

Determinants Of Investment Portfolio Performance: A Systematics Literature Review

Rena Yuliana¹, Leonita Siwiyanti², Budi Supriatono Purnomo³, Imas Purnamasari⁴

¹ Fakultas Pendidikan Ekonomi dan Bisnis, Universitas Pendidikan Indonesia

² Fakultas Pendidikan Ekonomi dan Bisnis, Universitas Pendidikan Indonesia

³ Fakultas Pendidikan Ekonomi dan Bisnis, Universitas Pendidikan Indonesia

⁴ Fakultas Pendidikan Ekonomi dan Bisnis, Universitas Pendidikan Indonesia

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ABSTRACT

A thorough grasp of the variables influencing portfolio performance is necessary given the significance of investment portfolio management in the face of shifting financial market dynamics. This study uses a method called the Systematic Literature Review (SLR) approach with an emphasis on Preferred Reporting Item for Systematic Review and Meta-Analysis (PRISMA) 2020, which has not been discovered in prior research on the same issue. The study highlights the importance of ratios like Sharpe, Treynor, Jensen, and Sortino in assessing investment portfolio success. It also highlights the impact of non-financial variables like household preferences on performance. Return is crucial, and diversification can lower risk and boost returns. The study emphasizes the use of Value-at-Risk (VaR) for dynamic risk evaluation.

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Corresponding Author:

Name: Rena Yuliana

Institution: Fakultas Pendidikan Ekonomi dan Bisnis, Universitas Pendidikan Indonesia

Email: rena.yuliana23@upi.edu

1. INTRODUCTION

The importance of investment portfolio management is increasing along with the changing dynamics of financial markets. Clear and relevant methods for dividing returns into activities that make up the investment management process, such as investment policy, timing markets, and selection of collateral, are needed to distinguish investment liability and measure performance contributions.

Researchers provide a simple framework based on passive portfolios, a reference that indicates the asset classes planned to be used over the long term, weighed by their long-term allocation. The returns generated from these "investment

politics" portfolios are compared to the actual returns generated from investment policies and market timing [1].

Government and development policies depend on portfolio investment. Studies on the determination of portfolio investments have been conducted in a variety of contexts. A thorough review of the relevant literature on portfolio investing can provide valuable insight into the reasons for portfolio investing. For example, research has investigated how sovereign bonds and portfolio allocations in affect the systematic risk and portfolio investment of Kenyan rescue [2]. Other studies have investigated private investments and found factors influencing investment decisions and the

added value generated by private investor portfolio companies. The determinants of *social environment disclosure* have also been studied by several studies. It becomes more important for investors to assess the company's performance [3], [4].

Investors, both individual and institutional, face the challenge of optimizing the performance of their portfolios in order to best achieve their investment goals. A portfolio's performance, which serves as a gauge of how well investment goals are met, is impacted by a number of intricate and shifting variables [5], [6]

A multitude of factors may influence the performance of a portfolio, depending on the type of investment made. A study on the factors influencing stock fund performance, for example, revealed that, while market timing has a major negative influence on stock fund performance, stock manager ability to choose stocks has a positive and considerable impact on stock fund performance. Further research into the factors influencing foreign direct investment reveals that labour force participation and exports have an impact on FDI. Furthermore, considerations such as profitability, user-friendliness, and security assurances impact investors' willingness to invest in fintech financing platforms [7], [8].

Risk, return, diversity, asset allocation, economic circumstances, and fluctuations in the global investment climate are all elements that influence the performance of investment portfolios [9]–[12]. As the two primary components of investing, risk and return, they are critical in determining investment returns. Additionally, proper asset allocation and diversification—the distribution of assets across many asset classes—are key components in risk management and achieving predicted returns [13].

Portfolio performance may be greatly influenced not only by internal difficulties, but also by changes in global investment policy and the status of the global economy. Investors may face challenges such as altering political environments, fluctuating interest rates, and market volatility [12], [14].

