

The Impact of Environmental Social Governance for Sustainable Development Goals to BTN Mutual Fund Investment Performance

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ABSTRACT

Introduction: The aim of Investment is for obtaining profits in the future. Sustainable mutual fund is a choice as a major force across global financial markets. Sustainable business growth is not only measured by financial aspects but also measured by the positive impact that generates to the environment and society, which can enhance the competitiveness of the company. It is now common to conduct ESG (Environmental, Social, and Governance) scoring for Sustainable Development Goals (SDGs) against mutual fund stocks to obtain mutual funds that are environmentally friendly, and legally safe, with the goal of social welfare.

Objective: Understanding the impact of environmental social governance (ESG) and sustainable development goals (SDGs) on the performance and profitability of BTN mutual fund investment products.

Research Methods: Cohort/Time series research that describes the performance and profitability of BTN mutual fund products that is chosen by investors, based on secondary data from BTN's ongoing reports. The impact of environmental, social governance (ESG) and sustainable development goals (SDGs) on the performance and profitability of BTN mutual fund investment products is analyzed descriptively and quantitatively using multiple linear regression analysis in SPSS.

Novelty: Applied ESG screening/social environmental governance for the Sustainable Development Goals (SDGs), in the management and selection of mutual fund investment products, which will result in increased performance and profitability of low-risk, environmentally friendly, and safe mutual funds. Conclusion. The sustainability score and various pillars of the ESG score for Sustainable Development Goals (SDGs) have a positive impact on the performance and profitability of BTN mutual fund investments.

Keywords: Mutual Funds, Environmental Social Governance (ESG), Sustainable Development Goals (SDGs)

Introduction

Investment activities aim to gain profits in the future and one form of investment is financial investment. Financial investment is an investment in securities in the form of written contracts, either long-term or short-term, aimed to obtain capital gains, dividends, or interest. One investment instrument that has experienced growth from 2009 to 2015 is mutual funds. Mutual funds are an alternative for investors with limited funds who do not have the time or expertise to assess the risks and returns on their investments. What distinguishes mutual funds from other instruments is the presence of an Investment Manager, which is a professional party, such as a bank, responsible for managing

the investment funds from mutual fund investors. One type of mutual fund that has the highest return and risk is equity mutual funds.

The high-risk profile of stock mutual funds does not make this type of fund lack of interest, as evidenced by the composition of the net asset value (NAV) of mutual funds at the beginning of 2015, where conventional stock mutual funds held the highest position at 42%. It is estimated that in 2015, public interest in this mutual fund will increase, and many potential investors will emerge in the stock mutual fund products. Prospective investors should conduct an analysis of the performance of stock mutual funds before deciding which stock mutual fund product to choose. Performance measurement can assess the level of return and risk.

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ESG investment is becoming increasingly popular as businesses shift their focus from conventional profit orientation to sustainability profit orientation. The three main pillars of ESG are scores for environmental, social, and governance factors. The 12 ESG scores are: Environmental (Water security, Pollution and resources, Climate Change, Biodiversity), Social (Labor standards, Human rights Community, Health and Safety, Customer Responsibility), Governance (Tax transparency, Risk Management, Corporate Governance, Anti-Corruption). Other literatures mention 10 ESG scores: Pollution prevention and waste management, Biodiversity conservation, Management of natural resources and energy efficiency, Climate change mitigation and adaptation and disaster risk, Employment and working conditions, Diversity, equity, inclusion and access, social interests, Cultural heritage, Leadership and governance, Risks and controls. Environmental considerations include the use of latest energy sources, waste management practices, air and water pollution issues, safety concerns related to logging, and awareness and handling of climate change. Social factors take into account employee salaries, retirement plans for employees, workplace policies regarding diversity, inclusion, and prevention of harassment against women, educational and tutoring programs, corporate assistance to communities, customer relationship management, and monetary donations to charitable organizations. As a governance consideration, emphasis is placed on the interests of corporate stakeholders, including employees, shareholders, and customers, as well as financial and accounting transparency and comprehensive and honest financial reporting.

The history of ESG investment began in the 1960s when investors in South Africa under apartheid adopted practices that excluded shares or industries involved in the production of weapons. The history of ESG funds dates back to 1971 when the first ESG fund named "Pax Sustainable Allocation Fund" was issued by Pax Worlds Fund in the United States. Today, a large number of ESG funds are available, and many more are being launched worldwide. In accordance with United Nation policies since 2006, assessments have been made regarding environmental, social, and governance (ESG) in the Principles for Responsible Investment, enabling investors to better align their interests and investment strategies and choose to invest in ESG stocks that aim to promote societal well-being. The investment climate in the world underwent substantial changes in 2015 as a result of the adoption of the 17 Sustainable Development Goals of the United Nations. The 17 Sustainable Development Goals are: No poverty, zero hunger, Good Health and Well-being, Quality of Education, Gender Equality, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry Innovation and Infrastructure, Reduced Inequality, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life below water, Life on Land, Peace, Justice, and Strong Institutions, and Partnership for the Goals.

Socially Responsible Investment (SRI), also known as sustainable, responsible, and impact investing, is an investment discipline that considers environmental, social, and corporate governance (ESG) criteria for the sustainable development / SDGs to generate competitive long-term financial returns and

positive social impact. According to the Global Sustainable Investment Review 2016 (GSIA), in 2016 there were \$22.89 trillion in professionally managed assets under SRI strategies globally [1,2]. Bilbao-Tero, Álvarez-Otero, Bilbao-Tero, and Cañal-Fernández concluded that the SRI label in the mutual fund industry is well valued by the market, which is an important factor driving this growth [3]. Barreda-Tarrazona, Matalín-Sáez, and Balaguer-Franch concluded that social preferences (not financial performance) are the main factor for investors choosing SRI mutual funds.

Research Gap: However, there are some opposing research results that state that ESG has no effect on profitability and mutual fund performance conducted by who mentioned that the Environment Social Governance (ESG) score has a negative impact on mutual fund performance. Research showing no relationship between ESG and mutual fund performance was also conducted by El Ghouli and Karoui using Corporate Social Responsibility (CSR) scores to study the effects on performance and mutual fund flows, and shows that high fund flows indicate poor performance and demonstrate the weak relationship between mutual fund performance and fund flows [4]. Another theory argues that choosing SRI funds is essentially a trade-off between investing in SRI and returns, resulting in SRI investments performing worse than benchmarks. One important recent paper is by Nofsinger and Varma, which provides a new perspective as they found that the difference between socially responsible investments (SRI) and conventional mutual funds depends on market conditions. SRI funds outperform conventional funds during market crisis periods, but in non-crisis periods, SRI funds perform worse than conventional funds.

Sustainable business growth is not only measured by financial aspects but also by the positive impact generated on the environment and society, which can enhance the competitiveness of companies in the global market. The results of this research analysis will provide conclusions on the performance and profitability of BTN mutual funds, in order to provide information to investors as consideration for safe and sustainable investment with open/transparency reporting for social welfare purposes. The integration of ESG principles into the business model is expected to attract more investors and support long-term growth, with sustainable products that influence the company's marketing strategies and product development. This research can also serve as a reference in choosing mutual funds with the best environmental and social governance for first-time investors entering the world of investment, as well as for seasoned investors in the capital markets who want to switch to mutual funds.

