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**PENGUJIAN PECKING ORDER THEORY PADA SEKTOR OTOMOTIF DI NEGARA ASEAN-4**  
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# **PECKING ORDER THEORY TESTING IN AUTOMOTIVE SECTORS IN ASEAN-4 COUNTRIES**

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Submitted by

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## **SUMMARY**

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## **ABSTRACT**

The purpose of this research is to examine the pecking order theory of capital structure in automotive sector companies in ASEAN-4 country. Based on the previous research that have tested and obtain the results, the pecking order theory tends to more widely used by companies in their funding decisions. Testing the application of pecking order theory is done by measuring the factors that are indicated to affect the capital structure. This research was conducted on companies listed on the stock exchange of each ASEAN-4 country that meet the sampling criteria in the form or panel data with an observation period from 2015-2019. The research model used to measure the capital structure with leverage and independent variables are financial deficit, profitability, liquidity, asset tangibility and company growth. By using the significance level of 5%, the results obtained show that all independent variables have a significant effect on capital structure. There are several different results that do not support the application of the pecking order theory, such as financial deficits and profitability in Singapore and asset tangibility in Indonesia and Malaysia. The conclusion from the overall test results is that pecking order theory is still widely applied in ASEAN-4 countries.

**Keywords:** pecking order theory, capital structure, financial deficit, profitability, liquidity, asset tangibility and company growth.

## **CHAPTER I : INTRODUCTION**

### **1.1 Background**

In running its business, the company will strive to provide an optimal corporate funding structure. There is no definite theory regarding how big the proportion of the components in the capital structure, whether with debt or capital, is to achieve the optimal proportion of the capital structure. In meeting its funding needs, the company has internal and external funding sources.

Internal funding can be in the form of paid-up capital from shareholders and from retained earnings, which is profit that is not distributed to shareholders in the form of dividends, but is used for company operations. Meanwhile, the external funding chosen by the company can be in the form of debt issuance, both long-term and short-term debt to third parties, issuance of bonds and issuance of new shares.

There are various kinds of theories explaining how a company can allocate its capital structure so that it becomes an optimal funding structure for the company, namely pecking order theory, trade-off theory, signaling theory, agency cost theory and market timing theory. The theory that will be tested in this research is pecking order theory. In this study, the ASEAN-4 countries sampled were Indonesia, Malaysia, Singapore and Thailand.

## **1.2 Research Purposes**

Based on the formulation of the problem and the background that has been described, the purpose of this study is to examine the use of pecking order theory in the selection of company capital structures in ASEAN-4 countries.

## **CHAPTER II : LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **2.1 Capital Structure Theory**

The theory about capital structure was first discussed in a study by Franco Modigliani and Merton H. Miller in 1958. In this study, several assumptions were concluded which according to some researchers were unrealistic, these assumptions were: (1) no tax, (2) no transaction costs, (3) the absence of bankruptcy costs, (4) the same level of borrowing between investors and the company, (5) information about the company's future investment opportunities owned by all investors and managements (6) EBIT is not affected by the use of debt.

### **2.1 The Pecking Order Theory**

According to Myers & Majluf (1984), the pecking order theory states that companies prefer to use internal funding rather than external funding, secure debt compared to risky debt, as well as convertible securities and finally stocks.

## CHAPTER III : RESEARCH METHODS

### 3.1 Data and Samples

The type of data used in this study is secondary data in the form of annual financial reports of companies from 2015 to 2019 in the automotive sector listed on the stock exchanges of ASEAN-4 country obtained from the official website for each country.

**Sample Explanation Table**

	<b>Number of Companies</b>	<b>Explanation</b>
Total samples	53	Automotive sector companies in ASEAN-4 countries
Taken out	7	Companies are not listing consecutively in 5 years (2015-2019)/ financial statement not available for 2015-2019
<b>Research samples</b>	<b>46</b>	



## Variable Proxies

Variable Type	Calculation	Estimated Results	Reference
<b>Dependent Variable</b>			
LEV	$\frac{\text{Total debt}}{\text{Total asset}}$		Frank and Goyal (2004)
<b>Independent Variables</b>			
<i>Financial Deficit</i> (DEF)	Dividend + Net Investment + Δ Working Capital + Beginning Balance of Long Term Debt - Cash Flow after Tax and Interest	+	Bhama et al. (2015) and Shyam-Sunder & Myers (1999)
<i>Profitability</i> (PRO)	$\frac{\text{Net Profit}}{\text{Total Asset}}$	-	Rajan and Zingales (1995)
<i>Liquidity</i> (LIQ)	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	-	Deesomsak et al. (2004) and Sergieschu and Vaidean (2014)
<i>Company Growth</i> (GRO)	$\frac{\text{Total Asset } t - \text{Total Asset } t-1}{\text{Total Asset } t-1}$	+	Titman and Wessel (1988)
<i>Assets Tangibility</i> (TAN)	$\frac{\text{Total Fixed Asset}}{\text{Total Asset}}$	+	Rajan and Zingales (1995) and Deesomsak et al. (2004)

