Profitability, feminism of board of directors and corporate sustainability performance: Role of independent board as a moderating variable

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ABSTRACT

The objective of this study is to examine the impact of profitability and feminism of board of directors on corporate sustainability performance. This study also investigates the role of independent board in moderating the relationship between profitability and feminism of board of directors on corporate sustainability performance. The analysis of this study use moderated regression analysis with balanced panel data. The sample consists of 51 firms, based on purposive sampling method. The results find that profitability and feminism of board of directors have negative effect on corporate sustainability performance. The result also shows that independent board moderates the relationship between profitability and feminism of board of directors on corporate sustainability performance.

Introduction

The issue of sustainability arises due to the issue of global warming and environmental degradation that is increasingly happening around the world. There has been a recognition that the ecology of the planet is threatened by human activities (Sukoharsono, 2007). This phenomena have to be taken into account that a danger is surrounding us. One solution is that every people should pay more attention to the environment. Day by day, society got concerned with human life cycle and everlasting of nature and for social prosperity (Sukoharsono, 2009). Although at first, this issue was just a social issue, but then sustainability developed into a strategic issue for the company. Commitment to apply the principles of sustainable development to corporations are increasingly being made (Searcy, 2009). Stakeholder and legitimacy theory are used to explain corporate motivation in reporting sustainability performance. Based on the perspectives of stakeholder theory, sustainability performance is how the corporate maintaining good relationship with all stakeholders because the sustainability report provides all information needs for all the corporate stakeholders (Reverte, 2009; Lourenco and Branco, 2013). While legitimacy theory explained that sustainability reports is a tool that can be used to gain social legitimacy for the corporates (Deegan, 2002).

Sustainability report is an interesting issue that is currently being discussed in Indonesia. This relates to a new regulation issued by Capital Market Authority (OJK) in 2017 (Regulation Number 51/POJK.03/2017) which requires all financial institutions (banking institutions) and public firms to disclose their sustainability reports. After the new regulation has released in 2017, there were only 61 public firms listed on the Indonesia Stock Exchange (IDX) that published their sustainability reports. This amount is only 10.85% of the total firms on IDX. This shows public firms in Indonesia still have a low level of concern related to their sustainability performance. Although now disclosing sustainability reports became a mandatory disclosure for financial institutions and public firms in Indonesia.
The corporate decision to disclose their sustainability performance can be made by several factors, one of them is the firm’s resources, specifically their economic resources. According to POJK Number 51/POJK.03/2017 article 8 which states that companies must allocate their CSR fund to support their corporate sustainability performance. Reverte (2009) posited that the relationship between corporate sustainability performance and profitability can be built on the basis of economic resource agreements. Based on the perspectives of legitimacy theory, profitability is one of the crucial factors that affect sustainability performance. Legendre and Codere (2013), posited that profitable companies tend to disclose more information about their sustainability performance to gain legitimacy for their operational activities compared to other companies. In line with legitimacy theory, slack resources theory explains that companies who have excess funding sources or have good financial performance tend to disclose more information about their sustainability performance compared to companies that do not have excess funding sources (Marquis and Qian, 2014).

Another crucial factor that can improve corporate sustainability performance is the corporate’s board of directors. Based on resource-based theory, the board is one of the company resources because they are the representative of shareholder and other stakeholder’s interests (Anggraeni and Djakman, 2017). Choosing the right board member will improve good corporate governance. If corporate governance becomes more effective, it will be reflected in increasing corporate’s attention to issues that related to corporate sustainability, such as environmental and social issues, because nowadays these issues are become corporate’s strategic issues in maintaining corporate going concern.

