



THE EFFECT OF FINANCIAL RATIOS ON THE CHANGE IN EARNINGS IN JAKARTA ISLAMIC INDEX (JII) AND FTSE BURSA MALAYSIA HIJRAH SHARIAH INDEX (FBMHS) PERIOD 2017-2018

Khoirunnisa Abidah, Nегina Kencono Putri, Warsidi Warsidi

Abstract

This study aims to determine the effect of liquidity ratios, solvency ratios, and profitability ratios on changes in earnings of listed companies in the Jakarta Islamic Index (JII) and the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS). This study uses quantitative methods with secondary data in the form of financial statements of companies registered in JII and FBMHS in 2017 to 2018. The study population is all companies registered in JII as many as 30 companies and registered in FBMHS as many as 30 companies within a period of two years. From the total of 60 companies, 29 companies were selected as the research samples using the purposive sampling method. This study uses multiple linear regression analysis techniques. The results show that the liquidity ratio that is current ratio significantly positive effect, while the solvency ratio that is debt to equity ratio, and profitability ratios that is return on assets have a positive not significant effect on earnings changes. In addition, the results of research conducted to examine the differences in earnings changes between JII and FBMHS show no difference in earnings changes on the two Islamic Stock Indexes. But on the other hand, the results of the study showed a difference in the solvency ratio, that is debt to equity ratio between JII and FBMHS. The implications of this research are as a consideration for companies to increase profits from year to year, as a material consideration for investors before investing, and a motivation for next researchers.

Keywords: current ratio, debt to equity ratio, return on assets, changes in earnings

JEL Codes: M40, M41

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INTRODUCTION

In the era of a highly developed and rapid economy, where business competition is felt by all lines of business sectors both of developed and developing countries, the economic sector plays a very important role in the sustainability of a country. These conditions require all sectors to carry out innovation, efficiency, and effectiveness in carrying out their operational activities. Also, the company must be able to regulate its financial condition to create a stable and well-established business continuity without any obstacles for the company.

The purpose of forming and establishing a company is to maximize profits and maximize the prosperity of company owners, but not always (Kolstad, 2007). With these objectives, the company's management is required to perform optimally in the company's activities, especially those related to finance to avoid the condition of decreased profits and losses.

The economic development that occurred included the presence of an economic system with sharia principles in Indonesia in the early 90s. The economic development with Islamic principles has become an interesting and beneficial phenomenon for the majority of Indonesian people who are Muslim. To provide direction and regulation, the National Sharia Council (DSN) affiliated with the MUI was established, whose fatwa became a reference for economic actors for implementation in its business. Beginning with the presence of Islamic mutual funds, then a special index was compiled which consisted of components of Islamic stocks, one of which was the Jakarta Islamic Index (JII).

Economic development with sharia principles also occurs in neighboring countries, namely Malaysia. Just like Indonesia, Malaysia also has Islamic stock indexes, one of which is the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS). JII and FBMHS have similar

characteristics, which both have 30 Islamic stock issuers. FBMHS is a Malaysian stock index that is designed to be used as a basis for investment products that are compliant with sharia and meets the requirements of international Islamic investor screening (www.ftserussel.com).

Conventional and sharia economic developments require openness regarding the information provided, such information is in the form of accounting information in the form of financial statements. In making investment decisions, the parties concerned, in this case, are investors who need to analyze the company's financial statements so that they do not experience the risk of loss that will occur in the future.

With the various crisis threats that have occurred, companies and industries are expected to be able to move quickly to make decisions and actions to survive in maintaining a business. Therefore, companies use financial ratio analysis as a measure of strengths or weaknesses in the financial sector.

This study aims to analyze the effect of financial ratios on the changes in earnings that occur in the company. Financial ratios used are liquidity ratios, solvency ratios, and profitability ratios. The sample used in this study is companies listed on the Jakarta Islamic Index (JII) listed on the Indonesia Stock Exchange (IDX) and FTSE Bursa Malaysia Hijrah Shariah (FBMHS) listed on the Bursa Malaysia (BM) within the 2017-2018 period.

