

Working Capital Management Relationship to Profitability of Plastic and Packaging Sub-Sector Companies on the Indonesia Stock Exchange

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Abstract

The purpose of this study is to determine the influence of working capital management consisting of variables *Cash Turnover*, *Inventory Turnover*, *Working Capital Turnover* affecting profitability in Plastic and Packaging Sub-Sector companies listed on the IDX. The research approach uses quantitative descriptive methods. The population that will be used is the financial report data of plastic and packaging sub-sector companies listed on the Indonesia Stock Exchange with *the purposive sampling* sampling method with the criteria of plastic and packaging sub-sector companies listed on the Indonesia Stock Exchange which have complete financial statements in the period 2011 - 2020 so that the data used are 60 financial statement data. Data analysis uses multiple linear regression. The results showed that there is a significant positive influence of cash turnover on profitability, meaning that the higher the cash turnover, the higher the profitability, the higher the cash turnover will be better because this means that the higher the efficiency of cash use and the greater the profit obtained. There is a significant positive effect of inventory turnover on profitability, meaning that the higher the inventory turnover, the higher the profitability, the higher the inventory turnover, the higher the profit obtained. There is no effect of capital turnover on profitability, which means that the rise and fall of capital turnover does not affect the rise and fall of profitability.

Keywords: *working capital management, profitabilitas*

Introduction

To answer and take advantage of opportunities, every company is obliged to optimally utilize every resource it has to produce a comparative and competitive advantage for itself. In order to operate optimally, the company must ensure the availability of sufficient capital in financing its operational activities. Working capital is used to obtain goods to be used in the production process, such as raw materials, auxiliary materials, paying labor wages, employee salaries and so on the hope that through the sale the company will be able to get back the funds that have been issued (Sundari and Salim, 2012).

As we know that plastic *packaging* is believed to continue to grow throughout 2022. Entering the beginning of this year, the downstream plastics industry increased by about 85%. This condition is caused by imported finished goods experiencing problems due to logistical disruptions due to the scarcity of containers globally. So that domestic *demand* can be fully filled by local *supply*, and make the downstream industry increase by up to 85% (industry.kontan.co.id). This condition certainly shows the recovery of the performance of the plastic and packaging sector

According to Reeve and James (2012) profitability is the ability of an enterprise to make a profit depending on the effectiveness and efficiency of its operating activities and available resources. Some previous studies have linked working capital management and profitability.

Working capital is one of the important aspects in overall financial management. The management of working capital management is the responsibility of every company leader. The purpose of working capital is to guarantee the liquidity of a company. The company can carry out its activities and fulfill short-term obligations that will mature and future operating expenses, without compromising profitability (Panigrahi, 2017). In working capital management, there are differences between service industry companies (retail goods sub-sector) and manufacturing companies. Service industry companies purchase inventory on credit or cash for resale without carrying out the production process. On the other hand, manufacturing companies purchase inventory and then carry out the production process and the production results are sold on credit and cash (Yulandreano, 2020).

Kasmir (2014) suggests that cash turnover is a comparison between net sales and net working capital. The greater the amount of cash owned by a company, the higher the level of liquidity, so that cash turnover has a close relationship with ROI. This is in agreement with the research conducted by Sufiana (2013); Eksandy Dan Dewi

(2018) who explained that cash turnover has a positive effect on profitability where to manage cash to suit the needs of the company, cash must be rotated properly. The cash turnover rate will have a direct impact on profits. In contrast to the opinion of Suminar (2015); Fuady and Rahmawati (2018); Kurniawan, et al (2022) who stated that cash turnover negatively affects profitability

According to Sartono (2012) Inventory that is too small, operating activities are likely to experience delays, on the contrary, if inventory is too large, it will result in low inventory turnover so that the company's profitability decreases. This is shown by the research of Suminar (2014) inventory turnover has a positive and significant effect on profitability. Inventory is an asset that must be managed properly, errors in management will result in other asset components being not optimal, and can even result in losses. Management in terms of managing inventory turnover can be very decisive in the management of the continuation of the company's activities. The higher the level of inventory turnover will reduce the risk of losses caused by price declines or due to changes in consumer tastes, in addition to saving storage and maintenance costs on these inventory.