Novelty: This research is the application of ESG screening/social environmental governance for the Sustainable Development Goals (SDGs), in the management and selection of mutual fund investment products, which will enhance performance and profitability with low-risk, environmentally friendly, and safe options. This research applies a 10-point (12 point) ESG assessment, namely social environmental governance for the 17 points of Sustainable Developmental Goals/SDGs as stipulated by the United Nations (UN) and the National Development Planning Agency (Bappenas), particularly in the management and selection of mutual fund products. There will be an increase

in mutual fund products that pass ESG screening which are environmentally friendly with legal certainty, to achieve Sustainable Development (SDGs) in all areas. Regulations regarding investments that adopt the ESG system do not yet have specific rules governing their implementation. The supremacy of law is essential to regulate the importance of ESG in mutual fund product processing. This research attempts to provide an alternative on the importance of low-risk mutual fund investments, environmentally conscious with legal certainty based on ESG for the purpose of Sustainable Development.

Literature Review

According to Tandelilin, "Investment is a commitment of a certain amount of funds or other resources made at the present time, with the aim of obtaining a certain profit in the future." Based on this definition, it can be concluded that investment is an action of managing a certain amount of funds to generate profits with a risk that must be faced. Fahmi states that "a portfolio is one of the ways that investors use to place a sum of money in places that are far from risk and maximize profit." One way to achieve this is through investment diversification. A mutual fund is a collection of funds obtained from the public or investors, which are then managed by investment managers and invested in various types of investment portfolios or other financial products.

Bapepam (www.bapepam.go.id) states that the types of mutual funds based on their investment portfolios are classified into 4 types:

- **Money Market Fund.** A fund that invests in debt securities with a maturity of less than 1 year. Its aim is to maintain liquidity and capital preservation.
- **Fixed Income Fund.** This fund invests at least 80% of its assets in debt securities. Its objective is to generate a stable rate of return.
- **Equity Fund.** A fund that invests at least 80% of its assets in equity securities. The risk of this type of fund is higher, but it also yields a higher rate of return.
- **Mixed Fund.** A mixed fund invests in both equity securities and debt securities.

An investor who chooses SRI funds is motivated by many factors such as positive financial results, positive ESG performance, and good reviews, but the main motivator is financial performance [5]. There are various ways to combine ESG with investments such as exclusive screening, best-in-class approaches, thematic investing, etc. Previous studies can also enhance the foundations for investors and highlight the number of rating providers that help investors find securities with good ratings such as MSCI indices, S&P Dow Jones, and RebecoSAM, FTSE Russell, and Thomson Reuters, and ESG is the global sustainability index MSCI, Dow Jones sustainability index, FTSE4 goodglobal index, and Thomson Reuters corporate responsibility index so that investors can find the best options. Once investors move towards SRI investing, they become loyal to it because loyalty is more related to ethical considerations. The literature is full of research supporting this ESG investment.

Research in India explains the investment scenario of SR (Social responsibility) India and demonstrates good returns and lower ESG index risks compared to the situation during COVID-19,

which is also outlined and concluded with equivalent performance in the pre-COVID scenario but outstanding performance post-COVID. Other studies highlight the effects of socially conscious investments on mutual funds. Several comparative performance evolution studies have been conducted in the literature in various countries such as studies in the US market, finding that responsible mutual fund investments are significantly safer concerning systematic risk. Another study conducted in the US found no difference in the returns of SR funds and conventional funds but found SR funds to be riskier. When examining ethical performance, SR funds were not found to be highly rated in comparison. Another US-based study proved that the performance of SR mutual funds is better compared to during the worst situations, and conversely, it examined Australian SRI funds and found no significant difference between the performance of SRI and the self-determined benchmarks. Another study investigated that SRI funds and conventional funds are not different at all in terms of risk-adjusted value when selecting the same investment style, concluding that high returns are observed by highly rated funds in Europe from a sample of 634 funds. The performance of the SBI Magnum Fund was studied compared to its benchmark, and there is a significant relationship between the Nifty 100 ESG index and the growth of the fund.

Studies have been conducted to evaluate the global growth patterns of ESG sustainable funds in several developed, developing, and underdeveloped countries. There are various ways to assess sustainable funds. The most commonly used data sources for assessments in Development Programs undertaken by the United Nations involve analyzing a range of data from various fields, including GDP per capita, education levels, life expectancy, electricity accessibility, and politically stable situations to determine the level of human development in different countries around the world. The annual Human Development Index (HDI), which ranges from 0.000 (lowest development) to 1.000 (most development), is calculated by summing all these figures and taking the average value. Countries are categorized as developing, underdeveloped, or (informally) least developed if their HDI scores are below or above certain thresholds. Developed countries are those with scores between 1.000 and 0.800. Switzerland, Norway, Iceland, Hong Kong, Australia, and Denmark rank at the top of the list according to the Sustainable Development report.

Another source is the World Economic Outlook Database by the International Monetary Fund, which identifies the top developed countries in ESG mutual fund investment for SDGs purposes as Luxembourg, Ireland, Singapore, Switzerland, Norway, the United States, San Marino, and Denmark, while the top developing countries are the United Arab Emirates, Saudi Arabia, Kuwait, and Bahrain. The United Nations is also a key resource used to select underdeveloped (backward) countries. The United Nations provides a list of LDCs that are taken into account. According to LDC data, the underdeveloped countries in terms of GDP are Bangladesh, Ethiopia, Uganda, and Nepal.

The increasing interest in SRI in recent years has led several organizations to assess the performance of mutual funds based on how well the underlying companies perform on ESG issues. In 2016, Morningstar launched the Morningstar Sustainability Rating, which classifies mutual funds that score on ESG. The

benefit of this product is that it allows investors to find sustainable funds. The use of this score shows an important difference from previous studies, which compared SRI funds with indices, or the most advanced studies that applied what is known as the adjustment approach, meaning they compared the performance of SRI investment funds (with ESG scores) and non-SRI funds with similar characteristics (fund size, fund age, expenses, etc.) with management fees and transaction costs properly accounted for SRI and conventional funds Mallin, Saadouni and Briston, Gregory, Matatko and Luther, Statman, Kreander. Gray, Power and Sinclair, Kreander, Gray, Power and Sinclair.

One important research question in the mutual fund industry regarding SRI investments is to understand how the performance of SRI mutual funds. Several studies have shown that ESG-compliant companies with social responsibility policies and practices are good investments. The research by Friede, Busch, and Bassen conducted a meta-analysis of about 2,200 unique primary empirical studies [6]. They found that most studies show a positive correlation between ESG factors and financial performance. However, despite the investigations conducted so far, there is still debate about whether this type of investment can create value for investors or not, and why they choose to invest their money here. Although according to Lewis and Mackenzie and Webley, Lewis, and Mackenzie some investors in SRI funds are morally willing to accept lower returns.

