Company Performance as Predictor in Maximizing Return with Dividend Policy as Moderating Variable in LQ-45 Company

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Abstract:

The purpose of this study is to empirically analyze the effect of the company’s financial performance such as Economic Value Added and Market Value Added with dividend policy as moderating variable—on return stock of the 45 companies certified as LQ-45. Purposive sampling technique was used in terms of collecting samples; the number of samples in this research is 12 companies during the period 2009-2013. The research data is secondary data obtained from the Indonesian Stock Exchange and ICMD. The hypothesis testing study used moderated multiple regression analysis, with application software Eviews. Result shows that: (1) EVA does not significantly affect return stock. (2) MVA significantly affects return stock. (3) DPR significantly affects return stock. (4) EVA moderated by DPR does not significantly affect return stock. (5) MVA moderated by DPR does not significantly affect return stock. (6) EVA and MVA both moderated by DPR simultaneously affect return stock.

Keywords

Economic Value Added (EVA), Market Value Added (MVA), Dividend Payout Ratio (DPR), stock return.

1. Introduction

Finance performance is finance achievement portrayed in company’s finance report such as balance sheet, loss and profit, and finance performance portrays company’s effort [1]. Company’s finance performance can be measured by analyzing and evaluating company’s finance report.

If company has goal to multiple wealth of shareholders, then the standard used to assess company’s performance must have relation with return received by shareholders [2]. Generally, return expected by a shareholder consists of two components: dividend yield and capital gain or loss [3]. Thus, return can be stated as the indicator to increase investor’s wealth including company’s shareholders.

In its implementation, analysis of company’s performance by using finance ratio has some weaknesses. Performance and management measured by finance ratio cannot be hold because obtained finance ratio extremely depends on method or treatment of accounting used [4].

It is caused by data used are accounting data which are not separated from estimation that can cause some distortions so that company’s finance performance is immeasurable appropriately and accurately [5]. Besides, this traditional measurement cannot count cost of capital so that it is difficult to know whether the measured company successfully creates value or not.

In 1989, Stern and Stewart, the founder of Stern Stewart & Company consulting company in United States of America introduce measurement concept of finance performance based on value known as Value Based Measurement (VBM) [6]. This VBM covers cost of capital in its calculation. By covering cost of capital of company in its calculation, VBM can be applied to evaluate value creating potency of company [7]. VBM basically shows that company can increase wealth of shareholder if the gained profit is higher than the cost of capital, so that its calculation base is subtracting profit and cost of capital. Company’s performance measurement, which is based on VBM, uses Economic Value Added (EVA) and Market Value added (MVA). Both methods can be made as better references for shareowners to consider whether the company will gain profit or loss toward the invested capital [8].

In this research, dividend policy issued as moderating variable of finance performance influence on company. It is caused by investor factor that not only pays attention on company’s finance performance, but also is interested in planting his capital on company which gives dividend/ Dividend policy also becomes center of attention of many parties besides shareholders which are creditor and other external parties which has interest of company’s information. [9].

This research uses companies registered in LQ 45 Index. The selection of this object is because shares included into LQ 45 Index are companies having high liquidity and big market capitalization so that...
investors believe that this share is the best share [10]. Therefore, based on background that has been explained, then problems in this research can be identified which is “Do Economic Value Added (EVA) and Market Value added (MVA) moderated by dividend have influence on share return received by investor?

2. Theoretical Framework / Review of Related Literature

2.1. Share Return

*Return* is profit or loss of investing asset which is bought. Return usually consists of two components: (1) income receiving directly from the investment which is known as *income component* and (2) change of asset value or called *capital gain or capital loss*. Return is income received from an investment added with change of market price, which is usually stated as percentage of initial market price of the investment.

2.2. Economic Value Added (EVA)

EVA is the estimation of real business economy profit for certain year. EVA shows remaining profit after capital cost [11]. Company having high EVA tends to attract investor more to invest in that company, because the higher EVA is, the higher the value of the company. EVA (*Economic Value Added*) as net profit of company or division after subtracted by the used capital cost.

2.3. Market Value Added (MVA)

MVA or commonly called Market Value Added is the gap between market value of company equity and its book value. MVA is the gap between market value of company equity and book value as shown in balance sheet, market value is counted by multiplying the share value [11].

2.4. Dividend Policy

Dividend Policy is the payment decision by company to its shareholders. Dividend policy is percentage of income in form of cash to the shareholders. Announcement and dividend sharing are important events for company. There are several theories supporting statement about the significance of dividend for management and investor.

