OPERATING CASH FLOW, EARNING RESPONSE COEFFICIENT, AND FIXED ASSET REVALUATION: STUDY ON MANUFACTURING COMPANY

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Abstract.

The purpose of this study to determine the effect of operating cash flow to the abnormal return and the effect of operating cash flow to the abnormal return of companies that conduct the revaluation is higher than that of non revaluation which adopted SFAS No. 16 (2012). The analysis used in this study are multiple regression, for the period 2012-2015. The results showed that operating cash flow has no effect on non-sampled companies revaluation, while the sample of firms that perform revaluation proves that operating cash flow has a positive and significant impact on the abnormal return. Moreover, the effect of revaluation policy can strengthen the influence between operating cash flow to the firm abnormal return than non revaluation.

Keyword: abnormal return, operating cash flow, fixed asset revaluation

Abstrak.

Tujuan penelitian ini untuk mengetahui pengaruh operating cash flow terhadap abnormal return, dan pengaruh operating cashflow terhadap abnormal return perusahaan yang melakukan revaluation lebih tinggi dibandingkan dengan non revaluation yang mengadopsi PSAK No. 16 (2012). Analisis yang digunakan dalam penelitian ini yaitu regresi berganda, periode 2012-2015. Hasil menujukkan bahwa operating cash flow tidak memiliki pengaruh pada sampel perusahaan non revaluation, sedangkan pada sampel perusahaan yang melakukan revaluation membuktikan bahwa operating cash flow memiliki pengaruh positif dan signifikan terhadap abnormal return. Disamping itu, pengaruh kebijakan revaluation dapat memperkuat pengaruh antara operating cash flow terhadap abnormal return dibandingkan perusahaan non revaluation.

Kata kunci: tingkat pengembalian abnormal, arus kas operasional, revaluasi aset tetap

INTRODUCTION

The IFRS convergence into FAS a major impact on the business world, especially in relation to the financial statements and other accounting data. Indonesian Financial Accounting Standards-based IFRS are considered more can improve improve the quality of financial reporting standards and comparability of financial statements (Bank of Indonesia, 2011). One of the changes from SFAS is SFAS 16 on fixed assets, one of which is the difference in the measurement of fixed assets after initial recognition. In SFAS 16, fixed assets are based on the acquisition of such assets less accumulated depreciation. SFAS 16 (Revised 1994) does not permit the revaluation of fixed assets (SAK, 2002). While the measurement after recognition (SFAS No. 16, 2012), "The entity choose either the cost model or the revaluation model as its accounting policy and apply that policy to all fixed assets within the same group. At the cost model, after recognition as assets, fixed assets are recorded at cost less accumulated depreciation and accumulated impairment losses. As for the revaluation model after recognition as an asset, fixed asset fair value can be reliably measured must be recorded on the number revaluasian, that is fair value at the date of revaluation less any accumulated depreciation and accumulated impairment losses after the date of revaluation. Revaluation is done with sufficient regularity regularly to ensure that the carrying amount does not differ materially from the amount determined using the fair value at the end of the reporting period."

Upward revaluation of fixed assets into council policy the most controversial accounting standards (Wang, 2006). The fair value (fair value) of fixed assets is more relevant in the economic decisions that must be used in fixed asset reporting. On the other hand, the upward revaluation provide opportunities for managers to manipulate accounting numbers reporting that would destroy investor confidence that this is not permissible (Wang, 2006). After the latest standards regarding fixed assets that allow the use of fair value accounting. The use of fair values for fixed assets will result in more relevant information than the method of cost and this method should be allowed to be used (Wang, 2006).

The financial report is information that summarizes all of the company's activities. (Nikkhah & Mojtahedzade, 1999). One of the elements in the financial report is expected to provide information on the profit achieved by the company in the period, an income statement. Earnings information in the financial statements is seen as an element that is quite rich (comprehensive) to demonstrate the performance of a company so that the

attention of investors in making decisions. This is caused by the belief of investors that the company that produces a fairly good profit showed a bright prospect and will provide optimal return to investors (Brigham and Houston, 2001).