Making sensible investment decisions consequently necessitates a full understanding of the aspects that influence the performance of investment portfolios. This research seeks to examine and explain these elements in order to enable practitioners and academics working with investment portfolios better understand them and manage their portfolios effectively and efficiently

This study is expected to provide a more thorough knowledge of how investment decisions may be made by taking these variables into consideration by identifying and assessing the factors that influence the performance of an investment portfolio. The findings of this study are expected to greatly enhance the theory and practice of investment portfolio management, as well as serve as a platform for future advancements in investment decision-making.

2. METHODS

Systematic Literature Reviews (SLR) may synthesize current knowledge in an area, allowing future research objectives to be identified. They can also address topics that individual research cannot, indicate difficulties with significant studies that should be addressed in upcoming investigations, and build or evaluate ideas about the origins or processes of phenomena [15].

To ensure systematic reviews are useful to users, authors should compile transparent, complete, and accurate reports on why they conduct reviews, what they do (such as how to identify and select studies), and what they find (such as contributing study characteristics and meta-analysis results) [15]. This systematic literature review is based on the *Preferred Reporting Item for Systematic Review and Meta-Analysis* (PRISMA). PRISMA 2020 is intended for use in systematic reviews that include synthesis (such as paired meta-analyses or other statistical synthesis methods) or do not include synthesis (for example, because only one eligible study was identified) [15].

This literature review data collection method uses Publish or Persih (PoP) version 8., by selecting international journals in the Google Scholar and Scopus databases with the keywords "Investment Profolio Performance" and "Risk Investment". The literature contained in the database can be useful for research on Determinants of Investment Profolio Performance. Using the search phrase, 42 articles were identified, with inclusion criteria including (1) Articles in

English; (2) Relevance to the topic studied; and (3) Full articles only. While the exclusion criteria used include (1) Non-expert website articles; (2) Non-scientific articles; and (3) Not relevant to the topic.

The next stage includes the refinement of the article in preparation for systematic observation. The above strategies ranging from search results to inclusion and exclusion criteria are presented in Figure 1.

