

## Comments on a Psychological Perspective of Standard Economics By Jack Lillibridge

In my blog comments on **Psychological Perspective of Standard Economics** built on my presentation for the Seminar on Strategic Decisions I explored how the theory of complex adaptive systems might suggest ideas to help us understand the current economic crisis, how it happened, possible key causal variables, and likely outcomes.

A central idea from the theory is that complex systems, such as the economic system, have a dual nature: a stability aspect and a growth aspect. The stability aspect is characterized by balance, continuity, equilibrium, renewal, etc., and the growth aspect is characterized by creativity, learning, exploration, risking, etc. A human being has a similar dual nature: a stability aspect to insure survival and a growth aspect to deal with unexpected challenges and anticipated needs.

The three books: *Predictably Irrational* by Dan Ariely, *Nudge* by Richard Thaler and Cass Sunstein, and *The Mind of the Market* by Michael Shermer, present and illustrate psychological factors that may influence economic decisions in ways not accounted for in the standard economic model.

*Nudge* also describes many examples of a general strategy that may improve such economic decisions. The strategy structures the array of decision options of an economic actor in such a way as to make choosing the most beneficial option more likely without restricting free choice.

A brief recap of some of the psychological factors:

- Anchoring is where first impressions and initial decisions shape many others that follow. Once an initial value or percept is set, we are biased toward that original choice.
- Status quo bias is exhibited as a kind of inertia when making decisions. We opt for what we are used to.
- Loss aversion is where people fear losses more than they desire gains.
- When something is free we forget the downside. We perceive what is being offered as being much more valuable than it really is.
- An automatic pilot mode is where people are not actively paying attention to the task at hand.
- A variation of this is where people rely on beliefs, heuristics, models, theories, etc. without paying attention to whether they are still appropriate in the current situation.

There are many other psychological factors that might be relevant, such as expectations, short-sightedness, self-justification, curiosity, etc., not explicitly dealt with in the books reviewed.

A nudging strategy is based on affecting the array of choices available to the decision maker in the context in which the decision is made. A nudge then is any aspect of the set of choices that alters people's behavior to make a beneficial choice more likely while maintaining real freedom to choose.

A possible limitation to the implementation of nudging strategies is that we don't know our preferences completely – we discover them through market processes and through the process of making decisions. We also don't fully know what future choice sets will look like, let alone what our preferences will be at that time. Designing strategies to affect unknowable incentives and outcomes will be difficult and perhaps not possible in some cases.

A few nudge examples to illustrate how they work:

- Anchors can serve as nudges. We can influence what you will choose in a particular situation by subtly suggesting a starting point for your thought processes.
- A default option serves as a powerful nudge. Providing a well-diversified and balanced investment portfolio is a default.
- Synchronizing pay raises and savings increases means participants never see their take-home amounts go down, and they don't view their increased savings as losses.
- Just before a dangerous curve, white stripes are painted every so often perpendicular to the direction of traffic. At first they are equally spaced. As the curve comes close, the lines begin to be progressively closer together. This gives drivers the sense that their driving speed is increasing and they slow down.

The effectiveness of each example is based on one or more of the above noted psychological factors. For instance, the use of painted stripes to get drivers to slow down is based on a kind of automatic pilot mode, where drivers pick up indications of things happening in their environment outside of their conscious awareness.

**An important issue for those trying to understand the current economic crisis is how psychological factors could impact decisions collectively arrived at by economic actors, both individuals and institutions. It is important to understand how such factors could be appropriately incorporated in a modified economic model.**

One way to address this issue is to see psychological factors as reducing the quality and completeness of the actor's information. The standard economic model has erroneous assumptions relevant to the decision.

Psychological factors like emotion and anchoring steer the actor's attention to some information and away from other information, filtering what information is perceived and sought. For instance, people believe that current trends will continue and do not look to see or test whether anything has changed that will impact the trend.

Perhaps the standard economic model could take account of how psychological factors might affect quality and completeness of relevant information in a decision situation.

Another concern is how to understand stock and housing bubbles and how to make sense of investors' reactions when the bubbles end. Psychological factors may operate to delay or inhibit our full appreciation of the import of rising bubbles and may amplify the emotional impact when they "burst".

Returning to the idea of the dual nature of complex systems, it is evident that these psychological factors mainly affect the stability aspect of system functioning. They foster maintaining or restoring an existing equilibrium.

Additional variables are probably needed in the economic model to factor in how people cope or don't cope with sudden unexpected change situations and what makes them more resilient in such situations. People are fallible and limited, not entirely rational, but we are innovative and adaptable, too. Greater coping ability, resilience and adaptability should hopefully reduce the intensity of the crisis and the quality of the resulting outcomes.

Jack Lillibridge, April 13, 2009