

**The Influence Between Working Capital and Profitability Company
(Study at Food and Beverage Sector listed at Indonesia Stock
Exchange for 2008-2011 period)**

By:

Hesvibet ElvaJulnine

International Management Program, Faculty of Economics and Business, University of
Brawijaya

Hesvibet@yahoo.co.id

Advisory Lecture:

Dr. Andarwati, SE., ME,

ABSTRACT

The purpose of this research is to examine the relationship of working capital management and profitability company in food and beverage sector listed at Indonesia Stock Exchange. In order to know the relationship occur among the independent variable (Inventory Conversion Period, Days Sales Outstanding, Payable Deferral Period, and Cash Conversion Cycle) on Return on Asset using the regression analysis, F test and t Test was conducted. This research is explanatory research, in accordance with its purpose to explain the correlation and relations of some fixed variables. The sample in this research were the income statement and statement of cash flows data from Food and Beverage sector listed at Indonesia Stock Exchange. The sampling technique is Purposive sampling and the research instruments tested using classical assumption test. The hypothesis testing was using the F and t test to analyze the data to be used in Multiple Regression Analysis. The multiple regression showed that, simultaneously and partially tested Inventory Conversion Period, Days Sales Outstanding, Payable Deferral Period, and Cash Conversion Cycle. While the dominant tes shows cash conversion cycle has dominant affecting to Return on Assets.

Keywords; Inventory Conversion Period, Days Sales Outstanding, Payable Deferral Period, and Cash Conversion Cycle, and Return on Assets

Backgrounds

The development of food and beverage industry in Indonesia significant grow, shown by many kinds of food and beverages types of market. On the other hand home industry for food and beverages shown that the development of food industry not consider low. Market segment for food and beverage not only limited to certain segmentation like others

industry product. The other factor supported the development of food and beverage industry is the availability of raw material in huge amount, so there is no extra cost needed for import.

Basically all companies doing activities to reach the target, so does company with food and beverage. Every activity done by the company need capital whether to fund the daily operational

activity or to fund at long term investment. The fund use to do the daily operational activity called working capital. Working capital is needed by every company to fund its daily operational in which the expensed working capital turn to profit in short term the product sold. The working capital out of product selling will be used to fund the next operational activity. It will be continuously use for every period in the company (Riyanto, 2001:37).

According to Hayajney and Yassine (2011) efficiency of working capital depend on how to measure of the element working capital policy. The first policy is collection policy, that measured by average receivables collection period (ARCP) which is meaning the average length of time required to convert the firm receivables into cash. Second policy is inventory policy, which expressed by average conversion inventory period (ACI). It means the average length of time required to convert raw materials into finished goods and then sell these goods. Third policy of working capital efficiency is payment policy, which measured by average payment period (APP) that means the length time between the purchase of materials and the payment of cash. These policies require from company to accelerate the collections of receivables, accelerate its inventory, accelerate the payment cycle, and reduce the cost of the working capital needs. It policies can be merged in one general policy, is called cash conversion cycle (CCC) which is cash conversion cycle is an important technique of analysis for the financial managers of firm to assess why and when the firm needs more cash to sustain its activities and when and how it will repay the cash.

According journal by Amarjit Gill (2010) there are strong possibilities of relationship between Cash Conversion Cycle from company with its profitability. Three component from Cash Conversion Cycle (inventory, account payable, and account receivable) can be managed by in

different ways to maximize profitability or giving optimal growth level for company.

In addition of cash, working capital element in this research is the inventory. Inventory or stock of goods as the main elements of the working capital assets are always in a state of spins, where constantly changing. The problem of determining the magnitude investment in inventory or capital allocation has a direct effect on company profits. Error in determining the amount of investment in inventory will depress corporate profits. The investment in inventories that are too large compared to the need to enlarge interest expenses, increase in the cost of storage and maintenance shed, increase the possibility of damage and losses due to the decline of quality, so will reduce the profitability of the company. Likewise, the investment that is too small will result in the company lacked material and the company can not work optimally (Deloof, 2003).