2.4.1. *Bird in the Hand*, theory found by Lintner that states some investors prefer choosing dividend to capital profit [12].

2.4.2. *Clientele Effect* is the theory stating that every investor has different needs. Some expect high dividend payout, and others expect low dividend payout. Company must adjust its dividend policy based on investor target (clientele) that is willing to expect [13].

2.5. Relationship Between Economic Value Added and Market Value Added Moderated by Dividend Payout Ratio Simultaneously Towards Return of Company Share

EVA is based on residual income concept that involves capital cost which aims to eliminate negative distortion of traditional accounting calculation [14]. Company value can be stated by using EVA calculation which then the company value can gain present value of free cash flows of company.

On the other hand, MVA is a premium for company given by market which exceeds amount of money that has been invested, based on market expectation on future EVA of company [14]. Therefore, there will be two scenarios. The first scenario, when MVA is positive, then investor will believe that company is able to gain income exceeding cost of capital, which then it will make investor add his investment on company. Or the second scenario in which market value of company that is lower than invested capital that causes the investors become skeptical that company will be able to give rate of return expected by the investors.

Besides referring to company performance portrayed on finance report, investor also expects stable dividend growth. In line with perspective of Horne, it is stated that manager believes that investor prefers company following more stabile dividend payout ratio.

However, perfect adjustment must be made in determining dividend policy in company. It is because company, in making its investment decision for allocating profit gained in the year, must consider two things: (1) profit will be hold to invest or (2) profit will be used to pay dividend and sell share in amount of the dividend to fund the investment. Investment decision of manager will influence share price of company both from fundamental aspect or technical aspect.

2.6. Hypotheses

Hypothesis of this research is:

\[ H_6 \] Variable of EVA \( (X_1) \) and MVA \( (X_2) \) moderated with DPR \( (MOD_1 = \text{EVA}\times\text{DPR} \) & \( MOD_2 = \text{MVA}\times\text{DPR} \) has positive influence on return of company share.

3. Research Method

This research is an explanatory research. Explanatory research is a research aiming to examine a theory or hypothesis for strengthening or even refusing theory or hypothesis of existing research result. Sampling method used in this research is by
using purposive sampling method with criteria (1) Registered in LQ-45 Index for period 2009-2013 consistently. (2) Never get suspend or its capital trade never get stopped by Indonesia Stock Exchange. (3) Issuer divides its dividend minimum three times during research period. (4) Issuer is in non-banking field. (5) Issuer does not do stock-split during research period. (6) Company which is made as sample has complete finance report data. Based on the criteria, it obtains samples of 12 companies. The obtained data in research is secondary data from several sources that will be analyzed then to the research interest obtained from ICMD report, yearly issuer finance report, the number of share flows, and closed price of monthly share through Indonesia Stock Exchange website (www.idx.co.id) and (www.sahamoke.com). The whole data used in this research are quantitative data in form of panel data. 

Definition of operational variable of research regarding to this research is:

3.1. Share Return

Share return is the profit obtained by investor because he has invested in the share. Return comprises of dividend and capital gain (or loss). According to Ross [15] the total of share return can be calculated by formula as follows:

\[
\text{Total of Return} = \text{dividend result feedback + capital gain (or loss)}
\]

\[
\text{Total of Return} = \frac{D_t}{P_{t-1}} + \frac{P_t - P_{t-1}}{P_{t-1}}
\]

In which:

\(D_t\) = Dividend

\(P_t\) = Share price in t period

\(P_{t-1}\) = Share price in t-1 period

Share price used is end-of-year closing price on each research period.

3.2. Economic Value Added (EVA)

Economic Value Added (EVA) is the method to measure the company ability in creative company value measured by the gained economy profit level. EVA can be calculated by formula as follows [11]:

\[
\text{EVA} = \{\text{EBIT \ (1-T)}\} - \{(\text{invested capital} \ast \text{WACC})\}
\]

\[
\text{WACC} = W_d r_d \ (1-T) + W_e r_e
\]

In which:

\(W_d\) = Debt proportion

\(r_d\) = Cost of long-term debt interest after tax

\(W_e\) = Equity proportion

\(r_e\) = Equity cost

The steps of calculating EVA are as follows:

1) Calculating cost of debt \((r_d)\)
   Cost of debt is the interest level on new long-term debts, not on long-term debts which are not on period yet [11].
   \[
   \text{Long-term debt cost after tax} = r_d \ (1-T)
   \]

2) Calculating equity cost \((r_e)\)
   Equity cost is defined as return level requested by investor on regular share of a company [11]
   \[
   r_e = \frac{1}{\text{Price Earning Ratio (PER)}}
   \]

3) Calculating debt and equity proportion
   Debt and equity proportion can be calculated by comparing long-term debt and equity with total of long-term debt added with equity.

