Determinant Factors of Profitability of the Indonesian Non-Financial SMEs PEFINDO Index

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ABSTRACT

This research aims to determine the influence of determinant factors of non-financial SMEs' PEFINDO index profitability in Indonesia from 2018 to 2022, with independent variables including company size, company age, company efficiency, working capital, liquidity, leverage, volatility, and market risk on the dependent variables of ROE and ROA. The study utilizes secondary data in the form of financial reports from non-financial companies that have been included in the PEFINDO25 index of the Indonesia Stock Exchange during the 2018-2022 period. This research sample used purposive sampling and obtained 65 companies as samples. Data analysis for hypothesis testing involves multiple regression using E-views 9 software. The test results indicate that company size, company efficiency, and working capital have a positive impact on ROE, while company age, leverage, and market risk have a negative impact on ROE. Company size, company age, and volatility have a negative impact on ROA, while company efficiency and working capital have a positive impact on ROA. However, liquidity does not significantly affect either ROE or ROA. These factors need to be considered by companies to make informed decisions in maintaining or improving company profitability, avoiding financial distress leading to bankruptcy, and determining suitable investments for investors.

INTRODUCTION

Essentially, the company's goals remain oriented towards commercial profits. A company's performance reflects its financial situation at a certain time. The company's financial performance is the result of its efforts to create profitability, which is important to observe the potential for positive growth. This also serves as a form of responsibility to investors in achieving the goals and aspirations that have been set (Perabawati et al., 2022). Identifying the factors that can lead to an increase in profitability reflects the quality and efficiency of managers. Improving profitability is useful for attracting new investors, increasing the satisfaction of existing shareholders, and signaling the completion of management, thus ensuring the company's sustainability. Maximizing profits for shareholders by increasing stock value is considered a top priority for every company. Improving profitability and determining the factors that influence performance remains a challenge for most companies. These factors include company size, company age, company efficiency, working capital management, liquidity, leverage, and volatility (Youssef et al., 2023).

The determinant factors of profitability to be studied are in Indonesia's non-financial Small and Medium Enterprises (SMEs). PT Pemeringkat Efek Indonesia (PEFINDO) actively conducts research in the Indonesian capital market by issuing its own index, one of which is the PEFINDO25 SME Index (PEFINDO, 2024). This index represents SMEs' stocks with strong fundamentals and liquidity that are listed on the Indonesia Stock Exchange (IDX). The PEFINDO25 Index consists of 25 stocks selected based on financial performance, liquidity, and high levels of public ownership (PEFINDO25, 2024). SMEs are an important foundation of the economy that creating more jobs, improving income distribution, and supporting economic growth and national stability. The novelty of this research is the addition of the Market Risk variable, as proposed by Vo (2023). The addition of the Market Risk variable is made because

market risk cannot be avoided in a company's operations. Among the forms of market risk, stock price fluctuations have a significant impact on the market asset value, a measure of company performance based on the market. Therefore, capturing the effect of market risk on company performance through stock price reflections is a practical task, especially during extreme events. Market risk is embedded in stock prices, which effectively influences the market value of a company's equity (Vo, 2023). Considering this context and background, this research is titled "Determinants of Profitability of the Indonesian Non-Financial PEFINDO Index SMEs".

1. Literature Review

Small and Medium Enterprises (SMEs)

Small and Medium Enterprises (SMEs) play a crucial role in the economy. SMEs are one of the key foundations of the economy, capable of creating more jobs, improving income distribution, and supporting economic growth and national stability. Numerous data highlight the significant economic impact that SMEs have on a country's economy. SMEs play a vital role in the success of a nation's economy by contributing in various ways (Investopedia, 2024). SMEs' vulnerability to market imperfections, such as financial constraints, operational challenges, and information asymmetry, is due to their size and limited financial and human resources. Consequently, greater challenges arise in maintaining solid financial performance and enhancing the well-being of SMEs, a critical issue for most global economies, including both developed and developing countries (Youssef et al., 2023). The SMEs referred to in this study are small and medium enterprises listed on the IDX and included in the PEFINDO25 Index for the period 2018-2022.

