

## MARKET VALUE ADDED (MVA), FINANCIAL RATIOS AND VALUE OF MANUFACTURING COMPANIES IN THE AUTOMOTIVE AND COMPONENT SUB-SECTORS

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### <sup>1\*</sup>Riska Agustin, <sup>2</sup>Reni Rochmawati

<sup>1,2</sup>Department of Management, Faculty of Islamic Economics and Business, University of Sunan Ampel State Islamic Surabaya – Indonesia

#### e-mail:

<sup>1\*</sup>riska.agustin@uinsa.ac.id (corresponding author) <sup>2</sup>renirchrch@gmail.com

#### ABSTRACT

In the competitive automotive sector, understanding the factors that influence investor valuation is essential. This study examines how Market Value Added (MVA) and Return on Assets (ROA) affect firm value, measured by Tobin's Q ratio, in manufacturing companies within the automotive sector from 2021 to 2023. A quantitative methodology with an associative approach was applied, analyzing the financial statements of 11 companies listed on the Indonesia Stock Exchange. The findings reveal two key points: (1) MVA does not impact firm value, while (2) ROA significantly influences firm value in this sector. These results underscore the importance of efficient asset management for enhancing profitability and shareholder value. The study clarifies the relationship between MVA, ROA, and firm value, offering valuable insights for stakeholders. Ultimately, while MVA may not be a decisive factor, a strong ROA can significantly affect market perception and a company's financial success.

Keywords: Market Value Added; Return On Assets; Tobin's Q

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#### **INTRODUCTION**

In a competitive business world, companies that have gone public will focus on achieving shareholder prosperity by increasing company value (Banusu et al., 2024). The value of an industry shows up from the amount that prospective buyers are prepared to offer if the industry is put up for sale (Sari et al., 2021). In other words, this value reflects how much economic potential the company has from the perspective of investors. A strong enterprise value can attract more investors, as they recognize the potential for profitable results in the present and the possibility of profitable opportunities in the future. The more valuable a company, the stronger its attractiveness for investors to invest in it. Every company is established to maximize shareholder welfare and increase the value of the company by optimizing its stock market value. This objective aligns with the long-term investment approach, where if the company invests in a way that generates direct profits exceeding the costs incurred, it will lead to an increase in company value (Mahasari & Binastuti, 2021).

Strong firm value can increase market confidence in current performance and future growth prospects. This value is evident in stable stock prices, which generally increase in the long term (Safira & Widajantie, 2021). Firm value, which is often called market value, can provide benefits for shareholders when the share price increases, resulting in increased profits for them (Erawati & Dete, 2020). One of the measuring tools in calculating company value is Tobin's Q ratio to compare market value to the company's book value. Tobin's Q ratio functions as a statistical tool for assessing a company's value from the perspective of investors (Fadli, 2022).

Investors' assessment of company value depends on various factors that reflect business performance. A key measure utilized involves examining financial performance. This performance is reflected in the profitability ratio, which refers to how effectively the company can generate profits (Amelia & Sembiring, 2023). In addition, increasing investor welfare can be achieved by optimizing the growth in the company's market value relative to the capital invested by investors is called market value added (MVA) (Mahasari & Binastuti, 2021). Understanding profitability and MVA in depth is very important for investors, as this can provide clear insight into the company's financial performance and ability to create value for shareholders (Sudiyatno et al., 2021).

Profitability is the measure of how effectively a company converts its operations into profit and measures the degree of effectiveness of operational activities in utilizing company resources (Erawati & Dete, 2020). High profitability will positively influence the value of the company, as increased profits lead to a higher firm value (Himawan, 2020). One method to assess profitability is to use Return on Assets (ROA). ROA is a metric that assesses a company's ability to produce profits in relation to its total assets. This ratio shows how efficient the company is in managing its assets (Putra et al., 2021). A high ROA reflects the company's ability to efficiently deploy its assets for generating greater profits (Erawati & Dete, 2020). In addition, ROA can serve as a metric for investors to assess the company's potential for future growth (Hastuti, 2022).

