THE INFLUENCE OF PROFITABILITY, CASH FLOW, AND STOCK RETURNS ON EQUITY MARKET VALUES BASED ON COMPANY LIFE CYCLE

(Study of Manufacturing Companies Listed in Indonesian stock exchange)

Nurjannah¹, Darwanis², Mulia Saputra³
¹²³ Department of Accounting, Faculty of Economics and Business, Syiah Kuala University, Indonesia

Abstract

The purpose of this study is to examine the effect of profitability, cash flow, and stock returns on equity market values based on company life cycle of manufacturing companies listed in Indonesian Stock Exchange over the period of 2012-2014. The data used in this study were obtained from audited financial reports which published by the capital market reference center on the Indonesian Stock Exchange. The type of this research is the hypothesis testing which is applied the purposive sampling method and there are 204 samples of the company as the research object. The results of the study indicate that simultaneous profitability variables, cash flow, and stock returns have a positive effect on equity market values regarding the company's life cycle. While, in the partial test the results of the study point that (1) Profitability at the stage of growth, mature and decline have a positive effect on equity market value. (2) The operating cash flow at the stage of growth, mature and decline have a positive effect on equity market value. (3) Investment cash flow at the stage of growth, mature and decline have a positive effect on equity market value. (4) Financing cash flow at the stage of growth, mature have a positive effect on equity market value while the decline stage has a negative effect on equity market value. (5) The stock returns at the stage of growth and maturity have a positive effect on equity market value while at the decline stage has a negative effect on equity market value.

Keywords: Equity Market Values; Company Life Cycle, Profitability; Cash Flow; And Stock Returns.

1. Introduction

The market value of equity is the value of capital owned by the company based on the assessment given by market participants (Anggraeni, 2007). Equity market value describes the size of a company. The greater the value of the equity market will indicate the greater the size of the company in the eyes of market participants. Investors and creditors tend to be interested in investing and providing loans to companies if the ratio of market value to corporate equity is high, meaning that the company is able to pay dividends and debts.

The value of the equity market is determined by the average market value of the company's equity by using the closing price of the stock, the number of shares of the company outstanding and the date of publication of the company's financial statements (Atmini: 2002). The market value of equity as it is stated by Chung and Charoenwong (1991) the value of equity markets is equal to the value of the company consisting of an asset in place and growth opportunities.

Table 1.1 presents the equity market value of several manufacturing companies listed on the Indonesian Stock Exchange in the period of 2014 which comes from the average closing price of the stock for 7 days, the deadline for submitting annual financial statements on December 31.
Table 1.1
Market Value of Company Equity

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Company Name</th>
<th>Equity Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ALKA</td>
<td>PT. Alaska Industindo Tbk</td>
<td>180</td>
</tr>
<tr>
<td>2</td>
<td>ALMI</td>
<td>PT. Aluminum Light Metal Industry</td>
<td>260</td>
</tr>
<tr>
<td>3</td>
<td>BTON</td>
<td>PT. Beton Jaya Manunggal Tbk</td>
<td>134,285</td>
</tr>
<tr>
<td>4</td>
<td>GDST</td>
<td>PT. Gunawan Dianjaya Stell Tbk</td>
<td>103,142</td>
</tr>
<tr>
<td>5</td>
<td>INAI</td>
<td>PT. Indah Aluminium industry Tbk</td>
<td>173,142</td>
</tr>
<tr>
<td>6</td>
<td>JPRS</td>
<td>PT. Jaya Pari Steel Tbk</td>
<td>243</td>
</tr>
<tr>
<td>7</td>
<td>LION</td>
<td>PT. Lion Metal Works Tbk</td>
<td>914,285</td>
</tr>
<tr>
<td>8</td>
<td>LMSH</td>
<td>PT. Lionmesh Primo Tbk</td>
<td>645</td>
</tr>
<tr>
<td>9</td>
<td>MYRK</td>
<td>PT. Hanson International Tbk</td>
<td>367,142</td>
</tr>
<tr>
<td>10</td>
<td>PICO</td>
<td>PT. Pelangi Indah Canindo Tbk</td>
<td>160</td>
</tr>
</tbody>
</table>

Source: Data Processed 2017

Table 1.1 presents several publicly listed companies which have the equity market value is still below the industry average, which amounts to Rp317,999. This reflects the low ratio of equity market value of these companies. If investors and creditors are unable to see the condition of the company as reflected in the equity market value, they will most likely suffer losses and they do not get maximum returns as a result of investments.