Profitability

Profitability reflects the ability of an organization, company, or business to generate profit. It indicates how well management can utilize all available resources in the market to optimize profits. To survive, grow, and succeed in competition, a business must generate profit. The better the business activities, the higher the profitability, and the more favorable conditions the industry has to grow sustainably and increase company value (Nguyen et al., 2023). In this research, ROA (Return on Assets) and ROE (Return on Equity) are used to measure profitability, which illustrates a company's ability to generate profits relative to its total assets and total equity. In the study by Youssef et al. (2023), profitability was measured using ROA and ROE, showing that company size has a significant negative impact on ROA. Company age has a significant positive effect on ROE. Working capital and volatility have a significant positive impact on ROA, while showing a significant negative impact on ROE. Efficiency and leverage are two independent variables that have similar effects on both ROA and ROE. Efficiency has a significant positive impact, while leverage has a negative impact on profitability. Vo (2023) study demonstrates that market risk has a significant effect on profitability. Additionally, the findings of Aldboush et al. (2023) show that company size, liquidity, market forces, and company growth have a significant positive impact on profitability.

Company Size

Company size measures a company's ability to benefit from economies of scale and market power. Companies with larger sizes often enjoy many advantages in their operations. Previous research has highlighted both positive and negative relationships between company size and profitability. The larger a company, the more sustainable its competitive advantage, and thus, the greater the likelihood that the company will increase its profitability. However, large or prominent companies are said to operate near optimal capacity and, as a result, may experience minimal growth or even need to downsize, leading to lower efficiency (Nguyen et al., 2023).

Company Age

Older companies tend to operate with higher profitability levels. Business reputation, ease of access to funding, preferential loan interest rates, and greater experience in business operations and risk management lead to higher business efficiency and have a positive impact on profitability. However, as companies age and decision-making processes become more bureaucratically codified, the speed of compliance to drive change and corporate flexibility decreases. This can reduce the company's agility in managing change and implementing innovation practices, which are essential for competing in the business establishment (Youssef et al., 2023). Rahman et al. (2019) found that company age has a significant negative impact on company performance.

Company Efficiency

Achieving higher profits requires operational efficiency within the company. Company efficiency is reflected in the Total Asset Turnover (TAT) ratio, which measures the revenue generated from the assets owned (Youssef et al., 2023). If asset turnover declines, it indicates that the company is not utilizing its assets optimally. Efficiency is a key factor in company operations, where the company strives to utilize all of its assets to increase sales, which in turn leads to higher profitability (Lim & Rokhim, 2020). The findings of Youssef et al. (2023) show that company efficiency, represented by asset turnover, has a significant positive impact on profitability.

Working Capital Management

Increasing profitability requires efficient working capital management. Working capital refers to the difference between a company's current assets and its current liabilities. Net working capital measures operational performance, liquidity, and short-term financial health (Nguyen et al., 2023). According to Aytac et al. (2020), working capital management involves routine actions to ensure that the company holds enough resources to operate smoothly without disruptions that could negatively affect performance. A Working Capital Management (WCM) policy must consider the optimal trade-off between expected profits and risks, while verifying and monitoring the levels of all components of working capital (Sensini, 2020). The study by Alarussi & Alhaderi (2018) shows that working capital has a significant positive impact on profitability.

Liquidity

Liquidity measures how quickly an asset can be converted into cash, as well as the ability to settle its short-term financial obligations. Liquidity is an important factor for good business management (Youssef et al., 2023). Companies with good liquidity will have a strong financial position, ensuring financial security and thus driving high profitability (Nguyen et al., 2023). The study by Lim & Rokhim (2020) shows that liquidity has a significant positive impact on profitability, while Youssef et al. (2023) found that liquidity has no significant impact on profitability.

Leverage

A company's financial leverage reflects its policy on the use of liabilities, and as such, financial leverage is an integral part of the company's capital structure. A high debt-to-equity ratio indicates that the company relies on borrowing to fund its growth. The trade-off theory of capital structure suggests that the more debt used, the lower the income tax, but the higher the financial risk. Financial leverage represents the choice between debt and equity, through which the trade-off between business risk and financial risk can be observed. When opting to use more borrowed capital to finance the company's needs, the company's financial leverage will be high, increasing the associated risks. This could put the company at risk of bankruptcy. However, financial leverage can enhance shareholders' return on investment. If the company determines an optimal debt level that balances the benefits of debt with its costs, its profitability will increase (Nguyen et al., 2023). Youssef et al. (2023) shows that leverage has a significant negative impact on profitability.