Junkus and Berry wrote literature from several financial journals about SRI, stating that the performance and index of socially responsible mutual funds (SRI) are not significantly different from conventional indexed funds. However, this is highly dependent on the model and specifications of the mutual funds, period/time, benchmarks, and other characteristics. Authors like Luther, Matatko, and Corner and Mallin, Saadouni, and Briston support the idea that SRI funds outperform market indices. But the more conventional theory is that SRI mutual funds have the same returns as other funds, and authors like Hamilton, Jo, and Statman, Kreander, Gray, Power, and Sinclair, Gregory and Whitakker, and Bauer, Derwall, and Otten, Humphrey, Warren, and Boon, and Syed align with this theory.

Another theory argues that choosing SRI funds is essentially a trade-off between investing in SRI and returns, resulting in SRI investments performing worse than benchmarks (e.g., White, 1995). One important recent paper is by Nofsinger and Varma, which provides a new perspective as they found that the difference between socially responsible investments (SRI) and conventional mutual funds depends on market conditions. SRI funds outperform conventional funds during market crisis periods, but in non-crisis periods, SRI funds perform worse than conventional funds.

Previous research has exclusively studied the effects of sustainability on performance using dichotomous variables to distinguish between socially responsible funds and conventional funds. However, the results are biased because under 'socially responsible,' they may have funds with very different levels of sustainability. Statman and Glushkov concluded that the lack of clearly defined criteria to distinguish mutual funds as 'socially responsible' results in inconsistently applied classifications that make it difficult to measure SRI performance. The traditional

methodology in empirical research is comparison with the latest indices as well as conducting matched pair analysis, which was initially applied by Maillin, Saadouni, and Briston, based on comparing the returns of SRI funds and conventional funds with similar characteristics in terms of asset volume, interception date, and so on. As such, the inclusion of sustainability scores allows for the assessment or evaluation of whether the sustainability level of the portfolio where funds are invested has a positive effect on performance. As far as we know, only Dolvin, Fulkerson, and Krukover and El Ghoul and Karoui have analyzed this effect [4,7]. Dolvin, Fulkerson, and Krukover concluded that funds with higher Morningstar Sustainability scores have similar constants to funds with lower Sustainability scores. The authors also observed that there is little difference in performance or sustainability scores between SRI funds compared to funds in the top 50 and top 20 percent of Morningstar Sustainability funds [7]. Lastly, they observed that mutual funds with higher Morningstar Sustainability metrics do not seem to be more attractive to investors compared to those with low scores. In contrast, self-proclaimed SRI funds have performed significantly better in terms of fund flows. El Ghoul and Karoui used CSR/Company Social Responsibility scores to study the effects on performance and fund flows, concluding that higher values indicate worse performance and a weaker performance-flow relationship [4]. From an investor's perspective, the advantage of using Sustainability scores is that they can choose their SRI, considering funds with better scores, regardless of whether they are labeled as SRI mutual funds or not.

Several papers discuss SRI by specifically examining the effects of the sustainability level of SRI, measured through the Morningstar Sustainability score included in Morningstar Direct in 2016. Specifically, this paper assesses the effects of the sustainability score and various dimensions into which the score is further divided (environmental, social, and governance) on performance, in addition to downside risk and fund flows. On the other hand, conventional dichotomous variables have been added to the model to evaluate to what extent the results may differ. Empirical evidence supports the literature on mutual funds that discusses whether the application of specific investment screening in portfolio selection affects mutual fund performance Bauer, Derwall, and Otten, or Muñoz, Vargas, and Marco, . The SRI portfolio is subject to positive and negative social screening Rivoli. Portfolio theory argues that narrowing the scope of assets will limit diversification opportunities and thus also affect performance, adjusted for risk Rudd. Meanwhile, Hill, Ainscough, Shank, and Manullang and Chegut, Schenk, and Scholtens argue that investment screening restrictions allow for the identification of companies with higher growth potential and better management, leading to better financial outcomes, both in performance and risk profile. Sustainable mutual funds apply specific portfolio screening by focusing investments on socially conscious businesses. Empirical research shows that a significant amount of funds is not stated as sustainable (conventional mutual funds) but their portfolios are comparable to sustainable mutual funds. In addition, the Sustainability score is significant in explaining performance levels, downside risk, and fund flows. Empirical research shows equivalent results for the three dimensions of sustainability (environmental, social, and corporate).

Research has shown that mutual funds with high Morningstar sustainability scores do not attract investors more effectively

compared to funds with low sustainability scores. However, SRI funds have shown significantly better performance which affects cash flows. El Ghouli and Karoui used Corporate Social Responsibility (CSR) scores to study the effects of performance and cash flows of mutual funds, showing that high cash flows indicate poor performance and demonstrate a weak relationship between mutual fund performance and cash flows [4]. The use of sustainability scores has benefits for selecting SRI, where investors can choose better scores even if the mutual fund is not classified as an SRI fund.

In recent years, SRI investment research has evolved. The CFA Institute, which is a global association for investment professionals, states that "the key idea in discussions of ESG issues is that systematically considering ESG issues is likely to lead to more comprehensive analysis and more informed investment decisions" and "that every investment analysis should be able to correctly identify and evaluate investment risks, and ESG issues are part of this evaluation" [8]. The research focuses on the first type of investors who care about the financial performance of their SRI funds.

Hamilton, Jo and Statman developed three hypotheses regarding the performance of SRI mutual funds. The first hypothesis is that the performance of SRI funds is equal to that of conventional funds, which is consistent with a market that does not take social responsibility features into account. The second hypothesis is that the performance of SRI funds is lower than that of conventional funds, which is consistent with a market that values social responsibility features. Finally, the third hypothesis is that the performance of SRI funds is higher than that of conventional funds. There are several arguments that can explain why SRI mutual funds could outperform, in financial terms, conventional funds (which do not consider ESG factors). Firstly, SRI mutual funds have a higher proportion of their portfolio in the small company segment; these companies are more adaptable to market changes Luther, Matatko, and Corner, Gregory, Matatko, and Luther and may also be more profitable in the long run. Secondly, social enterprises are more efficient, better managed, and perform better in the market Hamilton, Jo, and Statman. From a theoretical perspective for example, Margolis, Elfenbein, and Walsh, 2009, social enterprises can reduce costs (penalties, etc.) or increase revenues (innovative products, greater employee efforts, better public perception, increasing the likelihood that consumers will buy the company's products or its stock price, attracting socially conscious customers, etc.) [9]. Conversely, one important argument from critics of SRI funds is that the scope of possible investments for these funds is small (individual companies), thereby assuming higher investment risks due to a lack of diversification Chegut, Schenk, and Scholtens. Humphrey and Tan replicated 10,000 pairs of SRI and conventional portfolios to test the impact of SRI screening on performance and found no significant difference in risk-adjusted returns between screened and unscreened portfolios [10]. They concluded that a typical SRI fund would neither gain nor lose from its portfolio screening. However, Trinks and Scholtens found that negative screening implies opportunity costs, as excluding stocks from the investment portfolio can reduce financial performance.

