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Effect of Profitability, Sales Growth, Liquidity, and Business Risk on Capital Structure with Company Size as a Moderating Variable in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange

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Abstract: The aim of this research is to analyze effect of profitability, sales growth, liquidity, and business risk on capital structure with company size as a moderating variable in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. This research uses a casual comparative research design. This research uses a population of Palm Oil Plantation Sector Companies category listed on the Indonesia Stock Exchange from 2017 to 2022. The number of research samples is 12 companies with a total of 6 years of observations so that the total sample is 72 observation samples. The analysis technique used is panel data regression analysis and moderation test analysis. The research results show that profitability has no significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Sales growth has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Liquidity has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Business risk has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Company size moderates business risk on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. However, company size cannot moderate profitability, sales growth, and liquidity on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange.

Keywords: Profitability, Sales Growth, Liquidity, Business Risk, Capital Structure, Company Size.

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1. INTRODUCTION

The rapid development of globalization today and the increasing demand for derivatives of palm oil products have made the palm oil plantation sector increasingly competitive. Indonesia, as the largest producer of palm oil commodities in the world, has quite a large economic potential to increase state income through exports of palm oil commodities and their derivatives, so it has a very important role in supporting economic activities in Indonesia.
Based on data from the 2020 to 2022 National Leading Plantation Statistics published by the Directorate General of Plantations, Ministry of Agriculture of the Republic of Indonesia, the area of oil palm plantations in Indonesia reached 15,381 thousand hectares with crude palm oil production reaching 48,235,405 million tons.
This BBN program requires companies to be able to compete to increase the productivity of their plantations, either by expanding, replanting and using existing land effectively, so that they are able to produce quality products at an efficient cost. To realize the above program, of course a company requires quite large investment and operational costs, so it is very necessary to regulate its funding structure, namely by determining the company's capital structure in the form of debt and its own capital.
Companies in the oil palm plantation sector have their own uniqueness compared to other company sectors, where in the oil palm plantation sector the capital structure originates from debt or loans in the form of Investment credit obtained from banks or other financial institutions for oil palm plantation development projects in general. has a grace period or relaxation in the payment of principal and interest installments of 4 years, namely from immature plant investment (TBM) zero to TBM3. However, the installment interest expense that should be paid during the grace period will be used as the principal of the interest during construction investment credit loan and will be paid after the grace period ends.
Research on capital structure aims to determine a model or theory of capital structure that can explain the behavior of company funding decisions. In determining the composition of debt and equity as reflected in the company's capital structure, factors that influence the capital structure must be taken into account, such as company size, interest rates, sales growth, asset structure, risk level of assets, operating leverage, profitability, taxes, conditions capital markets, management, and the large amount of capital required.
Sales stability also affects capital structure. Increasingly stable sales growth will increase the company's income, thereby enabling the company to develop its business and more easily fulfill its business obligations. Company growth is an indicator to assess the growth of the company's prospects in the future by measuring changes in total assets. Companies whose activities continue to increase indicate that the company is in the expansion stage. Of course, growing companies require large amounts of funds, so sometimes they need to take external funding in the form of debt.
Chakrabarti (2018) states that liquidity and company size have a positive effect on capital structure, but profitability and sales growth do not have a significant effect on capital structure. Sales growth is stated to have a negative and insignificant effect on the capital structure because the company's sales are mostly credit sales, namely in the form of receivables, so creditors do not consider the company's sales growth in providing credit, profitability has no influence on the capital structure.

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The factors that influence capital structure in this research use company size, profitability, sales growth, liquidity, and business risk. These five factors are internal company factors, where the company's internal conditions greatly determine the composition of the company's capital structure. Company size is an important factor that is taken into consideration when making decisions related to capital structure. Company size can influence capital structure because the larger the size of a company, the more debt it tends to use (Maida and Fuadati, 2016). Debt is one of the sources of funds chosen if the company's own capital is insufficient.

The capital structure develops dynamically and changes from time to time, as a result there are always changes in the capital structure and also the factors that influence it, this is due to various interests regarding funding. The problem faced by the CFO is the difficulty in determining what factors should be considered in determining the appropriate capital structure composition.

The aim of this research is to analyze effect of profitability, sales growth, liquidity, and business risk on capital structure with company size as a moderating variable in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange.