Volatility

Earnings volatility refers to the fluctuations or instability in a company's income. The likelihood of financial distress refers to business risk or volatility. It is expected that companies experiencing high cash flow fluctuations will face higher financial distress costs (Youssef et al., 2023). High volatility in EBIT reflects significant fluctuations in operating income. This uncertainty can make financial and operational planning more difficult, which may negatively impact profitability. Companies may need to incur additional costs for risk management, such as hedging or diversification, to mitigate the effects of volatility. These additional costs can reduce profit margins. Işık (2017) shows that volatility has a significant positive impact on profitability in older companies but has a significant negative impact on small and young companies. However, Gysanty & Khomsiyah (2023) found that volatility had no significant impact on profitability.

Market Risk

Market risk is unavoidable and systemically affects the entire economy in which a company operates daily. Among the forms of market risk, stock price fluctuations have a significant impact on market asset value, a measure of market-based company performance. Market risk is embedded in stock prices, which effectively influence the company's market equity value. As a result, the company's value effectively decreases. Moreover, company value is known to affect overall company performance. Larger companies are known to perform better due to their market power in pricing and competition. In addition, stock price fluctuations cause a decline in equity value and the total value of the company. A decrease in company value makes it more difficult for companies to borrow funds to finance their business operations. Company performance deteriorates as market risk increases the volatility of the company's operations (Vo, 2023). A high level of risk makes it difficult for a company to control that risk, disrupting operations and ultimately lowering company performance (Arrozy & Sudarsi, 2019). Vo (2023) study show that market risk has a significantly negative impact on company performance. However, Nugroho & Halik (2021) indicate that systematic risk (BETA) has no impact on profitability or company value.

2. Hypothesis Development

With the research results above, the conceptual framework is as follows:

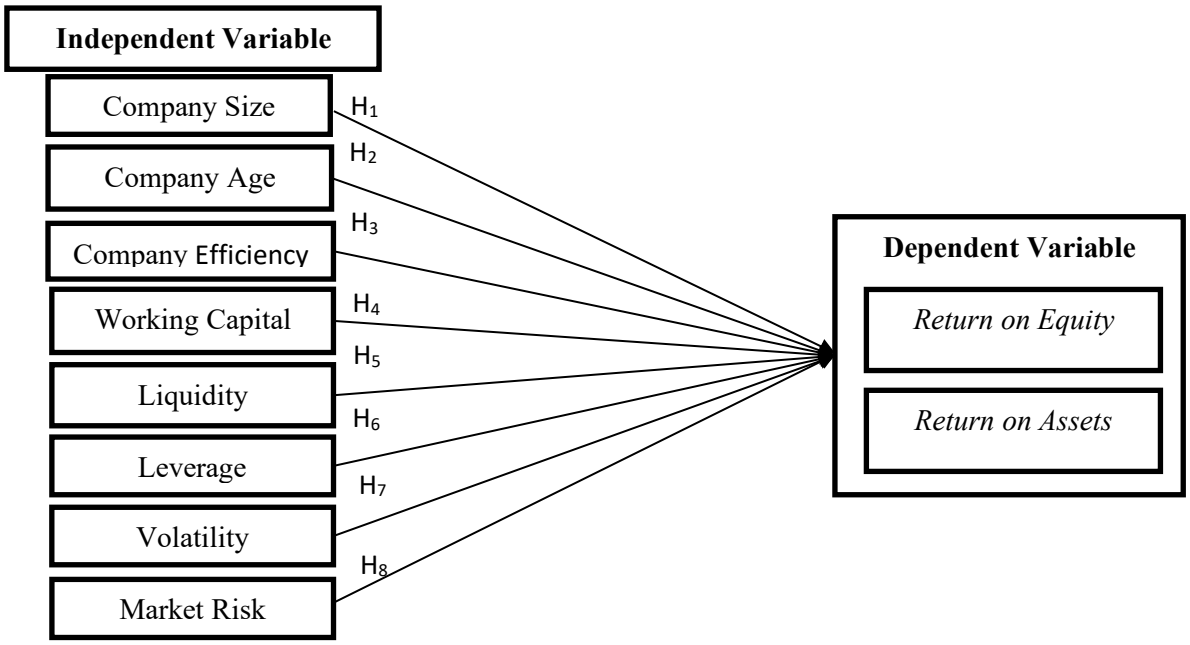

Figure 1. Conceptual Framework

Source: Data Processed, 2024

From this framework, a hypothesis can be formulated:

The Influence of Company Size on Profitability

Larger companies have easier access to financial resources as company size increases, reducing capital costs and boosting profits. The study by Nguyen et al. (2023) shows that company size has a significant positive impact on ROE and EPS. Research by Chandra et al. (2019) and Chandra et al. (2022) also shows that company size has a significant positive impact on profitability. However, large or prominent companies are said to operate near optimal capacity, and as a result, may experience minimal growth or even need to downsize, leading to lower efficiency. The study by Youssef et al. (2023) shows that company size has a significant negative impact on profitability. Based on the discussion above, the following hypothesis is proposed:

