# Perceived Market Efficiency and Investment Performance in Stock Market: A Literature Review

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**ABSTRACT**

This research is a literature review of 16 scientific articles in which the articles measure the influence of perceptions of stock market share on stock investment performance, with an emphasis on individual perceptions. This research is motivated by the large number of studies related to the perception of the efficiency of investment players' stock market share on stock investment performance, but most previous research was only limited to perceptions from a macro, micro and company perspective, very rarely research related to individual perceptions of stock market share on performance. stock investment. The benefit of this study is that it can add to financial literature, especially individual perceptions of stock market share. The conclusion of this study was obtained from several studies studied, researchers found that external things such as social influence can influence the decisions a person makes. Previous studies also suggested that the model they created could be used to look at other behavioral variables. In addition, previous research calls for further research with populations such as professional investors, this is to determine how much additional psychological components, such as financial literacy, risk taking, and overconfidence, can drive the relationship between personality traits and perceived investment performance.

***Keywords:*** *Perception of market efficiency, Stock investment performance, Individuals.*

## 1. INTRODUCTION

Along with developments in increasingly sophisticated times and accompanied by changes in cultures in the world, which begins with changes in work ethics in companies, such as financial information that is easily accessed and obtained by anyone, and the emergence of Artificial Intelligence-based technology, everyone can analyze the performance of companies that have been published in a very short time and accurately. This makes changes not only in terms of individual perspective analysis of financial report information but also affects individual perspectives on stock market efficiency. This makes many stock market efficiency perspectives on individual stock investment performance vary greatly, both positive and negative perspectives (Alves et al., 2020; Choi, 2021; Durnev et al., 2004; Hu, 2019). In general, quite a lot of research related to the perspective of stock market efficiency and stock investment performance has been carried out both internationally and nationally. According to Mulvey et al., (2006) stock market investment performance in recent years has been greatly influenced by the perspective of personal information so that this makes changes in terms of stock market efficiency more subjective and unpredictable. So, the risks that arise in the stock market become greater, because the information needed is not only limited to financial information that has been published, but also personal information that is only known by certain parties. Research according to Hung (2016), researchers found that for all types of traders except mutual funds, traders' market-adjusted investment performance improved with the holding period after purchase, and aggressive buy orders were less superior than less aggressive buy orders. The results of this study indicate that the most aggressive buy orders tend to outperform the least aggressive buy orders during the holding period. Meanwhile, according to Aktas et al., (2015) social influence greatly influences perceived investment performance and personality traits, this research looks at it from an individual's perspective, looking at the person's personality traits. Durnev et al., (2004) research shows that capital budgeting decisions can have a significant impact on variations in company-specific stock returns. Durnev et al., (2004) research argues from the point of view that a person makes investment decisions from a capital budget perspective, while Aktas et al., (2015) research argues that company performance and investment are greatly influenced by working capital management (WCM). Alves et al., (2020) research related to the US stock market not functioning well during the COVID-19 pandemic compared to the previous global financial crisis, so what about the perception of the stock market from an individual perspective. Research according to Palomino (2005) in the mutual fund industry, relative performance objectives can influence the behavior of fund managers. Managers with this objective tend to use riskier investment strategies and reduce the number of low-quality funds. So, what if we look at it from a market perspective, the efficiency of individual shares, for this reason it must be studied more deeply.

