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**THE EFFECT OF WORKING CAPITAL ROUND, SALES GROWTH
AND LIQUIDITY ON CORPORATE PROFITABILITY
(Case Study of food and beverage companies listed on the Indonesia Stock
Exchange for the period 2014-2018)**

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Abstract

The development of this industry is inseparable from the population of Indonesia which continues to grow each year. As the population grows, the volume of demand for consumption products also increases. In addition, food and beverage companies will continue to exist and are most resistant to crisis conditions compared to other sectors. The formulation of the problem in this study is to find out whether working capital turnover, sales growth and liquidity can affect company profitability. And the purpose of this study is to determine the effect of each variable working capital turnover, sales growth and liquidity on the profitability variable. The research data was collected using quantitative methods. The data source used in this study was secondary data sources in the form of corporate financial reporting documents. The population used by researchers was the Consumer Goods Industry Sector Company which was listed on the Indonesia Stock Exchange in the 2014-2018 period, which obtained 14 companies and using purposive sampling technique. The analysis in this study uses Descriptive Statistics, Panel Data Regression Analysis, Classical Assumption Test and Hypothesis Test with Eviews 10 application.

Keywords: Working Capital Turnover, Sales Growth, Liquidity and Profitability.

1. Introduction

The food and beverage industry is a fairly large and rapidly growing group of companies in Indonesia. This industry is also one of the mainstay manufacturing sectors in making a major contribution to national economic growth. Achievement of its performance so far has been consistently positive, starting from its role in increasing productivity, investment, exports and employment. "The growth of the national food and beverage industry in 2018 reached 7.91 percent or exceeded the national economic growth rate of 5.17 percent".

The development of this industry is inseparable from the population of Indonesia which continues to grow each year. As the population grows, the volume of demand for consumption products also increases. In addition, food and beverage companies will continue to exist and are most resistant to crisis conditions compared to other sectors, because in a crisis condition or not, food and beverage products will still be needed. The tendency of people's consumption patterns leads to the consumption of processed fast food products (Endarwati, 2017).

Indicators that can be used to assess a well-managed company are how the company manages working capital, liquidity and sales growth factors on the profitability of the company, because the better the profitability, the better it illustrates the ability of high profitability (Fahmi: 2012).

The author in this study chose food and beverage companies as the object of research. Food and beverage companies are industrial companies engaged in the processing of the food and beverage sector which have a significant role in economic growth in Indonesia. The company is considered to be able to survive because it is the main thing and is always needed in people's daily lives. Food and beverage industry is a well-developed industry, growth is very fast and always there because it is one of the basic needs (Jhony: 2017).

Meanwhile research conducted by Apollo (2018), entitled *The effect of Working Capital, Liquidity and Leverage on Profitability: Empirical Study of Manufacturing Companies in Indonesia Stock Exchange 2012-2016*, yields conclusions that working capital has a significant positive effect on profitability, Liquidity has no effect on profitability and leverage has a significant negative effect on profitability (working capital has a significant positive effect on profitability, liquidity has no effect on profitability and leverage has a significant negative effect on profitability).

Research from Ratna mappanyuki and Meipita sari (2017), entitled *The effect of sales growth ratio, Inventory turnover ratio, growth opportunity to company's profitability*, results in the conclusion that sales growth ratio (SGR) does not influence significantly to ROA and (Return On Assets) and NPM while the profitability ROE (Return On Equity) significant effect (sales growth has no significant effect on ROA (Return On Assets) and NPM while ROE (Return On Equity) profitability has a significant effect).

Research from Faizal taufik Ibrahim, Endang tri widyarti, (2015), entitled *Analysis of the influence of Leverage, Liquidity, Working Capital Turnover and Sales Growth on Company Profitability*, by generating conclusions Leverage has a significant negative effect, Current Ratio has no significant negative effect, Working Capital Turnover has a significant positive effect on profitability.

Research by Agus Wibowo and Sri Wartini (2012), entitled *Work Capital Efficiency, Liquidity, and Leverage on Profitability in Manufacturing Companies on the IDX*, concludes that working capital efficiency variables have a significant effect on profitability, while liquidity and leverage do not significantly influence company profitability.

