

The Analysis of Factors Affecting Price Earnings Ratio on the Company Shares Registered in Jakarta Islamic Index

Muslich Lutfi¹, Jessi Arsitha²

^{1,2}Management Department, Faculty of Economics and Business,
University of North Sumatera, Medan, Indonesia,
¹E-mail: muslichlutfi@yahoo.com (Corresponding author)

Abstract *The purpose of this research is to find out and analyze the effect of factors affecting price earning ratio on the shares registered in Jakarta Islamic Index. It is a causality research, a causality research which is based on the observation on the effects and the causing factors through some particular data. The data used were secondary data. This research used 48 observations as the research samples obtained based on certain criteria. The hypothesis was tested by using F-Test (Simultaneous Test), T-Test (Partial Test). The results showed that, partially, the Total Assets and Debt to Equity have significant effects to the Price Earning Ratio on the shares registered in Jakarta Islamic Index. Meanwhile, the Dividend Payout Ratio has no effect to Price Earning Ratio on the shares registered in Jakarta Islamic Index.*

Key words Total assets, debt to equity, dividend payout ratio, price earning ratio, Jakarta Islamic Index

JEL Codes: D53

1. Introduction

Capital market plays an important role in supporting the economy of a country. According to the Law concerning the Capital Market (1995), "Capital Market is an activity related to public offering and securities trading of the public companies related to its issued securities, and the institutions and professions related to the securities". One of the financial instruments targeted by the investors in the capital market is share.

Share assessment can accurately minimize the risks and help the investors to get a reasonable profit; given the share investment in a capital market is a kind of high-risk investment, though it promises relatively large profit. Various models and approaches can be used in assessing the equity of the share price. One of the fundamental analysis used is Price Earning Ratio.

Price Earning Ratio is one of the approaches in fundamental analysis which is based on the calculation of the ratio of share price per share with earnings per share, and gives the indication of the timeframe required to return the funds at the level of share prices and company profits in a certain period. Price Earning Ratio is a kind of market appreciation on business performances or prospects of the company in the future. Investors believe that a company that will have good prospects in the future will have the high Price Earning Ratio of companies which is reflected in the share prices in the market.

The analysis used to obtain real-time information about the Price Earning Ratio is necessary to know some of the variables that influence share prices, given that the investors have to analyze whether the share prices are worthy to purchase or not. This research takes three variables that affect the price earning ratio, namely: Total Assets, Debt to Equity Ratio, and Dividend Payout Ratio as the independent variables.

Jakarta Islamic Index is an index issued by the Indonesia Stock Exchange. This index consists of 30 shares that were evaluated for every 6 months. The shares group consists of shares that have the business field in Islamic way. Due to the halal shares, the authors are interested in conducting the research in Jakarta Islamic Index.

2. Literature Review

2.1. Capital market

Law concerning Capital Market No.8 year 1995 defines the capital market as an activity related to public offering and securities trading of the public companies related to its issued securities, and the institutions and professions related to the securities.

2.2. Share

Share is the evidence of ownership of a company in which the owner is also called as a shareholder. An evidence of which a person or a party may be considered as a shareholder is if the shareholder has been registered as a shareholder in a book called the Shareholder Register (DPS).

Two kinds of analyses that are mostly used to determine the true value of a share are a fundamental securities analysis or company analysis and technical analysis. Fundamental analysis uses fundamental data, i.e. the data derived from the finance of the companies (eg, earnings, paid dividends, sales, etc.), while the technical analysis uses the share market data (eg, price and volume of share transactions) to determine the value of the shares. Technical analysis is widely used by practitioners in determining the share prices while fundamental analysis is widely used by

academicians.

2.3. Price earning ratio

Price Earning Ratio is one of the approaches that is often used by the security analysts in assessing a share. This approach is based on the calculation on the price per share with earnings per share.

2.4. Total Assets

Total Assets is an indication of the size of a company. A large scale company is considered to have more access to capital market. This ease makes a large company to have a higher risk and to generate greater profits so that the value of the Price Earning Ratio compared to the small scale companies.

2.5. Debt to Equity

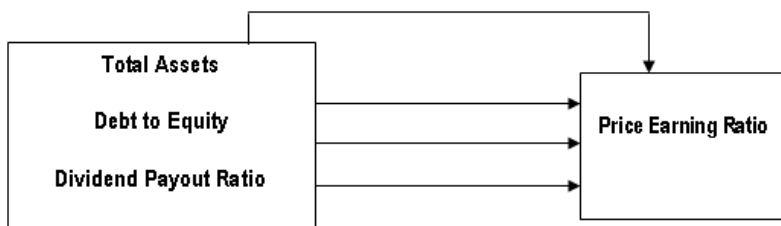
Debt to Equity is a ratio illustrates the comparison between the total debt and total equity of the company used as the business financing.

