

# **DECISION MAKING ON EQUITY FUNDING AND DEBT FINANCING FOR RETAIL COMPANIES IN INDONESIA**

## **(Test of Capital Structure Theory)**

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### **Abstract**

*Our aim is to examine whether market and operating performance influence firms' financing behavior as they are related to target leverage. Our focus on companies that issue both debt and equity enhances our ability to draw conclusions. This research method uses multiple linear regression using smart pls application. Consistent with Market Timing Theory, there is a negative influence between Market Value (PBV) and Equity (D.MS). This is because when the market value is high, the company cannot optimize its capital structure, because investors actually sell. This negative effect is supported by the positive influence between Market Value (PBV) and Dual Funding (D.TH + D. MS). So that in conditions of high market value, the company actually decides to do double funding. This is in accordance with the dynamic trade-off model proposed by Fischer et al. (1989) and Leland (1994). Multiple issuers offset deviations from targets resulting from accumulated profits and losses. Our results also imply that consistent with market timing, high stock returns increase the likelihood of equity issuance but have no effect on target leverage.*

**Keywords:** Capital structure; Leverage; Equity; ROA; Double Funding

### **1. Introduction**

#### **a. Background.**

The trade-off theory of corporate financing is built around the concept of a target capital structure that balances the various costs and benefits of debt and equity. These include the tax benefits of debt and the costs of financial distress (Modigliani and Miller, 1963), various agency costs of debt and equity financing (eg, Jensen and Meckling, 1976; Myers, 1977; Stulz, 1990; Hart and Moore, 1995), and the costs and benefits of signaling with capital structures (Ross, 1977).

In contrast, in the pecking order model of Myers and Majluf (1984), managers do not seek to maintain a certain capital structure. In contrast, firms' financing choices are driven by adverse selection costs that arise as a result of information asymmetry between better-informed managers and less-informed investors. Because these costs occur only when firms issue securities and are lower for debt than equity, firms prefer internal financing and prefer debt over equity when external funds must be raised.

This study is a contribution to the ongoing debate about whether the profound effects of operating and market performance on firms' financing decisions are due to trade-offs or pecking order financing behavior. Recent work in this area began with Shyam-Sunder and Myers (1999), who argued that the negative relationship between profitability and leverage was consistent with pecking orders but not with the trade-off model.

Fama and French (2002) agree that the negative effect of profitability on leverage is consistent with the pecking order model, but they also find an offsetting response of leverage to changes in earnings, implying that the effect of profitability is partly due to temporary changes in leverage or in other words changes to targets.

Fischer et al. (1989) and Leland (1994) present a dynamic trade-off model in which firms allow their leverage to fluctuate over time reflecting accumulated earnings and losses and do not adjust it to a target as long as adjustment costs exceed the value lost due to a suboptimal capital structure. Such behavior may lead to a negative relationship between profitability and leverage in a sample with relatively infrequent capital structure adjustments. This implies that such a relationship test has no power to reject the dynamic version of the trade-off hypothesis in favor of the pecking order model.

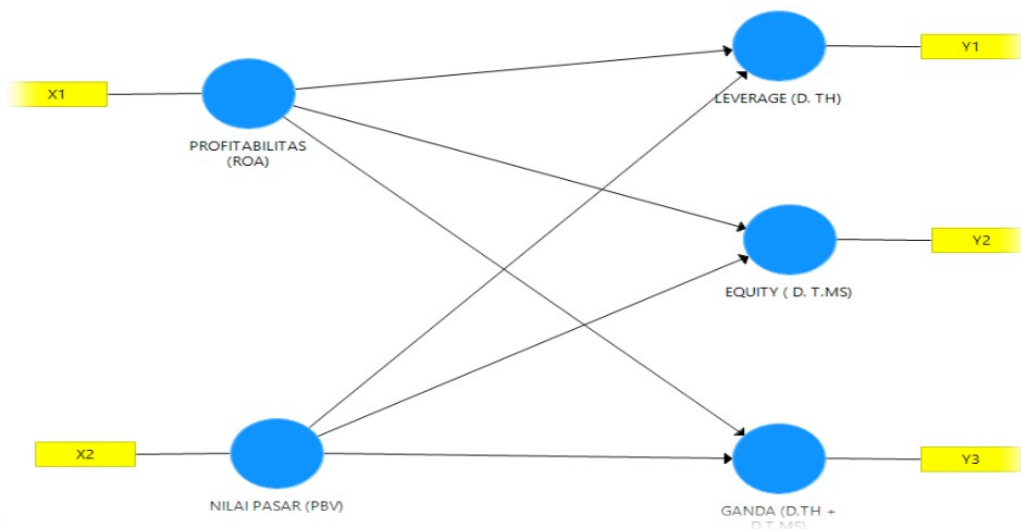
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## 2. Research purposes.