Kurtz or Goldreyer and Diltz argue that SRI fund managers require more information than conventional funds about the

companies they invest in; they base their decisions on deeper, more comprehensive, and higher-quality information, resulting in a significant reduction in their investment decision risk. Empirical evidence from several authors, such as Luther, Matatko, and Corner and Maillin, Saadouni, and Briston, supports the idea that SRI funds outperform conventional investments. However, there is also evidence supporting the idea that SRI is neutral to financial performance Hamilton, Jo, and Statman, Kreander, Gray, Power, and Sinclair, Gregory and Whittaker, Bauer, Derwall, and Otten, among others), or that SRI funds underperform in conventional investments for example, White.

The first study on SRI investment was conducted by Luther, Matatko, and Corner where these authors found that SRI investment funds neither fell short nor outperformed the benchmark index. They examined 15 British Ethical funds, finding weak evidence that the 15 UK SRI funds outperformed two stock market indices. Hamilton, Jo, and Statman conducted a similar study where the average excess return difference was insignificant, and only one of the 17 mutual funds had a positive Jensen's alpha. Luther and Matatko built upon their previous work by including small market indices and concluded that the excess returns of SRI funds were significantly influenced by the low capitalization of small-cap stocks. This study also demonstrated that SRI funds had a neutral effect on performance. White studied US and German mutual funds using simple regression against the environmental market index, showing that SRI investments underperformed in terms of three performance measures (Jensen's Alpha, Treynor ratio, and Sharpe ratio). In this study, the author uses a sample of six US funds and five German SRI investment funds.

All previous research used indices as benchmarks, leading to issues regarding which index is appropriate. Mallin, Saadouni, and Briston avoided this problem by using matched pairs analysis to compare SRI mutual funds and conventional funds in the UK. The authors matched 29 SRI mutual funds with conventional mutual funds using size and age of the funds as criteria. Their results showed no difference in performance between the two samples using Sharpe and Treynor ratios as performance measures, but they found that ethical funds performed better than non-ethical funds when Jensen's performance measure was used. Gregory, Matatko, and Luther studied 18 SRI funds where the area of investment and types of funds were considered. They found no performance difference compared to conventional funds. Statman studied the performance of 31 US SRI mutual funds and the Domini 400 Social-Index (DSI) from 1990 to 1998. Research results show that only a few SRI funds can perform poorly.

The results indicate that only a few SRI funds may underperform relative to benchmarks (S&P 500 or DSI). However, in general, SRI funds achieve performance similar to S&P 500, DSI, and conventional funds. Kreander, Gray, Power, and Sinclair used matching procedures and the age, size, country, and investment universe of the funds as variables. This study includes mutual funds from Sweden, the Netherlands, Norway, Germany, the UK, and Switzerland, and uses Jensen's alpha, Sharpe, and Treynor ratios as performance metrics. Their results show that the performance of SRI funds is very similar to that of conventional funds. Kreander, Gray, Power, and Sinclair studied

the performance of 30 European SRI funds from four countries and found that there is no difference between SRI funds and conventional funds.

Bauer, Otten, and Rad investigated the performance of ethical funds in Australia, and Bauer, Derwall, and Otten invested evidence from Canada, finding no statistical difference in performance between conventional funds and SRI. Gregory and Whittaker, in the UK market, found that both SRI and non-SRI funds did not show significant performance. Renneboog, Ter Horst, and Zhang found that SRI funds in the US, UK, and many European and Asia-Pacific countries underperformed in their domestic benchmarks. However, with the exception of France, Japan, and Sweden, the risk-adjusted performance of SRI funds was not statistically different from that of conventional funds. Gil-Bazo, Ruiz-Verdú, and Santos found that during the period 1997-2005, US SRI funds had better performance (gross and net Carhart alpha) than conventional mutual funds with similar characteristics. The authors found that the differences were driven exclusively by SRI funds managed by companies specializing in SRI, while funds managed by companies that do not specialize in SRI performed poorly in conventional funds.

Climent dan Soriano membandingkan kinerja investasi reksa dana lingkungan atau hijau AS, menemukan bahwa pada periode 1987-2009, dana hijau memiliki tingkat kinerja yang lebih rendah daripada reksa dana konvensional, tetapi, pada periode 2001-2009 dana hijau Climent and Soriano compared the performance of environmentally or green investment mutual funds in the US, finding that in the period from 1987 to 2009, green funds had lower performance levels than conventional mutual funds, but from 2001 to 2009, green funds achieved risk-adjusted returns that were not significantly different from SRI and other conventional mutual funds. Cortez, Silva, and Areal conducted a study focusing on 88 SRI funds from the European market from 1996 to 2007. They concluded that the performance of SRI funds was similar to that of conventional and socially responsible indexes. Cortez, Silva, and Areal studied seven European and US markets from 1996 to 2008. They found that in several European markets (Belgium, France, Germany, Italy, the Netherlands, and the UK), SRI funds showed similar performance compared to conventional and benchmark funds. Conversely, US and Austrian funds showed evidence of poor performance. u mencapai imbal hasil yang disesuaikan dengan risiko yang tidak berbeda secara signifikan dari SRI dan reksa dana konvensional lainnya. Cortez, Silva dan Areal melakukan studi yang berfokus pada 88 dana SRI dari pasar Eropa dari tahun 1996 hingga 2007. Mereka menyimpulkan bahwa kinerja dana SRI mirip dengan kinerja indeks konvensional dan bertanggung jawab sosial. Cortez, Silva dan Areal mempelajari tujuh pasar Eropa dan AS dari tahun 1996 hingga 2008. Mereka menemukan di beberapa pasar Eropa (Belgia, Prancis, Jerman, Italia, Belanda, dan Inggris) bahwa dana SRI menunjukkan kinerja yang sama dibandingkan dengan konvensional dan tolok ukur. Sebaliknya, dana AS dan Austria menunjukkan bukti kinerja buruk.

Pérez-Gladish, Méndez Rodríguez, M'Zali, and Lang compared 46 large-cap equity mutual funds based in the US, selected randomly (25 were SIF members and 21 were conventional funds), finding no significant performance differences between conventional mutual funds and SRI using Data Envelopment

Analysis. Nofsinger and Varma (2014) found that SRI funds outperformed conventional funds during the global financial crisis, thus they may be an optimal choice for investors looking to protect themselves from downside risk. They also found that SRI funds performed poorly at other times. Leite and Cortez (2014) conducted a multi-country study focusing on 54 international SRI funds located in eight European markets (Austria, Belgium, France, Germany, Italy, the Netherlands, the United Kingdom, and Spain); they applied a five-factor model and found similar performance between socially responsible funds and conventional funds. Muñoz, Vargas, and Marco (2014) studied 89 European green funds and 18 US funds from 1994 to 2013. They applied the Carhart four-factor model and stated that, for the US market, green funds do not perform worse than the market, but with a global equity portfolio, green funds showed evidence of poor performance. Becchetti, Ciciretti, Dalo, and Herzel did not find a clear dominance throughout the analyzed period (1992-2012), but also found that SRI funds generally performed better than conventional funds in the period following the global financial crisis of 2007 [11]. Leite and Cortez focusing on the French market, found that SRI funds performed slightly worse than matching samples according to different models, but the alpha differences were not statistically significant in many cases. They only found significance in one of the models estimated at a 10% significance level. Humphrey, Warren, and Boon found that SRI managers have longer tenures and are more likely to be female, but they did not find significant differences in the performance of SRI and conventional funds. Ibikunle and Steffen conducted a comparative financial performance analysis of European green, conventional, and black mutual funds; they concluded that there is no difference in performance between green and conventional funds and that green funds began to significantly outperform black funds.

