EFFECT OF BUSINESS RISK, FIRM SIZE, SALES GROWTH PROFITABILITY AND LIQUIDITY ON CAPITAL STRUCTURE IN FOOD AND BEVERAGE SECTOR MANUFACTURING COMPANIES LISTED IN EXCHANGE OF INDONESIA STOCK (BEI) 2013-2017

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Abstract: The purpose of this study is to analyse the components of business risk, firm size, sales growth, profitability and liquidity influencing the capital structure of food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2017.
This research was conducted by observing the food and beverage sector manufacturing companies on the Indonesia Stock Exchange. The sampling technique uses a sampling census method where. Testing the hypothesis by regression of the data panel and analysis is done using the Eviews application tool. The results of this study prove that partially business risk variables and firm size affect the capital structure while the sales growth, profitability and liquidity variables do not affect the firm value.

Keywords: Capital Structure, Business Risk, Firm Size, Sales Growth, Profitability and Liquidity

1. Introduction

One of the important decisions faced by companies is funding decisions or capital structure decisions. This is very important for the company because it is related to the continuity of the company's operations, the company's competitive advantage and in facing special situations such as the monetary crisis and so on. Capital structure is an important problem, because decisions about the structure of capital pose risks that must be borne by the company owner in addition to causing a certain rate of return. Each funding source has a different level of risk and rate of return. Debt funding causes profits or losses between the level of risk and the rate of return.
Brigham and Houston (2001), states that business risk is the risk of company assets if the company does not use debt. Risk arises along with the emergence of a cost burden on loans made by the company. The greater the cost that must be borne, the greater the risk faced by a company.
Firm size can affect the capital structure because the larger the firm size will tend to use larger debt. Debt is one of the sources of funds chosen if the company's own

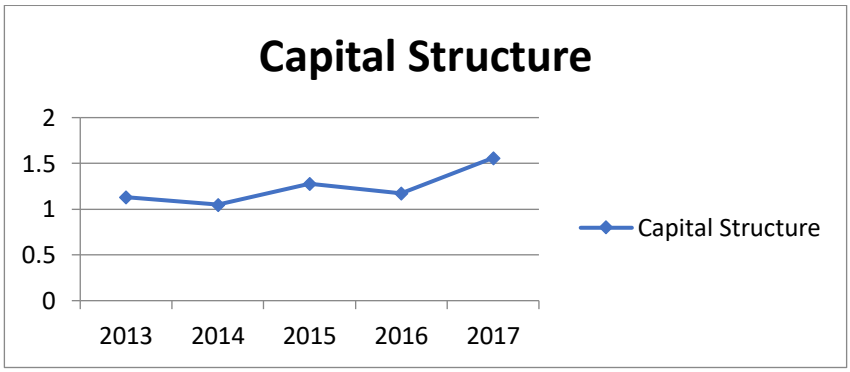
capital is insufficient. This is consistent with what Riyanto explained (2011: 230) that the firm size directly affect the capital structure policy.

Sales growth can also affect the capital structure of a company. Oktavia (2012) states that companies with large sales will generate high profits so that the company is more likely to finance its operations with its internal funds that come from the results of its operations. The higher the growth rate of the company's sales, the use of loan capital (debt) will be reduced.

Profitability or profit level is the ability of a company to generate profits at a certain level of sales in a period. In the pecking order theory, which explains companies prefer funding sources originating from internal companies rather than external companies, it shows that companies that get greater profits will prefer funds from internal companies to finance their operations. The higher the profitability of the company, the more the debt will be reduced to the company.

Liquidity is how much the company's ability to fulfill its short-term obligations. Liquidity is one of them measured by a debt ratio, which is a ratio that measures the presentation of capital needs that are spent on debt (Brigham and Houston, 2001). In accordance with the pecking order theory, companies will prioritize using internal funds. Companies with high liquidity will reduce their external funding due to high internal sources.

