



# Capital Structure, Financial Performance, and Macroeconomic Conditions: Evidence from Indonesia Stock Exchange

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## ARTICLE INFO

### Article History:

Received: 24 March 2024

Final Revision: 20 April 2024

Accepted: 02 May 2024

Online Publication: 04 May, 2024

## KEYWORDS

Capital Structure, Financial Performance, Macroeconomics Conditions, Firm Value

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## A B S T R A C T

This study aims to analyze the influence of capital structure, financial performance, and macroeconomic conditions on firm value (Tobin's Q) in companies included in the Kompas 100 index (100 companies with good liquidity and large market capitalization) listed on the Indonesia Stock Exchange between 2018 and 2022. A total of 50 companies with historical data for 5 years were analyzed amounting to 250 observational data. The data analysis method used is panel data regression analysis processed using Eviews software version 10. The results show that financial performance has a significant positive effect on firm value, and capital structure has a negative but not significant effect on firm value. Among the macroeconomic variables, inflation has a negative influence while interest rates have a positive influence, both of which are significant on firm value. However, GDP growth shows an influence that is not significant towards changes in firm value. The determinants of firm value are very complex thus each company needs to identify the key factors influencing them. It is recommended for further research to include corporate governance and firm growth variables.

## 1. INTRODUCTION

### 1.1. Research Background

Firm value is one of the important factors in the company. Every company wants to achieve high company value because this is an indicator of a well-developed company that will attract investors. Increasing company value is the main goal of company management, but this cannot be achieved without maximum effort from all aspects of the company [1]. High company value is also a reflection of investor confidence in the company. The higher the company value, the higher the profit obtained by shareholders (investors) [2]. Several factors can affect the value of the company, both internal factors (company financial performance) and external factors (GDP, interest rates, inflation, etc.).

Capital structure is usually calculated by comparing the level of debt to the company's equity. Determining the composition of this debt is very important because it is alleged to have a very significant influence on firm value. The financing decision is one of the most important decisions for corporate finance. This decision involves the efficient composition of the various

available sources of financing (debt vs equity) to minimize the weighted average cost of capital [3]. The cost of capital of using greater debt in the capital structure (high leverage) will increase the financial risk of the company. As a result, investors will demand a higher rate of return to compensate for this greater risk. But in the signal theory developed by Ref. [4] higher debt utilization can be a positive signal to the market because the company is considered to be running well and can generate profits and management is confident that it will be able to repay the loan.

Modigliani and Miller proposed the capital structure theory in 1958. According to this study, the combination of capital structure does not affect business value (an irrelevant concept). Asset allocation (investment) decisions are the most important aspect influencing a company's worth.. Asset allocation (investment) decisions are the main factor determining the value of the company. Modigliani and Miller's (1958) argument relies on very rigid assumptions that are unrealistic, specifically that capital markets function perfectly, all investors share the same expectations about asset performance, and there are no taxes or costs associated with trading and transacting financial assets. Under real market conditions, these assumptions become unrealistic. Modigliani and Miller developed their second



viewpoint in 1963, taking into account the tax shelter benefit obtained by integrating debt into the capital structure. According to this contemporary viewpoint, corporate management may wish to incur greater debt to raise shareholder wealth, as measured by company value. Because rising debt allows the company to pay less tax, it generates a higher net profit for investors and raises the company's value.

Several studies demonstrate that optimum capital structure has a favorable and significant influence on business value according to ref. [5] [6][7][8]. This study lends credence to the notion of trade-off theory, which claims that enterprises should balance the advantages and costs of debt.

Some additional research discovered a negative association between capital structure and business value in East African nations and Pakistan. According to Ref. [9][10] this is consistent with the pecking order hypothesis, which suggests that high debt can lower business value. Ref. [7] found that the effect of capital structure on firm value is non-linear, which means that each company should have an optimal capital structure.

