



Efficiency, Profitability, and Firm Size as Determinants of Financial Performance: A Systematic Literature Review

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Abstract

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This study aims to analyze the relationship between profitability, operational efficiency, and firm size on financial performance using a systematic literature review approach. The review covers various scientific publications from the past five years to identify research trends, theoretical gaps, and conceptual linkages among the three variables. The analysis reveals that operational efficiency has a significant negative effect on profitability, where a lower efficiency ratio indicates better management of operating expenses. Meanwhile, firm size positively influences financial performance, though the effect varies across different industries. Larger companies generally possess greater adaptive capacity and resource advantages to withstand economic volatility. The combined analysis of profitability, efficiency, and firm size provides a comprehensive understanding of the determinants of financial performance. These variables complement each other in shaping a company's effectiveness, stability, and competitiveness. Therefore, improving operational efficiency and optimizing organizational scale are crucial strategies for maintaining sustainable financial performance and ensuring resilience in an increasingly competitive global economic environment.



1. Introduction

The development of the financial industry in recent years has shown a significant increase in the need for efficiency and stability of corporate performance. The complexity of the business environment, the digitalization of the financial system, and the pressure on transparency post-pandemic require financial institutions to pay more attention to the balance between profitability, operational efficiency, and company scale as key indicators of financial performance. These three factors profitability (ROA), efficiency (BOPO), and company size (SIZE) are variables that are widely used to assess a company's ability to create economic value in a sustainable manner.

Profitability measured through Return on Assets (ROA) shows management's ability to optimize assets to generate profits. Increased profitability is considered a positive signal for investors and stakeholders regarding the effectiveness of corporate financial management (Amalia & Nugraha, 2021). On the other hand, operational efficiency (BOPO) is a benchmark of how well a company controls its operational expenses in order to generate maximum revenue (Hakim & Sugianto, 2018). As efficiency increases, costs decrease, and profitability tends to rise, indicating risk management and optimal use of resources.

The firm size factor also plays an important role in explaining the variation in financial performance. Larger companies generally have stronger resources, information systems, and managerial capabilities to maintain financial stability, increase efficiency, and expand their profitability base (Nugroho et al., 2021). However, the results of previous studies have shown an inconsistent relationship

between company size and profitability. Some studies have found that large companies tend to be more profitable due to their economies of scale, while other studies show no significant relationship due to the cost burden which also increases as the company grows (Akben-Selcuk, 2019).

Based on the literature published between 2017 and 2021, there is considerable variation in research results regarding the relationship between these three variables. For example, Hakiim (2018) found that efficiency measured through BOPO has a significant negative influence on ROA, showing that the more efficient a bank's operations are, the higher its profitability. Meanwhile, Badawi (2017) emphasized that company size has a moderation role that strengthens the relationship between efficiency and profitability in the banking sector. Other studies highlight the importance of the role of efficiency in strengthening long-term financial stability, where a high BOPO ratio can be an indicator of increased financial risk (Alzoubi, 2018).

From the results of these studies, it can be seen that the empirical consistency between ROA, BOPO, and SIZE has not been firmly established. Some studies have concluded a positive relationship between efficiency and profitability, while others have shown a negative or insignificant relationship. Differences in geographic context, observation period, and sample size are often the main causes of inconsistencies in results. In addition, there are few studies that systematically integrate these three variables within a single conceptual framework to describe the overall relationship between financial performance, operational efficiency, and company size.

The Systematic Literature Review (SLR) approach becomes relevant to address this fragmentation by tracing and synthesizing empirical findings from various previous studies methodologically. Using the SLR method, this study aims to (1) identify research trends in 2017–2021 that discuss the relationship between ROA, BOPO, and SIZE on financial performance; (2) analyze the underlying theories of the relationship; and (3) mapping the direction of research results and gaps that are still open. Through this approach, it is hoped to gain a deeper understanding of how the combination of profitability, efficiency, and company size contributes to overall financial performance.

Thus, this SLR contributes to providing a theoretical and empirical synthesis of key indicators of financial performance that can serve as a basis for advanced quantitative research. The integration of these three variables is also expected to help the formulation of corporate policy strategies in improving efficiency, strengthening asset structures, and optimizing profitability in the face of global economic uncertainty.

