The Influence of Biological Asset Accounting Policies and Corporate Governance Practices on the Financial Performance: Moderating Role of Knowledge about Renewable Energy

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ABSTRACT

High financial performance is the primary goal of all companies, including agricultural companies. In practice, the impact caused by various problems related to accounting policies of biological assets, principles of good corporate governance, knowledge about renewable energy and size of the company. This study aims to prove empirically whether there is an influence of biological asset accounting policy implications, good corporate governance practices and company size on financial performance along with the moderating role of knowledge about renewable energy in agricultural sector companies. Research data were collected through questionnaire instruments, face-to-face interviews and group discussion forums which were conducted in several places in Indonesia by sampling with non-probability sampling. Data were analyzed using structural equation model (SEM). The results showed that the implications of biological asset accounting policies, good corporate governance practices and company size had positive effects on financial performance and knowledge about renewable energy is playing a moderating role among the links. The plantation and forestry sector which is the unit of analysis is a limitation of this study because the agricultural industry includes not forests and gardens, but livestock and fisheries are also included in those who have biological transformed assets.

Keywords: Biological Asset Accounting Policies; Good Corporate Governance; Company Size; Financial Performance; Knowledge about Renewable Energy

JEL Classifications: K32, G30, Q

1. INTRODUCTION

In 1990-2010, the conflict was the forest sector with 1.065 cases, and 563 cases in plantation sector according to (Forest Watch Indonesia, 2015). Indonesia has vast natural resources, and it requires an extreme economic level. The Agriculture Sector plays an essential role in this regard. Intense domestic and international competition drives companies to demonstrate sustainable financial performance (Zuchruf et al., 2019). In practice, the achievement of financial performance in agricultural sector companies, in this case, is that the forestry sector is very much influenced by the accounting policies of the forest plant assets (Hidayah and Zarkasyi, 2017). Banks and methods of defining biological assets and agricultural products make accurate and transparent valuations and accounting possibilities. However, it should be noted that in whatever way the value can be defined (depending on the availability or absence of an active market), the method of determining the value must be reflected in the accounting policies developed in accordance with IFRS. The valuation of biological assets and agricultural products with fair value can be adjusted. However, the recommended method makes evaluating performance results more accurate, transparency of information in financial statements and company efficiency (Herawati, 2014).
Biological assets must be valued at the time of acquisition and at the end of each reporting period using fair value fewer costs to sell (IAS 41 par. 12). The difference in profit or loss on the valuation of biological assets is recognized as part of the current year profit and loss. From the various phenomena above and based on the information and financial reports, the poor performance of several agricultural companies in Indonesia is closely related to the production forest management with historical valuation rather than fair value, (Maruli and Farahmita, 2011) said that valuations using fair value must consider the balance among benefits and costs.

Company size is one of the significant variables in assessing profitability in a company (Odalo et al., 2016). Companies must develop in a controlled manner to achieve optimal company size so that they can enjoy economies of scale that can produce higher levels of financial performance (Omondi, 2013). Another fact is that the existing timber industry was concentrated in the hands of a small number of companies that had relations with the government at that time. Firm size is a reflection of the wealth of the company.

Knowledge about renewable energy is also considered as an essential factor for the financial performance of the organization (Lin and Syrgabayeva, 2016). The renewable energy resources of an organization and their knowledge regarding its effective use can help the organization in the boost up of its performance. In addition, the consumption of renewable resources is the key element of the economic growth of the country, but this growth is dependent upon the knowledge of the effective use of renewable energy for the growth of the organization (Fernando et al., 2018). The knowledge related to the effective usage of renewable energy resources improves the company ability to grow in the market that also enhance the financial performance of the organization (Seetharaman et al., 2016).

Thus, the research aims to prove and explain the implication of biological asset accounting policy, good corporate governance practice and company size on financial performance with the help of moderation role of knowledge about renewable energy resources in the corporate sector agriculture in Indonesia.

2. LITERATURE REVIEW

A fair value measurement (Bahri, 2015) gives more considerable in obtaining a measure of financial performance or position for a certain period, especially for a long biological transformation. With the net gain from changes in the fair value of biological assets in the income statement that can increase gross profit can increase net profit which will affect the amount of the company’s final capital so that it will increase. According to research Bohušová et al. (2012), how biological assets are measured affects the financial of agricultural sector. The cost model is a method of measurement that is more suitable for reporting carrier crops. In contrast, the measurement of fair value is more suitable for live animals with respect to the basic principles of financial reporting. In addition, Huffman (2013) proved that book value and income information are significantly more valuable in stock price regressions and stock returns. Also, Karppinen (2004), which proves that the application of IAS 41 causes no significant fluctuations in the profits of agricultural companies. Based on this literature, this study develops the following hypothesis:

H1: The implications of biological asset accounting policies have a positive association with financial performance.

