DETERMINANT OF CAPITAL STRUCTURE: EVIDENCE FROM MANUFACTURE LISTED COMPANY IN INDONESIA STOCK EXCHANGE (IDX)

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DECLARATION

I hereby that I have prepared the work and that no part of the work contained in this thesis has been submitted as an application for any other degree or qualification at this or any other university or educational institution.

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ABSTRACT

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Abstract

The purpose of this research is to quantify and evaluate the impact of firm size, tangibility, liquidity, profitability, and growth on a manufacturing company's capital structure in Indonesia. This Research makes use of panel data spanning the years 2017-2021 with 164 companies listed in the Indonesia Stock Exchange also 820 data are gathered. The study gathered the data for firm-level data from Data Stream and country-level data from the World Bank database and analyze using Stata 16.0 and Microsoft Excel program, which used multiple regression analysis. The findings indicated that although size, profitability, and growth negatively influence firm leverage they have a statistically significant relationship with firm leverage. Also, tangibility has a negative impact on firm leverage but it statistically insignificant. On the other hand, liquidity is the only independent variable that has positive impact to firm leverage and its relations to firm leverage is insignificant.

Keywords:

Capital structure, size, tangibility, liquidity, profitability, growth.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Capital structure is a complex topic and one of the factors that determine the value of the company. Some businesses suffer difficulties because their capital structure does not alter or fit the way finances are supplied and the period of requirement. The firm must have a high capital since the funding from the debt part is greater than the capital itself, therefore the funds utilized for the company's operational operations are more heavily reliant on the debt element. Identifying the debt-equity connection as a source of corporate finance is inextricably linked to the idea of capital structure. The capital structure is governed by the financial manager's financing policy, which is continually challenged by qualitative and quantitative concerns.

Many companies believe that funding sources other than their own resources are insufficient. Debt is typically a significant aspect of a company's capital structure because it is non-permanent and less expensive to retain. Creditors, on the other hand, are not always eager to lend money, especially if the company's credit risk is significant. (Coyle 2000 and Nanok 2008). Setiawan (2006) defines funding decisions as decisions on how much debt is utilized vs equity to finance a company's investment. The goal of spending decisions is to find the ideal amount of money capital structure, i.e. the debt-equity mix that will maximize the company's worth. The capital structure refers to the composition of the funding choices. The capital structure funds will be utilized to fund the company's investment in various sorts of investment alternatives.

1.2 Background of Study

Speaking of the industry competition in numerous business areas is becoming increasingly fierce. All include small and large businesses are all trying to gain a competitive advantage. At the end of 2019 Covid-19 was found in China and spread to other countries worldwide, including Indonesia. Covid-19 also affected Indonesia, namely through home quarantine and lockdown therefore companies were closed especially the manufacturing industry, due to lockdown and home quarantine caused not do any manufacturing activity.

All companies in Indonesia are affected, both companies listed on Indonesia Stock Exchange and unlisted companies except medical device and pharmaceutical industries. Based on the Data from the Indonesian Stock Exchange, the total number of manufacturing companies listed in Indonesia in 2022 is 193 companies. However, this research will focus on 164 companies for which complete data is available.

To grow its operations, the corporation needs extra cash in the form of debt and stock stated by (Brigham, E, Huston, J. 2011). According to (Horne, Van Wachowicz. 2005) The significance of capital structure for businesses is that debt and equity have expenses associated with them, known as the cost of capital, which is the needed rate of return on various kinds of financing. (Brigham, E, Huston, J. 2011) stated that when risk and return are balanced and share prices can be maximized, the capital structure is optimum.

Company executives must make financial decisions to determine the optimal capital structure. The decision should be based on the company's cost of capital and maximizing shares. If the capital structure is more optimal, the cost of capital incurred by the firm can be neglected. The cost of capital resulting from different financing sources has varied direct implications, thus the proportion of debt and equity used must be considered.

The source of capital chosen will have an impact on the business's value. As a result, firms must understand the costs associated with raising these funds. The interest expenditure levied by creditors is the cost of capital that emerges when a company is in debt. In contrast, if a firm uses internal funds, there is an opportunity cost for the funds used or equity capital, which corresponds to the return on equity capital produced from retained earnings claimed by shareholders. As a result, a financial manager must proceed cautiously while determining the company's capital structure. By the point already explain, this study examines some of the factors affecting companies' capital structure in Indonesia's manufacturing industry listed on the Indonesia Stock Exchange. The factors are firm size, tangibility, liquidity, profitability, and growth in the capital structure.