### 3.2 Metode Analisis Data

The analysis techniques used to test the hypotheses proposed in this study are as follows:

#### 3.2.1 Classic Assumption Test

##### a. Normality Test



b. Multicollinearity Test

c. Heteroscedasticity Test

3.2.2 Multiple Linear Regression Analysis

3.2.3 F test

3.2.4 t Test

## CHAPTER 4 : ANALYSIS AND DISCUSSION

The classical assumption test is carried out, the result is that the data in the model are normally distributed, free from multicollinearity and heteroscedasticity does not occur.

### F Test Results

Country	F	Sig
Indonesia	19,844	0,000
Malaysia	18,070	0,000
Singapura	3,386	0,014
Thailand	32,870	0,000

From the total results of the F test for all countries, it has a significance value  $<0.05$ , which means that the variables of financial deficit, profitability, liquidity, company growth and asset tangibility are appropriate to predict the capital structure variable. Also, the total results for F count  $>$  F table which means financial deficit, profitability, liquidity, financial growth and asset tangibility simultaneously affect the capital structure as the dependent variable.



## Regression Test Results

Independent Variables	Predicted Sign	Indonesia	Malaysia	Singapura	Thailand	ASEAN-4
Financial Deficit	+	H1 diterima	H1 diterima	H1 ditolak	H1 diterima	H1 diterima
Profitability	-	H2 diterima	H2 diterima	H2 ditolak	H2 diterima	H2 diterima
Liquidity	-	H3 diterima	H3 diterima	H3 diterima	H3 diterima	H3 diterima
Growth	+	H4 diterima	H4 diterima	H4 diterima	H4 diterima	H4 diterima
Asset Tangibility	+	H5 ditolak	H5 ditolak	H5 diterima	H5 diterima	H5 ditolak

## CHAPTER 5 : CONCLUSIONS

### 5.1 Conclusions

This research was conducted to test the use of pecking order theory in ASEAN-4 country companies in the automotive sector from 2015 to 2019 about their funding decisions. By using the variables of financial deficit, profitability, liquidity, asset tangibility and company growth, the decisions are obtained from the test results are as follows:

1. The financial deficit has a positive result on the capital structure of automotive companies in Indonesia, Malaysia, Thailand and tests of all ASEAN-4 countries that support the pecking order theory; but not in Singapore, which has a negative results.
2. Profitability has a negative results on the capital structure of automotive companies in Indonesia, Malaysia, Thailand and testing all ASEAN-4 countries; which supports pecking order theory; but not in Singapore, which has a positive results.



3. Liquidity has a negative results on the capital structure of automotive companies in all test countries, namely Indonesia, Malaysia, Singapore, Thailand and testing of all ASEAN-4 countries. So overall the test results support the pecking order theory.
4. The company growth obtained positive results on the capital structure of automotive companies in all test countries, namely Indonesia, Malaysia, Singapore, Thailand and testing of all ASEAN-4 countries. So overall the test results support the pecking order theory.
5. Asset tangibility has a positive results on the capital structure of automotive companies in Singapore and Thailand, so that this decision supports the pecking order theory. Meanwhile, in Indonesia, Malaysia and the testing of all ASEAN-4 countries, the test results were negative so that they did not support the pecking theory.
6. It can be concluded that from all the tests carried out both in individual and in the whole of the companies in the automotive sector in the ASEAN-4 countries still tends to use pecking order theory in choosing its funding structure.

### **5.3 Recommendation**

1. For future research, it is expected to use a longer time series to obtain more satisfactory results and also cover other sectors to make them more representative.



2. It is necessary to consider using a more diverse range of variables including variable proxy valuation using market value and bond value in order to obtain more comprehensive conclusions.
3. For further research in order to be able to further explain and conduct more in-depth research on the variables that can influence the choice of capital structure.
4. Future research is expected to test other theories that support the pecking order theory.

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