LITERATURE REVIEW

Working Capital

Working capital is part of the company's capital which is used for short-term operations. Working capital is generally divided into two groups (categories): gross working capital and net working capital. Gross working capital is the sum of all current assets, while net working capital is the difference between current assets and current liabilities. The first exposes the financial manager to the issue of how to manage all the components individually to match the interests of the company. Net working capital is part of current assets financed by long-term resource companies. Although the turnover of current assets and current liabilities is relatively short, the difference between two part is that the requires provision of funds the company permanently. Second, that the creditors have a particular interest on net working capital position as regard this number as a last source of funds for

repayment on their bills (Philip A Vale, 1988: 40).

According to Keown (2002:612) Traditionally, working capital is defined as the firm's total investment in current assets. Net working capital, on the other hand, is the difference between the firm's current assets and its current liabilities. A company always needs working capital to fund the daily operations, such as to provide advance purchase raw materials, pay wages, pay staff salaries, etc., in which money or funds that issued can be expected to come back into the company in a short through the sale of the products. The existence of sufficient working capital is very important for the company to operate as economically as possible and the company did not facing the difficulties that may arise caused financial crisis, but the excess working capital indicates that the fund is not productive, and it will cause loosing to the company because of the opportunity to get a profit has been wasted.

Types of Working Capital

According to Hampton and Wagner (1989:5) types of working capital can be classified into two forms:

1 *Permanent Working Capital*

This represent cash, receivables, and inventories required on a continuing basis over the entire year. It may be viewed as the minimum current assets needed to carry on operations at any time.

2. *Variable working capital*

This reflects additional current assets needed at peak periods during the operating year. Additional, inventory may be needed to support higher sales during the selling season. Receivables must increase once the goods have been sold. Extra costs may be needed to pay for increased supplies and labor activity preceding the period of high activity.

Thus, permanently working capital indicates that the available amount of working capital so that the operational of company can be done, while working capital variables held to anticipate the changes that may occur to be able to influence the company.

The element of working capital according to Brigham and Houston (2004:573) as follows:

1. Cash

In the course of every business company needs cash. Cash needed for day-to-day finance companies as well as for new investment in fixed assets. Cash and marketable securities are the most liquid type of asset for the company. Understanding cash is all cash on hand and in the bank in various forms such as deposits and current accounts.

According to Voorhis and Dunn (1962:33) cash is by no means the only asset subject to misappropriation. Businessman and systems designer often concentrate too much attention on cash to the neglect of other assets such as inventory and equipment. There is also serious possibility of loss through careless use and waste of assets. The internal control system must cover these possibilities too. Accounting is an integral part of this control. Appropriate reports can help management make sure that control are effective. Only a few highlights of internal control over other assets are considered here.

2. Receivable

Sundjaja & Barlian (2003:95) "Receivable is an estimate of assets that indicates the amount owed to the company as a result of the sale of goods and services "it appears as a credit sale. "According to Brigham and Houston (2004:591) (*account receivable*) is a balance due from a customer.

Factors account receivables involves the outright sale of a firm's account to a financial institution, called a factor. Factor is a firm's that acquires the receivable of other firms. The factoring institutions may

be a commercial finance company that engages solely in factoring receivables or it may be a commercial bank. The factor, in turn, bears the risk of collection and services the account for a fee. The fee is stated as a percent of the face value of all receivables factored.

3. Inventory

According to Stanley and Hurt (1992:186) inventory management is usually defined into three basic categories: raw materials used in the product: work in progress which reflects partially finished products, and finished goods which are ready for sale. All these forms of inventory need to be financed and their efficient management can increase a firm's profitability. The amount of inventory is not always totally controlled by company management because it is affected by sales, production, and economic condition. According to Keown (2002: 677-678) types of inventory divided into three, there are: raw materials, work in process, finished goods inventory.

Measuring Working Capital

The management of accounts receivable is a way to achieve optimal credit policy, namely the achievement of a balance between the costs resulting from the credit policy with the benefits of the policy (Philip A. Vale, 1988: 43). The condition is also associated with the control of inventories owned by the company, through the analysis of the inventory level for the use of working capital efficiencies can be realized.

