





You Can't Always Get What You Want, Because You Don't Always Know. 

Abstract:

The underlying assumptions of consumer theory tell us that individuals are rational agents who know their ordinal preferences. The basis of this paper is to examine and bring into question these underlying assumptions. Is our decision making process really shaped by rationality and ordinal utility maximizing preference? Perhaps not.

Psychological studies show that our rationality is bounded by complex situations, and sometimes altogether absent in transient psychological states of overwhelming emotion. In addition, our preferences are often shaped by several systematic biases that lead us into making bad decisions. Other times we might have the right choice predictions but fail to follow them because we act impulsively. In addition, we should question what might be wrong with assuming only ordinal preferences and discarding the assumption of cardinal preferences. 

We learned in Economics 1000 that fulfilling society's unlimited wants with the economy's scarce resources is the main purpose of economic study and practice. Since consumer theory attempts to explain the law of demand and how consumers allocate their fixed money income among available goods and services we find consumer theory to be at the very foundation of economics. But, just because consumer theory is foundational does not mean it is infallible. "Consumer theory assumes consumers are a rational people with ordinal utility maximizing preferences, hence they are capable of using their income

to buy the bundles of goods and services that will derive the greatest amount of utility. Because we are assumed to have preferences individuals can rank bundles of goods and will choose the highest ranked bundle of goods that he or she can afford given their income budget restraint” (McConnell 132).

Firstly, I think it is important to question the underlying assumption of consumer rationality. One must consider, for instance, events in which humans are incapable of being rational agents. Nowhere in the model of consumer theory are “transient psychological states” mentioned. These states include emotional feelings of anxiety, courage, excitement, and fear, all of which have the ability to influence our decision-making process. "These kinds of states have the ability to change us so profoundly that we're more different from ourselves in different states than we are from another person." (Gertner). Many depressed people will attempt suicide, many people caught up in a moment of passion will practice unprotected sex, and many angry people will chose to be physically abusive towards others. And often times, people who have decided to act in such ways turn around in a calm, rational state and say, “I never should have done that, what was I thinking?”

According to Brian W. Arthur of the Santa Fe Institute and Coopers & Lybrand Fellow, “The level at which humans can apply perfect rationality is surprisingly modest.” He says, “there are two reasons for perfect or deductive rationality to break down under complication. Firstly, beyond a certain amount of complicatedness, our logical apparatus ceases to cope. Modern psychologists realize that when humans are faced with increasingly complicated or ill-defined situations, their sense of perfect deductive rationality tends to break down. If a person is faced with making a decision,

but they lack information they will use forms of inductive reasoning, based on subjective beliefs and working mental hypotheses. To fill our gap in understanding we make a variety of working hypotheses, proceed with the most credible, and replace old hypotheses with new ones if the old no longer work. Secondly, in interactive situations of complication agents cannot assume the other agents they are dealing with to behave with perfect rationality, and so they are forced to guess the other agent's behavior. This forces people to rely on subjective beliefs, and subjective beliefs about subjective beliefs. In such instances, objective, well-defined assumptions then cease to apply." (Arthur 406-407)

"The example of inductive reasoning Arthur gives is "The Bar Problem." In this example 100 people decide independently to go to a bar every Thursday night to see some live Irish Music. Space in this bar is limited and is only enjoyable if less than 60 people to attend. But, there is no sure way to tell how many people will end up going, assuming there is no collusion among individuals. In this situation, there is no deductively rational choice to be made. Just like in the "Bar Problem" example, inductive reasoning systems are present in all kinds of strategic economic activity whether it be business negotiations, stock market speculations, poker games, or positioning products in the market. Humans are forced to use inductive reasoning all the time, and during many complex decision making processes we are unable to use perfect rationality and deductive reasoning." (Arthur 401-410)

Consumer theory assumes the idea of clear-cut preferences that will lead to the greatest amount of happiness. But do we have utility maximizing preferences? Psychologists have found that we are usually wrong at predicting how we will feel about

something in the future. Harvard Psychologist, Dan Gilberts, has done extensive research on this topic. Gilberts says, “People base many decisions on affective forecasts, or predictions about their emotional reactions to future events. When making these forecasts we tend to overestimate the intensity and duration of our emotional reactions to both good and bad future events. This gap between our predictions and ultimate experience is called the “impact bias” and it can affect our preferences. When we have false expectations it can lead to mistakes in choosing what we think will make us the happiest. Gilberts term for this false calculation is “miswanting.” In one of Gilbert’s impact bias studies he looked at College students’ predicted and actual levels of happiness after dormitory assignments. He asked participants to predict what their overall level of happiness would be a year later if they were randomly assigned to a desirable or undesirable dormitory. He used a 7-point scale, with 1 being unhappy, and 7 being happy. College students predicted that their dormitory assignment would have a large positive impact (6 on the scale), or negative impact (3.5 on the scale) on their overall happiness. But a year later, those living in undesirable and desirable dormitories were at nearly identical levels of happiness (5.5. on the scale). One cause of the impact bias is focalism, the tendency to overestimate how much we will think about the event in the future and to underestimate the extent to which other events will influence our thoughts and feelings. Another cause of the impact bias is that forecasters fail to recognize how readily they will make sense of novel or unexpected events once they happen.” (Gilbert 132-133)