Furthermore important profitability in an effort to maintain the survival of the company in the long run, because profitability states whether the company has good prospects in the future, which the higher the level of profitability of a company, the survival of the company will be more secure (Sri Hermuningsih, 2013).

The profitability ratio consists of profit margin, basic earnings power, return on assets, and return on equity, Brigham and Houston (2001). Return on equity (ROE) is a ratio that prepared the company's ability to generate net income for the return of shareholders' equity. ROE is a financial ratio used to measure profitability from equity. The greater the ROE results, the better the company's performance.

The purpose of the cash flow statement is to report the inflows and outflows of the company in the current period. Cash flow statements can help financial managers to assess a company's ability to obtain future net cash inflows from operations to pay off debt, interest, and dividends, and it also can help managers predict the company's needs for external funds and the impact of investment and financing of cash and non-cash transactions.

Habbe and Hartono (2001) argue that operating cash flows in companies in the start-up stage are still negative because companies are still looking for market share and they have not been able to generate cash inflows from operating activities in amounts greater than the cash outflows. However, changes in the star up stage have greater prospects and opportunities to grow and develop in the future so that the company's equity market value is expected to be high. Meanwhile, at the growth stage, the company has succeeded in gaining market share and is able to generate positive cash flow. Operating cash flows are expected to increase when the company is in the mature stage because the company's relative market share is very high and it will have a positive or negative effect on the equity market value.

2. Literature Review and Hypothesis

Market Value of Equity

The market value of equity is the value of capital owned by the company based on the assessment given by market participants (Anggraeni, 2007). The market value of equity describes the size of a company. The greater the value of the equity market will indicate the greater the size of the company in the eyes of market participants.

Company life cycle

The company's life cycle has four stages, namely start-up, growth, maturity, declined. Start-up is the stage where the company just started its business with the characteristics that the company has not been able to generate positive profits because sales volumes are still low, suffer losses due to start-up costs, and the level of company liquidity is still low. At the stage of growth, the company has experienced an increase in sales, profits, liquidity and an increase in the equity to
debt ratio and has paid dividends. While, in the maturity stage, the company experiences a peak sales level but experiences a decline in profits due to increasingly fierce competition, high liquidity, and the company pays a high dividend. Then the decline stage of the company experienced a significant decrease in sales, while the expenditure was very much for the product line so that dividend payments were stopped (Black, 1998). Therefore, the company's life cycle can be seen through the growth of sales and capital investment from the company Anthony et al (2006).

**Profitability**

Profitability is the company's ability to generate profits in relation to sales (Lestari and Paryanti (2016). The profitability of a company will influence investors' policies on investments made (Pasaribu, Topowijaya, and Sulasmiyati (2016). According to Sartono (2001: 113) "profitability ratios can measure how much the company's ability to make a profit, both in relation to sales, assets, and profits for own capital." While Jusuf (2002) states “that profitability ratio are ratios that indicate the company's ability to make profits”.

**Cash Flow**

Cash flows are cash inflows and cash outflows or cash equivalents (PSAK No.2, 2004). Cash inflows are cash inflows, which are sources of cash obtained, while cash outflows are cash requirements for payments (Martono and Harjito, 2012).

The cash flow report consists of three activities, namely (1) operating activities, where operating activities are the company's main source of income and finance all costs incurred in all company activities such as paying off loans, maintaining the company's operating capability and making new investments without relying on financing sources from outside the company.

**Stock Returns**

Hartono (2009:199) states "that stock returns are income earned during the investment period per number of funds invested in the form of shares”. According to Hartono (2009: 199), there are two types of stock returns obtained by investors for their investments, namely realized a return and expected a return. This return realization is important in measuring company performance and as a basis for determining future returns and risks. While the expected return is a return that is expected to occur in the future and is still uncertain.