In recent years, diversity has become one of the most important factors in research related to board of directors (Kang et al. 2007). Board of directors diversity consists of tribe, nationality, age, and gender. Based on the perspectives of resource-based theory, diversity on board increases creativity and innovation. Having a heterogeneous board allows corporate to solve specific problems and fulfill the needs from various stakeholder groups. In this study, feminism of the board of directors is used to explain board diversity. In line with resource-based theory, feminist ethical theory explained that women have different point of views in their opinions about corporate sustainability performance so that they will give new perspective in corporate decision making (Machold et al. 2008). Similarly, Bernardi and Threadgill (2010) found that women directors can improve the quality of decision-making process and provide more attention to ethical issues and environmental issues. Corporate policies about implementing sustainability report will be better handled by women directors because they have a higher level of concern for social and environmental issues compared to male directors (Liao et al. 2015).

Despite of the influence of profitability and feminism of board of directors on corporate sustainability performance, this study also wants to examine the role of independent board as a moderating variable in the relationship of profitability, feminism of board directors and corporate sustainability performance. The addition of moderating variables in this study is due to inconsistencies results of previous studies regarding the effect of profitability and feminism of board of directors on corporate sustainability performance. This study used agency and stakeholder theory to explain the role of independent board as a moderating variable in the relationship of profitability, feminism on board of directors and corporate sustainability performance. Based on the perspectives of stakeholder and agency theory, increasing the number of independent board will be effective in monitoring and ensuring management actions in carrying out social and environmental activities that are consistent with corporate stakeholder interest (Handajani et al. 2014). Therefore, we expect independent board will encourage management, especially women directors to allocate their csr fund regarding to POJK Number 51/POJK.03/2017 article 8 to disclose sustainability report to meet the interests of all corporate stakeholders.

**Literature Review**

Based on the perspectives of stakeholder, legitimacy, slack resources, resource-based, feminist ethical and agency theory, corporate sustainability performance can be improved by maximizing the role of women directors, board independence and profitability (Freeman, 1984; Mathews, 1993; Waddock and Graves, 1997; Wernerfelt, 1984; Wicks et al., 1994; Jensen and Meckling, 1976)

**Profitability**

There are numbers of studies suggesting a positive association between profitability and corporate sustainability performance (Waddock and Graves, 1997; Legendre and Codere, 2012; Marquis and Qian, 2014; Vitezic et al., 2014). Siregar and Bachtiar (2010) found that a profitable company has more resources with which to engage in social activities. Profitable companies are subject to higher public scrutiny than their counterparts, and this leads them to engage in activities contributing to sustainable development (Branco et al. 2014; Kilic and Kuzey, 2017). Similarly, Artiach et al. (2010), Ruhnke and Gabriel (2013), Hussain et al. (2016) found that profitability has a significant and positive influence on the decisions by firms to invest in corporate sustainability performance. Thus, this study predicts the following hypothesis:

H1: Profitability has a positive effect on corporate sustainability performance.

**Feminism of Board of Directors**

The existence and increasing number of women directors in corporate boards was positively correlated with increased attention to ethical issue and the environment (Larkin et al. 2012; Bernardi and Threadgill 2010). The role of women directors can improve the effectiveness of corporate governance through the using of capital resources and better role of institution, a better fair business and reflect the existence of all corporate stakeholders (Handajani et al. 2014). Similarly, Bernardi and Threadgill (2010) found that women directors can improve the quality of decision-making process and provide more attention to ethical issues and environmental issues. Thus, this study predicts the following hypothesis:
H2: Feminism of board of directors has a positive effect on corporate sustainability performance.

Independent Board

The composition of board of commissioners are positively related to voluntary disclosure, mainly related to social and environmental issues in the corporate annual report and independent board of commissioners provide more voluntary disclosure about strategic and progressive information (Lim et al. 2007). Increasing the number of independent board will be effective in monitoring and ensuring management actions in carrying out social and environmental activities that are consistent with corporate stakeholder interest (Handajani et al. 2014). Therefore, we expect independent board will encourage management, especially women directors to allocate their CSR fund regarding to POJK Number 51/POJK.03/2017 article 8 to disclose sustainability report to meet the interests of all corporate stakeholders. Thus, this study predicts the following hypothesis:

H3: Independent board has a positive effect on the relationship between profitability and corporate sustainability performance.

