

Analysis of Cash Holding Factors at Plantation Companies Listed on BEI

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Abstract—The purpose of this research is to know the influence of Net Working Capital, Board Size and Sales Growth on Cash Holding (Empirical Study on Plantation Sub Sector Companies in BEI Period 2014-2016). This study using descriptive study through hypothesis testing by using a causal design. The type of research used is explanatory research. The research method used in this research is quantitative research method. Hypothesis testing model in this research is doubled linear regression technique. Multiple linear regression analysis was performed with the help of EViews program version 8.0. The results of the study concluded (1) Net Working Capital has a positive effect on cash holding, which means the magnitude of Net Working Capital affects the size of the cash holding of sub-plantation companies in the BEI period 2014-2016, (2) Board Size has no positive effect on cash holding, which means that Board Size has little effect on the size of the cash holding of sub-plantation companies in BEI period 2014-2016, (3) Sales Growth has a positive effect on cash holding, which means that the size of Sales Growth influences the size of the cash holding of sub-plantation sector BEI PERIOD 2014-2016.

Keywords: *Net Working Capital, board size, Sales Growth, cash holding*

I. INTRODUCTION

Cash is the most liquid company asset that functions as the blood of the company in driving routine operations. The company's policy to hold cash is a step to protect the company from cash shortfall. The greater the uncertainty or volatility of the company's cash flow, the greater the likelihood of a lack of operational cash that can result in financial distress so that companies are encouraged to hold larger amounts of cash [1]. Cash needs to be an important concern for companies, this is because if the company keeps too little cash, the company will find it difficult to meet its short-term needs. This will cause the company to be considered bad and illiquid, which will eventually cause doubts on the other side. Saving cash with too large a portion will also cause losses to the company because the company cannot achieve optimal profitability, namely the profits that should be obtained by the company by utilizing the cash saved to conduct business activities. In addition, having a large amount of cash can be profitable, especially when the credit crisis occurs. The decision to hold cash is directly related to the company's investment decision, which then depends on financial flexibility. Companies can use cash in physical or

financial investments or distribute or existing shareholders. Cash holdings are very important when there are negative shocks to cash flows or a collection of investment opportunities. A company anticipating financial constraints in the future will be more conservative and holding cash at this time is to minimize the possibility of adverse impact in the future [2].

Research conducted by Gill and Shah [3], found a board size effect on cash holdings, and the research found that there was an influence of sales growth on cash holdings but in contrast to research [4,5], which found there's no the influence of sales growth on cash holdings. Previous studies that raised this theme have actually have been many, this is due to the need for the company to determine the amount of cash that must be owned by the company so that there is no excess or lack of cash. Although there have been many similar studies before, but the authors chose this study as a proof of whether there are differences in circumstances between the previous research period and the research carried out, namely the period of research objects and different companies. The study was conducted on plantation sub-sector companies listed on the IDX.

The poor management of cash holdings is one of the causes of companies having difficulty developing and anticipating unexpected costs. This condition is interesting to study. To find out the factors that influenced the behaviour of cash holding in the company. Researchers included three variables that allegedly affected cash holding, namely Net Working Capital, Board Size and Sales Growth.

Based on the description above, it can be seen that the results of previous studies regarding factors that affect cash holding have not been consistent. Based on the background description, the study was carried out with the title "Analysis of Cash Holding Factors at Plantation Companies listed on BEI". From the background of the research above, the following research problems can be formulated:

- How is the influence of the Net Working Capital on Cash Holding in the plantation sub-sector companies on the IDX for the 2014-2016 periods?
- How does the Board Size affect Cash Holding in the plantation sub-sector company on the IDX for the 2014-2016 periods?

- What is the effect of Sales Growth on Cash Holding in the plantation sub-sector companies on the IDX for the 2014-2016 periods?

II. METHODS

A. Cash Holding

Cash holding is cash held by the company as cash in hand or invested in current assets and distributed to investors [3]. Cash is the size of the company in paying debts on time. Cash holdings are important for companies because they provide the ability of companies in the company's liquidity, namely the company is able to pay obligations on time even when bad conditions hit. To increase sales and profits the company must have cash reserves so that it will create a positive cash flow and will maintain the business by living prosperously.

