Capital Structure, Firm Size and Effective Tax Rate on The Financial Performance of Automotive Subsector Companies

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Sections Info	ABSTRACT
	Objective: This study aims to examine and analyze the influence of capital structure, firm size, and effective tax rate on the financial performance of companies in the automotive subsector. *Method:* Employing a quantitative research approach, this study utilizes secondary data from 12 automotive subsector companies listed between 2020 and 2023. Purposive sampling was applied to select the sample, and multiple linear regression analysis was conducted using SPSS version 27 as the analytical tool. *Results:* The findings indicate that capital structure significantly impacts financial performance, with firm size and effective tax rate also demonstrating significant effects on the financial outcomes of the sampled companies. *Novelty:* This study provides empirical insights into the dynamic interplay between financial determinants and corporate performance in the automotive subsector, contributing to a nuanced understanding of how internal financial policies and tax strategies affect profitability in this industry.

INTRODUCTION

Along with the rapid development of the business world, every company is required to survive in a fast-paced and threatening global environment. The company certainly wants its business to continue growing. Such development can be supported by management's ability to establish policies for planning, acquiring, and utilizing resources to maximize financial performance.

Financial performance is one of the fundamental aspects regarding the financial condition of a company. By measuring financial performance, a company can see the level of success achieved in its operations. The better the financial performance of the company, the healthier the company will appear. The financial performance of a company can be measured by profitability ratios, also known as profit ratios. Profitability ratios describe the company's ability to earn or generate profit (operating ratio) through all its capabilities and resources, such as sales activities, cash, capital, number of employees, number of branches, and so on. The measurement of the company's performance can be seen from the financial statements using financial ratio analysis tools, namely profitability ratios including Gross Profit Margin (GPM), Operating Profit Margin (OPM), Net Profit Margin (NPM), Return on Equity (ROE), and Return on Assets (ROA). The researcher uses the profitability indicator using Return On Assets (ROA). ROA is a measurement of the overall ability of the company to generate profit with the total assets available in the company [1].

The increasing demand for automotive products and components has resulted in the rising profits of automotive and component companies year after year. However, not all automotive and component companies are experiencing continuously increasing profits. Performance of revenue and net profit of two automotive issuers. Namely, PT Astra International Tbk (ASII) and PT Indomobil Sukses Internasional Tbk (IMAS) have tended to be historically volatile from 2009 to the third quarter of 2013. According to the Department of Research Finance Today. The fluctuations are influenced by the accumulation of external and internal factors, especially the recovery from the global crisis. The trend of credit interest rates, as well as the depreciation of the exchange rate. After experiencing a 15.3% decline in sales in 2009. Indomobil's sales grew significantly in 2010 by 57.6%. Despite experiencing growth, Indomobil's sales showed a declining trend from 2010 until the third quarter of 2013 [2].

On the contrary, Astra's sales experienced a decline of 0.25% in 2010 and showed an upward trend in the following years until 2012. On the other hand, the trend of slowing sales at Indomobil has also been accompanied by a slowdown in the company's net profit growth since 2009. Conversely, the trend of increasing sales at Astra has also been accompanied by an increase in net profit from 2009 to 2011. In 2012, Astra's net profit grew by 9.2%, lower than the 23.8% growth in 2011. In the nine months of 2013, the sales of Indomobil and Astra grew by an average of 6.2% compared to the same period in 2012. However, the net profit of both issuers decreased by 9.4% and 8.2% in the same period. According to a study by the Finance Today Research Department, the fluctuating growth trends in sales and net profit of Indomobil and Astra indicate the companies' performance adjustments to the automotive market turbulence amid the recovery from the global crisis. Although automotive sales in Indonesia have increased along with the growing middle-class consumer segment in the country, the sales performance of automotive issuers is also faced with other factors outside the company's operations, such as interest burdens and exchange rates, which ultimately continue to pressure the company's financial performance. Based on the company's financial report, Indomobil's net profit in 2012 and up to the third quarter of 2013 decreased by 1.4% and 9.4%, respectively. A significant increase in financial expenses by 55.5% also eroded the company's net profit in 2012 [3].

In another source, www.bisnis.com mentioned that the largest market capitalization automotive issuer, PT Astra International Tbk, experienced a 7% decline in net profit throughout the first quarter of 2013. According to Astra International President Prijono Sugiarto, Indonesia's economic prospects remain positive, although in the short term Astra's profits will be affected by several obstacles. Among other things, the increase in labor costs, the weakening of commodity prices, competition in the automotive industry, and the impact of minimum down payment regulations on motor vehicle financing. Throughout the first quarter of 2013, the demand for motor vehicles remained high, supported by an increase in public income and affordable credit interest rates. However, competition has also increased due to the rise in domestic production capacity. In addition, the rising labor costs have also led to a decrease in the net profit contribution

from the automotive segment. This condition is expected to continue into the second quarter [4].

There are several factors that influence Financial Performance, namely Capital Structure, Firm Size, and Effective Tax Rate. The first factor is Capital Structure. Capital structure refers to the relative proportions of debt and long-term equity used by a company. In financing the operations of a company, the company needs to be able to combine elements that can generate a return on the borrowed capital. This situation shows that capital sources managed well based on long-term debt and equity. The capital structure represented by debt to equity can increase the company's profits, and shareholders also benefit [1].

The second factor is Firm Size. The size of the company is considered one of the factors that influence financial performance. The size of the corporation is manifested in the monetary value of the total assets of the company listed in the year-end balance sheet. The stages of maturity of a company are represented by its significant total assets. Large companies often have more resources, including labor, technology, and capital. This can help the company produce more and increase their market share. If compared to other financial indicators, the total asset value is generally quite significant. Both the size of the company, as indicated by the aggregate value of fixed assets held, and the increase in total fixed assets can contribute to the growth of a company. The expansion of a company's size can be an indicator of its profitability prospects [5].