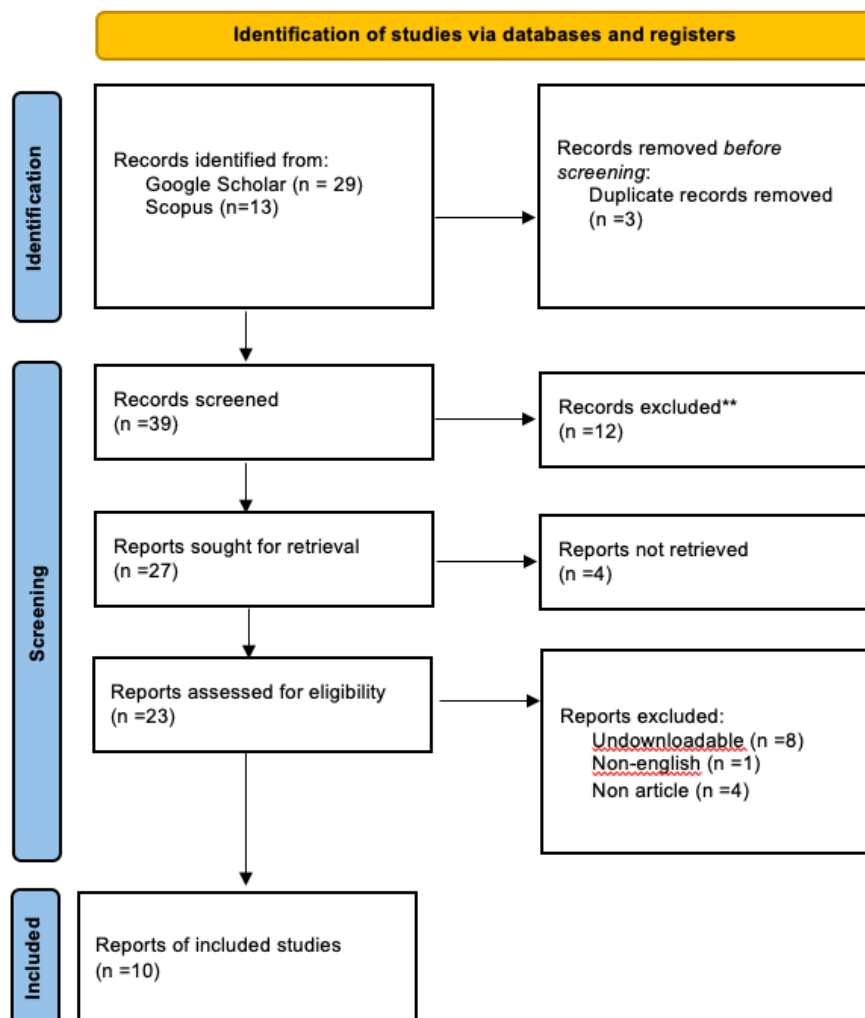


Figure 1. PRISMA Flow: Data Extraction Procedure

Source: Data processing results (2023)

3. RESULTS AND DISCUSSION

This research focuses on exploring what factors can affect portfolio investment performance. Investment portfolio performance refers to the evaluation of how well an investment portfolio has performed over a period of time. It is a measure of the return generated by a portfolio relative to the risk taken. Various performance measures can be used to assess the performance of an investment portfolio, such as the Sharpe Ratio, Treynor Ratio, Jensen Ratio, and Sortino Ratio [16]–[18]. Evaluating portfolio performance is important for individual investors and the economy as a whole, can help investors make informed decisions about their investments and contribute to efficient capital allocation [19].

Research [16] Discusses the evaluation of household investment portfolio performance by exploring household preferences expressed through utility functions. Traditional performance measures such as CAPM may not accurately reflect household preferences. So suggest using a measure such as the General Sharpe Ratio or modified beta.

The study [12] analyzed portfolios in Latin American stock indices for the period 2002-2014. The results showed no negative correlation, but also no entirely positive relationship between the different indices. The highest correlation was 0.86 between the United States and Europe, while the lowest was between Colombia and Chile with a value of 0.44. The conclusion of his research is that the stock markets with higher correlation (greater financial integration) are America and Europe, followed by Mexico and America, as well as Brazil and Mexico.

Expansion of investment portfolio performance appraisal model based on Value-at-Risk using time series approach [10]. Value-at-Risk (VaR) is a method used to measure financial risk. The time series approach in the context of VaR involves analyzing the historical or changing value of an asset or portfolio over time to assess the extent to which that value may fluctuate over a given period with a certain degree of confidence.

Portfolio optimisation strategies can be used to discover the best investment portfolio composition. It comprises selecting different investment instrument combinations that provide the highest return for a certain level of risk [17]. The appropriate portfolio composition may fluctuate depending on variables such as risk tolerance and market circumstances. According to one study, in order for DP-PLN to have an optimum portfolio, it should invest more in bonds, real estate, and buildings while lowering its holdings in mutual funds, stocks, savings accounts, and time deposits [18]. Diversification helps balance risk and reward in portfolio development by investing in fewer connected asset types, according to another study [11].

A thorough analysis of the risk and return characteristics of various assets, in general, should serve as the foundation for designing an investment portfolio for optimum returns. The study's findings [18] revealed the best portfolio composition, which comprised an increase in bond investments (59.84%) and land and building (20.00%), as well as an 11.30% return and 3.77% risk. - Reduce stock and mutual fund investments to 0%, savings and time deposits to 1.25%, and direct investments to 3.91%, while maintaining the SBN composition at 15.00%. - Treynor (0.06%), Jensen (0.02%), and Positive Sharpe (1.44%).

Portfolio tangency is the concept of constructing the best portfolio feasible by maximizing the Sharpe ratio, which represents the portfolio's risk-adjusted return. It is a fundamental part of contemporary portfolio theory and is predicated on the notion that, given a certain degree of risk, investors need to seek to maximize returns. A tangency portfolio, which is a collection of portfolios that deliver the maximum returns for a given degree of risk, is created by mixing risky and risk-free assets in such a way that the portfolio falls on the efficient frontier. Investors can maximize profits for a given level of risk or minimize risk for a given level of return by identifying a tangency portfolio. Numerous research publications have

examined and implemented this idea, including those written (2017) and [18], [9].

