Analysis of the relationship between the use of working capital and financial performance

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ARTICLEINFO ABSTRACT Article history: This study aims to see the close relationship between the use of working capital and financial performance in food and beverage Received Jan 29, 2023 companies from 2002 to 2006. The type of research used is an Revised Feb. 20, 2023 empirical study. Data collection techniques using the documentation Accepted March 30, 2023 method. In this analysis, the steps used are: (1) calculating the level of working capital turnover, (2) calculating company profitability, (3) looking for the relationship between working capital turnover and Keywords: financial performance. To find out the relationship between working Financial performance capital turnover and financial performance, correlation analysis Use of capital techniques are used. The results of the study show that the Working capital efficiency of working capital as seen from working capital turnover is related to financial performance as seen from ROI. This can be seen from the significance level between working capital turnover and ROI which is 0.001. ROI has a relationship with the level of working capital turnover because the significance level is less than 0.01.

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1. INTRODUCTION

A company must have a goal to be achieved. One of these goals is to achieve optimal profit. To achieve this, the important factor of production is capital because with available capital the company can operate and develop as expected. The ability of a company, both profit and non-profit oriented, is greatly influenced by the company's financial condition in facing competition.

Companies whose financial conditions are not healthy will be weak in facing competition and will eventually experience financial difficulties. The financial position is said to be good if the company is able to manage working capital so that the maximum profit target can be achieved. Proper management of working capital is very important for companies so that companies can operate efficiently and can avoid problems that arise due to financial difficulties (Munawir, 1998: 110).

Companies that do not have sufficient working capital cannot pay short-term obligations on time and will face liquidity problems that will disrupt the company's daily operations. Excess working capital in the company causes reduced company profitability because the turnover of each element of working capital will be longer.

The problem of profitability in the company is more important than the problem of profit, because large profits alone are not a measure that the company has been able to work efficiently. New efficiency can be known by comparing the profit earned with the wealth or capital that generates the profit (Riyanto, 1998: 37). The proper use of working capital can enable companies to operate efficiently, and avoid shortages or excess working capital. Besides being able to provide

several advantages, including: protecting the company from a working capital crisis caused by a decrease in the value of current assets, allowing it to have sufficient inventory and allowing the company to deal with financial problems that occur.

Excessive use of working capital indicates the existence of unproductive funds, resulting in idle funds resulting in losses for the company. Conversely, if there is a shortage of working capital in the company, the company will lose the opportunity to gain profits that should be obtained (Munawir, 1998: 116). Turnover working capital elements which include cash, debt and inventory can also be used to measure the efficiency of working capital.

The higher the turnover rate means the more efficient the investment or investment. The lower the turnover rate means that many of the assets invested are unemployed resulting in a lower level of profit and more inefficiency. A company can be said to be efficient if certain output can be obtained by investing in smaller amounts of input. Working capital has a very important role for the company because the use of working capital can be used to measure company performance. So the authors are interested in conducting research with the title "Analysis of the Relationship between the Use of Working Capital and the Financial Performance of Companies Listed on the IDX."

2. RESEARCH METHOD

This type of research is an empirical study on food and beverage companies listed on the Indonesia Stock Exchange from 2002 to 2006. The research was conducted at the Indonesian Stock Exchange Corner at Sanata Dharma University. The research was conducted from September to November 2008. The object of this research was companies engaged in food and beverages listed on the Indonesia Stock Exchange during the period 2002 to 2006, general description of the company, company balance sheets from 2002 to 2006, company profit and loss statements from 2002 to 2006, the population in this study were all food and beverage companies listed on the IDX, while the sample in this study was taken by purposive sampling. The data collection technique used in this study is the documentation method. The documentation method is a data collection method by viewing and studying existing data in the company. In addition to copying matters deemed relevant and necessary such as the general description of the company, the company's balance sheet data and the company's profit and loss statement data.