The turnover of working capital shows the relationship between working capital and sales that the company can obtain for each rupiah of working capital. A low turnover of working capital indicates an excess of working capital which may be due to low turnover of inventory, receivables or the presence of a cash balance that is too large. According to Satriya and Lestari (2012), Parlina (2017), Saputra (2017) and Safitri and Utami (2017) explained that working capital turnover has a positive and significant effect on profitability. The company uses working capital for its operational activities. The funds issued by the company are expected to return for further operational activities. These results prove that The higher the sales volume generated, the faster the working capital rotates so that capital quickly returns to the company which is accompanied by high profits as well, the presence of high profits causes the company's ROI to also increase. Increased ROI will be able to attract investors to invest in the company so that working capital increases.

In contrast to the opinion of Eksandy Dan Dewi (2018) who explained that working capital turnover negatively affects profitability where the effectiveness of companies in managing working capital can be measured through working capital turnover. In general, the success of an enterprise in carrying out its activities is often based on the level of profit obtained. However, a large profit is not necessarily a measure that the company has worked efficiently. The level of efficiency is only known by comparing the profit obtained with the wealth or capital that makes that profit (profitability).

The purpose of this study isto find out the influence of working capital management consisting of variables *Cash Turnover*, *Inventory Turnover*, *Working Capital Turnover* affecting profitability in Plastic and Packaging Sub-Sector companies listed on the IDX

Research Method

The research approach uses quantitative descriptive methods. The population that will be used is the financial report data of plastic and packaging sub-sector companies listed on the Indonesia Stock Exchange with *the purposive sampling* sampling method with the criteria of plastic and packaging sub-sector companies listed on the Indonesia Stock Exchange which have complete financial statements in the period 2011 - 2020 so that the data used are 60 financial statement data. Data analysis uses multiple linear regression with the following formula:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Information :

- Y = Profitabilitas (ROI)]
- α = Constant
- X_1 = Cash Turnover
- X_2 = Inventory Turnover
- X_3 = Working Capital Turnover
- e = error

The variables used in this study

- a. Profitabilitas (Y)

Profitability is a bound variable in this study as measured by *Return On Investment* (ROI). ROI relates the profit derived from the company's operations to the amount of investment or assets used to generate those operations. ROI can be formulated as follows (Kasmir, 2014):

$$ROI = \frac{EAT}{Total\ Assets}$$

b. Cash Turnover (X_1)

Cash turnover is a free variable which is the comparison between sales and average cash. Cash turnover can be used the following formula (Sartono, 2012):

$$Cash\ Turnover = \frac{Sales}{Average\ kas}$$

c. Inventory Turnover (X_2)

Inventory turnover is a free variable which indicates the number of times funds embedded in the inventory rotate in a period. Inventory turnover can be expressed by the formula (Sartono, 2012)

$$Inventory\ Turnover = \frac{Cost\ of\ Goods\ Sold}{Average\ Inventory}$$

d. Working Capital Turnover (X_3)

The turnover of working capital is a free variable which shows the relationship between sales and average working capital. The turnover of working capital can be expressed by the formula (Kasmir, 2014)

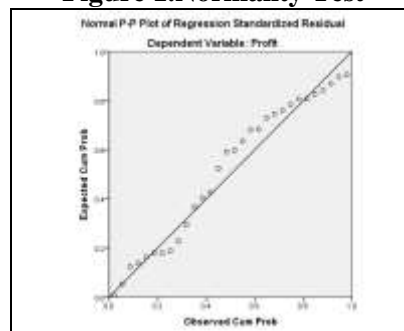
$$Working\ Capital\ Turnover = \frac{Cost\ of\ Goods\ Sold}{Average\ Working\ Capital}$$

Results and Discussion

3.1 Results

A. Test of Classical Assumptions

Figure 1. Normality Test



Source: SPSS 20.00 output (data processed 2022)

Based on figure 1. *Normal Probability Plot* above can be concluded that all data meet the assumption of normality because the data spreads around the diagonal line and the data spreads in the direction following the diagonal line.