One method of assessing business performance is to use the Market Value Added (MVA) approach. MVA can be calculated by subtracting the market capitalization of the firm's shares from the overall equity contributed by investors (Mahasari & Binastuti, 2021). Based on the Sten Stewart model, when a company's total market value surpasses the capital invested in it, it signifies that the company has effectively enhanced value for its shareholders and vice versa (Choong & Muthaiyah, 2021). This ensures that the rise in MVA demonstrates the company's ability to enhance shareholder welfare by managing

resources effectively, ultimately contributing to an increase in the company's worth (Mahasari & Binastuti, 2021).

In the manufacturing industry, especially in the automotive field and its components, is crucial to the global economy and makes significant contributions to national economies. This sector has successfully attracted investment of IDR 99.16 trillion, and has an annual production capacity of 2.35 million units, and can directly employ around 38,390 people (Suryaman et al., 2023). The automotive industry is considered an influential sector, which is why it is part of the Making Indonesia 4.0 roadmap, which aims to advance the application of industrial technology 4.0 (Saputra et al., 2022). It is predicted that the automotive sector will continue to experience rapid growth. Rapid growth in the automotive sector, driven by vehicle demand and technological advances, particularly in electric vehicles, creates both opportunities and challenges. Companies need to emphasize operational efficiency and improve profitability and market value added, which reflect value for shareholders (Berliana & Yovita, 2025). It is important to understand how profitability and value-added contribute to firm value, especially for investors in the changing automotive industry (Sari et al., 2021).

In this article, the object of study is focused on the manufacturing industry, specifically on the automotive sub-sector and its components. This sector was chosen because it is part of the real industry that includes various types of businesses. Companies in this sub-sector have unique characteristics, namely processing raw materials into finished products through various stages in the production process. In addition, the automotive and its components sector also has great profitability potential and can generate substantial market-added value, thanks to the application of innovation and efficiency in the production process. Based on this, it is interesting to conduct research related to MVA and ROA on the value of companies evaluated through Tobin's Q ratio in manufacturing companies, specifically in the automotive and component sub-sectors, for the 2021-2023 period.

## LITERATURE REVIEW AND HYPOTHESIS

## Signalling Theory

In 1973, Michael Spence introduced a theory that describes how the signal given by the sender (owner of information) aims to convey information regarding the benefits that will be received. Furthermore, the recipient will adjust their actions based on their understanding of the signal, this theory is called signaling theory (Wahyudi et al., 2023). Signaling theory is a concept used to interpret a condition that exists within the company (Sari et al., 2021). This theory prioritizes the importance of information released by companies when making investment decisions, in making investment decisions, where the company's ability to provide effective signals can affect their value (Firdausi & Fitria, 2024).

In this context, one of the signals or signs explained by a company can be measured from its financial statements (Julinda et al., 2022). Good quality financial statements indicate strong profitability, this can enhance the company's worth from the viewpoint of investors (Caesaria & Suhartono, 2023). Information about a profitability serves as a signal that can influence market reactions (Musdalifa & Amiranto, 2023). Higher profit margins can attract more investor interest in investing their capital into a company. When profitability increases, this means it reflects positive performance, so it can attract more attention and strengthen trust in a company (Kurniawan et al., 2022).

#### **Company Value**

The amount of price investors are willing to pay for their publicly traded shares is called company value, a higher value can indicate greater success or wealth for the owner (Suharna et al., 2021). The value of a company is established by the success it has achieved through the trust it has gained from the public over time. Company owners aim to increase this value, as it signifies an improvement in their own prosperity. This value arises from the interaction between consumers and producers, commonly known as the company's market value (Firdausi & Fitria, 2024). If the market value of the company is less than the capital that has been invested, then the company has harmed shareholders (Choong & Muthaiyah, 2021). Therefore, company leaders must work to maintain and optimize company value to provide great benefits to investors.

The indicators used to assess the company based on the company's external and internal aspects are through Tobin's Q ratio, which is a ratio introduced by James Tobin in 1967, this ratio evaluates the efficiency of management in utilizing the resources available in the company (Lubis, 2021). The Tobin's Q ratio is measured by taking the sum of the market value of the company's stock and its total debt, and then dividing that number by the company's total assets (Tobing et al., 2022). This ratio also serves as a statistical measure that proxies for company's value as seen by investor's perspective (Fadli, 2022). A company is considered to have strong value when its Tobin's Q ratio exceeds one, indicating that it is overvalued. A higher Tobin's Q value indicates a favorable evaluation of the company, while a ratio below one signifies that the company is undervalued, which may negatively impact investors' perception of it (Ristiani & Sudarsi, 2022). Therefore, Tobin's Q ratio is important in financial analysis because it offers valuable insights into a firm's effectiveness and helps investors make more informed investment decisions, especially in assessing growth potential and risks that may be faced.