3. RESULTS AND DISCUSSIONS

Research Results and Discussion

1. Working Capital Turnover Analysis

Table 4 Calculation	Deeulte of Mould	an Canital Turna aven Data
Lable 1 Calculation	Results of Worki	no Capital Turnover Rate

No	Company	2002	2003	2004	2005	2006
1	PT. AquaGolden Tbk	4.89X	5.29X	4.51X	3.8X	3.44X
2	PT. LightWest Kalimantan Tbk	1.46X	1.44X	1.45X	1.94X	2.32X
3	PT. DavomasTbk	3.75X	4.99X	3.44X	2.2X	1.98X
4	PT. DeltaDjakarta Tbk	1.43X	1.32X	1.28X	1.27X	0.99X
5	PT. Fast Food Tbk	6.75X	7.13X	7.69X	8.32X	8.98X
6	PT. IndofoodTbk	2.66X	2.53X	2.67X	2.91X	3.15X
7	PT. MayoraIndah Tbk	1.55X	1.62X	2.09X	2.6X	2.68X

a. PT. Aqua Golden Mississippi Tbk

From the above table it can be seen that the turnover rate of working capital from 2002 to 2006. Working capital turnover in 2002 was 4.89X, this means that in that year the funds embedded in working capital rotated an average of 4.89X, thus the term the time required for its rotation is 74 days. In 2003 the turnover was 5.29X, meaning that in that year the working capital rotated 5.29X, thus the period required for the turnover was 68 days. In 2004 the turnover of working capital was 4.51X, this means that in that year the funds invested in working capital rotated an average of 4.51X, thus the period required for turnover was 80 days.

Turnover of working capital in 2003 increased by 8.18% compared to 2002 because net sales in 2003 increased by 5.41%, while the average working capital decreased by 2.50%.

Turnover of working capital in 2004 decreased by 14.74% when compared to 2003 because the percentage increase in net sales of 23.76% was smaller than the average percentage increase in working capital of 45.20%. For 2005 working capital turnover decreased compared to 2004 amounting to 15.74 due to the percentage increase in net sales of 17.25% which was smaller than the average percentage increase in working capital of 39.10%.

a. PT. Cahaya Kalbar Tbk

From the table above it can be seen that the turnover rate of working capital from 2002 to 2006. Working capital turnover in 2002 was 1.46X, this means that in that year the funds embedded in working capital rotated an average of 1.46X, thus the term the time required for its rotation is 247 days. In 2003 the turnover was 1.44X, meaning that in that year the working capital rotated 1.44X, thus the period required for the turnover was 250 days. In 2004 the turnover of working capital was 1.45X, this means that in that year the funds invested in working capital rotated an average of 1.45X, thus the period required for turnover was 248 days. In 2005 the working capital turnover was 1.94X, this means that in that year the funds embedded in working capital rotated 1.94X, thus the period required for turnover was 186 days. For 2006 working capital rotated 2.32X, thus the period required for turnover was 155 days.

Turnover of working capital in 2003 decreased by 1.37% compared to 2002 because net sales in 2003 increased by 4.35%, while the average working capital increased by 6.03%. Turnover of working capital in 2004 increased by 0.69% when compared to 2003 because the percentage decrease in net sales of 7.14% was smaller than the average percentage decrease in working capital of 7.60%. For 2005 working capital turnover increased compared to 2004 of 33.79% due to the percentage increase in net sales of 43.61% greater than the average percentage increase in working capital of 7.03%. Meanwhile, in 2006 the working capital turnover increased compared to 2005 by 19.

b. PT. Davomas Abadi Tbk

From the table above it can be seen the level of turnover of working capital from 2002 to

with 2006. Turnover of working capital in 2002 was 3.75X, this means that in that year the funds invested in working capital rotated on average 3.75X, thus the period required for turnover was 96 days. In 2003 the turnover was 4.99X, meaning that in that year working capital rotated 4.99X, thus the period required for turnover was 72 days. In 2004 the turnover of working capital was 3.44X, this means that in that year the funds invested in working capital rotated an average of 3.44X, thus the period required for turnover was 105 days. In 2005 the turnover of working capital was 2.2X, this means that in that year the funds invested in working capital rotated 2.2X, thus the period required for its rotation is 164 days. For 2006 working capital rotated 1.98X, thus the period required for turnover was 182 days.

Turnover of working capital in 2003 decreased by 33.07% compared to 2002 because net sales in 2003 increased by 42.38%, while the average working capital increased by 7.03%. Turnover of working capital in 2004 decreased by 31.06 when compared to 2003 because the percentage increase in net sales of 20.73% was smaller than the average percentage decrease in working capital of 75.09%. For 2005 working capital turnover decreased compared to 2004 of 36.05% due to the percentage increase in net sales of 8.59% which was smaller than the average percentage percentage increase in working capital of 3.44%.

c. PT. Delta Djakarta Tbk

From the table above it can be seen that the turnover rate of working capital from 2002 to 2006. Working capital turnover in 2002 was 1.43X, this means that in that year the funds embedded in working capital rotated an average of 1.43X, thus the term the time required for its rotation is 252 days. In 2003 the turnover was 1.32X, meaning that in that year the working capital rotated 1.32X, thus the period required for the turnover was 273 days. In 2004 the turnover of working capital was 1.28X, this means that in that year the funds invested in working capital rotated an average of 1.28X, thus the period required for turnover was 281 days. In 2005 the working capital rotated 1.27X, thus the period required for turnover was 284 days. For 2006 working capital rotated 0.99X, thus the period required for turnover is 364 days.