Because market and operating performance are the basis for making funding decisions, which performance dominates funding decision making, in-depth research is needed so that interested parties such as potential investors and banks and other parties can plan suitable strategies.

## 3. Hypothesis.



**FIGURE 1. RESEARCH MODEL**

Based on the background and research model above, the following research hypotheses are proposed:

- H1 : There is a negative and significant effect between profitability (ROA) and leverage (D. TH).
- H2 : There is a positive and significant effect between profitability (ROA) and Equity (D. MS).
- H3 : There is a positive and significant effect between profitability (ROA) and Dual Funding (D.TH + D. MS).
- H4 : There is a negative and significant effect between Market Value (PBV) and Leverage (D. TH).
- H5 : There is a positive and significant effect between Market Value (PBV) and Equity (D. MS).
- H6 : There is a positive and significant effect between Market Value (PBV) and Double Funding (D.TH + D. MS).

4. Theoretical basis.

1. Trade-off theory.

Is a development of the Modigliani-Miller theory (Brealey and Myers, 1991). Based on the trade-off theory, companies base their funding decisions on an optimal capital structure. The optimal capital structure is achieved when there is a balance between the benefits of using debt and the costs of using debt.

2. Pecking order theory.

In this theory there is a sequence of priorities related to the company's financing activities. The pecking order hypothesis describes a hierarchy in the search for corporate funds where companies prefer internal funds first to pay dividends and investments and then implement them as growth opportunities if possible. If external funds are needed, companies prefer debt to other external sources of funds (Myers, 1984; Myers and Majluf, 1984).

3. Market Timing Theory

Capital structure is the cumulative result of past equity market timing efforts (Baker and Wurgler, 2002). Equity market timing theory states that companies will issue equity when the market value is high and will buy back equity when the market value is low. The purpose of doing equity market timing is to take advantage of temporary fluctuations in the cost of equity against the costs of other components of capital.

2. Material and Research Methods.

a. Object of research.

The object of the research or what is the focus of research in this study is the use of the financial statements of go-public retail companies on the Indonesia Stock Exchange in 2016 - 2020.

b. Research subject.

The population is the entire research subject (Arikunto, 2002: 108). In this study, all members of the population are the subjects to be studied. The population that will be studied in this study are go-public retail companies on the Indonesia Stock Exchange for the period 2016 to 2020.

The purpose of the sample is to take the subject, not based on strata, random or regional, but based on a certain purpose (Arikunto, 2002: 117). The criteria are:

1. The company publishes financial reports for 5 years, namely 2016, 2017, 2018, 2019, and 2020.
2. Financial statements must have data on the five variables needed in this study.
3. The company must have been listed at the beginning of the observation period and not listed until the end of the observation period.

There are 26 companies engaged in the go-public retail industry on the Indonesia Stock Exchange for the period 2016 to 2020 until now, there are 26 companies, but according to the classification results, it turns out that there are only 12 companies that meet the criteria.

Data Collection Method.

1. Documentation Method.

The method of documentation in this research is to take data on the financial statements of go-public retail companies on the Indonesia Stock Exchange from the internet and the Indonesian Capital Market Directory.

2. Literature Study Method.

c. Data Analysis Method.

The data analysis method is used to analyze research data so that it can be interpreted so that the resulting report is easy to understand. The method of analysis in this study uses the student version of the Smart PLS 3.2 program.

This study uses the influence test between the independent variables, namely X1 Profitability with ROA (Return on Assets) and X2 Market Value with PBV (Price to Book Value) proxy with the dependent variable, Y1 Leverage with D.TH (Delta Total Debt) and Y2 proxy. Equity with the proxy D.TMS (Delta Equity), and Y3 Double Funding (D.Debt + D.E&Debt). Test the effect with :

1. Financial Ratio Analysis.

This study uses multiple regression analysis using the Smart PLS 3.2 program. This analysis is used to analyze the effect or several independent variables on a dependent variable.