H_1: Company Size affects Profitability

The Influence of Company Age on Profitability

Older companies benefit from preferential loan interest rates and greater experience in business operations and risk management, leading to higher business efficiency and positively impacting profitability. The study by Youssef et al. (2023) shows that company age has a significant positive effect on profitability, with similar findings in the research by Chandra et al. (2022). As the age of the company increases and the codification of the decision-making process becomes more bureaucratic, there is a decrease in the company's flexibility in managing change and innovation practices which are important for facing competition in establishing a business. Research by Rahman et al. (2019) found that company age has a significant negative impact on company performance. Based on the discussion above, the following hypothesis is proposed:

H_2: Company Age affects Profitability

The Influence of Company Efficiency on Profitability

Achieving higher profits requires operational efficiency within the company. The study by Nguyen et al. (2023) shows that company efficiency, measured by the total asset turnover ratio, has a significant positive effect on profitability. Similarly, the study by Youssef et al. (2023) demonstrates that company efficiency, represented by asset turnover, has a significant positive impact on profitability. In contrast, the findings of Latha & Rao (2017) indicate that the asset turnover ratio has a significant negative effect on profitability. Based on the discussion above, the following hypothesis is proposed:

H_3: Company Efficiency affects Profitability

The Influence of Working Capital on Profitability

Efficient working capital management increases company profitability. The study by Alarussi & Alhaderi (2018) shows that working capital has a significant positive effect on profitability. Similarly, the study by Aytac et al. (2020) indicates that working capital has a significant negative effect on profitability, with similar findings in Sensini (2020) research. However, in contrast, the study by Youssef et al. (2023) found that working capital has a significant positive impact on ROA and a significant negative impact on ROE. The research by Nguyen et al. (2023) also shows that working capital positively affects EPS but negatively impacts ROE in financial performance. Based on the discussion above, the following hypothesis is proposed:

H_4: Working Capital affects Profitability

The Influence of Liquidity on Profitability

The study by Lim & Rokhim (2020) shows that liquidity has a significant positive effect on profitability. Similarly, research by Chandra et al. (2022) indicates that liquidity has a significant positive

impact on profitability, with similar findings in the studies by Arrozy & Sudarsi (2019) and Egbunike & Okerekeoti (2018). The research by Nguyen & Nguyen (2020) hows that liquidity positively impacts ROA and ROE but negatively affects ROS. On the other hand, Hussanie & Joo (2019) found that liquidity has a significant negative effect on profitability. Based on the discussion above, the following hypothesis is proposed:

H_5: Liquidity affects Profitability

The Influence of Leverage on Profitability

A company's financial leverage reflects its policy in the use of liabilities and is an integral part of its capital structure. The study by Egbunike & Okerekeoti (2018) shows that leverage has a significant positive effect on ROA. Research by Batool & Sahi (2019) indicates that leverage positively affects profitability in the United States but negatively in the United Kingdom. The study by Nguyen & Nguyen (2020) shows that leverage has a significant positive impact on ROA but negatively affects ROE and ROS. The research by Nguyen et al. (2023) demonstrates that leverage has a significant negative effect on financial performance, while Youssef et al. (2023) found that leverage has a significant negative impact on profitability. Based on the discussion above, the following hypothesis is proposed:

H_6: Leverage affects Profitability

The Influence of Volatility on Profitability

Earnings volatility refers to the fluctuations or instability in the income earned by a company. The study by Youssef et al. (2023) shows that volatility has a significant positive effect on ROA but a negative effect on ROE. Similar findings are also reported in the research by Chandra et al. (2022). The study by Işık (2017) indicates that volatility has a significant positive impact on the profitability of older companies but a significant negative impact on smaller and younger companies. Based on the findings of the studies above, the following hypothesis is proposed:

H_7: Volatility affects Profitability

The Influence of Market Risk on Profitability

One of the components of financial risk is market risk, which is a systematic risk that cannot be avoided. Market risk can be measured by the degree of stock price volatility in the market (Vo, 2023). The study by Vo (2023) indicates that market risk has a significantly negative effect on company performance. The research by Ika & Kamaluddin (2023) shows that market risk (BETA) has a significantly negative impact on profitability. However, this contrasts with the findings of Tingon (2022), which show that market risk has a significantly positive effect on financial performance. Based on the findings of the studies above, the following hypothesis is proposed:

