The effect of financial performance on company’s value moderated by dividend policy

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Abstract
The objective of the study was to analyze the effect of financial performance on company’s value moderated by dividend policy. Research variables consist of financial performance, dividend policy, and company’s value. Financial performance measured by liquidity, leverage, and profitability. Dividend policy was represented by dividend payout ratio. And last variable, company’s value was presented by Tobin’s Q. Data was purified from annual financial report of 18 insurance and banking companies. Those 18 companies were listed in Indonesia Stock Exchange during the period 2010-2013. Data were analyzed using moderating regression analysis. There was evidence that financial performance did not affect the company’s value. It was also showed that dividend policy did not moderate the effect of financial performance on company’s value.

Keywords: banking company, company’s performance, company’s value, dividend policy, Indonesian Stock Exchange, insurance company.

JEL classification: D53, G210, G220

1. Introduction
Studies on company’s performance, company’s value, and dividend policy have been done extensively by many scholars. Regardless the extensive of the studies, the relationship among financial performance, dividend policy, and company’s value are yet debateable. Researchers’ opinion related to relationship of dividend policy and company’s value can be differentiated into 2 mainstreams. First opinion showed that dividend policy relevant with company value (Dhanani, 2005; Kouki and Guizani, 2009; Howatt, 2009), which is well known on signaling and bird in hand theories. The second opinion, follow Miller and Modigliani (1961), that dividend policy does not influence company’s value (such as Farsio, Geary, and Moser, 2004). Among researchers supported the first opinion, again come up with different argument. First opinion showed that dividend policy influences company’s value positively (such as Howatt, 2009; Amidu, 2007; Kouki and Guizani, 2009). Dividend is the proportion of profits which is distributed to shareholders in a proportional amount to the number of shares owned. Subsequently, dividends may affect the stock price. In the case of dividend is high, the stock prices will tend to be high and so does the company’s value. If dividend is low, the stock prices will tend also to be low. In contravention, it shows that company’s value influence dividend policy negatively (Farrar and Slewyn, 1967; Litzenberger, 1980; Rozeff, 1982; Eastebrook, 1984).

Related to company performance and dividend policy, a number of studies have been done (such as Amidu, 2007; Howatt, 2009; Arnott and Asness 2003; Farsio, Geary, and Moser 2004; Fama and French, 2001). Their studies emerged the question of causality direction. Two mainstreams emerged. First group revealed that dividend policy affects company performance (Fama and French, 2001; Arnott and Asness, 2003; Zhou and Ruland, 2006; Howatt, 2009; Amidu, 2007). Positive changes in dividends are associated with positive future changes
in earnings per share (Arnott and Asness, 2003; Zhou and Ruland, 2006; Howatt, 2009). Arnott and Asness (2003) and Zhou and Ruland (2006) used profitability in representing company performance. Amidu (2007) showed a positive and significant relationship between return on assets, return on equity, growth in sales and dividend policy. Fama and French (2001) proofed that dividend paying firms tend to be large and profitable, while non-payers are typically small, less profitable but with high investment opportunities.

In contravention, others researchers showed the opposite relationship. In this stream, it shows that company performance influence dividend policy (such as Murekefu and Ouma, ). It shows that if the company makes a high profit, then the company will pay dividend highly. Murekefu and Ouma give evidence that company performance which are measured using financial performance affects dividend policy. Financial performance on their study are constructed using liquidity, profitability, leverage, More extreme, Lie (2005) and Farsio, Geary, and Moser (2004) showed there’s no relationship between dividend policy and company performance. Lie (2005) argues that there is limited evidence which support the improvement of company performance when company pay dividend.

