DETERMINANTS OF SMEs PROFITABILITY: DO FIRM SIZE AND AGE STILL MATTERS?

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ABSTRACT

Small and medium-sized firms (SMEs) are critical to the global economy because they create jobs and contribute to economic growth (ILO, 2019). This study examines the profitability of SMEs using the return on asset ratio, as well as the effect of size and age on profitability, by examining data samples from 106 enterprises in Indonesia's industry sector over a ten years. In total, 1060 pieces of data were examined in this study. The goal of this study is to comprehend the current state of SMEs' profitability and to identify the effect of age and size, as many scholars have various opinions on the subject. To evaluate the effect of size and age on the observed SMEs, multiple linear regression analysis was used. According to the findings, the average SME profitability in Indonesia, as assessed by the return on assets ratio, was only 1.1%, which is relatively low. Size also has a beneficial effect on profitability, as shown by the data. Furthermore, contrary to the hypothesized premise, age has a detrimental impact on the profitability of SMEs. Finally, this study identifies potential limits and suggests strategic implications for policymakers, SME management, and future research.

Keywords: Firm Profitability, SMEs, Firm Size, Firm Age

INTRODUCTION

At both the regional and national levels, Small and Medium Enterprises (SMEs) are the lifeblood of the Indonesian economy. In general, SMEs play an important role in the national economy as key players in economic activities by the largest providers of employment opportunities of which 97 percent of total national workforce absorption (Hidranto, 2023). According to data from the Ministry of Cooperatives and SMEs, there will be 65.4 million SME business actors, and around 115 million employees in 2023, and contribute up to 60.3% of Indonesian GDP in 2019 (Tambunan, 2023). Aside from that, SMEs have an essential role, particularly in terms of employment and income sources for the poor, income distribution, and poverty reduction, and SMEs also play a role in rural economic development (Melati, 2023). According to the Indonesian government, Micro, Small, and Medium-sized Entreprises (MSMEs) will once again become heroes of national economic rebirth in 2023, with the digitization of 20 million MSMEs on e-commerce platforms, from the goal of 30 million by early 2024. The government's objective for next year 2024, as announced by the Minister of Tourism and Creative Economy, is to create 4.4 million new and high-quality jobs (Viska, 2022).

However, according to the 2022 MSME Empowerment Report, since the Covid-19 pandemic, SMEs' performance has decreased, resulting in a decrease in GDP contribution, where in 2020, SMEs only contributed 37.3% (as depicted in figure 1), the lowest since the last decade, decreasing by 23% from 60.3% in 2019 (DSInnovate, 2023).
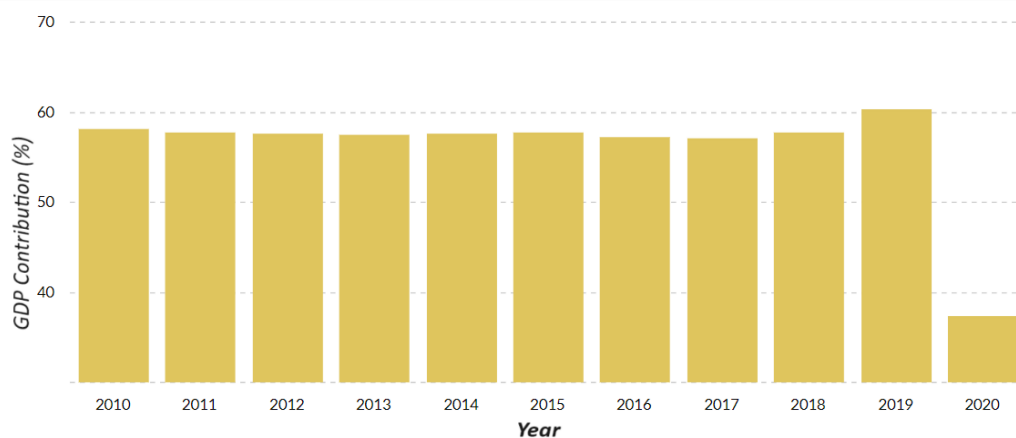

Figure 1. SME's Contribution to Indonesian GDP (2010-2020)
Source: Ministry of Cooperatives and SMEs Indonesia, visualized by Lokadata 2023

