CONSUMER ' S CHOICE: BEHAVIORAL CHALLENGES TO NEOCLASSICAL ASSUMPTIONS

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Abstract: The Neoclassical assumptions regarding the consumer's choice represented, untill recently, a strong point, on which the mainstream consumer's theory was leaning. Yet, more and more voices rise, questioning about the perfectly rational, the complete information based or maximizing utility based choice. These voices looked for a better understanding of the psichological incentives behind the economic action of individuals and are broadly grouped under the name of „behavioral economics". Ideas like „bounded rationality", „prospect based choice", „incomplete or assymetric information based choice", „intertemporal consumption choice" are challenging the neoclassical assumptions and represents fresh approaches founded on both psychological and economic backgrounds and . If they will strengthen or shatter the neoclassical assumptions, is a question that still awaits for an answer. This paper attempts to sinthesize the main behavioral economics contributions in the field of consumer's choice, taking into consideration also the Neoclassical model upholders responses.

Keywords: behavioral economics; neoclassical assumptions, consumer's choice, rationality, consumer's preferences.

Introduction

Assumptions on the behavior of individuals faced with choices that determine the economic action are as old as the economic science. Present in Adam Smith's work and lying at the foundation of the still mainstream neoclassical economic theory, these assumptions actually relied on brilliant intuitions about human psychology.

The rapid development of psychology as a science and the progress in sociological research inherently made room for new behavioral perspectives in economics. Thus, behavioral economics became a perpetual challenge to neoclassical assumptions, broadening the research area and trying to insert a bigger amount of realism to the theory itself.

This paper tries to synthesize the inputs that mainstream economics got from the behavioral approaches.

1. The Neoclassical Consumer's Theory Assumptions and Behavioral Insights

The neoclassical consumer's theory is assuming that the individual involved in economic actions is perfectly rational and has all the information necessary in order to evaluate different consumption bundles; he makes his choice by establishing a preference

order, which is necessary under the constraint of resources rarity, taking into consideration the price of goods and the available income, namely the budget constraint. The assumption of perfect rationality is build on the utilitarian idea that every individual will act and decide chosing one consumption bundle over another in order to maximize his utility.

Consumer equilibrium is thus defined by the situation in which the individual obtains the maximum amount of utility possible within his budget constraint.

This approach to consumer's behavior has been underpinned, mainly, by the works of Carl Menger, Leon Walras and Stanley Jevons, in the second half of the XIXth century. Although afterwards the neoclassical schools of economic thought followed different paths (broadly reffered to as: the English, utilitarian school; the Lausanne, mathematical school and the Austrian school), everyone of them had an impact on building the neoclassical theory as we know it today. Thus, the main neoclassical contribution relies on the revolutionary subjective theory of value according to which goods do not necessarily have an intrinsic value; instead, the value is attributed subjectively, by individuals, according to the level that particular good satisfies a specific need of the acting individual. In this way, utility is no longer intrinsic, but depends on the link between goods and their ability to satisfy needs (Pohoata, 1996, p. 231). People act following the utilitarian judgement: their behavior is a permanent act of weighing the specific quantities of utility they can get by consuming different bundles og goods, in an effort of maximizing their total utility.

So, at the very core of the neoclassical models there are several psychological assumptions. Irving Fisher and Stanley Jevons extensively used psychological statements in their theories and ideas. Earlier, the German economist Heinrich Gossen released a theory concerning human relations and the way they impact human actions („Entwickelung der Gesetze des menschlichen Verkehrs und der daraus fliessenden Regeln für menschliches Handeln" – „The Laws of Human Relations and the Rules of Human Action"). He stated the law according to which the intensity of a need diminishes when we constantly increase the quantity of the good consumed in order to fulfill that need, untill „satiety is ultimately reached" (Hagendorf, 2010). This law became, in neoclassical terms, *the law of diminishing marginal utility*.