Financial Ratio as follows:

$$X_1 = \frac{\text{Profitability}}{\text{Return on Assets (ROA)}} = \frac{\text{Earning after tax}}{\text{Assets Total}}$$

$$X_2 = \frac{\text{Market Value}}{\text{Price}} \text{ Book Value (PBV)} = \frac{\text{Market price per share}}{\text{Book value per share}}$$

$$Y_1 = \frac{\text{Leverage}}{\text{Debt Growth}(\Delta \text{Total Debt})} = \frac{\text{Total Debt } t - \text{Total Debt } t-1}{\text{Total Debt } t-1}$$

$$Y_2 = \frac{\text{Equity}}{\text{Equity Growth}(\Delta \text{Total Equity})} = \frac{\text{Total Equity } t - \text{Total Equity } t-1}{\text{Total Equity } t-1}$$

$$Y_3 = \frac{\text{Double Funding}}{\text{Funding}} = \frac{\text{Total Debt} + \text{Total Equity}}{\text{Funding}}$$

2. Multiple Regression Analysis.

Based on the mechanism of the relationship between variables, the mathematical formulation in this study is as follows:

$$Y1 = 1 (ROA) + \beta_2(PBV) \dots\dots\dots(1)$$

$$Y2 = 1 (ROA) + \beta_2(PBV) \dots\dots\dots(2)$$

$$Y3 = 1 (ROA) + \beta_2(PBV) \dots\dots\dots(3)$$

### 3. Results and Discussion.

#### a. Measurement Model Fit Test (Outer Model)

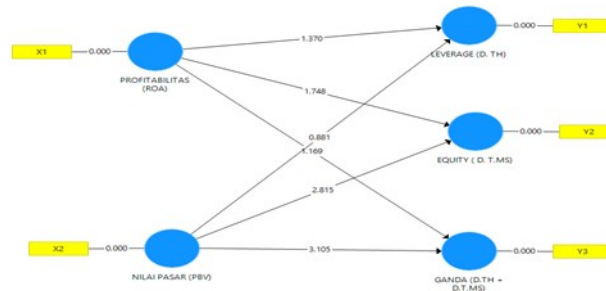


Figure 2. Outer Model Scheme (PLS Algorithm Testing)

#### b. Structural Model Fit Test (Inner Model).

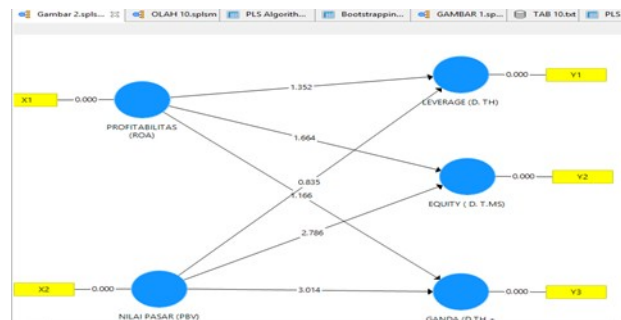


Figure 3. Inner Model Scheme (Bootstrapping Testing)

From Figure 2 it can be seen that:

1. The effect of Profitability (ROA) with Leverage (D.TH) of 1,352 is smaller than 1.96, meaning that there is no effect of Profitability (ROA) and Leverage.
2. The influence between Market Value (PBV) and Leverage of 0.835 is smaller than 1.96, meaning that there is no influence between Market Value (PBV) and Leverage.
3. The effect of Profitability (ROA) with Equity (D.T.MS) of 1.664 is smaller than 1.96 which means that there is no effect of Profitability (ROA) and Equity (D.T.MS).
4. The influence between Market Value (PBV) and Equity (D.T.MS) of 2.786 is greater than 1.96, meaning that there is a significant effect between Market Value (PBV) and Equity (D.T.MS).
5. The effect of Profitability (ROA) with Dual Funding (D.TH + D.T.MS) of 1.166 is smaller than 1.96, meaning that there is no effect of Market Value (PBV) and Dual Funding (D.TH + D.T.MS).