In addition, we currently have SMEs facing a numerous problem, especially post-COVID-19 pandemic or new normal era. According to a survey by DSInnovate of 1,500 SME owners, 51.2 percent facing difficulty in obtaining financing, 30.9 percent of MSMEs were having problems with digitalization, 70.2 percent were having difficulty marketing their products, and 46.3 percent had difficulty in fulfilling or delivering raw materials (Noor, 2023). In another survey by Pricewaterhouse Coopers (PWC) Indonesia, 74 % of SMEs in Indonesia do not have access to funding (Sandi, 2023), which is in line with previous research. One of the factors contributing to current challenges, such as marketing their products, is the limitation of the

marketing budget. With limited funds, they face difficulties in allocating funds for marketing strategies such as advertising and promotion (DSInnovate, 2023).

In terms of financial challenges, and access to capital, Bank Indonesia estimated that 69.5% of SMEs are still without loans (Kristianus, 2022). Banks and lenders argue that they have difficulty meeting the demands of SMEs because their credit scores are low on average in proportion to creditworthiness. In another sense, the size of the company can frequently prevent SMEs from undertaking profitability (Sandi, 2023). Previous research has demonstrated that profitability reflects corporate performance (Aghnitama et al., 2021). According to other studies, knowing the degree of corporate profitability and the variables that cause it is far more significant than simply being concerned with company growth (Mansikkamäki, 2023).

Existing research on the drivers of profitability often employs data or samples from big-sized corporations or a single industrial sector. Aghnitama et al., (2021) did a study used a sample of 14 big companies listed on the Indonesian Stock Exchange (IDX). Other research by Fonseca et al. (2022) used a sample of only a newly established Portuguese firm, Aguade et al. (2022) analyzing the manufacturing Industry in Ethiopia, Zhao et al. (2021) focused on Chinese property insurance companies. Still in China, Yin & Liao (2021) analyzed all listed firms in Chinese A-share markets, and Veronica & Saputra (2021) studied 16 mining companies in Indonesia. From that background, it is critical to investigate the profitability determinant using data from a diverse industry sector as well as varied company sizes, not only large corporations to get a more robust generalization of the industries.

Company size and age are incredibly famous in the analysis of profitability determinants as most authors use these variables in their research (Aghnitama et al., 2021; Fonseca et al. 2022; Aguade et al. 2022). Up to this point, no consensus has been reached on the impact of size and age on profitability. The importance of variable influence has largely been agreed upon, with size and age having a considerable impact on corporate profitability. However, whether the consequences are beneficial or bad, whether they reduce or increase profitability, is still being contested. There are even those who believe that size and age have no bearing on business (Mongid and Muazaroh, 2017; Charoenrat and Harvie, 2014).

This study will attempt to re-examine the impact of firm size and age on company profitability using the most recent data from the Thomson database for MSMEs in Indonesia. It is envisaged that the newly developed strategy, based on size and age analyses, will be more effective in assisting the organization in reaching profitability to achieve corporate sustainability.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT
The Resource-Based Theory (RBT)

Penrose's (1995) work inspired the Resource-Based Theory. Wernerfelt (1984) coined the name. It has made important advances in the understanding of the mechanisms behind business profitability and value creation (Barney et al., 2011). According to this idea, intersectoral discrepancies in performance are caused by an uneven distribution of resources

among firms. Profits of the most competitive firms are truly Ricardian rents derived from superior resources (Peteraf, 1993), i.e., resources that are valued, rare (scarce), inimitable, and nonsubstitutable (Barney, 1991). These create a difficult to reproduce competitive edge. The intersectoral dispersion of economic profitability is maintained to the extent that the firms' resources remain heterogeneous (Penrose, 1995). This, in turn, is dependent on the presence of isolation mechanisms that restrict the imitation of resources that preserve competitive advantage. From this perspective, one might argue that the most crucial aspect of competing with any certainty is not where to compete, but how to compete (Barney, 1991; Peteraf, 1993). As a result, it is critical to develop a plan for competing using the available resources.

Company Performance

Performance is defined as an entity's ability to generate a result based on priority (Laitinen, 2002). Thus, company performance is the achievement of specified goals established by the organization from the outset. As a result of the company's strong performance, it will provide a good representation of the whole worth and may attract additional customers and investors (Kotane, 2015). As a result, knowing performance is critical for a company to monitor its actions and fulfill its objectives. Folan, Browne, and Jagdev (2007) defined three dimensions to evaluate a company's performance: environment, which is commonly assessed by the company's impact on its surroundings; objective, which is commonly assessed by a future vision they want to achieve; and recognizable characteristics, which are commonly assessed by competitive parameters such as cost, quality, and sustainability that other people can recognize.

