Analysing the Influence of Company’s Dividend Policy and Financial Inclusion to Bank Risk and Performance

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Abstract
This study examines whether company’s dividend policy and financial inclusion influences bank’s risk and performance in the banking sector listed in Bursa Efek Indonesia during the period of 2013–2018 (6 years). Based on the analysis and hypothesis testing, this study showed the following results: Dividend Policy and Financial Inclusion has a significant impact on bank’s risk and performance. Furthermore, changes in dividend payments over time positively affect subsequent changes in foreign shareholding Method: This research used companies in the banking sector listed in the Indonesia Stock Exchange as samples. Data was extracted from companies’ financial statements for the years 2013 to 2018 and BankFocus application. Impact of dividend policy is analysed by eViews software version 10 and data analysis is done through multiple regression analysis to test the hypothesis.

Keywords: Dividend Policy, Financial Inclusion, Company Performance, Dividend Pay-out Ratio (DPR), Branches, Assets, Equity, Capital, National Financial Index.
I. INTRODUCTION

The more advanced a country is, the greater the role that the banking sector plays in controlling the country. Because of the banking world’s importance, there is a notion that the bank is “life” for spinning the wheels of the state economy. Therefore, investing in the capital market is still in demand from investors, especially in the banking companies (Sutedi, 2008). In 1998, pursuant to Law No. 10, Bank is a business entity that raises funds from the community in the form of deposits and channels them into the community in the form of credit and other ways to enhance the living standards of individuals. The company’s stock sales to the public through the capital market is one of the ways companies get to meet the needs of funds and expand and keep competing. (2013 Persada)

1. Dividend Policy
In the business concept foreign investors will put their money into the country and analyze for dividend policy. (Kharisma & Rachman, 2017). Some arguments on Dividend theory:

1.1 Stakeholder Theory
The main benefit of stakeholder theory helps the corporate management to increase firm value as the effect of activities done and to minimize the probable disadvantage appeared by stakeholder (Ghazali and Chariri 2007).

1.2 Agency Theory
An agency theory is a theory that sees how executives or managers make sure that their actions correspond to the willingness of the owners of a corporate organization. (Taufik & Widiyanti, 2014)

1.3 Irrelevant Theory
Modigliani and Miller (MM) argued that value of the firm is not determined by the size of Dividend Pay-out Ratio but is determined by net profit before tax (EBIT) and firm risk class. So, according to MM, dividend is irrelevant to be counted because it cannot raise the safe of shareholders.

1.4 The Bird in The Hand Theory
Gordon and Lintner (1956) stated that cost of corporate capital will rise as the effect of decreased dividend payment. Gordon and Lintner argued that investor viewed one bird in the hand is more valued than thousand birds in the air.

1.5 Signalling Theory
In terms of theory, there is a tendency that stock prices will rise if there is an announcement of a dividend increase, and the share price will drop if there is an announcement of the dividend decline.

1.6 MM Theory
This theory stated that capital structure does not influence the firm value. Modigliani and Miller (1961) proposed some assumptions in building his theory, such as no taxes, no broker fees, no bankruptcy fees, investor can borrow the same level as
the firm, all investors have the same information with management about investment opportunity in the future, EBIT cannot be influenced by using of debt.

2. Financial Inclusion

Financial inclusion is delivery of financial services, including banking services and credit, at an affordable cost to the vast sections of disadvantaged and low-income groups who tend to be excluded. The various financial services include access to savings, loans, insurance, payments, investment and remittance facilities offered by the formal financial system (Honohan & Beck, 2007).

Figure 1: Barrier hinder Financial Inclusion

Among the key financial services that are of great relevance here are risk management or risk mitigation services. As banking services are public good, it is essential that availability of banking and payment services
services to the entire population without discrimination is the prime objective of the public policy.

3. The Scope of Financial Inclusion

The scope of financial inclusion can be expanded through 2 way:

1. Voluntary effort by the banking community itself for evolving various strategies to bring within the ambit of the banking sector the large strata of society.

