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# The Development of a Research Framework for Decisions to Participate in the Stock Market: A Systematic Review of Literatures from 2011-2021

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## ABSTRACT

*The purpose of this paper was to understand stock market participation among individual investors. This paper involved a descriptive systematic-analysis of the empirical literature from journal indexed by Scopus, ISI and ERA with emphasis on understanding the concepts and background underlying stock market participation. Based on the review of past literature, this paper suggested that social alignment, fundamental stock literacy, and trust in institutions and stock value expectation as key concepts to understand stock market participation. The recommended framework may serve as a practical guide for stock broking firms to understand the behaviour of individual investors, encourage participation in the stock market and aid in the development of competitive marketing strategies.*

*Keywords: individual investors, behavioural finance, traditional finance, stock market*

## INTRODUCTION

In the world of finance, the two distinct ideologies are traditional finance and behavioural finance theory (Ahmad *et al.*, 2017a; Jaiyeoba & Haron, 2016; Raut, 2020). In traditional finance, researchers believe that investors are rational and include all relevant information into their decision-making and on that basis, financial markets are efficient because the information available are expressed in security prices (Degutis & Novickytė, 2014; Peón *et al.*, 2019). Traditional finance theories include the likes of efficient market theory, capital asset pricing theory, capital structure policy and dividend policy (Ackert, 2014; Al-Shattarat et al., 2018; Prorokowski, 2011; Soon & Abdul-Rahim, 2017). Meanwhile, behavioural finance combines two disciplines, psychology and economics, that aims to understand investors' psychology in relation to financial decisions (Coleman, 2016; Pompian, 2017; Tuyon & Ahmad, 2016; Zhu, 2018). This combination explains how, as people save, spend and borrow money they tend to make irrational financial decisions (Cohen & Kudryavtsev, 2012; Kumar & Goyal, 2016). Several behavioural finance theories for example are overconfidence, disposition effect, herding bias and self-attribution bias (Baker *et al.*, 2019; Barber & Odean, 2013; Khan *et al.*, 2019).

Stock market participation refers to trading in the stock market by buying companies' shares in order to increase wealth (Arrondel *et al.*, 2014; Calvet *et al.*, 2017; Cardak *et al.*, 2019). Individuals also participate in the stock market to save for retirement (Chen *et al*, 2020; Eugster, 2019; Fong *et al.*, 2021). Besides that, stock market is highly significant since it allows accumulation of cash, welfare and customer smoothing (Chatterjee, 2015; Jappelli & Padula, 2015; Tekçe & Yilmaz, 2015). The lack of participation in the stock market may contribute to socioeconomic losses for an economy (Khan *et al.*, 2019).

Although stock market participation had increased sharply worldwide, participation in the stock market among individual investors have remain stagnant over the past few years (Briggs *et al.*, 2021; Cadena Silva *et al.*, 2020; Khan *et al.*, 2017). Past studies have tried to understand stock market participation and the factors influencing individual decisions whether or not to participate in the stock market (Akhtar & Das, 2019; Eugster, 2019; Forbes, 2015; Sivaramakrishnan *et al.*, 2017). Thus, the objective of this paper is to determine constructs and identify the major factors related to individual investors' stock market participation.

## METHODOLOGY

This research adopted a systematic approach to obtain literatures related to stock market participation. The first stage of the literature search entailed using Google Scholar search to find all relevant papers and publications containing certain 'keywords' fitting to the research criteria. The search in Google Scholar generated a total of 440,000 articles. The 'keywords' used in this research refers to stock market participation, investor's attitude, social networks, financial literacy and trust.

**Table 1: The List of Inclusion and Exclusion Criteria**

| Criterion | Eligibility | Exclusion |
|---|---|---|
| Literature type | Journal (research articles) | Journals (systematic review), book, abstract |
| Language | English | Non-English |
| Timeline | Between 2011 and 2021 | Before 2011 |
| Industry | Finance | Non-finance |

In order to find the most relevant research publications in the area, the researcher extended the keywords search to include the Emerald Insight, Proquest and Ebsco databases. This was done to obtain more articles on stock market participation. The next move was to pick the journal papers most appropriate for the research, evaluate the title of the papers and their abstracts.

The search protocol focused on scholarly publications written in English published from 2011 to 2021 in order to review more recent literature on the framework. Journals in the areas of finance have been included in the review. Once the articles' search is completed, the inclusion and exclusion criteria were applied. Finally, 20 research papers were taken for the sample.