The amount of cash that the company should maintain in order to fulfil its financial obligations at any time, states that the amount of cash in a well finance company should not be less than 5% to 10% of the total current assets. Optimal cash balance is a certain amount of cash that is greater than (1) Number of transactions and cash reserves, and (2) Meet the required amount. Management of the amount of company cash becomes a special concern for companies considering determining the right amount of cash for the company's operational activities is not an easy matter. The formula used to calculate cash holdings is [5]:

$$Cash\ holding = \frac{Cash\ and\ Cash\ Equivalents}{Total\ Asset - Cash\ and\ Cash\ Equivalents} \quad (1)$$

B. Net Working Capital

Every company needs to provide working capital to spend the company's operations day by day, such as to provide advances on the purchase of raw materials or merchandise, paying labour wages and employee salaries and other costs. A number of funds spent to finance the company's operations are expected to return to the company within a short period of time through the sale of merchandise or products. The incoming money sourced from the sale of the merchandise will be reissued to finance the company's subsequent operations. Net working capital can act as a substitute for company cash holdings. Net working capital is measured by dividing the reduction of current assets and current liabilities with total assets [4,6].

$$Net\ Working\ Capital = \frac{Current\ Assets - Current\ Liabilities}{Total\ Asset} \quad (2)$$

C. Board Size

The board of directors is the number board of directors in a company, the more boards in the company will provide a form of supervision on the better performance of the company, with good and controlled company performance, it will produce good profitability and later it will be able to increase the company's stock price and the value of the company will also increase [7]. The size of the board of directors is the number of

board of directors in a company. The number of board personnel will improve the company's better performance.

The board of directors is the full organ of the company for the management of the company for the interests and objectives of the company [8]. The formula used to calculate board size is:

$$Board\ size\ (X2) = Number\ of\ directors\ within\ the\ company \quad (3)$$

D. Sales Growth

Sales can be classified into gross sales and net sales. Gross sales are the amount borne by the buyer in accordance with the selling price, while the net sales are disclosed by experts, one of which is "As a sales return and discount account or discounted account in the income statement where both are deducted from gross sales". Sales growth are: "Sales have a strategic influence for a company because sales must be supported by assets or assets and if sales are increased then the activity must be added, by knowing sales from the previous year, the company can optimize existing resources" [9].

Meanwhile, the sales growth is the percentage of sales increase this year compared to last year, the higher the better. Sales growth was "the percentage of sales increase this year compared to last year, the higher the better". The formula used to calculate Sales growth is:

$$Sales\ Growth = \frac{(Sales_t - Sales_{t-1})}{Sales_{t-1}} \quad (4)$$

Relationship between variables and hypothesis development:

1) *Effect of net working capital on cash holding:* Net working capital can act as a substitute for a company's cash holdings. This is due to the ease in changing it into cash when the company needs it. For example, receivables can be easily disbursed through the securitization process, bank loans can also be easily converted into cash [6]. If net working capital is negative or what is commonly called a working capital deficit, the company is alleged to be experiencing liquidity difficulties. Companies that experience negative net working capital will make cash, that net working capital is basically a substitute for cash [4,10]. When needed, they can be quickly liquidated for funding. As a result, companies with a lot of net working capital tend to hold cash in small amounts. The cost of converting non-cash current assets to cash is cheaper than other assets [11]. Companies with sufficient current assets may not have to use the capital market to get funds when they experience cash shortages. That way, companies with high net working capital will have low cash holding.

H₁: Net working capital has a positive effect on cash holding.

2) *Effect of board size on cash holding:* The board of directors is the full corporate organ of the company's management for the interests and objectives of the company and represents the company both inside and outside the court

in accordance with the articles of association [8]. The board size plays an important role in maintaining the cash level appropriately from the company's cash [3]. Large board size will cause agency cost problems that can cause the company to hold excess cash in the company. According to him the board of directors is responsible for cash management, corporate governance and other policies within the organization. Too high cash balances will cause agency cost problems because the board of directors does not work in supporting shareholders but for their own interests. The small amount of cash holding is affected by the policy of the board of directors as cash manager. Based on the description, the researcher determines the hypothesis of this study is that board size is thought to affect cash holdings.