Turnover of working capital in 2003 decreased by 7.69% compared to 2002 because net sales in 2003 increased by 9.01%, while the average working capital increased by 18.26%. Turnover of working capital in 2004 decreased by 3.03 when compared to 2003 because the percentage increase in net sales of 16.80% was smaller than the average percentage decrease in working capital of 20.10%. For 2005 working capital turnover decreased compared to 2004 of 0.78% due to the percentage increase in net sales of 22.42% which was smaller than the average percentage percentage increase in working capital of 23.98%. Meanwhile, in 2006 the working capital turnover decreased compared to 2005 by 22.

d. Fast Food Indonesia Tbk

From the table above it can be seen the level of working capital turnover from 2002 to 2006. Working capital turnover in 2002 was 5.63X, this means that in that year the funds embedded in working capital rotated an average of 5.63X, thus the term the time required for its rotation is 53 days. In 2003 the turnover was 7.13X, meaning that in that year working capital rotated 7.13X, thus the period required for the turnover was 51 days. In 2004 the turnover of working capital was 7.69X, this means that in that year the funds invested in working capital rotated an average of 7.69X, thus the period required for turnover was 47 days. In 2005 working capital turnover was 8.32X, this means that in that year the funds embedded in working capital rotated 8.32X, thus the required period of time for the turnover was 43 days. For 2006 working capital rotated 8.98X, thus the period required for turnover was 41 days.

Turnover of working capital in 2003 increased by 5.63% compared to 2002 because net sales in 2003 increased by 11.19%, while the average working capital increased by 5.31%. Turnover of working capital in 2004 increased by 7.85% when compared to 2003 because the percentage increase in net sales of 11.84% was greater than the average percentage increase in working capital of 3.67%. For 2005 working capital turnover increased compared to 2004 of 8.19% due to the percentage increase in net sales of 15.62% which was smaller than the average percentage increase in working capital of 6.87%. Meanwhile, in 2006 the working capital turnover increased compared to 2005 by 7.

e. PT. Indofood Sukses Makmur Tbk

From the above table it can be seen that the turnover rate of working capital from 2002 to 2006. Working capital turnover in 2002 was 2.66X, this means that in that year the funds embedded in working capital rotated an average of 2.66X, thus the term the time required for its rotation is 135 days. In 2003 the turnover was 2.53X, meaning that in that year working capital rotated 2.53X, thus the period required for the turnover was 142 days. In 2004 the turnover of working capital was 2.67X, this means that in that year the funds invested in working capital rotated an average of 2.67X, thus the period required for turnover was 135 days. In 2005 working capital turnover was 2.91X,

Turnover of working capital in 2003 decreased by 4.89% compared to 2002 because net sales in 2003 increased by 8.53%, while the average working capital decreased by 14.1%. Turnover of working capital in 2004 increased by 7.85% when compared to 2003 because the percentage increase in net sales of 11.84% was greater than the average percentage increase in working capital of 3.67%. For 2005 working capital turnover increased compared to 2004 of 8.19% due to the percentage increase in net sales of 15.62% which was smaller than the average percentage increase in working capital of 6.87%. Meanwhile, in 2006 the working capital turnover increased compared to 2005 by 7.

f. PT. Mayora Indah Tbk

From the table above it can be seen the turnover rate of working capital from 2002 to 2006. Working capital turnover in 2002 was 1.55X, this means that in that year the funds embedded in working capital rotated an average of 1.55X, thus the term the time required for its rotation is 232 days. In 2003 the turnover was 1.62X, meaning that in that year the working capital rotated 1.62X, thus the period required for the turnover was 222 days. In 2004 the turnover of working capital was 2.09X, this means that in that year the funds invested in working capital rotated an average of 2.09X, thus the period required for turnover was 172 days. In 2005 working capital turnover was 2.6X, this means that in that year the funds embedded in working capital rotated 2.6X, thus the

period required for turnover was 139 days. For 2006 working capital rotated 2.68X, thus the period required for turnover was 134 days.

