

## The Effect of Age, Sales Volume and Number of Employees on MSMe Business Performance in South Sulawesi, Indonesia

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Abstract — Micro, Small, and Medium Enterprises (MSMEs) are vital business sectors supporting a country's economy. The MSMEs sector absorbs a lot of labor and supports the country's Gross Domestic Product (GDP), especially in developing countries. This study aims to analyze the effect of age, sales volume, and the number of employees on business performance in micro, small and medium enterprises (MSMEs) in South Sulawesi Province, Indonesia. The locus of this research is in the province of South Sulawesi, Indonesia. The research sample is 227 SMEs in South Sulawesi. This type of research is quantitative descriptive with multiple linear analysis using SPPS version 25. The results show that business age and the number of employees have a positive but not significant effect on MSME business performance in South Sulawesi, while sales volume has a positive and significant effect on MSME business performance in South Sulawesi. Business age, sales volume, and the number of employees together have a significant effect on business performance, with a determination (R2) of 42.6%. In comparison, 57.4% is influenced by variables not examined in this study. Sales Volume is the most influential variable on the business performance of MSMEs in South Sulawesi.

Keywords - age, sales, employees, business performance

## I. INTRODUCTION

MSMEs, or micro, small, and medium-sized businesses, are a crucial part of the Indonesian economy. MSMEs in Indonesia are increasingly significant in the country's economic growth. At first, it was thought that the existence of MSMEs was a key factor in the creation of fieldwork and the major development of rural regions' economies. However, in the age of globalization, MSMEs are playing an increasingly significant role, such as serving as a source of foreign currency for exporting Indonesian non-oil and gas companies, who have also developed during times of crisis and are now capable of becoming the main sector of the Indonesian economy [5]. Small and medium-sized enterprises (SMEs) provide 60.3% of gross domestic output and can absorb 97.2% of the power needed to build national and regional economies. As a result, SMEs require attention in all areas to boost power competition. SME development is able to generate source potential for the economy since non-oil and

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gas exports expand annually [2]. SMEs have a contribution of 60.3% against product domestic gross and are capable give contributions of about 97.2% absorption power work with huge potential for growth economy national and regional, so SMEs need get attention in all aspects for increase power competition. SME development is able to create a potential source economy because of the growing export of non-oil and gas every year increase [14]. By and large, it has been stated in the literature that micro, small, and medium-sized enterprises (MSMEs) in developing countries are important for social and economic reasons due to their wide distribution in rural areas and therefore are crucial for the development of the rural economy, their capacity to absorb large numbers of workers, their roles as a receptacle for the development of entrepreneurship and business skills, especially in rural areas, and as a source of opportunity effort [21]. MSMEs' contributions to the economy include their ability to create jobs due to their labor-intensive nature, their contribution to regional economic growth, their role as complementary partners for large businesses, and their role as training for employers and young workers in the development of business and interpersonal skills [9].

South Sulawesi, being the eastern gateway to Indonesia, is anticipated to play a significant role in bolstering the nation's economy. The province of South Sulawesi, located on the southern peninsula of the island of Sulawesi, consists of three municipalities and twenty-one districts. This province is home to roughly 8,771,970 people in 2018, with an annual growth rate of 0.94 percent, making it the ninth most populous in Indonesia. Four ethnic groups dominate South Sulawesi Province: Bugis (41.9%), Makassar (25.43%), Toraja (9.02%), and Mandar (6.1%). In five years, South Sulawesi will be the second province with the highest economic growth (7.07%). South Sulawesi is renowned for its contribution to the agriculture, forestry, and fishing industries. Sectors contributed 21.28 percent to Product Domestic Regional Growth (GRDP) in 2019, the driving force of the province's economy [22]. South Sulawesi is a province with extremely quick growth, and this growth will have a transformative effect on a province that has become one of the most prominent in Indonesia. South Sulawesi's

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N. N. Illiyyun et al. (eds.), *Proceedings of the 2nd International Conference on Democracy and Social Transformation (ICON-DEMOST 2023)*, Advances in Social Science, Education and Humanities Research 793, https://doi.org/10.2991/978-2-38476-174-6\_26 gross regional product in 2019 was Rp. Five hundred five trillion with a 5.0 percent growth GDP [7].