The equation applied in this study to calculate Tobin's Q ratio is as follows (Dzahabiyya et al., 2020):

$$Q = \frac{(MVS + D)}{TA}$$
$$D = (AVCL - AVCA) + AVLTD$$

Where:

- MVS = Market Value of Outstanding Shares
- D = Debt (total debt), defined as the overall market value of debt, which can be determined by:
  - 1) AVCL : Accounting Value of the firm's Current Liabilities
  - 2) AVCA : Accounting Value of the firm's Current Assets
  - 3) AVLTD: Accounting Value of the firm's Long Term Debt
- TA = Total assets of the firm.

According to Ana and Wibowo (2025) the calculation parameters in Tobin's Q formula are categorized into three categories, namely:

1) Tobin's Q < 1, indicating undervalued conditions with low investment growth potential.



- 2) Tobin's Q > 1, indicating overvalued conditions with high investment growth potential.
- 3) Tobin's Q = 1, indicating an average condition with stagnant investment growth potential.

## Profitability

Profitability is an substantial aspect that can be used by investors and business owners to evaluate how effectively management oversees company operations (Safira & Widajantie, 2021). The business must be financially stable in order to continue its operations, because if a company does not make a profit, it will find it challenging to secure funding through external sources. Investors purchasing company shares aim to make a profit (Amelia & Sembiring, 2023). Therefore, the more effectively a company can generate profits, the greater the anticipated returns, which in turn will increase the overall value of the company. Profitability ratios are used to evaluate how well management is performing, where good performance can be seen from the success of management in obtaining the profits sought by the company (Sari et al., 2021).

One of the profitability ratios used in this research is the Return On Assets (ROA) ratio. ROA is a metric that indicates how efficiently a company generates profits from its total assets and reflects the degree of effectiveness in utilizing the assets of the company in management practices (Putra et al., 2021). ROA is very helpful in showing how efficiently the assets of the company are utilized to produce earnings (Arianto, 2022). ROA can measure how efficiently the company uses capital as a whole and is influenced by various factors that have an impact on the company's financial condition. ROA analysis is important because it can provide an overview of the company's performance, which in turn affects the increase in the company's value by investors.

In this research, the formula used to measure ROA is as follows (Fikriyah & Mustaqim, 2024):

Return On Assets (ROA) =  $\frac{\text{Net Income}}{\text{Total Assets}}$ 

## Market Value Added (MVA)

According to Sari et al (2021), Market Value Added (MVA) represents a concept that shows the expectations of investors or fund holders about the anticipated value of the company. The goal is to increase future value by increasing the subtraction between the market value of the company's equity and the amount of money that shareholders have invested in the company (Khuzaeni et al., 2025). Furthermore, MVA is used to evaluate the effectiveness of wealth maximization and to gauge the level of prosperity attained (Agustina & Widiastuti, 2024). Thus, MVA shows a rise in the company's market value by enhancing the market value of its equity and total investment, so that shareholder welfare can reach the maximum level (Silvia & Wangka, 2022). If the MVA value of a company is positive, this indicates that the business is providing profits to its investors, and vice versa (Fauziah et al., 2024). The purpose of this research is to investigate how MVA influences a company's value and provide investors with an understanding of assessing the profit potential of their investment, so that they can feel more confident in making the right investment decisions.

