



**THE INFLUENCE OF EARNINGS AND CASH FLOWS ON MARKET VALUE OF EQUITY BASED ON FIRM LIFE CYCLE (A STUDY OF LISTED COMPANIES FROM MANUFACTURING SECTOR ON THE INDONESIA STOCK EXCHANGE)**

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**Keywords:** Earnings, cash flow from operation, cash flow from investing, cash flow from financing, firm life cycle

**Abstract**

The objective of this study is to examine whether earnings has a bigger influence than cash flows or on the contrary toward market value of equity on listed companies from manufacturing sector at the Indonesia Stock Exchange. This study uses hypothesis testing research by using census method. There are two variables used in this study, those are independent variables and dependent variable. Independent variables are earnings, cash flow from operation, cash flow from investing, and cash flow from financing, whereas dependent variable is market value of equity. The population of this study are manufacturing companies listing at the Indonesian Stock Exchange in the testing period 2009-2013 and having criteria as companies in growth stage, mature stage, and decline stage. After being selected, there are 34 companies as population or 170 observation for the three years (2009-2013). To test the hypothesis, this study uses standardized multiple regression analysis (path analysis). The results show that (1) in growth stage, cash flows has not a bigger influence than earnings toward market value of equity, (2) in mature stage, earnings has a bigger influence than cash flows toward market value of equity, and (3) in decline stage, cash flows has not a bigger influence than earnings toward market value of equity.

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**Introduction**

Every business made by a company requires a variety of resources including financial resources. To measure the progress of a particular business made by a company, information on the performance achieved by the company is obviously needed. One important measurement to assess the performance of the company is the financial statements since it shows the result of the end of the company's performance as reflected in the balance sheet, income statement, and statement of cash flows.

The financial statements are the primary means of communicating financial information to parties outside the company (Kieso et al., 2007: 3). This report reveals the history of the company which is quantified in monetary units. Information needed by user of financial information will affect the decisions made by the user. According to Kieso et al. (2007: 6) differences in decision made by users of financial information is divided into two major groups, first is the internal users, that includes managers who plan, organize, and manage a business and the second is the external users, especially investors and creditors.

FASB (Financial Accounting Standards Board) in SFAC (Statement of Financial Accounting Concept) Number 1 states that there are two purposes of financial reporting. First is to provide useful information to investors, potential investors, creditors, and other users to make investment decisions, credit, and other similar decisions. Second is to provide information about the prospects of cash flow to help investors and creditors in assessing the prospects of the company's net cash flow.

To measure whether the information is assessed or responded by the market (investors), the indicator value of equity market can be used. The market value of the company's equity may change in accordance with the company's achievements and conditions. Table 1 presents the average value of the equity market some of manufacturing companies listed in Indonesia Stock Exchange in 2009 obtained from the closing price of the stock (3 days before and after the date of publication of the financial statements).



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*Table 1 Average of Market Value of Equity of Manufacturing Companies listed in Indonesian Stock Exchange in 2009*

Nama Perusahaan	Total Nilai Pasar Ekuitas
PT. Prasidha Aneka Niaga, Tbk	Rp 106,-
PT. Ekadharma International, Tbk	Rp 125,-
PT. Kageo Igar Jaya, Tbk	Rp 135,-
PT. Trias Sentosa, Tbk	Rp 208,-
PT. Budi Acid Jaya, Tbk	Rp 217,-

Sumber: Data diolah 2011

Table 1.1 presented the average market value of equity of some companies listed on the Stock Exchange, but the value of the equity market some companies are still far below the industry average, amounting to Rp. 15.050.-. This indicates that the problem regarding the market value of equity in some companies listed on the Stock Exchange. In this regard, it is interesting to study what factors affecting this condition. There are two important factors which can influence the market value of equity, i.e. earnings and cash flow information.

Earning is the main information used by investors to assess the company's performance. Subramanyam et al. (2005: 133) states that earning information should be used because of its competitive advantage and its ability to foster the understanding of the company's current and future performance. Earning information is a better indicator of a company's ability to generate cash in the future than information about the current period cash flows (Stice et al., 2009: 282). However, in some situations such as when the company reported a large amount of non-cash expenses, for example deletion, depreciation and provisions for liabilities in the future, the earning failed to provide an accurate picture of the performance of a company at a certain period. Considering that fact, then cash flows may help overcoming these problems by generating a more relevance and reliable financial information.

Dontoh and Ronen (1993) states that earnings and cash flow contains information responded by the investor. But the content of the information on accounting reports will not appear obviously seen but implicit, more Dontoh and Ronen (1993) states that the stock price is a function of the information. The new information will be reflected in the change in stock price. The change in earnings and cash flow will also be responded by investors as a signal to invest in the stock market. The question is, from those two information provided, which one is responded by the investor, earnings or cash flow?

While facing with two measurement of accounting performance, i.e. between earnings and cash flow, investors should convince that the measurement of accounting performance is the main focus of their attention which are able to better describe the economic conditions and prospects of the company including the growth and performance of the company in the future. Investors are interested to know more superior and useful information to evaluate the performance of the company at a particular time. Investors also must be able to ensure that the information they receive is relevant and reliable. Therefore, investors should also consider the life cycle of the companies such as growth, mature, and decline stages when they receive and respond to information about earnings and cash flow.

The life cycle of the company is very important to know the extent to which messages can be delivered through accrual measurement and cash flow, and how the message can be appeared opposite in many situations. Black (1998) states that companies that are in different stages of the life cycle have different characteristics, which can affect the usefulness of the measurement of company's performance, such as earnings and cash flow.