A company's financial performance, as measured by its ability to generate profits from its invested capital, is a factor also presumed to play a major role in increasing firm value. Profitability is a metric of a company's operational efficiency, and it becomes one of the key considerations for investors when deciding whether to invest in a certain company. This arises because investors generally tend to prefer companies that can efficiently produce optimal profits. Companies that can continually demonstrate strong bottom-line profitability and deliver returns on capital tend to attract greater investor interest and demand. As a result, robust and consistent profit drivers and profit levels lead to higher company valuations, as investors bid up share prices. Therefore, strong and improving financial performance directly impacts firm value for publicly listed companies. With higher profitability levels and returns on equity, combined with efficient productivity, companies can drive enhanced market capitalizations and overall firm value over time. This indicates a positive relationship between profitability and firm value [11][12]. Several studies show that Return on Assets (ROA) has a significant effect on firm value [13][14][15].

Macroeconomic indicators have a major influence on firm value [16]. Macroeconomic factors such as GDP, inflation, and interest rates will have an impact on firm value. A high GDP level reflects the good economic growth of the community so that people's purchasing power increases. This encourages an increase in sales and company profits which in turn also increases the company's value. However, research by Ref. [17] on manufacturing companies in Kenya found that GDP does not significantly affect firm value. In Addition, according to Raf. [18] shows a significant negative impact of GDP growth on firm value. In contrast to inflation and interest rates which have a negative impact on firm value. High inflation certainly has an impact on people's purchasing power which has decreased, and the company's operating costs have increased. Likewise, higher interest rates will increase the company's cost of capital, thus having a negative impact on profitability and firm value.

Ref. [19] in their research on non-financial companies in Ghana found that inflation has a negative impact on financial performance and firm value. They advise that the government's overarching economic goals of promoting gross domestic product growth and keeping inflation low should match up with companies' aims to increase their value and profitability.

Additionally, they recommend that institutional investors, like mutual funds or pension funds, should allocate their assets in a way that reduces the risk of inflation-eroding returns while allowing them to benefit from upswings in economic expansion. In contrast, research in Kenya conducted by Ref. [17] states that inflation has a positive effect on company performance and firm value but interest rates have a negative effect. According to [20] also conducted research linking interest rates with firm value and found that there is a negative and significant relationship between interest rates and firm value.

This study took a sample of companies included in the Compass 100 index listed on the Indonesia Stock Exchange for the period 2018-2022. Index 100 companies describe companies that have large market capitalization and high liquidity where the movement of the Kompas 100 Index illustrates investor expectations of future stock price movements.

## 1.2. Literature Review

### 1.2.1. Signaling Theory

Signalling theory was developed by Spence (1973) to explain how parties with asymmetric information can communicate with each other and send signals about their quality. This theory focuses on actions taken by parties with superior information (usually sellers) to send signals to other parties (usually buyers). The signal received by investors can be a positive signal or a negative signal. When a company issues new shares, the signal received by investors is usually a negative signal because investors assume that the company is unable to generate good profits or is experiencing losses. But when the company uses funding from debt, investors will accept it as a positive signal that the company is considered to have the ability to pay these obligations.

By understanding the signals in the financial statements, investors can make more informed investment decisions according to the fundamental conditions and prospects of the company [21]. Annual financial statements are a means for companies to communicate with investors and shareholders. The financial statements contain details of the decisions and actions taken by the company's management to realize the goals and interests of the company's owners. The information in the annual financial statements helps investors make decisions on where to invest their capital. When new financial information or data is released, capital market participants and investors will analyze whether the information is a positive or negative signal for the company's prospects. If the financial data shows an increase in sales, profitability or growth prospects of the company, it is considered a positive signal that can increase investor interest. Conversely, a decline in financial performance, losses, or gloomy projections may be considered a negative signal that makes investors withdraw their capital.

### 1.2.2. Theory of Modigliani Miller

Academic study on the link between capital structure and business value has yielded several conceptual and empirical ideas. The pioneer is Modigliani and Miller Theory (1958), also known as "MM Theorem", which states that there is no relationship between a firm's capital structure and its firm value (assuming no taxes). This is known as Proposition I of MM Theory. According to Ref. [22] also explains that MM proves that the choice between debt or equity financing has no impact on firm

value. Therefore, company management does not need to think about the proportion of debt and equity because, in a perfect market, the combination of both is the same.

