Do All Financial Economists Speak the Language of Positivism?

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Abstract

Behavioral finance is a branch of finance that studies the impact of psychology on financial decision making and market behavior. It challenges the traditional finance approach, which assumes perfect information, rational decision making, and standard utility theory. Behavioral finance incorporates insights from psychology to explain deviations from traditional finance theories, such as why individuals act irrationally due to emotional and cognitive biases. Micro behavioral finance studies individual decision-making processes while macro behavioral finance examines market deviations from efficiency. Contemporary finance research combines both traditional finance and behavioral finance perspectives and often adopts a functionalist and positivist approach with econometric and statistical analysis. The positivist paradigm views science as a method to identify associations among variables and sees theories and variables as mere tools for testing but does not argue that they necessarily describe reality. The research includes a review of papers in the field of finance and focuses on the philosophical stance they have taken while conduction the research. The conclusion derived on the basis of that critical review are provided in the body of the paper and the commentary has been done.

Keywords: Positivism, Interpretivism, traditional finance, behavioral Finance

Introduction

For the traditional researcher in finance the financial environment is occupied by flawless people. They live in a perfect world where they have complete rationality in their decision-making, they can obtain and use perfect information, and that their selections are made based on so-called standard utility theory. But the new creed of finance researchers, widely known as behavioral finance researchers, are in the habit of searching for a more-realistic approach to the financial actor. Richard Thaler, a founding father of behavioral finance, once remarked to the proponents of traditional finance: “The difference between us is that you assume people are as smart as you are, while I assume people are as dumb as I am.” This comparison from Thaler shows how these bespoken gaps in traditionalist and behaviorist perspectives can be magnified to bigger gaps when it comes to framing and emphasis.

Thus, the existence of capital markets and financial reporting is included in institutions in finance study (Ali & Khalidi, 2020). These include theories of efficient markets with no arbitrage (important in asset pricing and market behavior studies), agency theory (important in corporate governance), monetary theory (in banking), and stochastic processes (for financial engineering) (Ali, 2012). Over the last three decades, psychological research has made significant progress in developing robust theories of how people behave, which have been summarized into the categories of drive (fundamental motivations as described by Maslow's hierarchies of needs), cognition (how humans analyse data and draw conclusions), and affect (emotional responses to environmental stimuli, and how those responses affect behavior). While conventional finance does not include any human psychology, behavioral finance normally does not include any, depending instead on economic theory. The explanation is simple that finance institutions position people in complicated situations that are best represented in terms of knowledge, incentives, and actions that may be performed – precisely the building blocks of economic theory.

It is important to be clear about the philosophical stance in research because it shapes the overall approach and methodology of the study. The philosophical stance, or paradigm, guides the researcher's worldview and assumptions about reality, knowledge, and the nature of the phenomena being studied. This, in turn, influences the research questions, data collection methods, and interpretation of findings.

For example, a positivist paradigm assumes that there is an objective reality that can be studied through empirical observation and measurement, while a constructivist paradigm views reality as socially constructed and context dependent. These differing assumptions can lead to different research questions, methods, and conclusions.

Several authors have emphasized the importance of being explicit about the philosophical stance in research. Creswell (2009) notes that "the philosophical orientation of a research study informs all aspects of the research process." (p. 19). According to Guba and Lincoln (2005), "the philosophical stance that the researcher adopts is a crucial aspect of the research enterprise" (p. 7) and failure to explicitly acknowledge and justify one's philosophical stance can lead to confusion and flawed research.

Mertens (2014) further argues that researchers' philosophical stances "guide and shape their choices throughout the research process" (p. 21) and that the selection of a particular paradigm determines the types of research questions that can be asked, the data collection methods that can be used, and the interpretation of data. Denzin and Lincoln (2018) similarly suggest that researchers should be transparent in describing their philosophical stance and that such descriptions should "provide a context for the reader to understand the epistemological and theoretical framework within which the research is grounded" (p. 21).

In sum, being clear about the philosophical stance in research is important because it ensures transparency, clarity, and rigor in the research process. By explicitly acknowledging and justifying one's assumptions and worldview, researchers can enhance the validity and reliability of their findings.