There are many ways to represent company’s performance. Among them, the most commonly used, especially on stock market by investors is financial performance. Subsequently there are many indicators of financial performance. Financial performance in the forms of ratios cover a number of concepts and be grouped into profitability, liquidity, leverage, investment-shareholders ratio, and utilization. The effect of company’s performance on company’s value provides a maximum wealth to shareholders when the stock prices rise. The higher the stock price of a company, the higher the wealth of the shareholders (Jensen, 2010; Fama, 1978; Wright and Ferris, 1997; Walker, 2000). Enterprise value or known as company’s value is an important concept for investors, because it’s an indicator for assessing the company’s overall market. Company’s value in another side is affected by several factors, such as corporate risk-taking (Baugess, Slovin, and Sushka, 2012; Houston, Lin, Lin, and Ma, 2010; John, Litov, and Yeung, 2008), funding decisions, investment decisions (Azhagaiah and Priya, 2008), capital structure (Azhagaiah and Priya, 2008), company’s growth and company’s size.

Exploring the relationships between company’s value and dividend, as well as between company performance and dividend, motivated the idea that instead of influence company’s value, dividend policy moderates the relationship between financial performance and company’s value. Thus the objective of the study was to examines the effect of financial performance on company’s value moderated by dividend policy.

This study contributes to the literature in several ways. First, financial sector can be both a growth engine and a source of economy-wide fragility and crisis. Since 1997, huge financial crisis continuing economy crises has downed Indonesia to bid and long suffer. Levine (2005) and Beck (2009) for instance showed that financial deepening is a critical part of the overall development process of a country. The study will further our understanding of how the relationship among variables on Indonesian stock exchange case. Secondly, dividend policies vary across countries (Abdelsalam, El-Masry, and Elsegini, 2008; LaPorta, López-de-Silanes, Shleifer, and Vishny, 2000), so thus the relationship between variables. There are distinct differences between Indonesian and developed countries markets. This study will enrich the literature related to dividend policy, company performance, and company’s value relationship.
2. Data and Method

2.1. Data Set and Sample

This study made use of secondary data. Data was generated from annual report during the period 2010-2013. The data were accessed through the official website of Indonesia Stock Exchange (www.idx.co.id) to retrieve financial reports and the website of Yahoo Finance (www.yahoo.finance.com) to retrieve company’s share price. Annual financial report and share price were used to calculate the measure of all research variables, as shown on Fig. 1.

The sample includes all of insurance and banking companies listed on Indonesia Stock Exchange. Other criteria that deployed in selecting sample were:

- Company distributed dividend for 4 consecutive years (2010-2013).
- Company provided complete annual financial report during 2010-2013.
- While there are many ways to represent company’s performance, company’s financial performance is used by potential investors to determine stock investment. So thus company’s performance in this study was represented by company’s financial performance. Among company’s financial indicators, liquidity ratio, leverage ratio, and profitability ratio were used to represent financial performance. Further, liquidity was constructed using cash ratio. Leverage ratio was constructed using deb to equity ratio; and finally, profitability was constructed using return on equity (ROE) ratio. All those ratios were calculated based on annual financial report. Dividend policy was measured using dividend payout ratio (DPR). Company’s value was measured using Tobin’s Q. Again, annual financial report was deployed to calculate DPR and Tobin’s Q.

Figure 1. Research model

2.2. Data Analysis

The appropriate technique to test the interaction type of fit is by using moderated regression analysis (MRA). According to Champoux and Peters, (1987) and Southwood (1978) moderated Regression Analysis (MRA) is aspecific application of multiple linear regression analysis, in which the regression equation contains an `interaction term' (multiplication of two or more independent variables). Interaction on this study was multiplication between financial performance and dividend policy. The formula was:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \beta_5 X_1Z + \beta_6 X_2Z + \beta_7 X_3Z + e. \]

Symbols \( X_1, X_2, \) and \( X_3 \) represent liquidity ratio, leverage ratio, and profitability ratio respectively. DPR and Tobin’s Q were represented by \( Z \) and \( Y \) respectively. Prior to data
analysis using MRA technique, classic assumption test was performed to test normality, multicollinearity, autocorrelation, and heteroscedasticity.

