

THE EFFECT OF CASH DIVIDEND, RETAINED EARNINGS, AND STOCK PRICE OF MANUFACTURING COMPANY LISTED IN INDONESIA STOCK EXCHANGE

Farah Margaretha¹; Firzitya²

^{1,2}Management Science Program, Faculty of Economics, Trisakti University
Jln. Kyai Tapa No.1, Grogol, Jakarta 11440
¹farahmargaretha@yahoo.com; farahmargaretha@gmail.com

ABSTRACT

This study aims to determine the effect of cash dividends per share, retained earnings per share, earnings per share, and leverage on the stock price of manufacture industry in Indonesia from 2008-2012. Research used secondary data in which the source was obtained indirectly through an intermediary medium or data processed from literatures and reports associated with this research. Independent variables in this study (x) are cash dividends per share, retained earnings per share, earnings per share, and leverage, while the dependent variable (y) is stock price. The samples used were 23 companies with purposive sampling method. The empirical results of this study indicate that cash dividends per share, retained earnings per share, earnings per share, and leverage has significant effect on the stock price. It is therefore the higher stock price will attract investors to invest their money. Hence, companies and investors need to attend cash dividends per share, retained earnings per share, earnings per share, and leverage as factors that affect the increase or decrease of the stock price.

Keywords: cash dividends per share, earnings per share, leverage, retained earnings per share, stock price

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh cash dividends per share, retained earnings per share, earnings per share, dan leverage terhadap stock price pada perusahaan manufaktur di Indonesia periode 2008-2012. Data yang digunakan adalah data sekunder yang merupakan sumber data penelitian yang diperoleh secara tidak langsung melalui media perantara (diperoleh dan dicatat oleh pihak lain) atau data yang sudah diolah sebagai data dari literatur dan laporan yang terkait dengan penelitian. Variabel independen (x) yang diteliti adalah cash dividends per share, retained earnings per share, earnings per share, dan leverage, sedangkan variabel dependen (y) adalah stock price. Jumlah sampel yang digunakan adalah 23 perusahaan dengan metode purposive sampling. Hasil empiris dari penelitian ini menunjukkan bahwa cash dividends per share, retained earnings per share, earnings per share, dan leverage memiliki pengaruh signifikan terhadap harga saham. Harga saham yang tinggi akan menarik investor untuk menginvestasikan dananya. Oleh karena itu, perusahaan dan investor perlu memerhatikan cash dividends per share, retained earnings per share, earnings per share, dan leverage sebagai beberapa faktor yang berpengaruh pada kenaikan dan penurunan harga saham.

Kata kunci: cash dividends per share, earnings per share, leverage, retained earnings per share, stock price

INTRODUCTION

According to Ebrahimi and Chadegani (2011), “The shareholders is one of the important components of the company, therefore their interests should take precedence”. Brigham and Houston (2010) stated, “Each company has one main purpose, namely, to maximize shareholder wealth. If companies want to maximize shareholder wealth, they must know how to determine the well-being”. The company has several departments therein, namely, marketing, accounting, production, human resources, and finance. The task of the finance department is evaluating the decision proposed by the company and assessing whether the decision will affect the stock prices also affect shareholder wealth.

Gitman and Zutter (2015) stated, “Financial management has three important decisions that funding decisions, investment decisions and dividend policy decisions. The funding decision is a decision to determine the mix of funding and types of funding used by the company. While the investment decision is a decision to determine the mix and type of assets owned by the company”. Ross, Westerfield, and Jaffe (2008) stated “The dividend policy of the company is determining the amount of money paid to the shareholders, held for the company to be reinvested in profitable projects, or to be stored for use as needed in the future”. Dividend policy decision, which is one of three major decisions of financial management, is a topic that is widely studied by researchers, especially in relation to the share price. This is mainly due to the influence that the potential of the dividend policy for the company's stock price (AlTroudi & Milhem, 2013).

When the company decided to go public for the first time, there was no stock market prices until the start of the sale of shares in the secondary market. Stock price determination is a fundamental decision about the company. Investors generally will get the first information about the company through the IPO. The availability of quality information will help investors determine reasonable security prices (Margaretha, 2009). Investment in the stock market at least has to pay attention to two things, the expected benefits and possible risks. Therefore, the capital owners need to have some information related to the dynamics of stock price in order to take a decision on the company's shares to be eligible to choose (Margaretha & Isni, 2007).

