opting of behavioral finance schemes by the Street. After all, the rational market era ended up as a pocket-lining paradigm for Wall Street once it was suitably rendered as a buy and hold bullish story.

Behavioral finance is already at the risk of being simplified and conveniently packaged. There are hosts of behavioral departments working on behavioral ideas which will eventually blossom into behavioral funds of all sorts.

So expect to see lots of behavioral shingles blowing in the wind. I say this is the risk, but it is a practical certainty that the language techniques that appeal to behavioral ideas, great and small, will be propagated to the herd. After all, one of the behavioral tenets is that we are all herders; we are all hard-wired to imitate whatever we perceive as accepted and useful.

The opportunity for the behavioral school lies in the higher ground of potential societal benefits which Bob Shiller will talk about, I'm sure. The issue is the degree to which there is an evolutionary aspect to man as an economic animal. My own view is that the efficient market's era, and even the Cartesian world view was a deviation for a more integrated understanding of humanity.

I do think that behavioral finance is an enormous opportunity for an intellectual and practical re-direction of how we understand ourselves, and by extension, how capitalism can be both better understood and better managed. How these risks will interweave in the narrative of intellectual history is difficult to say, but there are parallels to the prior paradigms in which the alternative asset industry may be where random walk and the mutual fund industry were, say 20 years ago.

There is much more to learn about both human and market behavior. There are also things that we may never learn about either. So I leave you with this semiotics meme: observe everything, believe nothing and invest solely based on the behavioral errors of others. Thank you.

HT: Woody made an interesting statement -- you said that we are both rational and irrational beings. Can you give me a market-based example of rational behavior coupled with or set against a market-based example of irrational behavior?

WD: Well, there's always an interplay in which one might say in a certain market situation that the fundamentals or the psychologicals are overtaking the technicals. In fact, we could look at the recent March low, March 11th. You had what I would say rather strong, very strong psychologicals which had to do with the fear in the measures that we look at. You had a very strong meme based factor in terms of the fundamentals in terms of Iraq, but you didn't have -- and what many people expected to have -- a technicals confirmation. And that's why that low is what I called a dirty low because the ____ didn't go where it was supposed to go; the price bars weren't there. So that was a combination where the technicals were really missing.

But on the other hand what's interesting here is the psychologicals, in the very, very short term -- let's say this week/last week -- are rather robust. The market's gone a long way; people are relatively friendly. And yet, there's sort of a vacuum memetically right now. So -- in fact, what's interesting of course, is to see how these different forces are at work, and in very strong trending functions, of course, they're all going to work together. Which is why either school -- whether you're technical, fundamental or psychological -- can always find a claim to fame in terms of explanation after the fact in very strongly trending markets.