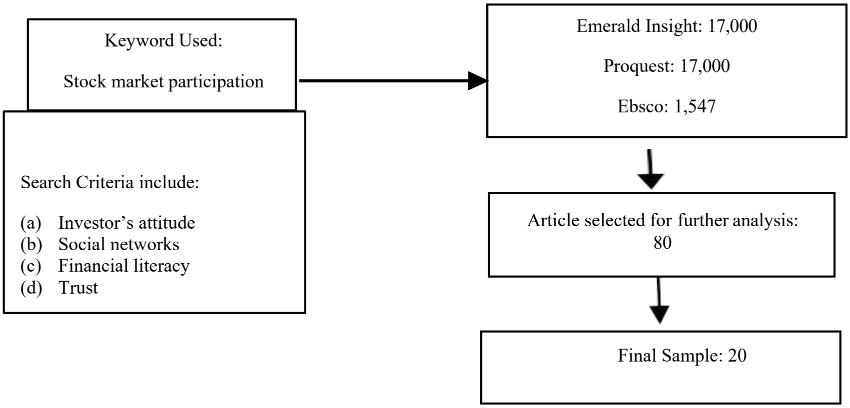


**Figure 1: Process of Searching Literature Related to Stock Market Participation**

## FINDINGS AND DISCUSSION

This study found there are various publications that explicitly addressed the connection between perceived value and stock market participation. Samudro *et al*. (2020) described perceived value as a consumer's overall assessment of a product or service's usefulness based on expectations of what is obtained from an exchange. Perceived value can also reflect the understanding of the usefulness of a certain relationship (Demirgüneş, 2015). Improving investors' interactions may increase their satisfaction, such as their intentions to participate more actively in the stock market (Puustinen *et al.*, 2013).

From previous literature, this study argues that financial literacy tends to influence individual investors to participate in the stock market (Ismanto *et al*, 2019; van Rooij *et al*., 2011). Other major variables that influences stock market participation are herding, investors sentiment, social word of mouth, peer, internet and family effects (Argan *et al*., 2014; Lima *et al*., 2020; Sharma & Kumar, 2020). Meanwhile, Mauricas *et al.* (2017) showed that stock market participation display investors' lack of financial literacy, low risk tolerance and lack of trust. Table 2 shows some features that describes stock market participation.

**Table 2: The List of Outcomes of Stock Market Participation**

| | |
|---|---|
| Attitude towards behaviour | (Raut *et al.*, 2018) |
| Subjective norms | (Raut *et al.*, 2018) |
| Perceived behavioural control | (Raut *et al.*, 2018) |
| Past behavioural bias | (Raut *et al.*, 2018) |
| Financial literacy | (Kadoya *et al.*, 2017) |
| Herd behaviour | (Kanojia *et al*, 2020) |
| Peer performance | (Kaustia & Knüpfer, 2012) |
| Social influence | (Kaustia & Knüpfer, 2012) |
| Word of mouth | (Al-Samydai *et al.*, 2020) |
| Trust | (Georgarakos & Pasini, 2011) |
| Sociability | (Georgarakos & Pasini, 2011) |
| Perceived past portfolio returns | (Khan *et al.*, 2019) |
| Firms' characteristics | (Khan *et al.*, 2019) |
| Optimism | (Khan *et al.*, 2019) |
| Corporate scandals | (Giannetti & Wang, 2016) |
| Overconfidence | (Khan *et al.*, 2019) |
| Expected investment value | (Njuguna *et al.*, 2016) |
| Expected sacrifices | (Njuguna *et al.*, 2016) |
| Subjective investment knowledge | (Njuguna *et al.*, 2016) |

The table above shows various features of stock market participation and from the literature review, this study suggests that stock market participation is characterised by four associated main constructs. Several components of individual investors behaviour serve to explain stock market participation such as gender, risk sharing and windfall gain (Arora & Kumari, 2015; Briggs *et al.*, 2021; Niu *et al.*, 2020). This study contends that all these different constructs may be classified into four dominant concepts in the context of stock market participation literature.

## Social Alignment

This research proposed that herding, investors' sentiment, social word of mouth, peer, internet and family effects be grouped under social alignment. Social alignment refers to how one or more individuals share current realities based on mutual understanding. The idea of alignment explains the multi-layered, complex social interactions and collaborations between individuals in various types of social experiences (Liu *et al.*, 2019). In the context of investing, investors may be irrationally guided by social influence and contact with other individuals. They may make basic errors in a herd like manner due to external pressures and the influence of news media. The media has two functions, first it sets the stage for market movements and second, it initiates them (Ruan *et al.*, 2018). Moreover, the advent of the internet has also influenced investors' trading patterns and this is demonstrated by the growth in individual investors' trading volume (Gopi & Ramayah, 2007; Ramayah *et al*., 2014).

## Fundamental Stock Literacy

In academic literature, poor financial literacy may explain biases or irrational behaviour as illustrated by behavioural finance (Adetunji & David-West, 2019; Baker *et al.*, 2019). Investors' behaviour have been assumed to be fully rational in terms of their decision-making by maximising utility and as economic agents' that take into account potential uncertainties depending on all available information (Ahmad *et al*., 2017a; Kumar & Goyal, 2015).

In this regard, most investors endorse the fundamental 'intrinsic value' inferred by assessing current and future earnings, cash flows, interest and risk factors in assessing particular stocks and industries (Lalwani & Chakraborty, 2018; Nti *et al*., 2020). As a result, the intrinsic value of a company's stock may differ from its stock price (Lalwani & Chakraborty, 2018; Ma *et al.*, 2018). If the intrinsic value is higher than the stock price, the stock is considered as undervalued (Bihari, 2014; Putra *et al*., 2018). Thus, it will attract investors to purchase the stock (Bihari, 2014; Ma *et al.*, 2018). Hence, individual investors need to embed financial expertise and skills into real life processes that contribute to better financial decisions.