Previous researchers found that the stock price might be affected by various financial indicators of finance. The financial indicators used in the study include cash dividends per share, retained earnings per share, earnings per share, and leverage (AlTroudi & Milhem, 2013) . Joshi (2012) makes the study of the effect of dividends, retained earnings, and stock prices. Results show that cash dividends and retained earnings affected the stock price. According to Cai and Zhang (2011), “When the company is too reliant on the use of debt, an increase in the leverage ratio, this resulted in an effect on future investments and cash flow expected to be received in the future. They found a negative effect of the change in leverage with the stock price”. This study examines the manufacturing company because the number of companies listed in the Indonesian Stock Exchange (BEI) is relatively more than the total listed companies, so the researchers are able to obtain more data. Based on this background, the purpose of this study is to analyze the effect of cash dividends per share, earnings per share, retained earnings per share, and leverage of the stock price.

Dividend policy has attracted a lot of interest for the company's financial researchers for a long time, especially about the relationship between the dividend policy of the company with the stock price (eg. see Alam & Uddin, 2009). This is mainly due to the influence of the dividend policy potential for the company's stock price. Joshi (2012) found an association between dividends, retained earnings, and stock prices. In his research, he found that there is a relationship between dividends and retained earnings to share price.

In addition to retained earnings and dividends, earnings per share and leverage are also found associated with stock prices. Seetharaman and Raj (2011) found a positive relationship between earnings per share of the stock price. While Cai and Zhang (2011) conducted a study on changes in leverage, debt curve and stock value. They found the conclusion that a change in leverage will send new information to the market about the price of the shares.

Previous research has found that the variable cash dividends per share has a positive and significant correlation with the stock price. This is in accordance with Al-Hasan, Asaduzzaman, and Karim (2013) who found the effect of dividends per share to retained earnings on the stock price. The results show that cash dividends have a positive influence on the stock price. It is the same with Joshi (2012) who made the study between the effects of dividends and retained earnings of the stock price. The results show that the stock price is influenced by both. Hence, the first hypothesis:

H1: There is the influence of cash dividends per share of the stock price.

Previous research found that the retained earnings per share has a positive and significant relationship to the stock price. This is consistent with Al-Hasan et al. (2013) who found a link between retained earnings and stock price. They found a positive relationship between the retained earnings of the stock price. It is equal with Joshi (2012) who found a link between the retained earnings of the stock price. Hence, the second hypothesis:

H2: There is the influence of retained earnings per share of the stock price

Previous research has found that earnings per share had an effect on the closing price of the price of stock companies. According to Gordon (1959) who examined the effect of dividend policy and earnings in the company's stock price. In addition, it is the same with the results of Seetharaman and Raj (2011) who found a positive relationship between earnings per share of the stock price. Therefore, the third hypothesis:

H3: There is influence between earnings per share of the stock price.

According to Bahreini, Baghbani, and Bahreini (2013) , "Leverage has a negative correlation to the stock price. This implies that if the companies increase leverage, then there will be a decline of the stock price". The same was found by Cai and Zhang (2011) that there is a negative correlation between changes in leverage to the stock price. Therefore, the fourth hypothesis:

H4: There is the influence of leverage on stock price.

METHOD

This study used secondary data obtained indirectly through an intermediary medium (obtained and recorded by other party) or data processed from literature research and reports associated with this research. These data were obtained from the website www.idx.co.id and Indonesian Capital Market Directory (ICMD). The data were in the form of financial statements of companies listed in the Indonesian Stock Exchange (BEI) for five years from 2008-2012.