2. Recent dynamics have seen another major player entering the market – financial technologies or fintech. Capitulating on the immense penetration of mobile and internet usage in Indonesia, the platform has enabled the Indonesian customers to get easier access to lending (borrowing). Providing access to financial services is increasingly becoming an area of concern for policymakers for the obvious reason that it has far-reaching economic and social implications. Various studies reveal that technology-based financial innovations carried out by banks and other financial service institutions can be relied upon to play a role in the economy through contributions in achieving financial inclusion which are then expected to encourage inclusive economic growth (eg Diniz et al., 2012; Ozili, 2018; Beck et al., 2018; Philip and Williams, 2019). In the National Strategy for Financial Inclusion, the financial inclusion strategy is elaborated to 6 pillars, namely 1) financial education, 2) public financial facility, 3) mapping of financial information, 4) supporting policy/regulation, 5) intermediary and distribution facility, and 6) consumer protection. To realize a sustainable financial inclusion program, it is necessary to have close coordination between Bank Indonesia and the relevant ministries and institutions for development, priority setting and program implementation, as well as implementation of program monitoring and evaluation. With close coordination, it is expected the objective to increase public access to financial services may be met. Therefore, referring to the information above, the author does research to answer the question; does a company’s dividend policy and financial inclusion influence their risk and performance?

II. RESEARCH METHODS

This study uses quantitative research, which includes four types of designs, namely descriptive, correlational, quasi-experimental, and experimental (Punch, 2014). Descriptive design defines the status of a phenomenon variable in which hypotheses
are established after collection of the data. Correlational design explores the relationship between variables using statistical analysis and does not search for cause and effect where data collection is simply observational.

A quasi-experimental design sometimes referred to as causal-comparative establishes a relationship of cause and effect between two or more variables which includes control variables. Finally, an experimental design often referred to as true experimentation uses scientific method to establish a correlation-like relationship of cause and effect except that the independent variable is manipulated to produce different results. Seeing the aim of this research if the cause-effect relationship between dividend policy and financial inclusion in Indonesia is to be found without manipulating the independent variable, this research uses quasi-experimental (causal-comparative) design to gather results. The framework of this research is to examine the effects of dividend policy and financial inclusion towards bank’s risk and performance.

Figure 2 The Research Framework

Based on the author’s objective in this research, the author summarizes the hypothesis as followed:

1. There is a significant positive relationship between dividend policy and bank’s risk and performance.
2. There is a significant positive relationship between financial inclusion and the bank’s risk and performance.

1. Hypothesis I
   H10: There is no significant positive relationship between dividend policy and bank’s risk and performance.
   H11: There is a significant positive relationship between dividend policy and bank’s risk and performance.

2. Hypothesis II
   H20: There is no significant positive relationship between financial inclusion and bank’s risk and performance.
   H21: There is a significant positive relationship between financial inclusion and bank’s risk and performance.

3. Purpose of The Study
   The purpose of this research is to identify the relationship between dividend policy and financial inclusion of banking company that listed in Indonesian Stock Exchange, with bank’s risk and performance. The study is based on the research question and developed research hypotheses which had already been discussed earlier in the chapter. Therefore, the purpose of this research is explanatory.

4. Measurement
   For this research, the author uses ten independent variables and two dependent variables. The breakdown of the variables in this research is as follows:
   1. Dependent Variable
      1.1 Net Income (Performance)
      To improve this research accuracy, the author will use Net Income on March 31 on the following year of the annual report. The reason for this is aligned with Kep-36/PM/2003 Rule Number X.K.2 Article 2a by Bapepam, who require each company to submit their annual report at maximum of three months after annual report date. With this method, the closing share price on March 31 will fully reflect the company’s performance in the previous year.
      1.2 NPL - Non-Performing Loan (Risk)
      A non-performing loan (NPL) is a loan in which the borrower is default and has not made any scheduled payments of principal or interest for some time. In banking, commercial loans are considered non-performing if the borrower is 90 days past due.