Behavioral decision research has found several other important systematic biases in decision-making predictions. “Closely related to impact bias, there is “projection bias”

which occurs when people make decisions in a different visceral state than when they actually experience their decision. The “eyes are bigger than your stomach saying” is applicable to this bias, because often times we are really hungry when go to dinner so we tend to overcompensate by ordering too much food and when it comes to eating it we can’t come close to finishing.” (Hse) Lowenstein’s article in the Quarterly Economic Journal says, “optimal decision-making often requires a prediction of future tastes, and future tastes may differ from current tastes due to such factors as day-to-day mood fluctuations, social influences, maturation, formation of habits, and environmental changes. Lowenstein’s studies show people usually understand qualitatively the directions in which their tastes will change, but systematically underestimate the magnitudes of these changes. Hence, they tend to overstate the degree to which their future tastes will match their current tastes. Examples of projection bias would include people making summer vacation plans in the winter to choose overly warm destinations, or people not addicted to cigarettes to underestimate the drawbacks of addiction” (Lowenstein 1210).

Often we make futuristic decisions based on our memory and evaluation of related past experience. This introduces a third type of bias, called “memory bias.” Memory bias is a problem because the human memory is imperfect, and often disproportionately influenced by an events peak and end experience, while remaining insensitive to the event’s duration. Daniel Khaneman, psychologist and winner of the 2002 Economic Nobel Prize, performed a classic experiment that demonstrates this theory. In this experiment, he had one group of participants submerge their hands in icy water for 60 seconds, and a second group of participants submerge their hands in icy

water for 60 seconds, and then again for 30 seconds. Even though the second group's experience was worse (because it lasted longer), the first group rated their experience as being more unpleasant than the second group. This is because the second group had a less unpleasant ending (Khaneman 403-404).

Aside from systematic biases in predictions of future consequences, we also experience a failure to follow our correct predictions. Many times we do not make the decisions that will provide us with the greatest overall happiness, because we are blinded by the options that will give us the greatest immediate pleasure. Examples of this kind of behavior would include: binge drinking, taking drugs, practicing unsafe sex, squandering savings, or dropping out of school (Hse). The costs of these decisions over the long-run outweigh the immediate benefits of the short-run, but we impulsively act on hedonistic desires and ignore this fact. This failure to follow our correct predictions on decision outcomes is closely related to the idea of "transient states," in that our current irrational and often emotional mental states overcome our willingness to make the right choice. Hence, we fail to balance impulse with self-control and the outcome is the wrong choice.

After questioning the assumption of rationality, economists should go on to question the historically recent shift to ordinal utility theory from cardinal utility theory. "Since the 1940s the utilitarian foundations of economic choice theory have been rejected. This is largely because happiness has been seen as subjective and therefore immeasurable in a scientifically objective sense. For the past half century the development of ordinal utility theory has replaced cardinal utility theory" (Dixon 1813).
"Ordinal utility theory assumes individuals can rank each bundle at least as high as itself, and their preferences are transitive, meaning if they chose good A to good B, and they

chose good B to good C, then they also chose A to good C. Under ordinal ranking theory, all we need to know is the order of the individual's preferences and it doesn't matter how much we prefer one thing to something else. This discards the notion of cardinal preferences, which asks the question, how much do we prefer one good to the next? In doing this, economists discard the notion of marginal utility and weaken the link between economics and utilitarianism" (Morey lecture notes). Perhaps, this should give economists enough reason to find a way to objectively measure the subjective realm of utility and not take the easy way out by assuming ordinal preferences. Modern technologies such as neuroscience might hold the definitive answers to "how much more happy" one thing makes us in relation to another. Certainly, many scientists are currently researching this question.

In conclusion, the underlying assumptions of consumer theory are too simplistic to accurately model the reality of consumer decision-making behavior. Many psychological studies go against the assumption of human rationality, proving rationality is limited and often compromised. Our rationality is bounded in complex situations and tainted by various decision-making biases and visceral states of mind. There are many situations in which we are blinded by expectation biases and therefore do not find ourselves attaining the utility maximizing bundles of goods in the long run. The second major assumption of consumer theory is says the utility ranking of bundles of goods is dictated by ordinal preferences. This leaves out the intensity of our preferences, so it doesn't ask the question "how much do we prefer one good over another good?" Without asking this question, we cannot know an individual consumer's marginal utility and therefore we cannot know a society's net utility.

The economic model of consumer theory does not account for these complexities, and in not doing so over-simplifies itself. Available literature and research in psychology would be very valuable to economists in revamping the consumer theory model. Economists should work to collaborate with psychologists to strengthen the over-simplified model of consumer theory as to incorporate irrationality and cardinal preferences into the model. This would accomplish greater accuracy not only in predicting consumer preferences, but also in predicting the amount of utility consumers would attain from their preferences. Since utilitarianism is at the foundation of economic theory, and achieving the highest level of utility for society is the necessary goal of utilitarianism, shouldn't economic models strive to predict and achieve this with a great deal of precision?

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