



A review of factors influencing investment decision in stock market

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Abstract

Investment is an asset class that is required to increase in its value over time. When we discuss investments, we refer to both financial (stocks, bonds, mutual funds, national pension scheme, bank FD, public provident fund, post office savings etc.) and non-financial including gold and real estate etc. While selecting any of these investments, traditional financial theories argue that investors take into consideration risk and return factors. However over the past few decades with the expansion and development of behavioural finance, numerous new factors have been identified that influence investment behaviour. The current study is a review paper that attempts to investigate several studies from around the world in order to identify various elements that influence individual investment decisions, notably in the stock market.

Keywords: Investors, investment decision, stock market, behavioural finance, risk and return

Introduction

Researchers have discovered that the financial market plays an important role in the growth of a country. Economic growth depends on financial development, and investment is a key channel through which financial development affects growth (Xu, 2000) ^[51]. Financial markets help to boost economic growth by concentrating resources on the most productive uses (Greenwood & Smith, 1997). Different financial market organisations have played an important role in building the country by increasing economic activity and supplying liquidity. They mobilise economic savings for investments in the economy's productive channels. There are different financial instruments through which investors can participate and invest. Investors are familiar to some of these instruments while there are some financial instruments investors are less familiar or have little knowledge about the functioning of these. When we look at the number of investors who invest in stock market we come across with a low percentage and very few investors in India opt to invest in stock market. Though there are numerous reasons for less participation but one of the hurdle is proper awareness about the functioning of stock market for a common investor. Regulators in India, for example SEBI organize different workshops on financial literacy to make a common investor understand the functioning of stock market. Socioeconomic, Demographic, and psychological characteristics are identified to be key determinants of equity awareness (Soekarno & Pranoto, 2020) ^[50]. Equity awareness is associated with the growth in financial market, and it enables investors to make better financial decisions, recognise and manage risk as investors (Soekarno & Pranoto, 2020) ^[50].

Objectives

To investigate the numerous factors that influence individual investor's behaviour to invest in stock market, as investigated by diverse researchers in various nations. To provide review of studies on investment behaviour of individual investor's in stock market.

Research Methodology

The paper is a comprehensive review of different studies on individual investor's behaviour in stock market as discussed and explored by various researchers in different countries.

Literature Review

Demography

Baker and Haslen (1977) discovered that age, sex, decision orientation, marital status, education, and income, in above order, have a significant impact on common stock risk-return preferences. Working on demographic variables Charles and Kasilingam, 2013 find that gender, age, education, income, financial dependents, and occupation are among demographic aspects that influence an investor's decision. Personal attributes including household net worth, homeownership, education level, and risk tolerance may have a significant impact on people's stock investment selections (Lei & Ramos Salazar, 2021) ^[30]. Investing in stock market is considered as a risky alternative and Muktadir-Al-Mukit, 2020 ^[27] reveals that the level of risk tolerance of investors in stock market varies greatly depending on marital status, family size, and financial responsibility in a study on the relationship between socio demographic parameters. Experience of an individual plays an vital role while taking any decision. Financial self-efficacy, prior experience (own and peer group) are among few of the key factors that influence investment intentions and actions of individual investors (Misra *et al.*, 2021) ^[33]. Lan *et al.* (2018) found that income and experience are particularly important determinants of investment behaviour and investor's age and experience are among the key determinants influencing diversification of asset in their portfolio (Mouna & Jarboui, 2015) ^[35]. Lutfi (2010) explored the relationship between demographic factors and investment decisions, concluding that men are more risk-takers and invest in the capital market than women, educated investors prefer the stock market and single investors prefer their investment capital market to married investors. Gender also influence investment decision and in comparison to females, males are more overconfident in their stock market understanding (Baker *et al.*, 2019) ^[6, 7]. Singla and Hiray, 2019 ^[49] explored that women prefer to