4) Calculating weighted average cost of capital
   WACC (weighted average cost of capital) is weighted average cost of debt component, preferment share, and regular equity
   \[
   \text{WACC} = \frac{w_d r_d \ (1-T)}{w_d r_d} + w_e r_e
   \]

5) Calculating operation capital total taken from investor (invested capital)
   Total of operation capital from investor is capital total of company covering self capital and long-term debt. Formula to calculate total of operation capital from investor is as follows [2]:
   \[
   \text{Invested capital} = \text{Cash} + \text{Working Capital} + \text{Fixed Asset}
   \]
   In which:
   \[
   \text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}
   \]

6) Calculating net operating profit after tax (NOPAT).
   Net operating profit after tax (NOPAT) is the profit gained by a company if company does not have debt and only has operating asset [11].
   \[
   \text{NOPAT} = \text{EBIT \ (1-T)}
   \]

7) Calculating EVA
   \[
   \text{EVA} = \text{NOPAT} - (\text{WACC} \ast \text{Invested capital})
   \]

3.3. Market Value Added (MVA)

According to Manurung (2007:133), MVA is the difference between market price of company (debt and equity) with capital total invested to company. MVA can be formulated as follows [7]:

\[
\text{MVA} = \text{(the flown share total \ast share price)} - \text{Equity total}
\]

In which:

\[
\text{Total Equity} = \text{Authorized Capital} + \text{Paid up Capital (Shares)} + \text{Retained Earnings}
\]

3.4. Dividend Payout Ratio (DPR)
Dividend Payout Ratio determines how much income that can be hold by company as funding sources and paid as dividend. Dividend Payout Ratio (DPR) can be calculated by using formula:

\[
DPR = \frac{\text{Dividend per share}}{\text{Earning per share}}
\]

4. Result and Discussion

Based on data analysis by using E-views application, descriptive research is obtained as follows:

Table 1. Result of Descriptive Data 2009-2013

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>EVA</th>
<th>MVA</th>
<th>DPR</th>
<th>MOD1</th>
<th>MOD2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.020293</td>
<td>20.0988</td>
<td>19.7216</td>
<td>0.441582</td>
<td>100.7020</td>
<td>207.0285</td>
</tr>
<tr>
<td>Median</td>
<td>0.020198</td>
<td>20.4082</td>
<td>19.8072</td>
<td>0.329637</td>
<td>78.2444</td>
<td>291.9582</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.156912</td>
<td>65.6541</td>
<td>59.1508</td>
<td>2.413.400</td>
<td>549.8472</td>
<td>222.6467</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.013161</td>
<td>11.1794</td>
<td>11.9827</td>
<td>0.000000</td>
<td>71.4058</td>
<td>2.508046</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.039920</td>
<td>13.9904</td>
<td>13.5281</td>
<td>0.111931</td>
<td>51.6066</td>
<td>68.8404</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.441.210</td>
<td>1.91572</td>
<td>0.360203</td>
<td>2.029.392</td>
<td>1.177.78</td>
<td>0.397870</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>4.331.108</td>
<td>1.356.75</td>
<td>2.802.80</td>
<td>1.007.34</td>
<td>5.398.58</td>
<td>3.491.78</td>
</tr>
</tbody>
</table>

The analysis done to achieve research objective covering Chow testing, Hausman testing, multi co linearity testing that must be fulfilled by a regression model of panel data and hypothesis testing on regression model obtained by doing t-test and F-test.

4.1. Selection of Panel Data Model

4.1.1. Chow Test

Chow test is the testing to determine the most appropriate Fixed Effect model or Common Effect used in estimating panel data.

Hypothesis in chow test is:

H₀: Common or pooled OLS
H₁: Fixed Effect Model

Table 2. Chow Test Result

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Statistic</th>
<th>d.f</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>4.481411</td>
<td>(11,43)</td>
<td>0.0002</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>45.827730</td>
<td>11</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

From Chow test above, it can obtain the result because p-value is lower than alpha value 5% or 0.05, so that it can be concluded that fixed effect model is more appropriate to be used in this research than Common Effect Model or pooled OLS.