In this research, the following calculation procedure of the MVA approach is used to measure the economic value added by a company (Mahasari & Binastuti, 2021) :

1. Calculating the value of the company:

Company Value = Number of Share Outstanding × Stock Price

2. Determine the value of Invested Capital (IC):

IC = (Total Liabilities + Equity) - Short term Debt

3. Determine the results of the Market Value Added (MVA) calculation:

MVA = Company Value - IC

According to Akbar and Syahyuni (2024), there are three indicators in measuring Market Value Added (MVA), namely:

- 1) Market Value Added (MVA) is positive or MVA> 0, meaning that managerial managed to get more profit with the ability to sell shares at a higher price than the market price.
- 2) Market Value Added is negative or MVA < 0, meaning that the managerial does not succeed in adding value by increasing the market price of the securities issued or boosting the market price of a stock that is currently lower than its book value.
- 3) Market Value Added is zero or MVA = 0, meaning that managers do not experience an increase or decrease in value as a result of the market price of securities, especially shares that are equivalent to book value or value per share.

## The Effect of Market Value Added (MVA) on Company Value (Tobin's Q)

MVA is one of the useful indicators to assess how much the company contributes to the welfare of shareholders (Khuzaeni et al., 2025). Therefore, as the value of MVA increases, so will the prosperity of shareholders (Jessica, 2023). Management initiatives to increase shareholder value will send favorable signals to investors and encourage their interest in investing in these companies (Suharna et al., 2021). A high MVA indicates that management has supervised the company effectively, emphasizing the important role of competent management in achieving company goals. Based on the study carried out by Agustina & Widiastuti (2024), shows that MVA significantly affects the value of the company which is assessed using Tobin's Q ratio. This finding is further strengthened by a study conducted by Mahasari & Binastuti (2021) which revealed that MVA has a significant impact on the value of companies measured using Tobin's Q ratio in the manufacturing industry. For this reason, the first hypothesis in this study is as follows :

H1: MVA has a significant effect on firm value as measured by Tobin's Q ratio.

## The Effect of Profitability (ROA) on Company Value (Tobin's Q)

Profitability can be interpreted as a ratio that indicates the amount of profit produced by a business (Saddam et al., 2021). This ratio provides an overview of how well the company is able to generate profits from its revenue (Safira & Widajantie, 2021). The profitability of the company can be measured through the ROA ratio and is considered an important factor in impacting the company's worth, as indicated by Tobin's Q (Fadli, 2022). Based on signal theory, it is said that a rise in ROA can convey a favorable message to investors about firm value (Putri & Utomo, 2021). Thus, companies that show a high level of profitability can attract investors' attention, because they are considered capable of providing better returns. According to the study carried out by Ristiani & Sudarsi (2022), companies that show high profitability tend to increase their overall value, so that they can make them attractive to investors who believe that these companies can generate returns on their investment in shares manufacturing industry. Thus the second hypothesis is as follows :

H2 : ROA has a significant effect on firm value as measured by Tobin's Q ratio.



### **METHOD**

This study uses a quantitative method with an associative approach (Akbar et al., 2023), utilizing secondary data obtained from the financial reports of the company, which are analyzed through statistical calculations. The research population consists of 19 manufacturing firms in the automotive and component sectors that are listed on the Indonesia Stock Exchange (IDX) from 2021 and 2023. The method employed for sampling is purposive sampling (Memon et al., 2025), which relies on to the variables examined in this study. So that 11 manufacturing companies from the automotive subsector and its components were selected as research samples. The data analysis method utilizes the assistance of Eviews Software, which applies a regression model using panel data (Murdani et al., 2022). The data analysis process involves selecting a panel data regression model, conducting a classical assumption test, and conducting a hypothesis test is conducted to examine the impact of the relationship between the variables in this study (Iba & Wardhana, 2024).

### **RESULTS AND DISCUSSION**

This research wants to evaluate the impact of MVA and ROA on the value of a company, as assessed by the Tobin's Q ratio, across 11 manufacturing firms, particularly within the automotive sector and its parts, that are listed on the Indonesia Stock Exchange. (IDX) from 2021 to 2023. The following are the specifications of the companies sampled in this study:

No	Company Name	<b>Company Code</b>		
1	PT Astra International Tbk	ASII		
2	PT Astra Ortoparts Tbk	AUTO		
3	PT Garuda Metalindo Tbk	BOLT		
4	PT Indo Kordsa Tbk	BRAM		
5	PT Goodyear Indonesia Tbk	GDYR		
6	PT Gajah Tunggal Tbk	GJTL		
7	PT Indomobil Sukses Internasional Tbk	IMAS		
8	PT Indospring Tbk	INDS		
9	PT Multi Prima Sejahtera Tbk	LPIN		
10	PT Multisrada Arah Sarana Tbk	MASA		
11	PT Selamat Sempurna Tbk	SMSM		
Source: Indonesia Stock Exchange, 2024				

