

## BEHAVIORAL INPUTS TO THE THEORETICAL APPROACH OF THE ECONOMIC CRISIS

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**Abstract:** *The current economic and financial crisis gave room for the theoretical debates to reemerge. The economic reality challenged the mainstream neoclassical approach leaving the opportunity for the Austrian School, Post Keynesianism or Institutionalists to bring in front theories that seem to better explain the economic crisis and thus, leaving space for more efficient economic policies to result. In this context, the main assumptions of the mainstream theoretical approach are challenged and reevaluated; behavioral economics is one of the main challengers. Without developing in an integrated school of thought yet, behavioral economics brings new elements within the framework of economic thinking. How are the main theoretical approaches integrating these new elements and whether this process is going to narrow the theory or enrich it to be more comprehensive are questions to which this paper tries to answer; or, at least, to leave room for an answer.*

**Keywords:** neoclassical approach; economics crisis; behavioral economics

**JEL Classification:** D03; G01

### Introduction

The major theoretical approaches use psychological assumptions in their explaining theories of the economic crisis, consistent with the hypothesis that stand at the theoretical approaches foundations. Within the context of explaining the economic crisis, the focus lies on the way in which the economic agents are making their economic decisions of consumption, production or investment.

The mainstream neoclassical approach relies on the perfect rationality assumption in order to base the theory of optimizing decision under risk conditions. Yet, by confrontation with the recent economic and financial crisis, the neoclassical approach's basic assumptions seem to stagger, placing a shadow of doubt, at the level of doctrinaire and theoretical debates, upon the realism and the degree of generality of the resulting models and also upon the efficiency of the economic policies they inspired.

In this context, the challenges from the behavioral economic thinkers, especially from the Daniel Kahneman and Amos Tversky's prospect theory (Kahneman, 1979), reemerge in front of the academic debates framework; questioning the basic assumption of the mainstream neoclassical approach from this perspective, supported by psychological scientific research challenges the capacity of the neoclassical model to catch, in predictive models, the economic behavior.

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The behavioral economic lens provokes at a methodological level and leaves room for other non-mainstream theoretical approaches to re-enforce their doctrinaire positions, integrating the elements raised by the prospect theory and the behavioral psychological inputs. The Keynesian investment theory, the postkeynesian economic crisis theories, the Austrian school approach and the institutionalist theoretical approach re-enforce their psychological assumptions through behavioral researches, suggesting a higher degree of adequacy to economic reality and a better predictive capacity.

To consider such subjective elements that relate to individual psychology takes a conceptualizing effort of defining terms from the psychological scientific background, in order to make such concepts large enough to cover the general trend of economic reality and not the particular, specific, exceptional behavior. In this particular case, the theory that bases on such narrow psychological assumptions risks to be narrow at its turn, fully explaining just a particular situation. The degree of generality and addressability is usually the norm of measuring a theory's validity. Thus, a theory that addresses and explains an exceptional behavior, although useful, remains narrow and restrictive for the normative level.

From this point of view, the behavioral economic thinkers and researchers methodologically challenge the mainstream theory, but also other theoretical approaches. Their efforts do not coagulates yet into a specific school of thought. Yet, attacking the neoclassical assumption of perfect rationality, bringing in front the reality of asymmetric information and of economic decision making process under risk and uncertainty, stressing the importance of concepts like "market sentiment" and "moral hazard" (Dow, 2012), and also focusing upon studying the importance of trust between commercial banks, central bank and population as explaining elements for the economic and financial crisis, forces the mainstream neoclassical theory and the other non-mainstream approaches to reconsider the psychological assumptions they base their line of thought, in order to enrich the basic hypothesis and/or consider new ones that better link the model to the economic reality.

Further on, this paper is trying to describe the behavioral elements that led to contesting the neoclassical theory's assumptions and to analyze the way in which these elements resulted in challenging the explaining and predictive power of the optimizing decision under risk model, leaving room for other theories attempts of approaching uncertainty as a starting premise of any economic decision.

