

**UNIVERSITI TEKNOLOGI MARA**

**INFLUENCE OF HEURISTICS  
AND FRAMING FACTORS ON  
SPECULATING  
AND INVESTMENT BEHAVIOR:  
EVIDENCE FROM INDIVIDUAL  
TRADERS IN THE SAUDI STOCK  
MARKET**

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Dissertation submitted in partial fulfillment  
of the requirements for the degree of  
**Doctor of Business Administration**


**Faculty of Business Management**

January 2016

## AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi Mara. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi Mara, regulating the conduct of my study and research.

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Discipline	:	Finance
Faculty	:	Faculty of Business Management
Dissertation Title	:	Influence of Heuristics and Framing Factors on Speculating and Investment Behavior: Evidence from Individual traders in the Saudi Stock Market.
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Date	:	7th January 2016

## ABSTRACT

Traditional finance (TF) assumes that people are rational. However, TF ignores the fact that people are human; their decisions, and subsequently, their behaviors, are influenced by emotions and psychology, especially when trading in the stock market. Therefore, Behavioral Finance (BF) has arisen to compliment TF. BF is a relatively new field that applies psychology to financial decisions and subsequently examines its effects on stock prices and the market. Most BF studies are conducted in developed markets, which are dominated by institutional investors. Most of these studies have used the experimental approach, and a few have used observation of trading accounts. However, there remains a lack of quantitative studies using surveys, especially in frontier markets like the Saudi Stock Market (SSM). The SSM is dominated by individuals who control around 90% of the market value. The market has witnessed stock mispricing, market inefficiency and sharp corrections, which have negatively affected individuals' investments. Irrational behavior on the part of individuals is suspected to be the root of this problem. While many studies that have been published examine rationality in decision making in emerging and developed markets, little is known about the behavior of individuals in the Saudi stock market. In response to these issues, this research aims to determine the degree of heuristics and framing factors exhibited by individuals and to propose a theoretical model that explains the influence of heuristics and framing factors on individual speculating and investment buying behavior simultaneously. It then aims to quantify how much speculation and investment behavior is due to the influence of heuristics and framing factors. Lastly, it examines the role of experience in moderating the relationship between behavioral finance factors and individuals' buying behavior. The model used was chosen based on a review of the literature and is empirically investigated using individuals trading in the biggest brokerage firms in Saudi Arabia. The findings of this research are drawn from 294 valid surveys collected from individuals trading in largest brokerage firms in Dammam, Riyadh and Jeddah City in the kingdom of Saudi Arabia. The Partial Least Square (PLS) approach to Structural Equation Modeling (SEM) is utilized in this research and SmartPLS version 2.0 software was used to analyze the empirical data. Analysis of the research model indicates that individuals exhibit a moderate degree of heuristics and framing factors during the decision making process. However, the results become more meaningful after examining the influence of these factors on the individuals' buying behavior. The results indicate that confirmation heuristics, loss aversion and regret aversion influence speculation and investment behavior. Additionally, representativeness heuristics influence investment while anchoring influence speculation behavior. The analysis indicates that the majority of heuristics and framing factors introduced in this research model can explain a large portion of individuals' speculation buying behavior (37%) and investment buying behavior (21%). Lastly, Multi Group Analysis was conducted to investigate the role of experience (low vs. high). However, no significant difference is found between the two groups. The research contributes to behavioral finance body of knowledge and is of interest to practitioners and scholars alike.

## **ACKNOWLEDGEMENT**

Alhamdulillah to Allah, the most Merciful who made this journey possible by granting me the patience, the courage and the strength. Without His blessing this journey would not be possible, Alhamdulillah.

I would like to offer my sincerest gratitude to my main supervisor, Associate Professor Dr. Noryati Ahmad for providing continuous support, guidance and knowledge throughout this research. I also would like to thank my co-supervisor, Professor Rosidah Musa, for her valuable help and advice, especially in the methodology and the statistical aspect of the data analyses. I also would like my second co-supervisor Professor Ismail Ahmad for his comments and advices.

In addition, I am grateful to Associate Professor Dr. Syazwan for his advices and the mind mapping techniques he taught me to use in my research. I also would like to extend my utmost gratitude to Ms. Grace for her continued support and help and many of my colleagues and friends who have helped me in distributing the survey during the pilot study stage.

Above all, thanks to my father Tawfeeq, uncle Abdul Hameed , sisters, brother's and family members for their support, encouragement and patience throughout my DBA research journey. Sincere gratitude to my Mom, Sohila Taha Alalay, who passed away in 2007. None of my success would be possible without your support and encouragement. You created the person that I am now, you were always there whenever I needed, you cherished me with all your love, and I wish you could be with me to witness my success. I believe you will always be there for me.

Finally, I would like to extend my gratitude to my sponsor, the King Abdullah scholarship program, for funding me during the course of my doctoral studies. I also would like to convey my gratitude to Arshad Ayub Graduate Business School, University Technology Mara for all the support through my years of study.

# CHAPTER ONE

## INTRODUCTION

### 1.1 RESEARCH BACKGROUND

In the 21st century, the lifestyle of many people has gone through vast changes. The prices of products and services are on the rise and what was once considered luxury has become a necessity (e.g. fast internet and smart phones). In the United States, the low interest rates set by the central bank have led to the depreciation of the dollar, and together with high government spending; inflation has affected the disposable income of the average household.

Therefore, it is very important not only to save but also to make money grow through wise investment. According to Myles (2003), investment can be defined as “*an increase in the stock of wealth that permits an increase in the flow of consumption.*” In other words, investment allows individuals to increase their consumption and the quality of their living standards.

There are two types of investment: real and financial. Real investment is the purchase of physical assets to increase production and earn a profit. Financial investment is the provision of capital to a company through the purchase of shares or bonds. Stock purchases, in particular, are one of the most attractive financial investments to individuals, even though they carry their own risks (Myles, 2003). Individuals prefer stocks over other types of investment for a simple reason: it provides the highest return in the long run compared to other types of investment (Shen, 2005).

To benefit from the high returns offered by stocks, investors have two main options: invest indirectly or directly in the stock market. Investors can invest indirectly by buying units in a mutual fund, or a company that pools money from investors and invests in different types of assets, including stocks. Mutual funds are managed by professional teams that create a diversified portfolio to reduce risk and maximize return. Such an instrument does involve risk, management fees and taxes. However, it is the best option