2.6. Profitability

Dividend Payout Ratio is a percentage of every generated profit that is shared to the shareholder(s) in the form of cash, calculated by sharing the cash dividend per share with the profit per share.

3. Methodology of research

3.1. Conceptual Framework



Source: Processed Data

Figure 1. Conceptual Framework

3.2. Research Hypotheses

H₁: Total Assets has a significant effect to Price Earning Ratio on the company shares registered in Jakarta Islamic Index.

H₂: Debt to Equity has a significant effect to Price Earning Ratio on the company shares registered in Jakarta Islamic Index.

H₃: Dividend Payout Ratio has a significant effect to Price Earning Ratio on the company shares registered in Jakarta Islamic Index.

H₄: Total Assets, Debt to Equity, and Dividend Payout Ratio have a significant effect simultaneously to Price Earning Ratio on the company shares registered in Jakarta Islamic Index.

It is a causal research conducted to analyze the effect of Total Assets, Debt to Equity, and Dividend Payout Ratio to Price Earning Ratio on the company shares registered in Jakarta Islamic Index.

Table 1. Definitions and Measurements of Research Variables

Variable	Definition	Formula
Price Earning Ratio (Y)	Reflection of money that is guaranteed to be paid by the investors for every profit.	$\text{Price Earning Ratio} = \frac{\text{Closing Price}}{\text{Earning per Share}}$
Total Assets	Total of All Assets owned by a company that are used in the operational activities of the company.	Total of All Assets in Rupiah
Debt to Equity	The ratio used to assess the debt with the equity.	$\text{Debt to Equity} = \frac{\text{Total Debt (Total Hutang)}}{\text{Equity (Ekuitas)}}$
Dividend payout ratio	Part of net profits of the company shared as the dividend	$\text{Dividend Payout Ratio} = \frac{\text{Devidend per share}}{\text{Earning per share}}$

Source: Processed Data (2015)

3.3. Research Population and Samples

The population used in this research is all of the companies registered in *Jakarta Islamic Index (JII)* in the period of 2010-2013 with the total of research population of 49 companies. There are only 12 out of 49 companies registered in JII in the period of 2010-2013 that meet the sampling characteristics.

3.4. Data Analysis Technique

All of the collected research data were then processed and analyzed to obtain the answers over the problems raised in this research. In analyzing the data, the researcher used SPSS program. The analysis method used in this research was statistics analysis method.

4. Results and Discussions

4.1. Descriptive Statistics

Based on the results of descriptive statistics test, it can be seen as follows:

- a. The total of respondents or samples (N) is 48. From 48 respondents, the minimum total assets are 5561433 and the maximum is 213994000. The average of total assets from 48 respondents is 36597204.23 and the standard deviation is 49812071.932. The skewness value is 2.138 while the kurtosis is 3.917.
- b. The minimum Debt to equity is 0 and the maximum is 2. The average of debt to equity from 48 respondents is 0.60 and the standard deviation is 0.465. The skewness value is 1.820 while the kurtosis is 3.391.
- c. The minimum Dividend Payout Ratio is 3 and the maximum is 211. The average of Dividend Payout Ratio from 48 respondents is 56.09 and the standard deviation is 31.790. The skewness value is 2.492 while the kurtosis is 11.284.
- d. The minimum Price Earning Ratio is 7 and the maximum is 37. The average of price earning ratio from 48 respondents is 18.76 and the standard deviation is 7.736. The skewness value is 1.013 while the kurtosis is 0.079.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Total_assets	48	5561433	213994000	36597204.23	49812071.932	2.138	.343	3.917	.674
Debt_to_equity	48	0	2	.60	.465	1.820	.343	3.391	.674
Dividend_payout_ratio	48	3	211	56.09	31.790	2.492	.343	11.284	.674
Price_earning_ratio	48	7	37	18.76	7.736	1.013	.343	.079	.674
Valid N (listwise)	48								

Source: Results of the Researcher's Processed Data (2015).

4.2. Simultaneous Significance Test (F-Test)

Actually, the F-statistics Test is used to test whether all of the independent variables in the research model have a significant effect collectively to the dependent variables or not.