A survey of Pervata et al. (2012) shows that the application of GCG has a significant influence on the company’s financial performance. A study of Supatmi (2007) concluded that not necessarily companies that get good corporate governance implementation ratings will have excellent financial performance as well (Yenti and Syofyan, 2013). Corporate governance is statistically proven not to affect financial ratios, namely profitability, liquidity, leverage and activity. Research result from Riandi et al. (2010) shows that GCG has no partial effect on ROA, but partially affects NPM and EPS. In addition, Abdul-Qadir and Kwanbo (2012) concluded the board size 20 related to profitability; however, did not have a significant impact on the bank’s financial performance (Durrah et al., 2016). The increasing volatility of the capital market is currently pushing for further demands for good corporate governance (GCG) good practices and demands for better financial reporting and a wider level of transparency to reduce investor fear and panic. GCG issues are a must for successful company performance.

Nurcahyani et al. (2013) show that GCG and Institutional ownership have an influence on both ROE and ROA. According to the Zahroh and Hamidah, (2017) CGP1 positively affects profitability, leverage has a negative influence on profitability, and company size negatively affects profitability. According to Dzingai and Fakoya (2017), corporate governance affects financial performance, and also proved too that it also positively influences business performance. Fung (2014) also believes that greater transparency in disclosure is essential for effective financial reporting and supervision for investors to monitor their governance processes and behavior. In addition, Kombo et al. (2017) proves there is a positive relationship between corporate governance practices and the performance of sugar manufacturing companies in Western Kenya. Based on this literature, this study develops the following hypothesis:

H2: Good corporate governance practices have a positive association with financial performance.
H₁: Firm size has a positive association with financial performance.

2.1. Moderating Role of Knowledge about Renewable Energy

The resources of the organization have a greater impact on the performance and other essential aspects of the organization, like implications of biological asset accounting policies, and good corporate governance practices (Kristianti and Priyadi, 2016). The effective knowledge and management regarding the renewable energy resources lead the organization towards the success, and it also can increase the impact of implications of biological asset accounting policies, and good corporate governance practices on the performance of the organization. In addition, the effective use of renewable energy always depends upon its effective knowledge that leads them towards high financial performance (Kaban et al., 2018). If the organizations have effective knowledge about the resources of renewable energy, the high influence of policies and practices on firm performance has been observed (Putri, 2014). In addition, the more the knowledge about the renewable energy, high the growth of the organization and also more significant the impact of the policies (implications of biological asset accounting policies) and practices (good corporate governance practice) on the firm performance (Sihura and Gaol, 2016). Moreover, the influence of implications of biological asset accounting policies on the firm performance may be change due to the knowledge about the effective usage of renewable energy (Yurniawati et al., 2018). Similarly, the impact of good corporate governance practices on firm performance may be different due to the difference in knowledge about the effective usage of renewable energy (Lasdi, 2013). Based on this literature, this study develops the following hypothesis:

H₂: Knowledge about renewable energy moderates the nexus among the implications of biological asset accounting policies and financial performance.

H₃: Knowledge about renewable energy moderates the nexus of good corporate governance practices and financial performance.

H₄: Knowledge about renewable energy moderates the nexus among the firm size and financial performance.

3. RESEARCH METHODOLOGY

The method used by researchers is explanatory research. The explanatory research method is a research used to obtain a description, a systematic, factual and accurate description of the facts, nature and relationships between the variables studied (Sekaran, 2013). The reason researchers chose this method because researchers want to get answers fundamentally about cause and effect by analyzing the factors that cause phenomena in the concepts raised in the study. Before being tested or verified, the research variables will be explained or described. This descriptive research method is also often called the survey method. This study intends to obtain a description or description of the influence of the biological asset accounting policy implications, good corporate governance practices, knowledge about renewable energy and company size on financial performance (Alexander et al., 2012). This research will be conducted in agricultural sector companies in Indonesia.

Based on the time horizon of this research is cross-sectional, that is, research conducted at a certain period and to collect related data to find answers to research questions. The population in this study is agricultural sector companies in Indonesia which are spread across several islands in Indonesia. Researchers took the population in the Forestry and Plantation sub-sector because it has almost the same characteristics, namely managing plants. A total of 328 companies consisted of 240 companies incorporated into the Indonesian Forest Concession Association and 88 plantation sub-sector companies listed on the Indonesia Stock Exchange and BUMN. The sample size for SEM analysis is 100-200. The unit of analysis in this study is the entity that compiles financial statements (Dwiprabowo and Suwarno, 2013).

