AAJ 5 (4) (2016)

Accounting Analysis Journal

http://journal.unnes.ac.id/sju/index.php/aaj

The Analysis of Earnings Persistence Roles in Mediating The Effect of Operating Cash Flow and Debt Level on Stock Return

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Article History

Received September 2016
Approved October 2016
Published November 2016

Keywords:
Operating Cash Flow;
Leverage; Stock Return;
Earning Persistence

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh arus kas operasi dan tingkat hutang terhadap return saham, serta menganalisis peran persistensi laba dalam memediasi pengaruh arus kas operasi dan tingkat hutang terhadap return saham. Populasi dalam penelitian ini adalah 40 perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia (BEI) periode 2010-2014. Pengambilan sampel dengan metode purposive sampling, dihasilkan sampel sebanyak 41 unit analisis. Pengujian penelitian ini dilakukan dengan teknik analisis regresi linear berganda dan sobel test dengan bantuan program IBM SPSS Statistics 21. Hasil penelitian ini menunjukkan bahwa arus kas operasi dan tingkat hutang tidak berpengaruh signifikan terhadap return saham, persistensi laba tidak memediasi secara signifikan pengaruh arus kas operasi terhadap return saham, dan persistensi laba mampu memediasi secara signifikan pengaruh tingkat hutang terhadap return saham.

Abstract

The aims of this research are to analyze the effect of operating cash flow and debt level toward stock return and to analyze the role of earning persistence in mediating the effect of operating cash flow and debt level toward stock return. The population of this research are 40 listed mining companies in Indonesia Stock Exchange (IDX) for the period 2010-2014. Data were selected by purposive sample, it obtained 41 units of analysis for the sample of this research. Multiple linear regression analysis and sobel test techniques were used to analyze data, and it was helped by IBM SPSS Statistics 21 software. The findings showed that operating cash flow and debt level did not have significant effect toward stock return, earnings persistence did not mediate significantly the effect of operating cash flow toward stock return, and earning persistence mediated significantly the effect of debt level toward stock return.

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ISSN 2252-6765

INTRODUCTION

The world of investment in Indonesia more years has more enthusiasts. Each individual or institution that has sufficient funds or commonly referred to as an investor will invest in companies that they think are profitable in the future. The profit they earn is called return. The main reason people invest is to earn profits and very reasonable if investors demand a certain rate of return on funds invested (Tandelilin, 2010: 9). According to Hartono (2003: 109), return is the result that earned from investment. Investors are willing to invest the funds they have if they will get a high return on the investment. It is due to high return reflects good company performance. They believe that a well-performing company is able to achieve maximum profits and have a prospect ahead. That is, return is one of the parameters of the company's success in achieving short-term and long-term profits. In relation to the expectations of these investors, high return is the hope of the company management. The management is responsible togive a positive signal to the investors. The management is expected to be able to manage the capability of the company's resources effectively and efficiently and to attract investors to invest their funds.

Investors usually invest by buying company stock. Stocks become one of the most favoured securities type by investors. Stock is a proof of ownership of the company's assets. The advantages of a shareholder is the right gotten in claiming corporate profits through dividends as well as profit on rising stock prices (Tandelilin, 2010: 31). The dividend and profit on rising stock prices is called stock return. Stock price becomes one of the interesting factors for investors, so it is generally used to be research variable by using stock return as a research proxy.

The ups and downs of stock prices are the main concern of investors. The more the stock price increases the higher the return they will receive. However, in recent years, there is a lot of information related to the decline of Composite Stock Price Index (IHSG) in Indonesia Stock Exchange. Antara News (2015) reported that on August 20, 2015 Composite Stock Price Index (IHSG) of IDX opened lower 13.68 points or 0.31 percent to 4,470.55. Meanwhile, the group of 45 leading stocks or LQ45 moved down 3.50 points (0.46 percent) to 752.89. Then on January 20, 2016, the rate of Composite Stock Price Index (IHSG) moved in the red zone at the opening of stock trading in which IHSG fell 7.78 points or 0.17 percent to 4,484.71. The decline affected LQ45 stock index declared moved down 0.30 percent to 779.96 level. From 10 index-building sectors, there are two sectors capable of being in the green zone where both sectors are consumer and manufacturing goods. While other sectors fell (bisnis.liputan6.com: 2016). The decline of IHSG continued until February 12, 2016, in which the IHSG of IDX closed down 61.46 points or 1.29 percent to 4,714.39, while the group of 45 leading stocks or LQ45 moved down 13.55 points (1.61 percent) to 825 , 46 (bisnis.tempo.com: 2016).

