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Financial Literacy and Behavioral Finance: Conceptual Foundations and Research Issues

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Abstract
financial literacy, defined as knowledge and numeracy, Investors decision-making Behaviour defined as how the investors judge, predict, analyses and review the procedures for decision making, which includes investment psychology, information gathering, defining and understanding, research and analysis. In Investors Decision-making Behaviour, the financial literacy plays a crucial effect. Misunderstood personal characteristics within Investors Decision-making Behaviour may generate unrealistic or inaccurate outcomes. Unfortunately, the effect of personal context is nearly ignored in c literature. this paper argues on the interaction between the influence of financial literacy, so as to explain Investors Decision-making Behaviour. This proposition could improve understanding the Investors Decision-making Behaviour and help to resolve inconsistency of findings in the literature.
Keywords: financial literacy; Behavioural Finance; Investors decision-making Behaviour; financial literacy; Palestine stock market.

INTRODUCTION

Financial models of human behavior based on the market efficiency and investors' rationality assumptions are simple, but more research studies have shown that they are incomplete and unrealistic (Abu Zarour, 2006; Zaleskiewicz, 2008). Instead, Letkiewicz and Fox (2014) rely on strong arguments in financial markets; such as an individual's own cognitive bias or the way the individual thinks tends to differ from one another's cognitive psychology (Cohen, 2010; Huston, 2010; Ritter, 2003; Willis, 2009) which is called into question about its reliability of the viability and effectiveness of the traditional expectations (Jamal, Ramlan, Pazim, & Budin, 2014).

When various investors do similar mistakes, they influence market efficiencies and price changes (Zaleskiewicz, 2008). Shleifer (2000) declares that errors should be aggregated based on the systematic nature of the behavioral biases and this has been proved by Tversky and Kahneman (1993). A similar view is also shared by Jackson (2003) whereby he mentions that an aggregation of errors plays a vital role in behavioral models where the existence of a group of usually irrational acting investors is affected. Barberis and Thaler (2003), Bondt and Thaler (1985), Black (1986), De Long, Shleifer, Summers, and Waldmann (1990), Daniel, Hirshleifer, and Subrahmanyam (1998), Barberis, Shleifer, and Vishny (1998), Hirshleifer (2001), Daniel, Hirshleifer, and Teoh, (2002), Coval and Shumway, (2005), Kumar and Lee (2006), Jamal et al. (2014) and Subrahmanyam (2008) have shown that investors are not rational or markets may not have been efficient, hence, prices may have significantly deviated from fundamental values due to the existence of irrational investors.

this study aims to understand individual investors' behaviours and with human limitations in mind, to predict individual investors' behaviours, by applying a psychological theoretical of the financial literacy model as an attempt to understand as well as predict both individual investors' intentions and behaviours in the stock market. Although several studies have been applied in understanding individual investor behaviour, the application of behavioural models has not been attempted seriously.

Behavioral Finance

Behavioral finance is a new approach to financial markets that has emerged, at least in part, in response to the difficulties faced by the traditional paradigm. In broad terms, it argues that some financial phenomena can be better understood using models in which some agents are not fully rational. More specifically, it analyzes what happens when we relax one, or both, of the two tenets that underlie individual rationality. In some behavioral finance models, agents fail to update their beliefs correctly. In other models, agents apply Bayes' law properly but make choices that are normatively questionable, in that they are incompatible with Subjective Expected Utility (SEU).

This review essay evaluates recent work in this rapidly growing field. In Section, we consider the classic objection to behavioral finance, namely that even if some agents in the economy are less than fully rational, rational agents will prevent them from influencing security prices for very long, through a process known as arbitrage. One of the biggest successes of behavioral finance is a series of theoretical papers showing that in some economy where rational and irrational traders interact, irrationality can have a substantial and long-lived impact on prices. These papers, known as the literature on "limits to arbitrage", form one of the two buildings blocks of behavioral finance.

Kahneman and Tversky (1979), Shefrin and Statman (1994), Shiller (1995) and Shleifer (2000) are among the leading researchers that have exploited theories of thinking and other social sciences to shed light on the competence of financial markets and clarify many stock market irregularities, which has deeply affected the area of finance.