The third factor is the Effective Tax Rate. The Effective Tax Rate (ETR) is actually a measure of the company's tax burden because it reveals the tax rate paid on the company's profits [6]. *Effective tax rate (ETR)* can be used as an indicator of effective tax planning. The Effective Tax Rate is the percentage of the effective tax rate that applies or should be applied based on the imposition of a specific tax [6]. In income tax, the percentage of the rate can be differentiated into several rates such as the marginal rate and the effective tax rate. The marginal rate is the percentage rate that applies to an increase in the tax base.

There have been many studies examining financial performance, including Pashah, Anikatun et al. (2018) and Ambarwati, Novi Sagita et al. (2015), which show that company size has a positive effect on financial performance. Research conducted by [7], Violita & Sulasmiyati (2017) and Pashah, Anikatun et al. (2018) show that capital structure has a positive effect on financial performance.

Further research is needed to understand the findings when applied to different environmental conditions and times, as the above phenomenon and previous studies still yield inconsistent results. Therefore, in this study, we will identify the factors that influence profitability using a different time period and objects from previous research, thus yielding different research results compared to earlier studies.

The purpose of this research is to examine the influence of Capital Structure, Company Size, and Effective Tax Rate on Profitability. (In automotive sub-sector companies listed on the IDX from 2020-2023). Further research is needed to complement previous studies on Financial Performance that have been conducted in Indonesia.

In this study, the object of research is automotive companies listed on the Indonesia Stock Exchange (BEI). The reason for using automotive companies is because the automotive industry is rapidly growing and has become a part of people's daily needs. Some reasons why the automotive industry is rapidly growing are that the advancement of time forces people to use transportation modes in their daily activities. The automotive industry produces various brands of vehicles that facilitate human activities in traveling. The automotive industry is one of the manufacturing sectors that supports national economic growth. An automotive company is a company that designs, develops, manufactures, markets, and sells motor vehicles.

Relationship Between Variables

Capital Structure Affects Financial Performance

Short-term liabilities are obligations expected to be settled within a relatively short period, usually one year. Short-term liabilities can arise from operating activities and financing activities. Short-term liabilities arising from operating activities include accounts payable, unearned revenue, wages payable, tax payable, and other accrued operating expenses. Short-term liabilities arising from financing activities include short-term loans, interest payable, and the portion of long-term debt that is due. Short-term debt is generally used to finance current assets and requires the use of current assets for its repayment. Current assets include cash and other assets that can be converted into cash or used by the company within one year. Assets that fall into the category of current assets include cash, receivables, inventory, prepaid expenses, and securities maturing within one year [8]. If the company cannot settle its short-term obligations, then the company's ability to settle its long-term obligations will be questioned, and the company's survival will also be in doubt. The capital structure theory has several different views regarding the impact of debt levels on company performance. The trade-off theory explains that debt levels have a positive effect on company performance. Debt financing is expected to increase the company's production capacity and provide tax savings benefits. Conversely, the pecking order theory explains that debt levels have a negative effect on company performance due to the risks it brings [9].

H1 : Capital Structure Affects Financial Performance

Firm Size Affects Financial Performance

Company size refers to the metrics used to assess the extent of a company's operations, taking into account total assets, market value, and other relevant aspects. Large and successful companies benefit from their strong operational performance, which gives them an advantage in engaging with the capital markets. This, in turn, attracts investor interest and encourages them to participate in the company. Large-scale companies, due to their substantial financial resources, are more likely to participate in comprehensive information transparency and provide information for internal use. As the company progresses, it dedicates more capital to running its operations, including the use of debt [1].

H2: Firm Size Affects Financial Performance
Effective Tax Rates Affect Financial Performance

Companies with debt will have a negative relationship with non-debt tax shields. (seperti pemotongan biaya depresiasi atau investasi kredit pajak) [10]. [11] shows that preferred tax activities such as tax shelters and Effective Tax Rate are substitutes for the use of debt. This indicates that companies use less debt when they engage in tax planning. The research mentioned above shows that the Effective Tax Rate can increase the company's profits or profitability.

H3: Effective Tax Rates Affect Financial Performance

RESEARCH METHOD

Research approach

This study uses quantitative data, which is research data in the form of numbers analyzed using statistics [12]. The data used in this research is secondary data. The secondary data in this research was obtained from the capital market database, at the Indonesia Stock Exchange (IDX) Gallery from 2020-2023, and the official IDX website www.idx.co.id.

Operational definition

Modal structure

Modal structure according to [8] states that it is a consideration or comparison between the amount of long-term debt and equity. Meanwhile, according to [13], "Capital structure is the consideration of the amount of permanent short-term debt, long-term debt, preferred stock, and common stock. [14] explaining the factors that influence capital structure are sales stability, asset structure, operating leverage, growth rate, profitability, taxes, control, management attitude, lender attitude and credit rating agencies, market conditions, internal company conditions, and financial flexibility [15]. In this study, the capital structure is measured using the Debt to Equity Ratio formula. (DER) [9] stating "DER is a ratio that measures the extent to which debt can be covered by equity." The higher the DER, the greater the assets that will be financed by debt, and this poses an increasing risk for the company. DER can be calculated using the formula:

$$Debt \ to \ Equity \ Ratio = \frac{Total \ Debt}{Total \ Equity}$$

Source : [16]