Aharony, Falk, & Judah (2006) found that the effect of the amount of information capabilities described by the cash flow is not significantly different from the set of accrual accounting. Black (1998) obtained empirical evidence that the different stages of the life cycle of the company influence the amounts of earnings and cash flows, where the measurement of cash flow has more value relevant than earning at the start-up, growth and decline stage, while earnings only has value relevant at the mature stage. Atmini (2002) found that earnings and cash flows are not consistent in affecting the market value of equity for different stages. His research results show that only earnings and cash flow financing is positively related to the market value of equity at the stage of growth. In the mature stage, it is found that only investment cash flow is negatively related to equity market value, whereas earnings, operating cash flow, as well as financing cash flows are unrelated to the market value of equity.



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This study wants to reexamine the influence of earning and cash flow to market value of equity, taking into account the life cycle of the company. Which of the two such information, earnings or cash flows have a greater effect on the market value of equity. This research takes into account the life cycle of the company as there are very few studies in Indonesia considering its life cycle factors when assessing the effect of earnings and cash flow on market value of equity. To test which of the two has a greater influence on the market value of equity, earnings or cash flows, this study uses regression standardized analysis (standardized regression analysis). The tests carried out based on the company's life cycle, namely the growth, mature, and decline phase. Start-up phase was not included all the companies that go public should at least already achieve the growth stage. Thus, companies that are in the start-up phase is not founded in the lists of Indonesia Stock Exchange. This study was subsequently prepared by the following systematic outline: theoretical framework and hypotheses, research methods, results and discussion, conclusions, limitations, and suggestions

### Theoretical framework and hypotheses

#### The effect of earnings and cash flow to market value of equity at growth phase

At this stage of growth, the opportunity of the company to grow begins to increase. The assets owned also have produced net income that the company has been able to pay dividends and debt. In addition, the company also started to diversify the product line. At this stage of growth, investors began to invest in the companies in hope of obtaining the maximum return at a later stage. Therefore, the investors will be more interested to see the condition of the company's cash flow either it will be sufficient or not to be used in operating, investing, and financing the company. Based on this concept, the growth stage of the cash flows is expected to be more influential than the return on the market value of equity.

At the stage of growth, the company has managed to gain market share and is able to generate operating cash flow. At this stage, the operating cash flow is positively related to the market value of equity. Operating cash flow at this growth stage is very useful for investors to assess whether the company has enough cash to buy supplies, pay for labor or other operating activities. Black (1998) found that at the stage of growth, operating cash flow is positively associated to the market value of equity. Further, Black (1998) explains that operating cash flows have more value relevant than earnings at the growth stage. Aharony, Falk, & Judah (2006) argue that when the company moves from the start-up phase towards growth phase, cash flow from operating activities will be gradually positive. Therefore, at this stage of growth, operating cash flow is expected to have a greater influence than earnings on the market value of equity.

In addition, the opportunity for company to grow is very high at this stage, so that the cash flow of investment will provide relevant information for investors. Juniarti and Limanjaya (2005) states that for those company at growth stage, investment cash flow significantly affect the market value of equity. This is due to the company at this stage are still spending huge investments to develop and maintain market share as well as to master the technology. Black (1998) found that the growth stage of the investment cash flow has a greater influence than the earnings on the market value of equity.

At the growth stage, cash flow financing also provides relevant information about the company's ability to get the funds to finance the growth and development of the company. Juniarti and Limanjaya (2005) argue that the growth stage required more funds than the start-up phase. The goal is to raise funds to finance sales growth and achieve higher profitability from the previous stage. Juniarti and Limanjaya (2005) revealed that at the growth stage, financing cash flows significantly influence the market value of equity. Atmini (2002) found that the market value of the company's equity at this stage is influenced by financing cash flows. If the growing company is able to generate earnings and positive financing cash flow can be used to finance the large investments made by firm, investors will assess the company to have a good prospects in the future.

#### Effect of earnings and cash flow to market value of equity at mature Stage

At the mature stage, opportunities to grow will be lower and the value of assets owned by the company will increase. The assets owned will create revenues and expenses in accordance with the activities of the company. At this stage, income is positively related to the market value of equity. This means that the higher the profits of a company, the higher the market value of the company's equity. In the mature stage companies have increasingly well-established and even its market share is so large that the company is able to lead the market. Cash flow of investment in the mature stage is able to produce a positive result of the value of capital invested in the previous stage. At this mature stage, investors are more interested to see the condition of corporate earnings rather than investing cash flows due to investor maximum demand return on the capital they had invested earlier. Financing cash flows at the mature stage will be reduced compared to the previous stage. This is because the company's cash is more than enough to finance a variety of activities, so that the cash flow of external



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funding is no longer needed. Atmini (2002) showed that at the mature stage, financing cash flows is not associated with the market value of equity.