1.3 Research issues and problem statement

Due to several flaws and weaknesses in the businesses' funding options, the Indonesian financial markets were deregulated beginning in 1983. Because state-owned banks dominated the debt market, enterprises relied only on state-owned banks for funding. Retained profits or other capital sources would be added later. Indonesia underwent another reformation when, beginning in 1988, private domestic and international banks were granted parity with state-owned banks for loans priced at market rates. There is so much empirical evidence that shows the differences in research findings in corporate capital structure, especially in financing decisions, which is reflected in inconsistent empirical results.

Recently we have to face a pandemic of COVID-19 which is giving so much effect on companies in Indonesia, especially the manufacturing sector. According to (A.Y.D.P.Rozet, L.H.S.Kelen. 2022) at the end of the first quarter of 2020, the Purchasing Managers Index (PMI) of Indonesian manufacturing has not shown a good enough change. This is because many regions have been affected by COVID-19, making a decline in the utility of various unavoidable manufacturing sectors. Except for the medical device and pharmaceutical industries, the production capacity (output) of several industries fell by almost 50 percent.

1.4 Research objective

This study examines the firm-specific determinant of leverage of Indonesian manufacturing firms. This paper is aiming to determine whether firm size, tangibility, liquidity, profitability, and growth affect the capital structure decisions of the chosen firms.

Specifically, this paper is examining:

1. To examine the relationship between firm size and leverage
2. To examine the relationship between tangibility and leverage
3. To examine the relationship between liquidity and leverage
4. To examine the relationship between profitability and leverage
5. To examine the relationship growth and leverage

1.5 Research question

Since this study is developing in understanding the better firm size, tangibility, liquidity, profitability, and growth on leverage of capital structure, the question of this study is:

RQ1: Does firm size influence capital structure?

RQ2: Does tangibility influence capital structure?

RQ3: Does liquidity influence capital structure?

RQ4: Does profitability influence capital structure?

RQ5: Does growth influence capital structure?

1.6 Significance of the study

Capital structure is critical for a company's operation since all operations and development are carried out with the existence of capital. The most difficult problem in capital structure theory is balancing the advantages and drawbacks of using debt capital. The decision on whether to use debt or equity in investment financing is made completely by the finance manager. Financial managers play a significant role in deciding the proportion of investment capital used by the company. This is for estimating the worth of debt and limiting the risks linked with its use.

1.7 Scope of Study

This chapter is only an opening study for this research, which tells about the research topic including the author’s opinion about the topic of the research. This study aims to determine whether the firm size, tangibility, liquidity, profitability, and growth influence the capital structure decision of listed companies. Moreover, the next chapter will be a detailed literature review and theory review about the relationship between firm size, tangibility, liquidity, profitability, and growth on leverage.

1.8 Summary of the chapter

This chapter is only an opening for this study. This chapter consists author’s opinion about the topic, the problem statement of the study background of the study, the research objectives, the research question, the significance of study and lastly scope of study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the conclusions, implications and recommendations, and limitations of the study based on research findings based on the data obtained for this research. In particular, this chapter will also answer research questions and research objectives in this research. Furthermore, towards the end of this section, the limitations of the research are discussed, and finally, the section ends by providing several recommendations that can be taken into consideration for further research.

5.2 Conclusion

The results of this study are to examine firms' specific determinants on capital structures of the manufacturing companies in Indonesia, whether firm size, liquidity, profitability, tangibility, and growth influence the capital structure decisions of listed company period 2017-2021.

All independent factors (firm size, liquidity, profitability, tangibility, and growth) had a substantial effect on the dependent variable, according to the findings of the panel data regression (Leverage). Hausman test and any other evaluation methods reveal that the fixed effect assets are more suitable than common and randomly distributed effects with the p-value of 0.000 for the Hausman test. Several tests were performed as parts of the classical assumption test, the normality test, and the multicollinearity test. Both of the tests fulfilled the requirements for the classical assumption test. Normality tests show that all the data are normal because it is more than 0.0000. The multicollinearity test shows no independent variable with a high correlation exceeding 10 with other independent variables, so it can be stated there is no multicollinearity in the model.

