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### Effect of Liquidity, Profitability, and Size of Companies on Firm Value

*Efecto de la liquidez, la rentabilidad y el tamaño de las empresas de valor firme*

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#### RESUMEN

Este estudio tiene como objetivo examinar y analizar el efecto de la liquidez, la rentabilidad, el tamaño de la empresa y su valor en la estructura de capital. La muestra en este estudio fueron 15 compañías bancarias que cotizan en la Bolsa de Indonesia en el período 2014-2018. El método de análisis utiliza el programa Eviews 8.0. Los resultados de este estudio indican que la liquidez, la rentabilidad y el tamaño de la empresa influyen significativamente en la estructura del capital. La estructura de capital no es un mediador de la influencia de la liquidez y la rentabilidad en el valor de la empresa.

**Palabras clave:** Estructura de capital, Liquidez, Rentabilidad, Tamaño de la empresa.

#### ABSTRACT

This study aims to examine and analyze the effect of liquidity, profitability, the size of the firm and its value in capital structure. The sample in this study was 15 banking companies listed on the Indonesian Stock Exchange in the 2014-2018 period. The method of analysis used was Eviews 8.0 program. The results of this study indicate that liquidity, profitability, and firm size significantly influence capital structure. Capital structure is not a mediator of the influence of liquidity and profitability on firm value, while the capital structure is a mediator of the effect of firm size on firm value.

**Keywords:** Capital structure, Firm size, Liquidity, Profitability.

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## INTRODUCTION

In the current era of globalization, business people in the business world increasingly compete to be able to achieve the goals to be achieved by the company. The banking industry has several challenges that must be faced in terms of tightening liquidity, improving capital structure, competition in the climate of net interest margins, developing fee-based income, distortion, cost efficiency, and digitalization. Firm value is a benchmark for investors to assess the success of a company. Research Yanti & Darmayanti (Yanti & Darmayanti: 2019) shows that liquidity can affect the value of the company, the higher the level of company liquidity, the better the company's position in the eyes of creditors because the company is considered to be able to pay obligations to creditors on time, while research conducted by Pribadi (Pribadi: 2018) shows that liquidity does not affect firm value. Research Septiani & Suryana (Septiani & Suryana: 2018) shows that liquidity affects the capital structure and supports the pecking order theory which states that companies with higher liquidity choose to fund with internal funds. The research is not in line with research conducted by Santoso & Priantinah (Santoso & Priantinah: 2016) which shows that liquidity does not affect capital structure.

Profitability affects the value of the company, causing a positive response from investors who can make an increase in stock prices in the market which ultimately increases the value of the company in the eyes of investors Yanti & Darmayanti (Yanti & Darmayanti: 2019). Unlike the research conducted by Pribadi (Pribadi: 2018) and Nugroho & Abdani (Nugroho & Abdani: 2017) which shows profitability does not affect firm value. The profitability of the previous period was an important factor in determining capital structure. Empirical evidence conducted by Guna & Sampurno (Guna & Sampurno: 2018) shows that profitability affects the capital structure. This supports the pecking order theory which states that the higher the profitability of a company, the lower the use of debt. Research Septiani & Suryana (Septiani & Suryana: 2018) states that profitability does not affect capital structure.

Besides liquidity and profitability, other factors affect the value of the company, namely the size of the company. Based on the research of Oktaviarni & Suprayitno (Oktaviarni & Suprayitno: 2018) that shows the size of the company affects the value of the company because the larger the size of the company, the easier it will be for companies to obtain funding sources, while the results of the study Pribadi (Pribadi: 2018) show that the size of the company does not affect the value of the company. Empirical evidence of research Marfuah & Nurlela (Marfuah & Nurlela: 2019) shows that firm size influences capital structure. This means that the size of the company is very influential on the capital structure, especially related to the ability to obtain loans, while research conducted by Purwohandoko (Purwohandoko: 2017) shows that the size of the company does not affect capital structure.

High and low capital structure has a direct risk to the condition of the company. The funding policy to be taken by management is influenced by the interests of shareholders. Management interests and shareholder interests that are not in line cause agency conflicts. Research Kristianti (Kristianti: 2018) and Yanti & Darmayanti (Yanti & Darmayanti: 2019) show that capital structure influences the firm value and supports trade-off theory that predicts a positive relationship between capital structure and firm value with the assumption that the value of companies with debt will increase with the increase in debt levels, while research did Dhani & Utama (Dhani & Utama: 2017) and Prima et al (Prima et al.: 2018) states that capital structure does not affect firm value.

