

INTERNATIONAL CONFERENCE ON HEALTH SCIENCE, GREEN ECONOMICS, EDUCATIONAL REVIEW AND TECHNOLOGY 2023 https://proceeding.unefaconference.org/index.php/IHERT

CAPITAL MARKET EFFICIENCY AND RETAIL INVESTOR RISK

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Abstract

This study aims to present a thorough analysis of the relationship between capital market efficiency and the risk faced by retail investors. Market efficiency is defined as the ability of the market to reflect all available information in asset prices, while retail investors' risk includes both systematic risk and idiosyncratic risk that they may experience. This study uses a theoretical framework that integrates the theories of market efficiency, investor behavior, and risk management. Market efficiency was also found to have a significant impact on the level of risk faced by retail investors. A more efficient market theoretically reduces the potential for arbitrage and increases transparency, but at the same time, can magnify market volatility. This research provides deep insight into how market efficiency and retail investor risk are intertwined and provides a basis for the development of adaptive investment strategies. Practical implications of the findings include the need for better financial education, emphasis on portfolio diversification, and increased investor awareness of the impact of market information on their investment behavior.

Keywords: Efficiency, Capital Markets, Risk, Retail Investors

INTRODUCTION

The capital market, as the center of global economic activity, reflects the complexity of economic dynamics and the behavior of the players in it. Capital market efficiency is one of the main concepts that has become the focus of attention of financial researchers and practitioners. In this context, the risks faced by retail investors attract special attention due to their significant role in driving the market and sustaining economic activity. The concept of capital market efficiency, as outlined by the Efficient Market Theory (EMH), presents the view that financial asset prices reflect all available information. In other words, if the capital market is efficient, market participants cannot generate abnormal profits by utilizing readily available information. This theory provides the basis for understanding how information is processed and reflected in asset prices, and the implications for investment decisions.

Meanwhile, retail investors, which include individuals from different walks of life, have diverse risk profiles. Factors such as risk tolerance, financial knowledge and investment objectives play an important role in shaping their decisions. Retail investors tend to be exposed to fluctuating market risks, and an in-depth understanding of how they respond to market volatility is key in designing effective and sustainable investment strategies.

This research aims to bridge these two important concepts, namely capital market efficiency and retail investor risk. By engaging an in-depth understanding of the forms of market efficiency, this research will explore how information reflected in market prices affects the behavior of retail investors. In addition, the risk faced by retail investors will be analyzed by considering external factors and their behavior in the face of market uncertainty.

This research aims to provide deep insights into the complexity of the relationship between capital market efficiency and retail investor risk. By understanding how information is integrated in market prices and how retail investors respond to it, this research has the potential to provide practical and theoretical guidance for stakeholders, including investors, asset managers, and regulators, in designing more effective investment and risk management strategies.

In previous research, there are several studies conducted that are related to the topic of this research. The research can be explained as follows. Farzana, Rahman and Mazumder (2012) The purpose of this study discusses two main areas of financial behavior, namely investor awareness of the capital market and services provided by intermediary service companies. The main focus of this



research is to understand the nature and response of individual investors, especially demographic factors, conceptual knowledge of the capital market, and how they evaluate brokerage services.

LITERATURE REVIEW

Market Efficiency

Market efficiency theory is a theory that discusses the price or value of securities that fully reflects all information available on the information (Hanafi, 2004). There are several definitions of market efficiency theory market efficiency theory.

- a. Based on the intrinsic value of securities. This theory explains that the market is said to be efficient if the price or value of securities on the market reflects information about how far the security price deviates from its instrinsic value.
- b. Based on the accuracy of price expectations. This theory explains that the market is efficient if the price or value of securities in the market reflects the full availability of information available.
- c. Based on information distribution. This theory explains that the market is efficient if the price or value of securities is obtained after everyone has information and is considered to have the same information.
- d. Based on dynamic process. This theory explains that the market is efficient if the price or value of securities listed in the market quickly and fully reflects all available information. So the concept of market efficiency discusses the relationship between the price or value of securities and information, how the market reacts to this information and the extent to which this information can affect new price movements.