In this sense, the reason why social finance gain big interest is because it influenced the finance sector in a short time because of the fact that in the efficient market edge, utility-maximization is incompetent to explain many truths (Bayar, 2011). According to behavior al finance, investors do not always behave sensibly. The investigation of previous studies reveals that investors act under the effect of various emotional issues (Kharb and Malik, 2014; Ton and Dao, 2014), and how important they are for their investment decisions (İslamoğlu et al., 2015; Riaz and Hunjra, 2012).

By introducing behavior al features to the decision-making procedure, behavior al finance seeks to add to the standard theories of finance. The main method of behavior al finance is that the investors are not rational and that they are prone to influence as well as markets are not always efficient, as opposed to traditional finance (Rabin, 1998; Statman, 2014). Behavior al finance is an addition to the rational decision making model, by taking into consideration the method whether illogical or the limited rationality. (İslamoğlu et al., 2015). It seeks to understand and predict systematic financial market implications of psychological decision processes. also, it focuses on the request of emotional and economic principles for the development of financial decision-making (Olsen, 1998).

Theories of behavior al finance is a division of finance that researches the behavior of investors in the financial market and the effects of psychological factors and the resulting influence on investment choices on the market, thus affecting prices. Behavior al finance aims to explain sensibly why investors believe that markets are incompetent. Fresh theoretical work in finance recommended that different beliefs or opinions among investors might be able to explain excessive investing and high levels of investment volume (Glaser and Weber, 2007).

There are several definitions written on behavior al finance, taken from the behavior al finance school as well as from investment professionals. Shefrin (2000, p. 4) describes behavior al finance as a fast rising area which deals with the interaction and effect of psychology with the financial actions and performance of investors. Gilovich, Griffin, and Kahneman (2002) have likened behavior al finance to behavior al economics and they have defined behavior al economics as uniting twin disciplines of psychology and economics to explain how and why people make apparently irrational or rational decisions when they invest, save, borrow and spend money.

A number of studies in behavioral finance have been focused in the investors' knowledge on investment, or investment literacy and the ability to use this knowledge effectively. There are several authors, have paid interest to determine the factors that contribute of individuals' participation in the stock market considering that they lack investments or savings (Washington, Shirley, Lisset, and Regina, 2015). Policymakers and individuals (Lusardi, Mitchell, and Curto, 2010; Van Rooij, Lusardi, and Alessie, 2011) and awareness (Guiso and Jappelli, 2005). On the other hand, some studies show that social interactions influence key individuals decisions and investment (Hong, Kubik, and Stein, 2004; Khan and Rohi, 2013). This aspect is of attention to brokerage firms to know what aspects within management scope affect investment decisions of individuals.

financial literacy

Previous procedure responses to help individuals make better financial decisions mostly concentrated on financial literacy, defined as knowledge and numeracy (Lusardi and Mitchell, 2007b; Mandell, 2008). Financial literacy is a wide perception that includes behavior and information; it is relevant to all consumers regardless of their income or wealth. The definition of financial literacy, as used in this note, was developed by the Organization for Economic Co-Operation and Development (2005) which states that:

"Financial literacy is the combination of consumers 'investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being."

Although researchers have already been examining questions related to whether or not financial knowledge improves investment decision making (Norvilitis et al., 2006), there is a lack of clarity within the literature as to the exact definition of financial literacy (Huston, 2010). Part of this confusion may be due to the seemingly interchangeable use of financial education, financial literacy and financial knowledge within the literature.

In a latest review of the literature on financial literacy, Huston (2010) strives to clarify the construct of financial literacy while attempting to identify the best way to measure it. Within this review of the literature, four common categories emerge: personal finance basics, borrowing, protection, and saving/investing. Furthermore, the author proposes that a succinct definition of financial literacy be used that is defined as "measuring how well an individual can understand and use personal finance-related information" (Huston, 2010, p. 36). Due to the lack of clarity of the definition of financial literacy in previous studies, this clear definition provides a standard definition constructed with the meta-analysis of previous data in mind.