Table 1 Research Objects

When testing panel data regression using Eviews Software, several tests are needed to determine the most suitable model from three categories of panel data models, namely: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) (Hutagalung & Darnius, 2022). This evaluation involves conducting the Chow Test, Hausman Test, and Lagrange Multiplier Test (Youssef et al., 2023), which will be explained in detail below:

### **Chow Test**

In this study, the Chow Test is utilized to determine the suitable model between the CEM and the FEM when analyzing research data. If the Chow test produces a probability value >0.05, it indicates that the appropriate model is the Common Effect Model (CEM). However, when the Chow test produces a probability level <0.05, it means that the selected model is the Fixed Effect Model (FEM).



#### Table 2 Chow Test Result

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.715529	(10,20)	0.0274
Cross-section Chi-square	28.304563	10	0.0016

Source: Data Analyzed, 2025

The data processing results presented in Table 2 reveal a cross section Chi-Square value of 0.0016 suggesting that the Fixed Effect Model (FEM) is a more suitable choice, because the probability value is <0.05.

### Hausman Test

The Hausman test is employed to identify the more appropriate model for this research, whether using the REM or the FEM. Random Effect Model (REM) is the appropriate model if the Hausman test has a probability value greater than 0.05. Fixed Effect Model (FEM) is the appropriate model if the Hausman test has a probability value smaller than 0.05.

#### Table 3 Hausman Test Result

Correlated Random Effects - Hausman Test Equation: Untitled Test cross-section random effects						
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.			
Cross-section random	0.263047	2	0.8768			

Source: Data Analyzed, 2025

Based on the test in Table 3, the probability value indicated in the figure is 0.8768, this indicates that the suitable model is REM, because it has a probability value> 0.05.

### Lagrange Multiplier Test

The Lagrange Multiplier test was conducted to determine the most suitable model for this study, specifically choosing among the CEM and the REM. Common Effect Model (CEM) is the appropriate model if the Lagrange Multiplier test has a probability level greater than 0.05. However, Random Effect Model (REM) is the appropriate model if the Lagrange Multiplier test has a probability level smaller than 0.05.



#### Table 4 Lagrange Multiplier Test Result

Lagrange Multiplier Tests for Random Effects Null hypotheses: No effects Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	T Cross-section	est Hypothesis Time	Both
Breusch-Pagan	4.143948	0.261950	4.405898
	(0.0418)	(0.6088)	(0.0358)
Honda	2.035669	-0.511811	1.077530
	(0.0209)	(0.6956)	(0.1406)
King-Wu	2.035669	-0.511811	0.363841
	(0.0209)	(0.6956)	(0.3580)
Standardized Honda	2.679692	-0.164972	-1.508386
	(0.0037)	(0.5655)	(0.9343)
Standardized King-Wu	2.679692	-0.164972	-1.766637
	(0.0037)	(0.5655)	(0.9614)
Gourieroux, et al.			4.143948 (0.0524)

Source: Data Analyzed, 2025

According to the test findings, the Cross-Section Breusch-Pagan value is 0.0418, this indicates that the optimal model to use is the REM, as the probability value results are less than 0.05. The most suitable model chosen in this data analysis is REM, then the next stage of analysis is to test the classical assumptions. Q ratio.

#### **Classical Assumption Test**

Before proceeding with hypothesis testing to determine the relationship between variables in the study, it is necessary to conduct a classical assumption test, including the following stages:

#### Normality Test

The aim of this evaluation is to determine if the information utilized in this study is normally distributed. When the probability level is greater than 0.05, it can be said that the data is normally distributed, but if the probability level is less than 0.05, it can be said that the data is not normally distributed.



Source: Data Analyzed, 2025

Figure 1 Normality Test Results

Based on Figure 1, the probability value is 0.690529, This suggests that the data in this research follows a normal distribution as this value is > 0.05.

#### Multicollinearity Test

Multicollinearity Test is performed to gather information regarding the presence of independent variables that have in common with other variables in a model. The correlation value between variables must be below 0.85 because it is the threshold for indicating multicollinearity.

