DETERMINANTS INFLUENCING INDIVIDUAL INVESTOR BEHAVIOR IN STOCK MARKET: A CROSS COUNTRY RESEARCH SURVEY

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Abstract

Although finance has been studied for several decades, behavioral finance which considers the human behaviors in finance is a quite new area. Behavioral finance theories, which are based on the psychology, attempt to understand how emotions and cognitive errors influence individual investors’ behavior. The individual investor plays a vital role in the stock market because of their good savings. The regulators of the stock market cannot ignore the behavior of individual investors. Many individuals find investments to be fascinating because they can participate in the decision making process and see the results of their choice. Not all investments will be profitable, as investors’ whims not always result in fruitful returns. Recent studies on the behavior of individual investors’ have shown that investors do not act in a rational manner. Several behavioral factors influence their investment decisions in stock markets. The present study aims to review the research studies and literature to gain knowledge about key factors that influence investment behavior in different countries and the ways these factors impact investment risk tolerance and decision making process among men and women and among different age groups.

Keywords: Investment behavior, Risk Tolerance, Stocks

Introduction:
Investment is the flow of capital which is used for productive purposes. There is a great emphasis on investment for being the primary instrument of economic growth and development for a country. Investment means an increase in capital spending and it helps in creating a robust economy. Investment is a component of aggregate demand. There are a large number of investment instruments available today. Some of them are marketable and liquid while others are
non-marketable and illiquid. There are instruments which are highly risky while others are almost riskless. The investors choose avenues, depending upon their specific need, risk appetite, and return expected. Investment avenues can broadly be categorized into two spheres, namely, Economic Investment and Financial Investment. Purchasing of a physical asset such as a building or equipment is an economic investment. Economic investments contribute to the net additions to the capital stock of a society. Financial investments, on the other hand, refer to investment in financial instruments like shares, debentures, insurance policies, mutual fund units etc. Financial investments help in creating the capital stock of the country. In the long term, investment is important for improving productivity and increasing the competitiveness of an economy. Without investment, an economy could enjoy high levels of consumption, but this creates an unbalanced economy. The states having more commitments to investment are more progressive. In India, few states have created a niche for economic development, the main reason being that they attracted large Investments. As investments have a 'multiplier' effect, they generate income and employment and create demand and consumption.

Objectives:
- To determine the various factors influencing Individual Investors’ Behavior as explored by several researchers in different countries.
- To provide comprehensive review of studies on Individual Investors’ behavior in the financial investments with particular reference to stock investments.

Methodology:
The present paper is a review paper. Various papers on Determinants of investment behavior across different countries have been taken for the review.

Literature Review:
Behavioral finance is a relatively new field that seeks to combine behavioral and cognitive psychological theory with conventional economics and finance to provide explanations for why people make irrational financial decisions. Cognitive psychology and the limits to arbitrage are two building blocks of behavioral finance. Cognitive psychology refers to how people think. Limits to arbitrage refer to predicting in what circumstances arbitrage forces will be effective, and when they won't be. It is a field of finance that proposes psychology-based theories to explain stock market irregularities. Within behavioral finance, it is assumed that the information structure and the characteristics of market participants systematically influence individuals' investment decisions as well as market outcomes.

Economists, sociologists and psychologists have all attempted to explain investor behavior in various ways. Economists' enquiries into investor behavior have focused largely on the "rationality" or "irrationality" of investor decision-making processes. Sociologists explain investor behavior by focusing on investors social environments. Psychologists explain investor behavior by focusing on individual characteristics. The operational definition of individual investors runs as “the people, who earn or receive money from spouse or parents on a monthly basis or occasional basis and invest in different investment avenues such as shares, mutual funds, deposits, etc. in order to save for future requirements.”

In connection with investment vis-à-vis different factors like risk, age, awareness about different avenues of investment, interest in real estate or capital markets etc., diverse reviews by various researchers in different countries are as follows:
Engin Demirel et al. (2011) studied the interaction between demographic and financial behavioral factors in investment decisions. The study was carried to find the impact of demographic factors influencing individual investors’ behavior. It showed that gender interacts with five financial behavioral factors i.e. overreaction, herding, cognitive bias, irrational thinking, and overconfidence and the level of individual savings interacts with only four of the financial behavioral factors viz; overreaction, herding, cognitive bias, and irrational thinking.