The first finding of this study is that the firm size of manufacturing companies in Indonesia negatively influences the capital structure with a coefficient of 0.118 also, it shows that firm size is significant because the p-value is lower than 0.01. This means that firms prefer to use domestic capital first, followed by debt and, if required, equity. The second finding results that tangibility has a negative effect on firm leverage with a coefficient of -0.064 and it has an insignificant relationship with leverage as the p-value stated 0.261 which is higher than 0.01. The third finding is that liquidity has a positive influence on the firm leverage with a coefficient of 0.000 but it has an insignificant relationship with leverage as the p-value is 0.599 which is higher than the alpha (0.01). The fourth finding is that profitability negatively affects the firm leverage with a coefficient of -0.320, but it has a significant relationship with firm leverage as the p-value is 0.000 which is lower than the alpha. Lastly same like profitability, growth also has a negative impact to leverage with the coefficient of -0.001 and also has a significant relationship with firm leverage with a p-value less than 0.01 which is the alpha.

5.3 Implication and Recommendation

This study deliberated the influence of firm size, liquidity, profitability, tangibility, and growth on the capital structure of manufacturing companies listed on the Indonesia Stock Exchange. However, the researcher hopes that implication of this study will be beneficial, whether it is theoretical or practical. In addition, future research is recommended to use another sector of companies in the Indonesia Stock Exchange to conduct the empirical test. This recommendation is that some of the independent variables are more or less sensitive in a different sector.

5.4 Limitation of Study

The researcher is aware that this study has many limitations that must be addressed in the future. There are several limitations to this research, which is that the existence of book value of equity is not distributed. The bank also does not have the complete data needed for further investigation and has 0 data. All these data need to be removed for whole years by cleaning the data and cannot be used as a sample in this study. After removing the outlier, the sample is decreased by 15 companies. Also because of the limitation of time researchers cannot use more independent variables so the researcher uses only 5 independent variables for this study, instead, a lot of aspects can determine the capital structure.

5.5 Chapter Summary

This chapter discusses the conclusion, consequences, limits, and suggestions for future researchers in depth. This chapter fully and thoroughly discusses all of the research questions and aims for this study. The researcher hopes and wishes that this study will bring extra benefits to the parties concerned as well as future researchers worldwide in terms of knowledge and thoughtful decision-making.

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APPENDICES

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
LEV	820	0.3009	0.4104	0	4.7593
SIZE	820	8.1615	0.7150	6.4108	10.4112
TANG	820	0.4723	0.1917	0.0226	0.9632
LIQ	820	2.5134	7.5517	0.0337	208.4446
PROF	820	0.0585	0.1463	-2.5717	1.0682
GROWTH	820	2.2265	18.4117	-453.9492	116.1729

Multicollienarity Test using vif

Variable	VIF
SIZE	8.43
TANG	7.69
PROF	1.22
LIQ	1.11
GROWTH	1.02
MEAN	3.90

Matrix of Correlation Variables

Variables	**LEV**	**SIZE**	**TANG**	**LIQ**	**PROF**	**GROWTH**
LEV	1.0000					
SIZE	0.0495	1.0000				
TANG	0.0221	0.2135	1.0000			
LIQ	-0.1124	-0.0618	-0.0882	1.0000		
PROF	-0.1852	0.1089	-0.1476	0.0187	1.0000	
GROWTH	-0.0734	-0.0527	-0.0108	-0.0055	0.1012	1.0000

The Fixed Effect Model Regression

LEV	Coef	Std. Err	t-value	p-value
SIZE	-0.118	0.043	-2.742	0.006*
TANG	-0.064	0.057	-1.126	0.261
LIQ	0.000	0.001	-0.526	0.599
PROF	-0.320	0.028	-11.362	0.000*
GROWTH	-0.001	0.000	-2.780	0.006*
_CONS	1.31791	0.3582	3.68	0.000
R-squared	0.957			
Adjusted R-squared	0.946			
F-statistic	86.552			
Prob(F-statistic)	0.000			
Durbin-Watson stat	1.400			