MSMEs are one of the most encouraging economic growth sectors in South Sulawesi, Small- and medium-sized businesses are able to play an essential role in a particular region, particularly as a first-mover in a growing economic area. Micro-, small-, and medium-sized companies (MSMEs) are viewed as a tool for introducing unique products to a region and providing opportunities for perpetrator businesses. In addition, the role of micro-, small-, and medium-sized companies (MSMEs) has been deemed crucial for increasing per capita income and the economy. Therefore, an effort is necessary for micro, small, and medium-sized companies (MSMEs) to take an active part in building the nation's economy [12]. The number of MSMEs in South Sulawesi has reached 751,802 units, comprised of 659,098 micro companies, 88,095 small enterprises, and 3,129 medium firms. In contrast, the number of business units belonging to large corporations has recently reached 1,309. From South Sulawesi's 7.16 percent economic growth, MSMEs make a considerable contribution [11].

Small- and medium-sized enterprises (SMEs) must constantly be encouraged to grow as pillars of the national and regional economy. Age, sales volume, and the number employees are all factors that assist the growth of SMEs. Business on stage important, after gathering many experiences, source power, and network built for maintaining operation they from time to time, but company sort of that can stagnant or even back off if not managed well, about 50% of new businesses in Europe cease operations after the third year, and this effect occurs outside of the normal age range for businesses in the fifth through seventh years [13]. Keep continuing to develop social connections inside the business and with external organizations to sustain cost-effective learning of new roles and responsibilities. Novelty can be a highly risky degree of growth effort that will ultimately lead to failure [17]. Increased sales volume is the most relevant metric for describing the effect of internal and external variables on fundamental company competitiveness. First, the internal factor is originating factor from within companies that can influence company performance and can be regulated and controlled by the company; such as decision additional company capital power work, determination proportion profit detained, merger, acquisition, debt determination for investment, structure managerial, etc. by the firm such as pricing competitive ingredient standard, conduct, macroeconomic and political situations, ethnicity flower loans, business climate, and market structure [10]. Because man is the executor of action in the skeleton of the organization attempting to attain its objective, the success of the organization will depend heavily on the success of the person in completing the given duty. One destination company is for increasing employee performance, which will lead to improvement in corporate performance. High performance will boost the company's production, reduce staff turnover, and validate its management style. On the other side, low employee performance might decrease job quality and productivity, increase employee turnover, and decrease corporate profits [15].

Study this aim to analyze how the age of business, sales volume, and the number of employees affect SMEs' performance in South Sulawesi. If research previously focused on large, long-term companies ripe, even many have researched on companies that have gone public, so research this we analyze from the three factors in a study this to MSME performance.

## II. METHOD

Study this is type study quantitative. Quantitative method research involves the quantification and analysis of variables in order to get a result. This involves the exploitation and analysis of numerical data, with a focus on answering questions such as who, how many, what, where, when, how much, and how [4]. This research utilizes primary data collected using a google form questionnaire sent to respondents. Respondents will be prompted to provide their business's age, sales volume, labor force, and profit for 2019-2021. This research was conducted in the province of South Sulawesi, Indonesia, which consists of 24 cities/regions. This study's sample includes as many as 227 MSMEs dispersed across the province of South Sulawesi.

Study this using SPSS version 25 as a tool for analyzing data that has been collected. The data processing process carried out namely:

## 1) Assumption Test Classic

The objective of the Assumption Test Classic's Normality test is to determine if the regression model, variable bound, variable free, or both have a normal distribution. A good regression model has normal data distribution or the distribution of statistical data along the diagonal axis of the chart.

## 2) Analysis Regression multiple

Use the method of multiple linear regression to test the hypothesis in this research. The election approach is based on a study with the goal of determining the effect from one variable free to variable bound [1].

## 3) Test Hypothesis Partial (t-test)

Partial employs a test hypothesis for test hypothesis research to determine the variable effect person [19].