The success or failure of the company in carrying out its activities, where stakeholders require an overview of the details regarding all the economic resources obtained and used in one period. Information presented in the cash flow statement is to be used by stakeholders to predict cash flows that will be distributed in the form of dividends or interest and repayment of principal as well as assess the risks (Brigham and Houston, 2001). The market reaction is indicated by changes in stock prices. If the market reacts, it can be said that cash flow information is one of the information considered in making investments. The market reaction can be measured by using abnormal return (Tay, 2009). Huang (2009) proved that operating cash flow positive effect on abnormal return. Operating cash flow is one indicator of the market value of the company, meaning that companies have high cash flow means it has a high market value. A high market value will encourage the interest of investors to invest in the shares of the company. Of course, this gives an effect to the stock prices increase. Martani et al. (2009), has not succeeded in proving the effect of operating cash flow to the abnormal return.

The decline in operating cash flow may cause the lender to worry about the company's liquidity (Seng and Su, 2010; Cotter and Zimmer, 1995). Upward revaluation is a signal of a higher value on the company's assets so as to convince the lender on the company's ability to repay debt. Companies that perform fixed asset revaluation will increase the company's cash flow (Cotter and Zimmer, 1995; Barac and Sodan, 2011). Fixed asset revaluation to be positive information for external parties of the company, because besides being able to motivate performance improvement companies that reflected in the increase in cash flow and corporate profits (Tay, 2009). Revaluation policy also gives a signal that the investor has the opportunity to make a profit on its investment, either in the form of returns and abnormal returns. The underlying reason for this decision by the company's asset revaluation is to ensure that the fair value of the fixed assets of the company is reflected in the financial statements. Revaluation of assets refers to the restatement on the net book value (carrying amount) so that the present value approach (Brown et al, 1992).

METHOD

The population in this study a company's financial statements listed on the Indonesia Stock Exchange (BEI). Samples by purposive sampling: (a) The Company listed on the Indonesia Stock Exchange period 2012 to 2015, (2) The financial statements manufacturing posted consecutive annual basis and have the completeness of the data the periods 2012 to 2015. Data of this research are secondary data from the annual financial statements of manufacturing companies listed in Indonesia Stock Exchange through the website of the Stock Exchange (www.idx.co.id). Data collection techniques are research archives (archival research).

Table 1. Samples

	Number of Samples	Persentase	*Non Revaluation*	*Revaluation*
Number of Population periods 2012 to 2015	304	100 %	256	48
Less				
Financial statements do not have complete data	24	7.89 %	16	8
Number of Samples	280	92.11 %	240 (85.71%)	40 (14.29%)

Table 1, the number of research samples totaling 320 manufacturing companies listing in BEI period of 2012 and 2015. The total sample of 304 companies, after deducting 24 financial statements that do not have the completeness of the data. Table 1, shows that the sample of companies that do not conduct revaluation are 240 companies with the period the period 2012 to 2015 and 40 companies that perform revaluation.

Analyzing data used statistical inferences (inductive statistics). The level of significance of the correlation between the independent variable (x) and the independent variable (y), it is necessary statistical model to test the hypothesis set. Therefore, the research hypothesis formulated indicates the correlative study, the technique used to analyze the level of significance for the independent variable on the dependent is a multiple linear regression model (multiple regression analysis).

$$ABN\_RTN = \alpha + \beta_1 CFFO + \beta_2 LEV + \beta_3 SIZE + \beta_4 ROE + \beta_5 CR\_RTO + e.....(1)$$

$$ABN\_RTN = \alpha + \beta_1 CFFO + \beta_2 CFFO*REV + \beta_3 LEV + \beta_4 SIZE + \beta_5 ROE + \beta_6 CR\_RTO + e ....(2)$$

Where: ABN_RTN = abnormal return is measured by CAR, CAR calculated Adjusted Market Model approach to CAR, CARit = Σ ((1+ Rit / 1+ RMT) -1); α = constant; β = koeefisien regression CFFO = operating cash flow; LEV = a debt to equity ratio is calculated by debt divided by equity; SIZE = the size of the company, measured by the logarithm of total assets; ROE = ratio of net profit after tax divided by total equity; CR_RTO = the measured current ratio of total current assets divided by current liabilities; REV = Log fixed asset revaluation.