6. The influence between Market Value (PBV) and Dual Funding (D.TH + D.T.MS) of 3.014 is greater than 1.96 meaning that there is a significant effect between Market Value (PBV) and Dual Funding (D.TH + D.T.MS) .

c. R-Square value

Table 1. R-Square Test Results

Matrix	R Square	R Square Adjusted
Equity (D.T.MS)	0,051	0,018
Leverage (D.TH)	0,080	0,048
Ganda /Dual Funding (D.T.MS + D.TH)	0,077	0,045

Source: Processed secondary data, 2022.

From Table 1 it can be seen that:

1. The value of R Square Equity is 0.051. This means that the Equity variable is influenced by the Profitability and Market Value variables of 5.1%, the remaining 94.9% is influenced by variables outside the model.
2. Double Funding R Square value of 0.077. This means that the Double Funding variable is influenced by the Profitability and Market Value variables of 7.7%, the remaining 92.3% is influenced by variables outside the model.
3. The value of R Square Leverage is 0.080. This means that the Leverage variable is influenced by the Profitability and Market Value variables of 8.0%, the remaining 92.0% is influenced by variables outside the model.

d. Direct Effect Coefficient Value

Table 2. Hypothesis Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Value
PBV > D.T.MS	-0,191	-0,197	0,069	2,786	0,006
PBV > D.TH	0,239	0,147	0,287	0,835	0,404
PBV > D.T.MS + D.TH	-0,259	-0,26	0,086	3,014	0,003
ROA > D.T.MS	-0,119	-0,126	0,072	1,664	0,097
ROA > D.TH	-0,153	-0,118	0,113	1,352	0,177
ROA > D.T.MS + D.TH	-0,098	-0,098	0,084	1,166	0,244

Source: Processed secondary data, 2022

From Table 2 it can be explained that the following regression equation can be obtained:

$$Y1(Lev) = - 0.153 (ROA) + 0.239(PBV)$$

$$Y2(Eq) = - 0.119 (ROA) - 0.191(PBV)$$

$$Y3(Ganda/Double) = - 0.098 (ROA) - 0.259(PBV)$$

1. Effect of Profitability (ROA) with Leverage (D.TH) with a T-Statistic Value of 1.352 smaller than 1.96 and a P Value of 0.177 greater than 0.05, it can be concluded that there is no influence between Profitability (ROA) ) with Leverage (D.TH), so that hypothesis 1 which states that there is a negative effect between profitability (ROA) and Leverage (D. TH) is not accepted. This means the Trade off Theory is not proven
2. Effect of Profitability (ROA) with Equity (D.TMS) with a T-Statistic Value of 1.664 smaller than 1.96 and a P Value of 0.097 greater than 0.05, it can be concluded that there is no influence between Profitability (ROA) ) with Equity (D. MS), so hypothesis 2 which states that there is a positive influence between profitability (ROA) and Equity (D. MS). not accepted. If the significance level is 0.1, then hypothesis 2 is accepted, which means that there is a negative influence between profitability and equity, which means that the greater the profitability, the lower the funding using equity. This means that retail companies in Indonesia prefer financing with debt compared to equity. Finally, it can be concluded that retail companies in Indonesia tend to adhere to the trade-off theory (TOT) compared to packing orders (POT).
3. Effect of Profitability (ROA) with Double Funding (D.TH + D. MS) with a T-Statistic Value of 1.166 smaller than 1.96 and a P Value of 0.244 greater than 0.05, it can be concluded that there is no the effect of Profitability (ROA) with Double Funding (D.TH + D. MS), so hypothesis 3 which states that there is a positive influence between profitability (ROA) and Double Funding (D.TH + D. MS). not accepted. This is consistent with the analysis of the multiple funding problem offering an opportunity to examine the effect of firm profitability on leverage in a setting where trade-off and pecking order theories do not have the same predictions. Trade-off theory (TOT) and Packing order (POT) are not proven.
4. Effect of Market Value (PBV) with Leverage (D.TH) with a T-Statistic Value of 0.835 which is smaller than 1.96 and a P Value of 0.404 greater than 0.05, so it can be concluded that there is no effect between Market Value (PBV) with Leverage (D.TH), so hypothesis 4 which states that there is a negative effect between Market Value (PBV) and Leverage (D. TH) is not accepted. This is consistent with the hypothesis that firms with growth (high market-to-book value) have low target debt ratios, while firms with low market-to-book value growth have high target debt ratios (Stulz, 1990). An alternative explanation of this result is that firms time equity issuance to periods when their market-to-book ratio is high, for example, because managers believe that the firm's stock is overvalued (Baker and Wurgler, 2002). This means the Trade off Theory is proven.
5. Effect of Market Value (PBV) with Equity (D. MS) with a T-Statistic Value of 2.786 greater than 1.96 and a P Value of 0.006 less than 0.05, so it can be concluded that there is an influence between Value Market (PBV) with Leverage (D.TH), so hypothesis 5 which states that there is a positive influence between Market Value (PBV) and Equity (D. MS) is accepted. The acceptance of hypothesis 5 does not mean it is in accordance with the Market Timing Theory which will optimize the capital structure when the stock market price is high. But this is actually shown by the large value of the original sample which shows a negative relationship of -0.191. This negative relationship occurs because of the reaction from the market or potential