2. RELATED WORKS

2.1 Effect of Profitability on Capital Structure

According to Dang et al. (2019), profitability is a company's ability to generate profits, which is one of the important factors in determining the capital structure of a company. Profitability is one measure of the level of success of a company. Companies that have high profitability attract more attention from investors. The higher the profitability obtained by the company, the greater the return expected by investors (Chandra et al., 2019). The position and responsibility of a financial manager in a company is to monitor and measure the funds spent and budgeted by the company. When costs increase, a financial manager can make recommendations to control the increase in costs, such as providing information about prices, changes in costs, and profit margins. Necessary for business processes to run smoothly and successfully as well as analyzing relevant data and making projections of company profits in the future.

2.2 Effect of Sales Growth on Capital Structure

Sales growth is an increase in the number of sales from one time to the next, from one time to the next. Sales growth describes the success of business sales in the previous period so that it can be a benchmark for determining future sales targets (Czerwonka and Jaworski, 2021). This increase in sales will increase retained earnings thereby growing the company's capital structure. According to Chakrabarti (2018), sales growth does not have a significant influence on capital structure. Stable sales or increasing sales growth will affect the capital structure. This growth has an influence on external parties because it is considered to have good performance, making it easier for the company to obtain additional funding, thus the higher the level of sales growth intensity, the greater the company's capital structure.

2.3 Effect of Liquidity on Capital Structure

Lipson and Mortal (2009) suggest that liquidity influences capital structure. A company that is able to fulfill its financial obligations in a timely manner means that the company is in a liquid

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state and indicates that the company's opportunities for growth tend to be high. Companies that have a good level of liquidity will easily obtain additional capital and can maintain the company's desired capital structure. The direct influence coefficient in the path analysis shows that the liquidity of companies in the construction and building subsector has a negative and significant effect on the capital structure of companies in the building and construction subsector listed on the Indonesia Stock Exchange during the research period from 2013 to 2017. The influence of liquidity on capital structure shows that it is increasing A large company liquidity ratio means the company has sufficient internal funding to pay its obligations so that the capital structure also decreases. Companies with a high level of liquidity prefer funding with internal funds. Companies with a high level of liquidity have large internal funds so companies prefer to use their internal funds first before using debt or issuing new shares because paying off current debt will reduce the company's debt level.

2.4 Effect of Business Risk on Capital Structure

Business risk is a threat to the company, either one that has not yet occurred or one that has already occurred. Business risk allows losses or consequences due to uncertainty. Companies that have high business risks can cause investors or debt providers not to be interested in the company. Business risks include the inability to pay debts to suppliers, employees, the state, and lack of work orders from customers, unfavorable values of the company's financial indicators. A business risk is one that cannot be predicted in advance. Debt and equity are the two main sources of financing for businesses. Debt holders bear less risk than shareholders (Gitman et al., 2015).

2.5 Effect of Profitability, Sales Growth, Liquidity, and Business Risk on Capital Structure which is Moderated by Company Size

Companies that have a high level of profitability will prioritize using their own capital rather than using debt because the company will not be charged with paying debt interest and high retained earnings are sufficient to finance most funding needs. An increase in the debt ratio sends a signal about a company's profitability and can reduce information asymmetry between managers and investors. Stable sales or increasing sales growth will affect the capital structure. This growth has an influence on external parties because it is considered to have good performance, making it easier for the company to obtain additional funding. Large companies certainly have a wider and larger market share, making it possible to increase their sales. A company that is able to fulfill its financial obligations in a timely manner means that the company is in a liquid state and indicates that the company's opportunities for growth tend to be high. Every business certainly has its own risks. Business risk is a threat to every company. The size of the risk experienced by the company depends on how the company can manage the company with the governance applied to the company.

3. METHODOLOGY

This research uses a casual comparative research design, namely investigating the possibility of a cause and effect relationship based on observations of existing effects. This also aims to re-observe the factors that are caused based on certain data (Basuki, 2006). The casual

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comparative research design is ex post facto in that it tries to explore several aspects of the research object through research instruments that have been provided previously without any manipulation of the subject (Sugiyono, 2014). Research that uses the ex post facto method aims to examine events that have occurred and analyze them again in order to find out what factors caused the incident to occur.

Population is a generalized area of objects or subjects that have certain characteristics (Bougie and Sekaran, 2019). Population is determined by the researcher who is analyzed and provides conclusions. This research uses a population of Palm Oil Plantation Sector Companies category listed on the Indonesia Stock Exchange from 2017 to 2022. The number of research samples is12 companies with a total of 6 years of observations so that the total sample is 72 observation samples.