Previous studies have shown inconsistent results. This has made the writer motivated to conduct further research on the factors that influence the value of the company in banking companies in 2014-2018. In addition to its role in managing payment traffic and its function as an intermediary institution, the banking sector is also a means of transmitting monetary policy because banking company shares are one of the stocks that investors are interested in investing in, so this research is expected to produce a better level of generalization compared to research beforehand and can provide additional insights for both investors and banking sector companies in making investment decisions and funding policies.

## **LITERATURE REVIEW**

### **Agency theory**

Agency theory is a relationship that occurs between shareholders as the owner of the company (principal) with the management as an agent. In this case, shareholders give responsibility to the management to manage and run the company so that the company's goals are achieved. In practice, in companies often conflicts occur called agency conflicts due to related parties namely principals (who give contracts or shareholders) and agents (who accept contracts and manage principal funds) have conflicting interests (Perdana & Raharja: 2014).

### **Trade-off theory**

Trade-off theory shows that the value of companies with debt will increase with increasing debt. However, the value starts to decrease at a certain point (Hanafi: 2016). At this point, the debt level is the optimal level. The Tradeoff Theory is a combination of Modigliani and Miller's capital structure theory by including bankruptcy costs and agency costs that indicate the existence of tax savings from debt with bankruptcy costs.

### **Pecking order theory**

Pecking order theory can explain why companies that have high levels of profit have smaller debt levels. The small debt level is not because the company has a small target debt level, but because they do not need external funds. The high level of profit makes their internal funds sufficient to meet investment needs (Hanafi: 2016).

### **Theory of information asymmetry and signaling**

Signaling theory is interpreted as an action taken by a company to guide investors about how management views the company's prospects (Brigham & Houston: 2011). The signal theory states that not only managers have information about the company's profitability and prospects. Investors also have the same information about the company's profitability and prospects.

### **Bankruptcy theory**

Bankruptcy theory is the failure of a company to run a company's operations to generate profits. Bankruptcy is also often called company liquidation or company closure or insolvency.

### **Firm value**

The main concept that is considered is the value of the company defines the value of the company as investors' perceptions of the level of success of a company which is reflected in the company's stock price. The company is experiencing pressure from various parties to increasingly pay attention to environmental, social, and corporate governance issues. Communication and openness to shareholders become very important in building firm value. The wealth of shareholders and companies is shown by the price of shares which is a reflection of investment decisions on funding and asset management. Rising stock prices reflect market confidence in the good prospects of the companies concerned in the future.

### **Liquidity**

Liquidity is a ratio that aims to measure a company's ability to meet its short-term obligations. A company that has high liquidity means that it can pay the short-term debt, so it tends to reduce total debt, which in turn capital structure will be smaller, so it can be said that liquidity affects the capital structure. By the Pecking Order Theory which suggests that managers prefer to use financing in the first order of retained earnings, then debt and finally the sale of new shares. This is supported by research conducted by Septiani & Suryana

(Septiani : Suryana: 2018). Based on the signal theory, the ability of a company to meet its short-term obligations will get a positive response by the stock market which causes the company's value to rise so that it can be said that liquidity affects the value of the company. This is supported by research Yanti & Darmayanti (Yanti and Darmayanti: 2019).

### **Profitability**

Profitability company is a picture that measures how well the company can generate profits from operational processes that have been implemented to ensure the continuity of the company in the future (Manoppo & Arie: 2016). The higher profits generated by a company will increase the creditor's confidence to provide loans and can increase investor confidence to invest capital, so it can be said that profitability influences capital structure. This supports the Pecking Order Theory which states that the higher the profitability of a company, the lower the use of debt. This is supported by research Guna & Sampurno (Guna & Sampurno: 2018). Based on the signal theory, the profits obtained by the company will be a signal from management to show the prospects of a company that can be seen based on the level of profits obtained by the company, so that profitability affects the value of the company, it is supported by research Yanti & Darmayanti (Yanti & Darmayanti: 2019).

