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VECTORS OF EXACT FORECAST IN THE STUDY OF BEHAVIORAL FINANCE

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Abstract. Strongly determined that for true planning and right decision in the economic markets circle the standard (classical) economic theory is not enough. Not infrequently economic forecasting according to classical theory, in the circle of markets, founds, enterprises relatively to results is not profitable and expected. For right prognosis and decision making is necessary to use behavioral theory. Some theory and methods for scientific research may be similar, and representative for all investigations. There are numerous similarities and differences in these theories according to institutions, methods and theory aspects. The behavioral theory refers to psychological and human behavioral algorithms, some biases, emotional filters, heuristic, farming and emotional concepts. Analyzing these factors open the way to more accurate and exact analysis. Behavioral finance can be analyzed to understand different outcomes across a variety of sectors and industries when we can't fully understand it with standard theory.

During the time appears a lot of schools of thoughts about human behavior, wishes and irrationality created with emotions, emphasized changing irrationality according to age, social status, gender, even wealth and level of educations. Recognized that these factors are interrelated, and this relating create biases, that could use like axioms for behavior understanding, and create representative sample for different environments (markets, companies etc.), and countries (low or high developed) where presented low level of shadow economy or even extremely high, all justified with number of variables.

Methods. Classification, Analytic-Synthetic, Historical-Logical, Modeling, Systematization.

Keywords: *Traditional finance, behavioral finance, frame dependence, farming, emotions, bias*

JEL classification: *A14, C53*

Introduction

Although a relatively young field, behavioral finance seems to be growing exponentially. This growth is not surprising given that behavioral finance has the potential to explain not only how people make financial decisions and how markets function but also how to improve them.

Each investor, each enterprise, any market participant wants to receive profits, thus trying to make exact forecast. In the past year dominated theory that each market participant is rational person, and market price forming according to rationality, each irrational behavior suggested wrong, and participant with such behavior learn to rationality or fully loss and leave the market. But, as the way of time, the participants found out more and more market anomalies, which seemed unexplained. As the result, scientist or just volunteers started to dig down in these anomalies, and found out value of irrational behavior, that fully create new unexplored way for economic processes and forecasting which includes social factor, thus unites economic and psychology in one science.

For the reason of best prognosis in the circle of markets participants it is necessary to sum up ways that prognosis should include according to behavioristic theory. Recognize psychological axioms of human behavior.

Theoretical background. The best structured and comprehensive information presented in the works of H. Kent Baker, John R. Nofsinger, they made scientific research in the spheres of corporation, investors, and markets, found out aspects to use and investigate in the circle of behaviorism. Investigated unconscious and conscious decisions, compared theories, methods.

Bloomfield, Robert J., and Kristina Rennekamp examined anomalies in the enterprises and find out correlation between behavioral and finance (accounting) aspects.

Scott, W. Richard. Create ideas according to institutions and organizations, find out and emphasize factors to research for exact forecast.

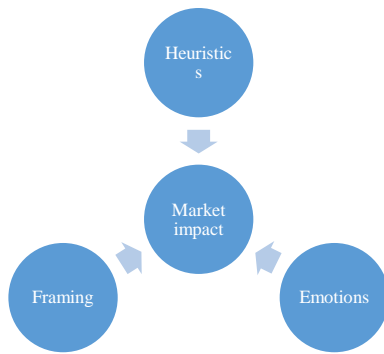
Thaler. R, emphasized and examined human behavior and psychology of using self-finance. To sum up information from this book we can find out how biases, emotions, and losses input on assets valuation, behavior and emphasizing human distinctiveness.

The research results. Observing people financial decisions, it is easy to find out that oftentimes are irrational and do not correspond with traditional finance theory, while traditional theory assume that people make unbiased decisions and can't explain market anomalies.

Behavioral finance is a relatively new but quickly expanding field that seeks to provide explanations for people's economic decisions by combining behavioral and cognitive psychological theory with conventional economics and finance. [1]

The main reason for quick growth is inability of traditional finance fully forecast financial decisions and people behaviors [5].

An underlying assumption of behavioral finance is that the information structure and the characteristics of market participants systematically influence individuals' investment decisions as well as market outcomes. The thinking process does not work like a computer. Instead, the human brain often processes information using shortcuts and emotional filters. [1] Let's divide irrational behavior according to market input for recognizing ways of scientific research Figure 1.



Heuristic: affect, representativeness, availability, anchoring and adjustment, familiarity, overconfidence, status quo, loss and regret aversion, ambiguity aversion, conservatism, and mental accounting.

Framing: the choice depends on how choice is framed.

Emotions: conscious and unconscious needs, fantasies, fears.

Figure 1. Structuring of keys in irrational finance

Indeed, part of the original attraction for a fledgling behavioral finance field was that market prices did not appear to be fair.

According to these conclusions let's find out basic differences between traditional and behavioral finance theory.

Traditional versus Behavioral finance as the truth way of scientific research.