Yosra Mefteh Rekik and Younes Boujelbene (2013): the study reveals that Tunisian investors do not always act rationally while making investment decisions. The study concluded that herding attitude, representativeness, anchoring, loss aversion, and mental accounting all influence the Tunisian investors’ perception of their decision making processes but there is an absence of overconfidence bias in the Tunisian Stock Market. In fact, Tunisian investors seem to be underconfident, hesitant and very sensitive to others’ reactions and opinions. The other finding related to the interaction between demographic variables and financial behavioral factors particularly provided that the variables like gender, age, socio-professional category, and experience all seem to have an influence on the behavior of investors operating on the Tunisian Market. This study provides that people at certain age, are less subject to psychological biases as they become more experienced while as elder investors who are relatively less knowledgeable and have lower incomes are subject to behavioral biases.

Merikas et al., (2003) the study was conducted to analyze factors influencing Greek investor behavior on the Athens Stock Exchange. The results indicate that individuals’ base their stock purchase decisions on economic criteria combined with other diverse variables. They do not rely on a single integrated approach, but rather on many categories of factors. The results also revealed that there is a certain degree of correlation between the factors that behavioral finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual behavior of active investors in the Athens Stock Exchange (ASE) influencing by the overall trends prevailing at the time of the survey in the ASE.

De Bondt et al., (1985) published a paper about behavioral finance in which they asked the following question: "Does the stock market overreact?", the article gave evidence to support the hypothesis that cognitive bias (investor over-reaction) to a long series of bad news could produce predictable mispricing of stocks traded on the NYSE.

Hussein A. Hassan Al-Tamimi, (2006) investigated the factors influencing the UAE investor behavior where it was found that Six factors were the most influencing factors viz; expected corporate earnings, get rich quick, stock marketability, past performance of the firm’s stock, government holdings, the creation of the organized financial market (i.e. Dubai Financial Market& Abu Dhabi Securities Markets). Five factors were found the least influencing factors which are expected losses in other local investments minimizing risk, expected losses in international financial markets, family member opinions and gut feeling on the economy. The most influencing group was by order of importance accounting information, self-image/ firm-image coincidence, neutral information, advocate recommendation, and personal financial needs. Two factors had unexpectedly least influence on the behavior of the UAE investor behavior, namely the religious reasons and the factor of family member opinions.

Volpe et al. (2002) argued that online investors should have more knowledge than normal investors to succeed in the securities markets, because they are more likely to be surrounded by financial misinformation and manipulation. Therefore, the authors examined investment literacy of 530 online investors and the difference in the literacy level among various groups of participants using age, income, gender, education, and previous online trading experience as variables. The study demonstrated that the level of financial literacy varied with people’s education, experience, age, income, and gender. Particularly, women had much lower financial
literacy than men and older participants performed better than younger participants. As well, online traders had higher knowledge than others. Moreover, investors with higher income had more knowledge in investment than those with lower income, and investors with college or higher degree performed better than those with low education.

*ACNielsen Research* (2005) conducted a national survey of adult financial literacy in Australia. The main results of this survey indicated that the lowest levels of financial literacy were associated with people who have lower education, unemployed or unskilled workers, and people with low income, single people, and those at both extremes of the age profile.

*Al-Tamimi, H and Al Anood Bin Kalli* (2009) this study examined the financial literacy level of UAE individual investors and the factors that influence their investment decision and it was found that the financial literacy is far from the needed level. The UAE investors were more knowledgeable about the benefits of diversification while they were least knowledgeable about the type of UAE financial markets indices. The financial literacy level was found to be affected by income level, education level, and workplace activity. A significant difference in the level of financial literacy was found as well between the respondents according to their gender. Specifically, women have a lower level of financial literacy than men. The top four most influencing factors on investment decision were religious reasons, reputation of the firm, perceived ethics of the firm, and diversification purpose, whereas the least four influencing factors were rumors, family member opinions, ease of obtaining borrowed funds, and friend recommendations. Financial literacy affected significantly the investment decisions of the individual investors. Specifically, financial literacy had a negative effect on each of the five categories that affect the investment decision, with the exception of the accounting information category. The effect of financial literacy on the accounting information category was positive but statistically insignificant.