4.1.2. Hausman Test

As statistical test to choose whether Fixed Effect model or Random Effect which is the most appropriate to use. Hypothesis in Hausman test is:

H₀: Random Effect Model
Ha: Fixed Effect Model

Table 3. Result of Hausman Test

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq.</th>
<th>Chi-Sq. d.f</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>19.457026</td>
<td>5</td>
<td>0.0016</td>
</tr>
</tbody>
</table>

From Hausman test above, it shows that p-value is lower than alpha value 5% or 0.05, so that it can be concluded that fixed effect model is more appropriate to be used in this research than random effect model.

4.2. Multi co linearity Test

The way to detect whether multi co linearity is there or not is by seeing the number of Variance Inflation Factor (VIF). If VIF > 10, it means that multi co linearity between independent variables is there. In contrast, if VIF < 10, it means that independent variable does not have multi co linearity.

Table 4 Result of Multicolinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.000106</td>
<td>10.50171</td>
<td>NA</td>
</tr>
<tr>
<td>EVA</td>
<td>2.85E-17</td>
<td>19.64592</td>
<td>4.089852</td>
</tr>
<tr>
<td>MVA</td>
<td>2.07E-19</td>
<td>3.294330</td>
<td>2.564058</td>
</tr>
<tr>
<td>DPR</td>
<td>0.000244</td>
<td>7.568146</td>
<td>2.867269</td>
</tr>
<tr>
<td>MOD1</td>
<td>1.06E-16</td>
<td>16.74879</td>
<td>6.135293</td>
</tr>
<tr>
<td>MOD2</td>
<td>1.47E-18</td>
<td>4.554717</td>
<td>3.934233</td>
</tr>
</tbody>
</table>

Based on multi co linearity test result shown in Table 4.4, it can be seen that value of VIF < 10. In which, it can be concluded that it does not have multi co linearity.
co-linearity effect on all independent variable in this regression model.

4.3. Hypothesis Test

Based on analysis result of moderating regression, result can be obtained as follows:

<table>
<thead>
<tr>
<th>Table 5 Result of Multi co-linearity Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects Specification</td>
</tr>
<tr>
<td>Cross-section fixed (dummy variables)</td>
</tr>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
</tr>
<tr>
<td>S.E. of regression</td>
</tr>
<tr>
<td>Sum squared resid</td>
</tr>
<tr>
<td>Log likelihood</td>
</tr>
<tr>
<td>F-statistic</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
</tr>
</tbody>
</table>

4.4. t Test

t-test or significance test of individual parameter is the test to value whether there is influence between independent variable on dependent variables partially. t Test can be done by comparing t statistical value (t count) with critical point according to t table.

Based on the above table, it can be known that EVA and MOD1 variables (EVA moderated by DPR) has t count value which is lower than its t table value as well as has higher significance than 0.05. It means that EVA and MOD1 partially do not influence company return variables. While, MVA, DPR, and MOD2 variables (MVA moderated by DPR) has higher t count value than its t table value as well as has lower significance value than 0.05. It means that MVA, DPR, and MOD2 partially influence company return variable.

Constanta as much 0.052 shows that if it does not pay attention EVA, MVA, DPR, MOD1, and MOD2, share return received by investors is as much 0.052 (5.2%). EVA Value has positive regression coefficient as much (9.20×10^-10). It means that every increase of EVA as much 1 unit, then share return will increase as much (9.20×10^-10) unit. MVA has positive regression coefficient as much (1.86×10^-9). It means that every increase of MVA as much 1 unit, then share return will increase as much (1.86×10^-9) unit. DPR has negative regression coefficient as much as (-0.052494). It means that every increase of DPR as much 1 unit, then share return will increase as much (0.052494) unit. EVA which is moderated by DPR has negative regression coefficient as much (-1.18×10^-8). It means that every increase of EVA moderated by DPR as much 1 unit, then share return will decrease as much (-1.18×10^-8) unit. MVA which is moderated by DPR has negative regression coefficient as much (-1.49×10^-9). It means that every increase of EVA moderated by DPR as much 1 unit, then share return will decrease as much (-1.49×10^-9) unit.

4.5. F Test

After doing t test, then the research is continued to F test which is the test to value whether there is influence between independent variables on dependent variable at once. Based on analysis result of regression, it can be known that significance value of F is lower than 0.05, then it can be concluded that free variables simultaneously has influence on existing bound variables which are EVA and MVA moderated by DPR influences company return.

4.6. Determination Coefficient (R^2)

Analysis of determination in multiple liner regressions can be used to know how much competence of all free variable in explaining variants of its bound variables. Lower R^2 value means that competence of free variables in explaining bound variables is very limited. In contrast, if R^2 value closes to 1 means that free variables can predict bound variables. Many researchers suggest to use Adjusted R Square because it is different from R square, Adjusted R Square value can increase or decrease with the addition of new variable depending on correlation between additional free variables with its bound variables.