Anya Riana Anissa's research (2019), entitled *The Effect of Working Capital Turnover, Sales Growth and Liquidity on Profitability at Retail Companies listed on the Indonesia Stock Exchange*, states that working capital turnover has a significant positive effect, sales growth has a significant positive effect, liquidity has no significant effect. Significant.

2. Literature Review

Working Capital Turnover

Working capital turnover is one of the ratios to measure or assess the effectiveness of the company's working capital during a certain period. This means how much working capital revolves during one period or in one period. (Cashmere, 2011: 182) According to Bambang Riyanto (2008: 335) Working capital turnover is the ability of working capital to spin in a period of cash cycles from the company In determining working capital turnover, two methods can be used, namely:

1. Funding Method (Fund Cycle)

This method is used if a new business is started, thus the experience of management or of course with dominana is influenced by the internal state of the company that follows the development of daily activities for a long time.

2. Turnover Method

This method uses a general financial statement analysis of the company or the total working capital is calculated by the formula of working capital turnover, that is total sales divided by net working capital or cross working capital.

In this study the authors used a turnover method to determine working capital turnover because this method uses an analysis of the company's financial statements. Bambang Riyanto (2010: 62) formulates a formula to calculate Working Capital Turnover (WCT):

$$\text{WCT} = \text{Sales} / \text{Current Assets} - \text{Current Liabilities}$$

If the working capital turnover ratio is high it will indicate low liquidity to support operations, whereas if this ratio is low indicates high liquidity. This working capital turnover shows the amount of net sales rupiah earned for each rupiah of working capital. From the relationship between net sales and working capital it can also be seen whether the company works with high working capital or works with low working capital.

Sales Growth

According to Lundholm and Sloan (2009: 87) suggested that growth rates are generally reported for various aspects of performance, including sales, profits, and cash flow, but sales growth is the main long-term driver in all other aspects. Sales growth is a measure of a company's ability to know an increase or growth in sales from year to year.

Kasmir (2010: 116) states the growth ratio (growth ratio) is a ratio that illustrates the ability of companies to maintain its economic position in the midst of economic growth and business sectors. In this ratio, what is analyzed is sales growth, net profit growth, revenue growth per share, and dividend growth per share.

The formula to calculate sales growth according to Harahap (2008: 309) is as follows:

$$\text{Sales Growth} = \text{Sales} - \text{Last year sales} / \text{Last year sales}$$

Liquidity

According to Brigham and Houston which had been translated by Ali Akbar Yulianto (2010: 134) stated that: Liquid assets are assets traded in active markets so that they can be quickly converted into cash at the prevailing market prices, while the liquidity position of a company is related to questions, whether the company is able to pay off debt when debt is due in the following year.

According to Syafrida Hani (2015: 121), liquidity is the ability of a company to meet all financial obligations that can immediately be disbursed or are past due. Specifically, liquidity reflects the availability of funds owned by the company to meet all debts that are due.

Profitability

According to Kasmir (2011: 196) Profitability is a form of ability of a company in terms of generating profits for a certain period of time. The profitability of a company is measured by the company's success and ability to use its assets productively. According to Agus Sartono (2010: 122) stated about profitability "Profitability is the ability of companies to earn profits in relation to sales, total assets and own capital."

In this study the authors use return on assets (ROA) to measure the company's profitability. The reason for using return on assets (ROA) is because it can show a company's ability to generate profits based on a certain level of assets and high return on assets (ROA) shows the efficiency of asset management, which means management efficiency. (Mamduh, 2009: 84).