While the observation units in this study are the accounting and finance section, the taxation section, the production section, and then the respondents in this study are the director, manager or head of the accounting and finance unit, the head of the taxation section.

Based on data collection techniques, this research can be referred to as survey research (survey research), where survey research, the data collected is primary data. Primary data is first-hand data obtained by researchers on variables of concern to the objectives of a particular study (Sekaran, 2013). In the context of this study, primary data is data or information collected by researchers through a list of questions from the questionnaire. Primary data will also be obtained through interviews with expert respondents. They already have an understanding of the research variables, namely the implications of biological asset accounting policies, good corporate governance practices, company size and financial performance. Secondary data is data or information collected from sources that are available or available (Sekaran, 2013).

The questionnaire will be distributed to all respondents directly (meet, face to face, interview), and use e-mail and Google forms. Data in this study were collected using questionnaire instruments, face-to-face interviews and focus group discussion (FGD) activities. The data collection process was carried out for 5 months, starting on October 26, 2019, until February 18, 2020. The primary data collection in this study was carried out directly by visiting each unit of analysis. Data collected through questionnaires in this study were 145 respondents. While the data is complete and can be processed as many as 110 respondents. The implication of biological asset accounting policy (IBAAP) has five items, good corporate governance practices (GCGP) has three items, and firm size (FS) also has three items. In addition, financial performance (FP) has three items and knowledge about renewable energy (KRE) also has three items. These variables are shown in Figure 1.

4. FINDINGS

The findings of the present study consist of the assessment of measurement along with the structural model. In the assessment of the measurement model, the construct validity and reliability has been checked. The validity includes the convergent along with the discriminant validity. The figures mentioned below show the convergent validity that describes the links among the items and the statistics show that CR and Alpha are larger
than 0.70 while loadings and AVE are not smaller than 0.50 that show a high correlation among the items and no issue with convergent validity and these figures are shown below in Table 1 and Figure 2.

### Table 1: Convergent validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Loadings</th>
<th>Alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial performance</td>
<td>FP1</td>
<td>0.751</td>
<td>0.766</td>
<td>0.865</td>
<td>0.682</td>
</tr>
<tr>
<td></td>
<td>FP2</td>
<td>0.874</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FP3</td>
<td>0.848</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>FS1</td>
<td>0.862</td>
<td>0.798</td>
<td>0.882</td>
<td>0.715</td>
</tr>
<tr>
<td></td>
<td>FS2</td>
<td>0.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FS3</td>
<td>0.769</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good corporate governance practices</td>
<td>GCGP1</td>
<td>0.846</td>
<td>0.779</td>
<td>0.872</td>
<td>0.695</td>
</tr>
<tr>
<td></td>
<td>GCGP2</td>
<td>0.870</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GCGP3</td>
<td>0.783</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of biological assets</td>
<td>IBAAP1</td>
<td>0.887</td>
<td>0.767</td>
<td>0.847</td>
<td>0.590</td>
</tr>
<tr>
<td>accounting principles</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>IBAAP3</td>
<td>0.784</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>IBAAP4</td>
<td>0.836</td>
<td></td>
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<tr>
<td></td>
<td>IBAAP5</td>
<td>0.508</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge about renewable energy</td>
<td>KRE1</td>
<td>0.812</td>
<td>0.823</td>
<td>0.895</td>
<td>0.740</td>
</tr>
<tr>
<td></td>
<td>KRE2</td>
<td>0.891</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>KRE3</td>
<td>0.876</td>
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</tr>
</tbody>
</table>

In the assessment of the measurement model, the discriminant validity is also checked. The figures mentioned below show the discriminant validity that describes the links among the constructs and the statistics show that the ratios of Heterotrait Monotrait are not larger than 0.90 that show no high correlation among the constructs and no issue with discriminant validity and these figures are shown below in Table 2.

In the assessment of the structural model, path analysis is used to check the links among the variables and also test the hypotheses. The results of path analysis show the positive along with the significant relationships among the biological asset accounting policy implications, good corporate governance practices, company size and financial performance and accept H$_1$, H$_2$ and H$_3$. In addition, the path analysis also shows that the knowledge about renewable energy moderated among the company size and financial performance, the biological asset accounting policy implications and financial performance and accept H$_4$ and H$_6$. However, the path analysis also shows that the knowledge about renewable energy does not moderate among the good corporate governance practices and financial performance and reject H$_5$. These links are shown in Table 3 and Figure 3.

In addition, the path analysis also shows that the knowledge about renewable energy moderated among the company size and financial performance and accept H$_6$. This moderation has a negative impact on the links if firm size and financial performance. These links are shown in Figure 4.