**The influence of profitability on the market value of equity**

Profitability is the most important factor for creditors and investors because this profitability is the main guarantee for creditors, no matter how large the liquidity or solvency of a company, if the company is not able to use its capital properly and efficiently or is unable to obtain large profits, the company, in the end, it will experience financial difficulties (liquidity) in returning the debt, (Santoso: 493).

Habbe and Hartono (2001), at the start-up stage companies, are still looking for market share and still have negative profits. The company has not been able to provide dividend distribution. But the company has the opportunity to grow and develop and the prospects are very large to generate positive profits in the future so that the expected market value of equity is high. It is expected that at this stage profit is expected to affect the equity market value.

Habbe dan Hartono (2001), also stated that at the stage of growth the company already had market share and increased income, due to increased sales, profits, liquidity, and an increase in the equity to debt ratio, and already able to pay dividends. The company is expected to be able to generate positive profits. Therefore, profits are expected to affect the equity market value.

At the stage of corporate maturity, the more mature and generate positive profits and are expected to influence the value of the equity market. While at the stage of decline the company's position is not attractive anymore, competition is getting tougher, and the potential market share is getting narrower so that it affects the company in generating profits and the company reports negative earnings. A negative number is estimated that the company is in a bad condition. Thus the market value will decrease so that profitability is expected to affect the equity market.

**The influence of investment cash flows on the market value of equity**

When companies are at the stage of start-up and growth companies make huge cash outlays to develop and maintain market share and have mastered the technology. At the mature stage, the company is still making investment expenditures, especially for business expansion. In these three stages, AKI is expected to be negative, this indicates that the company still has investment opportunities, has a chance to grow, and has a bigger prospect in the future, and it is expected that the equity market value is high.
While, when the company is in the decline stage will face a difficult situation, where investment opportunities are very limited. In dealing with this situation, companies sell more assets, especially unproductive assets, so that AKI is expected to be positive.

**The influence of financing cash flows on the market value of equity**

When the company is at the start-up stage, to start a business, the company needs large funds in terms of developing market share and mastering technology and financing investments in developing opportunities. At the stage of growth, companies still need a lot of cash, dividend payments are still low because the company still needs funds for financing needs.

At the stage of decline, companies have limited market opportunities. Investors and creditors consider the company has experienced a decline and most likely will experience failure so that the disbursement of funds must be limited. As a result, the financing cash flow is negative so that the equity of the company has a low market value. In the decline stage, the PPA is expected to influence the value of the equity market. Black (1998) found evidence that PPAs are positively related to equity market values at the start-up, growth, and decline stages but are negatively related to equity market values at the mature stage.

**The influence of stock returns on the market value of equity**

Returns are benefits enjoyed by investors for an investment made, Adiliawan (2010). The rate of return of shares depends on the company's ability to generate profits in each company's life cycle. Because each stage in the life cycle of a company will get a difference both in generating profits and cash flow. Returns are the expectations of investors in the future. Without a good return, investors will not want to invest in a company. The higher the rate of return the more influence the market value.

**Research Method**

**Research Design**

This research is the hypothesis testing model. The data used are secondary data. The unit of analysis in this study is a manufacturing company listed on the Indonesian Stock Exchange for the period 2012-2014.

The time horizon used is pooling data/panel data is a combination of cross-sectional data and time series data, where this study takes samples at several companies and several different times.

**Research Population and Samples**

The population in this study is all manufacturing companies listed on the Indonesian Stock Exchange over the period 2012-2014 which amounted to 126 companies. The selection of this research sample is based on purposive sampling.

Regarding the sampling criteria, a sample of 68 companies was obtained with 204 company observations which according to the stage of the company's life cycle. The details are 51 observations that are at the stage of growth, 106 observations that are in the mature stage, and 47 observations that are at the stage of decline.

