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Effect of Working Capital and Leverage on Profitability (Study on Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange 2014 - 2018 Period)

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Abstract

This study aims to testThe Effect of Working Capital and Leverage on Profitability (Study of Manufacturing Companies in the Food and Beverage Sub-Sector Listed on the Indonesia Stock Exchange for the Period 2014 - 2018). The population in this study were all food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period. TtechniqueSampling in this study using purposive sampling. Based on the predetermined criteria, the researchers determined 14 food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange. The data were processed using SPSS version 25. The results show that Days of Inventory Outstanding (DIO), Days of Sale Outstanding (DSO), Days of Payable Outstanding (DPO) and DER have a simultaneous effect. On Profitability, shows that DIO, DSO, DPO and DER together are able to increase profitability, DIO has an effect on profitability, DSO has a negative effect on profitability. DPO has no effect on profitability.

Keywords: Working Capital, Leverage, and Profitability

INTRODUCTION

The times have created higher competition between companies, companies are forced to meet consumer needs while improving quality at more competitive prices, as well as competing to be the most superior so that they can continue to survive. To build a company to meet needs, companies need a lot of funds in the form of working capital accompanied by good management. With the fulfillment of the management of working capital that is managed properly and appropriately, it can affect the company's performance so that it also improves. This will also have an impact on increasing company profitability.

*Profitability*can show the company's performance in creating profits, therefore profitability ratios need to be considered. Profitability ratios can show the company's ability to pay off long-term and short-term obligations. To meet the financial position and whether the company has performed efficiently and effectively, it is necessary to analyze the working capital ratio. According to Kasmir (2014:115) profitability ratio is a ratio to assess the company's ability to seek profit. This ratio also provides a measure of the level of management effectiveness of a company. This is indicated by the profit generated from sales and investment income.

*Pecking Order*mer theorywork out the theory that forms the basis of the theory in this research. *Pecking Order theory*This can explain the reason why companies that high levels of profit have actually have low levels of debt. According to Myers (1984), pecking order theory explains that companies with higher levels of profitability actually have low levels of debt.

Companies can measure the level of profitability (ROA) using several indicators contained in working capital, namely cash, receivables, inventories, and payables. From the four components, the turnover rate will be calculated which will then be linked to profitability. One way to find out how efficient the level of working capital management is can be seen through a comparison between DSO, DIO, and DPO on profitability (ROA).

According to Enqvist, et.al (2014) one way to measure company profitability is by linking capital to the CCC (Cash Convention Cycle) factor. Cash Convention Cycle (CCC) is a very important factor in working capital management as a measuring tool which Cash Convention Cycle (CCC) is defined as the length of time between the company's expenditures for the procurement of raw materials and the collection of sales of finished goods, as a measure of working capital (Enqvist, 2007). et.al 2014). Cash Conversion Cycle or cash conversion cycle is a metric that shows the time a company converts its investment in inventory into cash, then the company uses it to convert its resource inputs into cash. That way, the company can find out the right steps and policies to maintain business continuity.

Leverage is a ratio that describes the relationship between the company's debt to capital, this ratio can see how far the company is financed by debt or external parties with the company's ability described by capital. Meanwhile, according to Fahmi (2012) leverage is a measure used in analyzing financial statements to show the amount of collateral available to creditors. *Debt to equity ratio* (DER) is a debt ratio used to measure the ratio between total debt and total capital. Debt to equity ratio (DER) is a debt ratio used for creditors or investors who usually prefer a low debt to equity ratio (DER) because the level of security of funds is getting better. The results of research by Yulita M. Gunde and Sri Murni (2017) and Nuga Aditya Dharma (2010) which state that DER has an influence on ROA. states that DER has a significant effect on profitability, in contrast to the results of research by Sri Wahyuni (2018) and Yurico (2016) which state that DER has no effect on profitability.

PeThis study uses a food and beverage sub-sector manufacturing company because it has such rapid development and increasingly fierce competition in the food and beverage industry, where more and more product diversification is produced by food and beverage companies. People in Indonesia who tend to be consumptive in meeting basic needs such as: clothing, food, and shelter, are a very good future prospect because basically all people need food and drink to live. The population in the food and beverage sub-sector companies listed on the IDX is also quite large compared to other sub-sectors.

Based on the theoretical basis, the differences in the results of previous studies and the suggestions given, the authors are interested in conducting researchentitled “The Effect of Working Capital and Leverage on Profitability (Study on Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the Period 2014 - 2018)."

Formulation of the problem

Based on the above background, the formulation of the problem in this study is:

1. Do Days of Inventory Outstanding, Days of Sale Outstanding, Days of Payable Outstanding, and Leverage simultaneously affect Profitability?