Results of Black (1998) indicates that there is a positive relationship between income with the market value of equity at the mature stage. Further, Black (1998) showed that at the mature stage, earnings have a greater influence than the cash flow to market value of equity. Atmini (2002) indicated that operating cash flow at the mature stage has no effect on the market value of equity. Therefore, the earnings is expected to be more influential than the cash flow to equity market value at this mature stage

### Effect of earnings and cash flow to market value of equity at decline phase

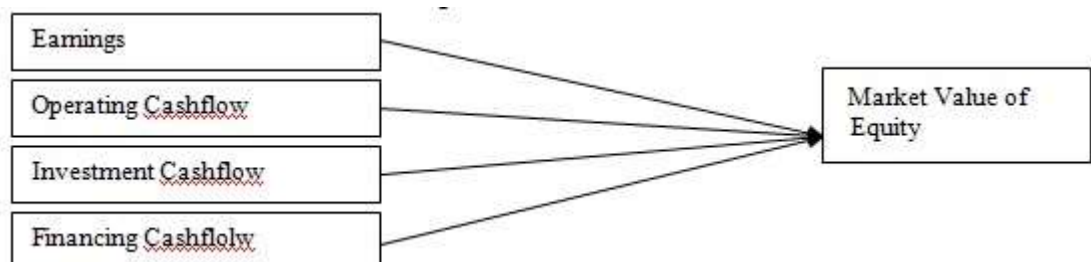
Company at the decline stage has limited growth opportunities as it faces increasingly intense competition and saturation of demand for the goods. Companies face many competitors, while the product demand from customers is very low. In addition the company also experienced managerial and technological obsolescence. This condition hardens the companies to generate earnings. Companies at the decline phase experiences the significant sales decreased resulting in losses and termination of dividend payments (Pashley and Philippatos, 1990). Aharony, Falk, & Judah (2006) showed that at the decline stage, the potential market of the product will also be declined due to tight competition, changes in customer tastes, and technology. In normal condition, the sales will decrease followed by a decrease in earnings. So, the earnings at the decline stage will decrease compared to the mature stage. Juniarti and Limanjaya (2005) states that the company's earnings at the decline stage will decrease, due to the limited market share in a company, then the sale will tend to decrease as well. If this decline in earnings continue appear from period to period, the company must perform revitalization, namely to make efforts in order to enter into the growth stage back. Therefore, the earnings is expected to positively affect the market value of equity if the company is able to perform updates to the products, assets and technology that have been worn. Results of Black (1998) showed that the ability of earnings to declare relevant information at the decline stage will be lower due to the bad condition of the company.

At this decline stage, operating cash flow provides information about the ability of the company to try to put cash on the company's internal needs. At this stage, the operating cash flows are positively related to the market value of equity. Sales of the company at this stage gradually decreased, resulting in the liquidity or the company's earnings will also declined. Therefore, the operating cash flow at this stage is expected to be greater than the earnings effect on the market value of equity.

Aharony research results, Falk, & Judah (2006) indicate that operating cash flows associated with the market value of equity at the decline stage, but the growth of operating cash flow at this stage will be lower than the mature stage. Black (1998) found that operating cash flows associated with the market value of equity at the stage of decline and the effect is greater than the earnings effect. This suggests that the decline stage, the operating cash flow of information is more relevant than the earnings information.

At this stage, the investment cash flow also provides information on the liquidation value of the company's assets and capital expenditures. Investment cash flow is positively related to the market value of equity. This means that the higher the cash flow of investment in a company, the higher the market value of the company's equity. The company at this stage tends to sell more of its unproductive assets, expecting the positive cash flow. This will make investors able to see that even though the company is in difficult conditions, but they are able to manage it. This will affect the market value of equity, so the expected market value value of the equity will increase. Therefore, the cash flow of investment at the decline stage will be greater than the earnings effect on the market value of equity. Aharony research results, Falk, & Judah (2006) showed that the investment cash flow has more value relevant than earning

*Based on the description of the theoretical framework, the scheme of the theoretical framework of this research can be seen in Figure 1.*





## Research Methodology

### Population and sample research

The population in this study is the manufacturing companies that continuously listed on the Indonesia Stock Exchange at least one year prior to the year of observation, namely the year of 2009 to 2013 and meet the criteria as a company operating at either growth, mature, or decline stage.

The company's criteria for each stage of the life cycle refers to the classification method used Anthony and Ramesh (1992). Classification of observations into the growth, mature, and decline stage is based on four variables, namely the percentage growth in sales (PP), the payment of dividends per year as a percentage of earnings (PD), as well as firm age (AGE). Table 2 shows the guidelines used in classifying each year observation in to growth, mature, or decline stage.

*Table 2 Indicator of the Company's Life Cycle*

Stages of Company's Life Cycle	Indicators of company's life cycle		
	Dividend Payment	Sales Growth	Ages
<i>Growth Stage</i>	Low	Low	Young
<i>Mature Stage</i>	Medium	Medium	Mature
<i>Decline Stage</i>	High	High	Old

Sumber: Anthony & Ramesh 1992:207

Based on population criteria, then the company that can be included to population in observational studies over the years 2007-2009 is amounted to 34 companies with 102 observation companies according to the stage of the life cycle of the company concerned. The details are as follows; 17 observations at the growth stage, 54 observations at the mature stage, and 31 observation at the decline stage. Since the number of elements of the population is not huge, then thus the sample selection is not used. The study was conducted by census method, the method of research in which all elements of the population are studied.

### Sources and data collection techniques

This research data is derived from secondary data. Secondary data is data obtained through existing sources (have now, 2006: 77). The data used is balanced panel of data of companies that have the same number of observations for each time / period. Data collection techniques used is documentation techniques. The data used are: (1) the audited annual financial statements of the company, the date of publication of the company's financial statements, and the company's stock price in 2007-2009 that was obtained through the Internet at [www.idx.co.id](http://www.idx.co.id); (3) the number of outstanding shares of each company between the years 2007- 2009 were obtained from the Indonesian Capital Market Directory; (4) Data about establishment of the companies obtained from Indonesian Capital Market Directory.

