## Behavioral Economics: Neo-Classical Economics with a Twist



There are many people who claim that behavioral economics is a field of study within economics that can explain any and all human behavior; the gambler who continues to bet even though he knows he will ultimately lose, or the differences in our stated preferences and revealed preferences and even the reasons we do things knowing it will actually hurt us. The field of study by definition is "Behavioral economics [applies] scientific research on human and social cognitive and emotional [patterns] to better understand economic decisions and how they affect market prices, returns and the allocation of resources. The fields are primarily concerned with the rationality, or lack thereof, of economic agents" (Goldstein). Behavioral economics has "been heavily influenced by a single area, namely cognitive psychology..."

(Lewis). More simply put Behavioral Economics seeks to find how the actual decision making process leads us to the decisions we make through research, psychology, and neo-classical economic theory.

Behavioral Economics attempts to apply psychology and reasoning, through research, to understand why people act the way they do. This theory has been used a lot in trying to determine how markets work in order to understand how people will react in certain situations. Even more simply, Behavioral Economics tries to predict the irrationality within us, it tries to predict why people do things that we know may have negative effects or why we make decisions from a purely emotional standpoint. Behavioral Economics look to explain what classical economic theory cannot explain. It "picks" up where classical theory falls short,

therefore I will attempt to explain what behavioral economics is and how it goes beyond neoclassical economics to understand decision making and market theories.

As complex as this theory main seems it is actually based around a few simple assumptions and ideas. It is composed of three main ideas; heuristics, framing, and inefficiencies/irrational expectations. These three ideas are very important to behavioral economics and lay the foundation for any assumptions that go along with the theory.

Heuristics are basically "rules of thumb" that most of us use in decision making. They are simply guidelines that help us make educated decisions. In Behavioral Economics heuristics is important because it helps us determine what cognitive bias we have. Our limited understanding of the world around is what we make base our choices off of. Knowing how we perceive problems and approach them can be very helpful in Behavioral Economists' research. It allows researchers to know how people go about making decisions. Process of elimination, for example, would be considered a heuristic. It is a logic tool that people use to approach real life problems by eliminating the options that seem impossible or very unlikely. Another example would be trial-and-error, which is another common way people make decisions. Having these heuristics shows that people aren't always using a neoclassical economic approach to decision making and Behavioral Economists need heuristics to help them determine why we make decisions based partially on how we go about making them. However to be clear, what behavioral economist are attempting to do is merely explaining certain decisions rather than actually predict them given a set of choices and circumstances. Predicting behaviors would mean that a behavioral economist could look at a situation with all the

characteristics of heuristics, framing and irrationalities and predict what the outcome would be.

The nature of behavioral economists' research limits them to only explaining rather than predicting because after all research is done following end results.

Following heuristics, framing is the second idea within Behavioral Economics. According to Wikipedia "In economics, framing means the manner in which a rational choice problem has been presented". In other words framing has to do with, not how we handle problems but, the way in which problems or decisions are given to us. Therefore the way a question or decision is framed will, according to Behavioral Economists, have an effect on how we respond. Amos Tversky and Daniel Kahneman have done much research on this subject "The effects of frames on preferences are compared to the effects of perspectives on perceptual appearance. The dependence of preferences on the formulation of decision problems is a significant concern for the theory of rational choice". Tversky and Kah an are known for their research on presenting people with the same problems two different ways and their research conclusively has found that people usually change answers given the two different frames. An interesting study using a framing method known as 'anchoring' conducted by MIT professor Dan Ariely and author of the book <u>Predictably Ir and concluded somewhat similar results</u>. In the study Ariely had undergraduate college students write down the last two digits of their social security number and then respond if they would be willing to pay that amount in dollars for a fancy bottle of wine, a not-so-fancy bottle of wine, a book, or a box of chocolates, he then asked them how much was the maximum they would pay for those same items. His study concluded there was a very strong positive relationship between the amount each students social security number was and the amount of the maximum price they would be willing to pay. Therefore for

the exact same items students with higher SS numbers would have a maximum amount for the same items. Ariely's conclusion was significant even after asking the students if their SS number had any effect on their maximum amount, which a majority of the students denied.

Therefore research can prove that a rational choice can be affected by framing. Behavioral Economists have found this evidence through much research. Knowing the ways in which situations are framed will help behavioral economists figure out how decision makers are likely to respond. Framing is a very interesting concept though in that a majority of time the subject has no idea that they perceive something in a different way. Therefore it may or may not be a rational decision based on how they made their decision given the certain frame. So in other words framing can prove that a perfectly rational person may make an irrational decision based on a certain frame, which has been proven in research. For that reason framing can be very significant in explaining the outcome of a situation. However framing obviously can be very subjective, which is why behavioral economics relies heavily on experimental data and field research.