The reason for using research samples in the form of companies listing on JII and FBMHS is because there is still a lack of accounting studies in both indexes. Besides, research on the analysis of the effect of financial ratios on the earnings changes is still rarely done for the non-bank financial industry in the sharia sector. Another reason for choosing a research sample from JII and FBMHS is to determine the effect of financial ratios on the changes in earnings in the Islamic financial sector both in Indonesia and Malaysia. Last but not least the reason in choosing a samples both of JII and FBMHS, there is a different sharia economic system especially on the sharia stock screening system in Indonesia and Malaysia. There are differences

in the criteria for screening of Islamic stocks both qualitatively and quantitatively which are selected by the Indonesia Stock Exchange and the Malaysia Stock Exchange.

LITERATURE REVIEW

Signaling theory is a signal given by a company in providing information to users of financial statements, namely investors about what has been done by the management (Wolk et al., 2001). Scott (2012) defines signal theory as a signal given by company executives, where the executive has better and faster information about his company. Because the executive or management has information that is rich in conditions in his company, he is compelled to give signals in the form of that information to investors to increase the value of the company through annual financial statements. Information in the form of annual financial statements gives a very important meaning for the sustainability of a company.

Signalling theory also argue as an action taken by a company to give instructions or signals to investors regarding management's views on the company's prospects. This signal can be in the form of information about what has been done by management to realize the wishes of the owner. Information provided by the company has a very important influence on investment decisions from external parties. The information provides an overview of information and records, both for past, present or future circumstances for the survival of the company and how it affects the company.

One component of the financial statements is information about earnings that aims to assess the performance of the company, estimate future profits, and predict investment risks that are likely to occur. One way to predict corporate profits is to use financial ratio analysis. According to Robbert (1997) in a book titled "Smart Books: Indonesian Capital Market" Financial ratio analysis is a collection of information about the relationship between the accounts

in the financial statements that describe the financial condition of a company and the results of the company's operations.

The development of the Islamic financial industry will be faced with a variety of inherent risks. The risks that may occur can cause harm to the company if not detected early. The financial crisis occurred in various countries in the world in rotation, both developed and developing countries, including Indonesia. The phenomenon of the financial crisis in Indonesia which had a significant impact occurred in 1997-1998 (Kuncoro, 2011).

Changes in earnings is an increase or decrease in earnings per year. The rate of change in earnings from year to year can be used as an indicator in assessing the level of investment returns made by investors based on the company's financial performance (Johnson, 1997).

Liquidity ratio is a ratio that measures a company's ability to meet its obligations in the short term that is due. Liquidity ratios are used to measure the ability to pay debts that must immediately be met with current assets (Jasay, 1956).

Solvency ratio as the use of assets and sources of funds by companies that have fixed costs intending to increase profits for shareholders. Unlike the liquidity ratio, the solvency ratio is the company's ability to meet its long-term obligations (Ibendahl, 2016)

Profitability ratios are a group of ratios that provide an overview of the effects of various combinations, namely liquidity, asset management, and debt on the company's operating results (Horrigan, 1965).

The hypotheses of this research are:

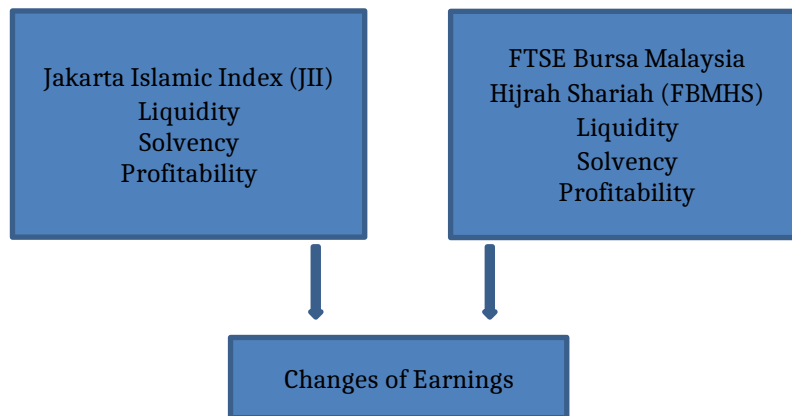
H1: There is a positive effect of liquidity ratio to changes in earnings of JII and FBMHS in the period 2017-2018.

H2: There is a positive effect of solvency ratio to changes in earnings of JII and FBMHS in the period 2017-2018.

H3: There is a positive effect of profitability ratios to changes in earnings of JII and FBMHS in the period 2017-2018.