Forms of Market Efficiency

According to Jogiyanto (2010), the forms of market efficiency are:

- a. Market efficiency from the point of information (informally efficient market)
- 1) Weak form market efficiency The market is said to be efficient in weak form if the price or value listed in the security fully reflects (fully reflect) past information.
- 2) Semistrong form Market efficiency is said to be efficient in semi-strong form if the price or value listed in the security fully reflects all published information including information in the issuing company's financial statements.
- 3) Strong form market efficiency (storng form) The market is said to be efficient in strong form if the price or value listed in the security fully reflects (fully reflect) all private information, as well as other information (published and past).

Thus, informational market efficiency is based on the availability of information that the price or value of securities reflects all information and the information can be obtained openly and quickly without any special barriers. The Indonesia Stock Exchange in Jakarta refers to the theory of half-strong market efficiency because the Indonesia Stock Exchange is a market whose value or price of securities fully reflects all information published by the company (Hadimukti, 2012).

- b. Decisionally efficient market
- 1) A decisionally efficient market can be seen from the ability of market participants to make decisions based on all available information.
- 2) The market is said to be efficient if there is information availability and informationally efficient is not necessarily decision efficient. The connection with this research is that the prices contained in the bonds or the values contained in the bond rating reflect all the information that contains information about the investment risk that will be borne by investors or creditors. Market prices listed on bonds or values on bond ratings are the main assessment in seeing investment risk.

This theory is in accordance with the characteristics of the research to be carried out, which is related to the dependent variable in this study, namely the bond rating issued by the Bond Rating Institute.

Retail Investor

Retail investors are individuals who conduct investment transactions through brokerage firms. Retail investors invest to manage personal funds. Examples of retail investors are



transactions through investment managers or securities companies that are carried out independently. For example, opening a stock account through a securities company to prepare for children's education funds or finance large asset purchases. Transactions that are managed independently and non-professionally are adjusted to the funds owned, risk profile and understanding of investment products. Non-professional means that the management of investment funds is highly dependent on the ability to analyze economic and financial developments. This is different from institutional investors who are managed by professionals who have certifications and licenses such as investment manager representative licenses.

Demographic profiles, such as age, income and family status, play an important role in determining a retail investor's risk tolerance. Young investors may have a higher risk tolerance due to long investment horizons, while retired investors may prefer more stable assets to protect their capital.

Retail investor risk

Market and economic conditions play a significant role in shaping the level of risk faced by retail investors. Fluctuating market conditions and economic changes can create new challenges, but also open up investment opportunities. An in-depth understanding of these impacts is key to designing adaptive and sustainable investment strategies. Changes in interest rates and inflation rates play an important role in shaping investment risk. High interest rates can increase borrowing costs and affect bond prices, while high inflation can reduce purchasing power and the real value of assets. Retail investors should consider the impact of these on their portfolios, especially in choosing investment instruments that are suitable for the current interest rate and inflation conditions.

Regulatory decisions and government policy changes can have a significant impact on market conditions and retail investor risk. Changes in tax rules, financial regulations, or fiscal policies can alter the investment environment and affect portfolio performance. Market sentiment and economic news also play an important role in shaping retail investor risk. Reactions to positive or negative news can trigger drastic changes in investor behavior, leading to spikes in market volatility.

It is important for retail investors to adopt an approach that is adaptive to changing market and economic conditions. Portfolio diversification, understanding individual risks, and continuous monitoring of economic news can help manage risks while capitalizing on investment opportunities. Financial education also plays a key role in empowering investors to make informed and rational decisions in the face of dynamic market conditions. In the face of ever-changing market and economic dynamics, retail investors who have a good understanding of the impact of market and economic conditions on their investment risks can make more informed and optimized decisions to achieve their financial goals.

Retail Investor Risk Behavior

Retail investor risk behavior involves a set of decisions, preferences, and reactions to uncertainties that may arise in their investments. Some aspects of this behavior include:

1. Risk Tolerance

Retail investors have varying levels of risk tolerance. This relates to the extent to which they are comfortable with fluctuations in the value of their portfolio. Factors such as age, investment experience and personal financial goals influence risk tolerance.

