

THE FACTORS INFLUENCING THE CAPITAL STRUCTURE OF INDONESIAN MANUFACTURING COMPANIES

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ABSTRACT

The purpose of this study is to investigate the impact of capital spending, sales growth, and asset tangibility on the capital structure of manufacturing companies listed on the Indonesia Stock Exchange from 2019 to 2021. In this study, the population consisted of all 24 food and beverage production enterprises. Food and beverage firms with comprehensive financial reports and a positive equity value meet the population criterion for the total population of 22 companies. The sampling approach used is a census, which takes a sample of the entire population, with a total of 22 firms. The study lasted three years and included 66 observations. Multiple linear regression was done on panel data using E-views for data analysis. According to the findings, capital expenditure and sales growth have a positive and insignificant influence on capital structure, but tangibility asset has a positive and significant effect on capital structure.

Keywords: capital expenditure, sales growth, tangibility asset, and capital structure.

Doi:

INTRODUCTION

Capital structure is an essential problem for businesses since it affects performance. Mistakes in estimating the capital structure will have an impact if excessive debt is used, resulting in higher fixed expenditures. This increases the likelihood of being unable to pay the principal and interest (Riyanto, 2008). Food and beverage firms' financial structures change, and nearly half of them employ debt. (bisnis.tempo, September 23, 2021). Internal funds dominated PT Indofood Sukses Makmur (INDF) and PT. Indofood (ICBP) financing in 2019, with DERratios of 45.13% and 77.48%, respectively.

The capital structures of both corporations fluctuated in 2020 and 2021 as a result of the growing usage of debt as support for the company's operating activities. This is due to a huge quantity of cash being spent on capital expenditure, leading internal finances to become insufficient and causing DER to climb by 105.87% and 106.15%, respectively. The increase in capital structure resulted in an increase in capital expenditure of 24% assigned to INDF and 16% allocated to ICBP. The budget is made up of both internal and external money. Furthermore, the combined liabilities of INDF and ICBP amount to about IDR 59.33 trillion.

Instability in the capital structure will harm the firm. A high amount of debt shows that the firm's interest load is rising, reducing profitability and putting the company at risk of default and insolvency. Aside from that, the company's high degree of debt encourages investors to consider investing in it. As a result, the bigger the debt (DER), the lower the share price, the greater the commitments that the firm must perform, and the smaller the payouts to investors for the investments they make. As a result, it can be stated that the capital structure plays a critical role in a company's long-term viability. The involvement of corporate management in capital spending and finance choices is critical to developing a sound capital structure.

Capital expenditure is the first of numerous elements that determine the capital structure. Capital expenditure is the accounting term for the intended allocation (in the budget) to acquire or repair corporate assets. Capital spending has an impact on the capital structure since it is used to meet long-term corporate demands. As a result, firm executives must weigh financial options. According to studies by Sholhin et al(2021) and Appuhami (2008), capital spending has a considerable effect on capital structure. However, according to Roshan (2011), capex has a negligible negative influence on capital structure.

The second factor is sales growth. Sales growth is a measure of the increase or decrease in sales from year to year carried out by a company (Sari, 2015). Companies that have a high level of sales growth tend to require large amounts of funds; for this reason, the company will use various methods to meet these funding needs, including using debt (Yaniatie and Destriana, 2010). This is because the increase in raw materials to be produced requires a large amount of capital. So sales growth affects the capital structure. This is in accordance with research by Yusintha et al. (2010), Susanti & Agustin (2015), and Firmanullah& Darsono (2017) that shows sales growth has a significant positive effect on capital structure. In contrast, Nurkhasanah and Nur (2022), said that sales growth had an insignificant negative effect on capital structure.

