

THE ROLE OF BEHAVIORAL ECONOMICS ON CONSUMPTION AND CONSUMER CHOICE BEHAVIOR



Social Sciences

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Abstract

This paper aims to analyze how behavioral economics theories and practices play a crucial role on consumption and consumer choice behavior. Behavioral economics great purpose is to obtain deeper understanding of human behavior and interactions, thus to understand how they interact both as individuals and as a group. Furthermore, by observing how an individual chose its precious time, income or even assets we can assume how that individual shall make the choices. Among many important theories of behavioral economics, prospect theory and its loss and gains aspects are mostly and widely studied, thus applied aspects on consumption. Otherwise called status quo bias, (Kahneman et al, 1991) consumers tend to focus and rely on status quo as a reference point, and consider that any deviation from this course could led to their loss. Prospect theory show that individuals are loss-averse, hence they more dislike losses rather than counterpart gains, therefore they are more willing to take risks to avoid a loss. Consumer behaviors towards losses or gains may also lead towards endowment effect – an attachment feeling towards valuing and paying higher price for an item that is already in possession, rather than owning a new one (Thaler, 1980). In behavioral economics consumer choice is influenced also by mental accounting, where according to Thaler (1985) is used as a cognitive bookkeeping tool that consumers use in order to keep records of financial activities and to control consumption. Application of behavioral economics theories and examples illustrated in this paper aim to show that BE and its principles have been applied in many consumption and consumer choice domains like product choice and product value, consumer spending and behavior.

Introduction

As a sub field of economics, behavioral economics' great purpose is to acquire deeper understanding of human behavior and interactions, hence to understand how they interact both as individuals and as a group (in organizations). Furthermore, by monitoring how an individual chose its precious time, income or even assets we can assume how that individual shall make the choices. To better interpret these observations, behavioral economics construct a theory by incorporating knowledge from psychology, anthropology, neuroscience and other fields. That is, to better love human individuals, it is necessary for one to first understand them (Ogaki and Tanaka, 2018).

In a perfect world, people would always tend to make ideal decisions that shall provide them with the utmost benefit and satisfaction. In the economics, rational choice theory indicates that when individuals are offered numerous choices under the circumstances of scarcity, they would tend to select the alternative that maximizes their satisfaction. Under this theory the assumption is that individuals, given their preferences and limitations, have capabilities to bring rational decisions by efficiently evaluating costs and benefits of each available option provided to them (Ostrom, 1998). The rational individual has self-control, is not influenced from external factors, hence knows what is best for oneself and final decision will be the best choice made.

However, behavioral economics explains that individuals are not rational, therefore, cannot make good decisions. Adam Smith was one of the first to recognize that individual economic decision making was defective and is influenced from values of equality and justice (Ashraf et al, 2005). Another economist, Herbert Simon on 1955 created the term ‘bounded rationality’, arguing that individuals do not retain endless decision-making capabilities, but rather they are limited by the volume of information and time they possess relevant to the decision (Simon, 1982). Furthermore, in classical behavioral economics, economic agents are perceived as bounded rational, thus procedurally rational. Therefore, bounded rationality is neither sub-optimal nor irrational and the behavior of economic agent is anticipated to be examined through possible actual techniques involved in decision making. Later on, Kahneman and Tversky (1979), developed Prospect Theory, which indicates that individuals’ decisions may not be always ideal. Individuals readiness to pursue risks is induced by the way in which options are outlined. A classic decision example is:

Which of the following an individual would select:

- 1) A. Definite win of \$300, or
B. 30% chance to win \$1000, and 70% chance to win nothing?
- 2) What about:
A. Definite loss of \$700, or
B. 70% chance to lose \$1000, and 30% chance of not losing anything?

Kahneman and Tversky with their work indicate that individuals’ responses are different if options are outlined as a profit (1) or a loss (2). When individuals would face first problem, majority of them would select less risky alternative A. However, when individuals are asked to choose second problem, most of them would decide for riskier alternative B. This causation occurs because individuals tend to dislike loses more than the alternative of profiting. The notion of giving something up is more hurting than the pleasure of receiving it (Kahneman and Tversky, 1979). An economist named Richard Thaler, economist and founder of behavioral economics inspired from Kahneman and Tversky work came up with the well-known concept of *mental accounting*. This concept argues that individuals treat money differently, depending on its origin and intention of usage, rather than viewing it as mental accounting. Based on this theory, individuals basically would think of value in comparative rather than in absolute terms (Thaler, 1999). An example of this theory is applied in consumption where some individuals would rather use credit card upon their purchasing goods and services, while others would prefer cash. Recently a group of theories called dual system theories increased growing importance in the research of behavioral economics. These dual system theories are often referred to as system 1 and system 2. System 1 entails thinking processes that are intuitive, are automatic, based on experience and somewhat unconscious. Heuristics are usually used to help shape judgements and decisions swiftly and to enable an individual to react fast upon it. This type of thinking it doesn’t require high cognitive capacity, hence may still be in action when great volume of cognitive resources are already assured by parallel cognitive tasks. Nevertheless, it won’t necessarily harm decision