### **Firm size**

Firm size is a total reflection of the assets owned by a company. Large companies can finance their investments easily because they have high sales growth rates and little asymmetric information occurs. This is by the Trade-Off Theory, the greater the company, the company can use more debt because the risk of bankruptcy of large companies is lower. The low risk of bankruptcy of large companies causes the cost of using large corporate debt is lower than that of small companies, thus encouraging companies to increase the use of more debt, so it can be said that the size of the company influences capital structure. This is supported by research by Marfuah & Nurlela (Marfuah & Nurlela: 2019). Large-scale companies tend to attract investors because they will impact the company's value later, so it can be said that the size of a company directly affects the value of the company. This is supported by the research of Oktaviarni & Suprayitno (Oktaviarni & Suprayitno: 2018) which shows the size of the company affects the value of the company because the larger the size of the company, the easier it is for companies to obtain sources of funding.

### **Capital structure**

Capital structure is a comparison of a company's long-term funding as indicated by a comparison of long-term debt to equity. Meeting the company's funding needs from its capital comes from share capital, retained earnings, and reserves. If the capital itself is still experiencing a shortage (deficit), it is necessary to consider funding from external companies, namely from debt (debt financing) (Meidiawati & Mildawati: 2016; Ríos et al.: 2019). In practice in the company conflicts often occur called agency conflicts due to related parties namely principals and agents who have conflicting interests. Based on the Trade-Off Theory which explains that if the capital structure of the company is below the optimal point, then every additional debt the company will make the company's value goes up. The problem is caused by the tax savings made by the company so that the capital structure can affect the value of the company. This is supported by the research of Kristianti (Kristianti: 2018) and Yanti & Darmayanti (Yanti & Darmayanti: 2019).

## **METHODS**

This study uses a causal descriptive and associative approach that aims to determine the effect of two or more variables. The type of data used in this study is sek data under the quantitative method. The population in this study is the banking sector companies listed on the Indonesia Stock Exchange in the 2014-2018 period

as many as 59 companies. The research sample of 15 banking companies with the purposive sampling method. The type of data used in this study is panel data. Data collection techniques used by researchers are nonparticipant observation. The research variables used consisted of independent variables, namely liquidity (X1), profitability (X2), and firm size (X3), while the dependent variable was firm value (Z), and the intervening variable was the capital structure (Y). Measurement of liquidity variables using Current Ratio (CR), profitability variables using Return on Assets (ROA), firm size variables using Log of Total Assets, firm value variables using Price to Book Value (PBV), and capital structure variables using Debt to Equity Ratio (DER). The method of analysis uses the Eviews 8.0 application program, namely descriptive statistics, panel data regression analysis, test suitability of panel data regression models, classic assumption tests, hypothesis testing, and path analysis.

## **RESULTS**

The results of testing the hypotheses of each variable are as follows :

### **Effect of liquidity on capital structure**

Hypotheses test results show that the value of t statistics = 3.246415 > t table = 1.99346 and the probability of showing a value smaller than 0.05, which is 0.0020, it can be interpreted Ho1 rejected and Ha1 accepted, which means liquidity has a positive and significant effect on capital structure. This is in line with the Pecking Order Theory which suggests that managers prefer to use financing in the first order of retained earnings, then debt, and finally the sale of new shares. The results of the study are also supported by Trade-Off Theory, which states that the use of debt at a certain level is used to get a trade-off between the cost of bankruptcy and the tax-shield.

### **Effect of Profitability on Capital Structure**

Hypotheses test results show that the value of t statistics = -2.453699 < t table = 1.99346 and the probability shows a value smaller than 0.05, which is 0.0172, it can be interpreted as Ho2 is rejected and Ha2 is accepted, which means profitability has a negative and significant effect on capital structure. This is consistent with the pecking order theory which states that companies with high profitability will use smaller debt because the company can provide sufficient funds through retained earnings assuming the dividends distributed to shareholders are fixed. If internal funds meet the needs of most funds, the company can reduce debt to a lower level.

### **Effect of firm size on capital structure**

Hypotheses test results show that the value of t statistics = 4.301808 > t table = 1.99346 and the probability shows a value smaller than 0.05, which is 0.0001, then it can be interpreted Ho3 is rejected and Ha3 is accepted which means that firm size has a positive effect and significant effect on capital structure. This is by the Trade-Off Theory, namely the larger the company, the company can use more debt because the risk of bankruptcy of large companies is lower. The low risk of bankruptcy of large companies causes the cost of using large corporate debt is lower than that of small companies, thus encouraging companies to increase the use of more debt.

### **Effect of liquidity, profitability and firm size on capital structure**

Hypotheses test results show that the value of F-statistics = 81.29218 > F table = 3.97 with a probability value (significance) of 0.000000 <  $\alpha$  = 0.05, then interpreted Ho4 is rejected and Ha4 is accepted which means liquidity (CR), profitability (ROA) and firm size (SIZE) together have a significant effect on capital structure. The goodness-of-fit test shows R square (R2) = 0.960388 and R2 adjusted = 0.948574.