Firm Size

According to [17] The size of a company is a scale or value by which a company can be classified as large or small based on total assets, log size, stock value, and so on. The size of a company can be expressed in total assets, sales, and market capitalization. The size of a company indicates its scale through sales and the amount of assets owned by the company. In this case, the size of the company can be seen from the total assets owned by the company for its operational activities. Company size becomes an important

factor in assessing the company's financial performance, because a larger company size has a greater amount of assets, which can be used by the company for its operational activities, thereby increasing the company's sales and profitability. Therefore, company size (firm size) is one of the factors that can influence the company's profitability level. In this study, the size of the company is measured using the following formula:

$$\textbf{Firm Size = Ln Total Asset}$$

Source **:** [18]

Effective Tax Rate

According to [19], the effective tax rate is the comparison between the actual tax we pay and the commercial profit before tax. The effective tax rate is used to measure the impact of changes in tax policy on the company's tax burden. [20] defining the effective tax rate (ETR) as the ratio (in percentage) of taxes paid by the company based on total pre-tax accounting income so that one can determine the extent of the percentage change in actual tax payments relative to the commercial profit earned by the company. The effective tax rate (ETR) is defined as the total income tax expense divided by pre-tax income [21]. Whereas [22] defining the effective tax rate (ETR) as the ratio of taxes paid to pre-tax profit for a specific period. Effective tax rate (ETR) is the tax rate that occurs and is calculated by comparing the tax burden with the company's accounting profit. From this definition, the effective tax rate (ETR) aims to determine the percentage change in the actual tax paid on the commercial profit earned. The effective tax rate (ETR) ratio is measured with the following calculation [6]:

$$Effective\ Tax\ Rate = \frac{Current\ Tax}{Profit\ Before\ Tax}$$

Source **:** [6]

Financial Performance

Financial performance refers to a systematic evaluation aimed at determining the extent to which a company complies with financial implementation regulations [23]. Company stakeholders require information that correlates with financial performance. This research asserts that financial performance serves as a metric used by companies to achieve their goals, thereby facilitating organizations in realizing their competitive advantage. The company and its employees can be regularly evaluated based on previously established standards, goals, and evaluation criteria. In this study, financial performance is measured using the Return On Assets formula. (ROA) [24]. ROA is a profitability ratio that shows the percentage of profit obtained by the company in relation to the total resources or average amount of assets. In other words, ROA is a ratio that measures how efficiently a company manages its assets to generate profit over a period. It can be said that the sole purpose of a company's assets is to generate revenue and, of course, also to generate profit or earnings for the company itself. ROA can help management and investors see how well a company is able to convert its investment in

assets into profit or earnings. ROA is calculated by dividing the company's net profit by its total assets and is presented as a percentage, using the formula below [25]:

$$ROA = \frac{Net\ profit\ before\ tax}{Total\ Assets}$$

Source : [26]

Population and Sample
Population

In this study, the population data used are all companies in the automotive sub-sector listed on the Indonesia Stock Exchange. The observation period conducted from 2020-2023.

Sample

The companies that are the sample for this research were selected using the purposive sampling method. [27], where the sample is selected based on certain considerations or specific characteristics.

The criteria for sample selection are as follows:

Automotive sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the years 2020-2023. Presenting complete financial statements for the period of 2020-2023. Companies that did not incur losses during the period of 2020-2023. There are companies used as samples, as follows:

Table 3.2. Research Criteria

No	Sample Criteria	Number of Companies
1.	Automotive Sub-Sector Companies listed on the Indonesia Stock Exchange (IDX) from 2020-2023	15
2.	Incomplete companies present financial statements for the period 2020-2023.	(2)
3.	Companies that experienced losses during the period 2020-2023	(1)
4.	The number of companies studied	12
5.	Number of observations: 12 x 4 years	48

Data Source: data processed by the researcher (2024)

Data Collection Techniques

Data collection methods explain how research data is obtained. The method of data collection in this study is [28]:

Documentation Study.

Method is a method conducted by obtaining data in the form of annual reports issued by the company from 2020-2023. This data can be obtained from the Indonesia Stock Exchange (IDX).

Library Study

Method is the collection of data as a theoretical foundation and previous research. In this case, the data is obtained from journals, articles, books, previous research, and other written sources related to the required information.

Analysis Technique

The statistical analysis technique in this study uses Multiple Linear Regression, which explains the influence between the dependent variable and several independent variables. Multiple Linear Regression is a regression used to test whether the profitability of the occurrence of the dependent variable can be predicted by the independent variables. The Documentation Study Method is a method conducted by obtaining data in the form of annual reports issued by the company in the years 2020-2023. El dato se puede obtener de la Bolsa de Valores de Indonesia. (IDX). The Library Study Method involves data collection as a theoretical basis and prior research. In this case, the data is obtained from journals, articles, books, previous research, and other written sources related to the required information.

The statistical analysis technique in this study uses Multiple Linear Regression, which explains the influence between the dependent variable and several independent variables. Multiple Linear Regression is a regression used to test whether the profitability of the occurrence of the dependent variable can be predicted by the independent variables [29]. In this study, the researcher used SPSS (Statistical Package for Social Science) as a tool to analyze the data. This analysis begins with descriptive statistics and classical assumption tests. The classical assumption tests consist of the multicollinearity test, normality test, heteroscedasticity test, and autocorrelation test. Subsequently, the collected data undergo multiple regression analysis and hypothesis testing, which includes the coefficient of determination (R^2), correlation coefficient (R), and t-test.

Descriptive Statistics

Descriptive statistics are used to describe various characteristics of data derived from a sample. Descriptive statistics such as mean, median, mode, percentile, decile, quartile in the form of numerical analysis or images/diagrams. In this descriptive statistics, it is processed per variable.