The next step of an investor is to analyze the factors that affect the movement of stock prices. According to Halim (2005: 5), fundamental approach is an approach based on information published by issuers or by stock exchange administrators. Fundamental approach is influenced by fundamental factors of the company. This research focuses more on the fundamental approach, because by fundamental condition of the issuer can explain how the internal condition of the company affect the movement of stock prices, especially in terms of corporate finance. Fundamental factors of the company describe the state of the company which one of them obtained from the company's financial statements.

Based on signal theory, management is the party who has more information than others. So that management has responsible in providing financial information of the company that presents information according to the wishes of investors. Management will try to provide information that can satisfy others by reflecting the success of the company. Nevertheless, management should not ignore the principle of reliability of the financial information. According to Brigham et al (2001: 36), signal is an action taken by the company's management that gives instructions to investors about how management views the prospect of the company.

One of the fundamental factors that investors usually use in analyzing stock returns is operating cash flow. Operating activities are principal revenue producing activities of the company and other activities that are not investment and funding activities (Fathurrochman, 2014). Companies that are able to earn a high cash amount, then the company can be said to perform well. Because the company is able to pay debts and dividends as well as fund the operating activities of company with the cash obtained. Operating cash flow becomes one of the investors' attentions in assessing company's survival. Signal theory explains when company's management provides information on good operating cash flow can be a positive signal (good news) for investors. Conversely, when the management provides bad cash flow information then it becomes a negative signal (bad news) for investors.

H1: Operating cash flow has a significant positive effect on stock return

The next fundamental factor is the level of debt. To determine the debt level of a company uses leverage ratio that reflects the extent to which the company's operational activities are financed by debt. The relationship between debt level and stock return is based on signal theory. Disclosure of increased debt levels becoming a signal for investors. This is due to when companies use assets financed by debt, companies will be burdened with interest that will reduce taxes and earn greater profits. Higher debt use on earnings before interest and the same tax will result in higher earnings per stock and will impact on increasing stock returns (Sutriani, 2014).

H2: Debt level has a significant positive effect on stock return

The research that examines the information content of profit to stock price is proven first in Ball and Brown research (1968) and concludes that there is a relationship between unexpected earnings with abnormal return of stock. The result of this study concludes that earnings announcement is considered as an event that is able to influence stock prices. Disclosure of earnings information has not been able to provide full trust from investors. Earnings persistence becomes one of the measurements used to revise the expected accounting earnings in the future. Earnings persistence is also used as an indicator of the quality level of a profit.

According to Fanani (2010: 110) earnings persistence is seen in two points of view. The first view holds that earnings persistence is related to the overall performance of the company as described in the company's earnings. This view states that high persistent profit is reflected in profits that can be sustainable for a long period. While the second view states that earnings persistence associated with the performance of capital market stock prices embodied in the form of returns, so that the stronger the relationship between corporate profits and returns for investors in the form of stock returns shows high earnings persistence (Ayres, 1994, in Fanani, 2010).

H3: Earnings persistence has a significant positive effect on stock return

Cash inflows from high operating companies mean that funds invested by investors are managed effectively and efficiently by the company. Cash flow statement helps the users to find out the reasons for the difference between net income or accounting profit with cash income. The relationship between operating cash flow reporting to earnings persistence is based on signal theory. In which good operating cash flow reflects the ability to generate profits by a high company. Information from a good operating cash flow can illustrate the quality of profit by showing its persistence. Barus and Rica (2014) stated that the higher operating cash flow to profit will be the higher the quality of profit and the positive cash flow conditions tend to give more trust in the ability of companies to earn profits in the future.