The third factor is the tangibility asset (TA). Tangibility assets are the number of assets owned by a company that can be used as collateral, which is measured through a comparison between fixed assets and total assets (Farisa &Widati, 2017) and measured by the fixed asset ratio (FAR). The TA influences the capital structure because the presence of large fixed assets by the company will increase the lender's confidence because they can be used as collateral for the loan being proposed. This is in line with research by Yushinta & Suryandari (2010), Lestari & Irianto (2017), and Natalia (2015), which states that TA has a significant positive effect on capital structure. Meanwhile, research by Chandra et al. (2019) and Komang et al.(2017) states that TA has a significant negative effect on capital structure. This result is also different from research conducted by Rosdiana (2018), which states that asset structure does not affect capital structure.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Pecking Order Theory (POT)

According to POT, the company chose internal funding sources because these funds were obtained without causing negative signals that could reduce share prices. When a company needs external funding sources, the first stage is to issue debt, while equity issuance is done as the final step. This shows that debt issuance is less likely to be seen as a bad signal by investors (Nurkhasanah & Nur, 2022).

Trade of Theory

According to Mirza (1996), the trade-off model cannot be used to accurately determine optimal capital for a company, but through this model, three conclusions can be drawn regarding the use of leverage, namely: (1) companies with lower business risk can borrow more without having to be burdened by the expected cost of financial distress so that tax benefits can be obtained due to the use of greater debt; and (2) companies that have tangible assets and marketable assets should be able to use greater debt than companies that have value mainly from intangible assets. This is because intangible assets are easier to lose value in the event of financial distress compared to standard assets and tangible assets, and (3) companies in countries with high tax rates should contain greater debt in their capital structure than companies that are paid to be recognized by the government as costs, thereby reducing income tax.

Capital Expenditure and the Capital Structure

Companies need investment in capital expenditure to support the company's operational activities. Purchasing fixed assets requires quite a lot of funds. Companies don't often do capex. Usually, the company carries out capital expenditure on fixed assets only a few times, and the rest is for repairs.

The company will use internal funds that come from retained earnings first, and if they are not sufficient, it will borrow from external parties. As explained in the pecking order theory, companies will use funds with the lowest costs, namely internal funds, for the company's operational needs, and if they are insufficient, the first step that will be taken is to borrow money from external parties. The results of this research are in accordance with research by Sholihin et al. (2021), which reveals that capex adds to the value of fixed assets so that it will have a direct impact on the company's capital structure. Based on the description above, the research hypothesis is proposed as follows:

H1: Capital Expenditure influences capital structure.

Sale Growth and Capital Structure

A company achieves its profit target if it can increase sales growth over a certain period of time. Companies that have a large profit growth rate will tend to use capital that comes from internal companies in the form of retained earnings. POT explains why companies that are very profitable and have relatively large internal funds generally have little debt; this is not because the company has a low target debt ratio but because the company does not need funds from outside parties (Brealey and Myer, 1995). Based on the description above, the research hypothesis is proposed as follows:

H2: Sales Growth influences capital structure.

Tangibility (TA) and Capital Structure

According to Brigham (2013), TA is an adequate asset to be used as collateral for a loan. These assets tend to have quite a lot of debt. TA influences sources of financing. Some industrial companies' capital embedded in fixed assets will prioritize the fulfillment of their capital over permanent capital, namely their own capital, while debt is only complementary. Asset structure is one of the factors considered in capital structure decisions. The theory used to explain this relationship is trade-off theory. The trade-off states that a company can increase debt as long as the benefits provided are much greater and there are fixed assets as collateral, but if the cost of debt is too high, the company should not add further debt to avoid unwanted risks that could affect the company's value. Using debt will affect the company's capital structure (Srimindarti & Hardiningsih, 2017). The greater the fixed assets a company owns, the greater the opportunity to obtain external funding sources, which will affect the company's capital structure. Based on the description above, the research hypothesis is proposed as follows

H3: Tangibility of assets influences capital structure.