The outcomes of behavior al research has drove to a shift away from financial literacy toward a broader perception that includes “A combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing” (Atkinson and Messy, 2012). The rising participation in the stock market requires that we better understand the determinants of their investment behavior. As the key determinants of individual investment behavior , studies show that characteristics such as social preferences and financial literacy play an important role (Guiso et al., 2008; Hong et al., 2004; Van Rooij, Lusardi, and Alessie, 2012).

Nevertheless, the relation between investment behavior and financial literacy is unclear. Van Rooij et al. (2012) show that individuals with lower financial literacy are much less likely to invest in stocks. Dhar and Zhu (2006) find empirical evidence that more literate investors are less prone to the disposition effect. The results of a study conducted by Müller and Weber (2010) indicate that financial literacy is positively related to investments in low-cost funds. Even finance professors with presumably high financial literacy do not implement their knowledge when building their own portfolio. Doran, Peterson, and Wright (2010) find out that the professors’ perception regarding market efficiency and the consequential optimal investment strategy are unrelated to their actual behavior. The authors argue that the behavior al factors drive professors’ investment decisions. Hibbert, Lawrence, and Prakash (2012) document that a significant number of finance professors do not participate in the stock market at all.

During 2009, there is significantly a less likely chance to report a negative income shock among individuals with better financial capability (Klapper, Lusardi, and Panos, 2013). In order to empower consumers in their interactions with financial markets, several countries develop strategies for education and financial literacy (Grifoni and Messy, 2012). According to Guiso, Sapienza, and Zingales (2008), knowledgeable individuals are significantly more likely to invest in stock and also buy stocks. However, there is empirical evidence to show that investors have a bias on emotional and psychological or social factors to invest in stocks of companies they are more familiar with (Seasholes and Zhu, 2010). Thus, this may affect the investment behavior of stocks in the market (Wanyana, 2012). Traditionally, this has been interpreted as evidence of Merton's (1987) model of investors with limited information. Also , any additional private that information investors may have determined their beliefs about assets’ expected cash flows, hence affecting investors’ perceived risk attitudes (Wanyana, 2012).

Despite growing interest and investment in financial literacy, several studies document only weak, if any, empirical evidence, and in order to improve the financial behavior of individuals on the quality of investment decisions, refer to Al-afifi (2014), Bodnaruk and Simonov (2012), Campbell (2006), Gathergood (2012), Hilgert, Hogarth, and Beverly (2003) Lundberg and Mulaj (2014) and Von Gaudecker (2013). The actual level of financial knowledge is lacking, which possibly contributes to poor decisions and poor decisions can lead to challenges for financial markets (Campbell, 2006). Bell and Lerman, (2005) identify that individuals with financial knowledge make better decisions than those without such knowledge. The education level influences consumer literacy which limits one’s skills in the management of personal financial affairs and fails to match income against expenditures (Mukasa and Masiga, 2003).

Several empirical studies have found that lack of investors have poor financial literacy which is associated with inefficient portfolio allocations and poor risk diversification. These studies are targeting at different population groups around the world and eliciting financial literacy in very different ways. Their findings have demonstrated that the majority of investors or consumers are not familiar with even basic economic concepts (Agnew and Szykman, 2005; Bernheim, 1994; J. Hancock, 2002). There is also evidence similar to the findings of Lusardi and Mitchell (2009) and Lusardi et al., (2006) which reveal that more than half of older adults in the U.S do not understand the concepts of inflation, diversification, long-term saving and even the use of credit cards. A 2009 Expanded and Sustained Access to Financial Services (ESAF) survey of the state of financial literacy in Palestine reveals that financial consumers, especially youth, have low levels of financial literacy and understanding of the financial sector.

To better understand the state of financial literacy in the West Bank and Gaza, ESAF (2011) began mobilizing expert knowledge and conducting survey research for developing interventions to address the most prominent gaps. ESAF findings indicate that financial consumers are at a severe information disadvantage in relation to financial institutions. Thus, the researchers recommend that consumers’ financial capabilities be improved, particularly with regards to the knowledge of the opportunities and risks associated with financial products and services.

