Describing Behavioral Finance Consequences on the Banking Organization

Mojtaba Mali
Department of Management, North Tehran Branch, Islamic Azad University, Tehran, Iran.
Mojtaba_mali@yahoo.com

Mir Feiz Fallah Shams
Associate Professor, Department of Management, Islamic Azad University, Tehran Centeral Branch, Tehran, Iran.
(Corresponding Author)
Fallahshams@gmail.com

Ali Saeedi
Associate Professor, Department of Management, North Tehran Branch, Islamic Azad University, Tehran, Iran.
a_saeedi@iau-tnb.ac.ir

Mohammad Ismail Fadaei Nejad
Associate Professor, Department of Accounting, Shahid Beheshti University, Tehran, Iran.
Fadaeinejad@yahoo.com

ABSTRACT

In behavioral finance and economics; the role of natural reactions of (not necessarily rational) human behaviors as an influencing variable on other economic and financial variables (which has not been considered in the past) is studied with further emphasized.The main issue is the existence of various behavioral biases in the decision making pro-cesses and selection of banking network in financial markets. Delphi and Excellence method test for data collection. In this research, we used a grounded theory approach initially based on data gathering through interviews with 74 experts, taking field notes, participatory obser-vation, documentation, abstract events, data generation, data analysis with a systematic ap-proach, open coding, axial coding, selective coding, and finally, after evaluating the model's validation with the approval of 222 subject matter experts, the model is presented with four dimensions and 20 categories and 239 features. Behavioral Finance for Private Banking: From the Art of Advice to the Science of Advice' is nonetheless a far-reaching architecture for client-centric bespoke private wealth management, entailing a symbiosis of behavioral finance and private banking, handling state-of-the-art domains of FinTech and neuroscience.

Keywords:
Behavioral finance, Behavioral biases, Banking System.

1. Introduction

It is first necessary to explain that behavioral economics and behavioral finance theories haven't been delimited, but perhaps in a simple category it can be said: behavioral finance can develop general theories of behavioral economics to respond to the phenomena of financial markets in a proprietary and practical way. In short, economics and behavioral finance are the future of cognitive psychology in the field of human cognition and the achievements of conventional economics in the field of economic phenomena. These include studying how people (consumers, the public, workers, and managers) react when companies, governments do good, moral and ethical things and when they do bad, immoral or unethical things. One where companies (say banks) do bad things and people (consumers, the public) react to this and where companies do good things and people react to this too, where both groups are compared to control groups of people exposed to neutral stimuli about the companies; a second where employees (maybe top or middle managers of a bank) do good things and do bad things and people in two separate groups (consumers or the public in each group) react to these outcomes and are compared to a control group; and third where the government does good and bad things and people react to these, again in relation to a control group.

2. Previous Research

Behavioral finance theories are presented by Simon(1955), Festinger, Riecken and Schachter(1956), Tversky and Kahneman(1973). In behavioral finance, it is declared that often it essential to find the response to the empirical riddles in the financial area to accept the possibility that some of the economic elements are not always rational. (Birnberg, 2011) The philosophy of the neoclassical economics school is based on the logical behavior of individuals as well as enterprises in the economy. (Hellmann, 2015) Shareholders make illogical transactions, and their illogical feedbacks can cause abnormality in returns and trading capacity. (Opera and Tanasescu, 2014) The impact of transferring stockholder mood on balance asset prices and returns lasts an open dispute. (Hui-chu et al, 2010) Novel procedures are a chain of trial and error or intellectual alternative routes to swiftly resolve the complex issues. (Ritter, 2003) Through this thinking, the financial market may not be described and clarified efficiently. (Thaler, 1993) The research was that the news and hearsay have a great impact on the investors' process of deciding who do not concentrate on financial variables at the company level. (Hunton, 2005) Stock market is influenced by news and data. (Rezaei and Elmi, 2018) It is realized that the behavior of previous profit figures with some of these procedures will be supported as a practical step to find a superior model for forecasting profit. (Jokar et al, 2018) Behavioral finance affects the asymmetric appropriateness on investors' expectations. (Karapinar et al, 2019)