RESEARCH METHODS

The population in this research is 24 manufacturing companies in the food and beverage sector listed on the Indonesia Stock Exchange (BEI) for the 2019–2021 period. The population criteria are food and beverage companies that publish their complete financial reports for the 2019–2021 period and have a positive equity value. The population that meets the criteria is 22 companies. The sampling technique is a census, which means taking the entire population as a sample. The number of observations was 66. The capital structure in this research is calculated using the long-term debt-to-equity ratio (LTDER), with a formula as follows:

$$LTDER = \frac{\text{hutang jangka panjang}}{\text{modal sendiri}}$$

Capex is calculated using a formula as follows: (Hindrawan, 2016)

$$CAPEX = \frac{\text{total fixed asset } t - \text{total fixed asset } t-1}{\text{total fixed asset } t}$$

Based on Amalia & Ichsanuddin (2019), sales growth is as follows:

$$SG = \frac{\text{net sales } t - \text{net sales } t-1}{\text{net sales } t}$$

Tangibilityasset is calculated using the following formula: (Dewinigrat&Mustanda, 2018)

$$TA = \frac{\text{total fixed asset}}{\text{total asset}}$$

Data analysis uses panel data regression with eViews version 10 software. Panel data regression analysis is used to determine the influence between the independent variable and the dependent variable (Ghozali, 2016) with the formula

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Y = Struktur Modal; β_0 = Konstanta; β_{123} = Koefisien Regresi; X_1 = Capital Expenditure; X_2 = Sales Growth; X_3 = Tangibility Asset; ε = Error term

RESULTS AND DISCUSSION

Based on Table 1, shows that the mean for the DER, CAPEX, and SG variables is lower than the standard deviation, meaning that the fluctuations in the DER, CAPEX, and SG data are relatively large. Meanwhile, the TA variable has an average value that is higher than the standard deviation, meaning that data fluctuations from the TA variable are relatively small.

Table 1
Descriptive Statistical Analysis

Variable	Mean	Median	Max.	Min.	Std.Dev	Obs
DER	0,375	0,242	1,571	0,000	0,421	66
CAPEX	0,140	0,093	0,733	0,001	0,172	66
SG	0,242	0,140	2,473	0,023	0,457	66
TA	0,575	0,595	0,840	0,103	0,201	66

Source : Processed Data (2023)

Based on Table 2, the results of the Chow test show that the cross-section probability value F is $0.0000 < 0.05$, so a temporary conclusion can be drawn that the fixed effect model (FEM) is more appropriate to use, so a Hausman test is carried out. The results of the Hausman test show a chi-square square probability of $0.116 > 0.05$, so the appropriate model is to use the random effect model (REM). Determining the estimate must proceed to the Lagrange multiplier test. The results of the Lagrange multiplier test show that the Breusch-Pagan cross-section probability is $0.0043 < 0.05$, so the best model is the random effect model (REM). This research did not test classical assumptions because it used panel data and the selected estimation model was the random effect model (REM). According to Gujarati & Porter (2013), the panel model (random effect) estimation method using the generalized least squares (GLS) method does not need to meet classical assumptions. Apart from that, Melati & Suryowati (2008) also said that in the random effect model, there is no need to test classical assumptions because the generalized least squares (GLS) method can overcome the problems of heteroscedasticity and autocorrelation.

Table 2
Determination of Panel Data Estimates

Description	Prob.	Decision	Obs.
Uji Chow Probability Cross-section F	0,000	<0,05 (FEM)	66
Uji Haussman Probability Chi Square	0,116	>0,05 (REM)	66
Uji Lagrange Multiplier Probability Breusch-Pagan	0,004	<0,05 (REM)	66

Source: Processed Data (2023)

Table 3
Data Panel Regression Result

Variable	Coefficient	t-statistic	Prob.
Constanta	-0,586	-2,533	0,019
CAPEX	0,236	1.533	0,139
SG	0,167	1,080	0,291
TA	1,499	3,875	0,001
R ²	0,502	Adjusted R ²	0,436
F statistic			0,001

Source: Processed Data (2023)