During the further development of the theory, the introduction of other psychologically based assumptions was left aside. The stress was on using and constantly perfecting the mathematical apparatus in order to create a viable model that could result into strong predictions and/or suggest normative economics.

The psychological insights are not a new approach in economics. Actually, classical liberals based their theories on such ideas: Adam Smith developed, in „The Theory of Moral Sentiments" an impressive analyse of human emotions, motivational patterns and factors and social behavior (Smith, [1790], 2005); this analyse later became the psychological framework that sustained his famous economic and social „Inquiry into the Causes and Wealth of Nations" (Smith, [1776], 2011). For instance, observing that the negative impact of involving in a painfull, unpleasant action is bigger than the positive emotional effect of engaging in a pleasent action (Smith, [1790], 2005, p. 109) Smith raised an idea which will be the foundation of Kahneman and Tversky's prospect theory: *loss aversion*.

More or less, psychological insights of the neoclassical theory rest on the assumption that utility is strictly related to the link between needs and goods. These needs are not

variable. Inside the model, they are considered fixed; also, the neoclassical assumption is that needs, as long as utilities attached to goods, are perfectly divisible and can be strictly ranked. Once the order of preferences being established, it becomes stable, so that, if one individual chose one good over the other one time, he will always choose the same given the prices and income. The perfect rationality with which the individual is endowed means that he is never going to chose to consume a good after the point where the marginal utility of the last unit consumed is zero (so there can be no negative marginal utility) and also that individuals will refrain from consuming a good which has a marginal utility inferior to that attached to a different wanted, available good (Pohoata, 1996, p. 228).

Wondering about the realism of such assumptions and about situations in which the accuracy of the model would be damaged by the existence of different behavior was lost under the concern of developing mathematical instruments able to underpin the consumer's theory, the producer's theory or the equilibrium theory.

2. The Methodological Challenge

In this context, behavioral economics gives a necessary incentive to reconsider the neoclassical assumptions, not necessarily in order to replace the existing models, but rather to broaden and relax its assumptions in a manner that could bring realism and accuracy to the models. From a historical perspective, the scientifically based psychological inputs in economics could be considered a necessary, natural evolution. Camerer and Loewenstein argue, for instance that, at the time when Adam Smith was writing his work, supplying economics with scientific rigour and coherence, psychology didn't exist as a discipline (Camerer, Loewenstein, 2002, p. 3). Indeed, the agglomeration of ideas and concerns in this field allowed psychology to rise and rapidly build scientific foundations at the end of the XIXth century and, stronger, in the first part of the XXth. Once it happened, though, it truely was a matter of time since preoccupations in behavioral economics would appear.

Economic models and theories are meant to capture patterns of behavior which, in their turn can be used in order to predict future behaviors or evolutions of economic phenomena; the neoclassical theories fit this methodological belief. Yet, neoclassical theories and models rely on assumptions which are not always realistic. Whether the economic theories should rely on realistic assumption or not is still a question for scientific debate. Milton Friedman argued, in his work „ The Methodology of Positive Economics", that the realism of the assumptions should not be a measure of judging a theory (Friedman [1953], 2008). Behavior economics researches seek to increase the assumptions realism, acting, in this way from a critical point of view in this specific methodological issue: the more realistic the assumptions of the model, the more accurate the predictions (Camerer, 2014, p. 2; Camerer, Loewenstein, 2002, p. 2).

In that sense, behavioral economics is trying to improve the capacity of the neoclassical models to supply valuable predictions by expanding the assumptions in a manner in which they can address and include psychological factors that give these assumptions a realistic dimension. For instance, interpreting the "perfect rationality" of the individual who

acts as a consumer/producer in a different manner, by taking into consideration and analyzing the seemingly irrational behavior of individuals in different circumstances, widens the capacity of the consumer's theory to cover a bigger part of economic behavior, thus improving its capability of delivering accurate predictions.

3. Preferences And Perfect Rationality Challenged

Synthesizing, the neoclassical assumptions which were challenged by behavioral economics researchers are: the perfect rationality assumption; the stable preferences assumption; the perfectly informed individual assumption; the preferences order assumptions; the homogenous goods assumption; the perfectly divisible needs and utilities assumption.