H4: Operating cash flow has a significant positive effect on earnings persistence

level of corporate stability. That is, when the stability of the company is high, then the company can easily manage high debts into big profits. Conversely, companies with low stability, tend to be worried when experiencing failure in closing its obligation to pay debts. The relationship of debt level and earnings persistence is based on signal theory. Information from a good debt level can illustrate the quality of earnings by showing its persistence. According to Fanani (2010), the level of corporate debt will cause the company to increase the earnings persistence in order to maintain good performance in the eyes of auditors and investors. With such a good performance, it is expected that creditors will still have trust to the company, making it easy to lend funds, and provide ease in the payment process (Barus and Rica, 2014).

H5: Debt level has a significant positive effect on earnings persistence

Increased operating cash flow reflects good compaby performance and attracts investors. Information from a good operating cash flow can illustrate the quality of profit by showing its persistence. Investors believe that the more persistent the profit generated by the company, then the profit becomes more qualified. A good operating cash flow will invite the profit quality of the company's. So that it affects the rate of return that will be obtained by investors. This is supported by research conducted by Nasir and Ulfah (2008) in which it has the conclusion that earnings persistence has the information content used to determine stock prices. The market, in this case the investor distinguishes the information contained in the earnings persistence.

H6: Operating cash flow has a significant positive effect on stock return through earnings persistence

Debt to Assets Ratio (DAR) is one of the financial ratios which function is to measure the level of corporate solvency, that is the company's ability to pay long-term debt. Companies with high debt level reflects the level of solvency that companies have so high that they are able to increase their earnings persistence to achieve good company performance. This good performance is the main attraction for investors to invest their capital. In relation to signal theory, when companies are able to achieve good performance then their stock price will increase and this impacts on returns that will be earned by investors. According to Fanani (2010), when the level of debt affects earnings persistence because it is related to the solvency of the company, where the level of corporate debt will cause the company to increase the earnings persistence with the aim of maintaining the company's performance in the eyes of auditors and investors.

H7: Debt level has a significant positive effect on stock return through earnings persistence

The theoretical thinking framework that can be described in this research is as follows:

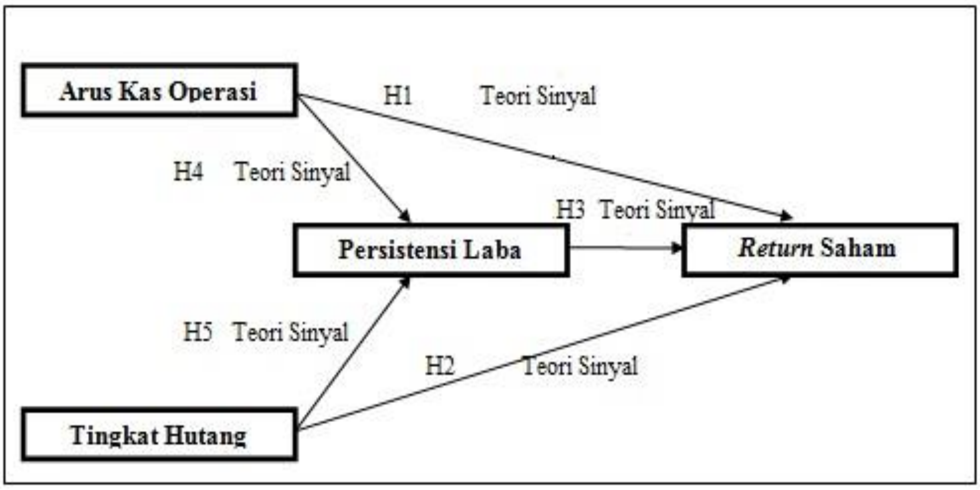

Figure 1. Theoretical Framework

METHODS

This research was a quantitative research. The data used in this study was secondary data in the form of financial statements, annual reports and daily stock closing price list of mining companies that have been listed on the Indonesia Stock Exchange (IDX) in 2010-2014 and has been published. This research object is mining companies listed in Indonesia Stock Exchange (IDX) year 2010-2014 with total population of 40 companies and using purposive sampling technique then obtained 11 companies. With a 5 year observation, and minus outlier data a number of 14 companies, the analysis unit is 41 observations. Variables used in this research were stock return, operating cash flow, debt level, and earnings persistence. The operational definition of the variables in this study could be seen in Table 1 below.