Working capital analysis will be used as follow:

1. Inventory conversion period (X1)

According to Brigham and Houston (2004:567) inventory conversion period is the average time required to convert materials into finished goods and then to sell these goods.

$$\text{Inventory conversion period} = \frac{\text{Inventory}}{\text{Sales per day}}$$

2. Days Sales Outstanding (X2)

Menurut Brigham and Houston (2004:594) Days Sales Outstanding is the average length of time required to collect credit sales. the Days Sales Outstanding can also be compared with the firm's own credit terms.

$$\text{Days Sales Outstanding} = \frac{\text{receivable}}{\text{annual sales}/365}$$

3. Payables deferral period (X3)

According to Brigham and Houston (2004:567) payables deferral period is the average length of time between the purchase of materials and labor and the payment of cash for them.

$$\text{Payables deferral period} = \frac{\text{payables}}{\text{purchase per day}}$$

4. Cash Conversion Cycle (X4)

Menurut Brigham and Houston (2004:567) Cash conversion cycle focuses on length of time between when the company makes payments and when it receives cash inflows. while according investopedia "The CCC is a combination of several activity ratios involving account receivable, account payable and inventory turnover. It measures how fast a company can convert cash on hand into even more cash on hand". (http://www.investopedia.com/articles/08/cash_conversion_cycle.asp, tanggal akses 3 Desember 2012, 22.00 WIB).

$$\text{Cash Conversion Cycle} = \text{Inventory conversion period} + \text{Days Sales Outstanding} - \text{Payables deferral period}$$

Profitability

Every profit oriented company will use it assets to gain optimal profitability. For those reason, profitability always become a basic in making decision for investors to invest. (Van Horne, 1981: 112)

Profitability is the company's ability to gain profit in term of sales, total assets and owner capital. Profitability ratios measure the overall record of management in producing profits. If a firm does not earn an adequate profits, its long-term survival will be threatened. Profits must be converted into a measure of profitability, which then reveals how successful past decisions and policies have been in earning a return for its investors (Ramesh, 1989:223).

There are some ratios that are used to measure profitability is as follows:

1) Gross Profit Margin

The gross profit margin is useful to know the company's gross profits from each item sold. Gross profit margin is strongly influenced by the cost of goods sold. If the cost of goods sold increases, the gross profit margin will decrease, otherwise. In other words, this ratio measures the efficiency of controlling cost or cost of production, indicates the company's ability to produce efficiently. The formulation for *gross profit margin* is below:

$$\text{Gross Profit Margin} = \frac{(\text{Sales} - \text{Cost of Goods Sold})}{\text{Sales}}$$

(Van Horne, 1981:113)

2) Net Profit Margin

Net Profit Margin (NPM) is describe the amount of net income the company on any sales made. In the other word this ratio measurement the net income after tax to sales.

The formulation for *net profit margin* is below:

$$\text{Net Profit Margin} = \frac{\text{Income after tax}}{\text{Sales}}$$

(Van Horne, 1981:113)

3) Return on Equity (ROE)

Return on equity is the ratio of net income to common equity and measures the rate of return on common stockholders investment. This ratios influenced by the rate of payable company, if payable

proportion bigger so this ratio will bigger too.

The formulation for *Return on Equity* (ROE) is :

$$\text{Return on Equity} = \frac{\text{Net income available to common stockholders}}{\text{common equity}}$$

(Brigham and Ehrhardt, 2005:454)

4) Return On Asset (ROA)

Manager must have funding responsibility in related to gained needed fund for the company assets. Operational responsibility related to using assets gained. According to Brigham and Houston (2004:88), "*Return On Assets is the ratio of net income to total assets.*"

$$\text{Return on total assets} = \frac{\text{net income} + (\text{interest rate} \times (1 - \text{tax}))}{\text{Average of total assets}}$$

Hipotesis I

According Journal by lazaridis and Tryfonidis hypothesis 1 are:

H₁:, The variables of Inventory conversion period (X1), Days Sales Outstanding (X2), Payables deferral period (X3), Cash conversion cycle (X4) are simultaneously affecting the Return on Asset (Y) in Food and Beverages sector listed at Indonesia Stock Exchange in period 2008-2011.