Framework

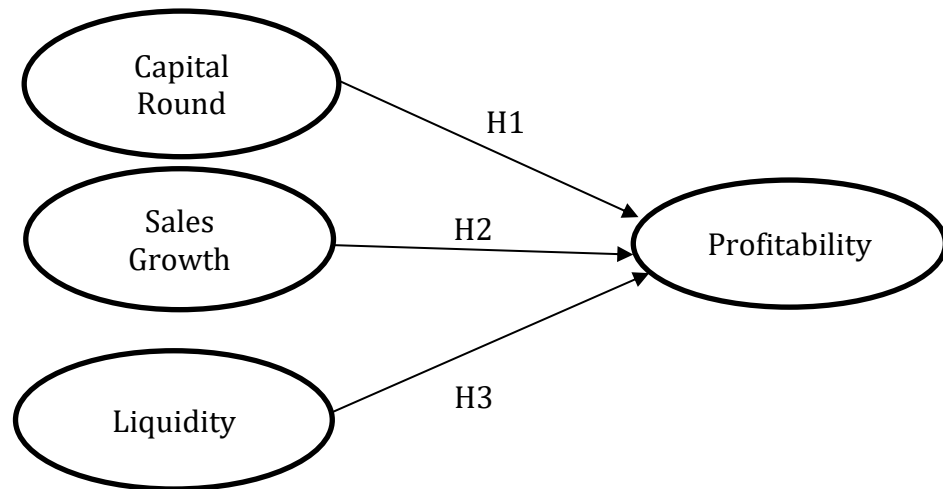


Figure 1. Framework

Source: Researchr data, 2019

Hypothesis:

H1 = Working capital turnover affects the profitability of the company

H2 = Sales growth affects the company's profitability

H3 = Liquidity affects the profitability of the company

3. Methods

This study uses quantitative research methods, where the variables of this study are Working Capital Turnover, Sales Growth, and Liquidity as independent variables, and Profitability as Dependent Variables. The population used in this study is food and beverage companies listed on the Indonesia Stock Exchange, for five years from 2014 to 2018 there were 18 companies. The sampling technique in this study uses a purposive sampling technique which is a sampling based on criteria that have been determined by researchers in which the mode of sample selection on the characteristics has been known beforehand. After the sample selection, then obtained a sample of 14 companies. The following is a sample list of food and beverage companies listed on the Indonesia Stock Exchange (IDX):

Table 1. List of Food and Beverage Companies on the IDX

NO.	COMPANY	CODE
1.	PT. Tri Banyan Tirta Tbk.	ALTO
2.	PT. Wilmar Cahaya Indonesia Tbk.	CEKA
3.	PT. Indofood CPB Sukses Makmur Tbk.	ICBP
4.	PT. Indofood Sukses Makmur Tbk.	INDF
5.	PT. Multi Bintang Indonesia Tbk.	MLBI
6.	PT. Mayora Indah Tbk.	MYOR
7.	PT. Nippon Indosari Corporindo Tbk.	ROTI
8.	PT. Sekar Bumi Tbk.	SKBM

9.	PT. Sekar Laut Tbk.	SKLT
10.	PT. Ultra Jaya Milk Industry Tbk.	ULTJ
11.	PT. Sariguna Primatirta Tbk.	CLEO
12.	PT. Delta Djakarta Tbk.	DLTA
13.	PT. Prasadha Aneka Niaga Tbk.	PSDN
14.	PT. Siantar Top Tbk.	STTP

Source: Data processed from www.idx.co.id, 2019.

4. Results and Discussion

Panel Data Regression Analysis

Panel Data Regression Analysis is a regression analysis with data structure which is panel data. Panel data is a combination of two time series (time series) and cross data (cross section). To determine the accuracy of the model test, it is needed a Chow Test and Hausman Test with the following results obtained:

Table 2. Chow Test

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	25.244009	(13,53)	0.0000
Cross-section Chi-square	138.107137	13	0.0000

Source: Statistical Eviews Output Version 10.2019

Based on the Chow Test results from this study, the probability value is 0.0000. this means the probability value (0.0000) < 0.05, then Ho is accepted which means the model approach used is the Fixed Effect. Followed by the Hausman Test to choose Fixed Effect or Random Effect.

Table 3. Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.670946	3	0.0832

Source: Statistical Eviews Output Version 10.2019

Based on the Hausman Test results from this study, the probability value is 0.0832. this means the probability value (0.0832) > 0.05, then Ho is accepted which means the model approach used is the Random Effect. Followed by the Langgrangge Multiplier (LM) Test to choose whether the Common Effect or Random Effect model is more appropriate to be used in the panel data regression equation model.

