Editorial

Behavioral economics, a multidisciplinary field

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Scientific approaches from multidisciplinary and heterodox points of view have resulted in rethinking the paradigms imposed by the most orthodox theoretical perspectives, which in the last century have been challenged by empirical evidence, allowing the construction of new theories and methods in economic sciences.

Adam Smith (1776), also known as the father of political economy, developed his economic theories based on the natural order of things and human freedoms (Ceña Cervantes, 1976). At that time, economics emerged as a result of philosophical thinking, law, and mathematics, and was recognized as a science due to its ability to express assumptions and theories through mathematical and statistical methods. From a historical approach, we find accounting as a tool used by the first merchants and entrepreneurs; economic mathematics, implemented to microeconomic and macroeconomic analysis; econometrics, which combines economic theory, economic mathematics, and statistics; and the most recent theories inspired by physics and even psychology, as is the case of econophysics and behavioral economics.

Ashraf, Camerer and Loewenstein (2005) document that Adam Smith established approaches related to behavioral economics, among which we find concepts such as loss aversion, intertemporal choice and self-control, overconfidence, altruism, fairness, and market interactions. In short, for Adam Smith, economic subjects were not dispassionate, purely interested rational agents, but multidimensional and realistic human beings.

The approaches developed by Richard H. Thaler made him worthy of the Nobel Prize in Economics in 2017 for his contribution in the field of behavioral economics, fifteen years after Daniel Kahneman had received the same award for his contributions in the same discipline. From a theoretical point of view, Thaler (2016) points out that the central problem is having one theory to accomplish two rather different goals, namely: to characterize optimal behavior and to predict actual behavior. From the perspective of

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empirical work, the discipline offers the opportunity to build better models of economic behavior, incorporating assumptions from other disciplines and social sciences.

In his article "*Behavioral Economics: Past, Present, and Future*," Thaler (2016) names several economists who in the early twentieth century further developed Adam Smith's theories of time discounting and the modern economic theory of intertemporal choice, including Arthur Cecil Pigou and Irving Fisher. He also mentions John Maynard Keynes, who anticipated the concept of financial behavior, as well as Vilfredo Pareto and John Maurice Clark, who considered that psychology had an important role in economy. In the mid-twentieth century, Herbert A. Simon (1955) indicated that traditional economic theory proposes an "economic man" who is both "economic" and "rational." His model assumes that this man knows the main characteristics of his environment, has an organized and stable system of preferences and a computing skill that allows him to calculate according to the alternative courses of action available to him, which will help him reach the highest possible point on his scale of preference (i.e., a scenario where utility maximization is replaced by satisfaction).

Thaler (2016) describes that neoclassical economic theory is based on the following particular assumptions about human behavior: a) agents have well-defined preferences, unbiased beliefs, and expectations; b) their decisions are based on such beliefs and preferences, supported by their infinite cognitive capacities and an infinite willpower; they choose what is best, not what is momentarily tempting; c) although they may act altruistically, especially towards close friends and family, their main motivation is self-interest. For him, these are the assumptions that define *Homo economicus*, also called *Econs*. Behavioral economics simply replaces *Econs* with *Homo sapiens*, also known as *Humans*.

Based on these references, Thaler builds his theory also inspired by the works of Amos Tversky and the 2002 Nobel Prize winner in Economics Daniel Kahneman (1974), two Israeli psychologists from the Hebrew University of Jerusalem, who make three central contributions to the discipline of behavioral economics. First, in their article "*Judgment under Uncertainty: Heuristics and Biases,"* they focus on human judgment and how people make predictions and make decisions under uncertainty. Psychologists use the term *judgments*, which economists often call *estimates* or *forecasts*; also *heuristics*, an elegant word for the rules of the game; finally they emphasize *bias*, for example in information, which causes people to make predictable errors (Thaler, 2018).

The second conceptual contribution provided by Kahneman and Tversky (1979) is their prospect theory. While the first research focused on trials, the second centered on decisions, particularly those that are made in environments of uncertainty. This, in fact, is one of the most important contributions to behavioral economics in the last four decades. According to Thaler (2018), this new contribution, in addition to offering a simple theory that could explain multiple empirical anomalies, was able to empirically illustrate two completely different types of theories: normative and descriptive. On the one hand, a *normative theory* refers to a theory of what is considered a rational choice (rather than

a statement about morality). On the other hand, a *descriptive theory* only predicts what people will do depending on the circumstances. The obvious flaw of neoclassical economic theory is that it uses one theory for both tasks: the theory of optimization.

Prospect theory proposes two main moments of observation: editing and assessment in the selection process. In the first moment, a preliminary analysis of the alternatives is made, following a heuristic process where, by identifying identical results, people set a reference point, and where the lowest results are considered losses, while the highest results are gains. In the second moment, based on potential outcomes and their respective probabilities, people are able to assess gains and choose the alternative that gives them greater benefit. The theory shows that people's decisions are more motivated to take risks in circumstances of loss than in circumstances of gain (Kahneman and Tversky, 1979).

The third contribution of Tversky and Kahneman (1981) is related to framing effects and their implications for rational agent models. For example, framing the results in terms of wealth or general well-being rather than in terms of specific gains and losses can dampen the emotional response to an occasional loss. Similarly, the experience of a negative change may vary if the change is framed as an uncompensated loss or as a cost incurred to achieve some benefit. From this point of view, the results may also reflect the acceptance or rejection of responsibility for specific consequences; in this context, the deliberate manipulation of framing is commonly used as an instrument of self-control. When framing influences the experience of consequences, the adoption of a decision frame is regarded as an ethically significant act.

Thaler (2016) stresses that, since the beginning of economic science, economists had implemented different mathematical and statistical tools; the progressive access to increasingly large and rich data sets had given rise to new methods encompassing a multiplicity of experiments, mainly focused on empirical rather than theoretical approaches. Behavioral economics, then, is an evidence-based discipline focused on the development of empirical research. In this sense, it is not revolutionary, but rather a return to the kind of open-minded and intuitive discipline that was initially proposed by Adam Smith, although now supported by increasingly powerful statistical tools and datasets. The disappearance of the discipline of behavioral economics depends on the ability of economists to focus their attention on the study of Humans rather than Econs. Finally, he emphasizes that even though behavioral economics and its applications may not change the world, they will give the economy a more human dimension, allowing the creation of theories that apply to both Humans and Econs, making this discipline more solid, useful, and accurate (Thaler, 2018).

For the case of Latin America, the II International Congress on Economics, Banking & Finance: "Application of experimental economics and behavioral finance in private and public policies," organized by the Universidad de Lima, the Universidad Católica de Colombia, and the Universidad Javeriana de Cali, gathered in Lima, Peru, in November 2019, researchers from different Ibero-American countries to discuss behavioral economics and

behavioral finance.[2] As a result, the Ibero-American Association of Behavioral Economics and Finance (AIEFIC) was created, which established a scientific cooperation network with the *Revista Finanzas y Política Económica*; consequently, it contributed to the Journal a selection of the four best research papers presented at this academic event. These works constitute the first part of this issue of the Journal and, together with other five articles, include researches that bring more evidence to the field of behavioral economics and reflect the new trend of multidisciplinary and empirical research in different areas of economic sciences; for our case, in the field of finance and economic policies.

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