Table 5 Multicollinearity Test Result

	MVA	ROA		
MVA	1	0,23488717		
ROA	0,23488717	1		
Source: Data Analyzed, 2025				

Based on Table 5, it is known that the correlation coefficient between variables is 0.23, so it can be stated that the data used does not occur multicollinearity because the coefficient value is less than 0.85.

#### Heteroscedasticity Test

This heteroscedasticity test aims to assess if there is a variation in the variance of the residuals within the regression model, using the Glejser method. If the probability value is greater than 0.05, there is no indication of heteroscedasticity.

# Table 6Heteroscedasticity Test Result

Dependent Variable: ABS\_RES Method: Panel EGLS (Cross-section random effects) Date: 01/16/25 Time: 19:18 Sample: 2021 2023 Periods included: 3 Cross-sections included: 11 Total panel (balanced) observations: 33 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.626589	0.155842	4.020673	0.0004		
MVA	2.25E-15	3.58E-15	0.626878	0.5355		
ROA	-0.002711	0.014403	-0.188196	0.8520		
	Effects Spe	ecification				
			S.D.	Rho		
Cross-section random			0.325803	0.6254		
ldiosyncratic random			0.252168	0.3746		
Weighted Statistics						
R-squared	0.014036	Mean depend	lent var	0.241580		
Adjusted R-squared	-0.051695	S.D. dependent var		0.241142		
S.E. of regression	0.247296	Sum squared resid		1.834659		
F-statistic	0.213530	Durbin-Watson stat		1.561178		
Prob(F-statistic)	0.808945					
Unweighted Statistics						
R-squared	0.051266	Mean depend	lent var	0.592134		
Sum squared resid	4.497742	Durbin-Watson stat 0.63		0.636815		

Source: Data Analyzed, 2025

According to the findings presented in Table 6, the probability level for both variables is greater than 0.05, so there is no indication of heteroscedasticity in the data from this research.

#### Autocorrelations Test

This test is carried out because the observation data is sequential so that the confounding error of the regression model can appear. If the DW value is greater than 2, it indicates that there is no significant positive autocorrelation in the data.

0.296490	Mean dependent var	-0.240740
0.249589	S.D. dependent var	0.658990
0.570859	Sum squared resid	9.776387
6.321660	Durbin-Watson stat	2.121995
0.005117		
Unweighte	d Statistics	
0.432561	Mean dependent var	-0.440739
	0.296490 0.249589 0.570859 6.321660 0.005117 Unweighter 0.432561	0.296490Mean dependent var0.249589S.D. dependent var0.570859Sum squared resid6.321660Durbin-Watson stat0.005117Unweighted Statistics0.432561Mean dependent var16 35255Durbin-Watson stat

#### Table 7 Autocorrelations Test Result

Source: Data Analyzed, 2025

Based on Table 7, the value of Durbin Watson (DW) is 2.12, which means that the data in the research shows that there is no autocorrelation, because the DW statistical results are between dU and 4-dU, according to the Durbin-Watson table.

#### **Panel Data Regression Analysis**

Panel data regression analysis is performed to determine the influence of independent variables on the dependent variable, using the appropriate estimation model. According to the REM regression test conducted, the following findings were obtained :

Panel Data Regression Analysis Result						
Dependent Variable: TO Method: Panel EGLS (Cr Date: 01/16/25 Time: 1 Sample: 2021 2023 Periods included: 3 Cross-sections includer Total panel (balanced) o Swamy and Arora estime	BINSQ1 'oss-section r 9:24 d: 11 bservations: 3 ator of compo	andom effects) 33 nent variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
C MVA ROA	-0.934516 1.24E-14 0.075851	0.292410 7.08E-15 0.028345	-3.195912 1.759135 2.676009	0.0033 0.0888 0.0120		
Effects Specification S.D. Rho						
Cross-section random Idiosyncratic random			0.520727 0.588139	0.4394 0.5606		
	Weighted	Statistics				
R-squared Adjusted R-squared S.E. of regression F-statistic Prob(F-statistic)	0.296490 0.249589 0.570859 6.321660 0.005117	Mean dependent var S.D. dependent var Sum squared resid Durbin-Watson stat		-0.240740 0.658990 9.776387 2.121995		
	Unweighte	d Statistics				
R-squared Sum squared resid	0.432561 16.35255	Mean depend Durbin-Watso	lent var on stat	-0.440739 1.268637		