3. Results and Discussion

3.1. Descriptive Statistics Results

Applying the criteria for the sample as mentioned above, it was identified 18 banking and insurance companies. At first step, we calculated liquidity ratio, leverage ratio, profitability ratio, and Tobin’s Q based on financial report, and DPR for 18 companies. Table 1 shows the result of calculation. We did not group the sample into banking and insurance company. The minimum value of Tobin’s Q was 0.35 which was shown by Bank Rakyat Indonesia firm. The maximum value was 1.460 which was shown by ABM Investama firm. The average value of Tobins Q (1.017) indicated that the effectiveness of the company’s management in utilizing the economic resources was 1.017 %. For liquidity indicator, the minimum and maximum ratio respectively were shown by Bank Tabungan Negara and Asuransi Bina Dana Arta firms. Cash ratio was deployed to represent liquidity ratio. Based on the average value of cash ratio, it can be stated that generally company is able to repay 59 % its short term debt.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobin’s Q</td>
<td>18</td>
<td>.350</td>
<td>1.460</td>
<td>1.01778</td>
<td>.256482</td>
</tr>
<tr>
<td>Liquidity</td>
<td>18</td>
<td>.006</td>
<td>.320</td>
<td>.05978</td>
<td>.076049</td>
</tr>
<tr>
<td>Leverage</td>
<td>18</td>
<td>.688</td>
<td>10.852</td>
<td>5.50778</td>
<td>3.449963</td>
</tr>
<tr>
<td>Profitability</td>
<td>18</td>
<td>.065</td>
<td>.674</td>
<td>.24350</td>
<td>.137666</td>
</tr>
<tr>
<td>Dividend Policy</td>
<td>18</td>
<td>.100</td>
<td>.630</td>
<td>.32884</td>
<td>.132327</td>
</tr>
<tr>
<td>Liquidity Moderated by Dividend Policy</td>
<td>18</td>
<td>.01</td>
<td>.68</td>
<td>.1745</td>
<td>.17921</td>
</tr>
<tr>
<td>Leverage Moderated by Dividend Policy</td>
<td>18</td>
<td>.00</td>
<td>.69</td>
<td>.1722</td>
<td>.18175</td>
</tr>
<tr>
<td>Profitability Moderated by Dividend Policy</td>
<td>18</td>
<td>.03</td>
<td>.57</td>
<td>.1858</td>
<td>.15000</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on leverage ratio, the minimum value was shown by Asuransi Bina Dana Arta firm whilst the maximum value shown by Bank Himpunan Saudara 1906 firm. Debt to equity ratio was used to represent leverage ratio. Debt to equity ratio is a financial ratio indicating the relative proportion of shareholders’ equity and debt used to finance a company's assets (Peterson, 1999).

The last indicator for financial performance, profitability, was represented by return on equity ratio. Return on equity is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. The minimum value of this indicator was shown by ABM Investama firm. The maximum value was shown by Asuransi Harta Aman Pratama firm.
Dividend policy which was represented by DPR, Bank Nusantara Parahyangan firm shown the minimum value of DPR, whereas Bank Jatim firm described the maximum value of DPR. The dividend payout ratio provides an indication of how much money a company is returning to shareholders, versus how much money it is keeping on hand to reinvest in growth, pay off debt or add to cash reserves. An average 32.8% indicated generally 32.8% of money was distributed to shareholders.

### 3.2. Classic Assumption Test Results

Prior to data analysis using MRA, classic assumption test was performed. Table 2 shows normality, multicolinearity, heterocedastisity and autocorellation test results. It shows that classical assumption test was fulfilled which leads to appropriateness of using MRA technique.

#### Table 2 The Classic Assumption Test Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Normality</th>
<th>Multicolinearity</th>
<th>Autocorrelation</th>
<th>Heteroscedastisity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>X1</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>X2</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>X3</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>X4</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>X5</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>X6</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

#### 3.3. Model Validation

In order to validate research model proposed on Figure 1, MRA technique was run. Using F value from ANOVA, it’s shown that significance value was 0.907. The significance value in order to accept the model is less than 0.05. The significance value in this case was greater than 0.05. So thus we could conclude that proposed model was rejected. It implied that the relationship between financial performance, which was represented by liquidity, leverage, and profitability ratio, with company value (measured by Tobin’s Q) did not moderated by dividend policy (measured using DPR).