According to Merton (2007), individuals who are exposed to economics during their schooling may be more likely to invest in the stock market. On the other hand, awareness can be through financial awareness which is mainly determined by the investors’ resources (income, financial wealth), age and education status (Guiso and Jappelli, 2005). Similarly, Lusardi and Mitchell (2007b) show that those who display low literacy are less likely to make investments and, as a result, accumulate much less wealth. Agarwal, Driscoll, Gabaix and Laibson (2007) further show that financial mistakes are prevalent among the young and elderly, who display the lowest amount of financial knowledge.

Geetha and Ramesh (2011) conduct a study on Indian investor's behavior about investment preferences. They point out that people are not aware about all the investment options available to them and they lack knowledge about securities. Samudra and Burghate (2012) conduct a study on investment behavior of the middle-class households in Nagpur, here, they find bank deposits to be the most popular instrument of investment followed by insurance. Amongst the factors which influence the decision to invest in a particular instrument is the return from the investment which ranks first.

Courchane and Zorn (2005), by examining the relationship between financial knowledge, financial behavior s and credit outcomes, find that there is a direct positive effect of knowledge on credit behavior. While mistakes in making personal finance, decisions coming from a lack of knowledge about personal finance issues, call for knowledge gain to face this lack.

Several studies that examine the effects of literacy on investment have found that literacy matters. Miles (2004) shows that UK borrowers display a poor understanding of mortgages and interest rates. According to Lusardi (2006) and Organization for Economic Co-Operation and Development, (2005) young Koreans fare no better than their American counterparts when tested on economics and finance knowledge, with most receiving a failing grade. Furthermore, a Japanese consumer finance survey shows that 71 percent of adult respondents have no knowledge of investments in equities and bonds and 57 percent have no knowledge of financial products in general. Lusardi and Mitchell (2005, 2007) find that those who display higher literacy are more likely to plan and more likely to invest in complex and tax favored assets, such as stocks and Individual Retirement Accounts. Calvet, Campbell, and Sodini (2007) show that households with greater financial sophistication are more likely to participate in risky asset markets and invest more efficiently.

Individuals and firms should be made investment decisions very wisely with financial knowledge. Volpe, Kotel, and Chen (2002) show that online investors should have more knowledge than normal investors to succeed in the financial markets, where online investors are more likely to be surrounded by financial misinformation and manipulation. In addition, investors with higher income have more knowledge in investments than those with lower income, and investors with college or higher degree perform better than younger participants.

Al-Tamimi and Kalli (2009) assess the financial literacy of the UAE individual investors who invest in the financial markets of UAE. They find that financial literacy of UAE investors is much less than what is actually needed. Their results also suggest that there exists a significant relationship between financial literacy and investment decisions. But in Yoong's (2007) dissertation does not find the same results in the USA sample, where he finds that financial literacy negatively affects stock market participation. His model suggests that illiteracy and mistaken beliefs may have different results for behavior, where illiteracy usually leads to less participation if investors heat an equivocation, but mistaken beliefs can go in another direction.

Wu and Huang (2012) point out that investors in the securities market in China have a low level of knowledge, and there are two types of investment decisions: emotional decisions and intellectual decisions. Most investors are classified as emotional, and their decisions are considered irrational. Therefore, it is recommended that investors learn securities investment knowledge and relevant financial and legal knowledge, sociology and psychology. Investors should also overcome their emotional weakness through practice to avoid market risks and obtain high yields.

Financial decisions have many risks, especially in cash and liquidity decisions. Therefore, the decision makers should have a basic level of financial literacy to be able to choose the best decisions. Lusardi's (2012), data from the United States and other countries report information about numeracy, financial literacy, and financial decisions that show a low level of numeracy in the adult population in the United States, England, Germany, Sweden, Japan, and some other Europe countries. This is especially evident among the elderly, women and those with low education attainment. So, their low level of financial literacy may have an effect on their financial decision making.

Nga, Yong, and Sellappan (2010) through their study conducted in Malaysia, suggest that females have a lower level of financial awareness as compared to males. It is also found that education level courses taken in business have an influence on general and financial product awareness. Bhushan and Medury (2013) assess that financial literacy levels get affected by gender, education, income, nature. Huhmann and McQuitty (2009) show that the consumer who has the ability and capacity in the knowledge of financial concepts and financial numeracy, will have significant effects on financial management outcomes related to borrowing, saving, investment, and has indirect effects on the consumer's credit score.