Moreover, the path analysis also shows that the knowledge about renewable energy does not moderate among the good corporate governance practices and financial performance and reject H$_5$. These links are shown in Figure 5.

Furthermore, the path analysis also shows that the knowledge about renewable energy moderated among the implementation of biological assets accounting policies and financial performance and accept H$_4$. This moderation has a positive impact on the links.
if the implementation of biological assets, accounting policies and financial performance. These links are shown in Figure 6.

5. DISCUSSION AND CONCLUSION

Based on the results of the analysis, it is known that the biological asset accounting policy implication variable has a significant positive effect on financial performance; thus Hypothesis 1 is proven where the implications of biological asset accounting policies on financial performance. This means that the better the company implements its biological asset...
accounting policy, the better the achievement of its financial performance.

These results are consistent with the research put forward by Bahri (2015) wherein the study it was concluded that there was a change in the method of valuing biological assets (biological assets) which initially used historical cost to fair value influenced the presentation of financial statements. Research result Hardiani and Chariri, (2014) explains that the use of fair value as a basis for valuation in financial reporting is believed to increase the relevance of financial reporting, judged to be more able to reflect the value of assets or liabilities according to the actual conditions, because the fair value displayed in the financial statements is in accordance with the prices incurred between current market participants, without coercion.

This study still finds several obstacles that occur in the agricultural sector companies in terms of the implications of biological asset accounting policies including this policy was only implemented as of January 1, 2018, by IAI in SFAS 69 Agriculture, and this is relatively new so that management is still learning and adapting to many related matters.

Good corporate governance practices have a significant positive effect on financial performance; thus, Hypothesis 2 is proven where good corporate governance practices affect financial performance. This means that the better a company is in carrying out good corporate governance practices, the better its financial performance will be achieved.

In this study found obstacles for the implementation of good corporate governance practices in agricultural sector companies based on the results of observations and interviews of the author, which will affect the financial performance of agricultural sector companies, as follows on the principle of transparency, it is still difficult for data to be accessed by the public such as writers for academic needs in several agricultural sector companies, it seems that company management is covering up the information contained in their financial statements. There is a company website that has not been updated, bearing in mind that at present every company should equip itself with the latest information technology system so that stakeholders have difficulty in obtaining information about the company (Dikopoulos and Mihiotis, 2012).

Firm size has a significant positive effect on financial performance; thus, Hypothesis 3 is proven where company size influences financial performance. This means that the size of the agricultural company will affect the company’s achievement in obtaining financial performance. This is proven by private agricultural companies, for example, the small-sized forestry sector, which has minimal financial performance, because the management of the timber potential they have is not as large and as wide as the rights owned by forestry companies, both private and state-owned. Also, in the plantation sector, the management rights of oil palm plantations of small-scale private companies will differ from SOE companies (Atrill and McLaney, 2011).

The knowledge about renewable energy has to play a moderating role among the links of biological asset accounting policy implications, and financial performance and accept hypothesis 4. In addition, the knowledge about renewable energy has to play a moderating role among the links of firm size and financial performance and accept hypothesis 6. These results are similar to the findings of the Kotilainen et al. (2019) who also found that the knowledge about the effective use of the renewable energy can enhance the impact of practices and policies on the financial performance of the organization (Chaudhary et al., 2010).

Thus, this study concluded that the organization of Indonesia have enough knowledge about the usage of renewable energy along with the effective practices and policies related to the corporate governance and implementation of biological assets accounting that is the reason of the high financial performance of the organizations in Indonesia. This study also provides the guidelines to the policymakers that they should enhance the focus on the knowledge about the consumption of the renewable energy that improves the financial performance.

5.1. Limitations of the Study
The plantation and forestry sector which is the unit of analysis is a limitation of this study because the agricultural sector includes not forests and gardens, but livestock and fisheries are also included in those who have biological transformed assets as regulated by SFAS 69 agriculture in Indonesia. Considering this regulation took effect on January 1, 2018, through SFAS 69 agriculture, this does not reflect the level of compliance of the agricultural sector companies on biological asset accounting policies that are only measured for 1 year, namely the 2018 financial reporting period.

5.2. Contribution of the Study
The results of the study are expected to improve existing theories regarding financial performance, the next research premise. The results are expected to enhance the practice of the implications of biological asset accounting policies in the agricultural sector, good corporate governance practices and company size, so financial performance becomes better. Contributions are expected to be useful for governments that synergize with the Indonesian Institute of Accountants, which plays a role in determining policies in Financial Accounting Standards that apply to agricultural sector companies. It is also hoped that they will be more careful in implementing biological asset accounting policies, also as a reference for the agricultural company in improving its financial performance.

REFERENCES


