

Behavioral Finance: The "Science" Behind Investor Decisions

Coleen D. Trimble, Senior Consultant

When consumers are confident they buy, when not, they sell. Consumer confidence is at the heart and soul of capitalism and is the engine of economic expansion and contraction - often roaring full speed ahead, at other times barely making it up the hill and then there are those times when it nearly falls off the cliff. Consumers and investors are driven by confidence or lack thereof, contributing to and creating cycles of economic growth, recessions and depressions.

What is Behavioral Finance?

The Conference Board's consumer confidence index measures how consumers feel about business conditions. A reading above 100 signals strong growth, an all-time low number such as 25.3 hit in February 2009, indicated out-right fear and perhaps panic. This accepted benchmark is an example of how consumers' feelings impact spending that in turn accounts for 70% of U.S. economic activity.

However, confidence is not just defined by an individual's feelings or emotions, as authors George A. Akerlof and Robert J. Shiller in their book Animal Spirits suggest, "Confidence..... is a view of other people's confidence, and of other people's perceptions of other people's confidence. It is also a view of the world - a popular model of current events, a public understanding of the mechanism of economic change as informed by the news media and by popular discussions."

"Behavioral Finance," a relatively new area of research, is the study of how human psychology, our thoughts, feelings and attitudes (such as confidence) influence financial decisions. While Behavioral Finance is becoming more familiar, Akerlof and Shiller suggest it is not fully understood as "conventional economic theories exclude the changing thought patterns and modes of doing business that bring on a crisis."

Classical economic theories of the 18th and 19th centuries (such as Adam Smith's invisible hand) assumed that security valuations were always based upon "rational economic behavior." In other words, human beings always had stable, well defined preferences and always made rational decisions consistent with those preferences.

These ideas were in contrast to those held by well known economist John Maynard Keynes who during the Great Depression introduced principals regarding the role of fiscal and monetary policy in fighting recessions. While these particular aspects of Keynes work were widely incorporated into the thinking of economists at the time (1946), his view of the economy differed

from those who believed the economy was driven by "rational actors." Keynes, instead believed that much of economic activity was driven by *animal spirits*, meaning that people have non-economic motives that are the main cause of economic fluctuations and of which create manias and panics (bull and bear markets).

While Keynes fiscal and monetary views were widely accepted, his ideas surrounding *animal spirits* were not. Modern finance, based upon the above "rational expectation" assumptions, was birthed in 1950 with Harry Markowitz's portfolio optimization tool which examined how investment returns could be optimized, maximizing expected return per unit of risk.

About ten years later, others such as Sharpe, Lintner and Mossen individually presented the theory of the Capital Asset Pricing Model (CAPM) based upon the premise that all investors utilized Markowitz's optimization tool and that the market is, therefore, a reflection of all investors "rational choices."

Around that same time, University of Chicago's Eugene Fama presented the idea of Efficient Market Hypothesis - given the view that the market is the reflection of perfect information and rational choice.

Contemporary questions about the assumption of "rational economic behavior" began to arise again in the mid 1970's from various disciplines such as finance, economics and psychology. Empirical data on market behavior and human decision-making widely contradicted the rational theories mentioned above and were more along the lines of Keynes philosophy concerning *animal spirits*.

More recently, "New Finance" theories proposed by Robert Haugen, for example, continued to poke holes in the efficient market hypothesis. Behavioral Finance proposes psychology based theories to explain these anomalies and has been influenced by generations of psychologists, sociologists, philosophers, scientists and mathematicians whom over the years have drawn upon interconnecting traditions and theories from seemingly divergent fields to provide new insights into financial theory.

Today, Akerloff and Shiller opine that the term *animal spirits* has become an economic term referring to..."a restless and inconsistent element in the economy," which fundamentally describes how human beings deal with ever present ambiguity and uncertainty.

Cognitive and Emotional Biases

Behavioral Finance has offered much needed awareness in how and why investor thoughts and feelings or "biases" impact financial decision-making. There are two general categories of investor biases: cognitive - the way we think and emotional - the way we feel. Akerloff and Shiller have distilled cognitive and emotional biases to five different aspects of *animal spirits* that, in their view, affect economic decisions. The way in which our thinking changes over time

about these variables drives economic cycles. In fact, they suggest these variables contributed to the financial crisis and must be acknowledged in order to better understand "how the economy works." The five *animal spirits* include:

- **confidence** (or lack thereof)
- **fairness** (non-market variables in how others should or should not behave)
- **corruption and antisocial behavior** (changing views about what is acceptable or not)
- **money illusion** (consider "nominal" dollars vs. real or relative values)
- **stories about the economy** (facts are remembered and meaning is derived through attachment to stories).

To the degree our belief systems (thoughts, attitudes and perceptions) are biased, the quality of our judgments are impacted. In addition, the level of our lack of confidence or "over-confidence" which is the tendency to think we possess the entire universe of knowledge and information needed to make a decision can cause us to become anchored to existing information, resulting in status-quo, herd mentality and extrapolation of trends which play into the above.

Humans also have an inherent "fear of loss." Psychologists tell us that due to living at subsistent levels (poverty) for thousands of years, we value losses 2:1 over gains. In other words, it feels twice as bad when we lose \$1 as it feels good to gain \$1. For this reason, not just investors - but humans in general will do most anything not to experience "self-regret," a close cousin to fear of loss that may result in financial decisions not always in our best interest.

Conclusion

Behavioral Finance is an attempt to merge conventional theories with insights concerning how human beings actually make decisions. Human psychology, thoughts and feelings will oscillate between fear and greed, quintessential elements within investing, not yet accounted for in many of today's economic models.

Animal Spirits, by George A. Akerlof and Robert J. Shiller, © 2009.