invest in fixed income instruments, while males prefer to invest in stock market-related assets and people choose fixed-income instruments and gold as investment options as they grow older, avoiding riskier investments. Baker *et al.* (1977) discovered that males and females place differing importance on dividends and capital appreciation. Males, in comparison to females, are less concerned with dividends and more concerned with capital gains, implying that males are willing to take more risks in exchange for a better return. Barber and Odean (2001) also compared men's and women's common stock holdings and discovered that males made 45 percent more transactions than women. Men who work in non-financial sectors and have greater experience were found as active investors in Malaysia by Khan *et al.*, (2017) [25, 26, 27]. While studying the factors influencing the investor behaviour in Saudi Stock Market, Khawaja and Alharbi (2020), explored that gender and age have no effect on investment behaviour; instead, professional experience, educational qualifications and investment volume have a considerable impact on investment decision. In a study on exploring the determinants of Individual Investor's behaviors in Tunisian stock market, Rekik and Boujelbene (2013) discover that demographic factors such as gender, age and experience influence investing decisions.

Social factors

According to the findings by Shiva & Singh, 2019 [47, 48], when it comes to deciding on preferred investment portfolios, investors consider social media platforms as the greatest priority in terms of utility, value and range. They further concluded that among the many social media sites, investors liked Twitter the most, followed by Facebook, and their primary interest in capital markets was seen in intraday trading, investment in the balanced portfolio and further the choice of speculative stocks was the main motivation for using social media networks. Investor's risk-taking and investment decisions are influenced with discussions with co-workers and decisions made by other market participants in stock exchange (Khan *et al.*, 2017) [25, 26, 27]. During the investing decision-making process, factors such as herding, advocate recommendation, social interaction and media factor influence investment decision (Haritha & Uchil, 2020).

Financial literacy

Financial literacy is a critical component of financial decision-making, influencing the behaviour of individual investors in key financial decisions including as stock investment (Rasool & Ullah, 2020) [20]. There is a significant influence of financial literacy on investment decision of investors in stock market Hassan Al-Tamimi & Anood Bin Kalli, 2009) [19]. Individuals with low financial literacy are far less likely to invest in stocks (Van-Rooij *et al.* 2011). Numerous demographic and socioeconomic factors such as gender, age, marital status, income and educational attainment have been found to influence financial literacy level, and there is a link between financial knowledge, financial attitude, and financial behavior (Garg & Singh, 2018) [17]. Gender of the investor also has an impact on the level of financial literacy and men has greater financial literacy as compare to women as pointed out by Hassan Al-Tamimi and Anood Bin Kalli, 2009 [19], in a study on UAE investors in stock market. The level of financial literacy has a considerable impact on the diversification of assets in portfolios of investor (Mouna & Jarboui, 2015) [35].

Accounting Information

Financial and non-financial data are still important in establishing a company's reputation and influencing investment decision of investor (Naveed *et al.*, 2020) [40]. Economic statistics and ratios and stock market historic returns are among the factors that influence investor's risk taking behavior which in turn affect their financial asset holding (Khan *et al.*, 2017) [25, 26, 27]. Khan *et al.*, (2017) [25, 26, 27] find that both institutional as well as retail investor's risk-taking and trading are influenced by their perceptions of prior portfolio returns. The entire financial health of a corporation is described in annual reports. Investors base their investing decisions on annual reports (Abu-Nassar & Rutherford, 1996) [2]. Individual investors considered corporate financial statements to be the most important source of information regarding their investment decisions, according to Al- Ajmi (2009) [3], who conducted a study to analyse their perceptions of corporate financial statements as a knowledge source for individual investors. Financial disclosures have a significant impact on stock selection, according to Das (2012) [16]. The four most crucial elements in decision-making for investors are price to earnings (P/E) ratio, earnings per share (EPS), net operational profit after taxes (NOPAT), and return on equity (Maditinos *et al.*, 2007) [31]. The past performance of the company's stock, anticipated stock splits, capital increase, and bonus, the dividend policy, anticipated corporate earnings, and get-rich-quick are the five most important elements that investors consider while making investment decisions (Obamuyi, 2013) [41]. Financial statements of the company, anticipated corporate earnings, and firm status in the sector are key factors influencing investment decision, according to a study by Mojgan and Ali (2011) [34]. The most important elements in the UAE that affected investor behaviour were stock marketability, getting rich soon, anticipated company earnings, and stock performance in the past (Al-Tamim, 2006) [4]. Cash dividend per share and earnings per share are the factors that most significantly affect investor's decisions to buy stocks (Mojgan & Ali, 2011) [11]. The elements that impact a person's decision to invest in stocks include dividends, rapid growth, quick profits, investments for savings, and long-term growth (Baker & Haslem, 1974).