### Methods of analysis and design hypothesis testing

Because this study aims to examine which of the independent variables has greater influence on the dependent variable, then to test the hypothesis, multiple regression analysis method was used. Standardized multiple regression models are also called path analysis (path analysis) (Li, 1975: 101 in Arfan, 2008). Path analysis is an extension of regression analysis. This expansion lies in the completeness of causal investigation.

The standardized multiple regression equation model used in this study are as follows:

$$Y_G = \rho_{YX_1} X_1 + \rho_{YX_2} X_2 + \rho_{YX_3} X_3 + \rho_{YX_4} X_4 + \varepsilon_1$$

$$Y_M = \rho_{YX_1} X_1 + \rho_{YX_2} X_2 + \rho_{YX_3} X_3 + \rho_{YX_4} X_4 + \varepsilon_2$$

$$Y_D = \rho_{YX_1} X_1 + \rho_{YX_2} X_2 + \rho_{YX_3} X_3 + \rho_{YX_4} X_4 + \varepsilon_3$$

Keterangan:

$Y_G$  = Market value of equity at *growthstage*

$Y_M$  = Market value of equity at *mature stage*

$Y_D$  = Market value of equity at *decline stage*

$X_1$  = Earnings

$X_2$  = Operating cash flow

$X_3$  = Investment cash flow

$X_4$  = Financing cash flow

$\rho$  = *Path Coefficient*

$\varepsilon_1$  = *Error Term at Growth stage*





$\varepsilon_2$  = Error Term Mature stage

$\varepsilon_3$  = Error Term Decline stage

Once the variables examined in this study, further the test for each hypothesis is carried on. To determine the acceptance or rejection of the hypothesis, it is necessary to test it statistically. This study tested the hypothesis with standardized multiple regression in order to determine which one has greater influence, earnings or cash flow towards the market value of equity through the life cycle of the company, either at growth, mature and decline stages in companies listed on the Stock Exchange. These data are processed by a computer program Standard Package for Social Science (SPSS).

Before testing the hypothesis, the design hypothesis testing was prepared first. This study tested the hypothesis by using a standardized multiple regression. Because this study used census method, tests of significance is not carried on, either t-test for the partial effect or F-test for the simultaneous effect. Conclusions drawn directly from the path coefficient value of each variable and the coefficient of determination ( $R^2$ ).

## Results and Discussion

### Results and Discussion of Research Description Data

Descriptive statistics of variables at each step used in the study can be seen in Table 3, Table 4 and Table 5.

Table 3 shows the average of the variable with a population of 17 companies. The dependent variable of market value of the equity has an average value of Rp 1698.1765 per share. The independent variable in the form of earnings has an average value of Rp 282.1176 per share. Further, the operating cash flow that illustrates the cash inflows and outflows derived from the company's operations have an average value of Rp 116.647 per share. Investment cash flows that describe the incoming and outgoing cash flows derived from the investment activities of the company have an average value of Rp -209.1765 per share. Lastly, financing cash flows that describe the incoming and outgoing cash flows derived from financing activities the company shows an average value of USD 74.1765 per share.

Table 4 shows the average value of the variables from a population of 54 companies. The dependent variable of market value of the equity an average value of Rp 9497.8889 per share. The independent variable in the form of earnings has an average value of Rp 906.2037 per share. Further, the operating cash flow that illustrates the cash inflows and outflows are derived from the company's operations have an average value of Rp 1131.0926 per share. Investment cash flows that describe the incoming and outgoing cash flows derived from the investment activities of the company have an average value of Rp -181.7073 per share. Lastly, financing cash flows that describe the incoming and outgoing cash flows derived from financing activities the company has an average value of Rp 226.5370 per share.

Table 5 depicts the average value of the variables studied from a population of 31 companies. The dependent variable of market value of equity market shows an average value of Rp 1.7785,0645 per share. The independent variable in the form of earnings has an average value of Rp 2247.6465 per share. Further, the operating cash flow that illustrates the cash inflows and outflows that derived from the company's operations have an average value of Rp 3015.5484 per share. Investment cash flows that describe the incoming and outgoing cash flows derived from the investment activities of the company have an average value of Rp -862.9677 per share. Lastly, financing cash flows that describe the incoming and outgoing cash flows derived from financing activities the company has an average value of Rp -2,795.6774 per share.

**Table3 Descriptive Statistics tahap Growth**

Item	Mean	Std. Deviation	N
Market Value of Equity	1698.1765	1320.99462	17
Earnings	282.1176	290.01420	17
Operating Cash Flow	116.647	370.13713	17
Investment Cash Flow	-209.1765	314.81269	17
Financing Cash Flow	74.1765	586.92176	17

**Table 4** Descriptive Statistics tahap Mature

Item	Mean	Std. Deviation	N
Market Value of Equity	9497.8889	17605.23323	54
Earnings	906.2037	1710.08282	54
Operating Cash Flow	1131.0926	2261.19906	54
Investment Cash Flow	-181.7073	822.41803	54
Financing Cash Flow	226.5370	659.71651	54

**Table 5** Descriptive Statistics tahap Decline

	Mean	Std. Deviation	N
Market Value of Equity	17785.0645	32617.65700	31
Earnings	2247.6452	3837.51134	31
Operating Cash Flow	3015.5484	5908.16780	31
Investment Cash Flow	-862.9677	2560.40965	31
Financing Cash Flow	-2795.6774	12014.13530	31

### Result and Discussion of the Standardized Multiple Regression Test

The effects of each of independent variable on dependent variable are described in details in table 6, 7 and 8.