Table 1. Operational Definition of Variables

Variable Name	Definition	Measurement
Stock Return	Return is the result obtained from investment.	Stock Return = $\frac{P_t - P_{t-1}}{P_{t-1}} x\ 100\%$ Explanation: Pt = stock price of current period Pt-1 = stock price of past period
Operating Cash Flow	Operating cash flow is the reduction result of cash inflow minus cash outflow derived from all of the company's operating transactions besides investment and funding over a period.	AKO = $\frac{\text{AKOMasuk} - \text{AKOKeluar}}{\text{Total Aset}}$
Debt Level	Debt Level proxied by DAR (Debt to Assets Ratio) reflects the extent to which the company's operating activities are financed by debt.	DAR = $\frac{Total\ Debt}{Total\ Asset}$
Earnings Persistence	Earnings persistence is the profit that indicates the sustainability of future earnings determined by the accruals and cash flow components.	$\frac{earning_{jt}}{shares\ outstanding_{jt}} = \beta 0 + \beta 1 \frac{earning_{jt-1}}{shares\ outstanding_{jt-1}} + \varepsilon_{jt}$ Explanation: Eamingsjt = profit before extraordinary items of company j year t Eamingsjt-1 = profit before extraordinary items of company j last year Sharesoutstandingjt = The shares outstanding of the company j year t Sharesoutstandingjt-l= The shares outstanding of the company j last year

Source: Various data sources processed, 2016

Data collection technique used in this study was documentation method. Data in the form of audited financial statements, annual reports, and daily stock closing price list of Indonesian mining companies for period off 2010-2014 were obtained from the official website of Indonesia Stock Exchange (BEI), namely www.idx.co.id and www.finance.yahoo.com. Analysis methods used included data analysis technique of descriptive statistics and inferential statistics. Analysis of descriptive statistics gave an overview or description of a data seen from the values of mean, standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness (Ghozali, 2013). Meanwhile, inferential statistics used to examine the hypotheses of the research by using multiple regression analysis technique and sobel test with the help of IBM SPSS Statistic 21. In the regression test, the researchers also conducted classical assumption test consisting tests of normality, mulicolinearity, heteroscedasticity, and autocorrelation.

RESULTS AND DISCUSSIONS

Descriptive statistics test result could be seen in Table 2. Operating Cash Flow (AKO) has an average of 0.0727, with a standard deviation of 0.10547. The minimum value of Operating Cash Flow was -0.17 which occurred at ATPK Resources Tbk. year 2011. Meanwhile, the maximum value of Operating Cash Flow was 0.31 which occurred at Tambang Batubara Bukit Asam Tbk. Year 2011. Debt Level (DAR) had an average of 0.4532, with a standard deviation of 0.15350. The minimum value of Debt Level (DAR) was Rp 0.22 which occurred at Aneka Tambang Tbk. year 2010. The maximum value of Debt Level (DAR) occurred at Samindo Resources Tbk. year 2012 and Radiant Utama Interinsco Tbk. year 2011 amounted to 0.79. Earnings Persistence (PL) had an average of 0.7761, with a standard deviation of 1.70711. The minimum value of Earnings Persistence (PL) was -0.34 that occurred at Ratu Prabu Energi Tbk. year 2012. Meantime, the maximum value of Earnings persistence (PL) was 10.83, which occurred at Samindo Resources Tbk. year 2011. Share Return (RS) had an average of 0.0305, with a standard deviation of 0.10156. The minimum value of Stock Return (RS) was -0.08 that occurred at Tambang Batubara Bukit Asam Tbk. 2012 and Mitra Investindo Tbk. 2013. Meanwhile, the maximum value of Stock Return (RS) was 0.42 that occurred at Mitra Investindo Tbk. year 2011.

