Zombie Company and CSR Performance with Corporate Governance and Ownership as Moderator Variables

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ABSTRACT
This study aims to determine the relationship between zombie companies and the performance of corporate social responsibility, with corporate governance and ownership as moderator variables. A zombie company is a near-insolvent firm due to inefficiency and low profitability but still survive with external support from the government or bank (Kane, 1987). The determination of the sample is done by a purposive sampling method, with OLS and Moderated Regression Analysis methods. The number of research samples is 288 companies with a total of 1865 observations for the period 2010-2017. The analysis shows that CSR performance in zombie companies is lower than that of non-zombies. The moderator variable of corporate governance is proxied by board composition, while ownership is proxied by family ownership and institutional ownership. The board composition and institutional ownership variables do not moderate the negative effects of zombie companies on CSR performance, while the family ownership variable worsens the relationship between zombie companies and CSR performance. The research control variables are financial leverage, a dummy of state-owned enterprise, and firm size. While financial leverage has no effect on the CSR performance, the state-owned enterprise and firm size are positively related to that performance.
INTRODUCTION

Nowadays, companies have more intensive in integrating CSR into their overall managerial processes, decision making, and strategy. This social program also has a positive impact on the company's business. Several studies reveal that there is a positive relationship between implementing CSR and company performance. Chen et al. (2015) show that CSR disclosure index has a positive influence on company profitability. This positive influence has an impact on improving the company's reputation in the eyes of stakeholders. Sudana et al. (2019) state that the larger and older the company, the higher its awareness to implement CSR in order to increase the reputation and acceptance of stakeholders so that it can bring up the achievement of sustainability.

CSR initiatives require large funding, therefore CSR performance variability is strongly influenced by the financial condition of the company. A study by [3] shows that profitability has a positive effect on CSR performance. Companies that experience financial distress will face huge obstacles in implementing CSR. One category of companies that are experiencing such financial difficulties is the zombie company.

A zombie company is a special type of company that usually does not have adequate financial resources. It refers to near-insolvent companies due to their inefficiency and low profitability but still persists thanks to external support from the government or banks [4]. Caballero et al. (2008) and Acharya et al. (2018) define zombie companies as companies undergoing a restructuring process through interest subsidies. According to Caballero et al. (2008), a company can be classified as a zombie when it exhibit a low level of profitability over a long period of time and therefore cannot fulfill its obligations on debt payments such as interest and principal. The Nikkei Asian Review revealed that the number of companies classified as zombies reached around 5,300 units in 2018 [7]. In Asia, the ratio of zombie companies increased rapidly in India, Indonesia and South Korea. In Indonesia alone, the ratio of zombie companies has increased from 13% to 24% in the period 2008 to 2018.

A zombie company is a special form of company that is experiencing financial distress. Hoshi (2006) states that zombie companies consist of companies that are in a state of distress, most have negative equity but still survive with the help of creditors. Poor financial conditions can prevent these companies from implementing CSR activities properly.

The relationship between zombie company and CSR performance can be influenced by corporate governance and ownership. Adnan et al. (2018) explain that corporate governance is influential in increasing the quantity and quality of CSR. Stakeholder theory explains that companies must maintain relationships and accommodate the wants and needs of their stakeholders. There are two models in stakeholder theory, namely the policy and business planning model and the corporate social responsibility model of stakeholder management [10]. CSR is a form of implementation of the principle of responsibility in corporate governance and is explained in the second model of stakeholder theory related to social responsibility.

Companies with high family ownership have the potential to have lower CSR performance (Ghoul et al., 2016; Cucculelli & Micucci, 2008). The higher the share ownership by the family, the easier it will be for the family to control the company. When companies face a very high risk of failure, the family-owner of the company will tend to take steps to save their investment rather than improving the company's performance, including its CSR performance. This notion is different from issues related to the existence of institutional investors. Chen et al. (2020) explain that, driven by the motivation to increase company value, there is a tendency for institutional shareholders to encourage improvements in social issues. This tendency has an impact on the higher intensity of CSR activities in companies with higher institutional ownership. Turban and Greening (1997) state that institutional investors favor the long-term benefits of corporate involvement in corporate social performance. The long-term benefit orientation will encourage companies with high institutional ownership to maintain CSR performance even though the company is experiencing financial difficulties.