Table 8 Panel Data Regression Analysis Result

Source: Data Analyzed, 2025

Based on Table 8, the findings from the panel data regression in this study yield the subsequent regression equation:

Tobin's Q = -0.934516 + 0.0000000000000124 MVA + 0.075851 ROA

## **Hypothesis Test Analysis**

Hypothesis testing aims to ealuate the influence of each independent variable in relation to the dependent variable at a significance level of 5% or 0.05 (Nofriyani, et al , 2021). Based on Table 8, the t test results can be described as follows:

- MVA (Market Value Added): The MVA coefficient is 0.000000000000124, t-value is 1.759135 and a probability is 0.0888. Because of probability value exceeding 0.05 suggests that MVA does not have a significant impact on the Tobin's Q ratio. at the 5% significance level.
- ROA (Retun On Assets): The coefficient of ROA is 0.075851, and yields a t-value of 2.676009 and a probability value of 0.0120. Because of probability value less than 0.05, this indicates that ROA significantly affects Tobin's Q ratio at the 5% significance level.

## The Coefficient of Determination

To find out how much the independent variable influences the dependent variable, a coefficent of determination test is conducted (Suharna, et al, 2021). The dependent variable (Tobin's Q Ratio) can be influenced by 29.649% of the independent variables employed in this study (MVA and ROA), according to Table 8, R-Squared value of 0.296490.

## Discussion

The findings from hypothesis testing show that MVA has no significant effect on the value of a firm as assessed by Tobin's Q ratio. MVA serves as a metric to evaluate how much value the company provides to its shareholders. A positive MVA value demonstrates that the firm generates more value than the initial capital invested by its shareholders and if the MVA is negative, it means that the company failed to generate the anticipated value for its shareholders. However, in this research, MVA has no effect on Tobin's Q because it is caused by other factors that are more dominant in determining the market value of company during the research data period such as market conditions, investor perceptions, and macroeconomic policies. The results of this study align with previous research conducted by Firmanda & Wahyuni (2024), which shows that MVA does not affect Tobin's Q ratio to measured company's value.

The findings from hypothesis testing show that ROA significantly effect on a company's value, which is measured by the Tobin's Q ratio. ROA is a metric that assesses the relationship between the company's net income and its total assets. This ratio serves to measure how effective management is in using the company's assets to generate operating profits and reflects the overall return received by all shareholders (Arief et al., 2020). A high ROA signifies that the company has effectively optimized its profits relative to its assets. This situation has the potential to boost market confidence in the company's future prospects, which could further enhance its market value even more. So that The Tobin's Q value will rise as the market value of the firm's assets grows. These findings same with Amelia and Sembiring (2023) research, which indicates that ROA positively influences the value of a company, as measured using the Tobin's Q ratio. This statement aligns with signaling theory, which states that a high ROA level indicate the company's

strong future performance. Therefore, this positive signal is likely to be positively viewed by shareholders, motivating them to invest in the company.

## **CONCLUSION AND SUGGESTION**

Considering the findings of data analysis research conducted on automotive and component sub-sector manufacturing companies related to the effect of Market Value Added (MVA) and financial performance, assessed through Return on Assets (ROA), in relation to firm value evaluated by Tobin's Q ratio, is as follows: (1) MVA has no effect on firm value as measured by Tobin's Q ratio, and (2) ROA has a significant effect on firm value as measured by Tobin's Q ratio in manufacturing companies in the automotive subsector and its components.

Based on the findings from the conducted research analysis, it is hoped that manufacturing companies, will further increase the effectiveness of their asset management so as to increase company profits which in turn can provide positive signals to shareholders so that they can invest in their companies.

For further research, it is possible to expand the independent variables used, for example by testing the Economic Value Added (EVA) and other ratios besides the profitability ratio that can affect the company's value, for example the liquidity ratio such as the research results (Ndurudu et al, 2020) which show that the liquidity ratio has a positive impact on the manufacturing company's value.

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