However, the MM Irrelevance Theorem is founded on limiting assumptions that do not correspond to reality. When those assumptions are eliminated, the choice of capital structure becomes a key predictor of business value. In a second research, MM amended their initial argument, known as Proposition II, which states that in the presence of taxes, companies choose to employ more debt to improve company value because of tax savings. This implies that profitable enterprises should borrow more to shelter income from corporation taxes [23].

### 1.2.3. *Trade-off Theory*

Empirical research on corporate capital structure is often based on two primary complementary theories, the Trade-Off Theory and the Pecking Order Theory [24]. The essence of the Trade-Off Theory is that there is an optimal capital structure that balances the benefits and costs of debt. If all funding comes from debt, there will be high bankruptcy costs [25]. Therefore, companies cannot be fully financed by debt.

This theory considers the balance between the tax-saving benefits of debt and the possibility of higher interest costs and bankruptcy risk if the debt is too large [26]. Trade-off theory stresses the existence of a target debt-to-equity ratio that maximizes business value. Any variation from the objective must be readjusted [27]. This target capital structure is specific to each firm and may change over time according to economic conditions and firm strategy.

According to this idea, the marginal tax advantage of more debt should equal the projected marginal bankruptcy cost [28]. The Trade-Off Theory solves the shortcomings of earlier models by including the impacts of bankruptcy costs and debt tax advantages in capital structure decisions. According to this theory, the ideal debt-to-equity ratio is reached by balancing the tax-saving benefits of debt against the risk of financial suffering due to bankruptcy [29].

### 1.2.4. *Pecking Order Theory*

In contrast to the Trade-Off Theory which emphasizes the use of debt to increase firm value. Pecking Order Theory prioritizes the use of own capital to finance the company's operational and investment activities. When external funding is needed, this theory suggests that companies should use debt rather than issuing new shares, because the cost of debt information is relatively lower [30].

The theory developed by Myers (1983) explains that companies must prioritize sources of funds based on the level of cost efficiency. The order of funding starts from retained earnings, then debt, and finally the issuance of new shares. This is because internal funding is considered cheaper than external. The goal is to maximize firm value with the lowest cost of capital [26][31][32].

According to Ref. [25], companies do not have a specific capital structure target because companies choose leverage based on financing needs. Debt is only used if internal funds are insufficient, not because of benefits such as tax savings. Profitable companies tend to use less debt because they can finance investment from retained earnings. High debt generally occurs in companies with large investment needs exceeding the capacity of their retained earnings [33]. Although the Pecking

Order Theory is considered dominant in the academic literature [34], empirical research results in various countries show mixed supporting evidence for both Pecking Order and Trade-Off Theory [35].

### 1.2.5. *Macroeconomic Conditions*

The GDP growth rate is regarded as a measure of leading indicators and macroeconomic performance, with a significant influence on the unemployment rate. As a result, a high level of GDP is thought to boost the company's financial performance, including increased returns and value. At first, it seems logical that when a country's economy is growing, companies in the country tend to generate higher profits. Therefore, stock prices in the stock market should also increase when the economy is growing. However, studies show that at least in China, the growth rate of Gross Domestic Product (GDP) is not always followed by a rise in stock prices. So even though the Chinese economy is growing, stock prices there are not always increasing [36].

Interest rates can affect the value of the company in several possibilities that can occur, with interest rates that tend to be lower will reduce the company's operating costs which will have an impact on increasing returns to increase the value of the company, and vice versa. When interest rates are high it also makes investors prefer to invest in safer means such as bonds and other banking products rather than investing in the capital market with uncertain returns, this of course has an impact on decreasing stock prices so it will also reduce the company's value. Some studies show a negative and significant relationship between interest rates and firm value [37]–[39]. In contrast to the results of studies that state a negative relationship between interest rates and firm value, some studies also produce a positive relationship. Research by [40] in the United States, [41] in Jordan, and [42] in Bangladesh found that interest rates have a positive effect on firm value.