### **1. Psychological assumption in the mainstream and other non-mainstream theoretical approaches**

The recent economic and financial crisis questioned the explaining capacity of the mainstream neoclassical approach, placing the economic thinkers in a position of trying to adjust the starting assumptions in order to better explain the mechanisms of the crisis and to permit more efficient instruments of economic policy for preventing and managing crisis.

The mainstream neoclassical theory is founded on the assumption of existing intrinsic stabilizing market forces that allow them to converge towards equilibrium and also on their coordination capacity in perfect competition conditions. So, as long as the market has the certainty of ensured perfect competition conditions, and especially perfect information, the economic agents choices will always be rational, leading toward spontaneous equilibrium at levels of full employment.

As long as the economic individual acts rationally, benefiting from all the information necessary to him, there is no place for mishaps. Therefore, at the normative level, the neoclassical economic policies focus became to ensure a degree of market transparency as high as possible, to facilitate the access to perfect information for economic agents and to ensure, generally, the conditions necessary for the perfect competition to manifest. Such a framework guarantees, in neoclassical view, a rational behavior.

So, any economic behavior that does not result into a decision that stands between the theoretical parameters considered, falls into the category of "irrational" behavior. At a theoretical level, "irrational" behavior does not diminish the explaining power of the mainstream approach, due to its specific character of exception; at the normative level, this irrational behavior is examined in order to discover and diminish the causes that resulted into such behavior.

Some of the factors that enforced the recent economic and financial crisis were the positive expectations of economic agents about the continuous increase in the price level and about the permanence of the financial stability. From this point of view, the mainstream theory approaches the economic crisis with its own instruments and explaining mechanisms, from within, trying to make economic reality match with the model and not the other way around (Dow, 2012, p. 81). Irrational expectations that results into irrational behavior do not fit with the neoclassical approach; they can only be the result of some imperfect information or irrational behavior of other economic agents. The possible causes of irrational behavior are also judged within the theoretical framework of the mainstream approach: they can refer to the existence of asymmetric information and to factors that disturb one way or another, the correct information in the market ("lender of the last resort type of

government intervention) (Dow, 2012, p. 80).

The economic policies developed towards preventing future crisis and managing the current one followed the theoretical framework, focusing on perfect information and the decision optimization under quantifiable risk

The further development of the decision making process mechanisms under risk and uncertainty follows the tracks of the neoclassical theoretical approach, especially in what its modeling part is concerned. When the economic agent is confronted with decision under risk and uncertainty, the rational choice means quantifying different options risks and choosing the one option which has the lower risk. The Rational choice theory leads, thus, towards a process of mathematization of the economic decision under very strict parameters.

## **2. Behavioral economics inputs: challenges to the main theory's assumptions and responses from other nonmainstream theoretical approaches**

In this context, the behavioral economic inputs provoke the neoclassical theory to revise its assumptions. 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 homogeneous goods assumption; the perfectly divisible needs and utilities assumption.

The first consistent reaction to perfect rationality assumption came from Herbert Simon in his book, "Administrative Behavior" published in 1947. Without abandoning the idea of rational choice, Herbert Simon broadens the "rationality" concept. Thus, instead of resulting into an optimal choice, Herbert Simon sustains that the decision making process based on rationality has as an outcome the most preferred choice after evaluating known alternatives (Simonsen, 1994, p. 4). He adds time as a limited resource and, as a consequence information as a limited resource to the budget constraint that gives specific shape to the individual choice. Limited by insufficient time and information, the individual will continue to act neoclassically rational trying to maximize his utility, but he is covering the gap resulted from insufficient information with mostly irrational heuristics. In other words, the rationality assumption still stands, the decision making process remains one governed by rationality, but, in uncertainty conditions; this transforms the principles that stand at the base of the decision making process into a "satisficing" one meaning that often, the individuals choose the "good enough" alternative (Simon, 1985, p. 295).

The bounded rationality opened the door towards other questions about decision under risk:

The neoclassical assumption about the process of decision making under risk is that the economic agents can assign probabilities to all future possible economic results. This implies that this process can be modeled so that the exact probability of future results of any options can emerge (Crotty, 1993, p. 3). In other words, uncertainty is not an option for the neoclassical approach. It is just an effect of limited information.