**Table 6** The Effect of Independent Variable on Dependent Variable Coefficients<sup>a</sup> at Growth Stage

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	465.675	395.832		1.176	.262
	X1	2.674	.891	.587	3.003	.011
	X2	.342	1.036	.096	.330	.747
	X3	-2.268	1.237	-.541	-1.833	.092
	X4	-.489	.720	-.217	-.679	.510



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**Table 7 The Effect of Independent Variable on Dependent Variable Coefficients<sup>a</sup> at Mature Stage**

Model	Standardized Coefficients	Standardized Coefficients		t	Sig.
		B	Std. Error		
(Constant)	9.784	2.977		1.688	.098
X1	.027	.06	.57	12.268	.000
X2	-.314	.35	-.7	-5.620	.000
X3	.380	.32	.8	1.661	.103
X4	-.02	.45	-.0	-.374	.710

**Table 4.6 The Effect of Independent Variable on Dependent Variable Coefficients<sup>a</sup> at Decline Stage**

Model	Unstandardized Coefficients	Standardized Coefficients		t	Sig.
		B	Std. Error		
(Constant)	1779.517	3361.064		.529	.601
X1	2.396	1.270	.282	7	0
X2	4.044	.976	.733	4.142	.000
X3	2.795	1.707	.219	1.637	.114
X4	-.299	.287	-.110	2	.307

From the statistical calculations shown from Table 4.4, 4.5, 4.6, so the following standardized multiple regression equation are derived

$$Y = 0,587X_1 + 0,096X_2 - 0,541X_3 - 0,217X_4 + \epsilon \dots\dots\dots(1)$$

$$Y = 1,557X_1 - 0,747X_2 + 0,088X_3 - 0,030X_4 + \epsilon \dots\dots\dots(2)$$

$$Y = 0,282X_1 + 0,733X_2 + 0,219X_3 - 0,110X_4 + \epsilon \dots\dots\dots(3).$$

Based on table 4.4, coefficient of determination of the effect of operating, investment and financing cash flow on market value of equity are 0.009216, 0.292681, 0.047089 respectively, while the earnings amounted to 0.344569. These results are not arrived as expected, the presence of cash flows in the manufacturing company listed in Indonesia Stock Exchange does not have greater influence than earnings to predict the market value of the equity required by investors and creditors. In other words, the operating cash flow results of this study are not consistent with the research conducted by Black (1998) and Aharony et al. (2006). Black (1988) indicated that operating cash flows associated with the market value of equity at the growth stage. Further, the results Aharony at al. (2006) showed that when the company moves from the start-up phase towards growth, cash flow from operating activities will be gradually positive. But the results of this study are consistent with research conducted by Juniarti and Limanjaya (2005) and Atmini (2002). Juniarti and Limanjaya (2005) showed that the operating cash flow at growth stage did not significantly affect the market value of equity. Atmini (2002) indicated that operating cash flow at the growth stage did not affect the market value of equity. Regarding the investment cash flow, this study are also not consistent with research conducted by Juniarti and Limanjaya (2005), the research results shows that those company at the growth stage, investment cash flow





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significantly affect the market value of equity due to the very large investment expenditures carried on to develop and maintain market share as well as to master the technology. But the results of this study support the research conducted by Atmini (2002) and Black (1998) in which Atmini (2002) indicated that at the growth stage, the investment cash flow is not related to the market value of equity, the results of Black (1998) find evidence that there are significant cash flows of investment at growth stage, but more earnings provide more relevant information than cash flow.

Financing cash flow in this study also gives the inconsistent result with research conducted by Juniarti and Limanjaya (2005), and Atmini (2002). Juniarti and Limanjaya (2005) argued that there is a significant influence of the financing cash flows on the market value of equity at the growth stage. At this stage the greater funds is needed to finance sales growth and achieve higher profitability from the previous stage. Atmini (2002) revealed that the market value of the company's equity at the growth stage is influenced by financing cash flows. If the growing company able to generate earnings and positive financing cash flow which can be used to finance the large investments made by the company, then the investors will assess the company to have a good prospect for the future. In contrast to the results of Limanjaya and Juniarti (2005) and Atmini (2002), Black (1998) support the results of this study which indicates that at growth stage, earnings has a more relevant value of information and financing cash flow is not associated with the market value of equity.

Furthermore, considering the earnings, the results of this study are consistent with previous research. Atmini (2002) showed that the market value of the company's equity at the growth stage is influenced by financing cash flow. Earnings are positively associated with the market value of equity. The results showed that in assessing the performance and future prospects of the company at growth stage, investors are more interesting in information about earnings. If the growing company is able to generate positive earnings which can be used to finance investment, the investor considers that the company has good prospects for performance in the future. Similar to the results of Black (1998) which shows that at the growth stage, earnings has a more relevant value of information for investors and creditors.

In the design of hypothesis testing, a requirement to state that the operating cash flow ( $X_2$ ), investment cash flows ( $X_3$ ) and financing cash flow ( $X_4$ ) is more influential than the profit ( $X_1$ ) on the market value of equity ( $Y$ ) if  $(\rho_{YX_2})^2 > (\rho_{YX_1})^2$ ,  $(\rho_{YX_3})^2 > (\rho_{YX_1})^2$  dan  $(\rho_{YX_4})^2 > (\rho_{YX_1})^2$ . Referring to the conditions, the results of this study accept  $H_{01}$  or reject  $H_{a1}$ . Thus it can be said that at the growth stage, cash flow does not have greater influence than the earnings on the market value of equity.

