Analysis of Market Ratio Toward Stock Return in Retail Companies on 2015-2016

Atik Tri Andari*, Yohan Bakhtiar
Accounting Department
Politeknik Negeri Malang PSDKU Kediri
Kediri, Indonesia
*triatik1213@gmail.com

Abstract—The capital market is one of the beneficial means for investors to get stock returns. Stock returns can be analysed by using financial ratios, such as market ratio. This study aims to determine whether market ratios affect stock returns in retail companies in 2015-2016. The research method is quantitative and to determine the effect of market ratios on stock returns is by linear regression analysis. The result shows that market ratios do not affect stock returns. In other words, investors might override market ratios in determining stock returns. Future studies can examine other market ratio such as Price Sales Ratio (PSR).

Keywords: market ratio, stock return, retail companies

I. INTRODUCTION

Company is one of the business entities that carry out economic activities, where its establishments are to produce goods or services. One form of company in Indonesia is a retail company. The retail industry is an industry that sells products and services that have given added value to meet the needs of personal, family, group, or end user [1]. Retail companies make a major contribution to Gross Domestic Product (GDP) of Indonesia, which eventually contribute to improve the society welfare. This is supported by an increase in retail companies in Indonesia by 9.5% in 2016. Based on the data on the increase in retail companies it is expected to attract investors to grow a stock in these companies.

The investors' attractiveness in growing stock in these companies can be seen from the stock returns that will be accepted. The stock return is an excess of stock selling price over the purchase price, where the higher the stock selling price above the purchase price, the higher the returns obtained by the investor. If an investor wants a high return then, s/he must be willing to bear a higher risk, and vice versa—if s/he wants the return is low, then the borne risk will be low too [2]. This means that in stock trading the investor analyses her/his stock, so the return obtained corresponds with her/his expectation.

Investors can look at the financial statements of these companies to carry out an assessment and analysis. Based on these financial statements, it can be found how's the company's performance in running the business activities and the company's ability to leverage its business activities efficiently and effectively, as well as factors beyond the company's economic, political, financial and others. Investors who don't

speculate surely consider and assess the financial performance consisting of financial ratios in selecting stocks. Ratio analysis provides information that summarizes the strengths and weaknesses of different corporations from return, liquidity and growth perspectives [3]. Financial ratio analysis can help the business practitioners and governments in evaluating companies' financial condition in the past, present and projected results or future profits. Thus, financial ratios can be used to measure the performance of the company, including measuring and predicting profits and expected profits in the future. This is one factor that may attract investors or prospective investors to invest their excess money in the company through the capital market, particularly with the purchase of securities such as stocks. Based on this, hence this study aimed to determine whether the market ratios effect on stock returns.

One of the financial ratios that can be used to analyse stock return is the market-based ratio. The market-based ratios including earning yield, dividend yield earning per share (EPS) and market to book ratio are very important to the investors in the measurement of the market value of the firm and identification of the under-priced and over-priced stocks and make sound investment decision [4]. Research by Martani and Khairurizka [5] examined the effect of financial ratio, firm size, and cash flow operating activities to stock return. The results of the study are profitability, turnover and market ratio has significant impact to the stock return. Research by Muhammad [4] investigate the ability of the historical accounting data in predicting future stock return using fundamental analysis i.e. profitability ratios, liquidity ratios, leverage ratios, and market-based ratio. The results indicate that the fundamental analysis can predict future stock returns for example market-based ratios. Research by Islam et al [6] examined Earning Per Share (EPS) effect on share price and firm value. The results indicate trend of running in the same way of EPS and share price is not worked properly. Based on these results shows that market-based ratio inconsistent to stock returns.

One of the market ratios which is related to return is the Price Cash Flow Ratio (PCFR). Price Cash Flow Ratio (PCFR) is the ratio used to determine a company's stock price that can be achieved through cash flow [7]. Based on this ratio (it is) expected that investors could see stock returns from the perspective of cash flow statement. This is because investors

more likely analyse the stock returns based on the company's profits, while the company's profits contain non-cash transactions and the depreciation that can be manipulated. It can be said that with the cash flow, it can show the basis of the cash flow projections in the future that can be measured using stock returns. Research by Foerster et al [8] examined strategies that suggest superior risk-adjusted returns based on utilizing transformed financial statement using Direct Cash Flow Method (DCFM) to estimate free cash flows. The result is Direct Cash Flow Method (DCFM) return on asset and Direct Cash Flow Method (DCFM) yield measures are generally superior to income statement measures based on profitability. Research by Jansen [9] develops a stock pricing model that expresses future changes in value creation to be a primary driver of stock return. The result is using fundamental result of the model then empirically suggested in the standard cross-sectional and time series tests that free cash flow, as a proxy value creation is a significant in determining stock returns. Meanwhile, research by Winarno [10] showed that the Operating Cash Flow (OCF) did not affect significantly positive on stock returns. Based on these results (it) shows that Price Cash Flow Ratio (PCFR) is a part of the inconsistent market ratios. Therefore, this study re-examined the market ratio on stock returns, so that the results of this study are expected to provide a new reference for academics and investors—related to market ratios analysis on stock returns.