Risk

Numerous risk variables impact an investment portfolio's success. Risk is the unpredictability brought on by changes in the value of an investment. Attempts to quantify and control risk in order to keep it within an investor's risk tolerance are known as risk management. Since various investors have varying levels of risk tolerance, one crucial component is the investor's level of risk aversion [16]. Systematic risk, or hazards that are inherent in the market as a whole and cannot be diversified, is another consideration [20]. The overall Sharpe ratio and market beta are two metrics used to quantify this risk [16].

Furthermore, some risks, such as those unique to a firm or the sector, may have an impact on portfolio performance. Additional risk concerns include interest rate risk, currency risk, and geopolitical risk. These characteristics may affect volatility and portfolio outcomes [12]. Investors should consider and manage these risk variables while developing and managing their investment portfolios.

Return

Return measures how much an investment's value has risen or decreased over time. Returns can be stated as a percentage of the initial value of the investment or as face value. The performance of an investment portfolio is heavily determined by return. The returns generated by an investment portfolio are used to evaluate its performance [16]. Return refers to the income or cash flow received by investors from their assets, which includes dividends, interest, and capital gains [12]. A good return signifies profitable performance of the portfolio, whereas a negative return denotes underperformance [21]. A number of variables, such as market circumstances, asset allocation, and portfolio makeup, affect investment portfolio performance [18]. Investing diversification and portfolio optimisation allow investors to target both risk management and return maximisation [19].

Race

Numerous ratios can impact an investment portfolio's success. It is customary to utilise the Treynor, Jensen, and Sharpe ratios to assess portfolio performance. A greater ratio denotes superior performance when comparing a portfolio's excess return to its overall risk, as measured by the Sharpe ratio [16].

A metric called the Generalised Sharpe Ratio (GSR) is used to rank mutual funds according to past performance and assess the usefulness of investments [16]. It may be applied in two situations: first, when the rate of return on the portfolio is not normally distributed; and second, when assessing the performance of investments from the standpoint of investors who have consistent levels of absolute risk aversion [17]. Normally undistributed returns may be utilised to determine GSR by adjusting the Sharpe Ratio to reflect the investor's desired utility [18]. The Sharpe ratio, on the other hand, computes the amount of excess return achieved against each unit of total risk by dividing the average excess return by the standard deviation [19]. It is used to assess portfolio performance and determine if it beats risk-free assets.

The Treynor ratio, on the other hand, assesses the excess of a portfolio's return above its risk using beta as a proxy for systematic risk [17]. The Treynor ratio is a performance indicator used to determine how much a portfolio's excess returns exceed systematic or market risk. It is calculated by dividing the portfolio's excess return by the beta, which indicates how sensitive the portfolio's returns are to changes in the market's returns. Treynor ratios are especially useful in well-diversified portfolios since they account for risks that diversification cannot entirely eliminate. It is one of three often used performance ratios, along with the Jensen and Sharpe ratios. The Jensen ratio accounts for the difference between the portfolio risk premium and the market risk premium, whereas the Sharpe ratio assesses the portfolio's total risk [17], [19].

The Jensen Ratio [18] is used to compare excess portfolio returns based on the

Capital Asset Price Model (CAPM) to expected returns. This ratio reveals how successfully portfolio results relate to the amount of risk absorbed. To influence portfolio performance, investors should focus on components such as asset allocation, diversification, and risk management approaches [19]. Investors may attempt to improve the performance of their investment portfolio by actively managing risk and changing the makeup of the portfolio.