Company year observation is classified into growth, mature, and decline stages are carried out based on four classification variables, namely percentage of profit (PD), and company age (AGE), sales growth and capital expenditure are components for company evolution (Anthony and Ramesh, 1992).

\[
PP_t = \left[ (Pen_j - Pen_{j-1}) / Pen_{j-1} \right] \times 100 \quad (1)
\]

\[
Cen_t = \left( Ce_t / NILAI_t \right) \times 100 \quad (2)
\]

\[
PD_t = \left( DIV_t / LSD_t \right) \times 100 \quad (3)
\]

\[
AGE = TB - TFORM \quad (4)
\]

**Description:**

- \(PP_t\) = net sales in year \(t\)
- \(Cen_t\) = capital expenditure in year \(t\)
- \(DIV_t\) = dividend in year \(t\)
- \(LSD_t\) = earning before tax, extraordinary event, and discontinued operation in year \(t\)
- \(TB\) = current year
- \(T form\) = year of company establishment
Analysis Method
The data analysis method used in this study is multiple linear regression which purposes to test and analyze the effect of profitability, cash flow and the return of shares on the market value of equity. Data is processed by program statistical package for social science (SPSS). The multiple linear regression models in this study are as follows:

\[ NPE_{it} = \alpha + \beta_1\text{Prof}_{it} + \beta_2\text{AKO}_{it} + \beta_3\text{AKI}_{it} + \beta_4\text{AKP}_{it} + \beta_5R_{it} + \epsilon \]

Description:
- \( NPE_{it} \) = the company's equity market value i in year t
- \( \alpha \) = Constant
- \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \) = regression coefficient
- \( \text{Prof}_{it} \) = company i profitability ratio on year t
- \( \text{AKO}_{it} \) = company i operating cash flow on year t
- \( \text{AKP}_{it} \) = company i financing cash flow on year t
- \( \text{AKI}_{it} \) = company i investing cash flow on year t
- \( R_{it} \) = company i stock return on year t
- \( \epsilon \) = Error Term

3. Result and Discussion
3.1 Descriptive Statistics
Descriptive statistics provide an overview of the characteristics of the observed research variables. Regarding the results of research on the stages of growth of manufacturing companies listed on the Indonesian Stock Exchange in 2012-2014 with a population of 51 companies. Dependent variable equity market value has an average value of 1279.25 means that the average equity market value held is Rp1279.25 per share. The independent variable in the form of profitability ratio has an average value of -0.07, which means that the average profitability ratio owned is IDR -0.07 per share. Furthermore, operating cash flows that describe the cash inflows and outflows originating from the company's operations have an average value of 28.82, meaning that the average operating cash flow owned is Rp. 28.82 per share. Investment cash flows that describe cash inflows and outflows originating from investment activities of the company have an average value of 8.83, meaning that the average investment cash flow owned is Rp. 8.83 per share. Finally, financing cash flows that describe cash inflows and outflows originating from corporate financing activities have an average value of -129.99, meaning that the average investment cash flow held is IDR -129.99 per share.

However, according to the results of research at the mature stage in manufacturing companies listed on the Indonesia Stock Exchange in 2012-2014 with a population of 106 companies. Dependent variable equity market value has an average value of 3095.08, which means that the average equity market value held is Rp. 3095.08 per share. The independent variable in the form of profitability ratio has an average value of 0.15, which means that the average profit owned is Rp. 0.15 per share. Furthermore, operating cash flows that describe the cash inflows and outflows originating from the company's operations have an average value of 673.27, meaning that the average operating cash flow held is Rp673.27 per share. Investment cash flow that describes cash inflows and outflows originating from the investment activities of the company has an average value of 253.43, meaning that the average investment cash flow held is IDR 253.43 per share. Finally, financing cash flows that describe cash inflows and outflows originating from corporate financing activities have an average value of -557.25, meaning that the average investment cash flow held is IDR -557.25 per share.

While on the behalf of the research result at the decline stage in manufacturing companies listed on the Indonesia Stock Exchange in 2012-2014 with a population of 46 companies. Dependent variable equity market value has an average value of 2771.84, which means that the average equity market value held is Rp2771.84 per share. The independent variable in the form of profitability ratio has an average value of 0.21, which means that the average profitability that is owned is Rp0.21 per share. Furthermore, operating cash flows that describe the cash inflows and outflows originating from the company's operations have an average value of 82.58, which means that the average operating cash flow held is Rp 82.58 per share. Investment cash flow that describes cash inflows and outflows originating from investment activities of the company has an average value of 120.11, meaning that the average investment cash flow owned is Rp. 120.11 per share. Finally, financing cash flows that describe cash inflows and outflows originating from corporate financing activities have an average value of -144.67, which means that the average investment cash flow held is Rp144.67 per share.