Figure 1. Value of Debt to Equity Ratio (DER) of food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange in 2013-2017



Source: data processed 2018

The value of the Debt to Equity Ratio (DER) of manufacturing companies in the food and beverage sector is listed on the Indonesia Stock Exchange during 2014 up to 2017 up and down. In 2013 amounted to 1.13, in 2014 amounted to 1.05, in 2015 amounted to 1.28, in 2016 amounted to 1.17 and in 2017 amounted to 1.56. The highest value of Debt to Equity Ratio (DER) in 2017 is 1.56, which means that the use of debt this year is very high. According to Bagas (2011), if the value of the capital structure is above one or greater than one, it means that the company has a larger amount of debt than the amount of its own capital. This condition is not in accordance with the optimal capital structure theory, where the amount of company debt should not be greater than the equity. Meanwhile, most investors are more interested in investing in the form of investments in companies that have a certain capital structure that is less than one.

Based on the previous description, the authors are interested in researching the "Effects of Business Risk, Firm Size, Sales Growth, Profitability and Liquidity on Capital Structure in Food and Beverage Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) in 2013-2017".

2. Literature Review

2.1. Pecking Order Theory

Briefly this theory states that: (a) companies like internal financing (funding from the results of operations in the form of retained earnings), (b) if external funding will issue the safest securities first, that is, starting with the issuance of bonds, then followed by securities that have characteristic options (such as convertible bonds), only when there is still insufficient, new shares are issued. In accordance with the theory, there is no target of a debt to equity ratio, because there are two types of own capital, namely internal and external. Own capital from within the company is preferred over capital originating from outside the company. According to Myers (2001), "companies prefer funding from internal capital, namely funds originating from cash flow, retained earnings and depreciation".

2.2. Signalling Theory

In the theory of signals according to Brigham and Houston (2001) "that an action taken by the management of a company that provides guidance for investors about how management views the prospects of the company". Furthermore, companies with profitable prospects will try to avoid the sale of shares and seek every new capital needed in other ways, including the use of debt that exceeds the normal capital structure target.

2.3. Agency Theory

This theory was put forward by Jansen and Meckling in (1976), where agency theory suggests a relationship between agents, namely managers and principals, namely creditors and investors. Management is the agent of the shareholders, as the owner of the company. Shareholders hope agents will act on their behalf so that they delegate authority to agents. To be able to function properly, management must be given incentives and adequate supervision. Supervision can be done through methods such as binding agents, checking financial statements, and limiting decisions that management can take.

2.4. Capital Structure

In the world of finance, the notion of capital structure usually refers to how a company manages funding for its assets through a combination of equity financing and debt financing. Capital structure is a comparison between debt and equity, so it is important for companies to supervise the percentage of debt. Supervision of capital structure can be calculated by one proxy on the debt to equity ratio (DER). In this study DER will be used to measure the use of debt to the total capital of a company (Wild, 2005).

2.5. Business Risk

Risk can be interpreted as a potential occurrence of an event that can cause losses. Companies with large business risks must use smaller debt compared to companies that have low business risks. This is because the greater the business risk, it will be difficult for companies to return their debts. Business risk is one of

the risks faced by companies when undergoing operations (Tandelilin, 2010). The level of business risk of a company is influenced by the stability of income and the structure of operational costs, in addition, business risks can occur if the company has a debt that is too high in portion.

2.6. Firm Size

Size is a symbol of firm size. This factor explains that a large firm has easier access to the capital market, while small firm are not easy. The ease of accessibility to the capital market is the flexibility and ability of the company to create debt or raise larger funds with the note that the company has a higher ratio of dividend payments to smaller companies.

2.7. Sales Growth

Sales growth is defined as an increase in the number of sales from year to year or from time to time (Kennedy et al., 2013). By knowing sales from the previous year, companies can optimize existing resources. A company can be said to experience growth in a better direction if there is a consistent increase and the main activity of its operations. The approach to sales growth is a component to assess the company's prospects in the future. It can be concluded that sales growth is a component to assess the company's prospects in the future and financial management is measured based on changes in total sales growth.