The final theme of behavioral economics is the concept of market inefficiencies and irrational expectations, or anomalies. Where an anomaly is "deviation from the norm (Webster)" or in a market context anomaly usually means market inefficiency or situations contradicting market hypothesis. Behavioral economists attempt to understand anomalies to a degree to which they aren't even anomalies anymore because there are perfectly good reasons for their occurrence. These anomalies occur by contradicting economic theory however behavioral economics goes beyond economic theory. Neo-classical economics assumes a few

things just can't be applied to real subjects. For example the assumptions that a) people know their preferences and b) people always maximize their utility by making rational decisions isn't really the case for most people. We see these assumptions aren't true all the time because people don't act like the robots they are perceived to be in standard economic theory. Instead there is a major psychological aspect that influences how we make decisions apart from our general logic. We as people or most people rather don't react solely based on logic; there is a lot more emotion and influence going into our decisions. Sendhil Mullainathan, a professor of economics at Harvard University, recently conducted a study for a bank in South Africa to see how the bank could get more customers to come to them for loans. Sendhil and his colleagues would send out letters offering special loans to clients of the bank. These letters were randomly altered to include psychologically important changes, such as including a male or female photo on the letter or pictures differentiated by race. What they found was that small changes can have the same impact on take-up of the loan as dropping the interest rate by 2 to 5 percentage points, Mullainathan stated "We found that any one of these things had an effect equal to one to five percentage points of interest! A woman's photo instead of a man's increased demand among men by as much as dropping the interest rate five points! These things are not small. And this is very much an economic problem." From all the research we can see that people don't make decisions based on just logic or economic principles. Influences can effect even large life changing decisions, from Mullainathan's research we can see that people are influenced during major life changing decisions.

Behavioral Economics differs from Neo-Classical economic theory for one reason, psychology. Behavioral Economists take the idea of utility maximization and apply cognitive

psychology. An article in the University of Chicago Magazine emphasizes this point "Traditional economics teaches that humans are rational actors who make decisions in ways that maximize their well-being. Behavioral economics, meanwhile, relies on cognitive-psychology research to relax those assumptions, teaching instead that humans have "bounded rationality" The field of Behavioral economics has the understanding that people don't always act in rational ways, like classical economic theory assumes. And I think that it is clear to see that behavioral economists are right in that people don't always make rational; gambling when people will always ultimately lose, or overeating when we know what harm it will cause, even large parts of marketing and advertising thrive through irrationality. Maybe because we as irrational people occasionally like to be unpredictable and throw the dice so to speak, both of which would likely be rationalized by a behavioral economists through cognitive psychology, but is very poorly explained by traditional economists. However the main argument between behavioral and traditional economics is not so much in personal decision making as in market efficiencies. Markets, according to a traditional economist, will always end up efficient if no outside influence is involved but behaviorists on the other hand argue that because the market, for argument sake let's say the stock market, can be effected by a portion of irrational people no matter how efficient the market tries to be, ultimately irrationality will sway the market.

One idea to elaborate on when understanding the difference between behaviorist and traditional economists is the idea of "bounded rationality". Bounded rationality is very important to the irrationality argument behaviorists make. The definition of bounded rationality according to Wikipedia.org is "individuals are limited by the information they have, the cognitive limitations of their minds, and the finite amount of time they have to make

decisions" Therefore people have limited information, time, and ability to make optimal decisions. Behaviorists argue that bounded rationality is a very real factor that enables people to make rational decisions. The two fields differ in that traditional economic theory states that people do have perfect information, enough time, and the mental capacity for rational decisions.

While Behaviorists have their criticism about traditional economic theory, the sword is double edged; traditional economists criticize behavioral economics for a few different reasons. They argue that you cannot apply observed behavior to actual markets for the reasons that "learning opportunities" and competition will ensure rational markets. Secondly the argument is made that cognitive psychology isn't useful in generalized economic behavior and is really only applicable in "once-off" decisions. And lastly many traditional economists are skeptical of the means in which behaviorist gather their data i.e. surveys and experiments. A general understanding in research is that researchers must be very careful about how they gather data in order to uphold the validity of that data. Therefore traditional economists stress the fact that research methods used by behavioral economists have trouble accounting for things such as "systemic bias, strategic behavior, and lack of incentive capability".

The idea of using behavioral economics has not gained enough understanding and presence to be used in real world economic policy, yet; however the field continues to grow and prove to have promising results regardless of contradiction from traditional economists. If behavioral economists continue develop the field effectively we can start to understand more and more about not only decision making but human behavior. It has already proved to be very

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helpful in finance with explaining different market fluctuations and problems, such as when University of Chicago professor Richard Thaler used behavioral finance to solve the Equity Premium Puzzle, a problem in equities that limits maximization of stock performance. With enough of the right kind of research the field will be able to do the same thing with economic markets.

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