H_8: Market Risk affects Profitability

RESEARCH METHOD

Each variable is measured to assess the impact of the independent variable on the dependent variable, with measurements:

Table 1. Definition of Operational Variables

Variable Types	Variable Name	Symbol	Definition of Operational Variables	Reference
Dependent Variable	Return on Equity	ROE	$\frac{\text{Net Income}}{\text{Total Equity}}$	Youssef et al. (2023)
	Return on Assets	ROA	$\frac{\text{Net Income}}{\text{Total Assets}}$	Youssef et al. (2023)
Independent Variable	Firm Size	SIZE	Natural logarithm of Total Assets	Nguyen et al. (2023)
	Firm Age	AGE	Natural logarithm of Firm Age	Rahman et al. (2019)
	Company Efficiency	CE	$\frac{\text{Sales}}{\text{Total Assets}}$	Youssef et al. (2023)
	Working Capital	WC	Current Assets - Current Liabilities	Youssef et al. (2023)
	Liquidity	LIQ	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Youssef et al. (2023)
	Leverage	LEV	$\frac{\text{Total Debt}}{\text{Total Equity}}$	Youssef et al. (2023)
	Volatility	VOL	$\frac{\text{Standard Deviation EBIT}}{\text{Total Assets}}$	Chandra et al. (2019)
	Market Risk	MKTR	$\beta=\frac{n\sum(R_{it}-\bar{R}_{it})(R_{mt}-\bar{R}_{mt})}{n\sum(R_{mt}-\bar{R}_{mt})^2}$ Calculating stock returns: $R_{it}=\frac{P_1-P_{t-1}}{P_{t-1}}$ Calculating market returns: $R_{mt}=\frac{IHSG_1-IHSG_{t-1}}{IHSG_{t-1}}$ Details: β = market beta Rmt = market index returns $\bar{R}_{mt}$ = average return of market index	Musyarofah et al. (2015)

Variable Types	Variable Name	Symbol	Definition of Operational Variables	Reference
			R_{it} = company stock returns $\bar{R}_{it}$ = average company stock return n = number of samples	

Source: Data Processed, 2024

Data collection method using secondary data (indirect data). Data sources come from the IDX website (idx.co.id) and from the official website of each sample company. The research data includes information on SMEs registered in the PEFINDO25 Indonesia Index during the period 2018-2022. Purposive sampling method was used for data collection. The selection of this method was based on considerations focused on specific objectives, namely the company meets certain predetermined criteria. The research sample covers 325 financial reporting periods, consisting of 65 companies from 94 companies listed on the PEFINDO25 Index on the IDX during the 5-year period (2018-2022). The criteria used for selecting the research sample are: 1) Companies that were listed on the PEFINDO25 Index on the IDX during the testing and analysis period (2018-2022) except for companies in the Finance sector; 2) Financial reports presented in Rupiah currency; 3) Companies present complete data in the period 2018-2022.

The results of the overall model analysis in the Chow test and Hausman test show a cross-section probability value of Chi-square <0.05, so H_0 is rejected so that the model used is the Fixed Effect Model (FEM). The results of the overall model analysis in the F test show that the probability value of the F-statistic < 0.05; indicating that the independent variables simultaneously influence the dependent variables, so that the regression model is suitable for use. The results of Goodness of Fit (R^2) test model 1 indicate that the independent variables are able to explain about 86.278% of the variation in ROE, while the remaining 13.722% can be explained by other factors not included in this model. The results of Goodness of Fit (R^2) test model 2 indicate that the independent variables are able to explain about 89.194% of the variation in ROA, while the remaining 10.806% can be explained by other factors not included in this model.

RESULTS AND DISCUSSION

Explanation of data characteristics is obtained by descriptive statistics. Data characteristics used in the study are seen from the minimum, maximum, mean, median and standard deviation values. Descriptive statistics can be seen in the following table:

Table 2. Descriptive Statistics

Variable	Min.	Max.	Mean	Median	Standard Deviation
ROE	-4.126150	2.211760	0.092834	0.105280	0.425612
ROA	-0.437630	0.552390	0.069070	0.057270	0.103127
SIZE	26.48256	31.44563	29.28995	29.44556	1.020634
AGE (Year)	1.609440	4.262680	3.406432	3.496510	0.500493
EC	0.002520	6.442960	1.022771	0.841930	0.878622
WC (Million)	-4874.455	13730.37	1685.173	1086.760	2357.515
LIQ	0.192550	12.76858	2.681214	1.812280	2.197718
LEV	0.019450	35.46560	1.144245	0.679220	2.267966
VOL	0.007940	0.526600	0.060995	0.040380	0.061233
MKTR	-8.781030	2.146210	0.708244	0.698410	0.713155