The dependent variable used in this study is the stock price. This variable is the closing price of the company's shares at the end of which can be seen on the website Yahoo Finance. Independent variables used in this study are: (1) Cash dividends per share (DPS), this variable can be seen on the

website sahamok; (2) Retained earnings per share (RPS), retained earnings per share can be calculated using the formula:

$$RPS = \frac{\text{retained earnings}}{\text{share outstanding}} ; \quad (1)$$

(3) Earnings per share (EPS), variable earnings per share is given in the company's financial statements; (4) Financial Leverage (LEV), Financial leverage can be calculated using the formula:

$$LEV = \frac{\text{Total Debt}}{\text{Total Assets}} . \quad (2)$$

Analysis was conducted to see the effect of Cash Dividends per Share, Retained Earnings per Share, Earnings per Share, and Leverage on Stock Price. In this case, the statistical method used is multiple linear regression model. The regression equation in this study using the dependent variable and independent variables Price Stock, Cash Dividends per Share, Retained Earnings per Share, Earnings per Share, and Leverage. Regression models were used, namely:

$$Y = \alpha + \beta_1DPS_{it} + \beta_2RPS_{it} + \beta_3EPS_{it} + \beta_4LEV_{it} + e ; \quad (3)$$

Where:

- Y = *Stock Price*,
- α = *Constant*,
- β_1 = *Cash Dividends per Share*,
- β_2 = *Retained Earnings per Share*,
- β_3 = *Earnings per share*,
- β_4 = *Leverage*,
- e = *error*.

T test or partial test ; tests carried out to test the partial regression coefficient with the significance of the influence of each independent variable on the dependent variable to assume other variables are constant. Basis for decision making for the partial test are as follows: (a) If the significance < alpha 0.05 then Ho is rejected; (b) If the significance > alpha 0.05 then Ho is accepted.

RESULTS AND DISCUSSION

Description of data is a brief overview of company data that is used as the object study in this research. The object of this research is manufacturing companies listed in the Indonesia Stock Exchange (BEI) from 2008-2012. The amount of the initial samples that met the criteria purposive sampling is 33 times the company with 5 years of the study period to 165 samples, then after adjustment and outlier data test samples meet the company amounts to 23 times the 5 year study period to 115 samples. Here is the field of industrial firms used in this study:

Table 1 Table of Samples

No.	Industry	Quantity	Percentage (%)
1.	Chemical products	2	8,69%
2.	Stone, clay, glass, and concrete products	1	4,35%
3.	Plastic and glass products	3	13,04%

Table 1 Table of Samples (Continued)

No.	Industry	Quantity	Percentage (%)
4.	Electronics and office equipment	1	4,35%
5.	Automotive products	4	17,39%
6.	pharmacy	3	13,04%
7.	Adhesive	1	4,35%
8.	Food and Drink	2	8,69%
9.	Metal products	2	8,69%
10.	Product purpose	2	8,69%
11.	Cement	1	4,35%
12.	Cable	1	4,35%
Total		23	100%

This section presents descriptive statistics of independent variable and the dependent variable. Variables used in this study are Stock Prices, Cash Dividends per Share, Earnings per Share, Retained Earnings per share, and Leverage. Descriptive statistical analysis shows the minimum and maximum values of each variable. The minimum value is the lowest value for each variable, while the maximum value is the highest value for each variable in the study. The mean value is the average value of each variable studied. Standard deviation is a distribution of the data used in the study that the data reflect a heterogeneous or homogeneous nature volatile. Here is the descriptive statistics of the variables used.

Table 2 Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std.Deviation
<i>Stock price</i>	115	38,75	15700,00	2465,0222	3048,77731
<i>Cash dividends per share</i>	115	1,00	865,00	94,5959	143,45710
<i>Earnings per share</i>	115	8,24	4393,00	421,2555	739,5548
<i>Retained earnings per share</i>	115	0,0000510	2,5780790	0,077915559	0,3754720617
<i>Leverage</i>	115	0,0212533	0,7639157	0,400481462	0,1865109861