Bashir et al. (2013) suggest that females are more at risk than males, whereas young and educated people are more attracted towards new risky investment opportunities and want to invest money in these instruments but they hesitate because of limited resources and lack of investment opportunities as well as the absence of investment trends. According to Lodhi's (2014) empirical results, financial literacy and accounting information are considered to be significant in lowering information asymmetry and allowing investors to invest in risky instruments. Additionally, it is verified that investors' preferences for risky investments decrease, as age and experience increase.

Chaturvedi and Khare (2012) identify that age, education, occupation and income level of an individual affects this investment behavior. Awareness of respondents towards traditional investment options is much higher than that for corporate securities, mutual funds, equity shares and preference shares. They also find that occupation, education and income level affect the awareness level of investors towards various investment avenues.

Meanwhile in another similar discussion, males are said to be more financially literate than females (Al-Tamimi and Kalli, 2009; Lusardi and Mitchell, 2008) due to less participation of females in financial issues. As a consequence, women are less likely to plan for retirement, and usually borrow at a higher rate. In the context of portfolio diversification, Abreu and Mendes (2010) find that education level impacts the number of investors' portfolio properties. Similar views are also confirmed by Van Rooij et al. (2012) which highlight that there's a strong positive link between formal education with financial literacy, thus triggering positive impact on savings behavior

Summary of the financial literacy

The main dilemma for investors is an absence of an acceptable level of financial literacy that causes them to misinterpret data and what the numbers mean. In addition, many individual investors have mistaken the subjective beliefs in solving financial issues, so this problem could lead to failure in making an investment decision such as which stock is better to purchase and what is the best time to make a selling decision. Also, the mismanagement of cash by spending it in the wrong place, thus leading to a shortfall in liquidity may lead to the loss of good opportunities

Investors may not make effective decisions without financial literacy for the purchase of the financial products and services. Therefore, according to Wolfe-Hayes (2010), financial literacy has become a pressing and definite need for all categories of society, individuals, companies and government. When investors have a very limited financial literacy, they may be depending on other factors to help them in making investments decisions, such as brokerage firms, friends, financial market rumors, or other factors which lead them to make muddled decisions.

Financial literacy does not aim to teach investors and decision maker how to classify the financial transactions; it leaves it to accounting and finance staff, who know all procedures. Financial literacy aims to teach them how to use and interpret the data they give them through financial reports which help them in making better decisions (Lambert, 2012).

RESEARCH METHODOLOGY

This study focuses on examining the determinant of the Behavioral Finance. Low rate of information technology in the Gaza strip local government is dedicated (Sultan, 2011). This study, therefore, A sample survey by interviewing and administering a questionnaire to a sample of Palestinians' investors' behavior is a measure to operationalize and extend the TPB model. a sample size of 257 is deemed to be appropriate using a formula proposed by Scheaffer, Mendenhall III, Ott, and Gerow (2011). An online internet questionnaire is considered for the data collection. There are three sections in the survey questionnaire. The first section is designed to collect demographic information relating to the respondents such as their: age, gender, Qualification, Job Title, Years of Experience, and working Ministry. The second section collects data about the Investors Decision-making Behavior. The last section collects data about factors affecting Investors Decision-making Behavior In this section, the questions have been built to proceed logically with one question linking to the next.

Conclusion

This conceptual paper discusses the determinants for Investors Decision-making Behavior in the investment sector decision and explains the usage of different influence strategy may affect the role of other factors in Investors Decision-making Behavior. This concept paper suggests and encourages future work to examine the effect of financial literacy to explain Investors Decision-making Behavior. In the next stage of this study, authors intend to investigate whether an influence strategy plays a significant effect of Investors Decision-making Behavior determinant to explain Investors Decision-making Behavior. By doing so, investors can utilize the findings of this study to understand which factors would most likely facilitate the Investors Decision-making Behavior. In addition, the findings of this paper are to enable the investors and economist to manage the effects of these factors more effectively.

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