2. Does Days of Inventory Outstanding affect Profitability?
3. Does Days of Sale Outstanding affect Profitability?
4. Does Days of Payable Outstanding affect Profitability?
5. Does Leverage affect Profitability?

LITERATURE REVIEW

Profitability Concept

In general, every company aims to make a profit or profit. The company's management is required to be able to achieve the targets that have been planned. The profitability ratio according to Fahmi (2013:116) is: "The profitability ratio is to show the company's success in generating profits. Potential investors will carefully analyze the smooth running of a company and its ability to earn profits. The better the profitability ratio, the better it describes the company's high profitability.

According to Kasmir (2014:115) profitability ratio is a ratio to assess the company's ability to seek profit. This ratio also provides a measure of the level of management effectiveness of a company. This is indicated by the profit generated from sales and investment income. The point is that the use of this ratio shows the efficiency of the company.

The Purpose and Benefits of Profitability Ratios According to Kasmir (2014: 197), the objectives and benefits of using profitability ratios are as follows:

Capital Structure Concept

The change plan (balance sheet) consists of the asset side which reflects the wealth structure and the liability side as the financial structure. The capital structure itself is part of the financial structure which can be interpreted as a permanent expenditure that reflects the balance between long-term debt and own capital. Capital structure is a balance or comparison between the amount of long-term debt with its own capital.

According to Weston and Copeland (1996) financial structure is the way in which a company finances its assets and can be seen on the entire right side of the balance sheet consisting of short-term debt, long-term debt, and shareholder capital. While the company's capital structure is permanent financing consisting of long-term debt, preferred stock and shareholder capital. So, the company's capital structure is only part of its financial structure. Meanwhile, according to Home and Wachowicz (1998) capital structure is the mix (proportion) of the company's permanent funding which is indicated by debt, preferred stock equity and common stock.

Fulfillment of funding needs can be obtained both internally and externally. The form of internal financing (internal financing) is retained earnings and depreciation. Fulfillment of needs carried out externally can be divided into debt financing and equity financing. Debt financing can be obtained through loans, while equity can be obtained through the issuance of new shares. The theory of capital structure has been widely discussed by many researchers. The following will be described by these researchers.

1. Modigliani-Miller Model Theory

2. *The Trade Off Model*
3. *Pecking Order Theory*
4. *Agency Theory*
5. *Signaling Theory*
6. *Asymmetric Information Theory*

Working capital

Every company in carrying out daily operational activities certainly needs funds to finance it. The funds that have been issued are expected to be able to return to the company and be used again by the company to finance further operations. One of these funds is working capital according to Kasmir (2012: 250) which defines that "Working capital is working capital used to carry out company operations. Working capital can also be interpreted as an investment invested in current assets or short-term assets, such as cash, marketable securities, receivables, inventories, and other current assets."

According to Munawir (2010: 114), there are three basic concepts or definitions of working capital used, namely:

a. Quantitative Concept
   This concept focuses on the quantity (amount) needed to meet the company's needs in financing routine operational needs or shows the amount of funds available for short-term operating purposes.
b. Qualitative Concept
   This concept focuses on the quality of working capital. In this concept, the definition of working capital is the excess of current assets over short-term debt (net working capital), namely the number of current assets originating from long-term loans and from company owners.
c. Functional Concept
   This concept focuses on the function of the funds owned in order to generate income (profit) from the company's main business, basically all the funds owned by the company will be used to generate profits for this period (current income), there are some funds that will be used to obtain income. or generate profits in the future.

Leverage

*Leverage*is the use of assets and sources of funds by companies that have fixed costs (fixed expenses) with the aim of increasing the potential profits of shareholders (Sartono, 2008:257). Leverage is a level of the company's ability to use assets and or funds that have a fixed burden (debt and or special shares) in order to realize the company's goal of maximizing the wealth of the owner of the company.

According to Sjahrial (2009:147), leverage is the use of assets and sources of funds by companies that have fixed costs (fixed expenses) meaning the source of funds comes from loans because they have interest as a fixed expense with the intention of increasing the potential profits of shareholders.

Companies that have fixed operating costs or fixed capital costs, the company uses leverage. The use of leverage can pose a burden and risk for the company, especially if the company's condition is deteriorating. In addition to the company having to pay the growing interest expense, the possibility of the company getting a penalty from a third party can also occur.

RESEARCH METHODS

Object of research

The object of this research is a food and beverage sub-sector manufacturing company listed on the Indonesia Stock Exchange for the period 2014 - 2018 and published through the IDX website, namely http://idx.co.id.