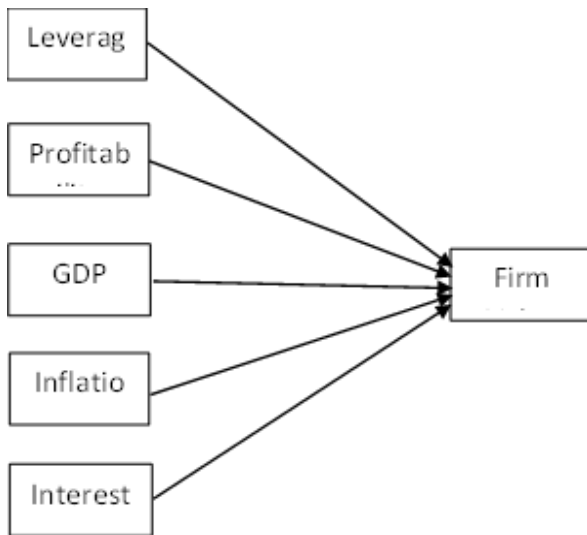
### 1.2.6. *Financial Performance*

Financial performance is a description of the financial condition of a company that is analyzed by financial analysis tools. Financial performance is important to assess the extent to which the company has carried out using the rules of financial implementation properly and correctly [43]. Financial performance can be measured by various financial ratios such as profitability, liquidity, solvency, activity, and capital. These ratios are used to analyze and assess the financial performance of a company. One measure of the company's financial performance that is most often considered is profitability, which is a ratio used to determine the company's ability to generate profits.

There is a close relationship between profitability and firm value. Profitability reflects the company's ability to generate profits. The higher the level of profit generated, it will naturally increase the value of the company. This indicates a positive relationship between profitability and firm value [11], [12]. Several studies have found that Return on Assets (ROA) has a significant effect on firm value. In other words, the higher the ROA level of a company, the higher the value of the company [13]–[15].

### 1.2.7. *Conceptual Framework*

Based on the literature review above, a conceptual framework can be made in Figure 1.



**Figure 1.** Conceptual Framework

Based on the conceptual framework above, the hypotheses of this study are:

- H1: Leverage has an influence on firm value
- H2: Profitability has an influence on firm value
- H3: GDP has an influence on firm value
- H4: Inflation has an influence on firm value
- H5: Interest Rate has an influence on firm value

### 1.3. Research Objective

This study aims to analyze the influence of capital structure, financial performance, and macroeconomic conditions on firm value (Tobin's Q) in companies included in the Kompas 100 index (100 companies with good liquidity and large market capitalization) listed on the Indonesia Stock Exchange between 2018 and 2022

## 2. METHODS

### 2.1. Population and Sample

The population of this research consists of firms registered on the Indonesia Stock Exchange. This study focuses on firms in the Kompas 100 index, which tracks the performance of 100 companies with strong liquidity and market capitalization. The Kompas 100 index is updated every 6 months, in February and August. Samples were taken using a purposive sampling technique based on certain criteria, namely companies that have never left the Kompas 100 index during the 2018-2022 research period, only taking data from non-financial companies because financial companies tend to have very different debt ratio values from other companies and companies that have complete data following the research variables.

**Table 1** Sample Criteria

Sample Criteria	Does not match the Criteria	Matches The Criteria
1. Companies included in the Kompas 100 index		100
2. Companies that have never been out of the Kompas 100 index	(38)	62
3. Non-financial companies	(12)	50
4. Observation years		5
5. Total research data	5 years x 70 issuers	250
6. Outlier data		-
7. Total research data for the period 2018-2022		250

### 2.2. Operationalization and Measurement Variable

How to operationalize and measure the variables in this study can be seen in Table 2. The table shows how each variable is conceptually defined and operationally measured in this study.