Classical Assumption Test

Multiple Linear Regression Model is used in hypothesis testing to meet the classical assumption test in the conducted research. This is done with the aim of avoiding biased estimates because not all data can use the regression model.

Normality Test

The one-sample Kolmogorov-Smirnov test can also be used to test the normality of data. Assessing the significance value in research must be able to draw conclusions to determine whether a data set follows a normal distribution or not. If the significance is > 0.05, then the variable is normally distributed, and conversely, if the significance is < 0.05, then the variable is not normally distributed [28].

Multicollinearity Test

The method used to test for the presence of multicollinearity can be seen from the tolerance value or variance inflation factor (VIF). The threshold determined to indicate the presence of multicollinearity is a tolerance value < 0.10 or a VIF value > 10.

Heteroscedasticity Test

To determine the presence or absence of heteroscedasticity in this study, the research is tested by examining the scatterplot graph between the predicted values of the dependent variable (ZPRED) and its residuals. (SRESID). The basis of the analysis used to test for the presence or absence of heteroscedasticity is as follows (Ghozali, 2016):

If in a certain pattern, such as points forming a specific pattern regularly (wavy, widening, then narrowing), it indicates the occurrence of heteroscedasticity.

If there is no clear pattern, and points are scattered above and below the number 0 on the Y-axis, it can be concluded that heteroscedasticity does not occur.

Autocorrelation Test

In regression model research, a model free from autocorrelation is considered a good regression model. One way to detect the presence or absence of autocorrelation is through the Durbin-Watson test. Decision-making on the presence or absence of autocorrelation (Ghozali, 2016) DW values between 1.55 to 2.46: no autocorrelation.

Hypothesis Testing

Correlation Coefficient Test

If the value of R approaches 1, it means the independent variable has a strong influence on the dependent variable. Conversely, if the value of R is far from 1, it means the influence of the independent variable on the dependent variable is still weak.

Coefficient of Determination (R2)

The coefficient of determination (R2) is a coefficient that indicates the percentage of influence of all independent variables on the dependent variable. This percentage shows how much the independent variables can explain the dependent variable. The higher the coefficient of determination or the R2 value approaches 100%, the better the independent variables are at explaining the dependent variable. This, the resulting regression equation is good for estimating the value of the dependent variable.

Multiple Linear Regression Analysis

Multiple Linear Regression Analysis is an approach used to explain the linear relationship between two or more predictor (independent) variables and one response variable. (dependen). Where there are 3 independent variables and 1 dependent variable. Namely: Capital Structure (X1), Company Size (X2), and Effective Tax Rate (X3) as independent variables, and one dependent variable, namely Financial Performance. (Y1). Where the model to be used is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

Y : Profitability (Y1)

α : Constant

β : Regression coefficients of the independent variables X_1, X_2, X_3

X_1 : Capital Structure

X_2 : Company Size

X_3 : Effective Tax Rate

e   : Disturbance Variable or Error

t-test (Partial Test)

The t-statistic test essentially shows how far the influence of one independent variable individually explains the variation of the dependent variable [30]. If the significance is greater than 0.05, then the hypothesis is rejected (the regression coefficient is not significant), which means that individually, the independent variables do not have a significant effect on the dependent variable.

If the significance is less than 0.05, then the hypothesis is accepted (the regression coefficient is significant), which means that individually, the independent variables have an effect on the dependent variable.

RESULTS AND DISCUSSION

Analysis Results

Descriptive Statistical Analysis

The purpose of descriptive statistical tests is to provide an overview or description of data based on the sample size, minimum value, maximum value, mean, and standard deviation of each research variable.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Struktur Modal	48	-0.06	2.00	2.0837	0.2901
Firm Size	48	0.10	3.75	2.9694	0.8811
Effective Tax Rate	48	18.57	33.49	27.0190	4.7596
Kinerja Keuangan	48	-8.03	2.36	5.3660	1.2766
Valid N (listwise)	48				

Source: SPSS version 27 Output (processed)

Based on the data acquisition, the results are as follows:

Financial Performance (Y1)

Profitability has a minimum value of -8.03, with a maximum value of 2.36, while the average value (mean) is 27.0190 with a standard deviation of 4.7596, indicating that the data dispersion is smaller than the average value, thus showing that the Financial Performance variable data is already adequate.

Capital Structure (X1)

Capital Structure has a minimum value of -0.06, a maximum value of 0.23, while the average value (mean) is 2.0837 with a standard deviation of 0.8811, indicating that the data dispersion is smaller than the mean value, thus showing that the Capital Structure variable data is already acceptable.

Firm Size (X-2)

Firm Size has a minimum value of 0.60, with a maximum value of 10.48, while its average (mean) value is 2.9694 with a standard deviation of 0.8811, indicating that the data dispersion is smaller than the average value, thus showing that the Firm Size variable data is normal.

Effective Tax Rate (X-3)

Effective Tax Rate has a minimum value of 0.10, with a maximum value of 3.75, while its mean value is 27.0190 with a standard deviation of 4.7596, indicating that the data dispersion is smaller than the mean value, thus showing that the Effective Tax Rate variable data is normal.

Classic Assumption Test

The classic assumption test is the first stage before performing regression calculations to determine the effect of independent variables on the dependent variable.

Normality Test

To test the normality of the data, this study uses the Kolmogorov Smirnov Test. Assessing the significance value in research must be able to draw conclusions to determine whether a data set follows a normal distribution or not. If the significance is > 0.05, then the variable is normally distributed, and conversely, if the significance is < 0.05, then the variable is not normally distributed (Ghozali, 2016).