From similar output, we may investigate the effect of each indicator on company value partially. The result using t-test is presented on Table 3.

#### Table 3T-value and the significance

<table>
<thead>
<tr>
<th>Variable</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.799</td>
<td>0.003</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-0.378</td>
<td>0.713</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.131</td>
<td>0.899</td>
</tr>
<tr>
<td>Profitability</td>
<td>-0.690</td>
<td>0.506</td>
</tr>
</tbody>
</table>
Dividend Policy | 0.123 | 0.904
Liquidity*Dividend Policy | -0.262 | 0.799
Leverage*Dividend Policy | 0.157 | 0.879
Profitability*Dividend Policy | 0.129 | 0.900

All significance value was above 0.05. It implied that liquidity, leverage, or profitability did not influence company value partially. The significance value of all interaction was also above 0.05. It meant dividend policy did not moderate the relationship between financial performance indicators with company value.

3.4. Discussions

The aforementioned result apparently showed financial performance did not affect company’s value. This result was not surprisingly for Indonesian market. Many researches showed that liquidity (such as Handayani, 2011; Mahendra, 2011; Agustia, 2010), leverage (Mahendra, 2011), and profitability do not affect company’s value. Compare to stock market abroad, most commonly the result was in contrary. However, the study of Ghos and Cai (2004), Ramlall (2009), and Carpenter (2006) showed the same result with this study, where they provided evidencethat profitability does not influence company’s value.

The contrary of this result with previous studies can be explained by the following supporting theory: although liquidity, leverage, and profitability are group of ratios most commonly and frequently use to depicts financial performance, but among those variables are exist causality. For instance, leverage influence profitability (which is measured using return on investment (ROI)) negatively. In another hand, liquidity, leverage, and profitability ratios can be measured using various indicators. The evidence on this study showed that for Indonesian market stock of banking and insurance companies, cash ratio was not suitable expression of liquidity. Similar logic can be apply to leverage and profitability ratios, in such that debt to equity ratio and ROE were not suitable expression for leverage and profitability ratios respectively.

Profitability when measured using return on asset (ROA) is consistent with a signaling perspective (Miller and Rock (1985). In this case, dividend payout may correlate positively with profitability (Jensen et al., 1992; Kowalewski et al, 2007). This variable is defined as the mean ratio between after-tax earnings before extraordinary items and total assets. Firms pay higher dividend when they realize a comfortable financial situation.

Another aspect that leads to this study result is company’s value is not only affected by company performance but also by several factors, such as corporate risk-taking (Baugess, Slovin, and Sushka, 2012; Houston, Lin, Lin, and Ma, 2010; John, Litov, and Yeung, 2008), funding decisions, investment decisions (Azhagaiah and Priya, 2008), capital structure (Azhagaiah and Priya, 2008), company’s growth and company’s size. For the case of Indonesian stock market of banking and insurance companies during 2010-2013 periods, corporate risk-taking, funding decisions, investment decisions, capital structure, company’s growth, and company’s size perhaps provide more dominant effect on company value.
4. Conclusions

We can conclude for banking and insurance industries, which were listed on Indonesia Stock Exchange and paid dividend continuously during 2010-2013, financial performance did not influence company’s value. Neither dividend policy moderated the relationship between financial performance and company’s value. As shown by previous studies on stock market abroad, we suggested to consider correlation between financial performance indicators in future research. Dividend policy chosen in this study was DPR, which is cash dividend and earnings measured after taxes and interests. The measurement of dividend policy probably is more appropriate by capital gain since Indonesian investors generally might are less likely not to use stock repurchase.

Company’s value as well can be measured using various indicators, i.e market-to-book-ratio (M/B), Tobin’s Q, Calculated Intangible value (CIV), and Return of Management (ROM). We used Tobin’s q in this study. It is possible that in banking and insurance companies in Indonesia, ratio of market value to firm asset replacement cost is not appropriate indicator for dividend policy. So thus with liquidity, leverage, and profitability ratios, there exist various indicators for those ratios. The last suggestion therefore for future research is to combine indicators in determining the appropriate indicator of each variable for Indonesian stock market.

References


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