H₂: Board Size has a positive effect on cash holding

3) *Effect of sales growth on cash holding*: The trade-off theory explains the relationship between growth opportunity and ownership of cash because companies that have greater growth opportunities will incur higher cash shortage costs. In this case, companies that experience better investment opportunities will save higher cash to avoid financial distress [10]. Pecking order theory states that high growth opportunities will encourage companies to make policies by preferring to hold high cash to finance their investment opportunities because companies with high growth opportunity use liquid assets (such as cash) to reduce the likelihood of financial distress and to seize opportunities good investment first when external financing is expensive [4].

Based on the description, the researcher determines the hypothesis of this study that growth opportunity is thought to have an effect on cash holdings.

H₃: Sales growth has a positive effect on cash holding.

III. RESULTS AND DISCUSSION

The type of data used in this study is secondary data. The data used in this study are the annual financial statements of each sample company from 2014-2016 issued by the Indonesia Stock Exchange on the official homepage of www.idx.co.id. The population in this study is a company of the Plantation Sub-Sector Company on the IDX for the 2014-2016 period, amounting to 16 companies. The sample is part of the number and characteristics possessed by the population [12]. Sample measurement is a step to determine the amount of sample to be taken in carrying out research in an object.

TABLE I. SAMPLE CRITERIA

No.	Description	Amount
1.	Company of Plantation Sub-Sector Companies on the IDX for the 2014-2016 Period	16
2.	Companies that present financial statements in dollars: PT. Austindo Nusantara Jaya, Tbk PT. Multi Agro Gemilang Plantation, Tbk	2
	Number of Samples	14
	Research Period (3 Years)	42

Based on these criteria, the authors determined 14 samples of companies in the Plantation Sector Sub-Sector in the 2014-2016 period totalling 14 companies. The hypothesis testing model in this study is a multiple linear regression technique. This multiple linear regression analysis is done with the help of the EViews version 8.0 program.

A. Assumption Classic Test

Multicollinearity test results are presented, it appears that there is no correlation coefficient between variables greater than 0.80 or close to 1. Thus, there is no multicollinearity between variables in this study. From the results obtained that the probability value is 0.095896. Thus, it can be said that the data is normal because the jarque-fall probability is > 0.05. Heteroscedasticity Test Result, obtained the probability value obs * R- Squared is 0.5146. This result shows that the probability value of obs * R-Squared is greater than 0.05, so there is no heteroscedasticity in the data. Durbin-Watson statistical results (DW stat) that is equal to 2.101765.

Furthermore, the DW stat value is compared with the DW table which consists of two values, namely the lower limit (dL) and the upper limit (dU). With k = 3 because the number of independent variables used is 3 and n = 42, it is obtained in the Durbin Watson table (α = 5%) the dL limit is 1.3573 and dU is 1.6617. Then it can be stated that the results of the Durbin-Watson statistical test are in the area dU < d < 4-dU or 1.6617 < 2.101765 < 2.3383 so that it can be decided that there is no autocorrelation.

B. Panel Data Analysis

Based on the results of the tests performed, it can be concluded:

TABLE II. CONCLUSION OF TESTING PANEL DATA REGRESSION MODEL

No.	Methods	Testing	Result
1.	Chow Test	Common Effect vs fixed effect	Fixed Effect
2.	Housman test	Fixed Effect vs Random Effect	Fixed Effect

The test results of the panel data regression model recommend the use of the fixed effect model which will be further analysed in this study.

C. Multiple Regression Analysis

Based on the results of the multiple regression analysis above, a regression line equation can be obtained as follows:

$$\hat{Y} = 0,228457 + 0,379200 \text{ NWC} - 0,032883 \text{ BS} + 0,109576 \text{ SG}$$

Based on the above equation, it can be interpreted as follows:

- A constant of 0.228457 states that if the variables X₁, X₂, and X₃ are constant, then the variable Y is 0.228457.
- The X₁ regression coefficient of 0.379200 states that each increase in Net Working Capital (NWC) of 1% will have an impact on increasing cash holding by

0.3792% assuming another independent variable is the magnitude of the constant.