2. Literature Review

2.1. Profitability and Financial Performance

Profitability is the main indicator that reflects the effectiveness of management in generating profits through the use of assets and capital owned. The Return on Assets (ROA) ratio is often used to measure a company's ability to create added value from available resources. According to Husna and Satria (2019), high profitability indicates the efficiency of asset management and a sound financial

structure, which ultimately increases the value of the company. In the context of financial institutions, ROA is often used to assess the extent to which management is able to maintain operational stability and manage financing risks effectively. In addition, Akben-Selcuk (2019) emphasizes that profitability is also closely related to external factors such as corporate social responsibility and organizational size, which can strengthen or weaken the relationship between financial performance and company value. Meanwhile, Pertiwi (2021) shows that the level of profitability differs between institutions depending on financial management strategies, credit risk levels, and operational cost efficiency. Thus, profitability is not only the result of financial decisions, but also a reflection of managerial ability to manage efficiency and company size synergistically.

2.2. Operational Efficiency (BOPO) and Financial Performance

Operational efficiency describes a company's ability to manage operating expenses to generate revenue optimally. The Operating Cost to Operating Income Ratio (BOPO) is used to assess how effective management is in reducing costs so that profitability increases. According to Rizal and Rofiqo (2020), high efficiency reflects the company's ability to allocate resources productively, thus having a positive impact on the ROA ratio. However, Sari, Fauzi & Respati (2022) found that in some cases, BOPO actually showed a significant negative relationship with profitability, which means that the higher the operating costs, the lower the financial performance. The findings are consistent with Wijaya et al. (2021), which states that BOPO is a key determinant of profitability, where lower ratios indicate high efficiency and effective risk management. In the context of the Islamic and

conventional financial systems, operational efficiency remains the main key to improving financial performance in a sustainable manner. Thus, BOPO can act as an indicator of internal risks that reflect the stability and competitiveness of financial institutions.

2.3. Firm Size and Financial Performance

Firm size describes the organization's capacity to manage resources, access capital, and adapt to external pressures. The larger the size of the company, the higher the ability to diversify risk and manage cost efficiency. Muthohharoh (2021) found that firm size plays a role as a moderation variable that strengthens the influence of efficiency on profitability. This shows that large companies tend to have better cost control systems and financial governance. In addition, Soewarno and Tjahjadi (2020) emphasized that company size contributes positively to financial performance due to the advantage of economies of scale and the ability to obtain external funding at a lower cost. However, different results were found by Akben-Selcuk (2019), who stated that firm size does not necessarily strengthen the relationship between profitability and company value due to increased operational complexity. Thus, the influence of firm size on financial performance is contextual and depends on the cost structure, industry sector, and the effectiveness of corporate governance.

3. Methods

This research method uses the Systematic Literature Review (SLR) approach which aims to examine, identify, and synthesize previous research results related to

the relationship between profitability (ROA), operational efficiency (BOPO), and firm size to the company's financial performance. The SLR approach was chosen because it is able to provide a comprehensive picture of the development of research over a certain period of time, as well as reveal patterns, trends, and research gaps that have not been studied in depth.

The SLR process is carried out through several main stages. The first stage is the identification of the literature by determining the main keywords such as profitability, return on assets (ROA), operational efficiency (BOPO), firm size, and financial performance. Searches are conducted on indexed scientific databases such as Google Scholar, ScienceDirect, and SpringerLink, with a restriction on the year of publication between the last five years to maintain the relevance and novelty of the data.

The second stage is the literature selection, where the researcher conducts screening based on inclusion and exclusion criteria. The selected article must be a reputable scientific publication, have full access, and explicitly examine the relationship between the main variables of the research. Articles that are only conceptual or have no empirical data are excluded from the analysis. After this stage, only articles that are relevant and meet methodological standards are maintained for the analysis stage.

The third stage is literature analysis and synthesis, which is the process of reviewing the content of each selected article to identify the variables, methods, results, and context of the research. The analysis was carried out with a narrative and thematic approach, where each study was grouped based on the similarity of

concepts, results, and methodological approaches. From this process, a mapping of research trends was generated that showed that profitability, efficiency, and company size have a significant relationship with financial performance, although the relationship between variables often differs depending on the industry context and the study region.

The final stage is conceptual synthesis, which aims to build a comprehensive understanding and produce conceptual models as the basis for further research development. Through this SLR method, the research is expected to be able to present the integration of relevant previous research results, provide new research directions, and strengthen theoretical understanding of factors that affect the company's financial performance.