### 2.3. Analytical methods

The data used in this study is a combination of time series and cross-section data. Therefore, the appropriate analysis technique is panel data regression [49]. Panel data regression can analyze data with time dimensions and cross-sections simultaneously. The analytical tool used is Eviews software version 10. The panel data regression equation used in this study is as follows:

$$FV_{it} = \alpha_{it} + \beta_1 [Lev]_{it} + \beta_2 [Prof]_{it} + \beta_3 [GDP]_{it} + \beta_3 [Inf]_{it} + \beta_3 [Int]_{it} + \varepsilon_t$$

In panel data regression analysis, three regression models can be used: pooled least squares, fixed effect model, and random effect model. Several methods, including the Chow Test, Hausman Test, and Lagrange Multiplier Test, are used to choose the best model among these three. The Chow test helps decide whether a pooled least squares model or a fixed effects model is more appropriate. The Hausman test helps compare a fixed versus random effects model to see which is better suited. Meanwhile, the Lagrange Multiplier test lets you determine if a pooled least squares or a random effects model is more fitting. In short, the Chow, Hausman, and Lagrange Multiplier tests allow selection between different types of econometric models.

**Table 2** Operationalization and Measurement

Variable	Code	Indicator	Formula	Reference
Capital Structure	LEV	Interest-bearing debt to equity	$\frac{Long - term\ debt + Short - term\ debt}{(bank\ debt)/equity}$	[44]
Profitability	ROE	Return On Equity	Earnings after taxes to total equity	[45]
GDP Growth	GDP	Income on production factors	Annual GDP Growth	[46]
Inflation	INF	Consumer Price Index	Annual CPI	[47]
Interest Rate	INT	Lending Interest Rate	Annual Interest Rate	[32]
Firm Value	FV	Tobin's Q	$\frac{(the\ equity\ market\ value)}{(the\ equity\ book\ value)}$	[48]

By conducting these three tests, the most suitable and appropriate panel data regression model can be determined to be used in the panel data regression analysis in this study. Choosing the right model is important so that the panel data regression results are valid and can be interpreted correctly.

### 3. RESULT AND DISCUSSION

#### 3.1. Descriptive Analysis

Descriptive statistics of the research variables are presented to provide an overview of the data used. Descriptive statistics include average value (mean), minimum value, maximum value, and standard deviation.

The mean value shows the average value of all observations for each variable. The minimum and maximum values show the lowest and highest values of the variable observations. Standard deviation measures how far the data is spread from its mean value.

With these descriptive statistics, it can be seen the distribution and variation of data from each research variable. This is useful for understanding the characteristics of the data before further analysis is carried out with inferential statistical analysis tools. Descriptive statistics provide initial information about research data.

**Table 3** Descriptive Statistic

Variables	Mean	Maximum	Minimum	Deviasi Standard
Leverage	0.294	3.117	0.019	0.283
Profitability	0.261	3.198	-1.467	0.401
GDP	2.588	4.640	-2.890	2.797
Inflation	2.982	5.510	1.680	1.375
Interest Rate	4.750	6.000	3.500	0.977
Tobin's Q	1.548	9.500	0.530	1.233

The average leverage of 0.294 indicates an average debt-to-equity ratio of 29.4%. The maximum value of leverage of 3.117 indicates a company with the highest debt-to-equity ratio of 311.7%. The minimum value of 0.019 indicates the company with the lowest debt-to-equity ratio of 1.9%. The standard deviation of

0.283 shows that the distribution of leverage data is quite varied. The variable leverage ratio with a high standard deviation may be caused by differences in debt policies between companies and the different financial conditions of the companies.

The average profitability of 0.261 indicates an average net profit margin of 26.1%. The maximum value of 3.198 indicates the highest net profit margin of 319.8%. The minimum value of -1.467 shows the deepest net loss of 146.7%. The standard deviation of 0.401 shows the variation in profitability is quite high. High variation in profitability can be caused by differences in operating and financial performance between companies and the industry conditions of each company.

