# EFFECT ON THE VOLUME RATIO PRROFITABILITAS STOCK TRADES (Case Study on Listed Companies in Jakarta Islamic Index Period 2010-2014)

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Abstract---The purpose of this research is to determine the influence of profitability ratio on the stock trading volume activity in the companies listed in Jakarta Islamic Index. Factors tested in this research were (1) gross profit margin, (2) net profit margin, (3) earnings per share, and (4) return on assets as independent variable. While the stock trading volume activity as dependent variable. The method that is being used in this research is descriptive method. Sampling technique being used in this study is purposive sampling method, with 12 companies as the total number of the selected sample. While the analyzing method being used in this study is the regression of linear on the significance level is 5%. The research's result shows that only net profit margin partially influence on trading volume activity, moreover (1) gross profit margin, (2) net profit margin, (3) earnings per share and (4) return on assets simultaneously influence on The stock trading volume activity in the companies listed in Jakarta Islamic Index during the period of 2010-2014.

*Keywords---*Gross Profit Margin, Net Profit Margin, Earning Per Share, Return on Assets, and Trading Volume Activity

## I. INTRODUCTION

Indonesia Stock Exchange is a media meeting between the parties that need capital to run businesses and others who have excess funds that want to invest. Investors can invest long term and these investments generally provide a larger return than bank savings. So that investors tend to prefer investments in the stock market by buying shares or securities other forms.

The capital market is a party that organizes and provides a system or means to bring together offer buy and sell shares other parties with the aim of including investors to trade stocks. The concrete form of the capital markets is the Indonesian Stock Exchange; one of the indices listed in the Indonesia Stock Exchange is the Jakarta Islamic Index which can be taken into consideration for investors when deciding to invest in capital markets. Jakarta Islamic Index is an index representing the corresponding shares through sharia after screening process (Meli; 2008).

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Stocks included in the Jakarta Islamic Index are rated issuers whose business activities do not conflict with Islamic law. Stock selection is based on annual financial statements or the middle of the year ends that have a maximum ratio of liabilities to assets of 90% and has the largest market capitalization that judging from the number of shares issued per share stock prices and stock issuers

that frequently traded (liquid). This study sampled companies listed in the Jakarta Islamic Index, because this index is seen as initial capital in founding the Islamic capital market other than Islamic mutual funds. Jakarta Islamic Index is also one benchmark Islamic economic developments in Indonesia, which has an average level of liquidity of stock trading value high. Therefore, this study interesting assessed to determine the level reflected in the stock trading volume activity trading on company incorporated in Jakarta Islamic Index so that it can be seen that the level of share trading volume is influenced by the level of profitability of the company.

In general, the decision to buy or sell shares is determined by the ratio between the estimated intrinsic value at market price which will have an impact on stock trading volume of a company, but it is not to be dominant, on the other hand there are several factors that can affect investors' interest in investing in the wrong only to see the level of profitability. The level of profitability of companies is also a consideration for investors in buying or selling stocks, the level of profitability will provide a variation on a company's stock trading volume (Hendra Sapriko, 2011). The volume of trading in this study was measured by Trading Volume Activity (TVA) that the instrument used to look at the capital market reaction to the information through parameter movement trading volume activity in the stock market.

According to Kashmir (2008: 196), "The ratio is the ratio of profitability to assess the company's ability to make a profit". This ratio also provides a measure of the effectiveness of management of a company. This is demonstrated by the profit generated from sales and investment income. Basically, the use of this ratio shows the level of efficiency of an enterprise.

Profitability ratios measure the company's ability to generate profits. Profitability is a factor that should receive attention is important because in order to establish his life, a company must be in favorable circumstances (profitable). Without the gain (profit), it will be difficult for companies to attract capital from outside. In analyzing the company, in addition to seeing the company's financial statements, can also be done by using financial ratio analysis.

The sales volume of the stock is the sum of every transaction that occurs in the stock at a certain time to determine the liquidity of the stock and will affect the movement of stocks. The level of sales volume stocks tend to fluctuate trade shows that fast it is influenced by

the information into the market and investors a high level of these shares, investors to buy and sell shares will be easily affected by high or low levels of profitability and stock prices and other factors that influence investors in making investment.