Table 1: The Following Theories Have Been Obtained By Interviewing And Emailing

Theory	University
Could imagine to the extent that banking executive take into account behavioral theories of decision making and also consider consumer emotions that this might affect the decisions they make.	Michigan
Maybe It Will Affect Their Investment Decisions. They may realize that they are not that rational	Harvard
Think Behavioral Finance Will Affect Banks? Yes. Think about bank runs for example.	Stanford and Harvard
Behavioral Finance Does And Will "Affect "Banks.	Copenhagen
I think it already has. And bank regulations, and other financial institutions.	oxford
Think Behavioral Finance Will Affect Banks? Yes, obviously.	Michigan
Think Behavioral Finance Will Affect Banks? Not much	Pennsylvania
Theory: Think Behavioral Finance Will Affect Banks? Not at all.	Cambridge
Very briefly, yes. But it will take time for the insights from behavioral finance to impact bank operations significantly. The first impact I believe will be in the management of pension funds and wealth/asset management.	wharton
For me behavioral biases are strongest in turbulent times when we have high volatility in markets - bubbles, crashes etc. In reception time, behavioral bias we have when banks tends to not give loans and business is afraid to start large projects. To reduce the consequences, there should be precise and sustainable policies for stimulating business activities.	Sofia
Think Behavioral Finance Will Affect Banks? Yes, See my book Behavioral Risk Management: Managing the Psychology That Drives Decisions and Influences Operational Risk.	Santa Clara

Author's Findings

3. Materials and Methods

Recent research has tried to Design and Explanation of the Reduction of Consequences of the Behavioral Finance Biases on the Banking System Recession. Attention to the objectives and questions of research, it is an applied research of benefit and motivation. The research statistical population is Banking System. This research examines a new conceptual model by using of scientific resources and obtained data from the viewpoint of sample tested, it is in applied researches of goal. Therefore the research is practical and use of the descriptive-analysis method. Grounded theory was first presented by Glaser and Strauss in their book The Discovery of Grounded Theory. The text provided a strong intellectual rationale for using qualitative research to develop theoretical analysis. It was largely a protest against a methodological climate in which the role of qualitative research was viewed as preliminary to the 'real' methodologies of quantitative research. This research is an applied research in terms of purpose and it is descriptive-analytic research in terms of method.

4. Data analysis and research pattern test
4.1. Descriptive Statistics

Numerical criteria with data collected from the questionnaire, for each of the to provide numerical statistics variables such as minimum, maximum, average, standard deviation, variance, skewness and kurtosis, has been investigated ,which due to the limitation, only two indicators of skewness and kurtosis are included in this article. As it can be seen, the variables are all in the acceptable range for the two indicators of skewness and kurtosis. It should be noted that the acceptable range for skewness and kurtosis is between 3 and -3.

4.2. Inferential statistics

To test the research hypotheses, we first examine the normality of the variables. Therefore, this condition is first examined for the research variables.

Given that the significance level of the Kolmogorov-Smirnov test in the above table is less than 0.05 for most research variables, it is concluded that the distribution of the above variables is significantly different from the normal distribution. Therefore, the data distribution is not normal.

It should be noted that in this case, SMART-PLS software can be used to confirm the hypotheses and model validation, because this software is not sensitive to the type of data distribution and fits normal and abnormal data.

Table 2: Descriptive Statistics Self-description

Test	Over-optimism	Over confidence	Self-attribution	Confirmation	Hindsight	Cognitive	Self-serving	Conservatism	Self-description
Skewness	-1.120	-.835	-1.757	-1.678	-.911	-1.009	-.966	-.653	-1.166
Kurtosis	.672	-.670	1.405	1.044	-.784	-.073	1.196	-.767	.545

Table 2: Descriptive Statistics heuristic simplification

Test	Representativeness	Formation	Categorization	Anchoring	Loss aversion	heuristic simplification
Skewness	-.668	-.715	-.753	-1.013	-1.451	-.824
Kurtosis	-.747	-.798	.314	1.097	.271	-.052