The average GDP growth was 2.588%. The highest growth was 4.64% and the lowest was -2.89%. The standard deviation is quite high at 2.797%, indicating that GDP growth fluctuations are quite varied. High GDP fluctuations may be influenced by Indonesia's macroeconomic conditions, which experienced ups and downs, especially in 2020, which experienced a very sharp decline due to the pandemic that hit all countries in the world. The average inflation rate was 2.982%. The highest inflation rate is 5.51% and the lowest is 1.68%. The standard deviation of 1.375% shows that the distribution of inflation does not fluctuate too much. Indonesia's inflation rate is relatively stable due to Bank Indonesia's controlled monetary policy.

The average interest rate is 4.75%. The highest interest rate is 6% and the lowest is 3.5%. The relatively small standard deviation of 0.977% shows that interest rates are quite stable. The maintained BI benchmark interest rate with a small standard deviation indicates BI consistent and prudent monetary policy. The average Tobin's Q ratio is 1.548. The highest value is 9.5 and the lowest is 0.53. The standard deviation of 1.233 shows that the variation in Tobin's Q is quite high. With an average Tobin's Q value above 1, it shows that companies in the Kompas 100 index are trusted enough by investors to invest in these companies. While the highly variable Tobin's Q value indicates different market assessments of company performance over time.

#### 3.2. Panel Data Regression

This study uses panel data regression analysis since the data is both time series and cross-sectional. The analysis was carried out using Eviews software to test the study hypothesis. Before

hypothesis testing, the most appropriate panel data regression model is chosen using the Chow Test, Hausman Test, or Lagrange Multiplier Test. The three tests are designed to determine if the Pooled Least Squares, Fixed Effects, or Random Effects models are best suited for panel data in this study. Choosing the suitable model is critical for ensuring that regression findings are accurate and can be correctly understood when testing the research hypothesis.

First, model selection is carried out using the Chow Test. Table 4 is the result of model selection using the Chow test.

**Table 4** Chow Test

Effects Test	Statistic	d.f.
Cross-section F	12.728	(49.195)
Cross-section Chi-square	358.670	49

The Chow Test results show a probability value of 0.000, which is smaller than the significance level of 0.05. This means that the Fixed Effects model is better to use than the Common Effects model for panel data regression in this study.

Furthermore, the model selection test is carried out using the Hausman test. The following are the results (Table 5):

**Table 5** Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.
Cross-section random	0.000	5

The Hausman Test results show a probability value of 1,000, where this figure is greater than the significance value of 0.05. This means that the Random Effect model is better to use than the Fixed Effect model. The last test in the model selection stage is to conduct the Lagrange Multiplier Test. The following are the results of the Lagrange Multiplier Test (Table 6):

**Table 6** Lagrange Multiplier

Null (no rand.effect)	Cross-section One-sided	Period One-sided	Both
Breusch-Pagan	223.247 (0.000)	2.450 (0.114)	225.746 (0.000)
Honda	14.941 (0.000)	-1.581 (0.943)	9.447 (0.000)
King-Wu	14.941 (0.000)	-1.581 (0.943)	2.585 (0.005)
SLM	15.106 (0.000)	-0.676 (0.751)	-- --
GHM	-- --	-- --	223.247 (0.000)

The Lagrange Multiplier test yields a Breusch-Pagan probability value of 0.000. This probability figure is lower than the 0.05 significance level used. Thus, the Lagrange Multiplier Test results indicate that the Random Effects Model is significantly better to use than Pooled OLS in the panel data regression for this study.

The results of panel data regression analysis using the Random Effect Model can be seen in Table 7. The LEV coefficient is -0.137653, with a p-value of 0.4898 > 0.05. The regression findings indicate that the LEV coefficient has a negative but insignificant influence. This is in line with the research of [50]. It also discovered insignificant and negative effects of leverage on company value (measured by Tobin's Q).

These findings suggest that rising debt does not always boost corporate value.