Source: Secondary Data Processed

Based on the results of data processing in the table above, stock price (SP) gained an average of 2465,0222 and a standard deviation of 3048,77731. While the minimum value of the stock price was 38,75 owned by PT Arwana Citra Mulia Tbk. In 2009 a maximum value was 15700 owned by PT Semen Gresik Tbk in 2012. The variable cash dividends per share (DPS) obtained an average of 94.5959 and a standard deviation of 143.45710. While the minimum value of cash dividends per share was 1 owned by PT AKR Tbk in 2009 and a maximum value of 865 owned by PT Astra International Tbk in 2011. The variable earnings per share (EPS) gained an average of 421,2555 and a standard deviation of 739,55485. While the minimum value was 8.24 earnings per share owned by PT Ekadharma Tbk in 2008 and a maximum value of 4393 owned by PT Astra International Tbk in 2011. The variable retained earnings per share (RPS) gained an average of 0,077915559 and a standard deviation of 0,3754720617. While the minimum value of retained earnings per share was owned by PT Ekadharma 0.0000510 Tbk in 2008 and a maximum value of 2,5780790 owned by PT Semen Gresik Tbk in 2012. The Variable leverage (LEV) gained an average of 0,400481462 and a standard deviation of 0,1865109861. While the minimum value of 0,0212533 leverage was owned by PT Kalbe Farma Tbk in 2011 and a maximum value of 0,7639157 owned by PT Lautan Luas Tbk in 2011.

These results indicate that the stock price can be explained by the variable cash dividends per share, retained earnings per share, earning per share, and leverage. Variable cash dividends per share, retained earnings per share, and earnings per share affect the stock price in a positive direction. While

the variable leverage affect the stock price with a negative direction. Explanation of each variable as follows.

The test results of t-test between cash dividends per share (DPS) of the stock price (SP) show the significant value of 0,000, which is smaller than 0,05. This shows that there is influence between cash dividends per share of the stock pice. Then based on the regression equation shown that the coefficient for this variable is positive (3,671), so it can be interpreted that the influence exerted by the variable cash dividends per share of the stock price is positive. This shows that the higher the value of cash dividends per share, the higher the stock price of the company. This is in line with AlTroudi and Milhem (2013) who found a positive effect between cash dividends per share of the stock price.

The test results of t-test between retained earnings per share (EPS) of the stock price (SP) show the significant value of 0,000, which is smaller than 0,05. This shows that there is influence between retained earnings per share of the stock price. Then based on the regression equation shown that the coefficient for this variable is positive (7,899), so it can be interpreted that the influence exerted by the variable retained earnings per share of the stock price is positive. Which shows that the higher the value of retained earnings per share, the higher the stock price of the company. This is in line with AlTroudi and Milhem (2013) who found a positive effect between retained earnings per share of the stock price.

The test results of t-test between earnings per share (EPS) of the stock price (SP) show the significant value of 0,002, which is smaller than 0,05. This shows that there is significant effect between earnings per share of the stock price. Then based on the regression equation shown, the coefficient for this variable is positive (3,135), so it can be interpreted that the influence exerted by the variable earnings per share of the stock price is positive. This shows that the higher the value of earnings per share, the higher the stock price of the company. This is in line with AlTroudi and Milhem (2013) who found a positive effect between earnings per share of the stock price. Similarly, Margaretha (2009) found that when earnings per share increased, then the stock price would increase as well.

The test results of t-test between leverage (LEV) to stock price (SP) show the significant value of 0,001, which is smaller than 0,05. This shows that there is influence between leverage to the stock price. Then based on the regression equation shown, the coefficient for this variable is negative (-3,373), so it can be interpreted that the influence exerted by the variable leverage against the stock price is negative. This shows that the higher the leverage, the lower the value of the company's stock price. This is not in line with research conducted by AlTroudi and Milhem (2013) who found no leverage to influence the stock price. However, this is in line with Cai and Zhang (2011) who found a negative correlation between changes in leverage against stock price.

Table 3 Results of t-test

Variable	Regression coefficients	Sig	Conclusion
<i>Cash dividends per share</i>	3,671	0,000	Significant
<i>Earnings per share</i>	3,135	0,002	Significant
<i>Retained earnings per share</i>	7,899	0,000	Significant
<i>Leverage</i>	-3,373	0,001	Significant

Source: Secondary Data Processed

CONCLUSION

This study aims to determine how the influence of cash dividends per share, retained earnings per share, earnings per share, and leverage of the stock price. This study used 23 manufacturing companies listed in Indonesia Stock Exchange (BEI) during the period 2008-2012. The results of multiple regression analysis show that all the proposed hypotheses are accepted (in the sense that there is the influence of the independent variables on the dependent variable). Based on the analysis and discussion that has been done, it can be concluded as follows. First, Cash dividends per share have an influence on the stock price. Second, Retained earnings per share have an influence on the stock price. Third, Earnings per share have an influence on the stock price. Fourth, Leverage has an influence on the stock price.