The analysis technique used is panel data regression analysis and moderation test analysis. Panel data regression analysis is a combination of time series data and cross- sectional data (Gujarati, 2015). Data collected at one time on many units of observation is called cross-individual data, while data collected over time. Moderation test analysis is very useful when researchers aim to investigate boundary conditions or contingencies that influence the relationship between variables (Ghozali, 2013). This test is used when researchers expect the relationship between independent and dependent variables to vary across subgroups or under certain conditions.

4. RESULTS AND DISCUSSION

General Description

This research was carried out to analyze the capital structure of palm oil companies on the Indonesian Stock Exchange. The data source is accessed through the official website of the Indonesian Stock Exchange, which consists of 12 companies. This research analyzes financial reports for the period 2017 to 2022.

The average capital structure measured using the debt to equity ratio (DER) in oil palm plantation sector companies listed on the Indonesia Stock Exchange from 2017 to 2022 has a DER ratio of 1.50. There are several companies that have a greater proportion of debt compared to their own capital, namely SMAR, DSNG, GOLL, SGRO, TBLA, BWPT, SSMS, and CSRA companies, meaning that these companies have high business risks because they will bear a large financial burden or debt burden. Meanwhile, companies that have a DER ratio < 1.0 are LSIP, AALI, ANJT, and SIMP companies. Meanwhile, the asset structure tends to be financed more using funding sourced from debt compared to financing from equity, this can be seen from the ratio of total debt to total assets> 50%, meaning that the average asset financing uses debt of more than 50% while financing using equity below 50%.

The palm oil plantation industry on the Indonesia Stock Exchange from 2017 to 2022 has a ratio of total debt to total assets of 0.53, meaning that the company's total assets are financed using debt of 53%, the remainder is financed using equity of 47%. There are several companies that have a debt to asset ratio that is greater than the average ratio for oil palm plantations of 53%, namely SMAR, DSNG, GOLL, SGRO, TBLA, BWPT, SSMS, and CSRA companies.

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Panel Data Regression Analysis

Table 1. Panel Data Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X_1	0.215301	0.878277	0.245140	0.8071
X_2	0.869568	0.395339	2.199548	0.0313
X_3	-0.214644	0.057498	-3.733052	0.0004
X_4	-4.650498	1.001382	-4.644081	0.0000
Z	0.112274	0.030457	3.686311	0.0005
C	-1.114537	0.871948	-1.278215	0.2057
R-squared	0.656821	Mean dependent var		1.504317
Adjusted R-squared	0.630823	S.D. dependent var		1.138444
S.E. of regression	0.691718	Akaike info criterion		2.180378
Sum squared resid	31.57926	Schwarz criterion		2.370100
Log likelihood	-72.49361	Hannan-Quinn criter.		2.255907
F-statistic	25.26392	Durbin-Watson stat		1.393830
Prob(F-statistic)	0.000000			

The research results show that profitability (X_1) has no significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Profitability is an important factor that can influence the capital structure of a company. Companies that have a high level of profitability tend to more easily generate sufficient profits to finance their operations and meet financial obligations without having to rely too heavily on debt. In other words, high profitability can reduce a company's need to take on more debt. As a result, companies tend to have capital structures that are based less on debt and more based on equity. Conversely, a company with a low level of profitability may have difficulty generating sufficient profits to finance its operations and meet financial obligations. To overcome this, companies tend to rely more on debt to fund their operations. As a result, companies with low profitability tend to have a capital structure that is based more on debt. Management decisions can also influence the relationship between profitability and capital structure.

Sales growth (X_2) has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Stable sales or increasing sales growth will affect the capital structure. This growth has an influence on external parties because it is considered to have good performance, making it easier for the company to obtain additional funding, thus the higher the level of sales growth intensity, the greater the company's capital structure. Companies that experience high sales growth will need additional funds to finance increased business activities. Based on the Pecking Order theory, companies will tend to use internal resources, such as profits generated from growth, as the first source of funds. This is because using internal resources is less expensive and carries lower risks than external funding sources. However, high sales growth requires high costs so obtaining external financing is the last option. Therefore, external debt is the last option in the company's capital structure. Sales growth in the context of plantation companies can have various implications for the company's capital structure. Sales growth often requires capital investment to increase production capacity, develop plantation land, or expand the supply chain. Significant sales growth often requires additional funding sources to finance investments in plants, infrastructure, and human

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resources. A company's decision to use equity, debt, or a combination of both will depend on a number of factors, including cost of capital, financial risk, and risk management policies.