The organization needs performance management to obtain strong results. It is defined as a process that allows organizations to manage their activities and connect their corporate and functional plans and goals (Bititci, Carrie, and Mcdevitt, 1997). Furthermore, performance management comprises performance measurement and performance reporting activities to control and improve its operation, as well as to increase employee communication and motivation (Johnston, 2012). According to Furqoni (2019), profitability is a picture of management performance in managing a firm, hence it is considered vital to measure the company's success.

Small Medium-sized Enterprises (SMEs)

SMEs are defined by the Indonesian government as independent productive economic entities. Based on the SME criterion, it is operated by an individual owner or a venture that is not a subsidiary, owned, managed, and directly or indirectly a part of bigger enterprises (Law of the Republic of Indonesia, 2008). The classification of SMEs is vast and often varies by country. However, the European Union (EU) began to standardize the notion of SMEs, as well as its criteria, which are now utilized globally (ILO, 2013). According to EU Recommendation 2003/361/EC, firms can be classified as SMEs if they have fewer than 250 employees, a

turnover of less than € 50 million or around Rp847.984 million, and a balance sheet totaling less than € 43 million or Rp729.266 million.

Measuring Firm Profitability

Daily, management must be able to accomplish the goals that have been established in a company (Kasmir, 2008). This will assist the company generate profits and increase its efficiency. Management might use the profitability ratio as a proxy for its computation to estimate the company's ability to produce a profit. Profitability ratios are commonly calculated using three methods: return on assets (ROA), return on investment (ROI), and return on equity (ROE).

Return on Assets (ROA) is a measure that reveals a company's potential to make profits as a result of productive resource usage and effective management (Burja, 2011). The ratio of earnings before interest, taxes, depreciation, and amortization (EBITDA) to total assets is used to calculate return on assets (ROA). Return on Investment (ROI) is a ratio that demonstrates a company's capacity to profit from the use of its capital. Investors and creditors can use this indicator to determine the extent to which invested funds can be returned as profits or losses (Zamfir et al., 2016). ROI is computed by dividing a company's net income by its total assets. Return on equity (ROE) is a ratio used to assess a company's success in creating profits for its shareholders (Mardiyanto, 2009). ROE can also be used to assess a company's potential to produce profits using its capital (Susilowati & Turyanto, 2011).

Because this study will focus on how the corporation uses its assets, the most relevant ratio to use is ROA. We avoid using ROE since it focuses on measuring return on equity. Meanwhile, ROI is important in focusing on the outcomes of specific investments, whereas not all MSMEs have investments.

Firm Size and Age

Empirical analysis has shown that company size and age affect company performance both positively (Bakker and Josefy, 2018; Coad, 2018; Josefy et al., 2015) and negatively (Ben-Hafaedh & Hamelin, 2022; Jang, 2011; Aghnitama et al., 2021; Steffens et al., 2009). The huge corporation has greater and stronger market power, according to the argument for the beneficial effect. As a result of economies of scale, the costs of inputs are lower. Furthermore, a corporation with big total assets and production scales will boost return to scale with fixed cost allocations such as research or risk management. It is also conceivable to implement new technologies with massive funds available to promote firm growth. Finally, based on these reasons, the larger the firm, the more efficient and sustainable the company will be in a competitive market, increasing the company's profitability (Jovanovic, 1982). On the other hand, some argue that size has a detrimental impact on profitability because smaller businesses are more flexible in terms of bureaucracy, including basic hierarchical systems (Yang and Chen, 2009). This circumstance will reduce the cost of information asymmetry, which might cause agency difficulties. Firms could be more efficient if they did not have to incur unnecessary costs to handle agency difficulties.