Table 3. F-Statistics Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1011.511	3	337.170	8.236	.000 ^b
	Residual	1801.388	44	40.941		
	Total	2812.899	47			
a. Dependent Variable: price_earning						
b. Predictors: (Constant), total_assets, dividend_payout_ratio, debt_to_equity						

Source: Research Results, 2015 (Processed Data)

The output results of SPSS for ANOVA or F-statistics test in Table 3 above show the probability of significance of 0,000. The probability of F significance, with a significance level of 0,05 and obtains the F significance of 0,000, is lower than the significance level of 0,05. Based on the comparison, it can be concluded that *the hypothesis 4 is accepted*, means that *Total assets, Debt to equity, and Dividend Payout ratio* collectively have a significant effect to *Price Earning Ratio* on the company shares registered in *Jakarta Islamic Index*.

4.3. Partial Significance Test (t-Test)

The t-statistics test in this research, actually, aims to find out how far an independent variable individually (partially) affects the dependent variable. The decision is made by comparing the value of the probability of significance of the statistics test results of each independent variable with a significant level of 5% or 0.05 then the H0 of significance profitability variable value < significance level of 5% or 0.05 then the H0 is accepted, means that the independent variable has no effect to the value of the dependent variable.

Table 4. t-significance Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	77.501	15.533		4.989	.000
	dividend_payout_ratio	.014	.030	.057	.458	.649
	debt_to_equity	8.000	2.135	.481	3.747	.001
	Ln_Total_Assets	-3.830	.923	-.502	-4.148	.000

a. Dependent Variable: price_earning

Source: Research Results, 2015 (Processed Data)

a. Total Assets

Based on Table 4 the output results of partial significance test above show the probability of the significance of the effect of total assets to Price Earning Ratio of 0.000. The significance probability of total assets is less than the significance level of 0.05, it can be concluded that the *hypothesis 1 is accepted* which means Total assets partially has a negative and significant effect to Price Earning Ratio in the company shares registered in Jakarta Islamic Index.

b. Debt to equity

Based on Table 4, the output results of partial significance test above show the probability of the significance of the effect of Debt to equity to Price Earning Ratio of 0.001. The significance probability of Debt to equity is less than the significance level of 0.05, it can be concluded that the *hypothesis 2 is accepted* which means Debt to equity partially has a positive and significant impact to Price Earning Ratio in the company shares registered in Jakarta Islamic Index.

c. Dividend Payout Ratio

Dividend Payout Ratio has a significant number of 0.649 (above 0.05), which indicates that the variable is not significant. It can be concluded that the *hypothesis 3 is rejected*, which means Dividend Payout partially has a positive and not significant effect to Price Earning Ratio in the company shares registered in Jakarta Islamic Index.

5. Discussions

The results of simultaneous of statistical test or F-test show that simultaneously Total Assets, Debt to Equity, Dividend Payout Ratio have a significant effect to Price Earning Ratio. These results support the fourth hypothesis. The results of partial test in this research state that Total assets has an effect to the Price Earning Ratio. The effect of Total assets to Price Earning Ratio is 0.000. The significance probability of Total assets is smaller than the significance level of 0.05. It can be concluded that the hypothesis 1 is accepted which means that Total assets individually affects the Price Earning Ratio. The results are consistent with the theory of Total assets that indicates the company's ability to increase sales and earnings. The bigger and stronger the company, the better the entrance to the capital market.

The results of partial test in this research state that Debt to equity has an effect to Price Earning Ratio. The significance probability of Debt to equity to Price Earning Ratio is 0.001. Debt to equity significance probability is smaller than the significance level of 0.05, so that it can be concluded that the Hypothesis 2 is accepted which means that Debt to equity individually affects the Price Earning Ratio. This may be due to the addition of new debt that can also be a signal because only few companies that are relatively stable and dare to increase debt.

The results of partial test in this research state that Dividend Payout Ratio that has no effect on Price Earning Ratio. Dividend Payout Ratio has a significance level of 0.649 (after 0.05) that show the variables are not significant. It can be concluded that Hypothesis 3 means that Dividend Payout Ratio, individually has no effect to Price Earning Ratio. This research is in line with the previous research by Hasanah (2009), Ramasundam (2011). Hasanah states the

Dividend Payout Ratio has no effect to Price Earning Ratio so that the increase or decrease of Dividend Payout Ratio during the observation period of observation that has no effect on the company shares price Price Earning Ratio and according to Hasanah, it is caused by the share prices of a company are not determined by the total of Dividend Payout Ratio but it is determined through profits (earnings) of the company, and the investors tend to like the capital gain more.

6. Conclusions and suggestions

6.1. Conclusions

Based on the results of the research and discussion that have been explained previously, there are some conclusions of the research as follows:

1. Partially, Total Assets has a negative and significant effect to Price Earning Ratio on the company shares registered in Jakarta Islamic Index.
2. Partially, Debt to Equity has a positive and significant effect to Price Earning Ratio on the company shares registered in Jakarta Islamic Index.
3. Partially, Dividend Payout Ratio has a positive and not significant effect to Price Earning Ratio on the shares registered in Jakarta Islamic Index.
4. Simultaneously Total assets, debt to equity, and dividend payout Ratio have a significant effect to Price Earning Ratio.