4) Test Hypothesis Simultaneous (F Test)

Test Hypothesis Simultaneously demonstrate that regression models provide better t values on data than models that do not include independent variables. The objective is to test what whole-beneficial regression models are [20].

5) Determination Test

Coefficient determination is defined as the sum of squared regression results divided by the sum of squared total outcomes. Typically, R2 is viewed as the proportional representation of the variation in the dependent variable as explained by the change in the independent variable [8].

### III. DISCUSSION

Heteroscedasticity is a classic condition in the analysis of linear regression that must not occur, meaning that residual variance must be the same. Using the SPSS version 25 software package, heteroscedasticity may be identified using scatterplot graphs that are changeable and reliant on the figure 1.



Figure 1. Heteroscedasticity Test

The points in the graph above are distributed arbitrarily and do not create a pattern, except that they are distributed above and below 0 on the Y axis. Therefore, heteroscedasticity is not present in the regression model.

Multiple regression analysis (multiple regression) using SPSS version 25 indicates that there is a link between the independent variable and the independent variable, as well as variance in the direction of that relationship. The impact and direction of the association are depicted in the table 1.

 Table 1: Effect of the Independent Variable (X) on the dependent variable (Y).

	Model	Unstandardized Coefficients		Standardized Coefficients
		В	Std. Error	Beta
	(Constant)	15544297.941	22848990.303	
	age	28216,251	283776,019	.003
	Sales	26002349541	1161123,849	.653
	Volume			
	Number of	.220	4.869	.001
	Employees			

a. Dependent Variable: Operational Income

According to the regression analysis presented in the table above, all independent factors (age, sales volume, and employee numbers) positively influenced business performance. From the findings of the investigation, the following regression equation is derived:

## Y = 15,544,297.94 + 28,216.25X1 + 26.002,349.54X2 + 0.220 X 3

The results of the equation for multiple regression can be read as follows:

#### 1) Constant (a)

This means that if age, sales volume, and quantity of employees have a value of 0 (zero) or constant, then performance effort is 15,544,297.94.

### 2) Age Effect on Business Performance.

The age leverage coefficient value was 28,216.25, and a positive sign indicates that age business has a direct correlation with performance effort. Every rise in age, one unit effort will result in an increase in company performance

of 28,216.25 or more. Any drop in age one unit effort will result in a decrease of 28,216.25 in company performance.

3) Sales Volume Effect on Business Performance

leverage for sales volume is 26,002,349.54, and a positive sign indicates a direct link between sales volume and performance effort. The performance business will rise by 26,002,349.54 for every one unit increase in sales volume or drop by 26,002,349.54 for every one unit decline in sales volume.

### 4) Influence Amount Employee on Business Performance

A leverage coefficient value of 0.22 and a positive sign indicating that the quantity of employees has a direct correlation with performance effort. Every increase in the number of one-unit employees will result in a 0.120 rise in performance work, and every drop in the number of one-unit employees will result in a 0.120 decrease in performance work.

The t-test is used to determine if the partial impact of the independent variable is real or not. The significance level utilized is 0.05. If the score is significantly smaller than the degrees of trust, then we adopt the alternative hypothesis, which argues that variable independence is somewhat influenced by variable dependence. T-test analysis may also be observed in the table 2.

Table 2: Hypothesis Test Partial

Coefficients <sup>a</sup>

	Model	t	Sig.
1	(Constant)	.680	.497
	age	.099	.921
	Sales Volume	22,394	.000
	Number of Employees	.045	.964
a. Dep	endent Variable: Business Perfor	mance	

#### **Influence Partial Age on Business Performance**

Age efforts have a t-count of 0.099 and a table value of = 1.652. Therefore, the t-count < t-table (0.099 < 1.652) with a score significance of 0.921, which is more than 0.05 (0,921 > 0,05), indicates that age effort has not significant impact on business performance.