There are two conceivable consequences of firm age on profitability. First, Lambey et al. (2021), Fonseca et al. (2021), and Aghnitama et al. (2021) discovered that age has a beneficial impact on corporate profitability. Older organizations have more experience organizing manufacturing activities and implementing multiple strategies (Hill and Kalirajan, 1993). Another factor is that the older company has a proven track record in the industry, which will make them respectable when seeking credit (Diamond, 1991). As a result, the financial institution will prefer to lend to them rather than to a new company. Second, an earlier study discovered that age had a detrimental impact on profitability. According to Perez-Gomez, Arbelo-Perez, and Arbelo (2018), the key reason was that older organizations used antiquated technology while younger companies introduced innovative technology. According to Le and Harvie (2010), younger enterprises frequently present a more original proposal that corresponds with the current trend. This improvement will allow the younger company to be more efficient by lowering costs and increasing revenue, resulting in increased profitability.

Hypothesis Development

1. The effect of company size on the SME's profitability

   Large organizations are often preferable to medium or small businesses. Because large organizations have more capital than small companies, they can produce profits from both corporate income and outside sources, such as interest, investments, and foreign currency exchange for financial sector companies like banks. At the same time, alternative sources of income for manufacturing firms could include rent and earnings from the sale of fixed assets (Collins Dictionary, 2023). Companies with more capital have the opportunity to adopt innovative technologies. New technologies enable businesses to boost production, profit, and reduce expenses (Knight, 2015).

   Larger companies also have larger assets. This circumstance makes it easier for businesses to receive loans from outside sources (Diamond, 1991). Therefore, the size of the company will have a favorable effect on the profitability of SMEs. According to Perez-Gomez, Arbelo-Perez, and Arbelo (2018), profitability improved as the size of SMEs increased. As a result, it follows that size has a favorable impact on profitability. Andrieș and Ursu (2016), Balios et al., (2015), Bahta and Baker (2015), and Nganga et al., (2010) all support this finding. Based on these considerations, the study hypothesizes:

   H1: Company Size has a positive impact on the profitability of SMEs.

2. The effect of company age on the SME's profitability

   It is expected that the older the company, the more experience it has. The voyage of organizing the company's actions for both failures and successes is referred to as the experiences. Stress and despair experienced by management in coping with taxing environmental demands will lead to self-efficacy, which will contribute to organizational resilience (Everly, Jr., 2011). Amornkitvikai et al. (2014) agreed, arguing that learning by doing is an important aspect of increasing a company's profitability.

According to Akhigbe and McNulty (2005), being older can help SMEs boost their profitability. It is corroborated by Lundvall and Battese (2000), Hill and Kalirajan (1993), and Diamond (1991), who discovered that business age had a beneficial impact on corporate profitability. Therefore, the second hypothesis is that:

H2: Company Age will have a positive effect on SMEs profitability.

RESEARCH METHOD

This research employs a quantitative approach and is analyzed using regression techniques. Panel data analysis will be used as the same companies are watched throughout time. Panel data integrate inter-individual differences (cross-section data) and intra-individual dynamics (time-series data) to capture the complexities of various company behavior and incorporate larger datasets (Gujarati and Porter, 2009). Furthermore, because this study used panel data regression with the balanced panel method, which needs equal or balanced data, organizations that do not frequently publish their financial statements or do not have enough data will be excluded. Secondary data were gathered from the Thomson ONE database (the main source), the Indonesian Stock Exchange (additional source), and corporate websites (supporting document). Between 2001 and 2022, 131 companies were identified and would form the basis of the study's analysis based on the criteria for recognizing organizations as SMEs. This results in a total of 2,882 observations out of 65 million (22 years x 131 firms). However, due to a lack of consistency in reporting by corporations from 2001 to 2022, the observation period was reduced to ten years (2013-2022).

The classification of SMEs is vast and often varies by country. However, the European Union (EU) began to standardize the notion of SMEs as well as its criteria, which are now utilized globally (ILO, 2013). According to the EU's Recommendation 2003/361/EC, firms can be categorized as SMEs if they have less than 250 employees, a turnover of €50 million or less, or a balance sheet total of €43 million.

In addition, from 131 SMEs, 25 companies were deleted since their data was found to be incomplete. As a result, the total final data set is 1060 (10 years x 106 firms). The goal of this reduction was to generate uniform and balanced data for each organization, which was required for panel data processing (Ghauri, Gronhaug, and Strange, 2020). As a result, the estimated model developed described the actual conditions more accurately. Panel data regression analysis was utilized to evaluate hypotheses in this study. It's a multiple regression study with panel data and the following estimation model: **$Y_{it} = \beta_0 + \beta_1 Size_{it} + \beta_2 Age_{it} + \varepsilon_{it}$**, in which Y_{it} represents ROA, β_0 Constanta, β_1 and β_2 are Multiple linear regression coefficients, and ε_{it} is standard error.