2.8. Profitability

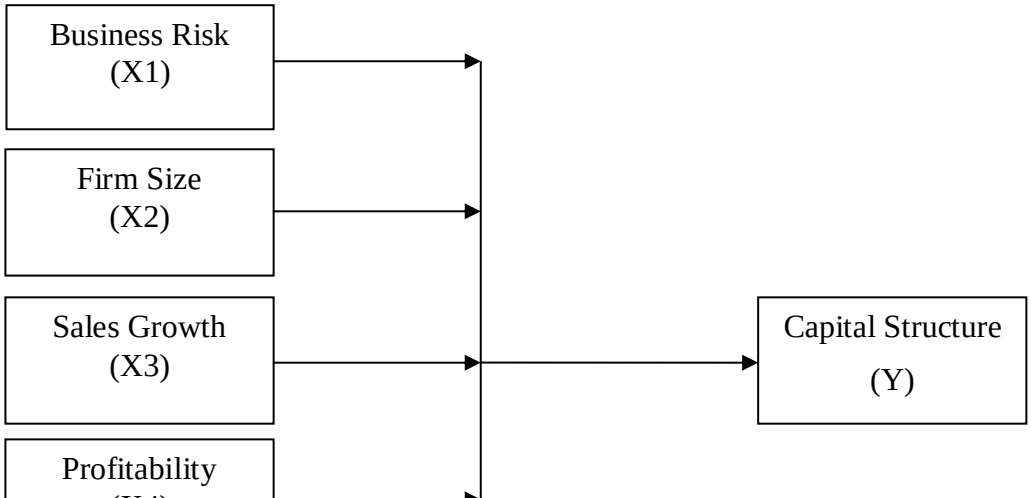
Profitability is the ability of a company to earn profits in a certain period. Husnan (2001), profitability is the ability of a company to generate profits at the level of sales, assets and certain share capital. Profitability describes the ability of a business entity to generate profits by using all of its capital.

2.9. Liquidity

Liquidity is the company's ability to fulfill its short-term obligations (Sudana, 2011). Liquidity ratio is a ratio that shows the ability of a company manager to fulfill its short-term obligations. If the company is able to fulfill its obligations, the company is considered as a liquid company. But on the contrary, if the company is unable to fulfill its obligations, the company is assessed as an illiquid company.

2.10. Conceptual Framework

Based on background, problem formulation and research theoretical basis, several independent variables were identified, namely Business Risk Variable (X1), Firm Size (X2), Sales Growth (X3), Profitability (X4) and Liquidity (X5) Dependent Variables namely Capital Structure (Y). The relationship between these variables is shown in the following figure:



Hypothesis

H1: Business Risk Has a Positive Effect on Capital Structure
H2: Firm Size Has Positive Impact on Capital Structure
H3: Sales Growth Has a Positive Effect on Capital Structure
H4: Profitability Has Negative Effects on Capital Structure
H5: Liquidity Has Negative Effects on Capital Structure

3. Method

This research is an associative type of study with a form of causal relationship. The research was conducted on food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange 2013-2017 from the Indonesia Stock Exchange website www.idx.co.id.

Based on these criteria, 14 companies were selected as samples. Sampling was taken in saturated sampling. The study period is 5 years (2013-2017) so the number of samples is 70 samples. The data analysis model and technique in this study uses a panel data approach. Before testing hypotheses, first testing the classical assumptions on research data because it is a statistical requirement that must be fulfilled to carry out multiple linear regression analysis. In this study, the classic assumption test that will be used is the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

4. Results and Discussion

4.1 Result

Determination of Estimation Model between Common Effect Model (CEM) and Fixed Effect Model (FEM) with Chow Test

To determine whether the CEM or FEM estimation model forms a regression model, the Chow test is used. It is known that the probability value is 0,000. Because the probability value is 0,000 <0,05, the estimation model used is the fixed effect model (FEM) model.

Determination of Estimation Model between Fixed Effect Model (FEM) and Random Effect Model (REM) with Hausman Test

To determine whether the FEM or REM estimation model in forming a regression model, the Hausman test is used. It is known that the probability value is 0.0780. Because the probability value is 0.0780> 0.05, the estimation model used is the random effect model (REM) model.