H4: Independent board has a positive effect on the relationship between feminism on board of directors and corporate sustainability performance.

Figure 1: Research Model

Research and Methodology

The population for this study is public firms in Indonesia Stock Exchange that disclose their sustainability report and has women directors in their board structure for the year of 2016-2018. Total sample of 17 companies obtained through purposeful sampling and so there are 51 observations.

This study used corporate sustainability performance (CSP) as a dependent variable. CSP is measured using content analysis technique by focusing on the information disclosed through the use of Global Reporting Initiatives (GRI) index. CSP index based on indicators of CSP disclosures items refer to the Global Reporting Initiatives (GRI G4) consists of indicators performance of economics (9 items), environmental (34 items) and social (48 items). CSP disclosure index is calculated by dividing the number of CSP items disclosed by company to expected disclosure of CSP number, referes to Jizi et al. (2014) and Anggraeni and Djakman (2017). Profitability and women on board is used as independent variables and independent board as a moderating variable in this research. Profitability is measured using return on assets, women directors and independent board are measured as follows:

$$WOB = \frac{\text{The member of women directors}}{\text{Total member of the board of directors}}$$

$$IB = \frac{\text{The member of independent commissioners}}{\text{Total member of the board of commissioners}}$$

Data Analysis Technique

The model of data analysis in this research is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_2X_3 + e$$
Description: \[ Y = \text{Corporate Sustainability Performance}, \] \[ a = \text{constant}, \] \[ b_1 \text{-} b_4 = \text{regression coefficient}, \] \[ X_1 = \text{Profitability}, \] \[ X_2 = \text{Feminism of Board of Directors}, \] \[ X_3 = \text{Independent Board}, \] \[ e = \text{error}. \]

**Result and Discussion**

The results of descriptive statistics are presented in table 1 below.

| Variable   | Minimum | Maximum | Mean  | Std. Deviation |
|------------|---------|---------|-------|----------------|
| CSP        | 0,19    | 0,59    | 0,37  | 0,11           |
| PROFIT     | -55,83  | 62,90   | 4,31  | 15,79          |
| WOB        | 0,08    | 0,75    | 0,28  | 0,14           |
| INDEPENDENT| 0,28    | 0,80    | 0,46  | 0,16           |

Based on descriptive statistics, it can be seen that the average value of corporate sustainability performance (CSP) is 0,37. It means that corporate sustainability performance index is relatively low in the public firms in Indonesia. On average, the firms were 4,31 percent profitable in terms of their return on assets (ROA). Meanwhile, women on board has an average value of 0,28 which indicates the number of women in a number of board director members is relatively low or less than 1 person. The proportion of independent board showed an average of 0,46 or 46% of board commissioners in board member are independent board, which meets the Indonesia capital market requirements which require at least 30% board of commissioners should be an independent commissioner.

Before conducting regression analysis, first this study have to test then choose which one from common effect model (CEM), fixed effect model (FEM) and random effect model (REM) is the best model for regression analysis in this balanced panel data. There are several test to find the best model for panel regression analysis i.e: Chow test or Likelihood test, Hausman test and Langrange Multiplier test. Based on the test, it is found that fixed effect model is the best regression model to test the hypothesis in this research. The results of regression analysis are presented in table 2 below.

| Variable               | Coefficient | t-Statistic | Prob | Results       |
|------------------------|-------------|-------------|------|---------------|
| Constanta              | 0,681       | 9,318       | 0,000| Not Supported |
| Profit (X1)            | -0,006      | -4,578      | 0,000| Not Supported |
| WOB (X2)               | -0,943      | -4,320      | 0,000| Not Supported |
| Profit*Independent (X3)| 0,019       | 2,657       | 0,012| Supported     |
| WOB*Independent (X4)   | 1,6703      | 4,0001      | 0,000| Supported     |

\[ \alpha = (0,05) \]

\[ R^2 = 0,921 \]

\[ \text{Adjusted } R^2 = 0,863 \]