The multiple linear regression technique has various advantages over traditional cross-section and time-series approaches, including being more informative, diverse, having less collinearity between variables, and having a higher degree of freedom. Furthermore, it enables the investigation of more complicated behavioral models such as economies of scale and technological progress. The coefficients for each independent variable that describe their effect on the dependent variable are the findings of the regression analysis (Gujarati and

Porter, 2009). Hypothesis testing begins with classical assumption tests that include normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests. Following that, a panel data regression using common effects, fixed effects, and random effects is performed. The Chow test and the Hausman test are used to select the appropriate test. Finally, t and f tests were used to examine the ways the independent variables affected the dependent variable.

RESULT AND DISCUSSION

This section is divided into four parts. The first part presents descriptive statistics on the key variables, and the second part provides an analysis of the profitability of SMEs in Indonesia. The third part discusses the data quality test, including the classical assumption and the panel data analysis model. The final part will provide discussions around how the results confirm (or not) the hypotheses.

Descriptive statistics

Table 1.1 presents the descriptive statistics of the SME's profitability. Concisely, the average value of ROA of SMEs as a sample was 1,1% with a maximum of 154% and a minimum percentage of -800. The average total asset of the SMEs was IDR 1.219 billion with a maximum of IDR 18.918 billion and a minimum of IDR 2,1 billion. Finally, the average age of the sample was 22 years with the oldest company being established 68 years ago and a minimum age was 1, or some companies were newcomers that existed one just one year of the observation.

Table 1. Determinant of SME's Profitability

Variable	Mean	Maximum	Minimum	Std. Dev.	N
ROA	0.010	1.541	-8.895	0.479	1060
SIZE	1.219	18.918	2,1	2061	1060
AGE	22.8	68	1	13.49	1060

Source: Author's computation. IDR (Indonesian Rupiah) in billion

SMEs' Profitability

Based on the sample data analyzed, the average of 106 SMEs profitability is relatively low which is 1.1%. The minimum score of the ROA ratio is said to be good if it is more than 5% (Zinn, 2021; Birken, 2021). Therefore, the study found that the current data of SMEs have less than standard ROA. Then, the study tries to group the sample into two categories, small enterprises (turnover <Rp170.219 million) and medium (turnover Rp170.219 – 765.988 million). After analyzing these two groups, it was found that the ROA ratio for small enterprises (12 SMEs with a total of 120 data) was -7.74%, and the ROA ratio for medium-sized enterprises (94 SMEs with a total of 940 data) was a 2.18%. It is concluded that both small and medium-sized enterprises as a sample have an ROA ratio less than good standard. However, it will not affect the multiple linear regression analysis in this study.

Data Quality Test and Estimation Model Selection

The classical assumption test was used to confirm that the estimator model was significant and could comprehend the relationship between the variables to attain the Best Linear Unbiased Estimator (BLUE). The results of the normality test revealed a Jarque-Bera (JB) value of 36.02, which is higher than the Chi-Square value (36.02 > 5.99), indicating that the data in this study is abnormally distributed. However, the data distribution in panel data is frequently skewed since the data is of many types and ranges, such as nominal, interval, and ratio data. For example, the total asset data (nominal) that indicates the size of the company differs much from the Return on Asset/ROA data (ratio), which may cause the data to exhibit aberrant distribution. As a result, having abnormal data distribution in panel data regression is acceptable. Furthermore, because the Ordinary Least Square (OLS) approach was utilized, the normal distribution for the common effect model and fixed effect model (used in this work) is not required to obtain the Best Linear Unbiased Estimator. In contrast, normal data distribution is required for the random effect model that uses Generalized Least Squares/GLS (Kuncoro, 2013).