2. Independent Variable
   There are 10 independent variables that the author will use in this research. Those variables are Branches, Assets, Equity Ratio, Capital Ratio, Loan To Deposit (LTD) Ratio, National Financial Index, Banks 5, Gross Domestic Product (GDP), M2...
(Broad Money Growth) and Dividend Pay-out Ratio. Banking companies listed in the Indonesian Stock Exchange at the latest as 2013 are follow:

Table 1 : Banking Company listed in Indonesia Stock Exchange in 2013

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Company Name</th>
<th>Listed Date</th>
<th>Number of Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AGRO</td>
<td>Bank Rakyat Indonesia Agroniaga</td>
<td>08/08/2003</td>
<td>21,129,857,328</td>
</tr>
<tr>
<td>2</td>
<td>BABF</td>
<td>Bank MNC Internasional Tbk.</td>
<td>15/07/2002</td>
<td>21,157,203,148</td>
</tr>
<tr>
<td>3</td>
<td>BACA</td>
<td>Bank Capital Indonesia Tbk.</td>
<td>04/10/2007</td>
<td>6,999,757,684</td>
</tr>
<tr>
<td>4</td>
<td>BBIA</td>
<td>Bank Central Asia Tbk.</td>
<td>31/05/2000</td>
<td>24,408,459,120</td>
</tr>
<tr>
<td>5</td>
<td>BBKP</td>
<td>Bank Bukopin Tbk.</td>
<td>20/07/2006</td>
<td>11,353,389,641</td>
</tr>
<tr>
<td>6</td>
<td>BBMD</td>
<td>Bank Mandiri Dharma Tbk.</td>
<td>08/07/2013</td>
<td>4,049,189,100</td>
</tr>
<tr>
<td>7</td>
<td>BBNI</td>
<td>Bank Nagara Indonesia (Fasiro)</td>
<td>25/11/1996</td>
<td>18,462,169,893</td>
</tr>
<tr>
<td>8</td>
<td>BBIF</td>
<td>Bank Nusantara Parahyangan Tbk.</td>
<td>10/01/2001</td>
<td>791,895,641</td>
</tr>
<tr>
<td>9</td>
<td>BBRI</td>
<td>Bank Rakyat Indonesia (Fasiro)</td>
<td>10/11/1997</td>
<td>122,112,351,900</td>
</tr>
<tr>
<td>10</td>
<td>BBTN</td>
<td>Bank Tabungan Nagara (Fasiro)</td>
<td>17/12/2009</td>
<td>10,484,100,000</td>
</tr>
<tr>
<td>11</td>
<td>BCIC</td>
<td>Bank Trust Indonesia Tbk.</td>
<td>25/06/1997</td>
<td>9,912,003,256</td>
</tr>
<tr>
<td>12</td>
<td>BDN</td>
<td>Bank Dianamon Indonesia Tbk.</td>
<td>06/12/1989</td>
<td>9,488,96,931</td>
</tr>
<tr>
<td>13</td>
<td>BEKS</td>
<td>Bank Pembangunan Daerah Banten</td>
<td>13/07/2001</td>
<td>63,468,336,053</td>
</tr>
<tr>
<td>14</td>
<td>BJBR</td>
<td>Bank Pembangunan Daerah Jawa B</td>
<td>08/07/2010</td>
<td>9,740,999,289</td>
</tr>
<tr>
<td>15</td>
<td>BJIM</td>
<td>Bank Pembangunan Daerah Jawa I</td>
<td>12/07/2012</td>
<td>14,943,956,196</td>
</tr>
<tr>
<td>16</td>
<td>BKS</td>
<td>Bank QNB Indonesia Tbk.</td>
<td>21/11/2002</td>
<td>20,232,319,124</td>
</tr>
<tr>
<td>17</td>
<td>BMAS</td>
<td>Bank Maspiion Indonesia Tbk.</td>
<td>11/07/2013</td>
<td>4,399,026,922</td>
</tr>
<tr>
<td>18</td>
<td>BMRI</td>
<td>Bank Mandiri (Persero) Tbk.</td>
<td>14/07/2003</td>
<td>46,199,999,998</td>
</tr>
<tr>
<td>19</td>
<td>BNTA</td>
<td>Bank Bumi Arta Tbk.</td>
<td>01/06/2006</td>
<td>2,286,900,000</td>
</tr>
<tr>
<td>20</td>
<td>BNGA</td>
<td>Bank CIMB Niaga Tbk.</td>
<td>29/11/1989</td>
<td>24,880,290,775</td>
</tr>
<tr>
<td>21</td>
<td>BNNI</td>
<td>Bank Maybank Indonesia Tbk.</td>
<td>21/11/1989</td>
<td>75,357,433,911</td>
</tr>
<tr>
<td>22</td>
<td>BNTI</td>
<td>Bank BNI Permai Tbk.</td>
<td>15/01/1990</td>
<td>27,762,311,813</td>
</tr>
<tr>
<td>23</td>
<td>BSIM</td>
<td>Bank Sinamas Tbk.</td>
<td>13/12/2010</td>
<td>15,183,894,926</td>
</tr>
<tr>
<td>24</td>
<td>BSVD</td>
<td>Bank Of India Indonesia Tbk.</td>
<td>01/05/2002</td>
<td>1,374,912,000</td>
</tr>
<tr>
<td>25</td>
<td>BTPN</td>
<td>Bank BTPN Tbk.</td>
<td>12/03/2008</td>
<td>8,065,864,461</td>
</tr>
<tr>
<td>26</td>
<td>BVIC</td>
<td>Bank Victoria International Tbk.</td>
<td>30/06/1999</td>
<td>8,349,346,760</td>
</tr>
<tr>
<td>28</td>
<td>MAYA</td>
<td>Bank Mayapada Internasional Tbk.</td>
<td>29/08/1997</td>
<td>6,313,147,533</td>
</tr>
<tr>
<td>29</td>
<td>MCOR</td>
<td>Bank China Construction Bank</td>
<td>03/07/2007</td>
<td>16,465,148,159</td>
</tr>
<tr>
<td>30</td>
<td>MEGA</td>
<td>Bank Mega Tbk.</td>
<td>17/04/2000</td>
<td>6,894,183,227</td>
</tr>
</tbody>
</table>