This study attempts to examine the effect of zombie company status on the performance of corporate social responsibility. This study also examines the role of corporate governance and ownership in moderating the influence of zombie companies on corporate social responsibility performance.
Literature Review and Hypothesis Development

Corporate Social Responsibility Performance

The Law of the Republic of Indonesia No. 40 of 2007 concerning Limited Liability Company article 1 paragraph 3 explains that corporate social responsibility is the company's commitment to participate in sustainable economic development in order to improve the quality of life and the environment that is beneficial, both for the company itself, the local community, and society at large. CSR activities can create and foster consumer confidence toward companies (Park et al., 2014). CSR activities can also help companies in developing new resources and capabilities. Research shows that companies with a good CSR reputation can improve their relationship with the public [16].

CSR performance measurement was carried out through an analysis of the implementation report using the content analysis method. This method converts qualitative information in the annual and sustainability report into quantitative information, so that statistical calculations can be carried out. We used CSR criteria developed by Hackston and Milne (1996) that have been adjusted by Sembiring (2005). There are 78 criteria items arranged into 7 groups of dimensions (attached). These dimensions and criteria are:

1. General intention (company commitment). This dimension has 2 items and is related to disclosure of CSR policy objectives and other matters relating to CSR.
2. Community (9 items). This dimension is related to the company’s contribution to the community in the form of donations for community activities, education and arts, contributions to public health, scholarships and support for the local education system, and concern for local business development.
3. Environment (13 items). This dimension covers company policies and actions related to pollution prevention and control, repairment of the environmental damage due to operations, waste treatment, environmental protection, and so on.
4. Product (10 items). This dimension relates to policies and actions aimed at product safety and liability, as well as to disclosures about product development and improvement efforts.
5. Employee (29 items). This dimension relates to policies and activities related to the use and development of women workers and workers with disabilities, homeownership and recreational facilities, and other policies related to improving working conditions in general. This dimension also includes reports related to company relations with trade unions as well as actions and solutions related to labor issues.
6. Occupational safety and health (8 items). This dimension is related to policies and activities related to efforts to create occupational safety and health for employees, compliance with regulations on occupational health and safety standards, and availability of health services.
7. Energy (7 items). This dimension includes reports on the more effective and efficient use of energy, as well as the use of waste as an energy source.

The first step in calculating CSR performance is to assign a value to each performance item. Value 1 if an item is disclosed and 0 if not. The value of each item is then added up to get the total value of the items of a company. The total number of items is further divided by the maximum number of items if all CSR activities are carried out to obtain the CSR disclosure index (CSR Index). The formula is as follows:

$$CSR_{Index} = \frac{\sum X_{it}}{N}$$

Where:
- $CSR_{Index}$ = Corporate Social Responsibility Disclosure Index of company $i$
- $\sum X_{it}$ = Total items disclosed by a company
- $N$ = Total number of disclosure items, which is 78.

Zombie Company

A Zombie company is a company that is in the process of restructuring through interest subsidies, which is the imposition of lower interest compared to healthy companies [5]. There is a generally accepted criterion about zombies that is these companies have high levels of debt (Ahearne & Shinada, 2005; Hoshi, 2006; Caballero et al., 2008; Papworth, 2013; Imai, 2016; Tan et al., 2016). Therefore, the most extreme type of a zombie company is a company that has lost all of its equity but is still carrying out its business activities and is in the process of restructuring [23]. Zombies are
companies that mostly have negative equity and are in a near-bankrupt condition but still survive on interest subsidies from creditors [8].