Research Population

Population according to Sugiyono (1999:72) is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The population in this study are all food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the period 2014 - 2018 which are published through the IDX website, namely http://idx.co.id

Research Sample

The sample is part of the population to be studied and which is considered to be able to describe the population (Soehartono, 2004:57). The sampling technique used in this research is purposive sampling, according to Sugiyono (2011:85) purposive sampling is a sampling technique with certain considerations. the criteria used in the sampling are:

1. Food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange and publishing financial reports in a row from 2014 -2018.
2. Have complete data needed in research, especially sample data used in this study.

Based on the predetermined criteria, the researchers determined 14 food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange to be sampled in this study.

Data Type

The types of data used are quantitative and qualitative data, as for the explanation of each data, namely:

1. Quantitative data is data in the form of summary data on the financial statements of food and beverage manufacturing companies, which are listed on the Indonesia Stock Exchange through the official website http://www.idx.com from 2014 - 2018.
2. Qualitative data is data in the form of explanations/statements that are not in the form of numbers, such as an overview of the company.

Data source

The source of data in this study is secondary data originating from the IDX website, namely http://idx.co.id, in the form of an Annual Report published from 2014 to 2018.

Method of collecting data

This study uses the method of collecting documentation data with secondary data in the form of annual financial reports of food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2014-2018 from the IDX website, namely www.idx.com.

Data analysis method

1. *Descriptive statistics*

   Descriptive statistics are used to determine the level of influence of Days of Inventory Outstanding, Days Of Sale Outstanding, Days Of Payable Outstanding, and Leverage on profitability in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange. The measurements used in this study are the minimum value, maximum value, average value, and standard deviation.

2. *Classic assumption test*

   The regression method obtained from OLS is a regression model that produces the best unbiased linear estimator (Best Linear Unbiased Estimator/BLUE), Ghozali (2011). The condition will occur if it fulfills several classical assumptions such as normality, heteroscedasticity, and multicollinearity.

RESEARCH RESULT

Influence *Days of Inventory Outstanding, Days of Sale Outstanding, Days of Payable Outstanding, and DER* to Profitability

The results of the hypothesis explain that simultaneously (together) the variable*Days Of Inventory Outstanding* (DIO), Days Of Sale Outstanding (DSO), Days Of Payable Outstanding (DPO), and Debt to Equity Ratio (DER) positive and significant effect on profitability. This is in accordance with the results of the calculation of multiple linear regression analysis F-test. This shows that together the effect of *Days of Inventory Outstanding, Days of Sale Outstanding, Days of Payable Outstanding, and DER*optimally can increase profitability. The results of this study are in accordance with the results of the studyDida Adi setyadarma (2019), and Fauzan (2015).

Influence *Days of Inventory Outstanding* Against Profitability

Based on the results of the analysis of the effect *Days of Inventory Outstanding* (DIO) on profitability found a positive and significant effect. Then the second hypothesis in this study which states that *Days of Inventory Outstanding* significant effect on profitability is accepted. This finding shows thatThe faster the inventory period will result in an increase in profitability (ROA) in manufacturing companies listed on the BEI. This can also be explained from the results of the appropriate mean DIO value, where the smaller the DIO

value, the better.

The faster the turnover rate of the inventory, the more likely it will have a big impact on the company and will get more profits. As previously explained, different things will happen if the opposite happens, namely if the level of inventory turnover is low, which means that the company's inventory is piling up in the warehouse, there will be a possible impact on the company, the smaller the company will get an increase in profitability.,As stated in the theory of capital structure, companies must be able to control their capital structure (in this case inventory) at a certain level as a step to limit the costs of the company being owned.Semafaster than the turnover processInventory will be able to prevent the company from the risk of losses that come from changes in market prices, as well as changes in the company's consumer tastes and can help the company to save costs from storage in the company's warehouse. The results of this study are in line with the research of Dida Adi Setyadarma (2019), and Fauzan (2015) stating that DIO has a positive effect on ROA.

Influence *Days of Sales Outstanding* Against Profitability

Based on the results of the analysis of the effect *Outstanding Days of Sale* (DSO) on Profitability, find DSO has a significant effect on ROA in a negative direction. So, the third hypothesis in this study is accepted. DSO is an estimate of the days it takes consumers to make payments from transactions made with the company by way of payment. Receivables are one of the investment assets in the company that reduce slightly from the company's capital. Receivables usually arise because the company makes transactions on credit with customers which is used to increase its sales volume. In pecking order theory, the company's preference for funding is to use internal funding obtained from sales. The faster the receivables turnover, the profitability will also increase. This research concludes that the faster the process of accounts receivable turnover, the faster the company will benefit from the sales process in the form of credit, so that later the impact of the process will result in the profitability of the company later being able to change in the form of an increase. because they quickly get profit from sales activity. If the opposite happens then profitability will decrease. The results of this study are supported by the results of a study by Fauzan (2015) and Linda (2015) which state that the Days of Sales Outstanding (DSO) relationship has a negative effect on ROA.but contrary to the results of research by Abuzayed (2012).