Dolvin, Fulkerson and Krukover are the only reference, to our knowledge, that uses the Morningstar Sustainability score in their analysis [7]. The authors conclude that funds with higher Morningstar Sustainability scores have similar alpha compared to funds with lower Sustainability scores. The authors also observed that there is little difference in performance or Sustainability scores between self-proclaimed SRI funds versus those in the top 50 and top 20 percent of Morningstar Sustainability scores. Finally, El Ghouli and Karoui used CSR scores, which are composite weighted asset CSR fund scores [4]. They showed the effect of CSR on fund performance; compared to low CSR funds, high CSR funds showed worse performance.

Bovis AV, who researched ESG innovation and green economic growth, found that ESG drives economic transformation in Russia and Central Asia [12]. This research shows that the integration of ESG can enhance the attraction of public and private investment to promote green economic growth. This serves as a basis for small, micro, and medium enterprises to access policy support and green investment incentives through the adoption of ESG practices.

Lapinskiene et al, in their research on ESG and the Stock Market in the European Union and the United States, found that environmental performance affects stock returns [13]. This research discovered that ESG data, particularly environmental aspects, has a positive relationship with stock market returns.

This motivates small, micro, and medium enterprises to improve their environmental performance in order to gain access to financing and partners that care about ESG.

Dai N, in his research on private equity investment and ESG, states that ESG is important in private equity investor decision-making [14]. ESG has become a key element in the perfection test and long-term investment risk mitigation strategy. This opens opportunities for sustainable oriented micro, small, and medium enterprises to attract large investors and venture capital.

Mohammad WM Wan, in his research on environmental innovation and access to financing, found that developing countries face green financing challenges, where the expansion of green financing promotes resource efficiency and financial innovation in the productive sector [15]. This provides a foundation for advocating for micro, small, and medium enterprises to gain access to environmentally friendly credit and energy efficiency incentive funds.

Ilesanmi J in his research on eco-entrepreneurship and sustainable business models found that innovative business models drive the local economy [16]. ESG business model innovation can enhance added value and investment feasibility for micro enterprises in the informal sector. This encourages micro, small, and medium enterprises to develop circular and community-based business models as a socio-economic investment approach [17].

Performance and Profitability of Mutual Funds

The performance and profitability of mutual funds can be evaluated through several indicators, including return, risk, benchmark, Sharpe ratio, Treynor ratio, operating costs (expense ratio), and portfolio composition. Return measures the level of profit obtained by investors, while the Sharpe ratio shows the balance between return and risk. Operating costs or expense ratio is the percentage of funds used for the operating costs of the mutual fund [18]. It is important to monitor the performance of mutual funds and consider various indicators to make informed investment decisions [19]. The assessment of stability and the increase in investment performance and profitability of global mutual funds can also be viewed and monitored through a joint mutual fund performance card that can be accessed online. The joint performance card of mutual funds can display data such as returns, expense ratios, and benchmark comparisons, allowing banks and investors to assess whether to invest in mutual funds with stable and safe performance and profitability as required [20].

Performance and profitability indicators of mutual funds:

Comparison of Returns and Risks:

- **Return.** Return measures how much profit an investor earns from a mutual fund investment. The comparison of returns between different mutual funds can illustrate the performance of each mutual fund. Returns can be measured over a specific period of time, for example, 6 months, 1 year, or 3 years.
- **Risk.** Evaluation of the level of risk offered by mutual funds, such as price volatility and the possibility of loss. Some risk factors that can be used include standard deviation and beta.

The Performance and Profitability: of mutual funds are also represented by the Net Asset Value (NAV) of the mutual funds, which is determined by the performance of the underlying investments, minus the fees incurred. Investors can earn returns through dividends/interest income, portfolio distributions, and capital gains from the sale of shares [21].

Use of Benchmarks: Each mutual fund has a benchmark which is an index or group of assets that serve as a measure of performance. Compare the performance of the mutual fund with its benchmark to see if the mutual fund can outperform or exceed the benchmark.

Performance Indicators:

- **Alpha (Jensen Alpha).** Indicates how much a mutual fund is able to generate returns that exceed what should be based on the risk taken. A higher alpha value indicates better performance.
- **Sharpe ratio.** The Sharpe ratio measures the performance of a mutual fund based on return and risk (volatility). The Sharpe ratio measures the return generated per unit of risk taken. A higher Sharpe ratio indicates that the mutual fund generates greater return for the same level of risk. A higher Sharpe ratio indicates better performance, especially when compared to the benchmark.
- **Treynor ratio.** The Treynor ratio is similar to the Sharpe ratio, but uses systematic risk (beta) as a measure of risk.
- **M2.** Measures the difference in return between the mutual fund and the benchmark after adjusting for risk.
- **Information Ratio.** Indicates how well the investment manager selects assets that yield higher returns than expected.

Costs and Portfolio Composition:

- **Expense Ratio.** Expense ratio indicates the percentage of funds used for the operational costs of mutual funds, such as investment manager fees, audit fees, and administrative costs. A lower expense ratio can enhance the profitability of mutual funds.
- **Portfolio Composition.** It's important to consider the types of assets invested in the mutual fund, such as stocks, bonds, or money market instruments. A portfolio composition that aligns with investment goals will provide better and optimal performance.

Social Environmental Governance / ESG: The ESG score is a general score that is a type of sustainability score that generally considers environmental, social, and governance factors, used to assess the performance of companies that are good and environmentally friendly [22,23]. The Social Environmental Governance scoring consists of 12 scores, namely: Environmental (Water Security, Pollution and Resources, Climate Change, Biodiversity), Social (Labor standards, Human Right and Community, Health and Safety, Customer Responsibility), Governance (Tax transparency, Risk Management, Corporate Governance, Anti Corruption)

Other literature mentions there are 10 points of ESG social environmental governance, which are: Pollution prevention and waste management, Biodiversity conservation, Natural resource

management and energy efficiency, Climate change mitigation and adaptation and disaster risk, Employment and working conditions, Diversity, equality, inclusion, and access, Social interests, Cultural heritage, Leadership and governance, Risks and controls.