II. METHODOLOGY

A. Types of Research

This research is quantitative. Quantitative research is required to use numbers from collecting the data, interpreting the data, and presenting the results. This study aimed to examine the market ratios that affect stock returns. Furthermore, this study focused on examining the ratio of the market with dimensions Price Cash Flow Ratio (PCFR). Data used is secondary data. Secondary data of this study is the financial data extracted from the financial statements of companies listed on the Indonesia Stock Exchange.

B. Population and Sample

The population in this study is retail companies' financial statements listed in the Indonesia Stock Exchange in the period of 2015 through 2016. The samples determination used the purposive sampling method, the sampling of the population based on the criteria. The criteria used in determining the sample is as follows; (that) have been listed on the Indonesia Stock Exchange in 2014 until 2017; that is not dropped out of the ISE period from 2014 until 2017; and present complete data on financial reports from 2014 to 2017.

C. Data Analysis Technique

Analysis technique to see the effect of Price Cash Flow Ratio (PCFR) as the independent variable on stock returns as the dependent variable, so a linear regression analysis was used. A linear regression assumes estimators to be the Best Linear Unbiased Estimator (BLUE). This means, the proposed regression equation must show a valid regression equation (BLUE), then the regression equation must be free of

symptoms of classic assumption deviation. Therefore, the classical assumption test needs to be done before regressing research variables. Classical assumption test includes normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. The analysis in this study used linear regression analysis. This analysis is to examine whether there is a relationship between the independent variables and the dependent variable. Hypothesis test in this study was obtained from the data collection above—that was processed in accordance with the type of data, so that the testing used the t test.

III. RESULTS

The population selected in this study is retail companies that are consistently listed in Indonesia Stock Exchange (ISE) from 2014 until 2017. Here are the details of the final sample. Retail companies listed in Indonesia Stock Exchange (BEI) in the year 2014 to 2017 were 23 companies. However, of the 23 companies, there is one company that was suspended and five companies that did not present the complete financial statement data in 2014-2017. Therefore, the final sample of this study were 17 companies.

TABLE I.   DESCRIPTIVE STATISTICS

	N	Min	Max	Mean	Std. Deviation
PCFR	34	-12824.91	7297.36	-144.6687	2565.40971
Return	34	-1280.00	3.47E8	7.7742E7	1.14749E8
Valid N (listwise)	34				

Based on table 1 can be seen the results of descriptive statistics provide an overview of the data. The data used to test the hypothesis, namely Price Cash Flow Ratio (PCFR) and stock return. The results of descriptive analysis of company data is minimum value of Price Cash Flow Ratio (PCFR) is -12824.91. The maximum value of Price Cash Flow Ratio (PCFR) is 7297.36. The average value of Price Cash Flow Ratio (PCFR) is -144.6687. Standard deviation value of Price Cash Flow Ratio (PCFR) is 2565.41. The minimum value of the stock return is Rp -1280,-. The maximum value of the stock return is Rp 347322190,-. The average value of the stock return is Rp 77741923,-. Standard deviation value of stock returns is Rp 114749266, -.

Tests on the classical assumption aimed to determine whether a regression model is good or not if it is used to perform the assessment. The classical assumption of this study was as follows.

A. Normality Test

In general, the results of normality test can be a graphic analysis by using normal graphs plot. Normality test results indicate that the chart gives approximately normal distribution pattern, the graph dots spread around the diagonal line and its distribution is around the diagonal line.

B. Multicolliniearity Test

Multicollinearity test aims to test whether (in) the regression models a correlation between independent variables was found. Based on the results of SPSS showed that the tolerance value calculation results indicate that the independent variable has no value of Variance Inflation Factor (VIF) of more than 10. Hence, it can be concluded that there is no multicollinearity in the independent variable in the regression model.

C. Autocorrelation Test

Autocorrelation test can be done by looking at SPSS output value for the Durbin-Watson (DW). SPSS results showed the value of Durbin-Watson (DW) of 1.107. Meanwhile, based on the table Durbin Watson with a significance level of 5%, for n totalling 34 sampling companies with one independent variable (k '= 1) obtained value dl = 1.393 and dU = 1.514. Durbin-Watson range for a significance level of 5% that is 0 <1.393 <1.514, then the value of the Durbin-Watson (d) of 1.393 is between values of 0 and 1,514. It can be concluded that the regression model is free from problems of autocorrelation.