| 31 | NAGA| Bank Mitra Tbk.               | 09/07/2013  | 1,612,710,000    |
| 32 | NISP| Bank OCBC NISP Tbk.           | 20/10/1994  | 22,715,776,032   |
| 33 | NOBU| Bank Nationalhobi Tbk.        | 20/05/2013  | 4,391,533,177    |
| 34 | FNEN| Bank Pan Indonesia Tbk.       | 29/12/1982  | 23,837,645,998   |
| 35 | SORA| Bank Woori Saurna Indonesia 1| 15/12/2006  | 6,315,116,991    |

5. Regression Analysis Model
Regression model analysis will be used to carry out the data empirically. There are 2 regression models to identify financial inclusion’s and dividend policy impact on bank’s risk and performance in Indonesia as follows:

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Where:

- NPL = Non-Performing Loan (Risk Indicator)
- NI = Net Income (Performance Indicator)
- Branches = Number of Bank’s Branches
- Assets = Banks Total Assets
- Equity = Equity Ratio
- Capital = Capital Ratio
- LTD = Percentage of Loans to Deposit Ratio
- NFI = National Financial Inclusion Index
- Banks 5 = Five Banks Assets Concentration
- GDP = % of Gross Domestic Product
- M2 = % of Broad Money Growth

6. Statistical Method Use in The Research
In this research, the author will use several statistical methods as follow:

6.1 Descriptive Statistic
Descriptive statistic will comprise the overview of all data used in this research from all variables. The overviews include maximum, minimum, average, mean, and standard deviation out of all 130 samples. Sequentially, multiple tests to select which models will best fit the research will be conducted followed by the regression using eViews.

6.2 Panel Data
Panel data analyzes have many possible outcomes depending on the quantity of independent variables which can complex the estimation parameter. There are thus several approaches for carrying out this analysis.