The reference usually used in previous studies for the multicollinearity test is that if the tolerance value is greater than 0.1 and the Variance Inflation Factor (VIF) value is less than 10, there is no multicollinearity (Ghozali, 2013). In this investigation, the VIF value of all independent variables was less than 10, indicating that there was no indication of multicollinearity between the independent variables. The heteroscedasticity test findings revealed that the p-value, as shown by the Chi-Square (2) Probability value in Obs*R-Squared, was 0.4198, which was greater than the significance level (0.05). It signifies that the regression model has no problems with heteroscedasticity. The Chi-Square (2) Probability value for the autocorrelation test was 0.0000, which is less than the significance level (0.05). It indicates that the model had an autocorrelation issue. This means that past data has an impact on the existence of data. According to Ghozali (2013), such a problem frequently occurs with time-series data and commonly occurs when the panel data also contains time-series data. The Weighted Least Squares (WLS) method, according to Ghauri, Gronhaug, and Strange (2020), could be used to solve such a problem. As a result, this approach was adopted in this study.

Finally, the regression equation in this study was tested using three models, starting from common effect, fixed effect, and random effect. After running the common effect and fixed effect, the chow test was conducted with the result fixed effect was selected with a probability of Cross-section Chi-square was 0.0000 < 0.05. The next step is conducting the Hausman test to choose between a fixed effect or a random effect. The test resulted in a P-value of 0.0000 < 0.05, therefore, the fixed effect was chosen as the panel data estimation.

Panel Data Regression Analysis

Table 1.2 shows the panel data regression analysis of the fixed-effect model using the cross-section weight method. Among the two variables affecting SMEs' profitability, all of them were statistically significant. This means that those variables, Size and Age, have a significant impact on the profitability ratio of SMEs.

Table 2. Panel Data Regression Analysis

Dependent variable: Return on Asset (ROA)

Method: Panel EGLS (Cross-section weight)

Total panel (balanced) observations: 1060

Variable	Coefficient	t-Statistic	Prob.
SIZE	7.130	3.727	0.0002
AGE	-0.019	-33.647	0.0000
C	0.451	35.909	0.0000
R-squared		0.8825	
Adjusted R-squared		0.8693	
S.E. of regression		0.3730	
F-statistic		66.8600	
Prob(F-statistic)		0.0000	

Source: Author's computation from EViews 12 SV Lite

The coefficient score explained the relation between the independent variables (Size and Age) and the dependent variable (Return on Asset). The positive coefficient means the variable increases the SME's profitability, while the negative coefficient means the opposite. The result shows that the Size had positive coefficients towards ROA. This implies that if the size of the company (total asset) increases by 1%, the SME's Profitability will increase by 7.1%. In contrast, Age had a negative coefficient on the Profitability ratio. It means that if the Age of the SMEs increases by 1%, the ROA will decrease by 0.019%.

As stated in Table 1.2, the coefficient determination (Adjusted R^2) value was 0.869. This suggests that variations in the two independent variables utilized in this study may explain 86.9% of the SMEs' profitability. Meanwhile, the other variables outside the research model described the remaining 13,1%. The outcome of the F test was 66.86, higher than 3.00 (f-table), and had a significance level of 0.000. As a result, it is possible to conclude that the independent variables substantially affected the dependent variable and that the model utilized was fit.

The t-test was utilized to determine whether or not each independent variable individually affects the dependent variable. The significance level utilized in this investigation is 5% or 0.05. The provisional assumptions for the t-test are (1) H0: the independent variable has no significant effect on the dependent variable; and (2) Ha: the independent variable has a significant effect on the dependent variable. The t-table value with a significance level of 5% and degree of freedom (df) of 1060 was 1.96.

The t-value of the Size variable was 3.727, which was higher than the t-table (1.96) and significant at the 1% level, as shown in Table 1.2. As a result, the Size variable had a positive effect on Profitability, and the study's initial hypothesis (H1) was accepted. In terms of age, the t-value was lower than the t-table (-33.64 < 1.96), indicating that there was no relationship between age and the profitability of SMEs. Its probability score, however, was 0.000, which is significant as less than 0.05. This demonstrated that the Age variable hurt the profitability ratio, and the second hypothesis (H2) in this study was rejected.

Discussion

The effect of company size on SMEs profitability

The Size variable represents the total assets of the observed SMEs, which are classified as small (less than EUR 10 million or Rp170.219 million) and medium (between EUR 10-45 million or Rp170.219 - 765.988). This variable's coefficient was 7.130, with a 1% significance level. The positive coefficient for ROA indicates that the larger the company, the greater the profitability of SMEs. In other words, increasing the company size by 1% boosts profitability by 7.1%. This research demonstrated that larger enterprises had higher profitability than smaller ones. This outcome is consistent with prior research by Perez-Gomez, Arbelo-Perez ,and Arbelo (2018), Andrieş & Ursu (2016) ,and Bahta and Baker (2015).