Jakarta Islamic Index is one way in which the Stock Exchange Indonesia to respond to the information needs related to Shari'ah investment.

This step was taken with regard to the more widespread economic development of Muslims; especially ground water is managed based on the principles of Shari'ah. Jakarta Islamic Index is a subset of the share price index (IHS), which was launched on July 1, 2000 and January 1, 1995 using as the base date (at 100). Jakarta Islamic Index as a benchmark for shares of Shari'ah investment in the capital market. Also as a means to increase investment in the capital market in Shari'ah and increase the confidence of investors to develop investment in equities by Shari'ah.

When viewed theoretically high and low profitability will affect the volume of sales of shares of a company in a positive way. But in reality does not always correspond to existing theory. For example, while the phenomenon is common in Indonesian about the profitability of the trading volume of shares in PT Kalbe Farma Tbk showed growth with value GPM rose to 48.80 % in 2013 which in 2012 stood at 47.99 % . While the point of view of the volume of stock trading of PT Kalbe Farma Tbk experiencing significant weakening, from 63,393,833 to 37,356,713 level or down as much as 26,037,120 shares. (Vibiznew - Stock).

The problem Is profitability ratio measured by (1) Gross Profit Margin (GPM), (2) Net Profit Margin (NPM), (3) Return On Assets (ROA), and (4) Earnings Per Share (EPS), affect the volume of stock trading company incorporated in the Jakarta Islamic Index partially or simultaneously.

Table 1 is describing the researcher's predecessor for this research.

Table 1 Researcher's Predecessor

No	Researcher Name	Research Variable	Research Object	Research Result
1	Cincin Haosana,	Return on assets,	Retaill company	RO A partial
	2012	Tobin 's Q ai	nd listed on the	effect on TVA.
		Stock Trading Volume	Indonesia Stock	Tobin 's variable partial effect on
		volume	Exchange	partial effect on TV A.
				Simultaneously,
				ROA and Tobin
				wil 's Q 1 affect
				the TVA
2	Peggy M. Lee,	The Effects O	f A sample of 114	Substantial
	2010	Name Changes On	".com" name	increases in
		Stock Prices an	nd changes	stock prices and
		Trading Volume		trading volume
		Activity		when firms add
				a ".com" suffix.

3	Hazem	Al	Trading	Volume	Industrial	Firms	Stock return and
	Samman, 2015		and Stock Returns		of Oman		tradin g volume
							are integrated
							at the level. In
							addition , the
							stud y provides
							evidenc e of a
							positive and
							significant

### **II. METHODOLOGY**

The independent variables in this study are the gross profit margin, net profit margin, earnings per share, return on assets. The independent variables suspected to affect the volume of stock trading.



Research hypothesis

H1: Gross Profit Margin (GPM) affects the volume of stock trading.

H2: Net Profit Margin (NPM) affects the volume of stock trading.

H3: Earning Per Share (EPS) affect the volume of stock trading.

H4: Return On Assets (ROA) affect the volume of stock trading.

H5: Gross Profit Margin (GPM), Net Profit Margin (NPM), Earning Per Share (EPS) and Return On Assets (ROA) simultaneously affect the volume

The object to be examined in this study is the profitability ratios and the effect on stock trading volume. The unit of analysis in this study is a company in Jakarta Islamic Index in the Indonesia Stock Exchange. Period financial statements used in this study are from 2010 through 2014.

The population in this study is all companies listed on the Indonesia Stock Exchange were included in the Jakarta Islamic Index period 2010 to 2014. The sampling technique used in this research is purposive sampling method. , Certain criteria considered are:

1. The companies listed in the Jakarta Islamic Index are not experiencing delisted during the period included in the study.