Hipotesis II

According Journal by lazaridis and Tryfonidis hypothesis 2 are:

H₂:, The variables of Inventory conversion period (X1), Days Sales Outstanding (X2), Payables deferral period (X3), Cash conversion cycle (X4) are partially affecting the Return on Asset (Y) in Food and Beverages sector listed at Indonesia Stock Exchange in period 2008-2011.

Hipotesis III

According Journal by lazaridis and Tryfonidis and Amarjit Gill for the hypothesis 3 are:

H₃: Variable of Cash Conversion Cycle (X₄) is a dominant factor affecting Return on Assets in Food and Beverages sector listed at Indonesia Stock Exchange in period 2008-2011.

RESEARCH METHODOLOGY

The types of research used by author is explanatory research. Explanatory research is aimed to test a theory or hypothesis to strengthen or even to reject those existing theory or hypothesis.

The population and sample in this research is income statement and cash of flow data from food and beverages sector listed at Indonesia Stock Exchange. The duration to take data is period 2008-2011.

Sampling Technique

The sampling technique is purposive sampling, according to Sugiyono (2011;85) purposive sampling is sampling technique with certain consideration, such as if the researcher wants to know about the food quality, the samples of the researches which are food expert.

For this research sample, the sample consideration of some criteria such as:

1. The author choose Food and Beverage sector listed at Indonesia Stock Exchange in period 2008-2011.
2. The company has not been loss (gained profit) from 2008 – 2011 which will reflecting the return level.

Data Types

The data that be used in this research is quantitative data namely numerical data. The quantitative methods is data analysis done by collecting, tabulating, and serving, and interpreting numerical data (quantitative data). Analyzing, counting, comparing, and implicating into fit

observed problems. This research obtained from financial statement of Food and Beverages company enlisted in Indonesia Stock Exchange 2008 until 2011.

Data Sources and Location of Research

According to Nasution (2003:143) secondary data is a data resource gathered from other party (people or institution). This kind of data can be obtained financial statement of Food and Beverage sector listed at Indonesia Stock Exchange in period 2008 until 2011.

Statistical Test Conducted

Statistical test conducted were classical assumption test (normality test, multicollenenearity test, and heteroscedasticity test) Multiple Regression Analysis, Determinant Coefficient, F test, t Test, and Dominant test.

FINDING AND DISCUSSION

Normality

Based on One Sampel Kolgorov-Smirnov test it is found that the significant value is bigger that alpha ($\alpha = 0,05$), so it is concluded that the data fulfilled normality assumption.

Table 1: Normality Test

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Return on Asset	.267	44	.434	.760	44	.528

a. Lilliefors Significance Correction

The results of normality test data obtained is sig. of 0.434, based on these results, the data used in this study normally distributed.

Multicollinearity

Table 2: Multicollinearity

Coefficient ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-320.533	222.674		-1.439	.158		
	X1	101.841	49.587	.266	2.054	.047	.925	1.094
	X2	262.501	101.063	.332	2.597	.013	.926	1.084
	X3	25.682	12.363	.176	2.077	.044	.959	1.070
	X4	66.821	23.227	.272	2.877	.006	.947	1.091

a. Dependent Variable: Y

Based on the test results show that the overall multicollinearity of independent variables used in this study include the variable Inventory Conversion Period, Days Sales Outstanding, Payables Deferral Period and the Cash Conversion Cycle there is no multicollinearity.

Autocorrelation

The autocorrelation estimator Consequently it is not efficient therefore the assurance interval becomes wider. The other consequence if allowed then the autocorrelation problem nuisance to underestimate the error variance, which in turn use the t test and F test can no longer be used. To detect the presence of autocorrelation it is used Durbin Watson of magnitude.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.913 ^a	.834	.817	812.506	1.139

a. Predictors: (Constant), X4, X3, X2, X1

b. Dependent Variable: Y

Based on the test results show that the autocorrelation Durbin Watson value of 1.139 where the figure lies between -2 and +2, its means there is no autocorrelation in the regression model used.

Heteroscedasticity

Based on the test results heteroscedasticity is known that the points on the graph formed scatterplot not form a clear pattern as well as the spread above and below the 0 on the Y axis so that it can

be concluded that the regression model used free of heteroscedasticity.