## Trust in Institutions

Based on the literature, trust refers to an individual acknowledgement pertaining to the reliability and integrity of another party (Burke & Hung, 2021; Ruan *et al*., 2018; van Esterik-Plasmeijer & van Raaij, 2017). Trust is an integral component of every relationship be it institutional arrangements or interpersonal relationships (Giannetti & Wang, 2016).

In most social and economic relationships, trust plays an important part, such as stock market which is full of uncertainties. It is because investors have insufficient knowledge and resources and are therefore seeking to minimise uncertainties and ambiguities by adding mental shortcuts (Ricci & Caratelli, 2017; Tho *et al.*, 2018). Therefore, understanding how trust is created and maintained can lead to stock market development (Christensen *et al.*, 2019; Ng *et al.*, 2016).

Engelhardt *et al.* (2021) observed that stock markets benefit when individuals trust each other. Without trust, stock markets appear to be weaker with lower participants (Asgharian *et al.*, 2013; Balloch *et al.*, 2015). Investors seldom place their trust in financial institutions and the stock market if there was insufficient degree of integrity between potential investors and the people managing their funds (Christensen *et al.*, 2019; Devlin *et al.*, 2015).

## Stock Value Expectation

The efficient market hypothesis states that stock market prices reflect all freely available information, and there are large number of investors aggressively competing in order to forecast individual stock prices (Kapoor & Prosad, 2017; Peón *et al.*, 2019; Soon & Abdul-Rahim, 2017). Investors favour higher expected returns with lower risk hence owning efficient portfolios (Bolton *et al.*, 2013; Merkle, 2017). In traditional finance, it is assumed that investment decisions will be made based on the relationship between expected returns and risks in relation to different investment options (Ahmad *et al.*, 2017b; Devadas & Vijayakumar, 2019; Jaiyeoba & Haron, 2016).

From a marketing perspective, value refers to product or service offerings that satisfy consumers' needs and marketing aims to provide greater value to consumers (Kim & Tang, 2020; Yeh, 2013). Marketing managers are advised to use consumer-oriented strategies to support and maximise long-term performance (Chaudhry *et al.*, 2019; Lin *et al.*, 2016). This is because companies operate in a competitive environment and more consumers are looking for value (Costa Climent & Haftor, 2021; Dyer *et al.*, 2018; Freudenreich *et al.*, 2020). Hence, stock prices before actual purchase may reflect investors' expectations, belief and confidence in what they are acquiring, compared to what needs to be given up (Khan *et al.*, 2019; Merkle, 2017; Xia *et al.*, 2014).

Past studies observed that stock market expectations are influenced by past experiences, sentiments and word of mouth communication (Al-Samydai *et al.*, 2020; Cassella & Gulen, 2018; Hurd *et al.*, 2011; Lee *et al.*, 2015). Here, investors seek monetary gains through investing to maximise their capital. Furthermore, if an individual investor assumes that investing in a particular way demonstrates benevolence, the stock's value is expected to be higher. Hence, based on the review of past literature, this paper suggests four important constructs that influence stock market participation.

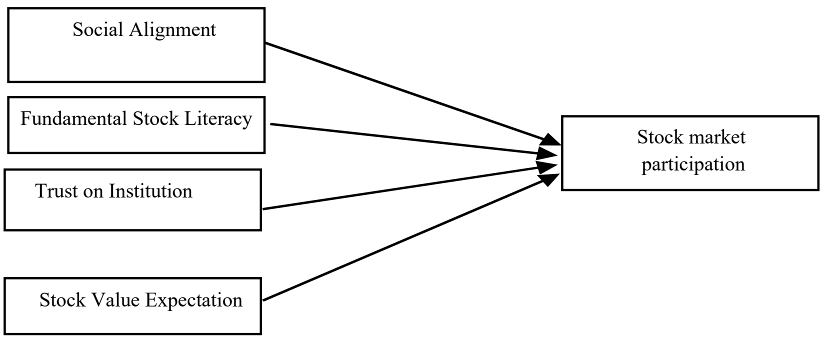


**Figure 2: Proposed Conceptual Framework of Stock Market Participation**

## CONCLUSION

This study provided an overview of individual investors' participation in the stock market. This study also helps to recognise a number of common features that affect individual investors' participation in the stock market. The outcomes of the research are valuable for stock broking firms in developing innovative investment products and successful business plans in the current competitive investing environments.

From an academic point of view, the current systematic review can contribute to the understanding behind individuals' stock market participation by incorporating certain marketing oriented constructs into a new conceptual framework. The study also shows that personal bias and incorrect evaluation of past performances can limit individual investors' participation in the stock market. In short, it is critical that individual investors' develop fundamental stock literacy to assist with their knowledge and understanding of expected stock values. Then, investors may gauge whether they are rational or biased in their investing decisions and improve accordingly.

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