Table 3: Descriptive Statistics emotion and social

Test	Mood	Self-control	Ambiguity	Regret	Restrictions	Contagion	Information flow	emotion/effect	social
Skewness	-.910	-.964	-.852	-1.412	-.511	-1.181	-1.043	-1.053	-.932
Kurtosis	-.837	-.580	-.594	.079	-.769	.567	.169	-.276	.568

Table 4: Kolmogorov-Smirnov test

test	Self-description	Heuristic simplification	Emotion/effect	Social
Test Statistic	.164	.126	.197	.096
Asymp. Sig. (2-tailed)	.000c	.000c	.000c	.000c

4.3. Reliability test

As can be seen, all dimensions are reliable, indicating that the components of the questionnaire are consistent.

Table 5: Cronbach's Alpha

Dimension	Cronbach's Alpha
Self-description (limits to learning)	0.973
Heuristic simplification (information processing errors)	0.953
Emotion/effect	0.954
Social	0.966

4.4. Structural Equation Modeling and Smart PLS Software

According to the contents of this study, in order to fit the conceptual model of the research, the method of path analysis and structural equations were used with the help of Smart PLS software.

4.5. Investigating the External Research Model

In PLS models, measurement models or structures are divided into two categories: reflective structures and combined structures. The results and output report of PLS software for these compound reliability indicators that are given in the table below.

Table 6: Composite Reliability and Cronbachs Alpha

Dimension	Composite Reliability	Cronbachs Alpha
Emotion/effect	0.886604	0.817922
Social	0.819387	0.785754
Self description (limits to learning)	0.910689	0.883833
Heuristic simplification (information processing errors)	0.783103	0.721695

4.6. Evaluating the validity of measurement models

The first validity to be validated for measurement models is convergent validity. Convergent validity means that a set of representatives explains the main

structure. At least 0.5 AVE indicates sufficient convergence validity, meaning that a latent variable can explain on average more than half of the scatter of its representations.

Table 7: Convergent validity

Dimension	AVE
Emotion/effect	0.675205
Social	0.605609
Self description (limits to learning)	0.572324
Heuristic simplification (information processing errors)	0.422903

As can be seen in the table above, the AVE value for latent variables is often higher than 0.5.
Therefore, it can be said that the convergence validity of the measurement models is desirable.

4.7. Model fit

The overall fit index of the GOF model is calculated as the geometric mean R2 and the average subscription:

$$GOF = \sqrt{Communality \times \overline{R^2}}$$

In this formula, the explained variance index R2, and the quality of the COMMUNALITY measurement model are as follows: It should be noted that the explained variance index for endogenous structures of the model is examined and shows how much the dependent variable was able to predict or explain the dependent variable.
A positive fit of the fitness index (GOF) with a value of 0.67 indicates the overall fit of the model. Because this value is more than 0.35, it turns out to have a good value. As a result, the overall fit of the model is confirmed.

Table 8: GOF index model

Dimension	R2	COMMUNALITY	GOF	result
Emotion/effect	0.860047	0.675205	0.67	Model validity
Social	0.776537	0.605609		
Self description (limits to learning)	0.946896	0.572324		
Heuristic simplification (information processing errors)	0.762146	0.422899		

4.8. Model validation using linear structured relationships

In the next step, after determining the measurement models to evaluate the conceptual model of the research and also to ensure the existence or absence of causal relationship between the research variables and to examine the appropriateness of the observed data with the conceptual research model, the research objectives using equation model Structures were also tested.

4.9 T-Value coefficients

It should be noted that a significance level greater than 1.96 and less than -1.96 is acceptable. The variables have a good level of significance. Because they are all more than 1.96.In this case, we say that the validity of the structure and the structure of the items are confirmed. Also, the functional loads of the dimensions have significant levels of values because they are all larger than 1.96. In this case, the operating loads are all significant.

4.10. Q2 Index

The STONE-GEISSER or Q2 index determines the predictive power of the model. To calculate the value of Q2 in the PLS software, the Blindfolding technique is used: By using this technique, two narrative indexes are obtained: Cross-validated Redundancy and Cross-validated Communality are Positive numbers that indicate the appropriate quality of the model. These values are obtained for all positive research structures. Also, the values of the variables are generally in the range of 0.15 to 0.35 or greater than 0.35. Therefore, the predictive power of research structures is estimated to be moderate to strong.