Table 2. Results of the Normality Test

One-Sample Kolmogorov-Smirnov Test		Modal structure	Firm size
N		48	48
Normal Parameters[a,b]	Mean	.0838	.9694
	Std. Deviation	.29012	.88113
Most Extreme Differences	Absolute	.353	.177
	Positive	.353	.177
	Negative	-.310	-.162
Test Statistic		.353	.177
Asymp. Sig. (2-tailed)[c]		.500	.301

One-Sample Kolmogorov-Smirnov Test		Effective tax rate	Financial performance
N		48	48
Normal Parameters[a,b]	Mean	27.0190	-.3660
	Std. Deviation	4.75964	1.27664
Most Extreme Differences	Absolute	.245	.324
	Positive	.171	.253
	Negative	-.245	-.324
Test Statistic		.245	.324
Asymp. Sig. (2-tailed)[c]		.543	.567
a. Test distribution is Normal.			

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: SPSS version 27 Output (processed)

Based on the results of the One-Sample Kolmogorov-Smirnov Test, it is known that the significance values of each variable are greater than 0.05, indicating that the regression model meets the normality assumption and can proceed to further testing.

Multicollinearity Test

The way to see whether there is multicollinearity in a model (Ghozali, 2018) is by looking at the tolerance and variance inflation factor values. (VIF). Tolerance measures the level of variability of the chosen independent variable that is not explained by other independent variables. The commonly used cutoff tolerance values are > 10 and VIP < 10. If such a thing happens, it means there is no multicollinearity in the regression model.

Table 3. Results of the Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Struktur Modal	.913	1.095
	Firm Size	.901	1.110
	Effective Tax Rate	.956	1.046

a. Dependent Variable: Financial performance

Source: SPSS version 27 Output (processed)

Based on the table above, it shows that the results of the multicollinearity test, the tolerance values of each independent variable > 0.10 while the VIF values < 10. Thus, the results of the multicollinearity test in this study indicate that multicollinearity does not occur in the regression model.

Autocorrelation Test

The autocorrelation test is used to determine whether there is a deviation from the classical assumption of autocorrelation, which is the correlation that occurs between residuals in one observation and another in the regression model. If such a correlation exists, it is referred to as an autocorrelation problem. With the following provisions:

DW value < 1.10; there is autocorrelation

DW value between 1.10 and 1.54; inconclusive

DW value between 1.55 and 2.46; no autocorrelation

DW value between 2.47 and 2.90; inconclusive

DW value > 2.91; there is autocorrelation

The results of the autocorrelation test can be seen in the following table:

Table 4. Results of the Autocorrelation Test

| Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.890a	.884	.822	1.26268	2.079
A. Predictors: (Constant), Effective Tax Rate, Structure Modal, Firm Size					
B. Dependent variable: Financial Performance					

Source: SPSS version 27 Output (processed)

Based on the autocorrelation test results, the Durbin-Watson value is 2.079. Therefore, the DW value is between 1.55 and 2.46. This indicates that there is no autocorrelation.

Heteroscedasticity Test

To test for the presence or absence of heteroscedasticity, this is done by looking at the Scatter Plot to see if the residuals are dispersed or form a specific pattern. If the points do not disperse and form a pattern, then heteroscedasticity occurs.

Figure 1. Heteroscedasticity Test Results
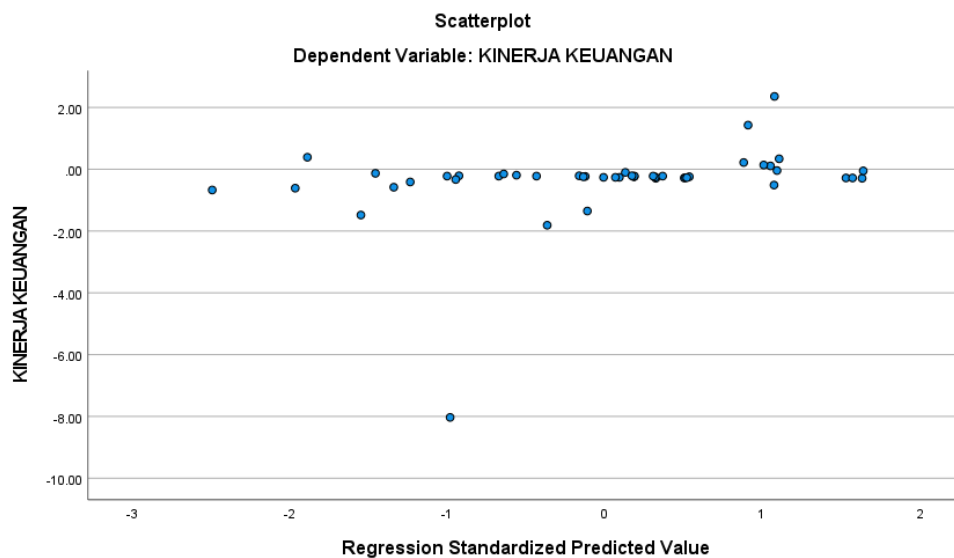
Source: SPSS version 27 Output (processed)

From the scatter plot in Figure 1, the points are spread randomly and there is no tendency to form a specific pattern, indicating that there is no sign of heteroscedasticity.

Multiple Linear Regression Analysis

The calculations were carried out using SPSS version 27 and the results are as follows:

Table 5. Results of the Multiple Linear Regression Analysis Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.417	1.063		3.333	.009
	Struktur Modal	2.011	.664	.003	3.017	.006
	Firm Size	2.240	.220	-.166	2.091	.001
	Effective Tax Rate	2.057	.040	-.214	3.450	.004

Source: SPSS version 27 Output (processed)

In the table regarding the SPSS processing results, a multiple regression equation can be formed as follows:

Y = 1.417 + 2.011,X-1. + 2.240,X-2.+ 2.057,X-3.