Sustainable Development Goals (SDGs): SDGs are a set of goals established by the United Nations (UN) to achieve a better and sustainable life. The SDGs program was initiated in 2015 and is expected to be achieved by 2030. The main goal of the SDGs is to achieve a better and sustainable life for all humanity on Earth. This general intention is then elaborated into 17 points of sustainable development goals. According to the United Nations and the National Development Planning Agency (Bappenas), the 17 SDG goals are: No Poverty, Zero Hunger, Good Health and Well-being, Quality of Education, gender Equality, Clear Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reduced Inequality, Sustainable cities and communities, Responsible consumption and Production, Climate Action, Life below Water, Life on Land, Peace, Justice and Strong institution, Partnership for The Goals. The known framework of the 5Ps of the Sustainable Development Goals (SDGs) that are interconnected with each other includes: People, Planet, Prosperity, Peace, and Partnership that are interconnected with each other [24-26].

Research Hypothesis

The performance and profitability of Mutual Fund Investments are positively influenced by environmental social governance (ESG) and the Sustainable Development Goals (SDGs)

Research Methods

Cohort/Timeseries research that analyses the performance and profitability of BTN mutual fund products that was selected by investors from 2021-2024, based on secondary data from BTN's sustainability ongoing reports. The impact of environmental, social governance (ESG), and sustainable development goals (SDGs) on the economic performance and profitability of BTN mutual fund investment products is analyzed descriptively and quantitatively using multiple linear regression analysis with SPSS [27].

Result and Discussion

The performance and profitability of BTN mutual funds during the years 2021 to 2024 increased by 2.12%, with managed funds growing by 20% and even up to 49.9% during the period of 2021-2024. In this study, there is an increase in the total interest income of mutual funds from the year 2021 (25.83 trillion) to 2024 (29.55 trillion), resulting in an increase of 3.83 trillion or 6.9%, indicating the good performance and profitability of BTN mutual funds. There is also an increase in the total managed funds of BTN mutual funds from 2021 to 2024 from 270.75 trillion to 810.59 trillion, which is an increase of 49.9%, further demonstrating the good performance and profitability of BTN mutual funds.

BTN offers a variety of mutual fund products with varying return potentials. The performance of mutual funds is influenced by market conditions and investment strategies. Economic and social governance and the goals of sustainable growth impact

the potential for more profitable and safer mutual funds with low risk. Mutual fund products with high return potential that have passed ESG screening are the MSCI index mutual funds (Morgan Stanley Capital International) with a return of 30.85% over the last 3 years. The MSCI index is an index used to track stock movements across various regions and sectors, including Indonesia [28,29]. MSCI index mutual funds have a lower risk profile compared to equity mutual funds, as they passively mimic the performance of the index and do not aim to beat the market, and have already passed the Economic Social Governance (ESG) screening. Examples of MSCI mutual funds in Indonesia include: Syailendra MSCI Indonesia Value Index Fund, Danareksa MSCI Indonesia ESG Screened, BRI MSCI Indonesia ESG Screened, KISI MSCI Indonesia ETF Exchange Traded Fund. Syailendra Capital is an MSCI mutual fund with a 20% growth in managed funds by the end of 2024.

Environmental Performance of BTN	2022	2023	2024
Plant Waste	124,52	124,52	137,77
Tree Planting (Tree)	No data	5.323	29.615
Penggunaan energi (GJ)	162.232	116.597	380.252
Social Performance of BTN	2022	2023	2024
Number of Employees (people)	11.859	12.045	12.847
Number of Local Suppliers (Suppliers)	314	452	939
Total Distribution of TJSL Funds (Billion)	61,98	79,99	88,96

Employee gender percentage 2024: Male 51.06% & Female 48.94%, Employee Persons with disabilities 2024: Male 0.17% Female 0.19%

Performance of BTN Governance: Formation of the ESG Committee, Enterprise & ESG Risk Management Division, and ESG Department, Development of the ESG Framework, Strategy, and Roadmap, The first state-owned bank to sign the Principles for Responsible Banking (PRB), Preparation of the Governance, Risk, and Compliance (GRC) Roadmap

ESG Ranking of BTN and Sustainable Score:

- BTN is listed in the KEHATI Groups Index, which includes: SRI KEHATI, ESGQ 45 IDX KEHATI, ESG SL IDX KEHATI.
- BTN is also listed in the climate change caring index, namely
- IDX LQ45 LOW CARBON LEADERS (IDX Growth 30, IDX Economic 30, IDX 80, IDX Finance)
- MSCI Indonesia Small Cap (IDX value 30, Kompas 100, IDX BUMN 20).
- Sustainable ESG Rating: 23.9 (Medium Risk) MSCI ESG Risk Rating: BBB (Average) CSRHUB ESG Rating: 84% compared to 29,854 companies Refinitiv: 64 (Grade B+).

The performance and profitability of BTN mutual funds can be accessed online through the sustainable annual report / SR BTN that is available online. BTN received an award as an ESG bank and received a national award, where BTN's ESG ranking and

sustainable growth were compared to the existing benchmark, which is the index or asset group that serves as a performance benchmark [30]. This compares the performance of mutual funds with their benchmark to see if the mutual funds can outperform or exceed the benchmark.

An improvement in the economic performance of BTN was recorded in 2021-2024, which also indicated an increase in the performance and profitability of mutual funds, as evidenced by the increase in total assets, interest income, total managed mutual fund capital, net profit, and an increase in credit distribution. Meanwhile, operating costs remained relatively stable with a small value [31]. This also indicates the good performance and profitability of BTN's mutual funds.

Descriptive Analysis:

The performance and profitability of mutual funds are represented by Mutual Fund Returns. In this study, the BTN Mutual Fund Return with a minimum return of -11.42 is the BRI Mawar Consumer 10 Stock Mutual Fund and the maximum return value is the TRIM Fixed Fund Mutual Fund with a return value of 27.54. The average return of BTN mutual funds is -2.00 ± 1.13150 . The standard deviation is 6.09330. The variance is 37.128. The skewness value is -0.014 ± 0.434 and the kurtosis value is -1.493 ± 0.845 . The average return value of -2% indicates the poor performance of BTN mutual funds, as it is not profitable for investors.

The performance and profitability of mutual funds are also represented by the Net Asset Value (NAV) of the mutual fund. In this study, the NAV is constant with a tendency to increase, ranging from a minimum of Rp. 913 for the Mandiri Index FTSE Indonesia ESG Stock Mutual Fund (Class A) to a maximum NAV of Rp 56,246.58 for the Batavia Equity Fund, indicating the good performance and profitability of BTN mutual funds. The average NAV = Rp 6,500.41 $\pm 2,347.2$. Standard deviation is 12,640.08. Variance is 159,771,684.8. The NAV of BCA is not normally distributed, with a p-value < 0.05 (i.e., $p = 0.00$). The skewness value is $+3.108 \pm 0.434$ and kurtosis is $+9.405 \pm 0.845$. The curve is peaked and skewed. The Net Asset Value of BTN is relatively high at Rp 6,500.41, indicating the good performance and profitability level of BTN mutual fund performance and benefiting investors [32].