investors who tend to respond to the increase in Market to book Value to take profits for profit taking by selling shares to the market. As a result, the market value will fall and at the same time companies tend to choose leveraged funding. This means that the Market Timing Theory is not proven, but the Trade off Theory is proven.

6. Effect of Market Value (PBV) with Double Funding (D.TH + D. MS). with a T Statistical Value of 3.014 which is greater than 1.96 and a P Value of 0.003 is smaller than 0.05, it can be concluded that there is an influence between Market Value (PBV) and Dual Funding (D.TH + D. MS ), so that hypothesis 6 which states that there is a positive effect between Market Value (PBV) and Double Funding (D.TH + D. MS) is accepted. The acceptance of this hypothesis is based on the P Value, but if it is seen that there is a negative relationship between PBV and double funding, it can be seen from the original sample value of -0.259. This means that the higher the PBV value, the negative market reaction by selling. On the other hand, if the company actually increases debt, the market reaction will also be negative, because investors view increasing debt as an additional risk for the company. And this is not liked by investors. This is in accordance with the Packing Order Theory and Trade off Theory. This actually gives a message to the company's management that if the company adopts a dual funding policy, what investors and potential investors will do is "wait and see". From this explanation, management should adopt a leveraged funding policy when the market value is high.

Conclusion on the results of the analysis that has been obtained, the conclusions of this study are:

- a. There is no effect between Profitability (ROA) and Leverage (D.TH). Hypothesis 1 is not accepted. This means the Trade off Theory is not proven.
- b. There is no effect between Profitability (ROA) and Equity (D. MS), so hypothesis 2 is not accepted. If the significance level is 0.1, hypothesis 2 is accepted. So it can be concluded that retail companies in Indonesia tend to adhere to the trade-off theory (TOT) compared to packing orders (POT).
- c. There is no effect between Profitability (ROA) and Double Funding (D.TH + D. MS). So hypothesis 3 is not accepted. This is consistent with the analysis of the multiple funding problem offering an opportunity to examine the effect of firm profitability on leverage in a setting where trade-off and pecking order theories do not have the same predictions. This means the Trade off Theory and Packing order Theory is not proven
- d. There is no effect between Market Value (PBV) and Leverage (D.TH), so hypothesis 4 is not accepted. This is consistent with the hypothesis that firms with growth (high market-to-book value) have low target debt ratios, while firms with low market-to-book value growth have high target debt ratios (Stulz, 1990). An alternative explanation of this result is that firms time equity issuance to periods when their market-to-book ratio is high, for example, because managers believe that the firm's stock is overvalued (Baker and Wurgler, 2002). This means the Trade off Theory is proven
- e. There is an influence between Market Value (PBV) and Equity (D.MS). So that hypothesis 5 is accepted. This means that it is in accordance with the Market Timing Theory which will optimize the capital structure when the stock market price is high. However, this is actually indicated by the large value of the original sample which



- shows a negative relationship of -0.191. This negative relationship occurs because of the reaction from the market or potential investors who tend to respond to the increase in Market to book Value to take profits for profit taking by selling shares to the market. As a result, the market value will fall and at the same time companies tend to choose leveraged funding. This means that the Market Timing Theory is not proven, but the Trade off Theory is proven
- f. There is an influence between Market Value (PBV) and Double Funding (D.TH + D. MS), so hypothesis 6 is accepted. This is in accordance with the Packing Order Theory and Trade off Theory.

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