accuracy. For instance, an individual, may consider pension investments very risky, due to having a family member experience a heavy loss upon investment on such a scheme during financial crises (Kahneman, 2011). On the other hand, system 2 processes entail a rational method of informational processing. It incorporates deliberative and reflective thinking, hence information is thoroughly measured and processed in a ruling fashion. System 2 is more reflective, it can be controlled, it is planned and analytical (Samson and Voyer, 2014).

Consumption and Consumer Choice Behavior

For many decades, behavioral economics was considered an unconventional discipline, somehow dissatisfied little cousin of standard economics. Even though traditional economists unwillingly confessed that individuals may behave irrationally from time to time, they continued to stick to their original wisdom. Drawing on feature of economics and psychology, behavioral economics supposition is that cognitive prejudices often tend to prevent individuals from making rational conclusions, despite their best efforts. Behavioral economics avoids the extensive principles of standard economics, greatly taught in the business universities, hence assesses the real conclusions consumers make, how much money to spend on a cup of tea, whether saving or not for the retirement, whether to make healthy decisions on a diet and so on (Ariely, 2009). Bounded rational choices made from consumers due to limitations on thinking process are depicted on Dan Ariely's work predictably irrational, where in a study, participants were asked whether they would purchase a wireless keyboard for a dollar amount that was equal to their last two digits of social security number. Then followed by secondary question what is the maximum price they are willing to pay for it. The results of wireless keyboard show that individuals from the top 20 percent of social security numbers were willing to offer three times more than the bottom 20 percent. This example reveals anchoring, a practice where numeric value delivers a non-conscious orientation point that influences consequent value perceptions (Ariely et al, 2003).

Behavioral economics has created empirical proof where individuals may not act like 'homo economicus', but tend to use their brains in richer and more complex – perhaps if not always better ways. Such causation is partly owed to the fact that individuals languish from cognitive restraints, systematic misperceptions and emotional effects in an environment where their decision making is influenced. One proposal is that individuals may use rule of thumb or even adapt second best alternative when faced with complex and challenging decisions (Garces, 2010).

In the following section we will discuss how behavioral economics theories are closely related to consumption and consumer choice behavior.

Among many important theories of behavioral economics, prospect theory and its loss and gains aspects are mostly and widely studied, thus applied aspects on consumption. Otherwise called status quo bias, (Kahneman et al, 1991) consumers tend to focus and rely on status quo as a reference point, and consider that any deviation from this course could lead to their loss. Fear of

deviation from this course, consumers would prefer to maintain a pre-set path (i.e. default) rather than moving away from default. For instance, pre-setting defaults on restaurant tipping leads to larger tips on consumption behavior. Pre-setting default on organ donation results into larger donation rates compared to default not to provide donation (Johnson and Goldstein, 2003). Furthermore, prospect theory outlays how certain individuals decide between alternatives that involve risk and uncertainty or in other words between benefits and losses. Such an example is the difference between these two patterns:

	Benefits	Losses
High possibility Effect of certainty	90% chance to win \$5000 Fear of dissatisfaction Risk averse	90% chance to lose \$5000 Hope to prevent loss Risk seeking
Low possibility Possibility effect	5% chance to win \$5000 Hope of benefiting large Risk seeking	5% chance of losing \$5000 Fear of losing large Risk averse

Prospect theory of (Kahneman and Tversky, 1979) show that individuals are loss-averse, hence they more dislike losses rather than counterpart gains, therefore they are more willing to take risks to avoid a loss.

Consumer behaviors towards losses or gains may also lead towards endowment effect – an attachment feeling towards valuing and paying higher price for an item that is already in possession, rather than owning a new one (Thaler, 1980). Furthermore, Kahneman argue that endowment effect revealed that consumer’s eagerness to pay for a cup was significantly higher when they already possessed a cup compared to those consumer’s that did not possessed a cup (Kahneman et al, 1991).

In behavioral economics, consumer choice is influenced also by mental accounting, where according to Thaler (1985) is used as a cognitive bookkeeping tool that consumers use in order to keep records of financial activities and to control consumption. In addition, one of the key tools to support consumer track and control their spending activities is by using earmarking, where consumers would allocate their expenditures into different mental categories. For instance (meals and leisure activities) expenditures allocated based on the pre-assigned budget on each category. In mental accounting consumers tend to treat money differently, depending on factors, its origin and intention of usage. A very important term underlying this theory is fungibility, where all the money is the same, hence has no labels, therefore, consumers consider assets as less fungible than they really are, they consider assets towards three different accounts: current wealth, current income or even future income. For instance, consumers considering small gains (\$100 lottery win) is usually considered as a current income, thus consumers tend to spent this amount of money.