*Somil* (2007) observed that the proponent of the theory of rational investor assume that an individual makes a decision on the basis of the principles of maximization, self-interest and consistent choice. According to him, rationality also assumes that an investor has perfect information of his surroundings and makes the decisions with the sole objective of profit maximization. The reasoning derivable from this principle of rationality is that the capital market must be efficient. Capital market efficiency implies that all information regarding the market is fully and instantaneously reflected in security prices and available to all investors. But most capital markets operate under inefficient conditions, making rational decisions impossible.

*Azam and Kumar* (2011) examined the factors influencing Pakistan investors’ behavior on the Karachi Stock Exchange and found that the earning per share, foreign direct investment and gross domestic product growth rate have a significant impact on stock prices. *Kaleem, Wajid and Hussain* (2009), in a study of factors affecting financial advisors perception in portfolio management in Pakistan, found that age, income, language and orientation of education have a significant role in determining the investment style of an investor. *Geetha and Ramesh* (2012) studied the relevance of demographic factors in investment decisions in Tamilnadu, India, and claimed that the demographic factors have a significant influence over some of the investment decision elements, while insignificant influence was found on some other elements.

*Fares and Khamis* (2011) investigated individual investors’ stock trading behavior at the Amman Stock Exchange, Jordan, using the multiple regression technique. They identified four behavioral factors (age, education, accessibility to the internet and interaction between the investor and his/her broker) that influenced investors’ trading decisions. According to the authors, investor’s age, education, and his/her accessibility to the internet had a significant and positive effect on stock trading, while the interaction between the investor and his/her broker, had a highly significant and negative effect.
Cooray (2003) identified the factors affecting investment decisions as risk factor, return on investment, liquidity of investment, tax consequences of an investment, inflation and the term of an investment in Sri Lanka. Hussain and Nasrin (2012) in a study of Bangladesh found that the eight most important principal factors influencing retain investors are company specific attributes/reputation, net asset value, accounting information, trading opportunity, publicity, ownership structure, influence of people and personal finance needs. Aregbeyen and Mbadiugha (2011) in their study in Nigeria found that the ten most influencing factors on investor’s decision in order of importance are: motivation by people who have attained financial security through share investment, future financial security, recommendations by reputable and trusted stock brokers, management team of the company, awareness of the prospects of investing in shares, composition of the board of directors of companies, recent financial performance of the company, ownership structure of the company, reputable predictions of future increment in share value and bonus payments.

Tomola Marshal Obamuyi (2013) Investment decisions of investors in Nigeria are influenced by certain identified factors. The most important principal factors are past performance of the company stock, expected stock split/capital increases/bonus, dividend policy, expected corporate earnings and get-rich-quick. These factors were significantly influenced by gender, age, marital status and educational qualification of investors in the Nigerian capital market. Specifically, the investment decisions of investors relating to past performance of the company’s stock differ based on their socio-economic characteristics (age, gender, marital status and educational qualification). Suman and Dr. D. P. Warne (2012) the study reveals that the respondents integrate the objectives of saving, the factors influencing the saving and the sources of information for decision making. The annual income and the annual saving are given importance of consideration by the respondents, because the level of income decides the level of savings. Today’s investors are fully aware about the stock market. The market movements affect the investment pattern of investors in the stock market.

Baker and Haslem (1974) found that dividends, expected returns and the firm's financial stability are critical considerations for individual investors. Baker, Hargrove and Haslem (1977) in their empirical study on risk/return preferences of investors found that investors behave rationally, taking into account the investment's risk/return tradeoff. A relatively new financial sub-discipline, behavioral finance, has achieved impressive strides in explaining the behavioral aspects of investment decisions. The results of some empirical studies about factors influencing individual investor behavior have been reviewed for this particular study. Researchers gave a substantial attention to institutional investors, whereas less attention is given to the individual investors’ behavior that is the emphasis of this research. However, almost all the previous studies have dealt with investors’ behavior in industrialized countries (USA, UK, Canada). However, factors’ influencing Indian individual equity investors’ behavior has not been explored.