Traditional Finance and Contemporary Research

Traditional finance, also known as classical finance, is based on the assumptions of rational decision making, perfect information, and standard utility theory. It forms the basis of several financial institutions such as efficient markets theory, agency theory, monetary theory, and stochastic processes (Kamoune & Ibenrissoul, 2022). However, this traditional finance approach has been challenged by the evolution of behavioural finance, which considers the influence of psychology on financial decision making and market behaviour (Sharma & Kumar, 2020).

Contemporary finance research is inclusive of both traditional finance and behavioural finance. Researchers continue to develop and refine theories of financial decision making and market behaviour, incorporating insights from both traditional finance and behavioural finance perspectives (Abu-Taleb & Nilsson, 2021). The majority of published academic research in finance adopts a functionalist approach that views finance as a technical practice and uses positivist research methods. The growth of econometric and statistical analysis has also limited finance research to an objective description of human activity (Thathsarani, Wei & Samaraweera, 2021).

Behavioral Finance and the Contemporary Research

An evolving area of finance, which seriously challenges the monopolized and established traditional finance domain, is Behavioral finance. This is the study of the impact of psychology on the conduct of financial practitioners and the resulting effect on markets (Nardo, PetraccoGiudici, & Naltsidis 2016). Behavioral finance is interesting because it explains why and how markets may be inefficient. Sewell has further information about behavioral finance (2001). Micro and macro behavioral finance are the two broad domains of behavioral finance. Individual decision-making processes are described in micro behavioral finance (Rizvi & Fatima 2015). It tries to explain why people diverge from orthodox finance theory. Macro behavioral finance focuses on understanding how and why markets diverge from what traditional finance refers to as efficiency (Copur, 2015). Behavioral finance that individuals suffer from emotional and cognitive biases forcing them to act irrationally (Pompian 2016) and thus end with sub-optimal portfolios.

Methodology

This study provides an overview of the use of research philosophy in finance research. For that this study employees a qualitative approach to provide the conclusions on the use of research philosophy in the researcher used in the area of finance for this purpose a number of research paper produced in the field of finance were reviewed. The focus of the researchers was to read through the philosophical stance of the papers. These observations are stated in classified manner to provide the overview of the different aspect of the research philosophy.

The Positivist Paradigm in Research

Continuing our discussion of rationality, we now throw some light on positivism. This is closely related to instrumentalism, which regards science as a method of identifying associations among observable variables (Rowbottom 2019), but does not contend that the variables themselves, or theories that describe the relationships between these variables, necessarily describe reality. (This is referred to as "realism" in philosophy.) Variables and theories, on the other hand, are only tools or instruments that allow ideas to be tested. In his landmark work Essays in Positive Economics, Milton Friedman argues that economic theory has considerable predictive potential and that the reality of its assumptions is immaterial. Any obvious irregularity can be explained by introducing a new post-hoc psychological inclination. While few traditionalists are rigorous positivists, it is evident that support has less value when rebuttal is impossible (Pence, 2020). Kuhn's viewpoint does not directly contradict instrumental positivism. However, behaviorists frequently argue Kuhn in opposition to traditionalists, who respond with instrumental positivism (Thorpe, 2022).

Ardalan stated in a comprehensive analysis of finance research that the great majority of published academic research is constrained to a functionalist perspective, which considers finance as a technical activity and assumes all information has a practical application. This functionalist view of research has put stress upon the use of positivist research methods (Günbayi & Sorm 2018) whereby finance research has become nothing but the search for explanatory and predictive power. Moreover, growth in the forms of research adopting statistical analyses from econometrics, has nearly limited finance to an “objective” description of human activity (Gourieroux & Jasiak 2022).

Interpretivism

Interpretivism is a philosophical approach in the social sciences that emphasizes understanding the meanings, experiences, and perspectives of individuals and groups being studied. It assumes that reality is socially constructed and subjective, and therefore cannot be studied in a neutral and objective manner (Panya & Nyarwath, 2022).

Interpretivist research typically employs qualitative methods, such as ethnography, case study, and grounded theory, to gain an in-depth understanding of the phenomena being studied. The goal is to uncover the perspectives and experiences of the people being studied, rather than testing preconceived theories or hypotheses (Alam, 2021).

This approach is often used in fields such as sociology, anthropology, and education, where the researcher is interested in gaining an understanding of the lived experiences and perspectives of people within a particular context. It values the importance of subjectivity and cultural diversity, and is often used to challenge dominant or dominant viewpoints and to give voice to marginalized groups (Lehman, 2023).