2. The financial statements are complete and publish it in the Jakarta Islamic Index row.

3. Have completeness of information required for research purposes.

Varia ble	Definition	Indicator	Scale
Gross Profit	The profits	GP Sales - COGS M =	Ratio
Marg in (X1)	obtained	Sales	

## Table 2: Variable Operationalization

	before	I	I
	deducting		
	the costs to		
	be borne		
	be bonne		,
	by		
	company		
		E AT NP	
Net Profit	The ratio is	M = Sales	Ratio
Marg			
in	used		
X			
2)	assess	]	
	company's		
	net income		
			ľ
	by		
	sales		
Earn		EE	
ings	The	PS = AT	Ratio
		Sum of share	
Per	that		
Shar			
e	describes		

(X3)	sum money that	
	will	

	generated			
	from	any		
	ordinary			
	shares			
	owned	by		
	investors			
Return On	Will		RO E A = AT	Ratio
Return On	W III			Ratio
			Total Asset	
Assets	illustrate			
	t			
(X4)	he	extent		
	t			
	0	which		
	t			
	he			
	effectivene			
	S			
	s of	the		
	company			
	to generate			
	profits			
	through			
I	l			

	asset		
	manageme		
	n		
	t		
		$TVA_{i,t} = Stock$	
Stock	Stock	trading	Ratio
		Volume :	
		Number of	
Trading	Trading	shares	
		outstanding	
Volume (Y)	Volume		
	Represents		
	the number		
	С		
	f shares	5	
	p		
	er yea	r	
	company		
	sales		

This study uses secondary data. By the time it was collected the data used in this research is data time series and cross section data.

Sources of data in this research are to measure the ratio of financial statements:

(1) Gross Profit Margin (GPM), (2) Net Profit Margin (NPM), (3) Earnings Per Share (EPS), (4) Return On Assets (ROA), and from the site www.idx.co.id to obtain data on sales volume Shares of companies listed in the Jakarta Islamic Index period 2010-2014.

Collecting data in this study is done by collecting secondary data such as financial statements and a list of the sales volume of the company's shares are listed in the Jakarta Islamic Index in accordance with the observation period, by downloading the data through the site www.idx.co.id.

## **III. RESULTS AND DISCUSSION**

Descriptive analysis aims to find an overview of each variable used in the study. Here are the results of descriptive statistics, namely:

#### Table 3

#### **Descriptive Statistics**

	TVA	GPM	NPM	EPS	ROA
Mean	6.113246	37.87424	19.81050	768.5865	13.51053
Median	5.714422	41.94884	18.94106	543.0460	11.38335
Maximum	26.49287	53.14152	40.29970	5206.769	40.37675
Minimum	0.057746	17.25272	9.264761	14.74449	1.960395
Std. Dev.	5.116400	11.57295	7.162593	867.9940	8.187377
Observatio ns	120	120	120	120	120

Source: Result output Eviews 8.0

Based on the above table shows for TVA variable indicate the average value of 6.113246, 26.49287 maximum value and minimum value of 0.057746. For variable gross profit margin (GPM) shows the average value of 37.87424, 53.14152 maximum value and minimum value of 17.25272. For variable Net Profit Margin (NPM) shows the average value of 19.81050, 40.29970 maximum value and minimum value of 9.264761. For variable Earning per Share (EPS) shows the average value of 768.5865, the maximum value of 5206,769, and the minimum value of 14.74449. For variable Return on Asset (ROA) shows the average value of 13.51053, 40.37675 maximum value and minimum value of 1.960395.

Classic assumption test

Normality test

Normality test aims to test whether the regression model, the dependent variable and independent variables both have normal distribution or not. In this study used tests Jarque Bera test for normality and a regression model based on the results of data processing using Eviews 8.0 software obtained the following results:





Based on Figure 2 can be seen Jarque - Bera value of 2.782426 and probability value or values significance obtained from Jarque - Bera test of 0.248773. Because the value of the probability of the Jarque - Bera test is greater than the error rate of 5% (0.05), it can be concluded that the companies listed in the Jakarta Islamic Index 2010-2014 normal distribution regression model, in which the distribution of residual data is formed normal distribution curve. Test Multi co linearity

This test aims to test whether the model of regression analysis found a correlation between independent variables (independent). Based on the results of testing that was done, was obtained VIF each independent variable as follows:

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
С	3.526550	19.25382	NA
GPM	0.003368	28.82004	2.442324
NPM	0.005636	13.64206	1.565518
EPS	4.07E-07	2.975257	1.661548
ROA	0.004381	5.956566	1.590143

## Table 3 Test Multi co linearity

Source: Result Output Eviews 8.0

Based on the test results multi co linearity table 2 above can be seen that values centered variance inflation factors (VIF) indicates the value of each variable is not more than 10 or < 10. Therefore, it can be concluded that the companies listed in the Jakarta Islamic Index period 2010- 2014 no multi co linearity between the independent variables in the regression model.