6.2. Suggestions

Related to the results of the research, there are some suggestions proposed as follows:

1. For investor, in assessing a share based on the value of Price Earning Ratio, should consider some factors such as Total Assets and Debt to Equity given that those variables, based on this research, have a significant effect to Price Earning Ratio. Moreover, the investor should consider Dividend Payout Ratio in assessing a share based on the value of Price Earning Ratio.
2. This research is only limited on the observation to 49 companies with certain criteria, so that it only obtains 12 samples. For future research, it is expected to use more samples by involving all of the companies registered in Jakarta Islamic Index during the research period. For future researchers, it is expected to have more research samples and to add more fundamental factors of the companies.

References

- Abdullah, F. (2005). *Fundamentals of Financial Management*, Second Edition, Prints Fifth. 55-57. UMM Press. Malang.
- Arifin, Z. (2005). *The Financial and Capital Market Theory*, First Edition, First Edition, 48-49. Publisher Ekonosia. Yogyakarta.
- Astuti, D. (2004). *Corporate Financial Management*, First Edition, Publisher Ghalia Indonesia, Jakarta.
- Crabb, P. (2003). *Finance and Investments Using The Wall Street Journal*, Mc Graw-Hill Irwin, New York.

- Erlina (2012). *Research Methodology*, USU Press, Medan.
- Ghozali, I. (2005). *Multivariate Analysis Application With SPSS Program*, Third Edition, Publishers Agency Diponegoro University, Semarang.
- Halim, A. (2007). *Business Financial Management*. Ghalia Indonesia. Bogor:
- Jogiyanto (2003). *The Portfolio Theory and Investment Analysis*, Third Edition, Publisher BPFE, Yogyakarta.
- Jones, C.P. (2004). *Investments: Analysis and Management*, Ninth Edition, United States of America.
- Cashmere (2008). *Basics of Banking*, Revised Edition, Publisher Rajawali Pers, Jakarta.
- Prastowo, D., and Rifka, J. (2002). *Financial Statement Analysis: Concepts and Applications*, 2nd Edition. UPP AMP YKPN. Yogyakarta.
- Samsul, M. (2006). *Capital Markets and Portfolio Management*, the publisher, Jakarta.
- Sartono, R.A. (2001). *The Financial Management: Theory and Applications*, Fourth Edition, First Edition, Publisher BPFE, Yogyakarta.
- Situmorang, S.H., Doli M.J.D., Iskandar M., Muslich L. and Syahyunan (2008). *Data Analysis Research (Using SPSS)*, USU Press, Medan.
- Sugiyono (2012). *Quantitative Research Methods, Qualitative and R & D*. Bandung: Alfabeta.
- Tandellin, E. (2001). *The Investment Analysis and Portfolio Management*, First Edition, First Edition, Publisher BPFE, Yogyakarta.
- Van Horne, J.C., Wachowicz Jr.J.M. (2005). *Principles of Financial Management*, Interpreting Heru Sutojo, Publisher Salemba Four, Jakarta.
- Widoatmodjo, S. (2004). *Fast Way to Start Investing Stocks: A Guide For Beginners*, First Edition, Publisher PT Elex Media Komputindo, Jakarta.
- Hasanah, N. (2009). Fundamental Factors Affecting the Price Earning Ratio (PER) at Company Registered In Jakarta Islamic Index (JII) Year 2001-2006, *Thesis*, Faculty of Sharia, Islamic University Sunan Kalijaga. (Unpublished).
- Kasilingam and Ramasundaram (2011). Price earning multiples: Actual Determinants (case study of Domestic Market in India), *Journals of Finance and Accounting*, 1(2), pp. 68-91.
- Faezina, V. (2012). The Quantitative Study of Effective Factors on Price earning ratio in Capital Market of IRAN, *Journal of Finance*, 3(10). pp. 56-72.
- Premkanth, P. (2013). Determinant of price earnings multiple in Sri Lanka Listed Companies, *Journal of Finance and Accounting*, 1(2). pp. 23-45.
- Marthinova (2007). Analysis of the Factors Affecting Price Earning Ratio Manufacturing Company on the Jakarta Stock Exchange, *Thesis*, Faculty of Economics and Business, University of North Sumatra.
- Tjendra, A. (2010). Analysis of the effect of Debt to Equity, Total Assets, Return on Investment and dividend payout Against PER On-listed company in Jakarta Islamic Index (JII) Year 2005-2007, *Thesis*, Faculty of Economics and Business, University of North Sumatra.