Table 4. Langgrangge Multiplier (LM) Test Results

Lagrange multiplier (LM) test for panel data
 Date: 08/11/19 Time: 15:08
 Sample: 2014 2018
 Total panel observations: 70
 Probability in ()

Null (no rand. effect) Alternative	Cross-section One-sided	Period One-sided	Both
Breusch-Pagan	69.39956 (0.0000)	1.931643 (0.1646)	71.33120 (0.0000)
Honda	8.330640 (0.0000)	-1.389836 (0.9177)	4.907890 (0.0000)
King-Wu	8.330640 (0.0000)	-1.389836 (0.9177)	2.825578 (0.0024)
GHM	-- --	-- --	69.39956 (0.0000)

Source: Statistical Eviews Output Version 10.2019

From the test results with the Langrange Multiplier Test (LM) above, it can be seen that the calculated LM value is 0.0000 < 0.05, meaning that the calculated LM value < chi-squared table then the model chosen is the Common Effect.

Based on the results of the Chow Test, the Hausman Test and the Lagrange Multiplier Test (LM), it can be concluded that the right panel data regression model in this study is the Common Effect Model (CEM) approach. From the statistical calculations using the help of the Eviews Version 10 program, the table can be seen as follows:

Table 5. Panel Data Regression Test Results for the CEM Method

Dependent Variable: Y
 Method: Least Squares
 Date: 08/12/19 Time: 12:23
 Sample: 1 70
 Included observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.088020	2.552423	3.560547	0.0007
X1	-0.197283	0.057049	-3.458117	0.0010
X2	0.009542	0.079420	0.120144	0.0047
X3	1.076094	0.795986	1.351900	0.1810
R-squared	0.600844	Mean dependent var		9.612857
Adjusted R-squared	0.564518	S.D. dependent var		11.14221
S.E. of regression	10.18450	Akaike info criterion		7.535057
Sum squared resid	6845.790	Schwarz criterion		7.663542
Log likelihood	-259.7270	Hannan-Quinn criter.		7.586093
F-statistic	5.529034	Durbin-Watson stat		0.747699
Prob(F-statistic)	0.001898			

Source: Statistical Eviews Output Version 10.2019

From the results of the above table, the panel data regression equation is obtained as follows:

$$Y = 9.088020 - 0.197283WCT + 0.009542SG + 1.076094CR + e$$

The interpretation of the panel data regression equation above can be seen that:

a. Constant value (α) = 9.088020

A constant value of 9.088020 with a positive value means that if the Working Capital Turnover variable (X1), the Sales Growth variable (X2) and the Liquidity variable (X3) are considered constant, the Profitability (Y) will increase.

b. Working Capital Equation Variable (WCT) = - 0.197283

The magnitude of the coefficient value of the variable WCT (Working Capital Turnover) of - 0.197283 with a negative value, then if every increase in the variable Working Capital Decision (X1) by one unit will cause the profitability variable (Y) to decrease by 0.197283.

c. Sales Growth Variable (Sales Growth) = 0.009542

The magnitude of the coefficient value of the Sales Growth variable is 0.009542 with a positive value, so if each increase in the Sales Growth variable (X2) by one unit will cause the profitability variable (Y) to increase by 0.009542 and vice versa.

d. Liquidity Variable (CR) = 1.076094

The magnitude of the coefficient value of the CR variable (Current Ratio) of 1.076094 with a positive value, then if every increase in the Liquidity variable (X3) by one unit will cause the profitability variable (Y) to increase by 1.076094 and vice versa.

Hypothesis Testing

Partial Testing (Statistical Test t)

T test is used to determine whether the independent variables partially have a significant effect on the related variables. The significance level used is 0.05. According to the test results in the previous table, the t test can be described in the following table:

Table 6. T-Test

Variable	Prob.	P-Value	Information
X1	0.0010	P < 0.05	H1 Accepted
X2	0.0047	P < 0.05	H2 Accepted
X3	0.1810	P > 0.05	H3 Rejected

Source: *Statistical Eviews Output Version 10.2019*

The interpretation of the t-test results are as follows:

a. The first hypothesis in this study is the working capital turnover (X1) affects profitability (Y). The results of testing the first hypothesis indicate that the value of Prob. 0.0010 is smaller than 0.05 (P <0.05). This means that H1 is accepted, where Working Capital Turnover (X1) variable influences Profitability (Y). Thus, H1 is accepted

b. The second hypothesis in this study is that sales growth (X2) affects profitability (Y). The second hypothesis testing results show that the value of Prob. 0.0047 is less than 0.05 (P <0.05). This means that the variable sales growth (X2) affects profitability (Y). Thus, H2 is accepted.

c. The third hypothesis in this study is that Liquidity (X3) affects profitability (Y). The results of testing the third hypothesis indicate that the value of Prob. 0.1810 is more than 0.05 (P > 0.05). This means that the variable Liquidity (X3) does not affect profitability (Y). Thus, H3 is rejected.