The irrational heuristics match the idea of conventional assumptions which stand at the base of the formation of expectations about the future in the Keynesian investment theory, but also the idea of conventions that support the creation of institutions invested with trust in institutionalists view. These conventions and heuristics represent a different point of view from the neoclassical approach, by suggesting, implicitly or explicitly that the uncertainty and bounded rationality represent constants of the economic behavior and hypothesis of founding a theoretical approach of economic behavior.

The neoclassical view relies, in building the theoretical ground of the decision making process under risk and of the rational expectations on knowledge of the future; assigning probabilities, mathematical modeling and experience of the past are “knowledge” that allows a mathematical model of the rational choice, by getting the uncertainty out of the equation (Crotty, 1993, p. 4; Dow, 2012, p. 84). On the contrary, in the Keynesian approach, uncertainty is a fact and the decision making process starts from there, forming expectations based on confidence in conventional judgments like extrapolating the past to the future and trusting the public opinion and the institutions (Crotty, 1993, p. 4).

The neoclassical approach leave out of the discussion institutional modification, market sentiments, and irrational behavior, thus limiting the explaining and predictive capacity of its models.

The “bounded rationality” assumption was the foundation from which Daniel Kahneman built (1979) and further developed the prospect theory, along with Amos Tversky (Kahneman, Tversky, 1979). The theory relies on cognitive psychology statements, integrating, in a complex manner, psychology researches with economic ones. Not only is the rationality assumption being challenged this time, but also the neoclassical preference stability. The “loss - aversion” assumption, intuited by Adam Smith in the XVIIIth 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, 2005, p. 16). The loss aversion assumption contradicts the stable preferences assumption by inferring that preferences depend on some reference point.

The incorporation of the behavioral elements into the mainstream theoretical approach had the meaning of an adapting effort from inside the theoretical framework, without essentially modifying,

though, the psychological base assumptions. From within, using the deductive method and the mathematical apparatus and keeping the main hypothesis, the mainstream approach made an effort of conceptualizing cognitive limitations and unstable preferences and of integrating them in the analysis as disturbing factors for the rational choice (Dow, 2012, p. 83). Thus, the theoretical and normative efforts remained focused still on diminishing the impact that asymmetric or limited information has on the capacity of making a rational decision.

Comparatively, the Keynesian and post-Keynesian views, but also the Austrian School and institutionalist approaches have starting premises which are more realistic from the psychological perspective.

### **Conclusions**

The behavioral economics approach provokes to reconsider the neoclassical assumptions without, yet, denying their predictive potential. The behavioral economics researchers efforts seem to direct to building models and explaining theories for specific situations in which the rational behavior principle does not seem to function. The landmark is the mainstream neoclassical theory and the results do not necessarily converge towards replacing it, 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 and Loewenstein, 2004, 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 century. Once it happened, though, it truly 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, 2005, p. 2; Camerer and Loewenstein, 2004, 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.

Kahneman seems to realize that the behavioral approach relates to the neoclassical mainstream approach and, especially, on the assumption of rationality as the base of the economic behavior. Although the behavioral inputs have the merit of broadening the limits of the landmark model, the fundamental assumption of the latter cannot be subtracted out of the mainstream approach; they are there with a reason, Kahneman says: "they allow for tractable analysis" (Kahneman, 2003, p. 166).

As Kahneman puts it, (Kahneman, 2003, p. 166) "thus, it now appears likely that the gap between the views in the two disciplines has been permanently narrowed, but there are no immediate prospects that economics and psychology sharing a common theory of human behavior".

Yet, although the behavioral approach relates to the mainstream one, it has the merit of raising questions and reconsidering positions within other non-mainstream theoretical approaches. It seems like the theoretical approaches that start from the uncertainty assumption and do not base their model on a perfectly rational individual find, through behavioral inputs, new ground for increasing the generality of their models and their predictive capacity.

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