Whereas large gains (\$10,000 work performance bonus) consumers treat it as a wealth, hence is considered for saving (Thaler, 1985).

Besides mental accounting, another important aspect of consumer irrational behavior is sunk-cost fallacy. Nevertheless, individual's continuation of irrational behavior towards expenditures or previously invested resources like money, time and effort is sunk-cost. The justification of this fallacy is that consumers believe that the money they have already spent on purchasing goods justifies spending more, or it may even require a consumer to spend more in order for the money spent does not go to waste (Thaler, 1985). In terms of consumption, credit card payments are often seen as psychological factor towards incurring higher sunk costs compared to cash. Very often consumers would rather purchase their goods and services with credit cards, rather than cash (Soman, 2001). For instance, a person may purchase a \$30 ticket to a concert and then drive through a horrible blizzard rain, just because he feels that he needs to attend this concert due to already made initial investment. According to Thaler (1999) making decisions based on money and time spend, individuals make wrong judgements and cannot recuperate from that. A good example is investors where they often base their selling decisions on acquisition prices. Purchase of stock or any other securities at a certain price, months later their prices start to drop, now the question arises whether the investor should sell the stock or keep it for later maybe the price will increase again. The fallacy is that the investor spent a lot of money on this stock and he has no desire to sell it now. The rationality that the future shall bring any benefit is what many individuals fell in sunk-cost fallacy trap.

Related to heuristics, salience is another factor that plays a crucial role on consumer's judgement and decisions, hence it grabs attention from the consumers and on many occasions nudges consumers towards a desired behavior (Tversky and Kahneman, 1974). A great example of salient is illustrated with wine from Bordalo, Gennaioli and Shleifer in their research paper. Let's assume a consumer is in a wine shop and he has to decide between French Syrah priced at \$20 and Australian shiraz selling for \$10. Knowing that the consumer's priority choice is French Syrah, it is 50 percent better and selling for twice as much. After giving some consideration the consumer decides to purchase Australian shiraz thinking it is a better bargain. Few weeks later, at a restaurant the consumer sees the same wine on the menu list, however, their prices are 40\$ higher for each bottle compared to the shop's price. French Syrah now sells for \$60, whereas, Australian shiraz sells for \$50. Knowing that French Syrah is 50 percent better, but only 20 percent more expensive than Australian shiraz the consumer sees it as a better deal, he gets splurged and orders the French wine. The intuition that goes behind consumer's mind is that at the wine shop the price change between the cheaper and more expensive wine is more salient than the quality difference, thereby reassuring the consumer to resolve for the cheaper wine. However, at the restaurant, after price hikes, the quality difference is more salient, thereby reassuring the consumer to show off. This type of thinking features a decision making that the consumer's attention is drained into and his decision is created by the most salient aspect in the choice he faces (Bordalo et al, 2013). Furthermore, in a research paper from (Sheth et al, 1991) about consumer choice behavior, describing five consumption values: functional value, conditional value social value, emotional

value and epistemic value, authors argue that while consumers desire to maximize consumption by trying to have all consumption values, it is often not realistic, therefore, consumers are willing to receive less of one value in order to increase more salient from another value. Sort of trading off fewer salient for more salient values.

Conclusion

Behavioral economics has significantly influenced consumer choice behavior in the last decades. Behavioral economics great purpose is to obtain deeper understanding of human behavior and interactions, thus to understand how they interact both as individuals and as a group. Furthermore, by observing how an individual chose its precious time, income or even assets we can assume how that individual shall make the choices. In a perfect world, people would always tend to make ideal decisions that shall provide them with the utmost benefit and satisfaction. The rational individual has self-control, is not influenced from external factors, hence knows what is best for itself and final decision will be their best choice made.

Nowadays, it is a shared knowledge and broadly accepted that consumers are cognitive misers and therefore, small and unintentional changes in the decision circumstance can significantly influence their decisions. Tenets like status quo, endowment effect, mental accounting and sunk cost play a crucial role on consumption, consumer choice behavior and decision making. These tenets not only postulate clarifications for many apparently irrational consumer behaviors, they also provide perceptions into how to un-bias irrational behavior and enable desired behavior. Application of behavioral economics theories and examples illustrated in this paper aim to show that BE and its principles have been applied in many consumption and consumer choice domains like product choice and product value, consumer spending and behavior.

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