A separate test revealed that, on average, medium-sized enterprises in Indonesia had a greater profitability ratio measured by ROA (2.18%) than small businesses (-7.74%). Even if the profitability ratio of medium-sized firms is less than 5%, it is deemed better than the profitability ratio of small-sized enterprises. One possible explanation for this result is that larger firms are generally superior to smaller firms because they have more capital than small firms, allowing them to generate profits through company income as well as other incomes such as interest, investment, and foreign currency exchange for financial sector companies such as banks. Companies with more capital have the opportunity to adopt innovative technologies. New technologies enable businesses to boost production, and profit, and reduce costs. (Knight, 2015).

The effect of company age on SMEs profitability

The Age variable has a negative coefficient of -0.019 and was deemed to be significant at 1%. This suggests that as the organization ages, the profitability ratio would drop. This study found that younger businesses have a higher ROA than older ones. Several prior studies, like those of Perez-Gomez, Arbelo-Perez, and Arbelo (2018) and Le and Harvie (2010), found similar results. According to Amornkitvikai et al. (2014), older businesses may have more experience and can achieve the greatest results through learning by doing, which can have an impact on profitability. They may, however, have obsolete equipment, machinery, and technology, putting them at a competitive disadvantage in today's fast-changing business environment (Batra and Tan, 2003). Simultaneously, younger businesses build more advanced facilities and fresh imaginative concepts to better serve customers' requirements. Furthermore, developing enterprises usually have highly educated employees who can maintain existing technology without the need for further training. Lowering costs allows the organization to increase its profitability (Le and Harvie, 2010).

CONCLUSION

This study attempts to examine the profitability of SMEs in Indonesia as defined by the ROA ratio utilizing data from several industry sectors. The findings show that the sample mean profitability ratio for SMEs in Indonesia is 1.1%, with 2,18% for medium-sized firms and -7.74 for small-sized enterprises. Using recent data from the Thompson database of SMEs in

Indonesia, it is demonstrated that firm size and age are still relevant as strategic development considerations for company sustainability. The findings indicate that both small and medium-sized businesses have distinct advantages and constraints that must be addressed through strategic generation. Age also plays an important impact in how SMEs can better adapt to the new environment.

In addition, one hypothesis is accepted and another is rejected based on hypothesis testing. Furthermore, size has been shown statistically to have a positive effect on SMEs' profitability, which is confirmed by earlier research. Age, on the other hand, differs from the hypothesis proposed, which resulted in a negative effect on profitability. However, Mongid and Muazaroh (2017), Al-Gasaymeh (2016), Charoenrat and Harvie (2014), and Le and Harvie (2010) all validate this finding. The negative effect indicates that younger enterprises are more profitable than older companies.

The research implication for policymakers is that they should pay attention to the low level of SMEs' profitability ratio in Indonesia, which signals the business's poor performance in generating profits, which can have an impact on economic growth. As a result, the government should consider the positive impact of size in its policies to encourage small businesses to grow. The government can also help new businesses make use of cutting-edge technologies while providing support to established businesses.

Furthermore, because academics have found varying results on the influence of company size and age on SMEs' profitability, these two factors may affect profitability levels differently. Smaller organizations that are less lucrative should aim to expand their operations so that they have more funds to access diverse resources. For older enterprises that may have antiquated machinery and technology, management should begin adopting new technologies available on the market and maybe seek government support in the adoption process. Finally, SMEs should develop ways to increase profitability while enhancing the value of their products or services to earn more revenue at the maximum profit margin. This can be accomplished with the help of competent staff and internal digitalization. The successful application of these new techniques will almost likely increase a company's profitability.

The study's shortcomings mainly relate to the observed data, which is confined to 106 SMEs over ten years. As a result, studies using larger and more diverse data sets from various nations may yield different conclusions. Furthermore, each company's operation may employ a distinct production technology. As a result, it is proposed that future research focus on more disaggregated data from more companies over a longer period to better represent the population. It is also recommended that future studies collect samples from other Asian nations to confirm the findings of this study. Nonetheless, the author feels that these limitations will not considerably reduce the significance of the study's findings.

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