Analysis

Multiple Regression Analysis

Table 3:
Multiple Regression Analysis Result

Coefficient ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-320.533	222.674		-1.439	.158		
	X1	101.841	49.587	.266	2.054	.047	.925	1.094
	X2	66.821	23.227	.272	2.877	.006	.947	1.011
	X3	25.682	12.363	.176	2.077	.044	.959	1.070
	X4	262.501	101.063	.332	2.597	.013	.947	1.084

a. Dependent Variable: Y

The interpretation of above equation are:

$\alpha = -320.533$ a constant value, the estimate of the return on assets in the food and beverage sector listed on the Indonesia Stock Exchange, if the independent variable consists of the variable Inventory Conversion Period, Days Sales Outstanding, Payables Deferral Period and the Cash Conversion Cycle has a value equal to zero.

$\beta_1 = 101.841$ the coefficient of variable direction Inventory Conversion Period (X1) that affect the return on assets in the food and beverage sector listed at Indonesia Stock Exchange, the regression coefficient (β_1) of 101.841 positively. These imply that the Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange will increase by 101.841, the nature of the relationship

in line with the assumption that other variables have a value equal to zero.

$\beta_2 = 66.821$ is the slope or the coefficient of variable direction Days Sales Outstanding (X2) that affect the return on assets in the food and beverage sector listed at Indonesia Stock Exchange, the regression coefficient (β_2) at 66.821 positively. These imply that the Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange will increase by 66.821, the nature of the relationship in line with the assumption that other variables have a value equal to zero.

$\beta_3 = 25.682$ is the slope or the coefficient of variable direction Payables Deferral Period (X3) that affect the return on assets in the food and beverage sector listed at Indonesia Stock Exchange, the regression coefficient (β_3) of 25.682 positively. These imply that the Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange will increase by 25.682, the nature of the relationship in line with the assumption that other variables have a value equal to zero.

$\beta_4 = 262.501$ is the slope or direction of the variable coefficient Cash Conversion Cycle (X4) that affects the return on assets in the food and beverage sector listed at Indonesia Stock Exchange, the regression coefficient (β_4) of 262.501 positively. These imply that the Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange will fall by 262.501, the nature of the relationship in line with the assumption that other variables have a value equal to zero.

$E = 812.506$ is the residual value or the possible errors of the regression equation model, due to the possibility of other variables that could affect the return on assets in the sectors of food and beverage sector listed at Indonesia Stock Exchange but were not included in the model equations.

Coefficient Determinant (R^2)

Table 4
Coefficient Determinant Result

Model Summary ^a					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.913 ^a	.834	.817	812.506	1.139

a. Predictors: (Constant), X4, X3, X2, X1

b. Dependent Variable: Y

From the calculated linear regression analysis was done to show the influence of the independent variable is the dependent variable, it can be seen in the value of the coefficient of determination (R^2) is equal to 0.834. Thus, it means that the influence of Inventory Conversion Period, Days Sales Outstanding, Payables Deferral Period and the Cash Conversion Cycle to variable Return on Assets in the food and beverage sector listed at the Indonesia Stock Exchange can be explained by 83.4% while the remaining 16.6% explained by other variables that are not included in this study.

Hypothesis Testing

F test

Table 5: F test

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1E+008	4	32436042.00	49.133	.000 ^a
	Residual	25746477	39	660166.077		
	Total	2E+008	43			

a. Predictors: (Constant), Age of Debtors, Cash Conversion Cycle, Days Sales Outstanding, Age of Inventory

b. Dependent Variable: Return on Asset

Based on the analysis of the F test in Table 4.6 using $Df_1 = 4$ and $Df_2 = 39$, with a significance of 0.000, so it can be seen that the significance level is less than α . Thus it can be concluded that the variable Inventory Conversion Period(X1), Days Sales Outstanding (X2), Payables Deferral Period (X3) and the Cash Conversion Cycle (X4) simultaneously have significant impact on Return on Assets (Y) in the food and beverage sector listed at Indonesia Stock Exchange.