2. Attitude Towards Risk

Retail investors' attitude towards risk can be conservative, moderate or aggressive. This attitude reflects their propensity towards risk-taking and the extent to which they are willing to pursue potentially higher returns by taking on greater risk.

3. Influence of Psychological Factors

Psychological factors, such as fear, greed, and self-confidence, can play an important role in retail investors' behavior towards risk. For example, the tendency for "loss aversion" or fear of loss may influence investment decisions.

4. Response to Market Changes



How retail investors respond to market changes, especially when experiencing a decline in portfolio value, can reflect their level of preparedness in the face of uncertainty. Impulsive or panic reactions can affect long-term investment decisions.

5. Assessment of Risk Information

How retail investors assess risk information, including fundamental and technical analysis, can influence their investment decisions. The level of understanding of the risk factors affecting a particular asset also plays an important role.

6. Use of Risk Management Tools

The use of risk management tools, such as portfolio diversification, placing stop-loss orders, or protective insurance, reflects how retail investors actively seek to manage risk and protect their capital.

7. Approach to Long or Short-Term Investments

Some retail investors are more focused on long-term investments while others may be more interested in short-term or speculative trading. This approach may reflect their comfort level in dealing with market volatility.

8. Influence of Economic Environment

External factors, such as global economic conditions or the geopolitical situation, can affect retail investors' attitude towards risk. An uncertain economic environment may trigger changes in investment preferences and strategies.

Understanding retail investors' attitude towards risk helps relevant parties, including financial advisors and financial planners, to provide appropriate advice and help investors achieve their financial goals while minimizing uncertainty and unwanted risks.

METHOD

The sample used in this study was 100 investors with Bachelor's or Master's degrees who invested in securities companies in Dhaka City. Data were collected from 100 respondents using convenience sampling. Educated respondents were purposely selected to reduce sampling bias because they are considered more responsive, better informed, and representative of the research objectives. The variables used in this study are demographic factors and service quality of securities companies in Bangladesh as independent variables and investment decision making as the dependent variable.

Rashid and Nishat (2009) The purpose of this study is to explore the market structure components that contribute to the level of retail investor satisfaction consisting of investment analysis, ease of making transactions, information management and risk management affect investor satisfaction. The sample of this study is individual investors in DSE, Bangladesh. The sample was randomly selected from 25 brokerage firms located in Dhaka city and the total respondents were three hundred individual investors. The questionnaire included three types of questions, of which nine demographic questions, forty-five questions on structural issues of the stock exchange and four questions on overall satisfaction. All satisfaction-related questions (45 + 4 = 49) were coded on a seven-point Likert scale, where "1" represents "very dissatisfied" and "7" represents "very satisfied".

RESULTS AND DISCUSSION

Market Efficiency And Retail Investor Risk

1. The Effect of Market Information on Retail Investor Decisions

Market efficiency and retail investor risk are interrelated and play an important role in shaping financial market dynamics. Understanding this relationship provides insight into how information is processed in the market and how retail investors respond to it in the face of uncertainty. Market efficiency assumes that asset prices reflect all available information. For retail investors, an understanding of the extent to which this information is reflected in asset prices can influence their level of confidence in investment decisions. If the market is considered efficient, investors may tend to rely on market price information in making investment decisions. In an efficient market, retail investors are expected to respond to new information quickly and effectively. However, the level of risk taken by retail investors may vary. Some may follow market trends and adjust their



portfolios according to available information, while others may be more reactive to market events, which may increase the level of volatility of their portfolios.

Retail investors often rely on the media and financial news to get the latest information on market conditions. The impact of news, whether positive or negative, can trigger emotional responses and lead to changes in investment decisions. Information derived from market analysis and research has a significant impact on retail investors' decisions. Fundamental, technical research and analyst recommendations can shape an investor's perception of the value of an asset and its potential.

The role of information technology plays an important role in the relationship between market efficiency and retail investor risk. Rapid access to financial information through online trading platforms and financial apps can influence the extent to which retail investors can respond to market changes. However, these technologies can also increase risk through excessive trading or impulsive decisions. The relationship between market efficiency and retail investor risk is dynamic and complex. Retail investors need to have a solid understanding of market efficiency to make informed investment decisions and understand the extent to which information in market prices can affect their risk profile. In an effort to achieve a balance that suits individual financial goals, retail investors need to continuously monitor market dynamics and adapt their investment strategies according to changing market conditions.