Source: Data Processed, 2024

Partial Test (T-Test) is conducted to see whether each independent variable has a significant influence on the dependent variable. The decision-making criteria are if sig.t <0.05, H_0 is rejected and if sig.t >0.05, H_0 is accepted. The results of the regression t-test can be seen in the following table:

Table 3. T-Test Results

Independent Variable	Dependent Variable			
	Return on Equity		Return on Assets	
	Coefficient	Probability	Coefficient	Probability
Constants	-4.325804	-	1.065730	-
SIZE	0.188360	0.0000	-0.016782	0.0400
AGE	-0.338165	0.0000	-0.169433	0.0000
CE	0.124949	0.0000	0.077467	0.0000
WC	0.0000135	0.0000	0.0000170	0.0000
LIQ	-0.000846	0.4330	-0.001084	0.3317
LEV	-0.074648	0.0000	-0.001925	0.2948
VOL	0.036071	0.6964	-0.456203	0.0014
MKTR	-0.016412	0.0000	-0.004192	0.1814

Source: Data Processed, 2024

Multiple Regression Equation:

Model 1

ROE = -4.325804 + 0.188360SIZE - 0.338165AGE + 0.124949CE + 0.0000135WC - 0.000846LIQ - 0.074648LEV + 0.036071VOL - 0.016412MKTR

Model 2

ROA = 1.065730 - 0.016782SIZE - 0.169433AGE + 0.077467CE + 0.0000170WC - 0.001084LIQ - 0.001925LEV - 0.456203VOL - 0.004192MKTR

H_1: Company Size affects Profitability

The results of the regression test indicate that company size has a significant positive effect on profitability (ROE). This result is consistent with the study conducted by Nguyen et al. (2023) on 566 non-financial companies in Vietnam (HOSE and HNX) for the period 2012-2021. Based on resource theory, analysts found that the larger a company is, the more sustainable its competitive advantage, and thus the greater the likelihood of increased profitability. Compared to its total equity capital, larger companies also have more efficient debt financing, allowing them to continue generating high net profits.

The results of the regression test also indicate that company size has a significant negative effect on profitability (ROA). This result is in line with the research by Youssef et al. (2023) on 93 non-financial SMEs in the UK for the period 2012-2020. This is explained by the fact that large or established companies are said to operate close to optimal capacity and, therefore, will grow very little and may even need to downsize, leading to reduced efficiency. In contrast, smaller companies, relative to their optimal size, tend to grow faster. As company size increases, the use of capital assets will also increase, so when compared to their use of capital assets, the company's net income will be smaller or decline.

H_2: Company Age affects Profitability

The regression test results indicate that company age has a significant negative effect on both ROE and ROA. This finding is consistent with the study conducted by Rahman et al. (2019) on 109 manufacturing companies listed on the Dhaka Stock Exchange from 2013-2017, as well as the research by Dimitrić et al. (2019) on hotels in Spain and Portugal from 2007-2015. As companies age and the codification of decision-making processes becomes more bureaucratic, there is a decline in the company's flexibility in managing change and implementing innovative practices, which are crucial for maintaining competitiveness. As a result, the usage of capital assets and equity becomes less efficient, leading to a decline in net profit.

H_3: Company Efficiency affects Profitability

The regression test results indicate that company efficiency has a significant positive effect on both ROE and ROA. This result is consistent with the study conducted by Youssef et al. (2023), which shows that company efficiency, as represented by asset turnover, has a significant positive impact on profitability. Similar findings are also reported in the research by Nguyen et al. (2023). To achieve higher profits, operational efficiency within a company is required. Operational efficiency is a key driver of the company's profit margins, and theoretically, a higher level of efficiency leads to larger profit margins. Company efficiency is reflected in the asset turnover ratio, or Total Asset Turnover (TAT), which measures the revenue generated from the assets owned. A high TAT ratio indicates more efficient performance in generating sales or income. High operational efficiency is a favorable condition for increasing company profitability, and conversely, inefficiency can negatively affect profitability. Efficiency becomes a key factor in a company's operations, where companies strive to maximize the use of their assets to increase sales, thereby leading to higher profit levels.