Table 1. Coefficients
Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | .634 | .074 | | 8.515 | .000 | | |
| 1 Cash_turn | .002 | .000 | .772 | 5.872 | .000 | .927 | 1.079 |
| Inven_turn | .010 | .005 | .271 | 2.127 | .043 | .984 | 1.016 |
| WC_turn | .038 | .029 | .170 | 1.302 | .204 | .941 | 1.062 |

a. Dependent Variable: Profit

Source: SPSS 20.00 output (data processed 2022)

Table 1. shows that the VIF values of all free variables in this study are smaller than 10 while the tolerance values of all free variables are more than 10% which means that there is no correlation between free variables, thus it can be concluded that there are no symptoms of multicollinearity between free variables in the regression model.

Table 2. Model Summary
Model Summary^b

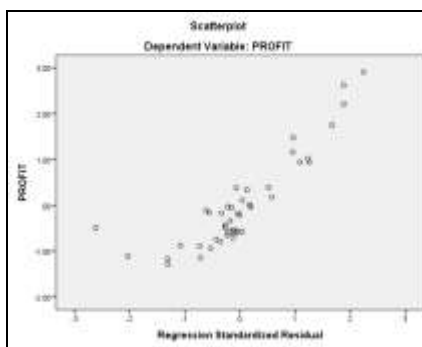
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .764 ^a | .584 | .535 | .12953 | 1.733 |

a. Predictors: (Constant), Perput_Modal, Perput_Pers, Perput_Kas

b. Dependent Variable: Profit

Source: SPSS 20.00 output (data processed 2022)

In this test, the tested sample was $n = 30$, the number of independent variables ($k = 3$), so that the value of $dL = 1.213$ and $dU = 1.649$ was obtained. (appendix to the Durbin-Watson table). Table 2. shows *the value of durbin watson* above the value of du and less than the value of $4-du$, $du < dw < 4-du$ ($1.649 < 1.733 < 2.351$) and it is stated that there is no autocorrelation.



Source: SPSS 20.00 output (data processed 2022)

Based on the figure above, it shows that the dots are spread randomly and scattered above or below the number 0 on the Y axis, there is no clear pattern, so heterochedasticity does not occur. So it can be concluded that the regression model is feasible to use.

B. Multiple Linear Regression Analysis

Based on the results of the regression analysis presented in table 1. Beta in the Unstandardized Coefficients column, the results of the equation are obtained as follows:

$$Y = 0,634 + 0,002 + 0,010 + 0,038$$

As for the meaning of the multiple linear regression model as follows:

1. The value of the constant is 0.634 meaning that if all independent variables are considered constant then the profitability is 63.4 percent.
2. Cash turnover has a regression coefficient with a negative direction of 0.002. If it is assumed that other independent variables are constant, this means that every increase in cash turnover by 1 unit, profitability will increase by 0.002.
3. Inventory turnover has a regression coefficient with a negative direction of 0.010. If it is assumed that other independent variables are constant, this means that every increase in inventory turnover by 1 unit, profitability will increase by 0.010.
4. Capital turnover has a regression coefficient with a positive direction of 0.038. If it is assumed that other independent variables are constant, this means that every increase in capital turnover by 1 unit, profitability will increase by 0.038.

C. Hypothesis Testing

1. Koefisien Determinasi (R^2)

Based on table 2. it can be known that the adjusted value of R^2 is 0.584. This shows that 58.4% of profitability is influenced by variations in the three independent variables used, namely cash turnover, inventory turnover and capital turnover. While the remaining 41.6% was influenced by other factors outside the research model.

2. Uji Parsial (T)

1) The Effect of Cash Turnover on Profitability

Based on table 1. shows t count cash turnover of 5,872 and t table of 1,708 so that t count is greater than t table ($5,872 > 1,708$) meaning that there is a positive effect of cash turnover on profitability. The signification value of 0.000 is less than 0.05 ($0.000 < 0.05$) which means it is significant, it can be concluded that there is a significant positive influence of cash turnover on profitability.

2) The Effect of Inventory Turnover on Profitability

Based on table 1. shows t count inventory turnover of 2,127 and t table of 1,708 so that t count is greater than t table ($2,127 > 1,708$) meaning that there is a positive effect of inventory turnover on profitability. The signification value of 0.043 is smaller than 0.05 ($0.043 < 0.05$) meaning that it is significant, it can be concluded that there is a significant positive influence of inventory turnover on profitability.