Hypothesis Testing

In testing the hypothesis, the coefficient of determination analysis will be carried out, testing for simultaneous influence (F test), and testing for partial influence (t test). Statistical values of the coefficient of determination, F test, and t test are presented in Table 1.

Table 1 Statistical values of the Determination Coefficient, F test, and t test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1?	0.756807	0.323025	2.342872	0.0223
X2?	0.135030	0.021641	6.239601	0.0000
X3?	0.195343	0.182559	1.070031	0.2886
X4?	-0.002479	0.006535	-0.379370	0.7057
X5?	-0.000928	0.000505	-1.836967	0.0709
C	-1.462707	0.273399	-5.350084	0.0000
R-squared	0.563274	Mean dependent var		-0.067153
Adjusted R-squared	**0.529155**	S.D. dependent var		0.513158
S.E. of regression	0.352120	Sum squared resid		7.935246
F-statistic	16.50899	Durbin-Watson stat		1.646617
Prob(F-statistic)	**0.000000**			

Source: Results of Olah Software Eviews 7

Based on the analysis of the coefficient of determination, it is known that the coefficient of determination (Adjusted R-squared) is $R^2 = 0.5291$. With this value it can be interpreted that BRISK, SIZE, SALES, ROA, CR simultaneously or jointly affect DER of 52.91%, the remaining 47.09% is influenced by other factors.

The F test aims to test the effect of independent variables together or simultaneously on non-independent variables. Based on the F test, the Prob value is known. (F-statistics), which is 0.0000 <0.05, it can be concluded that all independent variables, namely BRISK, SIZE, SALES, ROA, CR simultaneously, have a significant effect on the DER variable.

Based on the multiple linear regression equation and the significance test of the partial effect (t test), the multiple linear regression equation is obtained as follows:

$$Y = -1{,}462 + 0{,}756X_1 + 0{,}135X_2 + 0{,}195X_3 - 0{,}002X_4 - 0{,}0009X_5$$

1. It is known that the regression coefficient of the BRISK variable (X1) is 0.756, which is positive. This means that BRISK has a positive effect on DER. It is known that the Prob value is 0.0223, which is <0.05 significance level, then the BRISK has a significant effect on DER.
2. It is known that the regression coefficient of the SIZE (X2) variable is 0.135, which is positive. This means that SIZE has a positive effect on DER. It is

known that the Prob value is 0.0000, which is <0.05 significance level, then SIZE has a significant effect on DER.

3. It is known that the regression coefficient of the SALES variable (X3) is 0.195, which is positive. This means that SALES has a positive effect on DER. It is known that the Prob value is 0.2886, that is> a significance level of 0.05, then SALES has no significant effect on DER.
4. It is known that the regression coefficient of the ROA (X4) variable is -0.002, which is negative. This means that ROA has a negative effect on DER. It is known that the Prob value is 0.7057, which is> a 0.05 significance level, then ROA does not have a significant effect on DER.
5. It is known that the regression coefficient of the CR variable (X5) is -0,0009, which is negative. This means that CR has a negative effect on DER. It is known that the Prob value is 0.0709, which is> the 0.05 level of significance, then the CR does not have a significant effect on DER.

4.2. Discussion

The Effects of Business Risk on Capital Structure

Based on the results of testing using a partial test (t test) in table 1 shows that the coefficient of regression of the BRISK variable (X1) is 0.756, which means that this variable shows a positive direction between the BRISK variables and DER. The BRISK variable has a significance level of 0.0223 which is smaller than 0.05, meaning that BRISK has a positive and significant effect on DER. Based on the agency cost theory, the use of debt is the choice of shareholders to exercise control over the manager and limit the manager to making funding when the company decides to invest in high-risk investments but brings great profits when successful. The results of this study are in line with the research of Wardana & Sudiartha (2015) and Yulinda (2007) showing that business risk has a positive and significant effect on capital structure.