The above multiple linear regression equation can be interpreted as:

The constant is 1.417. This means that if not influenced by Capital Structure, Firm Size, and Effective Tax Rate, the Financial Performance would be 1.417.

The coefficient of the Capital Structure variable is 2.011. This means that if there is an increase in Capital Structure by one unit, Profitability will also increase by 2.011, assuming that other factors remain constant.

The coefficient of the Company Size variable is 2.240. This means that if there is an increase in Company Size by one unit, Profitability will also increase by 2.240, assuming that other factors remain constant.

The coefficient of the Effective Tax Rate variable is 2.057. This means that if there is an increase in the Effective Tax Rate by one unit, Profitability will also increase by 2.057, assuming that other factors remain constant.

Hypothesis Testing

Coefficient of Determination (R^2) Test

The (R^2) test is used to calculate the strength of the relationship between independent and dependent variables. The results of the SPSS calculations regarding the analysis are presented in the table below:

Table 6. R Square Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.890a	.884	.822	1.26268	2.079

A. Predictors: (Constant), effective tax rate, structure modal, firm size

B. Dependent Variable: Financial Performance

Source: SPSS version 27 Output Results (processed)

In the table above, it is known that the correlation coefficient R is 0.890 or close to 1. This means there is a strong relationship (correlation) between the independent variables, which include Capital Structure, Firm Size, and Effective Tax Rate, and the dependent variable, which is Financial Performance.

As for the multiple determination analysis, from the table above, it is known that the percentage of the influence of the independent variables on the dependent variable indicated by the R square value is 0.884, so the multiple determination coefficient is 0.884 x 100% = 88.4%, and the remaining 100% - 88.4% = 11.6%. This means that the rise and fall of the dependent variable, Profitability, is influenced by the independent variables, Capital Structure, Firm Size, and Effective Tax Rate, by 88.4%. Meanwhile, the remaining 11.6% is influenced by other variables not examined in this study.

T-test (Partial Test)

The results of the SPSS version 27 calculations regarding the t-test (partial test) are shown in the table below:

Table 7. Partial Test Results (Uji t)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.417	1.063		3.333	.009
	Struktur Modal	2.011	.664	.003	3.017	.006
	Firm Size	2.240	.220	-.166	2.091	.001
	Effective Tax Rate	2.057	.040	-.214	3.450	.004

Source: SPSS version 27 Output (processed)

The data analysis test on the hypothesis that Capital Structure Affects Financial Performance shows a significance value of 0.006, which is less than 0.05. Since the significance level of 0.006 < 0.05, H1, which states that the Capital Structure variable Affects Financial Performance, is accepted.

The data analysis test on the hypothesis that Company Size Affects Financial Performance shows a significance value of 0.001, which is less than 0.05. Since the significance level of 0.001 < 0.05, H2, which states that the Company Size variable Affects Financial Performance, is accepted.

The data analysis test on the hypothesis that Effective Tax Rates Affect Financial Performance shows a significance value of 0.001, which is less than 0.05. Since the significance level of 0.004 < 0.05, H3, which states that the Effective Tax Rates variable Affects Financial Performance, is accepted.

Table 8. Hypothesis Testing Results

No.	Description	Result	Explanation
1	H1: Capital Structure Affects Financial Performance	Accepted	0,006 < 0,05
2	H2: Firm Size Affects Financial Performance	Accepted	0,001 < 0,05

| 3 | H3: Effective Tax Rates Affect Financial Performance | Accepted | 0,004 < 0,05 |

Source: Data processed by the researcher (2024)

Discussion
Capital structure affects financial performance

Based on the analysis results, it can be concluded that the Debt to Equity Ratio (DER) has a significant positive effect on financial performance. Profitability is a goal that a company must achieve so that the business can survive and satisfy the owners or shareholders. High profitability, indicated by ROA, means that the company's profits can be obtained through the effective and efficient management of assets by the company's managers. The research results on Capital Structure (DAR) on financial performance (ROA) are consistent with the signaling theory according to [31] which states that capital structure is a positive signal for the company. Disclosure of financial statement information is one of the signals conveyed by the company to investors and potential investors. Components of the financial statement, such as good financial performance, will signal to investors that the company is capable of providing high returns to investors.

Firm size affects financial performance

The results of this study show that firm size has a positive and significant effect on financial performance. Larger companies usually have the ability to leverage economies of scale, which means an increase in production volume accompanied by a decrease in the cost per unit of production. For example, large companies have greater bargaining power and the ability to purchase raw materials in large quantities at lower costs, which means a decrease in the cost per unit of production and an increase in operational efficiency. With their strong brand reputation, they can negotiate more favorable contracts, allowing them to set more competitive and premium selling prices. This can increase profit margins and Return On Assets. (ROA). The findings in this study are in line with the research by Sauh Hwee Teng et al. (2022), which concluded that firm size positively affects financial performance. Research results show that business profitability will increase if they add assets, such as purchasing production machines. To avoid unused assets, assets must be used as effectively as possible. Unused assets will become a burden for the company and reduce its profitability.

Effective Tax Rates Affect Financial Performance

The results of the SPSS test show that the Effective Tax Rate variable affects financial performance. Profitability is the ability of a company to generate profit from the activities it undertakes. Rodiguez and Arias (2012) state that the relationship between profitability and the effective tax rate is direct and significant. Income levels tend to be directly proportional to the taxes paid, so companies with high profit levels tend to have a high tax burden. The increase in a company's profitability can be caused by the increase in the company's capacity or funding sources in conducting business activities. (Natalia, 2012). Companies that have the ability to generate profits must prepare the taxes to be paid based on the income earned.

