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Emerging Markets Queries in Finance and Business

# Behavioral biases of the investment decisions of Romanian investorson the Bucharest Stock Exchange

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**Abstract**

Classical economics and the study of financial markets from a normative point of view have their foundations laid in the rationality of economic agents. The main hypothesis revolves around decision making under rationality. Any(financial) decision is taken as if a person(investor) is maximizing a certain expected utility (welfare).This has been contradicted repeatedly through experiments within the behavioral finance field, whose development took place specifically in order to integrate irrationality in economic decision making. Moreover, there have also been theoretical studies that have shown that investors do not act as if they are rational, but on the contrary, exhibit many biases that lead to poor investment decisions in specific contexts. This paper wishes to analyze the investment decisions and behavior of investors from Bucharest's Stock Exchange, Romania. Using financial transaction data, we wish to study some of the most prominent behavioral biases investors have shown to be prone to. Thus, we wish to see if traders exhibit overconfidence in their trading positions, whether they have a representativeness bias and a disposition effect. The paper is structured as follows: the first section introduces the literature that has been done on similar studies. In section 2, the data is analyzed both from a normative and behavioral point of view. In section 3, we undergo our empirical analysis and test the main hypotheses. Section 4 concludes.



*Keywords:* financial markets, biases, investment decisions, behavioural finance, neurofinance, overconfidence, representativeness bias, disposition effect, Romanian stock exchange

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## 1. Introduction

Investing in financial markets from a normative point of view has been studied extensively over the past decades, numerous theories being elaborated with regards to financial return, financial risk and both of the prior taken together in the practice of investing. Most of the theoretical frameworks that have been proposed in the literature are based on the main criterion of individual rationality – the investor acts as if he is maximizing a certain expected utility (in the financial sense, he is maximizing his welfare), notion that was first approached by von Neumann and Morgenstern, 1947.Markowitz, 1952, proposed a mathematical framework for investment allocation on financial markets – proposal that was the foundation for modern portfolio theory. It represents a cornerstone in modern financial theory as it provides a means for investors to model the allocation of assets within a portfolio for a given required return and selected risk. Sharpe, 1964, develops the CAPM model which can be used to model the return of an asset, given a certain level of risk the investor is willing to take. Of course, both of these important theories, along with other major studies in the financial markets literature, are coupled in the rationality mentioned above. This rationality, taken aggregately, comprises the basis for financial markets efficiency, developed by Fama, 1970, which states that financial markets are able to publicly reveal all information to market participants, the latter being able to take full informed decisions with regards to their trading positions. However, human emotions and irrationality managed to play their role in financial markets movements, both of these factors being studied from a psychological stance by researchers starting with the 1970s. The rather novel field of behavioral finance appears, under prospect theory, developed by Kahneman and Tversky, 1979.The history of literature on financial markets, both from a traditional and a behavioral point of view is extensive and leads to the current study on investing biases. As mentioned above, behavioral finance is a field that captures the irrationality of investors, biases that investors are prone to. These cognitive errors are due to investors' inability to certainly know market movements for the next periods, which inclines them to make biased decisions. Of course, these can prove to be both poor and beneficial for their welfare. The next section describes three behavioral biases that investors are inclined to fall into. Upon this analysis, we start developing our empirical framework to analyze investors' decisions on the Romanian stock market.

## 2. Literature review and behavioral biases

People make irrational decisions in everyday events. Such non-optimal decisions are also taken in the marketplace, where the pressure of losing money can build up intensively, leading to serious psychological cognitive errors. These faulty decisions arise mainly because of human heuristic simplification under risk and uncertainty. We will test for irrational trading decisions in section 3, by studying the following three behavioral biases.

### *2.1 Overconfidence*

Overconfidence is a state in which people tend to think they are better than they really are (Trivers, 1991). Investors that exhibit overconfidence in their trading behavior are likely to expect larger returns during periods of boom on financial markets and such investors also attribute their successes to their skills, while their failures are attributed to "bad luck". Both psychological and behavioral studies have been developed on overconfidence (Campbell, Goodie and Foster, 2004, Lichtenstein et al., 1982). Another important sign of overconfidence is given by trading frequency, these data being used as a proxy for measuring it. Under this hypothesis, Barber and Odean, 2001, have found that US traders trade excessively, revealing a high degree of risk, while making poor investment decisions after buying stocks. Furthermore, using data from a brokerage account in China, Chen et al., 2007, have argued that the Chinese investors show both a disposition effect and a representativeness bias, while also revealing overconfidence in their trading decisions. The overconfidence was