Alleyne and Broome (2010) have examined the investment decisions among students using the theory of planned behavior and risk propensity among future investors. They say that the theory of planned behaviour is a significant predictor of investment intentions. The findings further show that attitudes and referent groups (peers, family and significant others) and beliefs about potential obstacles and opportunities significantly predict intentions to invest. They also found that the influence of friends and relatives, and easy access to funds are significant predictors of investment intentions of students.

Shanthikumar and Malmendier (2003) tried to answer the question: Are small investors’ naïve? They found that large investors generate abnormal volumes of buyer-initiated trades after a positive recommendation only if the analyst is unaffiliated. Small traders exert abnormal buy pressure after all positive recommendations, including those of affiliated analysts. Krishnan and

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Booker (2002) analyze the factors influencing the decisions of investor who use analysts’ recommendations to arrive at a short-term decision to hold or sell a stock. The results indicate that a strong form of the analyst summary recommendation report, i.e., one with additional information supporting the analysts’ position further, reduces the disposition error for gains and also reduces the disposition error for losses.

Nagy and Obenberger (1994) examined factors influencing investor behavior. They developed a questionnaire that included 34 questions. Their findings suggested that classical wealth – maximization criteria are important to investors, even though investors employ diverse criteria when choosing stocks. Contemporary concerns such as local or international operations, environmental track record and the firm’s ethical posture appear to be given only cursory consideration. The recommendations of brokerage houses, individual stockbrokers, family members and co-workers go largely unheeded. Many individual investors discount the benefits of valuation models when evaluating stocks.

Epstein (1994) examines and reports the demand for social information by individual investors. The results indicate the usefulness of annual reports to corporate shareholders. The results also indicate a strong demand for information about product safety and quality, and about the company's environmental activities. Furthermore, a majority of the shareholders surveyed also want the company to report on corporate ethics, employee relations and community involvement. Tabassum.S.S and S.Pardhasaradhi (2012) Investment decision process is considered critical decision for every investor, especially when investing in equities as it involves high risk and the returns are not certain. While choosing a particular stock to make an investment, 40 attributes have been identified that influence the investor buying decision process. The most influencing attributes were identified and ranked based on the frequency of highly important rating given by the investor. To identify factors influencing the behavior of Indian individual equity investors the current study has applied factor analysis. After applying factor analysis it was found that all the 40 attributes are reduced to the following ten factors namely Individual Eccentric, Wealth Maximization, Risk Minimization, Brand Perception, Social Responsibility, Financial Expectation, Accounting information, Government & Media, Economic Expectation and Advocate recommendation factors.

Schmidt & Sevak, (2006) Women’s investment has historically been lower than men’s for several reasons, including Social and various demographic concerns. However the differences continue to be significant even after controlling for individual Characteristics. Langer (1975) finds that self-reported risk tolerance does the best job of explaining differences in both portfolio diversification and portfolio turnover across individual investors. Dunham (1984) admits that although personality factors can change over an extended period of time, the process is slow and tends to be stable from one situation to another. Therefore, these factors are expected to influence the decision making behavior of an individual. Barnewall (1987) finds that an individual investor can be found by lifestyle characteristics, risk aversion, control orientation and occupation. Barnewall (1988) suggests the use of psychographics as the basis of determining an individual’s financial services needs and takes one closer to the truth from the customer’s perspective of need to build a marketing program.

Statman (1988) observed that people trade for both cognitive and emotional reasons. They trade because they think they have information, when in reality they make nothing but noise and trade only because trading brings them joy and pride. Trading brings pride when decisions made are profitable, but it brings regrets when they are not. Investors try to avoid the pain of regret by avoiding realization of losses, employing investment advisors as scapegoats and avoiding stocks of companies with low reputations. Harlow and Brown (1990) observes that psychologists tend to believe that an individual’s choice is primarily determined by factors unique to the particular
decision setting, whereas economists assume that there is some individual specific mechanism playing a common role in all economic decisions.