The performance and profitability of mutual funds represented by the growth of mutual funds over 1 year. In this study, the growth of mutual funds over 1 year ranges from a minimum of -5,560.07 for the Batavia Stock Fund to a maximum of +232 for TRIM Fixed Income Fund 2. The average mutual fund growth over 1 year is -37.63 ± 31.278 . The standard deviation is 159.487 and variance is 25,436.199. With a skewness value of -0.890 ± 0.456 and kurtosis of 1.542 ± 0.887 . In this study, the growth of performance and profitability of mutual funds represented by the growth of mutual funds over 1 year in 2025 is poor, with an average negative growth of -37.63. The average growth of BTN mutual funds at -37.63 indicates the poor performance and profitability of BTN mutual funds [33].

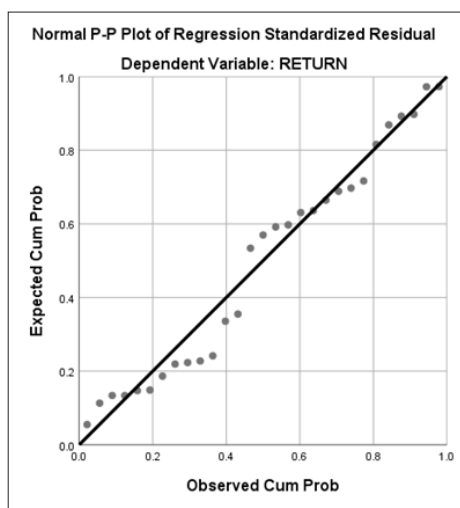
The performance and profitability of mutual funds can also be assessed from the operational expenses represented by the Expense Ratio. BTN's operational costs during the period 2021-2024 tend to be stable with a small value (minimum) ranging from 9.3 trillion to a maximum of 23.78 trillion. The average value is 13.41 ± 3.46472 . The standard deviation is 6.92944. The variance is 48.017. The skewness is 1.972 ± 1.014 . The kurtosis is 3.911 ± 2.619 . The low operational costs of BTN indicate good performance levels and profitability of BTN mutual funds. BTN's operational costs are classified as low, indicating that BTN's economic performance and profitability is good, effective, and efficient [34].

The performance and profitability of mutual funds can also be assessed by Total Interest Income and Total Managed Funds of mutual funds. In this study, there was an increase in the total interest income of mutual funds from 2021 (25.83 trillion) to 2024 (29.55 trillion), an increase of 3.83 trillion or 6.9%, indicating good performance and profitability of BTN mutual funds. The minimum interest income is 23.30 trillion and the maximum is 29.550 trillion. The average interest income is 26.745 trillion ± 1.3751 . The standard deviation is 2.75. The variance is 7.54. Skewness is -0.480 ± 1.014 . Kurtosis is -1.615 ± 2.619 . The total interest income of BTN is relatively low compared to other banks. This indicates the less favorable economic performance of BTN as a State-Owned Enterprise, where its efforts are less aggressive and less willing to take risks, prioritizing the welfare of the community and focusing on the goal of providing housing credit.

The performance and profitability of mutual funds can also be assessed by the total managed funds of the mutual funds. There has been an increase in the total managed funds of BTN mutual funds from 2021-2024 from 270.75 trillion to 810.59 trillion, reflecting an increase of 49.9%. The maximum value of the total managed funds is 270.75 trillion, while the maximum is 810.59 trillion. The average value of the total managed funds is 542.7750 ± 149.89823 . The standard deviation is 299.796. The variance is 89877.919. Skewness is -0.003 ± 1.014 . Kurtosis is -5.949 ± 2.619 . The total managed funds are very high, indicating a high level of investor confidence in BTN, along with the high economic performance of BTN and the high performance and profitability of mutual funds [35].

Quantitative Analysis

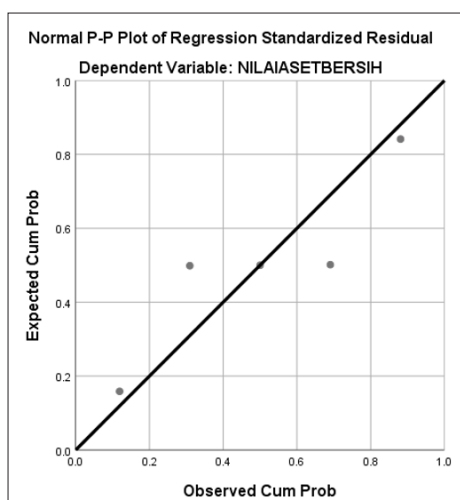
There is a positive insignificant relationship between the performance of BTN mutual funds represented by Mutual Fund Returns and ESG (+0.351), but a significant negative relationship (-10.439) was found between performance and profitability of mutual funds represented by mutual fund returns with SDGs. The linear equation of this relationship has a meaningful relationship value with a positive constant of +43.929. Performance and Profitability of Mutual Funds (represented by mutual fund returns) = $+43,929 + 0,351 \text{ ESG} - 10,439 \text{ SDGs}$



Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	43.929	18.942		2.319	.029	4.993	82.865					
	ESG	.351	2.154	.029	.163	.872	-4.075	4.778	.784	.032	.014	.242	4.138
	SDGs	-10.439	2.164	-.867	-4.824	.000	-14.887	-5.991	-.893	-.687	-.426	.242	4.138

a. Dependent Variable: RETURN

A positive but not significant relationship was found between performance and profitability of mutual funds represented by NAV with ESG (+ 47.605), but a significant negative relationship was found between performance and profitability of mutual funds with SDGs (- 945.275). This relationship has a positive constant value of +5.877.455. Performance and Profitability of Mutual Funds (represented by NAV) = +5.877.455 + 47.605 ESG - 945.275 SDGs.

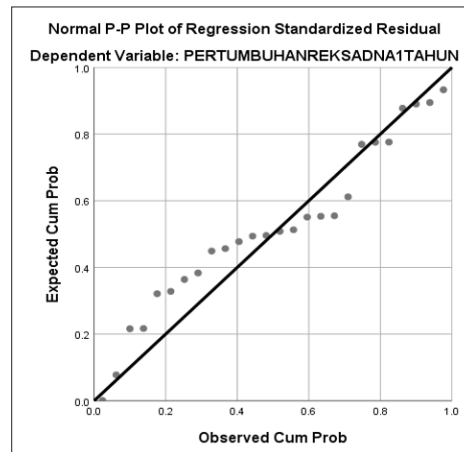


Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5877.455	110.574		53.154	.000	5401.692	6353.218					
	ESG	+47.605	15.334	-.042	-3.105	.090	-113.581	18.371	.373	-.910	-.038	.833	1.200
	SDGs	-945.275	12.520	-1.016	-75.501	.000	-999.145	-891.405	-.999	-1.000	-.928	.833	1.200

a. Dependent Variable: NILAIASETBERSIH

A positive non-significant relationship was found between the performance and profitability of BTN mutual funds represented by the growth of the mutual fund over 1 year with ESG (+114.783). However, a significant negative relationship was found between the performance and profitability of the mutual fund with SDGs (-148.103). This relationship has a positive constant value of +107.982.