Turnover of working capital in 2003 increased by 4.52% compared to 2002 because net sales in 2003 increased by 10.55%, while the average working capital increased by 6.11%. Turnover of working capital in 2004 increased by 29.01% when compared to 2003 because the percentage increase in net sales of 24.84% was greater than the percentage decrease in average working capital of 3.34%. For 2005 working capital turnover decreased compared to 2004 amounting to 24.40% due to the percentage increase in net sales of 23.80% greater than the percentage decrease in average working capital of 0.31%. Meanwhile, in 2006 the working capital turnover decreased compared to 2005 by 3.

2. Company Profitability Analysis

Table 2. Calculation Results of Rate of Return on Investment								
No	Company	2002	2003	2004	2005	2006		
1	PT. Aqua Golden Tbk	12.32%	12.09%	13.66%	8.79%	6.14%		
2	PT. LightWest Kalimantan Tbk	3.25%	1.08%	-7.99%	-6.58%	5.45%		
3	PT. DavomasTbk	2.79%	10.29%	6.27%	5.16%	7.25%		
4	PT. DeltaDjakarta Tbk	12.19%	9.44%	8.50%	10.49%	7.50%		
5	PT. Fast Food Tbk	15.41%	12.93%	11.11%	10.93%	14.25%		
6	PT. IndofoodTbk	5.26%	3.94%	2.41%	0.84%	4.10%		
7	PT. Beautiful MajoraTbk	8.97%	6.59%	6.65%	3.13%	6.02%		

a. PT. Aqua Golden Mississippi Tbk

Based on the calculation results from table 2. it can be seen using the ROI method for 2002 of 12.32% of the total assets. Whereas in 2003, the company was able to generate a profit of 12.09% of total assets. Thus, in 2003 the company experienced a decline in generating profits. The decrease in ROI value from 2002 to 2003 was 0.23%. ROI in 2004 was 13.66%, an increase of 1.57% compared to 2003. ROI in 2005 was 8.79%, a decrease of 4.87%. Meanwhile, ROI in 2006 was 6.14%, decreased by 2.65%.

b. PT. Cahaya Kalbar Tbk

Based on the calculation results from table 2. it can be seen using the ROI method for 2002 of 3.25 of the total assets. Whereas in 2003, the company was able to generate a profit of 1.08% of total assets. Thus, in 2003 the company experienced a decline in generating profits. The decrease in ROI value from 2002 to 2003 was 2.17%. ROI in 2004 was -7.99, a decrease of 9.07% compared to 2003. ROI in 2005 was -6.58%, an increase of -1.41%. Meanwhile, the ROI in 2006 was 5.45%, an increase of 12.03%.

c. PT. Davomas Abadi Tbk

Based on the calculation results from table 2. it can be seen using the ROI method for 2002 of 2.79% of the total assets. Whereas in 2003, the company was able to generate a profit of 10.29% of total assets. Thus, in 2003 the company experienced an increase in generating profits. The increase in ROI value from 2002 to 2003 was 7.5%. ROI in 2004 was 6.27%, a decrease of 4.02% compared to 2003. ROI in 2005 was 5.16%, a decrease of 1.11%. Meanwhile, the ROI in 2006 was 7.25%, an increase of 2.09%.

d. PT. Delta Djakarta Tbk

Based on the calculation results from table 2. it can be seen using the ROI method for 2002 of 12.19% of the total assets. Whereas in 2003, the company was able to generate a profit of 9.44% of total assets. Thus, in 2003 the company experienced a decline in generating profits. The decline in ROI value from 2002 to 2003 was 2.75%. ROI in 2004 was 8.50%, a decrease of 0.94% compared to 2003. ROI in 2005 was 10.49%, an increase of 1.99%. While ROI in 2006 was 7.50%, decreased by 2.99%.

e. PT. Fast Food Indonesia Tbk

Based on the calculation results from table 2. it can be seen using the ROI method for 2002 of 15.41% of the total assets. Whereas in 2003, the company was able to generate a profit of

1.82% compared to 2003. ROI in 2005 was 10.93%, a decrease of 0.18%. Meanwhile, the ROI in

f. PT. Indofood Tbk

2006 was 14.25%, an increase of 3.32%.