RESULT AND DISCUSSION

Descriptive statistics for the number of test samples are 280 companies, the sample is divided into two parts, that is companies that do not fixed asset revaluation as many as 240 companies and 40 manufacturing companies that fixed asset revaluation period of 2012 and 2015. This test includes testing the minimum value, the value of maximum, average and standard deviation. Descriptive statistical results:

Table 2. Descriptive Statistics

Panel A: Sample (Non Revaluation)

	N	Minimum	Maximum	Mean	Std. Deviation
ABN_RTN	240	-1,42	1,74	,4009	,59662
CFFO	240	3,00	7,05	4,8830	,83114
LEV	240	-179,97	538,77	12,4006	53,82978
SIZE	240	4,95	7,45	6,2751	,59532
ROE	240	-128,08	222,90	8,7952	37,23244
CR_RTO	240	-52,59	62,46	3,0022	9,15113
Valid N (listwise)	240				

Panel B: Sample (Revaluation)

	N	Minimum	Maximum	Mean	Std. Deviation
ABN_RTN	40	-1,07	1,00	-,1279	,53250
CFFO	40	3,85	6,33	4,8433	,74858
LEV	40	,05	5,25	1,3456	1,29417
SIZE	40	5,58	7,23	6,1985	,49145
ROE	40	,01	,36	,1474	,10918
CR_RTO	40	,32	1,23	,9348	,21558
REV	40	2,74	6,63	4,6504	,93440
Valid N (listwise)	40				

ABN_RTN: abnormal return; CFFO: operating cash flow; REV: revaluation; LEV: leverage; SIZE: firm size; ROE: return on equity; CR_RTO: current ratio.

The results of descriptive statistics in Table 2, panel A conducted on the non revaluation. The results obtained for the variable minimum value of -1.42 ABN_RTN

obtained maximum value of 1.74, the mean standard deviation of 0.4009 and 0.59662. CFFO the minimum value is 3.00, maximum value of 7:05, the mean is 4.8830 and standard deviation 0.83114. In addition, the LEV variable had minimum value of -179.97 and maximum value approximately of 538.77. With a standard deviation about 12.4006 538297. SIZE obtained minimum value 4.95, maximum value 7.45 mean is 6.2751 and standard deviation 0.59532. ROE is -128.08 minimum value, maximum value of 222.90, the mean 8.7952 and standard deviation37.2324. CR_RTN -52.59 minimum value, maximum 62.46, the mean is 3.0022 and standard deviation 9.1511.

Table 3: Corelation Marix

Panel A: Non Revaluation

Variable	ABN_RTN	CFFO	LEV	SIZE	ROE	CR_RTO
ABN_RTN	1					
CFFO	0.604	1				
p-value	-0.34					
LEV	0.04	0.882	1			
p-value	0.185**	-0.10				
SIZE	0.023	0.352	0.209	1		
p-value	0.147*	0.060	-0.081			
ROE	0.004	0.71	0.422	0.422	1	
p-value	1.183**	0.117	0.052	0.052		
CR_RTO	0.084	0.076	0.032	0.240	0.003	1
p-value	0.112	-0.057	0.240	0.0.626	0.189*	

Panel B: Revaluation

Variable	ABN_RTN	CFFO	LEV	SIZE	ROE	CR_RTO
ABN_RTN	1					
CFFO	0.604	1				
p-value	-0.34					
LEV	0.04	0.882	1			
p-value	0.185**	-0.10				
SIZE	0.023	0.352	0.209	1		
p-value	0.147*	0.060	-0.081			
ROE	0.004	0.71	0.422	0.422	1	
p-value	1.183**	0.117	0.052	0.052		
CR_RTO	0.084	0.076	0.032	0.240	0.003	1
p-value	0.112	-0.057	0.240	0.0.626	0.189*	