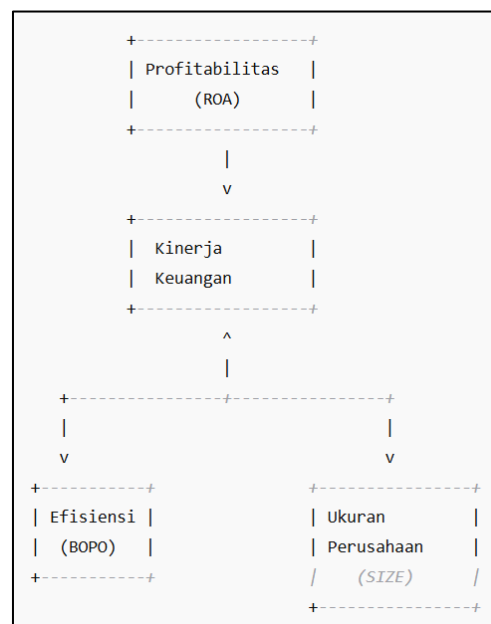


Figure.1 Konseptual Framework

Figure 1 illustrates that profitability (ROA), operational efficiency (BOPO), and company size (SIZE) act as independent variables that simultaneously affect a company's financial performance. The relationship between variables reflects the interaction between the ability to generate profits, the effectiveness of cost management, and the capacity of the organization to manage resources to achieve optimal performance.

4. Results

The results of a systematic study of the three main variables of profitability (ROA), operational efficiency (BOPO), and company size (SIZE) show that the relationship between these three to financial performance is complex, dynamic, and influenced by various contextual factors such as industrial structure, financial policy, and macroeconomic conditions. From the results of a review of thirteen scientific articles published between the last five years, it was found that most studies confirmed a significant relationship between efficiency and profitability, but the degree of influence of firm size varied between contexts and observation periods.

Research by Soewarno and Tjahjadi (2020) shows that company size plays a positive role in banking financial performance, while ROA is more influenced by capital structure and operational efficiency. These results emphasize the role of firm size as an indicator of financial capacity and adaptive ability in managing risk. The Hakiim study (2018) added that BOPO has a significant negative influence on ROA, showing that cost efficiency is the main determinant of profitability. In a similar context, Hakim and Sugianto (2018) found that BOPO has a significant effect on

bank profitability, while bank size acts as a positive signal to the market because it is considered to reflect higher financial strength and credibility.

Nugroho et al. (2021) explained that profitability is influenced by the ability of institutions to distribute funds productively and efficiently, with operational efficiency acting as a bridge between asset management and profit achievement. The results of this study are in line with Badawi (2017) who emphasized that bank size strengthens the relationship between efficiency and profitability because large banks have more mature risk management systems and resources. Conversely, Akben-Selcuk (2019) found that company size does not always increase profitability due to potential inefficiencies that arise due to the organization's too large scale.

Romulo and Dalimunthe (2021) show that operational efficiency and ROA also affect the effectiveness of corporate taxes, which reflects the indirect role of financial variables in improving fiscal performance and organizational sustainability. On the other hand, Wulandari et al. (2019) revealed that improving efficiency through reducing the BOPO ratio is able to strengthen investors' perception of the performance of banking stocks. These results are consistent with Alzoubi (2018) who found that financial performance has a direct effect on the profitability of microfinance institutions, and that efficiency is key in strengthening long-term stability.

Research by Jusni et al. (2019) found that efficiency and asset quality factors contribute significantly to the profitability of Islamic banks, although company size is not always the main determining factor. On the contrary, Wijaya et al. (2021) highlights the role of good corporate governance in strengthening the relationship

between BOPO and ROA, with results showing that efficient operational control results in a significant increase in profitability.

Methodologically, most studies use a quantitative approach based on secondary data from audited and published financial statements by financial authorities. The ROA ratio is consistently used as a proxy for financial performance because it is considered to be able to represent management's ability to utilize assets to generate profits. Meanwhile, BOPO is used to assess the level of efficiency in reducing operational costs to the revenue obtained. Research such as Hakiim (2018) and Wulandari et al. (2019) explicitly show that the negative relationship between BOPO and ROA describing good efficiency has a direct impact on increasing profitability.

In addition, it was found that the firm size variable plays a dual role: as a direct determinant of financial performance and as a moderation variable. Studies by Badawi (2017) and Soewarno and Tjahjadi (2020) indicate that large companies have better access to financing and stronger risk diversification capabilities, so that their profitability is more stable than that of small companies. However, in certain contexts, as found by Hakim and Sugianto (2018), company size does not always have a significant effect on ROA due to external influences such as interest rates, inflation, and changes in macroeconomic policies.