2. Investment Strategies and Risk Management in Efficient Markets

In efficient markets, where asset prices reflect all available information, investment strategies and risk management play a key role in achieving financial goals while reducing uncertainty. Here are some strategies that can be used by investors to operate in efficient markets

a. Portfolio Diversification

Diversification involves allocating funds to different types of assets and sectors to reduce the specific risks associated with one particular investment or asset class. In an efficient market, diversification helps investors optimize the balance of risk and potential return.

b. Passive and Index Approaches

Investors may opt for the passive approach by investing their funds in a market index or index fund. This reflects the belief in market efficiency and avoids the effort of picking stocks individually. This approach can minimize transaction costs and achieve results comparable to overall market performance.

c. Deep Fundamental Analysis

While efficient markets assume that all information is already reflected in stock prices, indepth fundamental analysis remains an important tool. Understanding a company's financial health, growth prospects, and other fundamental factors can help investors identify a stock's intrinsic value and make informed investment decisions.

d. Momentum and Technical Strategies

Some investors in efficient markets adopt momentum and technical strategies to identify market trends or price movement patterns. While this can carry risks, especially if the market does not always follow historical patterns, some investors see the potential to benefit from price movements identified through technical analysis.

e. Active Risk Management

Active risk management involves constant monitoring of the portfolio and adjustment of positions to reduce unwanted risks. This may involve the use of derivative instruments or stoploss orders to protect capital and manage portfolio.

f. Understanding Market and Economic Cycles

Investors in efficient markets can benefit from an in-depth understanding of market and economic cycles. This allows them to identify sectors or assets that will likely perform well under certain conditions and adjust their portfolios proactively.

g. Ongoing Financial Education

Continuous financial education is essential for investors in efficient markets. Understanding new developments, new financial instruments, and changes in market policies can help investors make timely and relevant decisions.



In efficient markets, prudent investment and risk management strategies can help investors achieve their financial goals while minimizing the risks associated with market volatility. Strategy selection should be based on an individual's risk profile and investment objectives, while taking into account market circumstances and available information.

CLOSING

Conclusion

This research explores the relationship between capital market efficiency and the risks faced by retail investors, focusing on a comprehensive analysis covering both theoretical and empirical aspects. The following is a summary of the main findings of this study:

- 1. Capital Market Efficiency
 - a. Capital markets have a high degree of efficiency, reflecting all available information in asset prices.
 - b. Market information, both fundamental and technical, plays a key role in shaping retail investors' perceptions.
- 2. Risk Tolerance of Retail Investors
 - a. An individual's demographic profile, investment experience and investment objectives influence the risk tolerance of retail investors.
 - b. Young investors tend to have a higher risk tolerance, while retired investors may be more conservative.
- 3. Investment Strategy
 - a. Retail investors tend to adopt a variety of investment strategies, including fundamental analysis, technical analysis and index approaches.
 - b. Portfolio diversification and passive indexing approaches are common strategies for managing risk.
- 4. Influence of Market Information
 - a. Market information has a significant impact on retail investors' decisions, whether through financial media, research analysis or market sentiment.
 - b. Information technology plays an important role in quick access to information, but also carries the risk of over-trading.
- 5. Risk Management
 - a. Portfolio diversification is a key tool in retail investor risk management to reduce investment-specific risks.
 - b. The use of stop-loss orders, insurance, and protective options are additional strategies to protect capital from sudden price drops.
- 6. Influence of Investor Psychology
 - a. Market sentiment and the herding effect can influence retail investors' decisions, causing market movements that are not always based on fundamental information.
 - b. Financial education and an understanding of investor psychology are needed to help investors manage the emotional impact of investment decision-making.

This research implies that a deep understanding of market efficiency and the risk profile of retail investors is important for designing optimal investment strategies. Ongoing financial education, consultation with financial advisors, and selection of appropriate risk management tools can help retail investors achieve their financial goals while minimizing unwanted risks.



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