Based on the results of regression analysis, it can be seen in table 2, the coefficient of determination is indicated by Adjusted \( R^2 \) value of 0,863 or 86,3%, which means that the variance of corporate sustainability performance is affected by profitability, feminism of board of directors and independent board of 86,3%. Result of hypothesis testing showed profitability and feminism on board of directors have negative effect on corporate sustainability reporting. The results also showed independent board has a positive effect on the relationship between profitability and feminism on board of directors with corporate sustainability performance. These findings indicate that hypothesis 1 and 2 are not supported, while hypothesis 3 and 4 are supported. The following is a discussion of research findings.

**The Effect of Profitability on Corporate Sustainability Performance**

The results of this study show that profitability has a negative effect on corporate sustainability performance. It means that \( H_1 \) is not supported. Therefore, this result did not support legitimacy and slack resources theory which stated that firm with greater financial performance tend to disclose more information about their sustainability performance. The result of this study also did not support the finding prior studies (Lagendre and Codere, 2013; Branco et al., 2014; Kasal et al., 2014; Hussain et al., 2016) which stated profitability can improve corporate sustainability performance, because profitable company has more resources with which to engage in social and environmental activities.

**The Effect of Feminism of Board of Directors on Corporate Sustainability Performance**

The results of this study also show that feminism of board of directors has a negative effect on corporate sustainability performance. It means that \( H_2 \) is not supported. Therefore, this result did not support feminist ethical theory which stated that the existence and the increasing number of women strongly correlated with increased attention to ethical and environmental problems. According to feminist ethical theory, woman with regard to altruism attitude leads to better social behavior. The result of this study also did not...
support the finding prior studies (Rao et al., 2012; Rupley et al., 2012; Ong and Djaadjikerta, 2018) found that women directors can improve the quality of decision-making process and provide more attention to ethical issues and environmental issues.

**The Effect of Independent Board on the Relationship of Profitability, Feminism of Board of Directors and Corporate Sustainability Performance**

The results of this study show that independent board strengthens the positive effect of profitability and feminism of board of directors on corporate sustainability performance. It means that $H_1$ and $H_2$ are supported. Therefore, this results support agency and stakeholder theory which stated that independent board will be effective in monitoring and ensuring management actions in carrying out social and environmental activities that are consistent with corporate stakeholder interest (Handajani et al. 2014). The results of this study support the finding prior study of Kassinis and Vafeas (2002), which stated the role of independent board is to ensure that management complies with all governmental rules regarding social and environmental responsibility. This result also support another prior studies (Wang and Coffey, 1992; Alipour et al., 2019; Hanifia and Cooke, 2005; Lim et al., 2007; Liu and Zhang, 2017; Walls et al., 2012) found that independent board can put pressure on companies to engage in sustainability performance for fulfilling the interest of various stakeholders of company.

**Conclusions**

This study concludes that profitability, feminism of board of directors and independent board have an impact on corporate sustainability performance. The results find that profitability has a negative effect on corporate sustainability performance, it means that firms with lower profitability are more likely to disclose social information. When firms experience unfavorable profit performance, they may tend to disclose more information about their activities add social values and contribute to the entire society in a positive way. This may help shareholders and the general public to view these companies more positively and alleviate their concerns about the low financial performance. This study also find that feminism of board of directors have negative effect on corporate sustainability performance. The low number of women on board in Indonesian public firms and lack of competence of female board was not able to encourage and improve corporate ethical behavior, including in sustainability strategy and corporate policy formulation so that it can have negative impact on corporate sustainability performance. The result also shows that independent board moderates the relationship between profitability and feminism of board of directors with corporate sustainability performance. This result proved that independent board will encourage management, especially women directors to allocate their CSR fund regarding to POJK Number 51/POJK.03/2017 article 8 to disclose sustainability report to meet the interests of all corporate stakeholders.

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