Based on Table 4.5, the coefficient determination of earnings that influence the market value of equity is 2.424249, while operating cash flow, investment cash flow, and financing cash flow shows 0.558009, 0.007744, 0.0009 respectively. Regarding earnings, the results of this study are consistent with the previous research, the results of Black (1998). Research conducted by Black (1998) indicated that there is a positive relationship between earnings and market value of equity at the mature stage.

Furthermore, regarding the operating cash flow, the results of this study are consistent with previous studies conducted by Atmini (2002) which indicated that the operating cash flow at the mature stage did not affect the market value of equity. However, the results of Limanjaya and Juniarti (2005), showed that at the mature stage, the operating cash flow significantly affect the market value of equity.

Regarding the investment cash flow, results of this study are not consistent with previous studies conducted by Atmini (2002) which showed that at the mature stage, the market value of equity is affected by the investment cash flows. Investment cash flow is negatively associated with the market value of the equity. Similar to the results of Limanjaya and Juniarti (2005) which shows that those companies at the mature stage, their investment cash flows are significantly affect the market value of equity. Aharony et al. (2006) also showed that there is a correlation of investment cash flow at the mature stage.

Regarding financing cash flows, results of this study are consistent with previous studies conducted by Atmini (2002) which showed that the mature stage, the market value of equity is not affected by financing cash flows. But Aharony et al. (2006) showed that there is a high correlation from financing activities at the mature stage due to the stable condition of the company with high sales growth.

In the design of hypothesis testing, a requirement to state that the earnings ( $X_1$ ) has a greater influence than the operating cash flow ( $X_2$ ), investment cash flows ( $X_3$ ) and financing cash flow ( $X_4$ ) on the market value of equity ( $Y$ ) if  $(\rho_{YX_1})^2 > (\rho_{YX_2})^2$ ,  $(\rho_{YX_1})^2 > (\rho_{YX_3})^2$  dan  $(\rho_{YX_1})^2 > (\rho_{YX_4})^2$ . Referring to the conditions, the results of this study reject  $H_{02}$  or accept  $H_{a2}$ . Thus it can be said that at the growth stage, cash flow does not have greater influence than the earnings on the market value of equity.

Based on Table 4.6, the coefficient determination of the influence of operating cash flow, investment cash flow and financing cash flow on the market value of equity are 0.537289, 0.047961, 0.079524, respectively. The



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results of this study are consistent with previous studies, in which results Black (1998) indicated that operating cash flows is associated with the market value of equity at the decline stage, the evidence suggested that the measurement of cash flow provide more relevant information.

The result on investment cash flow is not as expected. The existence of the investment cash flow in manufacturing companies listed in Indonesia Stock Exchange does not have a greater influence than earnings to predict the market value of the equity required by investors and creditors. In other words, the results of investment cash flow in this study are not consistent with research conducted by Black (1998), which indicated that there is a high correlation of cash flows of investment at the decline stage, although the investment cash flow at the decline stage are lower than the mature stag. But the results of this study are consistent with research conducted Aharony et al. (2006) which stated that the amount of investment cash flows at the decline stage are lower than that of at the mature stage, because the company has limited growth opportunities and has sold all the unproductive assets.

The result on financing cash flow is not as expected. The existence of the financing cash flow in manufacturing companies listed in Indonesia Stock Exchange does not have a greater influence than earnings to predict the market value of the equity required by investors and creditors. In other words, the results of financing cash flow in this study are not consistent with research conducted by Black (1998), which indicated that at the decline stage, financing cash flows is associated with market value of equity. But the results of this study are consistent with research conducted Aharony et al. (2006) which stated that financing cash flows at the decline stage are lower than in that of at the mature stage because the company has limited growth opportunities so that the borrowing and disbursement of funds is restricted.

Regarding the earnings, the results of this study are not consistent with previous studies conducted by Aharony et al. (2006) which showed that atthe decline stage, the potential market of the product will be declined due to tight competition, changes in customer tastes and technology. Normally, the turnover will decline followed by a decline in earnings. So, the earnings at the decline stage will decrease compared to that of at the mature stage.

In the design of hypothesis testing, a requirement to state that the operating cash flow ( $X_2$ ), investment cash flows ( $X_3$ ) and financing cash flow ( $X_4$ ) on the market value of equity ( $Y$ ) if  $(\rho_{YX_2})^2 > (\rho_{YX_1})^2$ ,  $(\rho_{YX_3})^2 > (\rho_{YX_1})^2$  dan  $(\rho_{YX_4})^2 > (\rho_{YX_1})^2$ . Referring to the conditions, the results of this study accept  $H_{03}$  or reject  $H_{a3}$ . Thus it can be said that at the decline stage, cash flow does not have greater influence than the earnings on the market value of equity.

### 4.3 Results and Discussion 4.3 Coefficient of Determination

The coefficient of determination is formally used to measure the percentage of variation of the dependent variable that can be explained by variations of the independent variables. Coefficient of determination shows the effects of independent variables on the dependent variable included in the analyzed model. The coefficient of determination can be seen from the value of R square. Table 4.7, 4.8, and 4.9 shows the value of R square in this study;

**Table 4.7 The Value of Coefficient of Determination Summary<sup>b</sup> Model at Growth Stage**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.779 <sup>a</sup>	.607	.476	956.12658

- Predictors : (Constant), Earnings, Operating Cash Flow, Investment Cash Flow and Financing Cash Flow,
- Dependent Variabel : Market Value of Equity

**Table 4.8 The Value of Coefficient of Determination Summary<sup>b</sup> Model at Mature Stage**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 <sup>a</sup>	.877	.866	6434.37970

- Predictors : (Constant), Earnings, Operating Cash Flow, Investment Cash Flow and Financing Cash Flow,
- Dependent Variabel : Market Value of Equity



*Table 4.9 The Value of Coefficient of Determination Summary<sup>b</sup> Model at Decline Stage*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.891 <sup>a</sup>		.763	15892.70555

a. Predictors : (Constant), Earnings, Operating Cash Flow, Investment Cash Flow and Financing Cash Flow,

b. Dependent Variabel : Market Value of Equity

Based on Table 4.7 it can be seen that the value of R Square amounted to 0.607 or 60.7%. Thus it can be said that 60.7% variations of market value of equity can be explained by the three independent variables examined in this study, the operating cash flow, investment cash flow and financing cash flows, while the remaining 39.3% is explained by other variables which are not mentioned in this research model.