6.2.1 Common Effect model
The calculation that pools all-time series and cross-sectional data and uses the Ordinary Least Square (OLS) approach to estimate the parameters is a model without the influence of a person (common effect). OLS is one of the popular methodologies used in linear regression to estimate parameter values. Also known as Pooled Least Square (PLS), this model is a simple approach in which every observation is regarded as independent observation.
6.2.2 Fixed Effect model: This is a statistical method which measures explanatory variables, and is also treated as non-random variables. This approach calculates the possibilities where omitted variables could alter the time series or cross section of the intercept. This model adds dummy variables to allow for the intercept adjustments.

6.2.3 Random Effect model: Random effect model restores least square process efficiency by calculating time series and cross section errors. The random effect model is the modification of the predicted least square generalization (GLS).

6.2.4 Chow Test: Chow test is also known as variance analysis and is used to evaluate the assumption of implicit regression model where the assumption of parameter is constant for all samples. This test is to test whether the Fixed Effect Model is the best suites model for this research (Brooks, 2019).

6.2.5 Hausman Test: Hausman test is used to test whether the variables have a two-way relationship (endogenous or exogenous) to decide how to treat them. The Hausman test is mostly to decide whether the fixed-effect model or random-effect model is the most suitable model to conduct this research (Brooks, 2019).

6.3 Classic Assumption Test: In this analysis, the classic assumption test consisting of the normality test, the multicollinearity test, the heteroscedasticity test and the autocorrelation test is used to continue with the multiple-regression test. As stated in chapter 3, this study uses a regression model with 10 independent variables and 2 dependent variables and therefore the classic assumption test applied to the regression model.

6.3.1 Normality Test: The normality test aims to verify if there is a regular distribution of the regression model, confounding variable or residual. If this presumption is violated, then the statistical test will become invalid. There is an endless list of methods to detect whether or not the data were normally distributed. One way to see the test of normality is by using graph analysis. Looking at the histogram graph comparing observational data with the approaches to distribution, a normal distribution can detect normality testing.

6.3.2 Multicollinearity Test: Multicollinearity is one of several statistical methods for discovering the relationship between variables and their significance, especially among independent variables. The matrix shows the strength of each variable’s correlation with each other (Sekaran & Bougie, 2013). When in the matrix of Pearson’s Correlation Coefficient, the coefficient value exceeds 0.5 or 50 per cent, it indicates a high correlation between the two variables. There are two types of multicollinearity test results, that is complete and close multicollinearity. Complete multicollinearity
occurs when there is an acceptable correlation between two or more variables and is usually used twice in a regression when there is incorrect use of one independent variable. Conversely, when there is no important yet unquestionable relationship between 2 or more variables, there is close multicollinearity (Brooks, 2019)

6.3.3 Heteroscedasticity TestOne of the crucial assumptions in linear regression model is that the variance of the errors is constant over observations, and when the errors have constant variance these errors are called homoscedastic. The standard estimation methods are inefficient if the errors have either non-constant or heteroscedastic variance. The residuals of the model are being plotted to assess the assumption, and if the plot shows a certain pattern it is an indication of heteroscedastic. If the plot has no obvious pattern and the spot is randomly dispersed, this is an indication of no heteroscedastic presence.

6.3.4 Autocorrelation TestThe autocorrelation test is used to test whether the linear regression model has connection between the period t errors with the period-1 error or earlier. It will conduct a Run Test to find out if there are autocorrelations. If there is no correlation between the residual the residuals are said to be random. If the statistical likelihood is greater than α = 0.05 (Ghozali, 2006), autocorrelation does not occur.