Performance and Profitability of Mutual Funds (growth of mutual funds over 1 year) = +107.982 + 114.783 ESG – 148.103 SDGs.



Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	107.982	653.153		.165	.870	-1243.169	1459.132					
	ESG	114.783	75.100	.363	1.528	.140	-40.574	270.140	.771	.304	.187	.267	3.750
	SDGs	-149.103	74.206	-.477	-2.009	.056	-302.610	4.404	-.787	-.386	-.246	.267	3.750

a. Dependent Variable: PERTUMBUHANREKSADNA1TAHUN

The performance and profitability of mutual funds, represented by the total managed funds of the mutual funds, have a positive relationship with total assets (+8.662) and a positive relationship with credit distribution (+9.559). This relationship has a positive constant value of +6372.36. ESG and SDGs do not influence nor relate to the total managed funds of mutual funds in this research analysis. The performance and profitability of mutual funds (Total managed funds of mutual funds) = +6372.36 + 8.662 Total assets + 9.559 Credit Distribution.

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-6372.363	.000		.	.	-6372.363	-6372.363					
	TOTALASET	8.662	.000	.984	.	.	8.662	8.662	.911	1.000	.969	.970	1.031
	KREDITPENYALURAN	9.559	.000	.420	.	.	9.559	9.559	.248	1.000	.413	.970	1.031

a. Dependent Variable: TOTALDANAKELOLAREKSADANA

The performance and profitability of mutual funds represented by interest income have a positive relationship with the total funds managed by the mutual funds (+0.013) and a negative relationship with net profit (-3.832), and a positive relationship with credit distribution (+0.011). This relationship has a positive constant of +27.587. ESG and SDGs have no effect and are not related to the total interest income of mutual funds in this research analysis. The performance and profitability of mutual funds (represented by mutual fund interest income) = +27.587 + 0.013 total funds managed by mutual funds - 3.832 net profit + 0.011 credit distribution.

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	27.587	.000		.	.	27.587	27.587					
	TOTALDANAKELOLAREKSADANA	.013	.000	1.424	.	.	.013	.013	.900	1.000	.825	.336	2.976
	LABABERSIH	-3.832	.000	-.647	.	.	-3.832	-3.832	.321	-1.000	-.434	.450	2.222
	KREDITPENYALURAN	.011	.000	.146	.	.	.011	.011	-.503	1.000	.116	.636	1.572

a. Dependent Variable: PENDAPATANBUNGAREKSADANA

Conclusion

BTN is a State-Owned Enterprise that has passed the ESG screening with a good rating and has received national awards. ESG ranking of BTN and sustainable score: Sustainable ESG Rating: 23.9 (Medium Risk) MSCI ESG Risk Rating: BBB (Average) CSRHUB ESG Rating: 84% compared to 29,854 companies Refinitiv: 64 (Grade B+).

The results of this study show that there is only a positive relationship between ESG and the performance and profitability of mutual funds represented by the return value of mutual funds, NAV, and the growth of mutual funds. In this study, there is no relationship between ESG and SDGs mutual funds with the total assets, total mutual funds managed, and total interest income, which also represent the performance and profitability of mutual funds, which in other studies is stated to have a positive relationship. This is due to limitations in the data. Further research is needed with more accurate data.

This research is supported by existing literature and statistical analysis proves that BTN and banks around the world are developing mutual fund products that pass ESG screening, which has a positive relationship with mutual fund performance and profitability, represented in this study by mutual fund returns (0.351), Net Asset Value / NAV (+47.605), and mutual fund growth over 1 year (+114.783). In this study, no relationship was found between the SDGs and the performance and profitability of mutual funds that is represented by returns (-10.439), NAV (-945.275), and mutual fund growth (-148.103). Thus, it is true that the sustainability scores from various ESG pillars of environmental governance have a positive impact on the performance and profitability of mutual funds, in accordance with other literature and research.

The performance and profitability of mutual funds represented by the total managed funds of mutual funds to total assets, interest income, net profit, operational costs, and loan disbursement have a relationship with a positive constant value of +6372.36 and are positively influenced by 8.662 by total assets and positively influenced by +9.559 by loan disbursement. ESG and SDGs do not have an influence and are not related to the total amount of managed mutual funds in this research analysis.

The performance and profitability of mutual funds, represented by interest income relative to total assets, total managed funds of mutual funds, net profit, operational expenses, and credit distribution, have a relationship with a positive constant of +27.587 and positively influenced by 0.013 of the total managed funds of mutual funds, negatively influenced by -3.832 of net profit, and positively influenced by 0.011 of credit distribution. ESG and SDGs do not affect and are not related to the total interest income of mutual funds in this research analysis.

The results of this research indicate that the performance and profitability of BTN's ESG mutual funds are good and show improvement during the period of 2021-2024. The measures used to assess the performance and profitability of BTN's mutual funds in this study are: mutual fund returns, Net Asset Value, total managed mutual fund amount, and total mutual fund interest income. The assessment of mutual fund performance and profitability is conducted descriptively and quantitatively

by multiple linear regression statistical analysis, which yielded significant results with a positive constant value. The performance and profitability of BTN's mutual funds increased by 2.12% during the years 2021 - 2024, with the total managed mutual fund amount increasing by 20%, even rising to 49.9% over the period from 2021 to 2024. The increase in total interest income during the period of 2021 - 2024 was 6.9%.

Sustainability scores have a significant impact on mutual fund flows, such that funds with higher ratings receive a larger volume of capital. From a risk perspective, ESG and SDGs scoring negatively relates to the funds' risk factor /VaR (value at risk), supporting that mutual funds with higher ESG and SDGs scores provide better protection against extreme losses.

From other available research data, it is proved that all countries are making efforts to promote mutual funds that pass ESG screening for the purpose of sustainable development with scoring points as determined by the United Nation, namely the 17 Sustainable Development Goals/SDGs. The investment goals of ESG mutual funds that align with the Sustainable Development Goals/SDGs purposes are to protect investors and the community, allowing them to invest their managed funds safely and environmentally friendly with clear legal protection as they have passed the screening.

The development of ESG mutual fund investments with the aim of sustainable development that is environmentally friendly and provides legal protection to investors for the purposes of social welfare and the community has been developed in all developed and developing countries such as Indonesia, India, the United States, Australia, Denmark, and Luxembourg [36]. Currently, there are many sustainable ESG mutual fund investment options available. ESG funds are SRI (Social Responsibility Investment) funds that generally perform better than conventional funds.

Investors should know, study, and seek information first about mutual funds that pass ESG and SDGs screening tests and are environmentally friendly before deciding to invest in a portfolio. Information can be obtained from the prospectus, monthly fund fact sheets (if published), or from the mutual fund profitability cards that can be accessed online, as well as from various related studies discussing mutual fund performance. Mutual funds that have positive performance with low value at risk and can outperform compared to the benchmark are mutual funds worth choosing as an alternative for investment. Future research is expected to benefit other research by providing additional data for empirical sustainability studies.

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