*** significant 1%, ** significant 5%, * significant 10%

Panel B at the company's revaluation. The results obtained for the variable values obtained ABN_RTN is minimum -1.07, maximum values 1.00, the mean 0.53250 and standard deviation -0.1279. REV is minimum value 2.74, maximum 6.63, the mean 4.6504, and standard deviation 4.6504. CFFO is minimum 3.85, maximum value of 6:33, the mean

is 4.8433 with a standard deviation of 0. 74858. LEV with 0.05 minimum value, maximum value of 5.25, the mean 1.3456 and standard deviation 1.2942. SIZE is minimum 5.58, maximum value of 7.23, mean 6.1985 and standard deviation 0.4914. ROE is the minimum value of 0:01, maximum 0:36, the mean 0.1474 and standard deviation0.1091. CR_RTN is minimum 0.32, maximum 1:23, mean 0.21558 and and standard deviation 0.9348. Based on the results of the correlation matrix in Table 3, was obtained that CFFO (operating cash flow) and REV (revaluation) has a positive and significant impact on ABN_RTN (abnormal return). This relationship illustrates that the higher the operating cash flow positively affect the abnormal return

Based on the hypothesis results in Table 4, this test sample is separated into two companies namely non revaluation and revaluation. This test directly see the impact of operating cash flow to the abnormal return, as well as the moderating role revaluation operating cash flow to the abnormal return. At the cost model, after recognition as assets, fixed assets are recorded at cost less accumulated depreciation and accumulated impairment losses. As for the revaluation model after recognition as an asset, fixed asset fair value can be reliably measured must be recorded on the revaluation amount.

Table 4. Results

Non Revaluation (240 companies)			(1)	Revaluation (40 companies)				
Independen variable	Koef. Regression	t	Sig.	Independen variable	Koef. Regression	t	Sig. (1)	Sig. (2)
Const.	0.441			Const.	2.645			
CFFO	-0.034	-0.748	0.455	CFFO	0.103	1.174	0.046	0.041
LEV	0.001	1.458	0.146	LEV	0.080	1.095	0.200	0.249
SIZE	0.154	2.405	0.017	SIZE	0.344	-0.755	0.005	0.021
ROE	0.001	0.963	0.336	ROE	-0.626	1.686	0.620	0.456
CR_RTO	0.004	0.940	0.348	CR_RTO	0.796	0.443	0.263	0.101
				CFFO*REV	0.038	1.545		0.032
F Statistic			3.522	F Statistic			1.061	1.318
Sig. F			0.004	Sig. F			0.049	0.047
R^2			0.070	R^2			13.5	0.193
DW			0.766	DW			1.189	1.506

Significant 5%

ABN_RTN: abnormal return; CFFO: operating cash flow; REV: revaluation; LEV: leverage; SIZE: firm size; ROE: return on equity; CR_RTO: current ratio.

Table 4, the company's non revalution of 240 companies shows which operating cash flow is not effect to abnormal return (H1 unacceptable) the significance level is 0.455> 0.05. In addition, the control variable can be determined for the variable leverage, ROE and Current ratio does not affect the abnormal return on a sample of non revaluation, the variable SIZE has a positive and significant impact on the abnormal return significant 0.017> 0.05.

These findings support the study Huang (2009) proved that operating cash flow positive effect on abnormal return. Operating cash flow is one indicator of the market value of the company, meaning that companies have high cash flow means it has a high market value. A high market value will encourage the interest of investors to invest in the shares of the company.

Fixed asset revaluation as a moderating with a total sample of 40 companies the period 2012 to 2015. The results showed fixed asset revaluation strengthen relationships influence abnormal operating cash flow to return to the level of signikansinya 0.032> 0.05, or in other words (H2 accepted). The use of fair values for fixed assets will result in more relevant information than the method of cost (Wang, 2006). These results are in findings Andison (2015), the company doing the revaluation had abnormal return is higher than non revaluation.

Companies that perform fixed asset revaluation will affect the company's cash flow increase (Cotter and Zimmer, 1995; Barac and Sodan, 2011). Fixed asset revaluation be positive information for external parties of the company, because besides being able to motivate performance improvement company that reflected in the increase in cash flow and corporate profits (Tay, 2009). Revaluation policy also gives a signal that the investor has the opportunity to make a profit on its investment, either in the form of returns and abnormal returns. The underlying reasons for this decision by the company's asset revaluation is to ensure that the fair value of the fixed assets of the company reflected in the financial statements. Revaluation of assets refers to the restatement on the net book value (carrying amount) so that the present value approach (Brown et al, 1992).