5 RESULTS AND DISCUSSION

The main purpose of the research is to design a model to reduce the consequences of effective behavioral biases in the banking system downturn. Then good or bad things might be banks doing money-laundering or refusing to engage in money-laundering or governments imposing or refusing to impose sanctions on companies or countries. Or some other behaviors to be determined. I realize that the policies and processes in banks differ between countries with Islamic codes of behavior versus countries with other codes of behavior and this needs to be taken into account and even could become interesting additional independent variables for study. Respondents in the experiments would react to scenarios or vignettes or stories presented to them of either bad, good, or neutral descriptions. Of course much work needs to be done on identifying behavioral banking variables.

According to the foregoing explanations, the behavioral finance characteristics can be summarized as follows:

- The consequent of the integration of neoclassical science and neoclassical financial science and psychology and decision making
- And attempt to describe the causes of unusual phenomena in financial literature
- It studies how investors make systematic errors in their judgments or in other words, deals with subjective errors
- Banking behavioral finance discussions is that some asset price changes are interpreted as deviations from intrinsic value and these deviations are considered to be the reason for traders who will not behave rationally.

References

1) Simon, H.A.,(1955) A Behavioural Model of Rational Choice. The Quarterly Journal of Economics, 69(1): 99-118.

2) Festinger, L. Riecken, H.W., and Schachter, S.(1956) When Prophecy Fails: A Social and Psychological Study of a Modern Group that

Predicted the Destruction of the World (1st ed.). Minneapolis: University Of Minnesota Press.

3) Tversky, A. and Kahneman, D,(1973) Availability: A Heuristic for Judging Frequency and Probability. Cognitive Psychology, 5(2), 207-232.

4) Birnberg, J.,(2011) A Proposed Framework for Behavioural Accounting Research. Journal Behavioural Research in Accountin. 23, P.1-43. DOI: 10.2308/bria.2011.23.1.1

5) Hellmann, A.,(2016) The role of accounting in behavioural finance. Journal of Behavioural and Experimental finance. 9, P.39-42. DOI: 10.1016/j.jbef.2015.11.004

6) Opera, C., Tanasescu, C.,(2014) Effect of Behavioural Financial on Emerging Capital Markets. Procedia Eco-nomics and Finance Journal,15, p.1710-1716. DOI: 10.1016/S2212-5671(14)00645-5

7) Hui-chu, S.,(2010) Investor mood and Financial markets. Journal of Economic Behaviour & organization, 76, P.267-282. DOI: 10.1016/j.jebo. 2010.06.004

8) Ritter, J. R.,(2003) Behavioral finance. Pacific-Basin Finance Journal.11, P. 429-437.DOI: 10.1016/S0927-538X(03)00048-9

9) Thaler, R. H.,(1993) The end of behavioral finance. Financial Analyst Journal, 55, P.12-17.DOI: 10.2469/faj.v55.n6.2310

10) Hunton, J. E.,(2005) Toward an understanding of the risky choice behavior of professional financial analysts. Journal of Psychology and Financial Market. 20, P.182-189.DOI: 10.1207/S15327760JPFM0204_2

11) Rezaei, N., Elmi, Z.,(2018) Behavioural Finance Models and Behavioural Biases in Stock Price Forecasting. Advances in mathematical finance & applications, 3(4),P. 67-82. DOI: 10.22034/AMFA.2019.576127.1118

12) Jokar, H., Shamsaddini, K., Daneshi, V.,(2018) Investigating the Effect of Investors' Behavior and Management on the Stock Returns: Evidence from Iran. Advances in Mathematical Finance and Applications, 3(3), P. 41-52. DOI: 10.22034/AMFA/2018.544948

13) Karapinar, E., Mosai, S., Taherinejad, F., (2019)A Corporate Perspective on Effect of Asymmetric Verifiability on Investors' Expectation Differences. Advances in mathematical finance & applications , 4(4),P. 1-18, DOI: 10.22034/AMFA.2019.1869165.1227