And the model of the research are:

$$\text{Changes of Earnings} = \alpha + \beta_1 \text{Liquidity} + \beta_2 \text{Solvency} + \beta_3 \text{Profitability} + e$$



RESEARCH METHOD

Based on the formulation of the problems discussed previously, this type of research uses a quantitative analysis approach. The independent variable in this study is the company's financial ratios including liquidity ratios, solvency ratios, and profitability ratios. The dependent variable in this study is earnings changes.

The object of this research is the financial statements of companies listed in the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah (FBMHS) with the research period 2017-2018.

Data sources in this study used secondary data to collect all the data needed. The data sources used in this study are as follows:

- a. Financial statements of companies listed in the Jakarta Islamic Index in the 2017-2018 period which can be downloaded from the website <http://www.idx.co.id/>

- b. Financial statements of companies listed in the FTSE Bursa Malaysia Hijrah Shariah (FBMHS) in the 2017-2018 period which can be downloaded from the website <https://bursamalaysia.com/>

The population in this study are all companies listed on the Jakarta Islamic Index (JII) of 30 companies and FTSE Bursa Malaysia Hijrah Shariah (FBMHS) of 30 companies in the period 2017- 2018.

The sampling method used in this study was purposive sampling. These criteria include:

- a. Companies listed on the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah (FBMHS) period 2017-2018
- b. Companies active in the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Bursa (FBMHS) period 2017-2018
- c. Provide data relating to research variables.

Data collection methods used in this study are as follows:

- a. Library Research
- b. Internet Research

Dependent variables used in this study is the earnings changes. The change in earnings used is the change in relative profit.

The liquidity as the first independent variable in this study was calculated using the current ratio (CR). Current ratio (CR) is an indicator that can describe the actual level of company liquidity because it compares the relationship of current assets with current liabilities.

The solvency ratio in this study is the second independent variable and calculated using debt to equity ratio (DER) which shows a comparison of companies in using debt as a source of corporate funds.

Profitability in this study was the third independent variable and calculated using the return on assets (ROA). Return on assets (ROA) measures the extent of the company's ability to generate net income based on the number of assets at a certain level.

Hypothesis test using the t-test statistic explains how far the influence of the independent variables individually in explaining the variation of the independent variables. The hypothesis that will be obtained is as follows:

HA1 =

There is no differences in earnings changes in the Jakarta Islamic Index (JII) and the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

HA2 =

There is no differences in current ratio in the Jakarta Islamic Index (JII) and the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

HA3 =

There is differences in debt to equity ratio in the Jakarta Islamic Index (JII) and the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

HA4 =

There is differences in return on assets in the Jakarta Islamic Index (JII) and the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

The criterion of this test is if Sig (2-tailed) > 0.05 then HA is accepted and H0 is rejected, which means there are no differences in change in earnings and CR, DER, ROA between JII and FBMHS, vice versa.

RESULT AND ANALYSIS

The study is intended to find out and test the effect of liquidity ratio, solvency ratio and profitability ratio as represented by the Current Ratio (CR), Debt to Equity Ratio (DER), and Return on Assets (ROA) on change in earnings. The data used in this study is an annual report of companies listed on the JII and FBMHS for the 2017-2018 period. The total of existing companies, with criteria that have met the established sampling only 29 companies sampled in this study. From 2017 to 2018 periods, there are 58 samples of companies listed both of the indexes. From the 58 samples, there are 1 data outlier identified. Therefore, only 57 compatible observations are used in the data processing.

Descriptive Statistic Test Result

Table 1
Descriptive Statistic Test Result

	N	Minimum	Maximum	Mean	Std. Deviation
CR	57	58.73	465.77	183.1033	102.12409
DER	57	, 15	10.25	1.3228	1.66615
ROA	57	-8.22	46.66	9.2167	9,83449
EARNINGS CHANGES	57	-4345689	3, E12	2.13E11	7.219E11
Valid N (listwise)	57				

Source: Secondary data processed (2020)

Table 1 shows that the number of observations on companies listed on the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS) for the 2017-2018 period in this study were 57 data.