## 2. RESEARCH METHODOLOGY AND DESCRIPTIVE DATA ANALYSIS

This research uses a systematic literature review methodology of published research and bibliometrics using the Voos Viewer application. Research according to Todea & Pleşoianu (2013) argues that stock markets in Central and Eastern Europe are very effective because of foreign portfolio investment. In addition, liquidity and market capitalization are very important for determining short and long term dependencies; Market volatility also greatly influences efficiency, so what if we look at it from the perspective of the perception of stock market efficiency from an individual perspective, especially in Indonesia, this is also in line with research by Arias Fogliano de Souza Cunha & Samanez (2013) that during the analysis period from December 2005 to December 2010, sustainable investments in the Brazilian stock market, measured using the Corporate Sustainability Index (ISE), did not achieve satisfactory financial performance. Although sustainable investments have several advantages, such as increased liquidity and low diversifiable risk, the restrictions imposed by sustainable investments in Brazil can impact their return and risk attractiveness. Research by (Arias Fogliano de Souza Cunha & Samanez (2013) does not look from the perspective of individual stock market perceptions but this research involves stock investment performance with increased liquidity, verified risks. Meanwhile, research (Hu, 2019; Hung, 2016) found that many factors, such as trading volume, closing price, return volatility, and trading costs, influence market efficiency in China's stock market. Speculative trading also affects market efficiency, as stocks with high return volatility and high price levels tend to be more efficient in the short term. However, after 15–20 minutes, this effect gradually disappears. But what if this research is seen from the perspective of individual perception and looks at the efficiency of the stock market to assess stock investment performance. then research by Su (2015) found that the reputation of investment banks (IBs) greatly influenced the long-term stock performance of IPOs in the Chinese stock market, but only after the reform. Before the reform, IB reputation did not affect the long-term stock performance of IPOs. This research only looks at the reputation of investment banks and their stock performance in the long term, this research has not studied the influence of individual perceptions of stock market efficiency on stock investment performance. Meanwhile, research according to Zhang & Gong (2018) found that strategic investment was affected by income pressure, but this impact was moderated by stock returns and sales growth. Low stock returns amplify the negative impact of earnings pressure, while low sales growth weakens this impact. Zhang & Gong (2018) research would be better if it studied not only in terms of investment strategy but also more on the perception of stock market efficiency on stock investment performance itself and combining risks such as stock return risk, sales growth and others. Meanwhile, research related to clusters, namely Alves et al., (2020) found that leading stock markets around the world can be divided into groups based on comparable long-term efficiency profiles. However, efficiency and cluster rankings only last for a short time. The proposed stock market network shows a strong globalization of stock market efficiency and has a modular structure, indicating that countries with low or high efficiency are more likely to cover certain market groups. Alves et al., (2020) research only covers stock market efficiency in the long and short term, does not combine time as a whole, and does not examine individual perceptions of the stock market regarding stock market performance in more detail. Meanwhile, Choi (2021) research analyzes the efficiency of the US stock market during the COVID-19 pandemic and compares it with the global financial crisis. The results show that the average return series shows different features during the two crises, with the COVID-19 pandemic showing persistent features. Research Choi (2021) is more generalized regarding the impact of the pandemic on the US stock market which influenced the global financial crisis but does not relate to individual perceptions of the perception of the stock market itself which influences stock investment performance. The studies are answered in a Table 1 to see how much citations made from the time of publication until now. Figure 1 shows the variable relationship among 16 literacy articles.

**Table 1.** Citation Paper

| Author | Year | Title |
|---|---|---|
| Choi, Sun-Yong | 2021 | Analysis of stock market efficiency during crisis periods in the US stock market: Differences between the global financial crisis and COVID-19 pandemic |

**Table 1.** Citation Paper (cont.)

| Author | Year | Title |
|---|---|---|
| Alves, Luiz G A<br>Sigaki, Higor Y D<br>Perc, Matjaž<br>Ribeiro, Haroldo V | 2020 | Collective dynamics of stock market efficiency |
| Shen, Yu<br>Zhu, Kehan<br>Wu, Fengyun<br>Chen, Ping | 2020 | The Stock Investment Performance of Pension Funds in China |
| Durán-Santomil, Pablo<br>Otero-González, Luis<br>Correia-Domingues,<br>Renato Heitor<br>Reboredo, Juan Carlos | 2019 | Does Sustainability Score Impact Mutual Fund Performance? |
| Hu, Yingyi | 2018 | Short-horizon market efficiency, order imbalance, and speculative trading: evidence from the Chinese stock market |
| Akhtar, Fatima<br>Thyagaraj, K S<br>Das, Niladri | 2018 | The impact of social influence on the relationship between personality traits and perceived investment performance of individual investors Evidence from Indian stock market |
| Zhang, Yu<br>Gong, Yan | 2018 | Stock Return or Sales Growth? Multiple Performance Feedback and Strategic Investments Under Securities Analysts' Earnings Pressure |
| Leone, Andre<br>Tomasini, Marcello<br>Al Rozz, Younis<br>Menezes, Ronaldo | 2018 | On the performance of network science metrics as long-term investment strategies in stock markets |
| Hung, Pi-Hsia | 2016 | Investor sentiment, order submission, and investment performance on the Taiwan Stock Exchange |
| Su, Chen | 2016 | Does institutional reform improve the impact of investment bank reputation on the long-term stock performance of initial public offerings? |
| Aktas, Nihat<br>Croci, Ettore<br>Petmezas, Dimitris | 2015 | Is working capital management value-enhancing? Evidence from firm performance and investments |
| Hung, Pi-Hsia<br>Chen, An-Sing<br>Wu, Yun-Lin | 2015 | Order Aggressiveness, Price Impact, and Investment Performance in a Pure Order-Driven Stock Market |

**Table 1.** Citation Paper (cont.)

| Author | Year | Title |
|---|---|---|
| Todea, Alexandru<br>Pleșoianu, Anita | 2013 | The influence of foreign portfolio investment on informational efficiency: Empirical evidence from Central and Eastern European stock markets |
| Arias Fogliano de Souza Cunha, Felipe<br>Samanez, Carlos Patricio | 2012 | Performance Analysis of Sustainable Investments in the Brazilian Stock Market: A Study About the Corporate Sustainability Index (ISE) |
| Palomino, Frederic | 2005 | Relative performance objectives in financial markets |
| Durnev, Art<br>Morck, Randall<br>Yeung, Bernard | 2004 | Value-Enhancing Capital Budgeting and Firm-specific Stock Return Variation |