Coefficient of Determination (R²)

The coefficient of determination (R²) is used to measure how far the model's ability to explain the variation of the dependent variable. The coefficient of determination is between zero and one. A small R² value indicates the ability of independent variables to explain the limited variation of the dependent variable. A value close to one means that the independent variable provides almost all the information needed to predict the dependent variable. Here are the results of the coefficient of determination test.

Table 7. Determination Coefficient Test Results

R-squared	0.600844	Mean dependent var	9.612857
Adjusted R-squared	0.564518	S.D. dependent var	11.14221
S.E. of regression	10.18450	Akaike info criterion	7.535057
Sum squared resid	6845.790	Schwarz criterion	7.663542
Log likelihood	-259.7270	Hannan-Quinn criter.	7.586093
F-statistic	5.529034	Durbin-Watson stat	0.747699
Prob(F-statistic)	0.001898		

Source: Statistical Eviews Output Version 10.2019

Based on the Determination Coefficient Test results show that the R-squared value is 0.600844. This shows that the variable variation in profitability is explained by variations in the variable working capital turnover (X1), sales growth (X2) and liquidity (X3) by 60.08% while 39.92% is explained by other factors outside the regression model (variable) studied .

Discussion

The Effect of Working Capital Turnover on Profitability

Based on the results of testing the hypothesis shows that the value of prob. 0.0010 is less than 0.05 (P <0.05). This means that H1 is accepted, where the working capital turnover variable (X1) influences profitability (Y). Thus the first hypothesis (H1) in this study was accepted because it was proven true that "Working capital turnover affects the profitability of the company". The results of this study are supported by the results of studies conducted by Anya Riana Anisa (2019), Apollo (2018) and Munawir (2004).

The results of this study indicate that food and beverages companies are categorized as good, in terms of working capital turnover because it can increase company profits. Anya Riana Anisa (2019), working capital turnover affects the company's profitability. The higher the working capital turnover, the faster the funds or cash invested in working capital return to cash. This means that the company's profits can be received more quickly.

Effect of Sales Growth on Profitability

Based on the results of testing the hypothesis shows that the value of Prob. by 0.0047 less than 0.05 (P <0.05). This means that H2 is accepted, where the sales growth variable (X2) influences profitability (Y). Thus the second hypothesis (H2) in this study was accepted because it was proven true that "sales growth affects the company's profitability". The results of this study are supported by the results of a study conducted by Supanji Setyawan and Susilowati (2018), Gladys and Yulius (2016) and Horne and Wachowicz (2013).

The results of this study indicate that food and beverage companies are categorized as good. Supanji Setyawan and Susilowati (2018), sales growth partially influences company profitability. The higher the net sales made by the company, the higher the gross profit obtained so as to increase the profitability of the company.

Effect of Liquidity on Profitability

Based on the results of testing the hypothesis shows that the value of prob. 0.1810 is more than 0.05 ($P > 0.05$). This means that H3 is rejected, where the Liquidity variable (X3) does not affect profitability (Y). Thus the third hypothesis (H3) in this study was rejected because it was not proven true that "Working capital turnover affects the profitability of the company". The results of this study are supported by the results of research conducted by Agus Wibowo (2012), where liquidity has no effect on company profitability.

The results of this study indicate that food and beverage companies in terms of liquidity do not have the ability to fulfill current liabilities with current assets that it does not have so that it does not affect the profitability of the company. According to Munawir (2001) Liquidity is the company's ability to meet its financial obligations that must be fulfilled immediately or the company's ability to meet financial obligations at the time of collection, so that if liquidity is high, the company will be easier to obtain capital through debt. The capital will be used to increase company profits. Thus, companies should increase their liquidity in order to increase profitability.