t Test

Table 6: t Test

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-320.533	222.674		-1.439	.158		
X1	101.841	49.587	.266	2.054	.047	.925	1.094
X2	66.821	23.227	.272	2.877	.006	.947	1.011
X3	25.682	12.363	.176	2.077	.044	.959	1.070
X4	262.501	101.063	.332	2.597	.013	.947	1.084

a. Dependent Variable: Y

Based on Table 6 t-test statistical regression analysis can be partially explained as follows:

1. Inventory Conversion Period (X1)
From the results of the analysis showed that the level of significance of the variable Inventory Conversion Period (X1) is equal to 0.047>, (5%) results showed that no significant effect variable Inventory Conversion Period (X1) on Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange, assuming other variables constant.
2. Days Sales Outstanding (X2)
From the results of the analysis showed that the level of significance of the variable Days Sales Outstanding (X2) is equal to 0.006 <, (5%) these results indicate that there is a significant variable Days Sales Outstanding (X2) on Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange assuming other variables constant.
3. Payables Deferral Period (X3)
From the results of the analysis showed that the level of significance of variables Payables Deferral Period (X3) is equal to 0.044 <, (5%) results showed that the influence of significant variables Payables Deferral Period (X3) on Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange assuming other variables constant.

4. Cash Conversion Cycle (X4)

From the results of the analysis showed that the level of significance of the variable age of debtors (X4) is equal to 0.006>, (5%) results showed that no significant effect variable Cash Conversion Cycle (X4) on Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange, assuming other variables constant.

Dominant Test

Among the variable of Inventory Conversion Period (X1), Days Sales Outstanding (X2), Payables Deferral Period (X3), and Cash Conversion Cycle (X4). Only the Cash Conversion Cycle (X4) has the largest *Beta Coefficient Standardized* (0,332), so it concluded that Cash Conversion Cycle (X4) variable is dominant over other variables.

CONCLUSION

1. All independent variables of inventory conversion period (X1), Days Sales Outstanding (X2), Payable Deferral Period (X3), and Cash Conversion Cycle (X4) are simultaneously affecting on Return on Assets (Y)
2. All independent variables of inventory conversion period (X1), Days Sales Outstanding (X2), Payable Deferral Period (X3), and Cash Conversion Cycle (X4) are partially affecting on Return on Assets (Y) with significant value of X1= 0,047, X2=0,006, X3=0,044, X4=0,013 which is lower than α (0,05). All variables are significantly affecting to Return on Assets (Y).
3. Based on the research test result only variable cash conversion cycle (X4) this variable is the dominant variable that effects the Return on Assets

Implication

Based on the analysis and discussion, it implied on the research that, there are Significant relationship between the Inventory Conversion Period, Days Sales Outstanding, Payables Deferral Period and the Cash Conversion Cycle on Return on Assets in the food and beverage sector listed at Indonesia Stock Exchange show the company's ability to generate profit is affected by changes in working capital owned by the company. These results suggest that the company should be able to manage the working capital held so the ability to increase net income can maximally done.

The working capital management done by the company is to exercise control each element contained in the working capital. The company's ability to improve the efficiency of used working capital will have a positive impact on the company's efforts in increasing the net income. A real effort to do that further increase the efficiency of the use of cash the company has, the review of the credit system established and the use of company-owned inventory to maintain smooth operation of the production company.

Limitation of Research

The study was limited to the food and beverage sector listed at the Indonesia Stock Exchange used as the sample, so the results of this study can not be generalized for research that use different object.