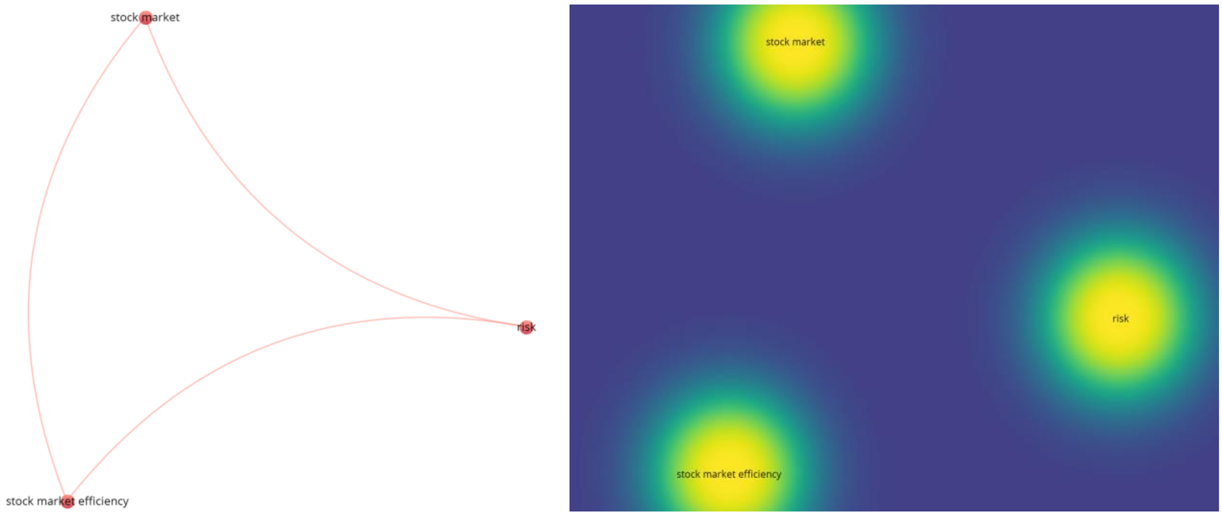


**Figure 1** Variable Relationships from 16 Literacy Articles.

## 3. DISCUSSION ON METHODOLOGY

From research into several studies described, it seems that questionnaires and statistical analysis such as hierarchical regression and structural equation modeling are the methods most frequently used. Questionnaire (Akhtar et al., 2018; Shen et al., 2020). In this research, questionnaires were used to collect data from respondents. This questionnaire includes questions about independent and dependent variables that are relevant to the research (Shen et al., 2020). The main reason for using questionnaires is that they are effective and can collect data from many respondents in a short time. Hierarchical Regression: In this study, hierarchical regression was used to predict perceived investment performance using the Big Five personality dimensions, social influence variables, and interaction terms. This method was chosen because it allows researchers to evaluate how well the independent variables explain variation in the dependent variable and to evaluate how the explanation of variation changes when additional variables are added to the model (Ahmad, 2017; Akhtar et al., 2018; Leone et al., 2018; Mulvey et al., 2006).

Structural Equation Modeling (SEM): SEM was used in this study to evaluate a number of independent relationships. This is done primarily because it allows researchers to test hypotheses about the relationships between observed and latent variables and evaluate how consistent the theoretical model is with the data they collect (Akhtar et al., 2018; Hung, 2016; Su, 2015; Zhang & Gong, 2018). Cluster Analysis: This research uses cluster analysis to find groups of businesses that have comparable performance. This method was chosen because it allows researchers to group comparable items into the same group, which can then be analyzed further (Arias Fogliano de Souza Cunha & Samanez, 2013). Based on the 16 articles reviewed, the research method used was Survey Approach: The researcher in the quote used a survey approach to collect data; Their main instrument was a structured questionnaire, which was thoroughly pre-tested before being used for data collection. Data Analysis Approach: The researcher seems to use a data analysis approach in the quotes and. They analyze company data and may make conclusions using statistical techniques. Aktas et al., (2015) Theoretical and Empirical Approaches: Researchers use theoretical and empirical approaches in their quotes. To support their conclusions, they refer to theoretical models and empirical research that has been conducted previously. Aktas et al., (2015) Network Approach: Researchers use a network approach to citations. They used centrality theory and previous research methods to create alumni network variables (Arias Fogliano de Souza Cunha & Samanez, 2013).

## 4. CONCLUSION

In several studies reviewed, researchers found that external things such as social influences can influence the decisions a person makes. Previous studies also suggested that the model they created could be used to look at other behavioral variables. In addition, previous research calls for further research with populations such as professional investors, this is to determine how much additional psychological components, such as financial literacy, risk taking, and overconfidence, can drive the relationship between personality traits and perceived investment performance. In addition, previous research asks individual investors to be careful when making new investments. Because new investors must learn the risks and benefits associated with the investment. No matter whether the dependency is short-term or long-term, there is a direct and significant correlation between foreign portfolio investment and efficiency, according to studies conducted by previous researchers.

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