3) The Effect of Capital Turnover on Profitability

Based on table 1. shows t calculate capital turnover of 1,302 and t table of 1,708 so that t count is smaller than t table ($1,302 < 1,708$) meaning that there is no effect of capital turnover on profitability. The signification value of 0.204 greater than 0.05 ($0.204 > 0.05$) means that it is insignificant, it can be concluded that there is no effect of capital turnover on profitability.

3.2 Discussion

A. The Effect of Cash Turnover on Profitability

The results showed that there is a significant positive influence of cash turnover on profitability, meaning that the higher the cash turnover, the higher the profitability. The higher the cash turnover, the better this means that the higher the efficiency of cash use and the greater the profit obtained.

Cash turnover shows the ability of cash to generate income so that it can be seen how many times the cash rotates in a given period. Cash is needed by companies to pay for labor, raw materials, pay off debts, buy fixed assets, pay taxes, pay dividends, and other needs.

This is in accordance with the opinion of Rahma (2011) explaining that cash turnover is positively related to *Return on Investment* (ROI). The existence of a positive influence means that the higher the cash turnover, the higher the profit obtained by the company. With a certain amount of cash that the company has, it will generate high sales. A high level of sales will cause the profit earned by the company to get higher and higher. This shows the company has used cash efficiently

B. The Effect of Inventory Turnover on Profitability

The results showed that there is a significant positive influence of inventory turnover on profitability, meaning that the higher the inventory turnover, the higher the profitability. The higher the turnover of inventory, the higher the profit obtained.

To measure inventory efficiency, it is necessary to know the turnover of inventory, the higher the level of inventory turnover will reduce the risk of losses caused by price reductions or due to changes in consumer tastes, in addition to it will waste storage and maintenance costs on these inventory.

Inventory management is a difficult job, errors in determining inventory levels can be fatal. The size of the inventory can be increased as long as there are savings. The balance between savings and costs incurred is highly dependent on additional storage costs and efficient inventory control.

This is in accordance with the opinion of Suminar (2014) which shows that inventory turnover has a positive and significant effect on profitability. Inventory is an asset that must be managed properly, errors in management will result in other asset components being not optimal, and can even result in losses. Management in terms of managing inventory turnover can be very decisive in the management of the continuation of the company's activities. The higher the level of inventory turnover will reduce the risk of losses caused by price declines or due to changes in consumer tastes, in addition to saving storage and maintenance costs on these inventory.

C. The Effect of Capital Turnover on Profitability

The results showed that there is no influence of capital turnover on profitability, meaning that the rise and fall of capital turnover does not affect the rise and fall of profitability. This happens because the fluctuations in capital turnover are very high with an increasing tendency. Based on the regression coefficient, it shows a positive direction, which means that any increase in working capital can increase profitability.

A high level of turnover of working capital will please short-term creditors. They will get certainty that working capital rotates with high volatility and debt will soon be able to be paid even in difficult operating conditions, thereby increasing the company's profitability. A company is said to have high profitability meaning that the capital is large, the effectiveness will also be high. But a large amount of capital is not necessarily the company obtaining high profitability. This depends on the use of working capital whether it is effective and efficient or not. Always rotating working capital will affect the flow of funds in the company. If the turnover of working capital increases every year, it means that the flow of funds returning to the company will be smoother. Vice versa, the lower the level of working capital turnover, the longer the time the funds are bound, which means that working capital management is less effective and efficient and tends to reduce profitability. This is in accordance with the opinion of Julkarnain (2012) which states that the Turnover of Working Capital does not have a partial effect on Return On Investment (ROI).

Conclusion

Based on the results of testing and analysis using a regression model, it can be concluded that there is a significant positive influence of cash turnover on profitability, meaning that the higher the cash turnover, the higher the profitability. The higher the cash turnover, the better because this means that the higher the efficiency of cash use and the greater the profit obtained. There is a significant positive effect of inventory turnover on profitability, which means that the higher the inventory turnover, the higher the profitability. The higher the inventory turnover, the higher the profit obtained. There is no effect of capital turnover on profitability, which means that the rise and fall of capital turnover does not affect the rise and fall of profitability. This happens because the fluctuations in capital turnover are very high with an increasing tendency. Based on the regression coefficient, it shows a positive direction, which means that any increase in working capital can increase profitability.

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