In his book, "Administrative Behavior" published in 1947, Herbert Simon was the first to challenge the perfect rationality assumption. While agreeing that most of the individual choices follow the rationality rule, Herbert Simon states that some decisions do not have as an outcome the optimal choice, but the most preferred choice after evaluating known alternatives (Simonsen, 1994, p. 4). When time is a scarce resource, the perfect information assumption fails to be realistic; in these circumstances, faced with instant decision processes, the individuals act rationally related to their goal of maximizing utility, but often base their decision on irrational heuristics. The process of decision making is rational, but the principle ruling this process of deciding under uncertainty conditions is "satisficing", meaning that often, the individuals choose the "good enough" alternative (Simon, 1985, p. 295).

The "bounded rationality" assumption was the foundation from which Daniel Kahneman built (1979) and further developed the prospect theory, along with Amos Tversky. The theory relies on cognitive psychology statements, integrating, in a complex manner, psychology researches with economic ones. Not only the rationality assumption is being challenged this time, but also the neoclassical preference stability. The "loss - aversion" assumption, intuited by Adam Smith in the XVIII th century, was researched and empirically tested by Kahneman and Tversky: namely, it seems that people tend to dislike to lose goods from their consumption bundles more than they like to add goods in their bundles (Camerer, 2002, p. 16). The loss aversion assumption contradicts the stable preferences assumption by inferring that preferences depend on some reference point.

George Akerlof, also, studied decisions individuals make in market characterized by asymmetric informations. Also, his research on psychological factors that influence decision revealed new perspectives in defining preferences; in George Akerlof and Rachel Kranton's book "Identity Economics: How Our Identities Shape Our Work, Wages and Well-Being" non economic factors are identified behind economic action. They differentiate between basic preferences of which neoclassical theory is concerned about and preferences derived from social norm and rules (Akerlof, Kranton, 2011, p. 10) which actually change the preferences stability assumption and challenges at its core the neoclassical assumption that people are basically choosing the bundle that best suites their need given the budget constraint. Thus, the economic act of choosing one bundles over another may be motivated and/or limited not only by the budget constraint, but also by social rules to which they adapt their behavior.

Preferences would be, in this situation, dependant on the social context and the rules emerged from it.

The identity utility is defined as the benefit obtained by following one's social norms; a disutility appears when one's behavior does not suit the accepted social rules. Maximizing the identity utility would mean choosing the specific bundles that ensures the best conformity to the social rules and not necessarily the bundles that best suits one basic need (Akerlof, Kranton, 2011, pp 27-28). The authors analyze has the explicit goal of reintroducing human passions and social institution in economics (Akerlof, Kranton, 2011, p. 16), thus bringing back in front of the behavioral researchers the insights that Gary Becker had on human behavior and needs.

The effort of Akerloff and Kranton towards integrating psychological and sociological approaches of preferences is not unique. Dan Ariely, George Loewenstein, Colin Camerer and others researched about non economical motivation of economic actions, further integrating economics with psychology, social psychology and anthropology approaches.

Conclusions

What behavioral economics tries and manages to do is to increase the explanatory power of neoclassical models, instead of replacing them with new ones, capable of better explaining economic phenomena. When reconsidering neoclasical assumptions, behavioral economics researchers are actually improving the approach to economics based on utility maximization and equilibrium, by building a better empirical and theoretical foundation.

In the process, new questions rise and new research directions appear. While the behavioral approach to economics may broaden the neoclassical assumptions, making the models and theories more accurate in terms of predicting outcomes, the question can be asked weather reaserching too thoroughly the out of the ordinary situations and circumstances of the general theory doesn't actually have a restrictive impact on the generality of the theory. The answer is yet to be obtained. Nonetheless, permanent inputs and further challenges to mainstrean economics constantly signals toward the vivacity of the scientific's economic debate.

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