Positivism vs Interpretivism

Positivism and interpretivism are two broad philosophical approaches to research. Positivism is based on the scientific method and assumes that objective reality exists and can be studied using empirical, quantitative methods to test hypotheses while interpretivism, on the other hand, assumes that reality is socially constructed and subjective (Cuthbertson, Robb & Blair, 2020). It emphasizes understanding the meanings, experiences, and perspectives of individuals and groups being studied. Qualitative methods, such as ethnography, case study, and grounded theory, are often used in interpretivist research. In summary, positivism emphasizes objectivity and generalizability, while interpretivism values subjectivity and understanding of social phenomena from the perspectives of those being studied (Alharahsheh & Pius, 2020).

Rationalism

Rationalism is a philosophical tradition that holds that knowledge can be acquired through reason, intuition, or innate ideas, independently of sense experience. This approach is based on the belief that reason is the primary source of knowledge, and that the mind is capable of comprehending the world through the use of logical deduction and mathematical calculation (Shah, Khan, Ahmad & Arshad, 2020). Rationalism developed as a response to the sceptical arguments of the empiricists, who maintained that all knowledge is derived from sense experience and that there is no certain way of knowing things about the world. The rationalists, on the other hand, believed that certain knowledge could be attained through a priori reasoning, or reasoning that is independent of experience (Akpan & Benedict, 2021).

Rationalism has been influential in many areas of philosophy, including epistemology, metaphysics, ethics, and mathematics. For example, René Descartes, a key figure in the rationalist tradition, held that the process of doubting the evidence of one's senses could lead to certain knowledge. He argued that knowledge could be acquired through intuition and clear and distinct ideas, which are inherent to the mind and can be deduced logically (Malivskyi, 2019). Another important rationalist philosopher was Baruch Spinoza, who held that the principles of reason and intuition could be used to understand the nature of God, the universe, and human beings. He argued that the universe operates according to strict laws of causality and that everything that exists is a mode of God's existence. Rationalism also played a significant role in the development of mathematics, as the rationalists believed that mathematical truths could be deduced through reason and were independent of experience (Tănăsescu, 2021). For example, the mathematician and philosopher Leibniz argued that mathematics was a product of the human mind and that mathematical truths could be discovered through logical deduction.

Overall, rationalism remains a major philosophical tradition and continues to influence contemporary debates in epistemology and the philosophy of mathematics. However, the view that reason is the sole source of knowledge has been challenged by critics who argue that reason must be supplemented by experience and sensory observation in order to arrive at a complete understanding of the world.

Dilemmas of Rationalism

Fama has had a big impact on financial research, particularly in his development of the Efficient Market Hypothesis (EMH), which says that financial markets have complete information. The theory of rationality is central to EMH and modern finance, and says that financial agents and market participants make decisions based on their beliefs and expected outcomes (Singh, Babshetti & Shivaprasad, 2021). However, behavioural finance argues that financial agents do not always act rationally and that factors like trading opportunities or psychological issues can affect their behavior (Yurttadur & Ozcelik, 2019). For example, it has been shown that bad weather can impact stock prices because it can cause negative moods and emotions among traders. This shows that psychological biases can impact trades and stock returns.

Kuhn's book, "The Structure of Scientific Revolutions," argues that scientists don't actually create new things, but instead test and prove the theories we already have. In the 1970s, there was a struggle in finance over empirical research, and today, a similar struggle seems to be appearing, but the challenges presented by alternative perspectives are being quickly shut down by modern finance proponents (Daston, 2020). By redeveloping behavioral finance as a quantifiable project using positivist methodology, the rationality theorem of financial agents remains unchallenged. Researchers like Fama have criticized behavioral finance as a weak attack on the efficiency of modern finance and have tried to view it as a separate area of study (Willett, 2022).

Because the possibility for interdisciplinary study is restricted, the lack of a broader behavioral viewpoint in finance becomes a social science concern. For example, behavioral theories in accounting have evolved with the support of subjects like as psychology, history, sociology, and philosophy, but behavioral viewpoints anchored in economics appear to have a monopoly in finance (Areiqat, Abu-Rumman, Al-Alani, & Alhorani, 2019). Accounting from a broader viewpoint helps scholars to see it as more than just a technical discipline, but one with a social and organisational significance. This social side of studying financial processes is usually absent from academic finance, where theorization is mostly technical and functionalist. According to the society theory that supports positivist and functionalist finance, all human activity, including conduct, can be directly quantified and conforms to a cause-and-effect model of human nature (Ormerod, 2020).