Diversification

Diversification is an important factor that determines the performance of an investing portfolio. Markowitz's Modern Portfolio Theory emphasises the benefits of diversification in decreasing risk and increasing returns. This means that investors may achieve a better risk-reward balance by diversifying their assets across asset classes, industries, and categories [12]. International diversification minimises correlations while increasing diversification benefits by allowing stock markets and country economies to evolve concurrently and non-synchronously. [18]. Furthermore, asset allocation is an important aspect of diversification. The benefits of diversification can be enhanced by allocating funds among various assets based on industry classifications and expected returns [20]. Furthermore, it has been established that diversification and institutional ownership have a large and positive impact on portfolio performance [22]. Diversification via international asset allocation and investment may help investors improve the performance of their portfolios by decreasing risk and increasing returns.

Investment Asset Allocation

Risk aversion, diversification, and investment instrument selection are all elements that influence the asset allocation performance of an investment portfolio. Risk aversion is an investor's preference for low-risk investments, and it can influence how assets are distributed within a portfolio [16]. Furthermore, diversification is critical since it reduces overall volatility and helps spread risk across a number of assets [12]. Portfolio performance is also affected by the financial

instruments used, such as bonds, mutual funds, and shares. The asset allocation among multiple instruments, each of which has a distinct level of risk and return, can have an influence on the overall performance of a portfolio [17], [18].

4. CONCLUSION

This study highlights the various factors that influence the profitability of investment portfolios, including risk, ratio, return, variety, and portfolio allocation. Performance evaluation is crucial for investors to make informed decisions. Key performance metrics include Treynor, Jensen, Sortino, and Sharpe ratios, which provide a comprehensive view of portfolio performance. Traditional performance indicators like CAPM may not accurately represent household preferences, so metrics like the Generalised Sharpe Ratio (GSR) or modified beta are recommended. Understanding the linkages between Latin American stock indexes can help make more successful asset allocation decisions. The paper also discusses the use of Value-at-Risk (VaR)-based time series models for analyzing investment portfolio performance. The study emphasizes the importance of an optimum portfolio composition for optimal results, requiring risk management, asset allocation, and diversification strategies.

Recommendation

Based on the statistics presented above, many recommendations may be made. First, models for measuring the success of investment portfolios that account for household preferences and return non-linearity are expected to offer a more accurate picture of performance. Second, given the multiple cross-market links, investors and portfolio managers should consider increasing the global diversification of their holdings. Third, combining a time series technique with Value-at-Risk (VaR) may improve the dynamic nature of financial risk management. Using VaR methodologies, investors may better detect and manage changes in portfolio value. Fourth, in order to

get the greatest results, investors should carefully review the composition of their portfolio, taking into account risk management, diversification, and asset

allocation strategies. Fifth, by combining performance ratios such as the Treynor, Jensen, and Sharpe ratios, a full picture of portfolio performance may be generated