CONCLUSION

Fundamental Finding : This study establishes that capital structure, firm size, and effective tax rate significantly influence the financial performance of companies in the automotive subsector. These findings underline the importance of strategic financial management and tax optimization in enhancing corporate profitability. **Implication :** The results emphasize the need for corporate decision-makers to balance capital structure, consider economies of scale, and adopt efficient tax strategies to drive financial performance. Policymakers could also utilize these insights to develop supportive regulatory frameworks for the automotive industry. **Limitation :** The study is constrained by the use of only three independent variables and one dependent variable, a limited observation period of 2020–2023, and the focus solely on direct relationships between the variables. **Future Research :** Subsequent studies could explore additional factors influencing financial performance, such as firm value, corporate social responsibility, tax avoidance, and gender diversity. Expanding the research period and incorporating moderating or mediating variables could provide deeper insights into the complex dynamics affecting corporate performance.

REFERENCES

[1] K. A. Putri dan A. Haq, "PENGARUH FIRM SIZE, NET PROFIT MARGIN (NPM), STRUKTUR MODAL TERHADAP KINERJA KEUANGAN.pdf," *J. Ekon. Trisakti*, 2024.

[2] R. Septiano, D. Anggriana, dan L. Sari, "Pengaruh Modal Kerja Dan Penjualan Terhadap Laba Bersih Pada Perusahaan Otomotif Yang Terdaftar Di Bursa Efek Indonesia," *J. RevenueJurnal Akunt.*, vol. 3, no. ISSN: 2723-6501, hlm. 514–524, 2023.

[3] A. N. Bunga dan S. Sofie, "Pengaruh Rasio Likuiditas, Leverage, Aktivitas Dan Firm Size Terhadap Profitabilitas Perusahaan Sub Sektor Otomotif Dan Komponen Di Bursa Efek Indonesia," *E-J. Manaj. Univ. Udayana*, vol. 2, no. 1, hlm. 13–28, 2015.

[4] R. Yahdi dan A. S. Dewi, "Pengaruh Struktur Modal, Ukuran Perusahaan, dan Profitabilitas Terhadap Nilai Perusahaan Otomotif yang Terdaftar Di BEI Periode 2012-2016," *J. Din. Akunt.*, vol. 7, no. 2, hlm. 1–14, 2017.

[5] Y. R. Sari dan N. D. Setyaningsih, "Pengaruh Good Corporate Governance, Struktur Modal Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Perusahaan Pada Perusahaan Properti Dan Real Estate," *J. Ilm. Manaj. Ekon. Akunt. MEA*, vol. 7, no. 2, hlm. 1165–1183, 2023, doi: 10.31955/mea.v7i2.3127.

[6] Y. Sudaryo, D. Purnamasari, N. A. Sofiati, A. Kusumawardani, dan T. Sajekti, "Pengaruh Tax Retention Rate (Trr), Book Tax Differences (Btd) Dan Effective Tax Rate (Etr) Terhadap Kinerja Keuangan Pada Perusahaan Properti Dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2019," *Ekonam J. Ekon. Akunt. Manaj.*, vol. 2, no. 2, hlm. 95–107, 2020, doi: 10.37577/ekonam.v2i2.289.

[7] N. W. Pradnyanita Sukmayanti dan N. Triaryati, "Pengaruh Struktur Modal, Likuiditas Dan Ukuran Perusahaan Terhadap Profitabilitas Pada Perusahaan

Property Dan Real Estate," *E-J. Manaj. Univ. Udayana*, vol. 8, no. 1, hlm. 172, 2018, doi: 10.24843/ejmunud.2019.v08.i01.p07.

[8]   T. Hairi, "Pengaruh Struktur Modal, Profitabilitas Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia (Bei) Periode 2013-2017," *Tirtayasa Ekon.*, vol. 14, no. 2, hlm. 171, 2019, doi: 10.35448/jte.v14i2.4743.

[9]   D. Agrien, "PENGARUH STRUKTUR MODAL, SUKU BUNGA, DAN RETURN ON ASSET TERHADAP NILAI PERUSAHAAN (STUDI PADA PERUSAHAAN MANUFAKTUR SEKTOR INDUSTRI BARANG KONSUMSI YANG TERDAFTAR DI BEI TAHUN 2017-2020)," 2022.

[10]   R. D. B. Y. Putra, "PENGARUH LEVERAGE DAN PROFITABILITAS TERHADAP TAX AVOIDANCE DENGAN KONEKSI POLITIK SEBAGAI VARIABEL PEMODERASI," *SIMBA*, no. September 2022, 2022.

[11]   A. A. Muh dan Yohanes, "Pengaruh Profitabilitas, Capital Intensity dan Leverage terhadap Tax Avoidance," *E-J. Akunt. TSM*, vol. 3, no. 1, hlm. 1–16, 2023, doi: 10.34208/ejatsm.v3i1.1834.

[12]   Sugiyono, "Sugiyono, Metode Penelitian," *Penelitian*, 2017.

[13]   D. E. Siswanti dan S. Ngumar, "PENGARUH STRUKTUR MODAL, PROFITABILITAS, UKURAN PERUSAHAAN TERHADAP NILAI PERUSAHAAN," 2019.

[14]   A. N. Chasanah, "Pengaruh Rasio Likuiditas, Profitabilitas, Struktur Modal Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Yang Terdaftar Di Bei Tahun 2015-2017," *J. Penelitan Ekon. Dan Bisnis*, vol. 3, no. 1, hlm. 39–47, 2019, doi: 10.33633/jpeb.v3i1.2287.