Moreover, results of this study are expected to be implemented by the financial managers as consideration for increasing the share price and as information for investors. The managerial implications of this research are as follows. For Finance Manager, the study found that cash dividends per share, retained earnings per share, earnings per share, and leverage have an influence on the stock price. Financial managers need to pay attention to these factors if they want to raise the company's stock price. High stock price will attract investors to invest because of high stock prices, and it indicates that the company is a good company. For Investors, before deciding to invest their funds in a company, they should consider the various factors that influence the amount of a company's stock price. These factors are cash dividends per share, retained earnings per share, earnings per share, and leverage. So that, the investors know how the state of the company and able to predict the amount of dividends to be received on the capital already invested.

REFERENCES

- Alam, M. M., & Uddin, M. G. S. (2009). Relationship between interest rate and stock price: Empirical evidence from developed and developing countries. *International Journal of Business and Management*, 4(3), 43–51. Retrieved from <http://www.ccsenet.org/journal/index.php/ijbm/article/view/217/177>
- Al-Hasan, M. A., Asaduzzaman, M., & Karim, R. al. (2013). The effect of dividend policy on share price: An evaluative study. *IOSR Journal of Economics and Finance*, 1(4), 6–11. Retrieved from <http://www.iosrjournals.org/iosr-jef/papers/vol1-issue4/B0140611.pdf?id=7841>
- AlTroudi, W., & Milhem, M. (2013). Cash dividends, retained earnings and stock prices: Evidence from Jordan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(12), 585–599.
- Bahreini, V., Baghbani, M., & Bahreini, R. (2013). No Title. *European Online Journal of Natural and Social Sciences*, 2(3), 25–34. Retrieved from <http://european-science.com/eojnss/article/viewFile/332/pdf>
- Brigham, E. F., & Houston, J. F. (2010). *Essentials of Financial management*. Singapore: Cengage Learning Asia.
- Cai, J., & Zhang, Z. (2011). Leverage change, debt overhang, and stock prices. *Journal of Corporate Finance*, 17(3), 391–402. <http://doi.org/doi:10.1016/j.jcorpfin.2010.12.003>

- Ebrahimi, M., & Chadegani, A. (2011). The Relationship Between Earning, Dividend, Stock Price and Stock Return: Evidence from Iranian Companies. In *International Conference on Humanities, Society and Culture*, 20 (pp. 318–323). Retrieved from <http://www.ipedr.com/vol20/62-ICHSC2011-M20021.pdf>
- Gitman, L. J., & Zutter, C. J. (2015). *Principles of Managerial Finance* (14th ed.). United State: Prentice Hall.
- Gordon, M. (1959). Dividends, earnings, and stock price. *The Review of Economics and Statistic*, 41(2), 99–105.
- Joshi, R. (2012). Effects of dividends on stock prices in Nepal. *NRB Economic Review*, 24(2), 61–75. Retrieved from http://www.nrb.org.np/ecorev/pdffiles/vol24-2_art5.pdf
- Margaretha, F. (2009). Faktor yang mempengaruhi harga saham pada perusahaan yang terdaftar di Bursa Efek Indonesia. *Development Research of Management*, 4(2).
- Margaretha, F., & Isni. (2007). Pengaruh indikator keuangan terhadap harga saham. *Jurnal Ilmiah Manajemen Bisnis*, 7(1), 59–78.
- Ross, S. A., Westerfield, R. W., & Jaffe, J. (2008). *Corporate Finance* (7th ed.). USA: McGraw-Hill.
- Seetharaman, A., & Raj, J. R. (2011). An empirical study on the impact of earnings per share on stock prices of a listed bank in Malaysia. *The International Journal of Applied Economics and Finance*, 5(2), 114–126. Retrieved from <http://www.scialert.net/qredirect.php?doi=ijaef.2011.114.126&linkid=pdf>