This result also uses control variables, financial leverage, firm size, ROE and current ratio. Based on the control variables are used, where the financial leverage, and the current ratio does not affect the abnormal return. Variable size effect on abnormal return on a non revalution samples and samples that do revaluation. Large companies reported higher profits, the report will attract the attention of regulators and other parties who have

the power and capacity to create new rules that reallocate the resources of the company. In addition, large companies also attract the attention of the union because it is associated with the payment of salaries by the company (Brown et al. 1992; Seng and Su, 2010). Therefore, large companies will use the procedure decline in revenue (reducing income) and reduce the possibility of losses due to regulation (Brown et al. 1992). Because the government wants to reduce the pressure of political or labor unions, large companies will avoid reporting high profits. upward revaluation of assets is an effective way to reduce the reporting earnings through an increase in depreciation costs as a result of increased asset revaluation (Seng and Su, 2010).

CONCLUSION

Based on the results in Table 4, the company's non revalution, operating cash flow does not affect the abnormal return (H1 unacceptable) the significance level is 0.455> 0.05. In the sample of companies that perform fixed asset revaluation proves that operating cash flow positive and significant effect on the abnormal return. The results of fixed asset revaluation as a moderating influence which strengthened operating cash flow to the abnormal return (H2 accepted). In concept, the revaluation would make the financial statements more relevant in decision-making, but in practice it is difficult to do.

Limitation of this study is the small number of companies that choosing revalution. It is advisable in future studies to test in a different period or a different kind of company. In addition further research may also examine other factors that have not been examined in this study as the company's growth factor, takeover, bonus issue.

REFFERENCES

Andison. (2015). Fixed Asset Revaluation: Market Reaction. *Simposium Nasional Akuntansi* XVIII.

Barac, Z.A. & S. Sodan. (2011). Motives for Asset Revaluation Policy Choice in Croatia. *Croation Operational Research Review* (CRORR), Vol 2: 60-70.

Brigham, E.F & J.F. Houston. (2001). *Fundamental of Financial Management*, Singapore: Harcourt Asia.

Brown, P., H.Y. Izan & A.L. Loh. (1992). Fixed Asset Revaluations and Managerial Incentives, Abacus, Vol. 28, No. 1: 36-57.

Cotter, J. & I. Zimmer. (1995). Asset Revaluations and Asseement of Borrowing Capacity. *Abacus*, Vol. 31, No. 2: 136-159.

De Medeiros, O.R. (2005). Emperical Evidence on the Relationship Between EVA and Stock Return in Brazilian Firm. Unpublished.

Huang, A. G. (2009). The Cross Section of Cash-flow Volatility and Expected Stock Return. *Journal of Empirical Finance*, Vol. 16: 409-429.

Ikatan Akuntansi Indonesia. (2012). *Standar Akuntansi Keuangan. PSAK No. 16: Aset Tetap dan Aktiva Lain-lain.* Jakarta. Salemba Empat.

Martani, D., Mulyono & R. Khairurizka. (2009). The Effect of Financial Ratio, Firm Size, and Cash Flow From Operating Activities in The Interim Report to The Stock Return. *Chinese Business Review.* Vo. 8, No.6: 44-53.

Nikkhah. A. A, & A. Mojtahedzade. (1999). An Empirical Examination of User's Perceptions of The Independent Auditor's Areas of Responsibilities With Respect to Financial Statements: A Comparative Study. *The Iranian Accounting and Auditing Review*, Vo. 7 (27): 1-70.

Seng, D. & J. Su. (2010). Managerial Incentives Behind Fixed Asset Revaluation. International *Journal of Business Research*, Vol. 10, No.2: 254-271.

Tay, I. (2009). Fixed Asset Revaluation: Management Incentives and Market Reactions. (*Unpublished Thesis*). New Zealand: Lincoln University.

Wang, Z. (2006). Upward Revaluation of Fixed Assets. *Journal of Business and Economics Research*, Vol. 4, No. 1: 53-58