## Test Heteroskidastisity

Heteroskedastisitas test aims to test whether the model regression occur inequalities residual variance from one observation to another observation. Based on the results of data processing, heteroscedasticity test in this study extend the results Breusch value - Pagan - Godfrey obtained from output software Eviews 8.0 as follows:

## Table 4 Test Heteroskidastisity

## Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.728885	Prob. F(4,115)	0.1484
Obs*R-squared	6.806882	Prob. Chi-Square(4)	0.1465
Scaled explained SS	13.84087	Prob. Chi-Square(4)	0.0078

Source: Result Output Eviews 8.0

Based on the test results heteroskedastisitas Table 3 shows the value of multiplication Obs with R - squared of 6.806882. Then from the table x2 at the error rate of 5% (0.05) and degrees of freedom 4 obtained a value of 9.488. If viewed from the Obs \* R -squared (6.806882) indicates a value less than the value of x2 (9.488) and a probability value of F is 0.1484 indicates a value greater than 5 % error rate (0.05), it can be concluded that the companies listed Jakarta Islamic Index 2010-2014 period there are no symptoms heteroscedastisity in regression models.

## Test Autocorrelation

This test aims to test whether the linear regression model was no correlation between bullies error in period t with bullies error in period t - 1 (previous) to test whether there is autocorrelation , in this study using the Durbin - Watson test (Ghozali , 2011: 110). Decision making whether there is autocorrelation as follows:

#### Table 5

#### Test Autocorrelation

R-squared	0.397005	Mean dependent var	-1.96E-15
Adjusted R-squared	0.364987	S.D. dependent var	4.608745
S.E. of regression	3.672602	Akaike info criterion	5.496241
Sum squared resid	1524.145	Schwarz criterion	5.658845
Log likelihood	-322.7745	Hannan-Quinn criter.	5.562275
F-statistic	12.39963	Durbin-Watson stat	1.891816
Prob(F-statistic)	0.000000		

Source: Result Output Eviews 8.0

Based on the test results a Autocorrelation Table 5 shows the number Durbin Watson of 1.891816, this value will be compared with DW table with the number of observations (n) = 120, the number of independent variables (k) = 4 and the 0.05 level in the can value dl = 1.6339 and du value = 1.7715. Therefore the value of DW = 1.891816 is above the value du = 1.7715 but below a four - du = 2.2285 i.e. (1.7715 < 1.891816 < 2.2285), the DW is between the value of du and 4 - du (du < d < 4 - du), then the hypothesis that there is no positive and negative autocorrelation in the regression model cannot be rejected on the companies listed in the Jakarta Islamic Index 2010-2014.

## Linear Regression Testing

Regression analysis was used to determine the relationship that exists between the variables that can be obtained from the association estimated that a single variable, if prices of other variables known. Equation regression model used by the author is the equation of linear regression model.

Regression models were created based on the results of research is:

Y = 6.009959 - 0.099222 + 0.296857 NPM GPM - EPS 0.000852 - 0.101019 ROA

Test Coefficient of Determination

Test model fit is done by calculating the coefficient of determination. Coefficient determination test used to measure how far the ability of the model to explain variations in the independent variables on the dependent variable. Here the coefficient of determination (R2) of the data processing models Random effect obtained from the output software Eviews 8.0 as follows:

R-squared	0.188597	Mean dependent var	6.113246
Adjusted R-squared	0.160375	S.D. dependent var	5.116400
S.E. of regression	4.688212	Akaike info criterion	5.968753
Sum squared resid	2527.623	Schwarz criterion	6.084899
Log likelihood	-353.1252	Hannan-Quinn criter.	6.015921
F-statistic	6.682471	Durbin-Watson stat	0.792564
Prob(F-statistic)	0.000072		

Table 6 Test Coefficient of Determination

Source: Result Output Eviews 8.0

Based on test results coefficient of determination in Table 5 above, shows that the R2 value of 0.188597, which means that the variability of the dependent variable is Trading Volume Share (TVA), which can be explained by the independent variables are variables (1) Gross Profit Margin, (2) Net Profit margin, (3) Earning Per Share, and

(4) Return on Assets in this study amounted to 18.86 %, while the remaining 81.14 % is explained by other variables outside the research model.