Table 2. Result of Descriptive Statistics Test

	N	Minimum	Maximum	Mean	Std. Deviation
AKO	41	-0,17	0,31	0,0727	0,20647
DAR	41	0,22	0,79	0,4532	0,15350
PL	41	-0,34	10,83	0,7761	1,70711
RS	41	-0,08	0,42	0,0305	0,10156

Source: Output IBM SPSS Statistics 21, 2016

Inferential analysis included classical assumption test and hypothesis test. Based on the result of classical assumption test, the model used in the study was free from classical assumptions. Hypothesis testing directly (t test) in this study was as follows:

Table 3. Result of Statistics t test Model 1

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	0,001	0,047		0,020	0,984
AKO	0,065	0,131	0,069	0,499	0,621
DAR	-0,005	0,095	-0,007	-0,051	0,959
PL	0,035	0,008	0,585	4,176	0,000

Dependent Variable: RS

Source: Output IBM SPSS Statistics 21, 2016

Table 4. Result of Statistics t test Model 2

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1,047	0,889		-1,777	0,246
AKO	2,485	2,519	0,155	0,986	0,330
DAR	3,624	1,747	0,326	2,075	0,045

Dependent Variable: PL

Source: Output IBM SPSS Statistics 21, 2016

Based on Table 3 above, it was known that Operating Cash Flow (AKO) did not affect on Stock Return (RS), which meant H1 which stated that operating cash flow had a significant positive effect on stock return, rejected. The result of this study was relevant to research conducted by Aini (2009), Adiwiratama (2012), Sa'adah and Kadarusman (2014), and Purwanti et al (2015). This finding has empirically shown that operating cash flow directly was not able to encourage the increase of stock return as the view of signal theory. Operating cash flow information did not provide additional information for users of financial statements. Information from operating cash flow could not directly give an overview of how much profit would be received by investors.

Hereafter, based on Table 3, H2 which stated that debt level had a significant positive effect on stock return, rejected. The result of this study was relevant to research conducted by Malintan (2013), Farkhan and Ika (2013), and Sulia and Rice (2013). This finding empirically has shown that debt level (DAR) was not able to encourage the increase of stock return (RS) as the view of signal theory. The high DAR increased the company's responsibility to creditors, as well as increased the risk of investment to shareholders. High degree of dependence of mining companies on debt in their business process would certainly result in the level of risk received by investors who invested in mining companies' shares would also be high which reduced investors' interest to invest in shares of the company (Malintan, 2013).

Based on Table 3, H3 which stated that earnings persistence had a significant positive effect on stock return was accepted. The result of this research empirically has shown that earnings persistence (PL) could encourage the increase of stock return (RS) as the view of signal theory. Earnings persistence became one of the measurements used to revise expected future accounting earnings. Earnings persistence was also used as an indicator of the earnings quality level. The more persistent an earning, the more qualified the earning that would affect the level of return that would be obtained by investors. The stock price was very determined by the earnings persistence.

Based on Table 4, H4 which stated that operating cash flow had a significant positive effect on earnings persistence, was rejected. This result was relevant to research conducted by Meythi (2006) and Chowijaya et al (2015). This finding empirically has demonstrated that operating cash flow (AKO) was unable to encourage an increase in earnings persistence (OT) as the view of signal theory. The insignificant result was caused by the amount of operating cash flow owned by mining companies in 2010-2015 was still too small that has not been able to achieve a high level of earnings persistence.

Furthermore, based on the result of Table 4, H5 which stated that debt level had a significant positive effect on the earnings persistence, was accepted. The result of this study has empirically shown that debt level (DAR) was able to encourage the increase of earnings persistence (PL) as the view of signal theory. Companies with high debt level reflected the level of solvency that companies had high that they were able to increase their earnings persistence to achieve good corporate performance. This good performance was the main attraction for investors to invest their capital. Associated with signal theory, when companies were able to achieve good performance then their stock price would increase and this impacted on returns that would obtained by investors. This research used sobel test with the application Sobel Test Calculator for the Significance of Mediation through website www.danielsoper.com.