Multicollinearity Test Result

Variable	Tolerance	VIF
CR	0,817	1,224
DER	0,762	1,313
ROA	0,908	1,102

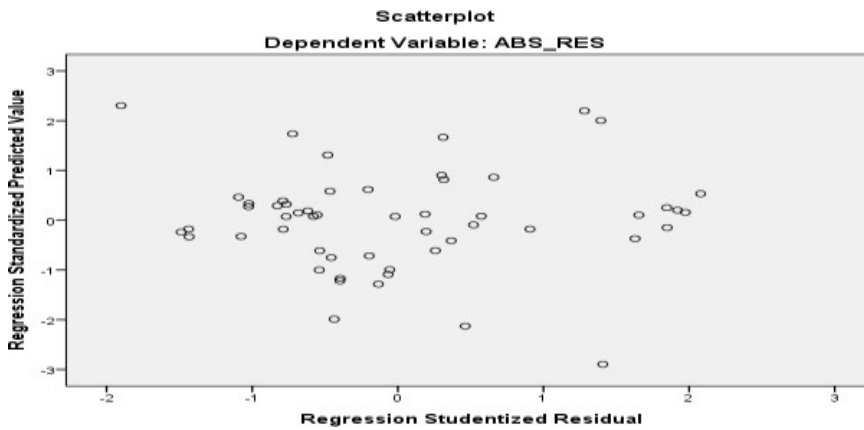
Source: Secondary data processed (2020)

Based on table 2 it can be seen that the multicollinearity test results show a

tolerance value close to 1 and a VIF of around 1 for each variable. Based on the results of the multicollinearity test, it can be concluded that all the independent variables in the regression equation model have no multicollinearity problems.

Heteroscedasticity Test Result

Table 3
Heteroscedasticity Test Result



Source: Secondary data
processed (2020)

Based on the scatterplots output above, it can be seen that:

1. Spread data points are above and below or around zero.
2. The points do not only collect above or below only.
3. The spread of data points does not form a wavy pattern widening then narrowing and widening again
4. The spread of patternless data points

Thus, we can conclude that there is no heteroscedasticity problem until a good and ideal regression model can be fulfilled.

Autocorrelation Test Result

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	Unstandardized Residual
Test Value ^a	-.46431
Cases < Test Value	27
Cases >= Test Value	28
Total Cases	55
Number of Runs	19
Z	-2.584

Asymp. Sig. (2-tailed) .010

Source: Secondary data processed (2020)

In table 4 it is known that the value of Asymp. Sig. (2-tailed) is $0,010 > 0,05$. Therefore, it can conclude there is no autocorrelation.

Normality Test Result

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	Unstandardized Residual
N	57
Kolmogorov-smirnov	0,671
Asymp. Sig. (2-tailed)	0,758

Source: Secondary data processed (2020)

Based on table 5, it can be seen that the data is normally distributed. Because the Kolmogorov- Smirnov value is 0.671 and the Asymp Sig. amounted to 0.758

where the value is greater than 0.05.

Multiple Regression Analysis Result

Table 6
Multiple Regression Analysis Result

Variable	Constant B	t-count	Sig.
	-5,778E11	-2,380	0,021
CR	3,728E9	3,967	0,000
DER	5,495E10	0,921	0,361
ROA	3,811E9	0,412	0,682
Adjusted Square	R 0,192		
F	Sig 0,002		

Source: Secondary data processed (2020)

Based on the results obtained from the regression coefficients above, a regression equation can be made as follows:

$$Y_t = -5,778E11 + 3,728E9 X_1 + 5,495E10 X_2 + 3,811E9 X_3 + e$$

The Adjusted R Square 0,192. This means that 19.2% of the variation in earnings changes can be explained by variations in independent variables namely the current ratio, debt to equity ratio, and return on assets. While the rest (80.8%) is explained by other variables not included in this study.

And based on the calculation with the F test, the calculated F value of 5.427 with a significance value of 0.002. Because the probability value is below 0.05, it can be concluded that the CR, DER, and ROA variables simultaneously have a significant effect on earnings changes in JII and FBMHS.

1. Liquidity ratio has a positive effect on change in earnings

The first hypothesis of this research states that the liquidity ratio has a positive effect on change in earnings. Based on table 11, the coefficient of the variable is 3,728E9 and the significant value of the current ratio (X1) is 0,000 < 0.05. It shows that the current ratio has a significantly positive effect on a change in earnings. It means that whenever an increase in the value of the current ratio will be followed by an increase in change in earnings.