T test (t - test)

This test is basically aimed to show how far the influence of the independent variables individually in explaining the dependent variable. It can be seen from the significant value t from the calculation. If the value sig.t < significant level (0.05), the individual independent variables affect the dependent variable. Conversely, if the value of sig.t > significant level (0.05), the independent variables individually have no effect on the dependent variable.

Based on test results using linear regression analysis obtained the following results:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	6.009959	1.877911	3.200343	0.0018
GPM	-0.099222	0.058035	-1.709693	0.0900
NPM	0.296857	0.075075	3.954162	0.0001
EPS	-0.000852	0.000638	-1.334898	0.1845
ROA	-0.101019	0.066192	-1.526138	0.1297

## Table 7

T test (t - test)

Source: Result Output Eviews 8.0

Based on table 6 partial test results can be concluded only NPM which affect the volume of stock trading. Based on the results of the t test ( partial ) in the regression model , the value of variable significance net profit margin of 0.0001 < 0.05 ( significance level of significance of the study ) . Moreover, it can be seen also from the comparison between  $t_{count}$  and  $t_{table}$  which showed

the value  $t_{count}$  while  $t_{table}$  1.98081 3.954162. From these results it appears that  $t_{count} > t_{table}$  i.e. 3.954162 > 1.98081 it can be concluded that H0 rejected and Ha accepted,

meaning partial variable Net Profit Margin affect the variable Shares Trading Volume (TVA).

F test (F test)

Simultaneous test used to determine whether the independent variables jointly or simultaneously affect the dependent variable. F test results in the study can be seen in the table below:

## Table 8 F test (F test)

R-squared	0.188597	Mean dependent var	6.113246

Adjusted R-squared	0.160375	S.D. dependent var	5.116400
S.E. of regression	4.688212	Akaike info criterion	5.968753
Sum squared resid	2527.623	Schwarz criterion	6.084899
Log likelihood	-353.1252	Hannan-Quinn criter.	6.015921
F-statistic	6.682471	Durbin-Watson stat	0.792564
Prob(F-statistic)	0.000072		

Source: Result Output Eviews 8.0

Based on the results of hypothesis testing (test F) in Table 7 above, the value of the significance of the regression model simultaneously (Prob. F -statistic) 0.000072 of this value is smaller than the significance level of 0.05 (5 %), which is 0.000072 < 0, 05. Moreover, it can be seen also from the comparison between  $F_{count}$  and  $F_{table}$ 

which showed the value  $F_{count}$  6.682471 while  $F_{table}$  of 2.45. From these results it appears that  $F_{count} > F_{table}$  is 6.682471 > 2.45, it can be concluded that simultaneously rejected and accepted, meaning together or simultaneously independent variables are variables (1) Gross Profit Margin, (2) Net Profit Margin, (3) Earnings Per Share, and (4) Return On Asset affect the dependent variable is the variable Trading Volume Activity.

## **IV. CONCLUSION**

Based on the analysis of data and discussion that has been done in previous chapters, the researchers took several conclusions as follows:

1. Gross Profit Margin no effect on Trading Volume Shares in companies listed in the Jakarta Islamic Index 2010-2014.

2. Net Profit Margin positive and significant impact on the volume of shares trading, meaning that the higher net profit margin will be followed by a rise of Stock Trading Volume on companies listed in the Jakarta Islamic Index 2010-2014.

3. Earnings per Share has no effect on Trading Volume Shares in companies listed in the Jakarta Islamic Index 2010-2014.

4. Return on Asset has no effect on Trading Volume Shares in companies listed in the Jakarta Islamic Index 2010-2014.

5. Simultaneously (1) Gross Profit Margin, (2) Net Profit Margin, (3) Earning per Share, and (4) Return on Asset influence on Trading Volume Shares in companies listed in the Jakarta Islamic Index 2010-2014.

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