Positivism in Finance Research

The perspective of behavioral finance through a positivist lens ignores the broader ethical considerations of human behavior, relying on unrealistic assumptions about human nature and limiting motivations to profit-seeking (Drakopoulos & Katselidis, 2023). This narrow view of financial agents' motivations crowds out non-monetary incentives, such as those based on moral and ethical considerations. This emphasis on positivist methods in behavioral finance can have negative effects, such as making it harder for researchers who use non-positivist methods to get published in high-ranking journals or be promoted. PhD awarding committees in finance also tend to favor positivist approaches, making it less likely for non-positivist PhD theses to be awarded. This narrow focus on positivist methods in finance is stifling progress and limiting understanding of complex phenomena in the field (Cooksey, McDonald, Cooksey & McDonald, 2019).

The dominance of positivist approaches in behavioral finance has limited the discipline's perspective, neglecting the ethical aspects of human behavior and equating financial agents' motivations solely with profit. This narrow viewpoint also affects researchers, who may struggle to get published in high-ranking journals or obtain PhDs if they don't adopt a positivist approach. Alternatively, research that incorporates other methods, such as interviews with traders, could provide a deeper understanding of human motivations and attitudes in finance (Daxhammer, Facsar & Papp, 2023). A growing body of research is beginning to embrace a pluralistic approach, examining the human context of investment, as seen in works like De Goede's book, which investigates the socio-cultural roots of finance through a genealogical approach.

Expanding the focus on "behavior" in behavioral finance can lead to deeper understanding of complex finance phenomena. By relying mostly on positivist methods, the knowledge in this field may be limited (Tomar, Baker, Kumar & Hoffmann, 2021). This presents an opportunity for finance researchers to broaden their approach beyond positivism and confront the dominant methodology in finance, which may be hindering progress. It is not only an issue for behavioral finance, but for the discipline of finance as a whole and has implications for the social sciences (Ingale, & Paluri, 2022).

Research Recommendations

If a researcher wants to apply a positivist approach in finance research, they can follow the following recommendations. The researcher should clearly define their research question and state their hypotheses in advance. Positivist researchers typically use quantitative methods, such as econometrics, to collect and analyze data. This allows them to test their hypotheses objectively and draw statistically significant conclusions. The researcher should collect data that is relevant to their research question and use appropriate sampling techniques to ensure representativeness. The researcher should use appropriate statistical methods to analyze the data and test their hypotheses. They should also report any assumptions made during the analysis process. The researcher should interpret their results objectively, without being influenced by personal biases or preconceived notions. They should also consider alternative explanations for their results. The researcher should aim to achieve generalizability of their results, which means that they should be able to apply their findings to other populations and settings. The researcher should document their methods in sufficient detail to allow other researchers to replicate their study. This enhances the credibility of the research findings. By following these recommendations, a researcher can apply the positivist approach in a rigorous and systematic manner, leading to more credible and reliable results in finance research.

Conclusion

In conclusion, the ongoing debate in finance research between traditionalists and behaviorists is a matter of perspective on the nature of financial decision-making. While traditional finance is rooted in rationalistic principles and focuses on the efficient use of information, behavioral finance takes a more realistic approach, acknowledging the role of psychological biases in financial decision-making. However, the dominance of positivism in finance research has limited the field to a functionalist perspective, with a focus on statistical analysis and the search for explanatory and predictive power. The debate between rationalism and empiricism continues to shape the discipline of finance and is likely to play a crucial role in shaping its future direction. Ultimately, it may be a combination of both traditional and behavioral perspectives that provides a comprehensive understanding of financial decision-making and market behavior.

Positivism and interpretivism are two broad philosophical approaches to research. Positivism values objectivity, neutrality, and generalizability, and assumes that objective reality exists and can be studied using empirical, quantitative methods to test hypotheses. Interpretivism values subjectivity and cultural diversity, and assumes that reality is socially constructed and subjective. It employs qualitative methods to uncover the perspectives and experiences of individuals and groups being studied. Both approaches have their own strengths and limitations and can be applied to different research questions and fields. Behavioural finance challenges traditional finance by considering the influence of psychology on financial decision making and market behaviour. The vast majority of published finance research adopts a functionalist approach that views finance as a technical practice and uses positivist research methods.

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