D. Heteroscedasticity Test

A good regression model is homoscedasticity or (do) not occur (as) heteroscedasticity. Detection of the presence (or absence) of heteroscedasticity can be seen through the scatterplot graph image. Based on the results of SPSS showed the points spread randomly above and below the point 0 on the Y axis.

E. Hypothesis Test

After the classical assumption test was met, the next step is to test the hypothesis by statistical t test. T statistical tests was performed to show how far the influence of the independent variables individually in explaining the variation of the dependent variable. Based on the above table, it can be seen partial effect of variable Price Cash Flow Ratio (PCFR) to stock return. Based on the t statistical test above, the independent variable for PCFR entered into a regression model with a significance level of 5% is not significant. This is due to the significant value of 0.840 is greater than 0.05. It can be concluded that in partial stock returns cannot be affected by Price Cash Flow Ratio (PCFR).

IV. DISCUSSION

Based on the results of the regression (it) was known that the hypothesis that the Price Ratio of Cash Flow effect on stock returns was rejected. It is seen that the value t-count on Price Cash Flow Ratio of 0.203 is smaller than t-table value which is 1.691 (df = 34), as well as the significance value of 0.840 is greater than 5% significance level. Price Cash Flow Ratio is the ratio used to determine a company's stock price that can be achieved through cash flow [7]. Price Cash Flow Ratio compares the price of the stock market to the amount of cash flow generated per the company stock. Based on this ratio (it) is expected that investors could see stock returns from the perspective of cash flow statement used by investors to evaluate the attractiveness of investment from the perspective

of a company's stock. Operating cash flow is one of the fundamental factors of company that can be seen by the investor as one way to decide investment. This is because the company must issue a dividend that is paid in cash and—to buy assets to run the company operations require cash. Price Cash Flow Ratio is not significant due to the operating cash flow information is not used by investors as an investment decision. Besides, there are also other factors such as technical factors and other factors such as economic and political conditions that may affect stock returns but not investigated. The results of this study are consistent with research conducted by Winarno [10] that the operating cash flow information does not affect the stock returns. However, these results do not correspond with references number [8,9], in which they found that the operating cash flow affects stock returns. This means that the company which has been seen by the investors to have high Price Cash Flow Ratio have lower returns and company which has low Price Cash Flow Ratio has higher stock returns. It can be concluded that investors do not view cash flow information regarding price ratio as a benchmark in assessing stock returns for their investment interests. Future studies can examine other market ratio such as Price Sales Ratio (PSR).

REFERENCES

[1] E. Soliha, "Analisis Industri Ritel di Indonesia," J Bisnis dan Ekon., vol. 15, no. 2, pp. 128–143, 2008.

[2] A.T. Mollik and M.K. Bepari, "Risk-Return Trade-Off in emerging markets: Evidence from Dhaka Stock Exchange Bangladesh," Australas Accounting, Bus Financ J., vol. 9, no. 1, pp. 71–88, 2015.

[3] N. Muhammad and F. Scrimgeour, "Stock Returns and Fundamentals in the Australian Market," Asian J Financ Account., vol. 6, no. 1, pp. 271, 2014.

[4] S. Muhammad, "The Relationship Between Fundamental Analysis and Stock Returns Based on the Panel Data Analysis; Evidence from Karachi Stock exchange (KSE)," Res J Financ, vol. 9, no. 3, pp. 84–96, 2018.

[5] D. Martani and R. Khairurizka, "The effect of financial ratios, firm size, and cash flow from operating activities in the interim report to the stock return," Chinese Bus Rev, vol. 08, no. 06, pp. 44–55, 2009.

[6] M.R. Islam, T.R. Khan, T.T. Choudhury and A.M. Adnan, "Senior Lecturer 1 How Earning Per Share (EPS) Affects on Share Price and Firm Value," Eur J Bus Manag., vol. 6, no. 17, pp. 2222–2839, 2014.

[7] S.M. Bragg and J. Wiley, "Business Ratios and Formulas," Business Ratios and Formulas, 2012.

[8] S. Foerster, J. Tsagarelis and G. Wang, "Are cash flows better stock return predictors than profits?" Financ Anal J., vol. 73, no. 1, pp. 73–99, 2017.

[9] B. Jansen, "Intrinsic Value in Stock Return," SSRN Electron J., pp. 1–37, 2016.

[10] D. Winarno, Pengaruh Profitabilitas, Struktur Modal, dan Operating Cash Flow Terhadap Return Saham (Perusahaan Property dan Real Estate yang Terdaftar di BEI), pp. 1–27, 2012.