Influence *Days of Payable Outstanding* Against Profitability

Based on the results of the analysis of the effect*Days Of Payable Outstanding* (DPO) on Profitability found that DPO results have no effect on profitability. So, the fourth hypothesis in this study which states that Days of Payable Outstanding has a significant effect on profitability is rejected. Debt itself is also a source of funding which is used in the pecking order theory. Companies tend to choose suppliers with longer payment terms so that the available cash funds can be used to invest in other operational activities to increase sales. According to Munawir (2007), trade payables have a close relationship with the purchase of merchandise because large companies generally make purchases on credit. As explained in the pecking order theory which states that companies with high levels of profitability have

low levels of debt. Therefore, companies that are able to earn high profits (profitable) will tend to use their own funds for investment purposes, because the funds owned by the company are available and the company has established good relationships with suppliers.

The results of this study support the results of previous research on the effect of working capital on profitability that DPO has no significant effect on profitability as measured by ROA, Arja Darsid (2012) (Margaretha and Oktaviani 2016), and Fauzan (2015). However, contrary to the results of research (Margaretha and Oktaviani 2016), and Fauzan (2015), that working capital has a significant positive effect on profitability.

Influence *Debt to Equity ratio* Against Profitability

Based on the results of the analysis of the effect of DER on Profitability, it was foundDER has a significant negative effect on profitability. So, the fifth hypothesis in this study that DER has a significant effect on profitability is accepted. The funding policy reflected in the Debt equity ratio (DER) greatly affects the achievement of the company's profits. Ang (1997) states that the higher the DER will affect the amount of profit (return on assets) achieved by the company. If the cost of debt reflected in the cost of borrowing is greater than the cost of own capital, then the average cost of capital (weighted average cost of capital) will be greater so that the return on assets (ROA) will be smaller, and vice versa (Brigham, 1983). DER shows that the composition of total debt is greater than the total equity, so that it has a greater impact on the company's burden on outside parties (creditors), (Robert Ang, 1997). Pecking Order Theory, explains why companies have a preference order in choosing funding sources. Profitable companies generally borrow in small amounts. Companies that are less profitable tend to have greater debt due to insufficient internal funds and because debt is the preferred external source. (Weston and Copeland, 1997).

The results of this study support the results of research conducted by Meulinda (2011) which states that DER has a significant negative effect on ROA. However, contrary to the results of research by Sri Wahyuni (2018) and Yurico (2060), that DER has no effect on ROA.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of research and discussion, the conclusions of this study are as follows:

1. *Days Of Inventory Outstanding, Days of Sale Outstanding, Days of Payable Outstanding, and DER* simultaneous effectto Profitability. Shows that DIO, DSO, DPO, and DER together are able to increase profitability.
2. *Days Of Inventory Outstanding* (DIO) shows that the faster the inventory period will result in an increase in profitability (will optimally increase profitability).
3. *Outstanding Days of Sale* (DSO) showsthat the faster the process of accounts receivable turnover shows the faster the company will benefit from the sales process in the form of credit, so that later the impact of the process will result in the profitability of the company which can later experience changes in the form of increased profitability.

4. *Days Of Payable Outstanding* (DPO) shows that the size of the debt does not affect the company's profit.
5. *Debt to Equity ratio* (DER)shows that the higher the DER will affect the amount of profit (return on assets) achieved by the company.

Suggestion

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

a. For investors

   To investors who will invest their funds in go public companies, should choose companies that have a high working capital turnover rate and are positive for the company's profitability, because with a high and positive working capital turnover rate, it will be able to increase profitability the company, so that the investments invested can be managed properly and profitably.

b. For Company Management

   This research can be used as material for analysis or consideration to improve company performance in an effort to achieve maximum results for the potential to increase company profitability. Working capital efficiency is influenced by how well the company manages working capital itself. The inefficient working capital needs to be immediately found a solution, so that the company is able to be more productive in an effort to increase profitability. The most important thing for companies to do is to tighten policies regarding accounts receivable, accounts payable, and inventory. This is done so that the working capital turnover period can be faster.

c. For the Academic World

   The results of research on the effect of working capital on the profitability of this company can at least provide information for subsequent researchers and become a reference for research so that the research results obtained can be better and comprehensive than the results of this study. One of the improvements that the author proposes to other researchers is to add other variables that theoretically can affect the company's profitability and the expansion of the research sample, namely MSMEs.

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