The traditional (standard) school of finance exclude: biased decisions, correlations between errors. Suggesting that each participant make a rational decision and trying to maximize self-interests. Any individual who makes suboptimal decisions would be punished through poor outcomes. [1] And as a result leave the marketplace or advancing to make better decision. Thus, this theory suggest that errors of market participants do not input on market prices, because should be every time rational otherwise leave or learn.

Standard finance argues that investor mistakes would not affect market prices because when prices deviate from fundamental value, rational traders would exploit the mispricing for their own profit. [1] This theory practically includes reliance on arbitrageurs (institutional investors) who keep markets efficiency. Emphasizing that arbitrageurs may also provide irrational decisions, therefore, exacerbate market inefficiency.

Every research study in finance can be placed in a three-dimensional matrix describing the institution being studied, the theory from which hypotheses are described, and the methods used to demonstrate results [2] let's illustrate main difference factors in table format Table 1.

Table1. Main similar and different factors in both theories

Institution	Methods	Theory
High Frequency Trading	Econometrics	Macroeconomics
Capital Structure	Experiment	Microeconomics
Executive Compensation	Mathematical Modeling	Psychology
Managerial Investment	Simulation Survey	Stochastic Processes
Banking	Case Study	Etc.
Monetary Policy	Etc.	
Etc.		

The three-dimensional model of finance research clarifies the rather slight differences between traditional and behavioral finance. Both addresses largely the same institutions and use similar methods.

The institution can be thought of as the topic of study of a finance researcher. “We use the term institution to refer to laws, common practices and types of organizations that persist over long periods of time.” [3] Thus, institutions include norms and beliefs that impact social behavior. And scientific research would be included management forecasting behavior or the nature of conference calls, and common forms of commercial arrangements and “best practices,” such as long-term contracts, relative performance evaluation, and debt covenants.

Behavioral finance includes some psychological rules – biases:

1. Confirmation bias – everyone wants to confirm their existing ideas. Essentially, people hear what they want to hear and no matter how impartial someone thinks they are, they’re going to favor information that supports what they already believe or want to be true.
2. Loss aversion – describes how we fear loss considerably more than we value gaining something of the same worth.
3. Anchoring bias – is where people place more significance on the first piece of information they receive. For example, the first review someone reads about a product will have more impact upon them than the second or third.
4. The bandwagon effect – When a consumer product becomes as fashionable as the iPhone, people buy it purely for the logo. When finance companies tell you every sensible person is paying into their futures, people sign on the dotted line. And when a few people get rich with a new investment opportunity, everyone wants a piece of the action.
5. The mere exposure effect – Otherwise known as the familiarity principle, the mere exposure effect explains why people are more likely to buy from brands they know well.
6. The endowment effect – people place additional value on items they own and evaluate lower items that they want to buy.
7. Sunk cost bias – This bias (or sunk cost fallacy) occurs when people invest time or effort into something. In most cases, people don’t want this time and effort to be wasted, which encourages them to persevere with something until their investment is justified.
8. The halo effect is a cognitive bias where our first impressions influence the way we interpret further information about things or people. This is why a great company with a shoddy website will struggle to sell more online than a shoddy company with a great website [4].
9. The serial position effect -the serial position effect explains how people interpret the first and last pieces of info in a list as being more important and remember them more clearly.

Thinking of biases like axions, we can gather factors which have received from biases, these factors should be used for behavioral examining Table 2.

Table 2. Factors that have relationship with Biases

Age	Income	Trading Behavior
Gender	Education	Personality
Marital Status	Experience	Perception
Profession	Wealth	Attitude
Knowledge	Beliefs	Socio Demographic

These factors connected to each other and had input; each one changes the approach for forecast. These demographic factors rely on and consist of biases according to susceptibility level. For example:

1. Gender factor has susceptibility to: risk lovers, overconfident, disposition effect, risk-averse bias, familiarity bias.
2. According to income we can observe: overconfidence, disposition effect, familiarity bias.
3. Age emphasizes different level of disposition effect, familiarity bias.
4. Financial literacy or level of education shows different level in: disposition effect, emotional bias, mental accounting, overconfidence, self-attribution bias.

As you can observe there are a lot of factors to understand for best and exact forecast of behavior, his factors connected to each other and should be unalised together.

Conclusion

In this paper we examined factors, features and patterns of Behavioral economy, partly comparing with standard theory. Emphasized complexity of analysis, structured biases and find out relations to that. Analyzed that for exact forecast and involving behavior theory as an attachment to classical theory, it is necessary to involve all factors that could recognize human, behavior such as: heuristic, framing, emotion, this factor has impact on markets, and can be used for understanding the anomalies appeared according to classical theory.

The main points to research new relation should be axioms (biases), there are a lot of biases which are changeable according to demographic factors. Thus, there are a lot of biases appear based on: age, gender, income, profession, beliefs, education etc. These factors are useful for market, investment and corporations. There is school of thought of the susceptibility of behavioral biases caused by demographic factors can make use at the time of investment decisions in the stock markets and for corporation decisions.

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