Volume 12, Issue 1 available at www.scitecresearch.com/journals/index.php/jrbem 2318
3.2. Discussion

3.2.1. Influence of profitability, cash flow, and stock returns on market values of equity at the stage of growth, mature, and decline

Regarding the test results of t statistics of manufacturing companies at the stage of growth, mature dan decline:

1) Profitability (X1) the stage of growth has a significant value of 0.843, at the mature stage 0.301, and at the decline stage, 0.647 is greater than 0.05 (5%). This shows that profitability at the stage of growth, mature, and decline does not affect the equity market value. Thus the first hypothesis (h1) and the second hypothesis (h2) which states that profitability at the stage of growth and mature has a positive effect is rejected. While the third hypothesis (h3) which states that profitability at the decline stage negatively affects the market value of equity received.

2) Operating Cash Flow (X2) at the stage of growth has a significant value of 0.000, at the mature stage 0.001 is smaller than 0.05 (5%). This shows that operating cash flows at the stage of growth and maturity have a positive effect on equity market value. Thus, the fourth hypothesis (h4) and fifth (h5) which states that operating cash flows at the stage of growth and mature have a positive effect on the market value of equity can be accepted. While, in the decline stage, 0.469 is greater than 0.05 (5%). This shows that the operating cash flow at the decline stage does not affect the equity market value. Thus the sixth hypothesis (h6) which states that operating cash flows at the decline stage have a negative effect on the market value.

3) Investing Cash Flow (X3) the growth stage has a significant value of 0.039, less than 0.05 (5%). This infers that the investing cash flow in the growth stage has a positive effect on the equity market value. Thus, the seventh hypothesis (h7) which states that investing cash flows at the growth stage have a positive effect on the acceptable market value of equity. While, the amount in the mature stage is 0.060, and at the decline stage 0.276 is greater than 0.05 (5%). This identifies that the investing cash flow at the decline stage does not affect the equity market value. Thus the sixth hypothesis (h8) and ninth (h9) which states that investing cash flows at the mature and decline stages negatively affect equity market values are rejected.

4) Financing Cash Flow (X4) the growth stage has a significant value of 0.899, greater than 0.05 (5%). This shows that the financing cash flow at the growth stage does not affect the equity market value. Thus the sixth hypothesis (h10) which states that investing cash flows at the growth stage negatively affect equity market values are rejected. While, the amount at the mature stage is 0.002, and at the decline stage 0.000 is smaller than 0.05 (5%). This is concluded that financing cash flows at the mature and decline stages have a positive effect on the equity market value. Thus, the eleventh hypothesis (h11), and twelfth (h12) which states that financing cash flows at the mature and decline stages have a positive effect on the acceptable market value of equity.

5) Stock Return (X5) the stage of growth has a significant value of 0.906, at the mature stage 0.250, and at the decline stage is 0.951 it is greater than 0.05 (5%). This is pointed out that the return of shares at the stage of growth, mature, and decline does not affect the equity market value. Thus the twelfth hypothesis (h12) and the fourteenth hypothesis (h14) which states that returns to the stages of growth and maturity have a positive effect on the value of the equity market rejected. Whereas the fifteenth hypothesis (h15) is acceptable.

4. Conclusion

Profitability at the stage growth matures, and the decline has a positive influence on the market value of equity.

1. Operating cash flow at the stage of growth, mature, and the decline has a positive effect on the market value of equity.
2. Investing cash flow at the stage of growth, mature, and the decline has a positive effect on the market value of equity.
3. Financing cash flow at the stage of growth, mature, and the decline has a positive effect on the market value of equity.
4. Stock return at the stage of growth, mature, and the decline has a positive effect on the market value of equity.

DAFTAR PUSTAKA


[35] Yogyakarta: hermun_feust@yahoo.co.id.