5. Conclusion

Based on the results of research conducted, regarding the effect of working capital turnover, sales growth, and liquidity, on profitability in food and beverage companies listed on the Indonesia Stock Exchange in 2014-2018, the conclusion is drawn that Working Capital Turnover in listed food and beverage companies in the Indonesia Stock Exchange in 2014-2018 has an average ratio of 9.710857, a maximum value of 165.6200, namely PT. Prasadha Aneka Niaga Tbk in 2018 and the minimum value of -14.91000, namely PT. Multi Bintang Indonesia Tbk in 2017. Sales growth in food and beverage companies listed on the Indonesia Stock Exchange in 2014-2018 has an average ratio of 7.753714, a maximum value of 50.02000, namely PT. Prasadha Aneka Niaga Tbk in 2017 and the minimum value of -53.13000, namely PT. Delta Djakarta Tbk in 2017. Liquidity in food and beverage companies listed on the Indonesia Stock Exchange in 2014-2018 has an average ratio of 2.199286, a maximum value of 8.640000 namely PT. Delta Djakarta Tbk in 2017 and a minimum value of 0.510000, namely PT. Multi Bintang Indonesia Tbk in 2014. Profitability of food and beverage companies listed on the Indonesia Stock Exchange in 2014-2018 has an average ratio of 9.612857, a maximum value of 52.67000 namely PT. Multi Bintang Indonesia Tbk in 2017 and the minimum value of -6.870000, namely PT. Prasadha Aneka Niaga Tbk in 2015. Working capital turnover, Sales Growth and Liquidity of 60.08% and the remaining 39.92% explained by other variables not examined in this study such as leverage, company size, asset management, net profit margins, total assets turnover, and company growth. Hypothesis results obtained from the study are Working Capital Turnover affects Profitability, Sales Growth affects profitability and Liquidity does not affect profitability.

References

- Brigham, Eugene F. and Houston Joel F. 2010. *Fundamentals of Financial Management*. Subtitles: Ali Akbar Yulianto. Edition 11. Book 1. Jakarta: Four Salemba.
- Devi, Merti Sri. 2012. *Factors Affecting the Profitability of Chemical and Pharmaceutical Companies Listed on the Indonesia Stock Exchange in 2008-2011*. Accounting journal. King Ali Hajj Maritime University.
- Harahap, Sofyan Syafri. 2009. *Critical Analysis of Financial Statements*. Jakarta: PT Raja Grafindo Persada.
- Hofstrand, Don. 2009. *Understanding Profitability*. IOWA State University.
- Horne, James C. Van and John M. Machowicz. 2009. *Principles of Financial Management*. Subtitles: Dewi Fitriasaki and Deny Arnos Kwary. Jakarta: Salemba Empat.
- Horne, James C. Van, John M. Wachowicz, Jr. 2009. *Fundamentals of Financial Management*. 13th Edition. United Kingdom: Pearson Education.
- Cashmere. 2010. *Introduction to Financial Management*. First edition. Jakarta: Prenada Media Group.
- Cashmere. 2012. *Analysis of Financial Statements*. Jakarta: Rajawali Press.
- M. Hanafi, Mamduh and Abdul Halim. 2009. *Analysis of Yogyakarta Financial Report: UPP STIM YKPN*.
- Munawir, S. 2010. *Analysis of Financial Statements*. Yogyakarta: Liberty.
- Nazir, Moh. 2011. *Research Methods*. Jakarta: Ghalia Indonesia.
- Nugroho, Elfianto. 2011. *Analysis of the Effect of Liquidity, Sales Growth, Working Capital Turnover, Company Size and Leverage on Company Profitability (Study of Manufacturing Companies Listed on the Indonesia Stock Exchange in 2005 - 2009)*. Journal of Economics Volume 1 Number 7. Diponegoro University.
- Sari, Afriyani Wulan. 2010. *Analysis of the Effect of Working Capital Efficiency, Leverage, Liquidity, and Firm Size on Profitability (Case Study on Manufacturing Companies listed on the Indonesia Stock Exchange in 2005-2009)*. Journal of Economics and Business. Syarif Hidayatullah State Islamic University.
- Sartono, Agus. 2010. *Financial Management Theories and Applications*. 4. Yogyakarta Edition: BPFE.
- Sjahrian, Generous. 2009. *Financial Management*. Jakarta: Media Discourse Partner.