III. DISCUSSIONS

The purpose of the study is to determine the impact of dividend policy and financial inclusion to bank risk and performance. The financial component of this research will be branches, assets, equity ratio, capital ratio, loan to deposit ratio, national financial index, banks5, growth domestic product, M2 and dividend pay-out ratio. This financial component will be the ten dependent variable use in this research, as well as two independent variables, which is net income and non-performing loan ratio. The data from each variable was collected from each bank's annual report and other sources. Finally, this research used secondary data of 22 companies under the banking industry that are listed in Indonesian Stock Exchange from 2013-2018. Although there are 35 companies, only 22 were chosen because some of them haven't been listed in 2013, being suspended by the regulators in the stock exchange, and did not produce positive net income from the period of 2013 until 2018. Data from other ASEAN countries including Singapore, Malaysia, Thailand, Philippine and Vietnam are also included in the research for comparison purposes.

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Those banks are Maybank – Malayan Banking Berhad and CIMB (Malaysia), Bank of The Philippines Island and BDO Bank (Philippines), DBS Bank and OCBC (Singapore), Ayudhya Bank and Bangkok Bank (Thailand) & VietinBank and Vietcom Bank (Vietnam). The highest value of dividend pay-out ratio (DPR) is BBNP with 98.20% from financial year of 2014 as it will be merge with Bank Danamon Indonesia. This number is higher than their DPR in 2015 of 91.90%. For this research, the non-performing loan gross is going to be used. A gross non-performing loan means that the bank considers not only a loan that default, but also a loan that almost default. The highest non-performing loan on this research is 9.26% by Bank Bukopin (BBKP) in 2016. The equation formed based on the regression are as follow:

\[
NPL = \beta_0 + \beta_1 \text{Branches} + \beta_2 \text{Asset} + \beta_3 \text{Equity} + \beta_4 \text{Capital} + \beta_5 \text{LTD} + \beta_6 \text{NFI} + \beta_7 \text{Bank5} + \\
\beta_8 \text{GDP} + \beta_9 \text{M2} + \beta_{10} \text{DPR} + \varepsilon
\]

\[
NI = \beta_0 + \beta_1 \text{Branches} + \beta_2 \text{Asset} + \beta_3 \text{Equity} + \beta_4 \text{Capital} + \beta_5 \text{LTD} + \beta_6 \text{NFI} + \beta_7 \text{Bank5} + \\
\beta_8 \text{GDP} + \beta_9 \text{M2} + \beta_{10} \text{DPR} + \varepsilon
\]

Indonesian Banks: NPL as Dependent Variable
\[
\begin{align*}
\text{NPL} &= -1.14470 - 0.418884 + 0.651671 + 1.222850 - 0.163500 - 1.212255 - 0.533159 \\
&\quad - 2.615834 - 2.032307 - 0.103804 - 0.003519^* + \varepsilon
\end{align*}
\]

Net Income as Dependent Variable
\[
\begin{align*}
\text{NI} &= 102.6004 + 0.278463 + 0.6880282 + 0.265804 + 1.478140 + 0.688742 - 2.018082 + \\
&\quad 24.46832 - 1.683836 + 0.661502 + 0.035909 + \varepsilon
\end{align*}
\]

ASLAN Banks: NPL as Dependent Variable
\[
\begin{align*}
\text{NPL} &= 28.62956 - 2.605170 - 0.852340 + 0.260448 - 0.707818 + 2.325714 - 0.146654 + \\
&\quad 0.140508 + 0.227432 + 0.256571 - 0.091222 + \varepsilon
\end{align*}
\]

Net Income as Dependent Variable
\[
\begin{align*}
\text{NI} &= 7.181508 + 0.988734 - 1573.833 - 6.061406 - 0.069608 - 0.599846 + 0.086002 + \\
&\quad 1572.943 + 0.088283 - 0.49954 + 0.414143 + \varepsilon
\end{align*}
\]

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Constant value of 12.4470 means that if the company’s independent variable is equal to zero, then the performance of the company measured by NPL will increase by 12.4470. Now we can conclude that all the independent variables in this research influence the NPL and Net Income significantly.

IV. CONCLUSION

The following results are formulated, based on the findings and analysis: Dividend policy and financial inclusion impact banking sector risk and performance. This finding gives an indication that will respond whenever the amount of dividend pay-out ratios and branches changes on the annual report of companies, and when investors want to invest in the banking sector they will focus on those three variables.

REFERENCES


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