REFERENCES

- [1] G. P. : Brinson, L. R. Hood, and G. L. Beebower, "Determinants of Portfolio Performance A Framework For Analysis," *Repr. from Financ. Anal. J.*, no. February, pp. 39–44, 1985.
- [2] R. Ginanjar and A. Kurniasih, "Indonesian Equity Fund Performance Determinants," no. September 2019, 2021, doi: 10.4108/eai.28-9-2020.2307356.
- [3] K. M. P. S. B. Konara, "Foreign direct investment in Sri Lanka : determinants and impact," no. September, pp. 1–276, 2013, [Online]. Available: <https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsble&AN=edsble.589201&site=eds-live&scope=site>
- [4] M. O. Al-Smadi, "Determinants of foreign portfolio investment: The case of Jordan," *Invest. Manag. Financ. Innov.*, vol. 15, no. 1, pp. 328–336, 2018, doi: 10.21511/imfi.15(1).2018.27.
- [5] I. G. B. Wiksuana, "Kinerja Portofolio Saham Berdasarkan Strategi Investasi Momentum di Pasar Modal Indonesia," *J. Manaj. dan Kewirausahaan*, vol. 11, no. 1, p. pp.73-84, 2009, [Online]. Available: <http://puslit2.petra.ac.id/ejournal/index.php/man/article/view/17747>
- [6] E. F. Komara and I. Purnamasari, "Pengaruh Cognitive Bias dan Emotional Bias Terhadap Keputusan Investasi (Studi Pada Investor Muda di Galeri Investasi UNJANI)," *J. Ekon. Syariah Pelita Bangsa*, vol. 08, no. 02, pp. 221–231, 2023.
- [7] A. Swanitarini, "Analisis Faktor-Faktor Yang Mempengaruhi Investasi Asing Langsung Di Indonesia Tahun 2011-2014 an Analysis of the Factors Affecting Foreign Direct Investment in Indonesia in 2011-2014," *Pendidik. dan Ekon.*, vol. 5, no. 5, pp. 365–372, 2016.
- [8] M. Zaenuddin, "Analisis faktor-faktor yang mempengaruhi investasi pma di batam," *Jejak*, vol. 2, no. 2, pp. 156–166, 2009.
- [9] A. Macenning, D. B. Hakim, and T. Andati, "Analysis and Optimization of Investment Portfolio Performance (Case Study of PLN Pension Fund)," *Int. J. ...*, 2019.
- [10] Sukono, "Expansion of the investment portfolio performance assessment model based on value-at-risk using a time series approach," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 567, no. 1, 2019, doi: 10.1088/1757-899X/567/1/012015.
- [11] K. Kandie, J. Macheru, and C. Osoro, "The Moderating Role of Treasury Bills and Bonds Allocations on the Relationship between Systematic Risk and Investment Portfolio Performance of Pension Schemes ...," *Int. J. Financ. ...*, 2023.
- [12] I. Arribas, J. González-Bueno, F. Guijarro, and ..., "Impact Of Foreign Exchange Risk On Investment Portfolio Performance In Latin American Stock Indexes," *9th Int. ...*, 2017.
- [13] N. S. S. Sugiana, I. Purnamasari, and B. Purnomo, "Rasio Free Float Saham ; Sebagai Analisa Teknikal Dalam Pengambilan Keputusan Berinvestasi Studi Kasus Pada Saham Lq 45 Periode 2020-2022," *Eqien - J. Ekon. dan Bisnis*, vol. 11, no. 04, pp. 532–537, 2022, doi: 10.34308/eqien.v11i04.1268.
- [14] B. S. Purnomo and A. Sofia, "Analysis of Investment Policy of Local Government in the Era of Industrial Revolution 4.0," vol. 65, no. Icebef 2018, pp. 77–80, 2019, doi: 10.2991/icebef-18.2019.18.
- [15] M. J. Page *et al.*, "The prisma 2020 statement: An updated guideline for reporting systematic reviews," *Med. Flum.*, vol. 57, no. 4, pp. 444–465, 2021, doi: 10.21860/medflum2021_264903.
- [16] R. Pietrzyk, "Households investment portfolio performance evaluation," *academia.edu*.
- [17] M. I. Surianegara, "Investment Portfolio Optimization and Performance (Case Study on PLN Pension Fund Period 2010-2020)," *ijisrt.com*.
- [18] I. Vincent, L. Anggraeni, and T. Andati, "Optimization of Investment Portfolio Performance: Case Study of PT Asuransi Jiwa Taspen," *Int. J. Res. ...*, 2019.
- [19] N. Angelica and C. A. Utama, "Sustainable and responsible investment portfolio performance analysis in Indonesia Stock Exchange," *J. Keuang. dan ...*, 2020.
- [20] K. Kandie, J. Macheru, and C. Osoro, "Systematic Risk and Investment Portfolio Performance of Pension Schemes in Kenya," *Int. J. Financ. ...*, 2023.
- [21] J. Patel, "Investment Portfolio Performance Evaluation." 2008.
- [22] S. Wahyudi, "Asset allocation and strategies on investment portfolio performance: a study on the implementation of employee pension fund in Indonesia," *Accounting*, vol. 6, no. 5, pp. 839–850, 2020, doi: 10.5267/j.ac.2020.5.010.