Psychological Factors

In decision making we come across different factors and different dimension of any problem. So in modern financial system we can't solely rely on traditional finance theories like expected utility theory and efficient market hypothesis in making financial decision. Researchers have come up with new development in behavioural finance and highlighted various behavioural biases that influence decision making of investor regarding their investment options. Tversky and Kahneman (1979) [23] introduced prospect theory, which explains how people make decisions in situations containing uncertainty, risk, and probabilities. When faced with an equal risk and return situation, investors assess wins and losses differently, favouring perceived gains over perceived losses. In stock market herd behaviour is there when investors follow others behaviours even when their private information tells them to act otherwise (Banerjee, 1992) [8]. When markets are in extreme upward direction herd behavior is present in market. Irrational investors ignore their own analysis and

information and go with the market consensus, even if they do not agree with it (Christie & Huang, 1995) ^[14]. Chang *et al.*, (2000) ^[13] argue that herding behaviour does not only occur when the markets are in stress. They believe there is a degree of herding behaviour in normal market conditions which becomes significant when the market shows extreme upward or downward movements and much volatility. Lao & Singh, (2011) ^[29] concludes that herding behaviour exists in both India and China stock markets and herding behaviour is more predominant during large market movements.

Sometime investors fall prey to overreaction and under reaction. Overreaction is induced by investor's overconfidence in private information, according Daniel *et al.*, (1998) ^[15]. Investors who engage in overreaction behaviour do so by misinterpreting new information supplied to the market (Can & Dizdarlar, 2021) ^[12]. According to DeBondt and Thaler (1990), the level of overreaction in analyst earnings projections grows with the length of the forecast time, because there is an increase in overreacting with increasing uncertainty and over a lengthy time horizon. The study on Chinese share market by Wang *et al.*, (2004) explored that, the trends in Chinese stock returns are consistent with investor overreaction. Musnadi *et al.*, (2018) ^[38, 39] investigated the overreaction and underreaction behaviours of investors across the Indonesian stock market's sectoral stock indices and found that the overreaction anomaly was evident among the winner portfolios throughout all sectoral indices. Despite the fact that the changes may be attributable to changes in the stock's fundamentals, some investors invest solely in equities that have reached a new low from a previous high. Investors are drawn to these stocks because they offer a chance to buy them at a discount. Kengatharan and Kengatharan, (2014) ^[24] discovered that anchoring has a considerable favourable impact on investment success. The impact of anchoring on investor experience, according to Bonner (1990), decision makers with more knowledge are less prone to anchoring effects.

Investor decision is influenced by under reaction bias, which is produced by investor's conservatism, who depend solely on prior assumptions and earnings estimates and may ignore all available information (Barberis *et al.*, 1998). They don't base their investing decisions on current events that could have a big impact on their decision, resulting in underreaction. According to Daniel *et al.*, (1998) ^[15], investor's skewed self-attribution causes under-reaction. Metawa *et al.*, (2019) ^[32] in their study on Egyptian stock market used behavioural factors (herd behaviour, investor's sentiment, overconfidence, overreaction and underreaction) as mediator variables to explore the relation between investor's demographic variables with their investment decisions and found that investor's sentiment, overconfidence, herd behaviour, investor underreaction and overreaction, all have a substantial impact on investment decisions. Renu and Christie (2019) investigated the relationship between income and behavioural bias and find that, high-income investors were more likely to have higher overconfidence bias but lower representativeness, availability, loss aversion and mental accounting biases. For examining the impact of behavioural bias on investor decision-making on the Ghana Stock Exchange by Quaicoe and Eleke-Aboagye (2021) ^[43, 44], found that Herding with regret aversion and the gambler's fallacy, as well as