H_4: Working Capital affects Profitability

The regression test results indicate that working capital has a significant positive effect on both ROE and ROA. This finding is consistent with the study by Youssef et al. (2023), where working capital has a significant positive impact on ROA. Alarussi & Alhaderi (2018) also shows that working capital significantly and positively influences profitability. Increasing profitability requires efficient management of working capital. Working capital refers to the difference between a company's current assets, such as inventory and receivables, and its current liabilities, such as payables. It represents the company's short-term financial needs. On the other hand, working capital management involves the regular actions taken to ensure that the company has sufficient resources to operate without interruptions that could negatively impact its business. By optimally balancing the trade-off between expected gains and risks, monitoring and verifying the levels of all working capital components (assets and equity), a company can manage its working capital efficiently, thus enhancing profitability.

H_5: Liquidity affects Profitability

The regression test results indicate that liquidity has an insignificant effect on both ROE and ROA. This finding is consistent with the study conducted by Youssef et al. (2023) on 93 non-financial SMEs in the UK for the period 2012-2020. The insignificance of this effect is due to the fact that a company's ability to pay short-term debt does not necessarily guarantee an increase in profitability. This is particularly related to liquidity, which is measured by the current ratio, comparing current assets with current liabilities. This condition does not necessarily ensure increased profitability because not all current assets, including inventory (such as unsold finished goods), directly contribute to profit growth. A high inventory level does not guarantee profitability improvement, as inventory takes time to be sold and converted into cash that benefits the company. Furthermore, a high current ratio is not always desirable, as it may indicate that a significant amount of funds is not being used productively, even though those funds could be invested to generate returns and improve profitability.

H_6: Leverage affects Profitability

The regression test results indicate that leverage has a significant negative effect on ROE, but an insignificant effect on ROA. This finding is consistent with the research by Youssef et al. (2023) which shows that leverage has a significant negative impact on profitability. A company's financial leverage reflects its policy on the use of liabilities, making financial leverage an integral part of the company's capital structure. A high debt-to-equity ratio indicates that the company is relying on loans to finance its growth. High leverage can lead to poor performance, and as a result, banks need to assess credit risk more carefully. While increased debt may reduce taxable income, it also raises financial risk. When a company opts to use more borrowed capital to finance its needs, its financial leverage increases, bringing higher risk, which could place the company at risk of bankruptcy.

The study by Hussanie & Joo (2019) shows that leverage does not have a significant effect on ROA. This is because leverage, as measured by the debt-to-equity ratio (DER), does not account for the use of assets to increase profits. Although leverage affects ROE, ROA tends to be more influenced by the efficiency of asset utilization in generating profits. If a company can use its assets efficiently without relying heavily on debt, ROA may not be significantly impacted by leverage. ROA reflects how efficiently a company uses its assets to generate profit, and the use of leverage, such as debt, may not directly affect asset efficiency.

H_7: Volatility affects Profitability

The regression test results indicate that volatility has a significant negative effect on ROA but an insignificant effect on ROE. This finding aligns with the research by Işık (2017), which shows that volatility has a significant negative impact on ROA in small and young real sector companies listed on the Borsa Istanbul Stock Exchange from 2005-2012. Earnings volatility refers to the fluctuations or instability in a company's income. The likelihood of financial distress is associated with business risk or volatility. Companies experiencing high cash flow fluctuations are expected to face higher financial distress costs. High volatility in EBIT reflects significant fluctuations in operational income. This uncertainty can complicate financial and operational planning, negatively impacting profitability. Companies may need to incur additional costs for risk management, such as hedging or diversification, to mitigate the impact of volatility, reducing profit margins.

The study by Gysanty & Khomsiyah (2023) shows that volatility does not have a significant effect on profitability. This is because volatility in their study is measured by comparing the standard deviation of EBIT (earnings before interest and tax) to the company's total assets. As a result, the level of volatility in this study does not take into account the equity levels when assessing its impact on profitability. ROA and ROE consider the company's capital structure differently. Earnings volatility can affect ROA because operational income directly influences asset returns. However, earnings volatility may not directly impact ROE if its effect is more related to capital structure and cost of capital. Earnings volatility may have a more direct effect on ROA since ROA focuses on operational performance and asset efficiency in generating profits, while ROE reflects shareholder returns, which are more influenced by financial policy decisions and long-term capital structure.