- The X_2 regression coefficient of -0.032883 states that every increase in Board Size (BS) of 1 person will have an impact on the decrease in cash holding by 0.032883% assuming another independent variable is the magnitude of the constant.
- The X_3 regression coefficient of 0.109576 states that every increase in Sales Growth (SG) of 1% will have an impact on increasing cash holding by 0.109576% assuming another independent variable is the size of the constant.

D. Hypothesis Testing

The results of the calculation of the t test can be seen in the table below:

- Variable Net Working Capital (NWC) has a significance value of 0.0016 which is smaller than 0.05. This shows that H_0 is rejected, in other words partially it can be concluded that the variable Net Working Capital (NWC) has a positive effect on cash holding. Thus, H_1 which states "Partially there is a positive influence on net working capital on cash holding" is accepted.
- Variable Board Size (BS) has a significance value of 0.0652 which is greater than 0.05. This shows that H_0 is accepted, in other words partially it can be concluded that the Board Size (BS) variable does not have a positive effect on cash holding. Thus, H_2 which states "Partially there is a positive influence on board size on cash holding" is rejected.
- The Sales Growth (SG) variable has a significance value of 0.0073 which is smaller than 0.05. This shows that H_0 is rejected, in other words partially it can be concluded that the Sales Growth (SG) variable has a positive effect on cash holding. Thus, H_3 which states "Partially there is a positive influence on sales growth on cash holding" is accepted.

The analysis of the coefficient of determination presented in the table above shows that adjusted $R^2 = 0.549230$, this can be interpreted that 54.923% of cash holding can be explained by variable variations of Net Working Capital, board size and Sales Growth, while the remaining 45.077% cash holding company can be influenced by other variables not used in this study.

E. Interpretation of Research Results

1) *Effect of net working capital on cash holding:* The results show that Net Working Capital has a positive effect on cash holding, which means that the size of the Net Working Capital affects the size of the company's cash holding. Net working capital can act as a substitute for a company's cash holdings. This is due to the ease in changing it into cash when the company needs it. Net working capital is basically a substitute for cash. When needed, they can be quickly

liquidated for funding. As a result, companies with a lot of net working capital tend to hold cash in small amounts.

2) *Effect of board size on cash holding:* The results showed that Board Size does not have a positive effect on cash holding, which means that a small amount of Board Size does not affect the size of the company's cash holding. This shows that the board size does not play an important role in maintaining the cash level appropriately from the company's cash. The small amount of cash holding is not significantly affected by the policy of the board of directors as cash manager.

3) *Effect of sales growth on cash holding:* The results showed that the Sales Growth has a positive effect on cash holding, which means the size of the Sales Growth affects the size of the company's cash holding. Sales growth has an impact on cash ownership because companies have greater growth opportunities that will lead to higher cash shortage costs. In this case companies that experience better investment opportunities will save higher cash to avoid financial distress. Sales growth is a manifestation of investment success in the past period and can be used as a predictor of future growth. Sales growth is also an indicator of the demand and competitiveness of companies in an industry. The rate of growth of sales of a company will affect the ability to maintain profits in funding opportunities in the future. In simple language, sales growth indicates an increase in the number of sales that a company has achieved in the current year compared to sales in the previous year. As sales growth increases, opportunities to invest in different operational areas also increase which will have an impact on cash holding.

IV. CONCLUSION

Based on the results of the above research, the researchers concluded the following:

- Net Working Capital has a positive effect on cash holding, which means the size of the Net Working Capital affects the size of the cash holding of the plantation sub-sector on the IDX for the 2014-2016 periods.
- Board Size does not have a positive effect on cash holding, which means that a small amount of Board Size does not affect the size of the cash holding of the plantation sub-sector on the IDX for the 2014-2016 periods.
- Sales Growth has a positive effect on cash holding, which means the size of the Sales Growth affects the size of the cash holding of the plantation sub-sector on the IDX for the period 2014-2016.

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