[15]   S. Cahyono, N. K. Surasni, dan H. Hermanto, "Pengaruh Profitabilitas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Pemoderasi Pada Perusahaan Sektor Pertanian Yang Terdaftar Di Bursa Efek Indonesia," *Jmm Unram - Master Manag. J.*, vol. 8, no. 4, hlm. 323–337, 2019, doi: 10.29303/jmm.v8i4.455.

[16]   A. Aziz, Fatahurrazak, dan I. L. S. Munthe, "PENGARUH RETURN ON ASSET, UKURAN PERUSAHAAN, STRUKTUR MODAL DAN LIKUIDITAS TERHADAP NILAI PERUSAHAAN PADA PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI BURSA EFEK INDONESIA TAHUN 2016-2018," no. 2017, hlm. 1–12, 2020.

[17]   G. G. K. Ardiansyah, "Pengaruh Profitabilitas, Ukuran Perusahaan, Leverage Dan Likuiditas Terhadap Nilai Perusahaan," *J. Paradig. Akunt.*, vol. 2, no. 1, hlm. 367, 2020, doi: 10.24912/jpa.v2i1.7165.

[18]   A. A. A. Kemara Dewi dan I. B. Badjra, "Pengaruh Profitabilitas, Aktiva Tidak Berwujud, Ukuran Perusahaan, Dan Struktur Modal Terhadap Nilai Perusahaan," *E-J. Manaj. Univ. Udayana*, vol. 6, no. 4, hlm. 254302, 2017.

[19] Shinta dan Agus Sihono, "Pengaruh Profitabilitas, Ukuran Perusahaan, Tingkat Utang dan Kualitas Audit Terhadap Agresivitas Pajak," *J. Ekon. Bisnis Dan Manaj.*, vol. 1, no. 4, hlm. 210–222, 2023, doi: 10.59024/jise.v1i4.407.

[20] A. F. Dinah dan Darsono, "Pengaruh Tata Kelola Perusahaan, Profitabilitas, Dan Penghindaran Pajak Terhadap Nilai Perusahaan," *Pengaruh Tata Kelola Perusah. Profitab. Dan Penghindaran Pajak Terhadap Nilai Perusah.*, vol. 6, no. 3, hlm. 1–15, 2017.

[21] B. Hudha dan D. C. Utomo, "PENGARUH UKURAN DEWAN DIREKSI, KOMISARIS INDEPENDEN, KERAGAMAN GENDER, DAN KOMPENSASI EKSEKUTIF TERHADAP PENGHINDARAN PAJAK PERUSAHAAN (Studi Empiris pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia 2017-2019)," *Diponegoro J. Account.*, vol. 10, no. 2018, hlm. 2337–3806, 2021.

[22] K. Diviariesty dan N. K. A. M. Cahyani, "Pengaruh Capital Intensity, Inventory Intensity, Profitabilitas, dan Leverage Terhadap Agresivitas Pajak," *WACANA Ekon. J. Ekon. Bisnis Dan Akunt.*, vol. 23, no. 1, hlm. 44–58, 2024, doi: 10.22225/we.23.1.2024.44-58.

[23] S. Mudjijah, Z. Khalid, dan D. A. S. Astuti, "Pengaruh Kinerja Keuangan Dan Struktur Modal Terhadap Nilai Perusahaan Yang Dimoderasi Variabel Ukuran Perusahaan," *J. Akunt. Dan Keuang.*, vol. 8, no. 1, hlm. 41–56, 2019.

[24] A. Napitupulu dan R. D. Napitupulu, "ANALISIS KINERJA KEUANGAN DAN PENGARUHNYA TERHADAP PRICE EARNING RATIO (PER) PADA PT. HOLCIM INDONESIA TBK DI BURSA EFEK INDONESIA (BEI)," 2018.

[25] Yunanda, "PENGARUH ANALISIS KINERJA KEUANGAN PERUSAHAAN TERHADAP RATE OF RETURN SAHAM SYARIAH (Studi Pada Perusahaan yang Terdaftar di Jakarta Islamic Index Tahun 2017-2019)," *Skripsi*, hlm. 6, 2021.

[26] S. M. Apriliawati, U. Nadhiroh, dan U. Jatmiko, "Pengaruh DAR, Sales Growth & Firm Size Terhadap ROA Perusahaan Subsektor Apparel & Luxury Goods BEI (2017-2019)," *Akt. J. Manaj. Dan Bisnis*, vol. 4, no. 1, hlm. 17–22, 2023, doi: 10.56393/aktiva.v3i2.1031.

[27] I. Ghozali, "Aplikasi Analisis Multivariate IBM SPSS 25," dalam *Aplikasi Analisis Multivariate IBM SPSS 25*, 2018, hlm. 161–167.

[28] imam Ghozali, *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23*. Semarang: Badan Penerbit Universitas Diponegoro, 2018.

[29] I. Ghozali, *Aplikasi Analisis Multivariete dengan Program IBM SPSS 23*, Cetakan VI. Semarang: Badan Penerbit Universitas Diponegoro, 2016.

[30] Sugiyono, *Metode Penelitian Kombinasi (Mixed Methods)*, 6 ed. Bandung: Alfabeta, 2014.

[31] P. Marusya dan M. Magantar, "Pengaruh Struktur Modal Terhadap Profitabilitas Pada Perusahaan Tobacco Manufactures yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2008-2015," *J. Berk. Ilm. Efisiensi*, vol. 16, no. 03, hlm. 484–492, 2016.

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