H_8: Market Risk affects Profitability

The regression test results indicate that market risk has a significant negative effect on ROE but an insignificant effect on ROA. This finding aligns with the research by Vo (2023), which shows that market risk has a significant negative impact on company performance. Similar findings are reported by Ika & Kamaluddin (2023), who found that market risk (BETA) has a significant negative impact on profitability. Market risk is unavoidable and systemically affects the entire economy in which companies operate daily. Stock price fluctuations have a significant influence on the market value of assets, which is a market-based measure of company performance. Market risk is embedded in stock prices, effectively influencing the market value of a company's equity and, as a result, reducing the company's value.

Moreover, company value is known to affect corporate performance. Fluctuations in stock prices lead to a decline in equity value and total company value, making it more difficult for companies to borrow funds to finance their operations. Corporate performance decreases as market risk adds to the company's operational volatility. A high level of risk makes it challenging for a company to control that risk, which disrupts operations and ultimately leads to reduced profitability.

The study by Nugroho & Halik (2021) found that systematic risk (BETA) does not have an impact on profitability. ROE is influenced by a company's capital structure, where market risk can affect the cost of capital. If a company uses leverage or debt in its capital structure, changes in market risk can significantly impact the cost of capital, thereby affecting ROE. Meanwhile, ROA focuses more on operational performance without considering capital structure. ROE measures the rate of return to shareholders, while ROA emphasizes the efficiency of asset utilization to generate profits. Market risk, which impacts stock prices (affecting ROE), does not necessarily reflect operational efficiency (which is reflected in ROA). Market risk tends to affect ROE more during unstable economic conditions or periods of high market volatility. However, these conditions may not directly affect ROA if the company's operations remain stable. A company may have an effective risk management system to cope with market fluctuations, so changes in market risk may not directly impact operational performance as reflected in ROA, which is more influenced by internal factors than external ones.

CONCLUSION

Based on the research findings, the following conclusions can be drawn: Company size (SIZE) has a significant positive effect on ROE and a significant negative effect on ROA. Company age (AGE) has a significant negative effect on both ROE and ROA. Company efficiency (CE) has a significant positive effect on both ROE and ROA. Working capital (WC) has a significant positive effect on both ROE and ROA. Liquidity (LIQ) has an insignificant effect on both ROE and ROA. Leverage (LEV) has a significant negative effect on ROE and an insignificant effect on ROA. Volatility (VOL) has a significant negative effect on ROA and an insignificant effect on ROE. Market risk (MKTR) has a significant negative effect on ROE and an insignificant effect on ROA.

For companies, managers, and other stakeholders, it is essential to identify and analyze the factors that determine profitability. As companies age, they must continue to operate optimally, remain flexible in decision-making, and continually innovate to stay competitive. Operational efficiency requires companies to leverage all their capital (assets and equity) to boost sales. Companies should routinely ensure they hold sufficient resources to operate smoothly. By optimizing the trade-off between expected returns and risks, and by monitoring all components of working capital, companies can manage their working capital effectively, thus enhancing profitability. Thus, managers and stakeholders can develop strategic plans and make informed decisions to improve profitability, ensuring the company's sustainability and stability.

For investors interested in investing in the non-financial SME sector in Indonesia based on the PEFINDO25 index, an older company could be a viable investment option, provided that it has demonstrated the ability to generate profits or distribute dividends in recent years. This indicates that despite its age, the company remains capable of providing returns to investors. Investors should pay attention to the company's operational efficiency by assessing how well it utilizes all its capital (assets and equity) to increase sales, which impacts profitability. Furthermore, investors should evaluate how efficiently the company uses its assets and manages its working capital to enhance or maintain profitability. This approach will enable investors to plan their portfolios and identify investment opportunities effectively.

The research sample is limited to companies that have been part of the PEFINDO25 Index on the IDX from 2018 to 2022, based on the selection criteria mentioned. Consequently, the findings of this study

may not be applicable to other types of companies or specific industry sectors. Another limitation of this research is the restriction to using only independent variables such as company size, company age, company efficiency, working capital, liquidity, leverage, volatility, and market risk, as well as dependent variables ROE and ROA. Future researchers are encouraged to incorporate additional variables, whether independent, dependent, or moderating, to uncover other factors that may influence profitability and to diversify the research. For instance, including variables related to market forces and company growth, as suggested by Aldboush et al. (2023), could provide deeper insights. Additionally, exploring profitability in other industry sectors in Indonesia would contribute to a broader understanding of the factors affecting profitability across different contexts.

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