BIBLIOGRAPHY

- Amarjit Gill and Friends. 2010. *The Relationship Between Working Capital Management and Profitability*. United Stated. Research Journal Business and Economic, 10.
- Archer Stephen H., G.Marc Choate and George Rocette.1983. *Financial Management* (2nd Edition). Canada. Willey.
- Arikunto, S. 2006. *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta Rinneke Cipta.
- Aulia Rahma. 2011. *Analisis Pengaruh Manajemen Modal Kerja Terhadap Profitabilitas Perusahaan*. Semarang. Universitas Diponegoro.
- Bagchi, B. 2012. *The Relationship Between Working Capital Management and Profitability A Study of selected FMCG Companies in India*. Research Journal Business and Economic, 12.
- Barlian, Ridwan S. 2003. *Manajemen Keuangan*. Edisi Kelima. Cetakan Kedua. Jakarta. Penerbit Literata Lintas Media.
- Block Stanley B. and Hirt Geoffrey A.1992. *Foundation of Financial Management* (6th Edition). United Stated. Irwin Professional Publishing.
- Deloof M. 2003. *Does Working Capital Management Affect Profitability of Belgian Firms?*’, Journal of Business Finance and Accounting, 30 (3) and (4), p.585 Blackwell Publishing.
- Eugene F. Brigham and Philip R. Daves. 2003. *Intermediate Financial Management* (8th Edition). United Stated. Thomson South-Western.
- Eugene F. Brigham and Joel F. Houston. 2004. *Fundamentals of Financial Management* (10th Edition). United Stated. Thomson South Western.
- Eugene F. Brigham and Michael C. Ehrhardt. 2005. *Financial Management (Theory and Practice)*. 11th Edition. United Stated. Thomson South Western.
- Garrison and Norren. 2006. *Managerial Accounting* (7th Edition). New York. Mc. Graw Hill.
- Gitosudarmo, Indriyo and Basri. 2002. *Manajemen keuangan* (4th Edition). BPFE, Yogyakarta.
- Ghozali, I. 2006. *Aplikasi Analisis multivariate Dengan Program*

- SPSS. Semarang. Badan Penerbit Universitas Diponegoro.
http://www.investopedia.com/artcles/08/cash_conversion_cycle_definition.asp (online), accessed on December 3th 2012.
- James C. Van Horne. 1981. *Fundamentals of Financial Management* (4th Edition). New Jersey. Prentice Hall.
- John J. Hampton and Cellilia L. Wagner. 1989. *Working Capital Management*. Canada. John Willey and Sons Inc.
- Keown, Martin, Petty, and Scott JR. 2002. *Financial Management* (9th Edition). New Jersey. Prentice Hall.
- Kumar R. 1996. *Research Methodology*. Australia. Addison Wesley Longman.
- Lazaridis I, Tryfonidis D, 2006. *Relationship Between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange*. Journal of Financial Management and Analysis, 19:16-25.
- Louder Back Joseph G. and Jay S. Holmen. 1999. *Managerial Accounting* (10th Edition). United States. Thomson South Western.
- Malhotra, N.K. 1993. *Marketing Research an Applied Orientation*, 2nd ed. New Jersey. Prentice Hall International Inc.
- Malhotra, N. K. and Peterson, M. 2006. *Basic Marketing Research*. New Jersey. Pearson Education.
- Munawir S. 2007. *Analisis Laporan Keuangan* (4th Edition). Cetakan Ketujuh. BPFE, Yogyakarta.
- Nasution. 2003. *Metode Research*. Jakarta. PT. Bumi Aksara.
- Osama Suhail Hayajneh and Fatima Lanchen Ait Yassine. 2011. *The Impact of Working Capital Efficiency on Profitability-an Empirical Analysis on Jordanian Manufacturing firms*, 66.
- Philip A. Vale. 1988. *Financial Management*. New York. Mc. Graw Hill.
- Philippatos and George S. 1991. *Financial Management* (2nd Edition). Massachusetts. Needham Heights.
- Rao Ramesh K. S. 1989. *Financial Management Concepts and Applications*. Cincinnati. Ohio South-Western Publishing.
- Riyanto, Bambang. 2008. *Dasar- Dasar Perusahaan*. Cetakan Ketujuh. BPFE, Yogyakarta.
- Schall and Lawrence D. 1991. *Introduction to Financial Management* (6th Edition). New York. Mc. Graw Hill.
- Sekaran, Uma. 2006. *Metode Penelitian untuk Bisnis*. Jakarta. Salemba Empat.
- Singgih Santoso and Fandy Tjiptono. 2006. *Riset Pemasaran Konsep dan Aplikasi dengan SPSS*. Jakarta. Gramedia.
- Sugiyono. 2011. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung. Alfabeta.
- Voorhis V. Robert and Clarence L. Dunn. 1962. *Using Accounting in Business*. California. Wadsworth Publishing Company.
- Widayat and Amirullah. 2005. *Riset Bisnis*. Edisi Pertama. Malang. CV. Cahaya Press.