Based on Table 4.8 it can be seen that the value of R Square amounted to 0.877 or 87.7%. Thus it can be said that 87.7% variations of market value of equity can be explained by the three independent variables examined in this study, the operating cash flow, investment cash flow and financing cash flows, while the remaining 12.3% is explained by other variables which are not mentioned in this research model.

Based on Table 4.9 it can be seen that the value of R Square amounted to 0.794 or 79.4%. Thus it can be said that 79.4% variations of market value of equity can be explained by the three independent variables examined in this study, the operating cash flow, investment cash flow and financing cash flows, while the remaining 20.6% is explained by other variables which are not mentioned in this research model.

Based on these results, the investors and creditors should be able to notice that the earnings, operating cash flow, investment cash flow, and financing cash flows can be used as a prediction for determining the market value of the equity of a company.

## Conclusion

Based on discussion of the research that has been expanded above, it can be concluded that:

1. Operating cash flow, investment cash flow and financing cash flows does not have greater influence than the earnings on the market value of equity for those companies at the growth stage.
2. Earnings have greater influence than the operating cash flow, investment cash flow and finance cash flow on the market value of equity for those companies at the mature stage
3. Operating cash flow, investment cash flow and financing cash flows does not have greater influence than the earnings on the market value of equity for those companies at the decline stage.

## Limitations

Researchers are fully aware that there are many limitations of this study, to name a few, there are:

1. This study only examine the manufacturing companies listed in the Indonesian Stock Exchange, thus the results cannot be generalized to other types of companies listed on the Indonesian Stock Exchange.
2. The selection of factors that are expected to affect the market value of equity are restricted to three factors (earnings, operating cash flow, investment cash flow, and financing cash flows). This allows the ignorance of other factors that may have a bigger impact on the market value of the equity.

## References

- [1] Aharony, J., H. Falk., N. Yehuda. 2006. *Corporate Life Cycle and The Relative Value- Relevance of Cash Flow versus Accrual Financial Information*. Journal of Accounting and Finance. 3: 1-26.
- [2] Ajie, Veno. 2003. *Kandungan Informasi Pelaporan Kerugian dan Hubungannya dengan Pergerakan Return Saham (Studi Empiris pada Bursa Efek Jakarta)*. Jurnal Riset Akuntansi Indonesia. Vol.6, No.2: 169-185.
- [3] Almilia, S., L., dan Meliza Silvy. 2006. *Analisis Kebijakan Dividen dan Kebijakan Leverage Terhadap Prediksi Kepemilikan Manajerial Dengan Teknik Analisis Multinomial Logit*. Jurnal Akuntansi dan Bisnis. Vol.6, No.1: 853-1415.
- [4] Anthony, J. H., dan K. Ramesh. 1992. *Association Between Accounting Performance Measures & Stock Prices: A Test of The Life Cycle Hypothesis*. Journal of Accounting & Economics. 15: 203-227.



## INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

- [5] Arfan, Muhammad. 2006. *Pengaruh Arus Kas Bebas, Set Kesempatan Investasi, dan Financial Leverage terhadap Earning Management: Studi pada Perusahaan Manufaktur di Bursa Efek Jakarta*. Disertasi Tidak Diterbitkan. Bandung: Program Pascasarjana Universitas Padjajaran
- [6] Atmini, Siti. 2002. *Asosiasi Siklus Hidup Perusahaan dengan Incremental Value-Relevance Informasi Laba & Arus Kas*. Jurnal Riset Akuntansi Indonesia. Vol. 5, No. 3: 257-276.
- [7] Baridwan, Zaki. 1997. *Analisis Nilai Tambah Informasi Laporan Arus Kas*. Jurnal Ekonomi dan Bisnis Indonesia. Vol.12, No.2: 1-14
- [8] Bebchuk, L., and Y. Grinstein. 2005. *Firm Expansion and CEO Pay*. Working Paper Cornell University and Harvard University.
- [9] Belkaoui dan Ahmed, R. 2000. *Teori Akuntansi*. Buku 1. Edisi Pertama. Jakarta: Salemba Empat.
- [10] Beza, B dan Naim, A. 1998. *The Information Content of Annual Earning Announcements a Trading Volume Approach*. Jurnal Riset Akuntansi Indonesia. 1: 163-173
- [11] Black, E. L. 1998. *Which is More Value Relevant: Earnings or Cash Flows? A Life Cycle Examination*. Journal of Financial Statements Analysis. 4: 40-57.
- [12] Burgstahler, D. C., & Dichev, I. D. 1997. *Earnings, Adaptation, and Equity Value*. Journal of Accounting Review. 72: 187-215.
- [13] Crutclley, C. dan Hansen. 1989. *A Test of The Agency Theory of Managerial Ownership, Corporate Leverage and Corporate Dividends*. Financial Management. 18: 34-36
- [14] Dontoh, A. dan Ronen. 1993. *Information Content of Accounting Announcement*. Accounting Review. 68: 857-869.
- [15] Financial Accounting Standard Board. 1978. *Objective of Financial Reporting by Bussiness Enterprises*. Concept Statement Number 1. Stamford, CT.
- [16] Ghozali, Imam. 2006. *Aplikasi Analisis Multivariate dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- [17] Gujarati, D.N. 2003. *Basic Econometrics*. New York: Mc Graw-Hill Company.
- [18] Gumanty, T, A dan Novi Puspitasari. 2008. *Siklus Hidup Perusahaan dan Kaitannya dengan Investment Opportunity Set, Risiko, dan Kinerja Finansial*. Jurnal Akuntansi dan Bisnis. Vol.8, No.2, 139-150
- [19] Hayn, C. 1995. *The Information Content of Losses*. Journal of Accounting and Economics. 20: 125-153
- [20] Indrianto, Nur dan Bambang Supomo. 2002. *Metodelogi penelitian Bisnis untuk Akuntansi dan Manajemen. Edisi Pertama*. Yogyakarta: BPFE.
- [21] Ikatan Akuntan Indonesia. 2009. *Standar Akuntansi Keuangan*. Jakarta: Salemba Empat.
- [22] Julianto dan Hotmian. 1993. *PowerPC: Prosesor Tandingan Pentium*. Info Komputer. Vol.7. No.11: 61-63
- [23] Juniarti dan Rini Limanjaya. 2005. *Mana yang Lebih Memiliki Value-Relevance: Net Income atau Cash Flows (Studi Terhadap Siklus Hidup Organisasi)*. Jurnal Akuntansi dan Keuangan. Vol.7, No.1: 22-42.
- [24] Kieso, Weygandt, dan P. D. Kimmel. 2007. *Accounting Principles*. Buku 1. Edisi Ketujuh. Jakarta: Salemba Empat.
- [25] Kieso, Weygandt, dan P. D. Kimmel. 2008. *Accounting Principles*. Buku 2. Edisi Ketujuh. Jakarta: Salemba Empat.
- [26] Kieso, Weygandt, dan Warfield. 2008. *Intermediet Accounting*. Buku 1. Edisi Keduabelas. Jakarta: Erlangga.
- [27] Machfoedz, M. 1994. *Financial Ratio Analysis and The Prediction of Earnings Changes in Indonesia*. Journal of Financial and Accounting. 7: 144- 137
- [28] Mueller, D.C. 1972. *A Life Cycle Theory of Firm*. Journal of Industrial Economics. 20: 199-219
- [29] Munte, Mariati, HotmaMei. 2009. *Pengaruh Faktor Fundamental Terhadap Return Saham pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia*. Tesis. Program Pascasarjana Universitas Sumatera Utara.
- [30] National Association of Accountants. 1986. *Statement of Management Accounting*. Statement No. 4D, Measuring Entity Performance. Montvale. New Jersey: NAA
- [31] Pradhono dan Yulius Jogi Christiawan. 2004. *Pengaruh Economic Value Added, Residual Income, Earnings dan Arus Kas Operasi Terhadap Return yang Diterima Oleh Pemegang Saham*. Jurnal Akuntansi dan Keuangan. Vol.6, No.2, 140-66
- [32] Sartono, Agus. 2001. *Manajemen Keuangan*. Teori dan Aplikasi. Edisi Keempat. Yogyakarta: BPFE.
- [33] Scott, Petty, Martin, dan A. J. Keown. 2008. *Manajemen Keuangan*. Buku1. Edisi Kesepuluh. Jakarta: PT. Indeks.



## INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

- [34] Sekaran, Uma. 2006. *Metodologi Penelitian untuk Bisnis*. Buku 2. Edisi Keempat. Jakarta: Salemba Empat.
- [35] Smith K.G., T. R. Mitchell., dan C. E. Summer. 1985. *Top Level Management Priorities in Different Stages of the Organizational Life Cycle*. Journal of Academy Management.28(4) : 799-820
- [36] Stice, J. D., E.K. Stice., dan K.F. Skousen. 2009. *Akuntansi Keuangan*. Buku 1. Edisi Keenam belas. Jakarta: Salemba Empat.
- [37] Subramanyam., Wild., dan Halsey. 2005. *Analisis Laporan Keuangan*. Buku 1. Edisi Kedelapan. Jakarta: Salemba Empat.
- [38] Tim Penelitian dan Pengembangan Wahana Komputeer. 2005. *Pengembangan Analisis Multivariate dengan SPSS 12*. Edisi Pertama. Jakarta: Salemba Infotek.
- [39] Triyono dan Jogiyanto Hartono. 2000. *Hubungan Kandungan Informasi Arus Kas, Komponen Arus Kas dan Laba Akuntansi dengan Harga atau Return Saham*. Jurnal Riset Akuntansi Indonesia. Vol.3, No.1, 54-68
- [40] Wahidahwati. 2002. *Kepemilikan Manajerial dan Kepemilikan Institusional pada Kebijakan Hutang Perusahaan. Sebuah Perspektif Theory Agency*. Jurnal Riset Akuntansi Indonesia. Vol. 4, No.1,
- [41] Warrent, Reeve, Fess,dan R. C. Niswonger. 2008. *Prinsip-prinsip Akuntansi*. Edisi Kesembilan belas. Jakarta: Erlangga.
- [42] Weston, J. W & E. F. Brigham. 1981. *Managerial Finance*. (7th ed.). The Dryden Press.