Liquidity (X_3) has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Liquidity refers to a company's ability to convert its assets into cash quickly without incurring substantial losses. A company that is able to fulfill its financial obligations in a timely manner means that the company is in a liquid state and indicates that the company's opportunities for growth tend to be high. Companies that have a good level of liquidity will easily obtain additional capital and can maintain the company's desired capital structure. Plantation companies often face regular harvest cycles. During this period, the company needs sufficient liquidity to finance operations, including harvest, production and distribution costs. Dependence on cash can influence decisions regarding capital structure, where a company may be more inclined to use its own capital or short-term debt to meet daily liquidity needs.

Business risk (X_4) has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Based on the trade-off model theory, business risk can influence a company's decision to use debt. Debt as a component of capital structure can help reduce stock risk. Companies seek a balance between the benefits of using debt to reduce stock risk and the risks and costs associated with debt. Business risk has an impact on the company's evaluation of the risks and benefits of debt which can influence the extent to which debt is used in the capital structure. The business risks faced by plantation companies can have a significant impact on decisions regarding capital structure. The right capital structure can help companies manage and respond to these risks more effectively. Plantation companies are often affected by fluctuations in commodity prices such as palm oil, coffee or rubber. The risk of commodity price volatility can affect company revenues and profits.

Moderation Test Analysis

Table 2. Moderation Test Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.034773	2.527146	-0.805167	0.4238
X_1	-0.556988	7.543032	-0.073841	0.9414
X_2	-5.455771	3.700550	-1.474314	0.1455
X_3	-0.998512	1.194631	-0.835834	0.4065
X_4	41.43365	14.23902	2.909867	0.0050
Z	0.148952	0.085746	1.737137	0.0873
X_1Z	-0.044850	0.364361	-0.123092	0.9024
X_2Z	0.227411	0.129085	1.761712	0.0830
X_3Z	0.027525	0.040195	0.684795	0.4960
X_4Z	-1.618777	0.503531	-3.214849	0.0021
R-squared	0.711036	Mean dependent var		1.504317
Adjusted R-squared	0.669089	S.D. dependent var		1.138444
S.E. of regression	0.654888	Akaike info criterion		2.119541
Sum squared resid	26.59046	Schwarz criterion		2.435745
Log likelihood	-66.30348	Hannan-Quinn criter.		2.245423
F-statistic	16.95104	Durbin-Watson stat		0.576910

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Prob(F-statistic)	0.000000			

Company size (Z) cannot moderate profitability (X_1) on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Large companies may have greater flexibility in choosing their capital structure, while small companies may be more limited in their choices and tend to be more affected by their profitability. It is important to remember that these are complex factors, and many other factors, such as the business cycle, industry, and corporate strategy, will also influence a company's final capital structure decision. Large companies with many assets and better access to capital markets may be more likely to have capital structures that are less influenced by profitability. They can easily access capital markets to raise additional funds without having to rely heavily on debt, even if their profitability is low.

Company size (Z) cannot moderate sales growth (X_2) on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Because company size and sales growth are two factors that tend to have an independent relationship in making capital structure decisions. Company size and sales growth are different factors in financial decision making. Company size refers to how large or small the company is based on total assets, revenue, or market value. Meanwhile, sales growth reflects the rate of change in sales revenue from one period to the next.

Company size (Z) cannot moderate liquidity (X_3) on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Large companies often have multiple business lines or business segments. In some cases, different business segments may have different liquidity. Therefore, the overall size of the company does not always accurately reflect the liquidity conditions of each business segment. Large companies' size may provide better access to capital markets, so they can raise funds easily through issuing shares or bonds. This can reduce their dependence on short-term debt which can affect liquidity.

Company size (Z) moderates business risk (X_4) on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Large companies have corporate risk management so they can minimize existing or future business risks. It can be assumed that business risk is moderated by company size and has an effect on capital structure.

5. CONCLUSION AND SUGGESTION

The research results show that profitability has no significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Sales growth has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Liquidity has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Business risk has a significant effect on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. Company size moderates business risk on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange. However, company size cannot moderate profitability, sales growth, and liquidity on capital structure in Palm Oil Plantation Sector Companies on the Indonesian Stock Exchange.

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Based on the research results and discussion above, research suggestions that can be given are as follows:

1. For future researchers, it is hoped that they can develop research related to factors that influence capital structure. Expanding the scope of research by adding variables and research samples.
2. For Companies are expected to be able to conduct a careful analysis of these factors and consider their own situation and objectives to determine the optimal capital structure.
3. For investors and other practitioners, it is hoped that it can be a reference for analysis in making decisions before investing.

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