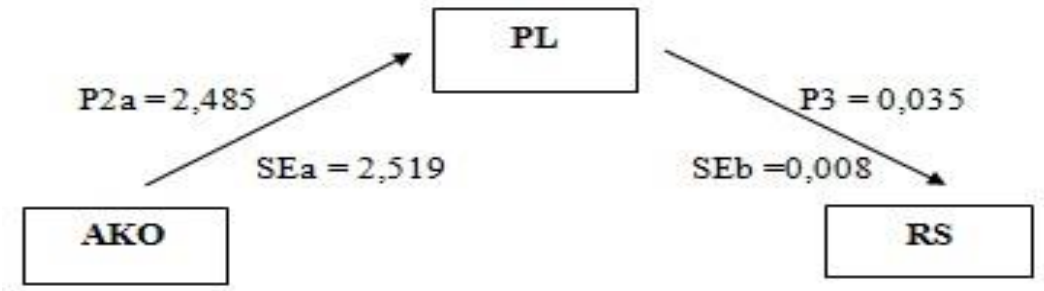

Figure 2. Path Analysis of Operating Cash Flow

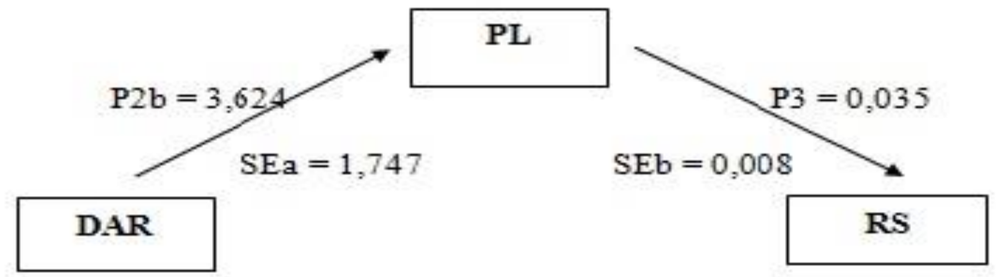

Figure 3. Path Analysis of Debt Level

Based on the path analysis in Figure 2, the result of sobel test that was conducted obtained the value of sobel test of 0.962 with probability value of 0.168. This showed that the relationship of earnings persistence mediation to operating cash flow with stock return was rejected, because probability value was greater than 0,05. So the path analysis could be concluded that the sixth hypothesis was rejected. This was due to there were still many investors who only saw profit on the whole without analyzing first the level of profit quality. Cash flow did not show the sustainability of cash flow in the future that was realized in earnings persistence so that the relevance of cash flow value depended only on the current to be responded by market (Abdullah, 2011).

Based on the path analysis in Figure 2, the result of sobel test performed obtained value of sobel test amounted to 1.874 with probability value of 0.030. This showed that the relationship of earnings persistence mediation to debt level with the stock return was accepted, because the probability value was less than 0.05. So the path analysis could be concluded that the seventh hypothesis was accepted. This significant result proved that investors believed when debt level increased, the quality of corporate profits was increasing. When companies were able to show the level of earnings persistence owned, investors were increasingly convinced of the sustainability of the company and were interested in buying stocks.

CONCLUSIONS

Conclusions resulting from the results of this study is operating cash flow positively insignificant affects on stock return, debt level has an insignificant negative effect on stock return, earnings persistence has a significant positive effect on stock return, operating cash flow has an insignificant positive effect on earnings persistence, debt has a significant positive effect on earnings persistence, earnings persistence is not able to mediate the effect of operating cash flow to stock return, and earnings persistence is able to mediate the effect of debt level on stock return. Future research is expected to convert other currency into rupiah currency in financial statements of mining companies, so the number of samples used in the study becomes more. The result of descriptive analysis explains that the variant data of earnings persistence variable is very high. Future studies should use other proxies in earnings persistence calculations than those used by researchers to obtain data with low variance.

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