Result of adjusted R^2 test in this research obtains 0.6003. It shows that company return variable is influenced by EVA and MVA moderated by DPR as much 60.03, while its residue is as much 39.97% is influenced by other variables which are not analyzed in this research.

5. Discussion

5.1. Influence of EVA on Company Share Return

EVA helps company to focus itself in increasing rate of return of equity level that increases operational profit. However, the result of this research data analysis reveals that EVA separately cannot influence company share return if other variables are considered constant. It is explained that analysis of EVA cannot be used as base of decision taking for investor to do purchase and company share release and not used by company management in taking policy of its dividend sharing.

During research year, global economy condition is in unstable condition. This instability is because of
the global economy crisis caused by debt crisis suffered by European countries. The consequence of this global economy crisis is the occurrence of share market decrease so that it causes the shares note capital loss in the end of year. The higher the capital loss value of a share, then the share return that will be received by investor will be lower. This is that perhaps causing separated EVA cannot influence share return. This result is in line with research conducted by Rahayu [2], Harjito and Rangga [16], Agustina and Alexander [17], and Trisnawati [18].

5.2. Influence of MVA towards Company Share Return

The pressure of MVA does not directly gain value [7]. This research result states that Market Value Added separately can influence company return. This result is in line with research conducted by Himawan and Sukardi [19], Safitri [20], and Kurdiani [21]

5.3. The Ability of DPR to Moderate EVA Influence towards Company Share Return

There is a substantial agreement among economists regarding to irrelevance of dividend for company value [22]. According to this research data analysis result, EVA moderated by DPR separately cannot influence return if other variables are considered constant. This research result can occur is perhaps because of measurement period of finance performance variable, dividend policy, and company value are conducted at once. In fact, investor reacts after knowing company finance performance only, and lack of paying attention on dividend.

5.4. The Ability of DPR to Moderate MVA Influence towards Company Share Return

Besides referring to company performance shown in finance report, investor also expects stable dividend growth. The result of this research data analysis shows that MVA moderated by DPR separately cannot influence share return value if other variables are considered constant. The positive MVA value indicates that market price of company is higher than company book value. However, company management does not use MVA in taking its dividend policy.

The financial crisis in European Union and budget deficit of United States hold significant effect in the slowness of economy recovery trend after crisis in the beginning of 2009. It also affects Indonesia Stock Exchange marked by most sampling companies do not share its dividend during 2009-2010. In 2011, global economy condition gets pressure again which finally influence performance of stock exchange in the whole world marked by the decrease of sampling company share price. It causes the record of capital loss at the end of the year, so that share return value will be decreased as well.

6. Conclusion and Recommendation

6.1. Conclusion

After doing all classical assumption test and it is valid, then it can conclude hypothesis test result done by using Moderated Regression Analysis. From the analysis, some conclusions are taken as follows:
6.1.1. Economic Value Added (EVA) separately does not influence company share return.
6.1.2. Market Value Added (MVA) separately influences company share return.
6.1.3. Economic Value Added moderated by Dividend Payout Ratio separately cannot influence company share return.
6.1.4. Market Value Added moderated by Dividend Payout Ratio separately cannot influence company share return.
6.1.5. Economic Value Added and Market Value Added moderated by Dividend Payout Ratio collectively can influence company share return.

6.2. Recommendations

Based on result of research that has been done and above conclusion, the suggestions that the writer gives are as follows:
6.2.1. For Management

To calculate company performance more by using Economic Value Added and Market Value Added methods because these methods pay attention on capital cost that must be paid by company. The calculation by using regular ratio does not pay attention on capital cost so that it shows company performance less accurately.

6.2.2. For Researcher

6.2.2.1. Because the dynamic economy condition, then the researcher must always develop research, one of them is about Value Measures which bases performance based on value. Besides with Economic Value Added (EVA) and Market Value Added (MVA), it is needed to add other variables like Cash Value Added (CVA) and Shareholder Value (SHV).

6.2.2.2. For researcher that wants to analyze company finance performance using EVA and MVA methods, it is also good to add longer research period.

6.2.2.3. Period of research is better to be more update so that it can obtain up-to-research.
6.2.2.4. Besides adding research period for data testing which is longer, it can also add list of sampling company analyzed not only the registred company in y LQ-45 share group only.

7. References


