Greenwich Roundtable

Behavioral Finance: Psychoemotional Perspectives on Investing

Introducing Triunity Theory as a Practical Advance in Behavioral Finance

Presented at the by Woody Dorsey
with Panelists Robert Shiller and Nassim Taleb on May 15, 2003

Rediscovering Our Common Cunning

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 disequilibria. 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. Behavioral finance is partly just a rediscovery of our basic competitive motivations, our common sense or perhaps, our common cunning.

Contrary opinion, the popular investment philosophy which predates modern behavioral finance theory, is amazingly ill-defined. Contrary opinion has been a convenient catchall for a variety of perspectives about outsmarting 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 the crowd.

When Homer spoke of "wily" Odysseus, he was talking about our hardwired human heuristic for trying to outwit our competitors. Plato's' famous allegory of the cave is an equally apt illustration of behavioral finance 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 terminal.

Adam Smith, the pop star of economics also known as "the invisible hand" man came by his behavioral ideas from the Physiocrats and Philosophes of France who preceded him. Behavioral ideas have always existed and have been borrowed or passed on because human motivations are immutable. There is no difference between Adam Smith's invisible hand, John Maynard Keynes "animal spirits" and the idea of a "Mr. Market." These are all descriptions of the mysterious motivations of man in the marketplace.

Prospect Theory: "Man is the Measure of all Markets"

Let's fast forward to Kahnemann and Tversky whom I 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." To paraphrase the ancient dictum of, "Man is the measure of all Things," we might say, "Man is 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 a language, mechanics and knowledge of such things but please tell me or show me any equally precise language, mechanics, or knowledge of the market? It does not exist. We are woefully in the dark about markets. This is the dirty little secret of the dismal science… there is no cohesive economic science for making money in the market. Robert Rubin has said: "Everything I have experienced suggests that, at core, economic conditions and markets are grounded in the human psyche." The reason we have so little expertise in markets is because of the persistent denial of the psychological component of the market.

Descartes Delivered a Dualistic Bum Steer

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 of 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 their 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 can we proceed after the failure of pure rationality?

New strides in behavioral finance 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 structure of the market. The primary fact of cognitive science is that man is composed of three distinct brains which perform three different functions.

Market analysis has generally mirrored the bipolar duality of Descartes… there are the Fundamentals on one side very definitely opposed by the Technicals on the other hand. 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, called Triunity Theory, is a reflection of these three components of man and markets.

Our Ignorance about the Study of Irrational Exuberance

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 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 Psychologicals component of the market, I have proposed a basic unit of emotion which I call an emotum or emota in the plural. As part of Market Semiotics, 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 semiprofessional caste of investors. This sentiment database is the source for various Semiotics sentiment studies. The Semiotics Sentiment model 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, present company included, understand market emotions very well.

Irrationality Rules and it may have Rules
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 against the prevailing notions 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 absurd… in fact, it is impossible. We are always and will always be emotional. The Psychologicals component of markets may be the most undiscovered territory in finance. Irrationality rules and it may have rules.

Fundamentals are Transient Investment Themes
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 Transient Investment Themes enter the propaganda realm they finally lose their power to attract new investors into their investment paradigm. This understanding has identified extremes such as the Fantasia deflationary climax in Q3 1998, the E Greed extreme in Q1 2000 and the E*Quiphobia extreme of March 2003.

Transient Investment Themes can be identified and measured through what we call a slogan search. For instance, from January 2001 to April of 2003, a slogan search for Erak as a media headline had a negative 85% correlation with the S&P 500. In fact, extreme readings in the Erak slogan corresponded almost exactly to the stock market lows of last October and in March of this year. Memetics works and makes ideas such as information cascades and viral propagations more practical.

The Study of Trend Duration is the Third aspect of Triunity Theory
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 Elliot wave theory 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 or what I call Triunity Theory, may lead towards an optimized behavioral finance which may predict some of the markets some of the time. The invisible hand does leave some fingerprints. The herd does leave hoof prints.

Wall Street will "Use" Behavioral Finance Ideas

The risk to the unadulterated development of the behavioral finance school 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 risk of being simplified and too 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 that this is the risk, but it is a practical certainty that the language, techniques and appeal of 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 hardwired 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 has been espousing. 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 markets" era and even the Cartesian worldview was a deviation from a more integrated understanding of humanity. In that context, I think that behavioral finance is an enormous opportunity for an intellectual and a practical redirection of how we understand ourselves as human beings… and by extension, how economics and capitalism can be both better understood and better managed.

Observe Everything and Believe Nothing

How these risks and opportunities will interweave into the narrative of financial and intellectual history is difficult to forecast. But practically speaking, I think there are parallels to the prior economic and market paradigm. Behavioral Finance and its relative corollary, the Alternative Asset industry may be where the random walk story and the mutual fund industry were say, 20 years ago. Behavioral finance is now well beyond its infancy and somewhere between adolescence and mainstream acceptance. 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 a final Semiotics meme: Observe everything, believe nothing and invest solely based on the behavioral errors of others.