2. Solvency ratio has a positive effect on change in earnings

The second hypothesis of this research states that the solvency ratio has a positive effect on change in earnings. Based on table 11, the coefficient variable is 5.495E10

and the significant value of the debt to equity ratio (X2) is $0.361 > 0.05$. It shows that the debt to equity ratio has an insignificant effect but has a positive effect on a change in earnings. So, it can be included that the variable solvency ratio not provides an influence to change in earnings.

3. Profitability ratio has a positive effect on change in earnings

The third hypothesis of this research states that profitability ratio has a positive effect on change in earnings. Based on table 11, the coefficient of the variable is $3,811E9$ and the significant value of the debt to equity ratio (X3) is $0.682 > 0.05$. It shows that the return on assets has an insignificant effect but has a positive effect on a change in earnings. So, it can be included that the variable profitability ratio not provides an influence to change in earnings.

Additional Hypothesis Test Result

Table 7
Additional Hypothesis Test Result

	Sig. (2-tailed)
Equal variances assumed	0,089
CR - Equal variances assumed	0.298
DER - Equal variances assumed	0.032
ROA - Equal variances assumed	0.186

Source: Secondary data processed (2020)

The value of Sig. (2-tailed) is $0.089 > 0.05$ so as the basis for decision making in the independent test sample t-test it can be concluded that HA1 is accepted or has a variance similarly, in other words, that there is no difference in earnings changes on the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

The value of Sig. (2-tailed) for current ratio (CR) is $0.298 > 0.05$ so as the basis for decision making in the independent test sample t-test it can be concluded that HA2 is accepted or has a variance similarly, in other words, that there is no difference in current ratio on the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

The value of Sig. (2-tailed) for debt to equity ratio (DER) is $0.032 < 0.05$ so as the basis for decision making in the independent test sample t-test it can be concluded that HA3 is rejected or has no variance similarly, in other words, that there is a difference in debt to equity ratio on the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

The value of Sig. (2-tailed) for return on assets (ROA) is $0.186 > 0.05$ so as the basis for decision making in the independent test sample t-test it can be concluded that H_0 is accepted or has a variance similarly, in other words, that there is no difference in return on assets on the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

So it can be concluded that although there are differences in terms of economic system and the index screening system that exists in Indonesia and Malaysia, but there is no difference on changes in earnings, current ratio, and return on assets both of JII and FBMHS.

CONCLUSION

Based on the results of the analysis with IBM SPSS Statistics 23 it can be concluded that liquidity ratios namely current ratio (CR) has a positive and significant effect, solvency ratios namely debt to equity ratio (DER) and profitability ratios namely return on asset (ROA) has a positive and not significant effect on earnings changes in the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS). Based on the t-test different test it can be stated that there is no difference in earnings changes, current ratio, and return on assets and there is a difference in debt to equity ratio between the Jakarta Islamic Index (JII) and FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS).

The implications of the research is it can be used as a consideration for the company to take corrective actions that will increase profits from year to year, because it is known that the company can get positive change in earnings if the company can manage all of their assets effectively and efficiently. Then it can be used as a material consideration for investor in making decisions when making an investment, because change in earnings will positively influence consideration of investor to invest their funds to the company. Last but not least, the result of the research can be used as motivation for the next researcher

There are limitations to the results of the study, which are limitation on the sample used, limitation on the variables used, and limitation in the study period. This study only uses samples from the Islamic stock index, namely JII and FBMHS. The sharia stock index is the sharia stock index with the least number of issuers compared to other sharia stock indexes. Then, this study only uses three independent variables, namely the current ratio variable, debt to equity ratio, and return on assets so that it cannot yet represent all the factors that influence the dependent variable, namely changes in earnings. Lastly, this study only uses a research period in a period of two years, namely during 2017 to 2018. The use of the study period for a period of two years due to the limited

information regarding the number of samples registered on the FTSE Bursa Malaysia Hijrah Shariah (FBMHS) before the 2017 period, so this research period conducted from 2017 to 2018.

The results state that the current ratio has significant positive effect on earnings changes, while the debt to equity ratio and return on assets have a positive but not significant effect on earnings changes, it is necessary to have an analysis of financial statements to increase company value, so researchers will provide some suggestions for further research:

1. Researching with a longer period (five years) to produce even better data.
2. Adding the number of variables that can affect earnings changes, so it will produce better data, such as return on equity, net profit margins and debt to asset ratio.

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