**Table 7** Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.682	0.285	2.398	0.017
LEV	-0.138	0.199	-0.692	0.490
ROE	0.393	0.143	2.754	0.006
GDP	-0.027	0.020	-1.340	0.182
INFLASI	-0.091	0.044	-2.071	0.039
INT	0.241	0.065	3.728	0.000

Dependent Variables: Tobin's q

The ROE coefficient is 0.393248, with a p-value of 0.0063 (<0.05). This implies that ROE has a positive and meaningful effect. These results are supported by research from [51] Hang (2018) illustrates that ROE has a favorable impact on company value. The higher the profitability (ROE), the better the company's prospects are deemed, resulting in a favorable influence on its market value.

GDP has a negative but insignificant influence, as indicated by the coefficient of -0.027435 and the p-value of 0.1815, which is more than 0.05. Research from [52] also found an insignificant negative relationship between GDP and firm value. Macroeconomic growth does not necessarily reflect the performance of individual companies.

The inflation coefficient of -0.091153 is significant at 5% alpha (p-value 0.0394). Research from [53] in Spain shows inflation has a negative effect on the company's market value. Supporting the regression results where the inflation coefficient has a significant negative effect.

The coefficient of interest rate (INT) 0.241321 is significant at 5% alpha (p-value 0.0002). Interest rates have a positive effect because higher interest rates usually reflect good economic conditions, so they correlate with high stock prices and company market value. Research by [54] which examined non-financial companies on the Amman Stock Exchange found inflation had a significant positive effect on Tobin's Q. High inflation encourages investors to invest in the capital market so that demand for shares increases and the company's value also increases.

#### 4. CONCLUSION

The estimation results show that profitability, as measured by Return on Equity (ROE), has a significant positive effect on Tobin's Q. The higher the level of profitability of a company, the higher its market value compared to book value. The higher the profitability level of a company, the higher its market value compared to book value. On the other hand, inflation is shown to have a significant negative effect on Tobin's Q. A high inflation rate tends to reduce the company's market value relative to its book value. Meanwhile, interest rates have a significant positive effect on Tobin's Q. Leverage measured by the ratio of debt to equity and economic growth (GDP) is not proven to have a significant effect. Overall, profitability, inflation, and interest rates are factors that are proven to affect the market value of the company relative to its book value.

Leverage does not have a significant effect because in assessing the prospects of a company, investors do not only look at the leverage aspect. In addition to leverage, investors will also

consider profitability, liquidity, sales growth, and other fundamental factors in assessing the company's prospects. Therefore, high leverage does not necessarily make the company value increase in the eyes of investors. Meanwhile, the use of debt at a certain level may be necessary for companies to finance business expansion and new investments. However, an increase in debt that is too high and excessive will increase the risk of default of the company itself. Therefore, excessive leverage does not always increase firm value.

GDP, which reflects macroeconomic growth, has no significant effect because it is aggregative for the economy as a whole. GDP does not necessarily reflect the individual performance of each company specifically. Macroeconomic growth is not always followed by an increase in individual company performance. Firm value is more determined by the micro factors of the company itself such as profitability, liquidity, growth prospects, and other aspects, not by macroeconomic factors such as GDP. Therefore, GDP has no significant effect on firm value in this study.

The limited amount of observational data, the period of the study, and the analysis model used are also potential causes of why the influence of leverage and GDP is not significantly detected. Further research development is needed to capture the influence of these two variables.

Future research can expand the research sample not only to non-financial companies but also to financial companies and BUMN. Thus the research results can be generalized to all public companies in Indonesia. Extend the research period for example 10 years so that the regression results are more accurate in capturing the influence of macroeconomic variables. Long-term panel data is better at estimating the effects of inflation and interest rates. It is also better to conduct a comparative study in several ASEAN countries to see if the research results are consistent across countries.

## ACKNOWLEDGMENT

I am truly grateful for the time and effort dedicated by these contributors in graciously lending their attention, carefully reading through the material, and providing constructive feedback.

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