### **Effect of liquidity on firm value**

Hypotheses test results show that the value of t statistics = 5.806725 > t table = 1.99394 and the probability shows a value smaller than 0.05, which is 0.0000, then it can be interpreted as Ho5 is rejected and Ha5 is accepted which means that liquidity has a positive and significant effect to the value of the company. Based on the signal theory the ability of a company to meet its short-term obligations will get a positive response by the stock market because it is considered capable of maintaining the company's performance so that it can cause the company's value to rise.

### **Effect of profitability on firm value**

Hypotheses test results show that the value of t statistics = -1.435406 < t table = 1.99394 and probability indicates a value greater than 0.05, which is 0.1567, it can be interpreted Ho6 is accepted and Ha6 is rejected, which means profitability does not affect significantly to the value of the company. The results of the analysis of researchers' factors that cause profitability do not affect the value of the company, namely the effectiveness of the use of assets owned by the company in generating net income after tax does not become a reference for investors in making investment decisions. Currently, banks are actively involved in money market operations, project funding, insurance business, leasing, mortgage funding, securities trading and other practices that make banks more vulnerable to various business risks,

### **Effect of firm size on firm value**

Hypotheses test results show that the value of t statistics = -8.536103 < t table = 1.99394 and the probability shows a value smaller than 0.05, which is 0.000, then it can be interpreted that Ho7 is rejected and Ha7 is accepted, which means firm size has a negative and significant effect to the value of the company. In terms of the firm size seen from the total assets owned by the company, which can be used for company operations. If the company has large total assets, the management is more flexible in using the existing assets in the company. The freedom that this management has is proportional to the worries that the owner has over his assets.

### **Effect of capital structure on firm value**

Hypotheses test results show that the value of t statistic = 5.486103 > t table = 1.99394 and the probability shows a value of less than 0.05, which is 0.000, it can be interpreted as Ho8 is rejected and Ha8 is accepted, which means that capital structure has a positive and significant effect on firm value. This supports the trade-off theory that predicts a positive relationship between capital structure and firm value, assuming tax benefits are still greater than bankruptcy costs and agency costs. In essence, the trade-off theory shows that the value of companies with debt will increase with increasing levels of debt.

## **DISCUSSION**

### **Effect of liquidity, profitability, firm size and capital structure on firm value**

Hypotheses test results show that the value of F-statistics = 82.81132 > F table = 3.12 and Ho9 is rejected and Ha9 is accepted which means liquidity (CR), profitability (ROA), firm size (SIZE) and capital structure (DER) together has a significant effect on firm value. Goodness-of-fit testing as measured by R square (R2) = 0.963792 and R2 adjusted = 0.952153.

Based on the results of the path analysis shows that; the direct effect of liquidity on firm value is 0.062700 and is significant, the indirect effect of liquidity on firm value through the capital structure is 0.002917 and it is significant, then the capital structure is not an intervening/mediating variable of the effect of liquidity on firm value; the direct effect of profitability on firm value of -0.005806 and not significant, the indirect effect of

profitability to firm value through a capital structure of -0.001161 and not significant, the capital structure is not an intervening/mediating variable of the effect of profitability on firm value; the direct effect of firm size on the firm value of -0.061831 and significant, the indirect effect of firm size on firm value through the capital structure is 0.006792 and is significant, so the capital structure is an intervening/mediating variable of the effect of firm size on firm value.

## **CONCLUSION**

Based on a review of research conducted on banking companies listed on the Indonesia Stock Exchange for the period 2014-2018, the results of the study indicate that liquidity, profitability, and firm size partially have a significant effect on capital structure. Liquidity, profitability, and firm size together have a significant effect on capital structure. Liquidity, firm size, and capital structure have a significant effect on firm value, while profitability does not affect firm value. Liquidity, profitability, firm size, and capital structure together have a significant effect on firm value. Capital structure is not a mediator of the effect of liquidity and profitability on firm value.

This research is expected to be able to contribute to the science of accounting and the development of the implementation of financial theories, especially those relating to factors that influence firm value. The results of the study are also expected to provide benefits to companies in determining funding decisions that affect the profitability and risks borne by shareholders and the magnitude of the expected rate of return to be able to achieve optimal profits.

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