anchoring, mental accounting and overconfidence were found to have a considerable influence on investment decisions. Ahmad (2020) ^[11] finds that underconfidence bias has a significant detrimental impact on investor's short- and long-term investment decisions. Baker *et al.*, (2019) ^[6, 7] discovered the presence of various behavioural biases in a study of 500 Indian investors, including disposition effect, overconfidence, self-attribution, herding representativeness, mental accounting, anchoring bias and emotional biases.

According to the standard assumptions underlying models of decision making under uncertainty, the disposition effect, that include the inclination to sell winning assets while holding onto losers is an investing blunder (Heimer, 2016). Individual investors are particularly vulnerable to the disposition effect, which is influenced by demographic factors such as gender, age, gender, experience, and investor sophistication (Zahera & Bansal, 2019) ^[52]. Using a monthly data from one of Brazil's major asset management organisations, from June 2007 to February 2017, Oreng *et al.*, 2021 ^[42], find that disposition effect is more common in risk averse investors, age is not connected with the disposition effect, tendency to experience the disposition effect diminishes during bull markets but increases during a bear markets. Furthermore, knowledgeable investors are more likely to experience disposition effect. Shah *et al.*, (2018) ^[46] explored that reveal that heuristic biases (representativeness, overconfidence, availability, and anchoring) have a significant detrimental impact on the investment decisions of individual investors regularly trading on the PSX, as well as perceived market efficiency. Mental accounting, anchoring, and overconfidence, as well as biases like regret aversion and gambler's fallacy, were discovered to have a significant impact on investor decisions by Quaicoe and Eleke-Aboagye, (2021) ^[43, 44], in a study on behavioural factors influencing investment decision on the Ghana Stock Exchange.

Others factors

Specialized press and stock exchange bulletins influence the individual investors in their risk taking and investment decision (Khan *et al.*, 2017) ^[25, 26, 27]. Ibrahim and Agbaje (2013) ^[20] argue that variations in inflation can make an economy unpredictable. This suggests that inflation is an important macroeconomic factor that affects the movement of investment therefore determines the direction and fluctuations seen in return on equities over time. They also claim that because of the potential impact on their profits, this uncertainty may discourage both domestic and foreign investors from making investments. Braggion *et al.*, (2022) ^[11], find that when local inflation is greater, individual investors buy fewer equities (sell more stocks). Grinblatt *et al* (2011) ^[12] find that IQ is monotonically correlated with participation in the stock market.

Conclusion

The decision-making process of individual investors in the stock market is complex and influenced by various elements, including demographic features, accounting information, external recommendations, social influences, psychological biases, and personal situations. These factors often determine risk tolerance and investment objectives. Accounting information, including Earnings per Share, Stock Price per Share, Return on Equity, Book Value per Share, Price to Earnings Ratio, Current ratio, Debt to Equity

ratio, Dividend Payout Ratio, Net Operating Profit After Taxes, Past performance of shares influence investor investment decision. Recommendations of Brokers, Financial advisors, Business News Channels, professional investors, Newspapers, Magazines also significantly influence investor investment decision. Social factors, such as the influence of family, friends, and colleagues, further complicate the decision-making landscape, adding a layer of communal influence to personal financial strategies. Psychological factors like herding, overreaction, Underreacting, Disposition Effect, Representativeness, Overconfidence, Availability bias, Anchoring, Mental Accounting, Regret bias and Gambler fallacy etc. and various cognitive biases introduce emotional elements into what should ideally be rational decision-making. These psychological tendencies can lead to suboptimal investment choices, driven by impulses rather than sound analysis. Personal factors, including the level of IQ, availability of funds and an individual's risk appetite, also play a critical role in shaping investment decisions, as do broader economic factors like financial literacy and inflation. In conclusion, investment decisions of individual investors are governed by a complex interplay of demographic, financial, social, psychological, and personal influences rather than any single factor.

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