Based on Table 3, the regression equation can be formulated as follows:

$$SM = -0.586 + 0.236CAPEX + 0.167SG + 1.499TA$$

The constant value is -0.586, meaning that if the CAPEX, SG, and TA variables are considered constant, then the capital structure decreases by 58.6%. The capital expenditure variable shows an insignificant positive relationship with capital structure. For every 1% increase in capex, there will be an increase in capital structure of 23.6%, with a small increase in the sales growth variable showing a positive to insignificant relationship to capital structure. For every 1% increase in sales growth, there will be an increase in capital structure of 16.7%, with a small increase rate. The tangibility variable shows a positive and significant relationship to capital structure. For every 1% increase in asset tangibility, there will be a significant increase in capital structure of 149.9%.

The corrected R-squared value is 0.436587 (43%), indicating that three independent variables (capital expenditure, sales growth, and asset tangibility) explain 43% of the capital structure variable, while the remaining 57% is explained by other factors. Which is not included in the research model. The F statistic probability $0.001 < 0.05$ explains that the model used in this research shows a good model, meaning that the capital structure is influenced by CAPEX, SG, and TA.

Capex has a positive effect but is insignificant on the capital structure. High capex does not increase the use of debt because capital expenditure uses internal funds. As for spending and repairing fixed assets, it requires quite a lot of funds, so the company's internal funds are no longer sufficient, so the next step the company will take is to use debt. This is in line with POT, which states that for capital expenditure, a company uses funds with the cheapest costs first, namely funds that come internally; if they are not sufficient, the company borrows from external parties. Capital expenditures for fixed assets are not often carried out, except for repairs or additions to fixed assets. The more capex increases, the capital structure will increase with an insignificant increase. The results of this research are in line with previous research by Roshan (2009), which concluded that capex had a positive but insignificant effect on capital structure.

Sales growth has a positive and insignificant effect on the capital structure. Companies that have a high sales growth rate use more internal funds in the form of retained earnings. In accordance with POT, companies that are very profitable and have a high sales growth rate prefer funding with the lowest costs and minimal risk, namely internal funds. This condition shows that the ups and downs in sales growth do not increase debt because the company does not use external funds in the form of debt for the company's operational needs. However, companies with high sales growth rates use company profits obtained from these sales. So debt is not needed to finance company operations. The results of this research are in line with Nurkhasanah & Nur (2022) and Peter & Tanadi (2020) that sales growth has a positive relationship and is insignificant to capital structure.

The Effect of Tangibility Asset on Capital Structure

TA has a significant positive effect on the capital structure. TA is owned by a company, which indicates how much wealth the company owns, both in the form of current assets and fixed assets. Companies that have a large number of fixed assets have easy access to funding sources other than internal funds. In accordance with POT, it is stated that companies with high fixed assets can increase debt as long as the benefits provided are greater by having fixed assets as collateral. However, if the cost of debt is too high, the company should not add further debt to avoid unwanted risks that will impact the company's value. Some companies invest their capital in fixed assets. The greater the total number of fixed assets owned by the company, the greater the capital the company has, and the easier it will be for the company to make loans in the form of debt. Investors are more interested in investing in companies that have a large number of fixed assets. If the company cannot fulfill its obligations, the fixed assets owned by the company can be sold to pay off its obligations and avoid the risk of bankruptcy, and large amounts of fixed assets can be used as collateral by the company. The results of this research are in line with research by Natalia (2015), Lestari & Irianto(2017), and Angeliend (2013), which found that TA has a significant positive influence on capital structure.

CONCLUSIONS

Based on the research results expenditures have a positive and insignificant effect on capital structure, meaning that increasing capital expenditure will increase capital structure with a small increase. Sales growth has a positive and insignificant effect on capital structure, meaning that increasing sales growth will increase the capital structure by a small increase. TA has a positive and significant effect on capital structure, meaning that increasing TA will improve the capital structure with a large (significant) increase. It is recommended that future researchers add other independent variables to produce better research results, such as profitability, debt policy, funding decisions, investment decisions, company size, earnings management, and others. It is hoped that future research will include a longer research period than this one.

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