According to the findings of Mallinguh et al. (2020b) [13], the age of a firm is a key indicator of its financial success, whether directly or indirectly. A positive correlation indicates that foreign investors prefer businesses that have been on the market or in operation for longer than start-ups or those yet in Step. One argument is that youthful firms are more likely to be hazardous, have less expertise, and have access to unlimited sources of power than older organizations. This study is also consistent with the research Radipere, (2014) [16] indicating that corporate performance increases with age, for example, as a result of experience. More reports indicate that a company's performance increased until a particular age and then declined. If a firm does not continuously produce fresh and inventive ideas to prevent business people from being self-satisfied, the cycle of life will decrease and becomes a success.

#### **Influence Partial Sales Volume on Business Performance**

The sales volume has a t-count of 22,394 and a t-table value of 1.652. Therefore, t-count > t-table (22,394 > 1,652)

with a score significance of 0.000 < 0.05 (0.000 < 0.005) indicates that sales volume has a significant impact on business performance.

According to al Rachmat et al. (2022) [3], the relationship between Volume Sales and Profitability is unidirectional, indicating that the firm has determined that the outcomes of end-sales obtained will fulfill the aim. The coefficient test findings for regression indicate that Sales Volume has an influence on Profitability for the Food and Beverage firm listed on the Indonesia Stock Exchange over the period 2017-2020. Also consistent with studies from Effendi & Effendi (2020) [6] indicating a very high association between sales volume and profit. Calculation results indicate that the link between the second variable and the first variable is unidirectional (positive), which suggests that as sales volume increases, so will profit. According to Suartini et al. (2018) [18] research findings, sales volume has a considerable and negative impact on business performance.

# Influence Partial Amount Employee on Business Performance

The number of employees with a t-count as large as 0.045 and t-table = 1.652. Therefore, the t-count < t-table (0.045 < 1.652) with a score significantly more than 0.05 (0.964 > 0.05) indicates that age effort has not significant impact on business performance.

According to the findings of study done by (Vosloban, 2012), the key employee in a growing organization is the point employee. Also, the study by Prasetya (2018b) [15] ndicates Variables that impact the performance of highly good employees. Also, in accordance with research performed by (Zidai, 2016), those who demonstrate that there is a favorable influence on the financial and economic accomplishments of enterprises should be given precedence for owning share capital via the acquisition of security. Our data also demonstrate a long-term, unidirectional causal link between variable finance and ownership-employee compensation, with no evidence of causation in the opposite way.

The f test is used to determine the effects of many independent variables, such as age, sales volume, and personnel number, on performance effort. Test using the comparison Among score F-count and F-table technique. If the value F-count is more than F-table, then the linked variable should be affected by the mean. The outcome of the f-test calculation is displayed in the table 3.

Table 3: Hypothesis Test Simultaneous

ANOVA <sup>a</sup>					
Model		F	Sig.		
1	Regression	167.172	.000 <sup>b</sup>		
	Residual				
	Total				

a. Dependent Variable: Business Performance

b. Predictors: (Constant), Number of Employees, Sales Volume, Age

Based on table 3, it can be concluded that age, sales volume, and number of employees have a simultaneous effect on the performance of small and medium enterprises (MSMEs) in South Sulawesi.

Coefficient determination is defined as the sum of squared regression results divided by the sum of squared total outcomes. Typically, R2 is regarded as the percentage variation of the dependent variable represented by the

fluctuation of the independent variable. The calculation result coefficient determination can be observed in the table 4.

Table 4: Coefficient Test Determination

Model Summary <sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.653 a	.426	.424	571124007.56730	
a. Predictors: (Constant), Number of Employees, Sales Volume, Age					

b. Dependent Variable: Business Performance

Based on table 4, it was determined that age, sales volume, and the number of employees had a 43.6% impact on the performance of MSMEs in South Sulawesi. In comparison, the remaining 56.4% is a variable that has not been studied in this research. Because the coefficient of determination is greater than 4%, it can be stated that age, sales volume, and the number of very excellent workers explain the performance of SMEs in South Sulawesi.

## IV. CONCLUSION

Based on our previous discussion of the research results, we can conclude that age has a positive but not significant effect on business performance, sales volume has a positive and significant effect on business performance effort, and the number of employees has a positive but not significant effect on business performance in South Sulawesi. Simultaneously, age, sales volume, and the number of employees jointly affect the business performance of MSMEs in South Sulawesi.

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