Based on the overall results, these SLR results confirm that efficiency (BOPO) has a negative and significant relationship to profitability (ROA), while company size (SIZE) has a positive effect but is not always consistent across studies. Profitability has proven to be a key indicator in measuring a company's financial

performance, while efficiency plays an internal driver that can strengthen long-term financial sustainability. The combination of these three variables reflects the balance between a company's ability to generate profits, control costs, and make optimal use of economies of scale.

Thus, these findings support the hypothesis that companies that are efficient in managing operational costs, have large assets, and are able to maintain a stable level of profitability will exhibit superior financial performance. The studies studied also provide direction for further research to integrate other variables such as corporate governance and financing risk to gain a more comprehensive understanding of the determinants of financial performance in the global financial sector.

5. Discussion

The results of the study analyzed through the Systematic Literature Review (SLR) approach show that the relationship between profitability, operational efficiency, and company size on financial performance has a consistent direction but the degree of influence varies across different research contexts. In general, profitability (ROA) is the main indicator that reflects a company's ability to manage assets to generate profits, while efficiency (BOPO) describes the effectiveness of controlling operational costs. These two ratios are theoretically interconnected, where increased efficiency will drive increased profitability. This is in line with the findings of Jusni et al. (2019) which states that the lower the BOPO ratio, the greater the potential for the company to achieve the optimal ROA level.

In the context of the banking industry, the role of efficiency has proven to be dominant. Research by Rizal and Rofiqo (2020) confirms that high efficiency through controlling operational costs contributes significantly to increasing the profitability of Islamic financial institutions in Indonesia. The study also emphasizes that the negative relationship between BOPO and ROA is a key indicator of the success of operational management strategies. Meanwhile, Rizal and Rofiqo (2020) found that post-merger efficiency at Bank Syariah Indonesia was the main factor in increasing profitability during the 2021–2024 period, where BOPO functioned as a reflection of internal efficiency that strengthened financial stability.

From the perspective of company size, the results of the study show a situational relationship. Muthohharoh (2021) found that firm size plays a role as a moderation variable that strengthens the relationship between efficiency and profitability. Large-scale companies have more resources to manage risk and optimize cost efficiency, so their performance is relatively more stable. However, research by Soewarno and Tjahjadi (2020) adds that the size of a company that is too large also has the potential to cause structural inefficiencies, especially if it is not balanced with an adaptive management system and flexible cost structure. Thus, the effect of company size on financial performance depends on the extent to which the organization is able to manage the complexity and operational costs arising from the scale of its business.

Research by Husna and Satria (2019) reinforces the view that the success of increasing profitability does not only depend on internal efficiency, but is also influenced by bank ownership, asset management policies, and market conditions.

This study shows that high efficiency does not necessarily guarantee an increase in ROA if external factors such as liquidity and credit quality are not controlled. Therefore, the integration between efficiency, profitability, and company size should be viewed as a complementary system, not as a stand-alone factor.

Based on the overall results, the results of this SLR confirm that the combination of ROA, BOPO, and SIZE forms an important foundation in understanding the dynamics of a company's financial performance. All three function synergistically: efficiency is a key driver of profitability, profitability reflects the results of effective asset management, and company size determines an organization's capacity to maintain long-term financial stability. Thus, companies that manage to maintain operational efficiency while strengthening asset scale will be able to create sustainable and resilient financial performance in the face of global economic pressures.

6. Conclusion

Based on the results of a systematic review through the Systematic Literature Review (SLR) approach to various studies that discuss the relationship between profitability (ROA), operational efficiency (BOPO), and company size (SIZE) on financial performance, it can be concluded that these three variables have complementary roles in determining the financial stability and sustainability of the company. Profitability reflects the effectiveness of asset management in generating profits, efficiency describes the ability to control costs to achieve optimal revenue, while company size reflects the organization's capacity to manage resources and risk

more broadly. The negative relationship between BOPO and ROA confirms the importance of efficiency in increasing profitability, while the influence of SIZE is relative to management's ability to manage operational complexity.

The results of the study also show that companies with high efficiency and strong asset structures tend to have more stable financial performance and better resilience to changes in economic conditions. Thus, the combination of efficient management, increased profitability, and strengthening organizational scale is an important strategy for companies to achieve sustainable financial performance. Further research is suggested to add variables such as corporate governance and financing risk to broaden understanding of the key determinants of financial performance across various sectors.

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