Based on the calculation results from table 2. it can be seen using the ROI method for 2002 of 5.26% of the total assets. Whereas in 2003, the company was able to generate a profit of 3.94% of total assets. Thus, in 2003 the company experienced a decline in generating profits. The decrease in ROI value from 2002 to 2003 was 1.32%. ROI in 2004 was 2.41%, a decrease of 1.53% compared to 2003. ROI in 2005 was 0.84%, a decrease of 1.57%. Meanwhile, the ROI in 2006 was 4.10%, an increase of 3.26%.

g. PT. Mayora Indah Tbk

Based on the calculation results of 2. it can be seen using the ROI method for 2002 of 8.97% of the total assets. Whereas in 2003, the company was able to generate a profit of 6.59% of total assets. Thus, in 2003 the company experienced a decline in generating profits. The decrease in ROI value from 2002 to 2003 was 1.32%. ROI in 2004 was 2.41%, a decrease of 1.53% compared to 2003. ROI in 2005 was 0.84%, a decrease of 1.57%. Meanwhile, the ROI in 2006 was 4.10%, an increase of 3.26%.

3. Analysis of the Relationship between Efficient Use of Working Capital and Corporate Profitability (ROI)

After knowing the turnover of working capital and the level of company profitability for 5 years from 2002 to 2006, it will be known whether there is a relationship or not between the efficiency of the use of working capital and company profitability with correlation analysis, namely linking between the two variables X and Y. Variable X is variable of working capital turnover. Variable Y is company profitability (ROI). In conducting this analysis, the author uses computer assistance in the form of the SPSS 17.0 for windows program.

4. CONCLUSION

Based on the results of the analysis that has been done, it can be concluded that the efficiency of working capital seen from working capital turnover is related to financial performance seen from ROI. This can be seen from the significance level between the working capital turnover rate and ROI of 0.001. ROI has a fairly strong relationship with the level of working capital turnover because the correlation is 0.418 and the significance level is less than 0.01.

REFERENCES

Arshinta, Fani. 2000. Analysis of the Efficiency of Using Working Capital Based on the Ratio of Activity and Profitability of Working Capital. Unpublished thesis. Yogyakarta: Sanata Dharma University.

Freud, J. Houston and Eugene F. Brigham. 2001. Financial Management. Translated by Dodo Suharto & Herman Wibowo. Jakarta: Erlangga.

Gitosudarmo Indriyo and Basri. 2000. Financial Management Third Edition. Yogyakarta: BPFE. Husnan, Suad. 1989. Corporate Spending (Fundamentals of Company management). VIII edition. Jakarta: Erlangga.

Husnan, Suad. 1994. Corporate Spending (Fundamentals of Company management). VIII edition. Jakarta. Publisher: Erlangga.

IAI. 1999. Financial Accounting Standards. Jakarta: Salemba Empat Publishers.

Jakarta Stock Exchange. 2004. Indonesian Capital Market. Jakarta: Institute for Economic and Financial Research.

Jakarta Stock Exchange. 2005. Indonesian Capital Market. Jakarta: Institute for Economic and Financial Research.

Jakarta Stock Exchange. 2007. Indonesian Capital Market. Jakarta: Institute for Economic and Financial Research.

Laela, Fatma. 1996. Balance Scorecard as an alternative to Management Performance Measurement. Yogyakarta: AMP YKPN.

Munawir, Slamet. 1980. Analysis of Financial Statements. Yogyakarta BPFE Publisher. Munawir, Slamet. 1998. Analysis of Financial Statements. Yogyakarta: BPFE. Munawir,

Riyanto, Bambang. 1997. Fundamentals of Corporate Spending. Yogyakarta: BPFE UGM. Sarwoko and Halim, Abdul. 1998. Financial Management. Yogyakarta: BPFE.

Sartono, Agus. 1990. Financial Management Theory and Applications. Yogyakarta: BPFE UGM. Soediyono. 1991. Financial statement analysis: Ratio Analysis. First Edition. Yogyakarta. Publisher: Liberty.

congratulations. 2001. Analysis of Financial Statements. Yogyakarta: BPFE. Prastowo, Dwi. 1995. Analysis of financial statements. Yogyakarta: Liberty.

Syafaruddin, Alwi. 1989. Analysis and Spending Tools. Yogyakarta: Andi Offset. Triton. 2005. SPSS 13.0 Applied: Parametric Statistical Research. Yogyakarta: Andi Offset.

Windarisni, Yustina. 1999. Analysis of the Efficiency of Using Working Capital. Unpublished thesis. Yogyakarta: Sanata Dharma University.