Kabra.G., Mishra.P.K., and Dash.M.K. (2010) studied the factors effecting investment behavior and concluded that investors’ age and gender are the main factors which decide the risk taking capacity of investors and that the modern investor is a mature and adequately groomed person. In spite of the phenomenal growth in the security market and quality Initial Public Offerings (IPOs) in the market, the individual investors prefer investments according to their risk preference. For e.g. Risk averse peoples chooses life insurance policies, fixed deposits with banks and post office, PPF and NSC. Occasions of blind investments are scarce, as a majority of investors are found to be using some source and reference groups for taking decisions. Though they are in the trap of some kind of cognitive illusions such as overconfidence and narrow framing, they consider multiple factors and seek diversified information before executing some kind of investment transaction.

**Conclusion:**
From the review of above studies, it can be concluded that there are numerous determinants that influence the individual investor’s behavior in stock market. Some factors influence majorly while other have slight role in influencing the behavior of an individual investor. The factors can be grouped into demographic, economic, social, and psychological in nature. The most common determinants that have a significant impact on the investors’ behavior are herding, over-reaction, cognitive bias, irrational thinking, confidence (over or under), gender, age, income, education, risk factor, dividends, influence of people’s opinion (friends or family), past performance of the company, accounting information, ownership structure, bonus payments, expected corporate earnings, get rich quick. On the other hand there are several determinants which were found uncommon in various studies conducted across different countries. They are Stock marketability, expected losses in international financial markets, perceived ethics of the firm, diversification purpose, tax consequences of an investment, inflation, trading opportunity, publicity, composition of the board of directors of companies, brand perception, social responsibility, economic expectation and control orientation.

### Factors influencing Individual Investor behavior.

<table>
<thead>
<tr>
<th><strong>Demographic Factors:</strong></th>
<th>Investor’s gender, age, marital status, education, income, occupation etc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stock Fundamentals:</strong></td>
<td>Beta, past return, risk, EPS, firm size, share price, share turnover and book to equity ratio.</td>
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<tr>
<td><strong>Lifestyle Characteristics:</strong></td>
<td>Personal ability, confidence level and dependency level of investors.</td>
</tr>
<tr>
<td><strong>Psychological Influences:</strong></td>
<td>Desires, goals, prejudices, biases and emotions that guide the investor’s decision.</td>
</tr>
<tr>
<td><strong>Risk Bearing Capacity:</strong></td>
<td>Parameters of safety, liquidity, capital appreciation, return and risk coverage.</td>
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<tr>
<td><strong>Personal Values:</strong></td>
<td>Socially and religiously expressive characteristics.</td>
</tr>
<tr>
<td><strong>Accounting Information:</strong></td>
<td>Information about Stock Merchantability, Expected Corporate Earnings, Financial Position, Dividend Paid, Expected Dividend and the Past Performance.</td>
</tr>
<tr>
<td><strong>Self Image/Firm Image coincidence:</strong></td>
<td>Information regarding the Product and Service, Reputation of the firm in the Industry, Expectation of Getting Rich Quickly, Firm Status.</td>
</tr>
<tr>
<td><strong>Advocate Recommendation:</strong></td>
<td>Advice or recommendation from the Broker, Family members, Friends and Stock holder.</td>
</tr>
<tr>
<td><strong>Personal Financial Needs:</strong></td>
<td>Diversification needs, Easy availability of the funds whenever</td>
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needed. Need to minimize the risk and loss and maximize the return.

*Neutral Information:* Information about government holders, Information from Internet, Fluctuations in the stock market, coverage in press, Recent price movements.

*Other Factors:* Inflation, Social Responsibility.

Factors influencing investing behavior
Most Common Factors:

Social:
- Influence of people’s opinion (friends or family)
- Herding

Psychological:
- Cognitive bias
- Irrational thinking
- Confidence (over or under)
- Get rich quick
- Over-reaction

Economic:
- Past performance of the company
- Ownership structure
- Accounting information
- Expected corporate earnings
- Bonus payments
- Dividends
- Risk factor

Demographic:
- Gender
- Income
- Age
- Education
Uncommon factors:

- Stock marketability
- Perceived ethics of the firm
- Tax consequences of an investment
- Composition of the board of directors of companies
- Economic expectation
- Control orientation
- Publicity
- Brand perception
- Expected losses in international financial markets
- Diversification purpose
- Inflation
- Trading opportunity
- Social responsibility
- Economic expectation
References:


