Analysis of the Effect of Total Asset Turnover (TATO), Cost of Goods Sold (CGS), and Net Working Capital (NWC) on Net Profit Margin (NPM) in Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange 2016-2018

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Abstract. This study aims to determine the effect of Total Asset Turnover (TATO), Cost of Goods Sold (CGS) and Net Working Capital (NWC) on Net Profit Margin (NPM). The population in this study are food and beverage sub-sector companies listed on the Indonesia Stock Exchange. The sampling technique in this study used purposive sampling and obtained 14 samples of companies that were used as criteria for food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) during 2016-2018. Testing the hypothesis of this study using quantitative descriptive methods and panel data regression analysis using the eviews 10 for windows operating system. The results in this study indicate that the independent variable total asset turnover has no effect on the net profit margin, the cost of production has an effect on the net profit margin and net working capital has an effect on the net profit margin. simultaneously the independent variables total asset turnover, cost of production and net working capital have a significant effect on the net profit margin.

1. Introduction

In general, the purpose of establishing a company is to achieve maximum profit. The profit earned is an internal source of funds for the company, for the survival of the company and future business development and the company will continue to survive in the business world. The condition of the company's financial performance is a major concern for various parties, not only company management, stakeholders such as investors, creditors, suppliers and other parties need information about the condition of a company's financial performance, because a company's financial performance will determine the survival and welfare of various parties. which is

involved. interested. For this reason, company management must supervise the stability of financial performance.

The Indonesian Food and Beverage Entrepreneurs Association in the last year experienced a decline in profit. The decline in income for the food and beverage industry is different for each company. Chairman of the Association of Indonesian Food and Beverage Entrepreneurs (GAPMII) Adhi Lukman said his party had to sacrifice company profits because of the exchange rate. United States (US) dollar reached Rp. 14,500. Adhi explained that at this time his party had decided not to increase the price of food and drinks amid rising food and beverage prices due to the dollar exchange rate. To prevent losses due to this decision, his party chose to sacrifice the company's profits by reducing the margin obtained. Understandably, the industrial raw materials of this sector still rely on imports. no doubt, when the US dollar strengthens causing production costs to swell. Meanwhile, the selling price of the product is in rupiah, because it targets the domestic market.

Based on the records of the Indonesian Food and Beverage Entrepreneurs Association (GAPMII), the food and beverage industry has a high dependence on imported raw materials. Such as raw materials for flour, sugar, milk, salt, and fruit flavoring products. If this situation continues it could lead to a price increase of between 3% to 7%.

In general, the success of a company in carrying out its activities is often based on the level of net profit margin obtained. Net profit margin is the ratio used to show the company's ability to generate net income. The relationship between net income and net sales shows the ability of management to run the company quite successfully by leaving a certain margin as a reasonable compensation for the owners who have provided for the risk (Wulandari et al, 2015).[1]

The net profit margin achieved can be maximized by increasing the company's product sales and minimizing operational costs. To maximize the net profit margin obtained by the company, financial managers need to know the factors that have a major influence on the net profit margin. Based on the description above, the researchers are interested in discussing: 1). the effect of total assets turnover (TATO) on the net profit margin (NPM) of food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2016-2018?. 2). How is the effect of Cost of Goods Sold (CGS) on the Net Profit Margin (NPM) of food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2016-2018?. 3). How is the net working capital (NWC) effect on the net profit margin (NPM) of food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2016-2018?. 4). How do total assets turnover (TATO), Cost of goods sold (CGS) and net working capital (NWC) affect the net profit margin (NPM) of food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2016-2018?

2. Literature review and Hypothesis

2.1 Signal theory

Signaling theory was first introduced by Spence in his research entitled Job Market Signaling. Spence (1973) in Muliawati (2015)[2] suggests that the signal or signal gives a signal, the sender (information owner) tries to provide relevant pieces of information that can be utilized by the recipient. The implications of signaling theory in this study are based on how companies should give signals to users of financial statements, so that companies can maximize net profit from sales.

2.2 Total Asset Turnover (TATO)

Syamsuddin (2016: 62),[3] states that total asset turnover is the level of efficiency in using the company's assets as a whole in generating a certain sales volume. From this understanding, it can be said that Total Asset Turnover (TATO) is part of the activity ratio that measures the level of efficiency and effectiveness of all assets used by the company in increasing sales obtained from each rupiah of assets by comparing sales with total assets. In general, the higher the total asset turnover (TATO), the more efficiently the company uses its assets. In addition, total asset turnover (TATO) will reduce company loans to other parties, with high turnover, unnecessary costs will be reduced,

Based on this description, it can be hypothesized that the total assets turn over has a direct effect on the Net Profit Margin of the food and beverage sub-sector companies listed on the Indonesia Stock Exchange. Based on this, the hypothesis that we propose is as follows:

H1: Total assets turn over has an effect on Net Profit Margin

2.3 Cost of goods sold (CGS)

Cost of goods sold is all costs used to process raw materials into finished goods within a certain period of time. The determination of the cost of production is used to calculate the company's profit or loss which will be reported to the company's external parties. In addition, production costs play a role in making company decisions for several things such as accepting or rejecting orders, making or buying raw materials, and others. Information regarding the cost of goods sold becomes the basis for management in making decisions on the selling price of the product in question. Therefore, the costs incurred by the company to produce a finished product can be calculated to determine the right selling price. So that the accuracy and accuracy in calculating the cost of production must be considered because if an error occurs in the calculation it will cause losses for the company. research conducted by Maulidina (2017)[4] states that production costs have a positive and significant effect on net income at PT. Unilever Indonesia Tbk. Based on this, the hypothesis that we propose is as follows:

H2: Cost of Goods Sold affects Net Profit Margin

2.4 Net Working Capital (NWC)

Sutrisno (2017: 242)[5] states that working capital is a very important asset element in the company because without working capital the company cannot meet the needs to carry out its activities. Every company needs to provide working capital to finance the company's daily operations, such as providing an advance for the purchase of raw materials or merchandise, paying labor wages and employee salaries and other costs. A number of funds spent to finance the company's operations are expected to be returned to the company in the short term through the sale of merchandise or products. The money from the sale of merchandise will be reissued to finance the company's further operations. Based on this, the hypothesis that we propose is as follows:

H3: Net working capital has a direct effect on Net Profit Margin

2.5 Net Profit Margin (NPM)

Kasmir (2015: 200),[6] states that net profit margin is a measure of profit by comparing profit after interest and taxes compared to sales. By comparing net income to total sales, investors can see what percentage of income is used to pay for operating and non-operating expenses and what percentage is left that can pay dividends to shareholders or reinvest in the company. Based on this, the next hypothesis

H4: Total assets turn over, Cost of Goods Sold and net working capital together have an effect on Net Profit Margin

3. Research methods

The research method used is quantitative research with descriptive and verification methods with data processing using statistical software

3.1 *Population and Sample*

The population in this study were 16 companies food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) 2016-2018. Sampling technique using *saturated sampling* , that is sampling technique when all members of the population are used as samples.

3.2 *Data Collection Techniques Data*
data collection techniques using internet research (online research), namely collecting observational data with secondary data in the form of annual financial reports contained in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018.

3.3 *Data analysis technique*
The analysis technique used is multiple linear regression analysis, the purpose of multiple linear regression analysis is to find out how much influence several independent variables have on the dependent variable. Testing the hypothesis in this study, namely the T test was carried out to test the significant relationship between the independent variable (X) and the dependent variable (Y). Does the independent variable partially affect the dependent variable. Furthermore, the F test is used to test whether the effect of Total Asset Turnover (TATO) (X1), Cost of Goods Sold (CGS) (X2), Net Working Capital (NWC) is significant to the Net Profit Margin (NPM) (Y) simultaneously.

4. Research Results and Discussion
The adjusted R-square value that is close to one means the ability of the independent variables to provide almost all the information needed to predict the dependent variation

Table 1. Coefficient of Determination

MODEL	CF	MODEL	CF
R-squared	0.950379	Mean dependent var	0.035417
Adjusted R-squared	0.919580	SD dependent var	0.217245
SE of regression	0.061607	Akaike info criterion	-2.448309
Sum squared resid	0.110069	Schwarz criterion	-1.707625

Likelihood logs	77.75942	Hannan Quinn Criter.	-2.168404
F-statistics	30.85732	Durbin-Watson stat	2.319513
Prob(F-statistic)	0.00000		

Score Coefficient of determination (Adjusted R-Square) between variables Total Asset Turnover, Cost of Goods Sold Net Working Capital with Net Profit Margin variable is 0.919580 This shows that the percentage of the contribution of the influence of the independent variable on the dependent variable is 91.95%. 8.05%others are influenced by variables outside of this study

Panel Data Regression Analysis

Table 2. Coefficient

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.103131	1.061112	-5.751636	0.0000
TATO	-0.004831	0.099578	-0.048517	0.9616
HPP	0.004383	0.000891	4.919676	0.0000
NWC	0.068289	0.030226	2.25925	0.0316

Based on the results of panel data processing using a fixed effect model approach, the results of the direction test of the panel data regression equation above show that there are two independent variables that have positive coefficients, namely the cost of production and net working capital. While the total asset turnover variable has a negative coefficient. The interpretation of the results of the direction test is that the independent variable which has a positive coefficient indicates that there is a unidirectional relationship or is directly proportional to the dependent variable. Where, if the independent variable is positive and increases by one unit, the value of the dependent variable also increases by the coefficient value of the independent variable. Whereas, the dependent variable which has a negative coefficient indicates that there is an opposite or inverse relationship with the dependent variable. Where, if the independent variable is negative and increases by one unit, the value of the dependent variable will decrease by the coefficient value of the independent variable.

T . Test Results

Table 3. Partial Test with Dependent Variable Net Profit Margin

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.103131	1.061112	-5.751636	0.0000
TATO	-0.004831	0.099578	-0.048517	0.9616
HPP	0.004383	0.000891	4.919676	0.0000
NWC	0.068289	0.030226	2.25925	0.0316

The results of the first hypothesis (H1): From the table above, it can be seen that the significant value for the influence of the X1 variable on Y is 0.9616>0.05 so it can be concluded that H0 is accepted and H1 is rejected, which means it is partially concluded that total asset turnover has no significant effect on net profit margins in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018.

The results of the first hypothesis (H2): From the table above, it can be seen that the significant value for the influence of the X2 variable on Y is 0.0000>0.05 so it can be concluded that H0 is rejected and H2 is accepted, which means it is partially concluded that the cost of production has a significant effect on the net profit margin in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018.

The results of the first hypothesis (H3): From the table above, it can be seen that the significant value for the influence of the X3 variable on Y is 0.0316>0.05 so it can be concluded that H0 is rejected and H3 is accepted, which means it is partially concluded that Net Working Capital has a significant effect on net profit margins in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018

F . Test Results

Table 4. Simultaneous Test with DependentNet Profit Margin

F-statistics	Prob (F-statistic)
30.85732	0.00000

Based on the table above, it can be seen the value of important for the variable influence of interpersonal conflict and workload of 0.000 > 0.05 so it can be concluded that H1 is accepted and H0 is rejected, which means simultaneously *total asset turnover* (X1), cost of production (X2), Net Working Capital (X3) has a significant effect on *net profit margin* (Y).

5. Conclusion

Total asset turnover does not affect the net profit margin in the food and beverage sub-sector in 2016-2018. Based on the results of tests that have been carried out from 16 food and beverage sub-sector companies in 2016-2018 that were sampled, only 7 companies had a total asset turnover value > 1 time, meaning that only 7 companies generated sales > 1 times their total assets. While the other 9 companies have a total asset turnover value of <1 times, meaning that the other 9 companies generate sales <1 times their total assets.

This means that the utilization of the total assets of the food and beverage sub-sector companies in 2016-2018 is less efficient.

The cost of production has a positive and significant effect on the net profit margin of the food and beverage sub-sector companies in 2016-2018. When If the company increases sales, the cost of production increases. Companies need more raw materials to make products in order to increase their sales. The use of good quality raw materials will produce a good product as well. Where the increase in sales will increase the net profit margin generated by the food and beverage sub-sector companies in 2016-2018.

*Net Working Capital*positive and significant effect on the net profit margin of companies in the food and beverage sub-sector in 2016-2018. The current assets of the food and beverage sub-sector companies in 2016-2018 are greater than the total current liabilities. This means that the financial condition of the food and beverage sub-sector in 2016-2018 is good. Good financial condition will affect the profit earned by the company will be high. *total asset turnover,*Cost of production and net working capital simultaneously have a significant effect on the net profit margin of the food and beverage sub-sector companies listed on the IDX in the 2016-2018 period. Because the higher the total asset turnover value, it means that the company is able to maximize its assets to generate higher sales. High sales will have an impact on the company's cash sufficiency and the higher net profit value as well. When the company increases sales, the cost of production increases. Companies need more raw materials to make products in order to increase their sales. The use of good quality raw materials will produce a good product as well. Where the increase in sales will increase the net profit margin. A good net working capital is if the current asset value is greater than the current debt value. This reflects good financial condition. Where good financial conditions will affect the profits obtained by the company will be high

6. *Discussion*
It is expected that the company will increase sales and manage total asset turnover better and maximize current assets so that it will increase net profit margin.

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