The Effect of Firm Size on Capital Structure

Partial test results (t test) show that the variable size coefficient of firm size (SIZE) coefficient of 0.135 means that this variable shows a positive direction between SIZE and DER. SIZE variable has a significance level of 0.0000 which is smaller than 0.05, meaning SIZE has a positive and significant effect on capital structure (DER). This research is in line with signalling theory, where increasing firm size will be followed by an increase in capital structure because large firm size is a positive signal for outsiders to provide additional capital so that the capital structure becomes larger. The results of this study are consistent with Primantara & Dewi's (2015), Juliantika & Dewi (2014), and Pranbansari (2005) studies, which state that firm size has a positive and significant effect on capital structure.

The Effect of Sales Growth on Capital Structure

The partial test results (t test) show that the coefficient regression of sales growth variable (SALES) is 0.195 which means that this variable shows a positive direction between SALES and DER. The SALES variable has a significance level of 0.2886 which is greater than 0.05, meaning that SALES has a positive and not significant effect on capital structure (DER). The variable of sales growth is not significant to the capital structure, it is because the sales of the previous year were

larger compared to the sales of the following year which caused the company's sales growth rate was very small. The results of this study are in line with the researchers Kaliman & Wibowo (2014) and Wijaya & Utama (2013) who showed sales growth did not affect the capital structure.

The Effect of Profitability on Capital Structure

The partial test results (t test) show that the coefficient regression of profitability (ROA) variable is -0.002 which means that this variable shows a negative direction between ROA and DER. The ROA variable has a significance level of 0.7057 which is greater than 0.05, which means that ROA has a negative and not significant effect on capital structure (DER). Where the level of company profitability is low, it will use more debt to finance most of the company's funding needs. This result is not in accordance with the pecking order theory which states that the greater the profitability of the company, the greater the source of funds originating from the internal company. The results of this study are in line with researchers Widayanti et al. (2016) and Pertiwi & Darmayanti (2015) who stated that profitability does not affect the capital structure.

The Effect of Liquidity on Capital Structure

The partial test results (t test) show that the variable liquidity coefficient (CR) coefficient value is -0,0009 which means that this variable shows a negative direction between CR and DER. The CR variable has a significance level of 0.7009 which is greater than 0.05, which means that the CR has a negative and not significant effect on the capital structure (DER). The relationship of liquidity in this study has a negative and but not significant effect, this theoretically shows the ability of the company to pay off its smooth obligations with its current assets. But the company should not only pay attention from the side of current assets in determining the amount of debt, but the company must also look at the company's fixed assets, because companies that have large fixed assets can be used as collateral for their debt. The results of this study are in line with the researcher Dahlena (2015) and Wenny & Linandi (2012) who stated that liquidity had no effect on the capital structure.

5. Conclusion and Suggestion

5.1. Conclusion

Based on the description above, conclusions can be obtained as follows:

1. Business risk (BRISK) has a positive effect on capital structure (DER) in food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2017
2. Company size (SIZE) has a positive effect on capital structure (DER) in food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2017
3. Sales growth (SALES) does not affect the capital structure (DER) in food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2017
4. Profitability (ROA) does not affect the capital structure (DER) in food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2017

5. Liquidity (CR) does not affect the capital structure (DER) of the food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2017

5.2. Suggestion

Based on the conclusions of the results that have been presented, the researcher gives suggestions as follows:

1. For the Company, it is expected to maintain various factors that can affect the capital structure, especially business risk, company size, sales growth, profitability and liquidity. And companies better maintain the stability of the company in the company's activities so that the business risks faced are smaller if there is a loss.
2. For investors, it is expected that the results of this study can be used as a reference in making decisions in investing, especially investment in food and beverage companies by looking at the capital structure.
3. For the next researcher, it is expected that the results of this study can be used as a reference and consideration for conducting research development, especially research related to factors that can affect capital structure. And further researchers can add other factors such as asset structure, taxes and others that can affect capital structure, add years of research and conduct research in other sectors.

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