Hoshi and Kim (2013) explain that the identification of a zombie company can be done with the measurement of Financial Expenditure to Sales ratio (FES) and Bank Help (BH). FES is a ratio being used to identify whether a company that exhibits a high level of debt also has poor performance. FES is calculated as follow:

\[
FES_{it} = \frac{\text{Financial Expenditure}_{it}}{\text{Sales}_{it}}
\]

Where:
- FES = Financial expenditure to sales ratio
- Financial expenditure = Interest payments + other finance charges
- Sales = Total sales

Companies with high FES ratios are companies that have high levels of debt and perform poorly. The next measurement is BH, which is a measurement of how much a company gets help from its creditors (bank help). BH is calculated as follows:

\[
BH_{it} = \frac{TL_{it} - TL_{it-1}}{SL_{it-1} + CLL_{it}}
\]

Explanation:
- BH = Bank Help
- TL = Total bank borrowings (short-term bank borrowings + long-term bank borrowings)
- SL = Short-term bank borrowings
- CLL = Long-term borrowings that are due at the end of the year

A BH of 0 occurs if the creditor extends all borrowings due for a certain year and there are no new borrowings. BH is worth -100% if there are no extended borrowings and also no new debt. Meanwhile, a positive BH happens if the amount of the new borrowings are greater than those of the matured debt that is not extended, that is, matured debt that has been repaid. A BH of -10% indicates that 90% of loans due are renewed. Companies with a high BH ratio have a high refinancing ratio for their matured debt, and are therefore indicated to get intensive help from banks.

A company will be considered as a zombie if it has FES and high BH values, at the same time.

Fukuda and Nakamura (2011) mentioned that unprofitable firms with increasing borrowing can be categorized as zombies. Hoshi and Kim (2013) argue that companies with very high debt levels and do not have good business performance (companies with high FES) will not possible to get entirely new loans from banks. What can be done by such companies is, with the help of banks, extending debts. Even so, banks will consider the business risks and potential of the distressed company to survive. In this case, banks will extend debt maturities only to companies with high survival prospects. The higher the potential for survival the higher the loan in a rollover or restructured (high BH). Following Hoshi and Kim’s (2013) zombie company is expressed as a dummy variable regarding the value of FES and BH. A company will be considered a zombie if it shows FES of more than 5% and BH of more than -10%. Therefore, the zombie dummy variable (ZOM_DUM) is determined by the following criteria:

\[
ZOM_DUM_{it} = \begin{cases} 
1 & \text{if } FES_{it} > 5\% \text{ and } BH_{it} > -10\% \\
0 & \text{if else}
\end{cases}
\]

A zombie company is one that experiences financial distress and faces the threat of bankruptcy. Zombies have a lower ability to implement CSR than non-zombies Han et al. (2018) Zombie companies experience a lack of financial resources due to their relatively poor ability to generate profits. Such zombies will go bankrupt without external support from the government and banks in the form of interest subsidies or other restructuring activities. The zombie company's financial condition that is worse than companies in general, will limit their ability to carry out CSR activities. This results in the lower CSR performance in zombie companies compared to those of non-zombies.

\[H_1: \text{The state of being a zombie company has a negative effect on CSR performance; a zombie's CSR performance is lower than that of non-zombie.}\]

Corporate Governance

Corporate Governance is a concept that seeks to improve company performance through the monitoring of management activities, in order to ensure accountability, transparency, responsibility, independence, fairness, and equality of a company in the eyes of stakeholders [27]. In addition to
monitoring management activities, corporate governance provides guidelines for companies on how a company can be directed and controlled. Corporate governance is the way of organizing a company so that it can operate effectively and efficiently.

In this study, corporate governance is measured by the composition of the independent board of commissioner (BC) variable. The measurement is a representation of the principle of accountability. This variable is used as a proxy for corporate governance because the existence of an independent board of commissioners acts as a balancing force in decision making within the board of commissioners. Independent commissioners are expected to be able to provide a holistic and balanced constructive opinion that can positively influence the implementation of CSR in the company. Dalton et al. (1999) and Zubeltzu-Jaka et al. (2020) show that companies with board members who are dominated by outsiders (independent non-executive directors) can produce better firm performance, including social performance. The Independent Board of commissioner composition is measured as follows:

\[ BC_{it} = \frac{IC_{it}}{BOC_{it}} \]

where:

- \( BC \) = The Independent Board of Commissioners Composition
- \( IC \) = The number of Independent Commissioners
- \( BOC \) = The number of Board of Commissioners

Independent commissioners do not have a relationship with the company, so they are expected to be more capable and more effective in monitoring management. As a consequence, the supervisory board is expected to be more efficient when carrying out their duties and responsibilities to the various needs of stakeholders and can influence the company's compliance toward the implementation of CSR (Chen and Jaggi, 2000). In this case, they will avoid actions that can damage the company's reputation (Abbott et al., 2000). Reeb and Zhao (2013) find that independent commissioners effectively influence the implementation and disclosure of CSR of a company. Independent commissioners are motivated to increase information disclosure to investors and other stakeholders to increase company value and to reduce information asymmetry (Matolcsy et al., 2012). Therefore, one of the tendencies of independent commissioners is to focus on the sustainability of CSR initiatives in the company in order to maintain the company’s reputation even in conditions of distress.

**H1:** The Independent Board Composition weakens the negative influence of zombie company on CSR performance.

**Family Ownership**

Family ownership is the percentage of shares of a company owned by a family. In the context of CSR, controlling families can use their dominant voting rights to divert funds from CSR activities to other projects. The transfer of funds is one of the causes of lower CSR performance for companies with high family ownership. Cavanati (2018) shows that public family firms tend to neglect social performance when compared to private family firms. The measurement of family ownership (FOWN) in this study is by the following formula:

\[ FOWN_{it} = \frac{\text{Total shares owned by the family}_{it}}{\text{Total shares outstanding}_{it}} \]

Families with high share ownership tend to try to maintain ownership of the company so that it can be passed on to the next generation. In conditions of distress, the priority of companies with high family ownership is the survival of the family interest. This situation causes companies to tend to ignore the implementation of CSR. Therefore, family ownership strengthens the negative influence of zombie company on the performance of corporate social responsibility.

**H2:** Family ownership strengthens the negative influence of zombie company on CSR performance.

**Institutional Ownership**

Institutional ownership is, usually, the largest type of share ownership in a company. This is the ownership of shares by the government, financial institutions, legal entities, foreign institutions, trusts, and other institutions [35]. Institutional ownership describes the proportion of shares owned by institutions. The measurement of institutional ownership (IOWN) is as follows:
Chen et al. (2020) state that institutional investors prioritize the long-term benefits of corporate involvement in corporate social performance activities. The higher institutional ownership, therefore, is expected to encourage companies to be responsive to the natural environment, the community, and their employees. The value of the company in the long run is the priority of institutional shareholders. Therefore, institutional shareholders encourage the implementation of initiatives that are expected to have an impact on increasing the value of the company in the long run. Nevertheless, Dyck et al. (2019) find that not all types of institutional investors encourage CSR initiatives. Only institutional investors from countries whose communities believe in the importance of CSR issues have a positive impact on CSR performance.

H₄: Institutional ownership weakens the negative influence of zombie company on CSR performance.

**RESEARCH METHODS**

**Data and Sample**

This research utilizes a purposive sampling method with the following criteria: 1) non-financial companies listed on the Indonesia Stock Exchange; 2) companies that published annual reports during the study period, i.e. in 2010 to 2017; 3) The companies published the financial statements in Rupiah; 4) Published all the data needed in research. Data related to zombie company, corporate social responsibility, board composition, family ownership, institutional ownership, and control variables (financial leverage, SOEs, and firm size) were obtained from annual reports of companies that meet the sample criteria. These criteria yielded a sample consisting of 288 companies with 1865 observations.

**Measurements**

CSR is measured by the CSR disclosure index (CSRI). Zombie company is stated as a dummy variable (ZOM_DUM) with a value of 1 if FESₜₜ > 5%, BHₜₜ > -10%, and 0 if not. Corporate governance is proxied by the independent board of commissioners composition (BC). Family ownership (FOWN) is the proportion of a company shares owned by the family. Institutional ownership (IOWN) is the proportion of a company shares owned by institutions. There are several control variables in this study, including: financial leverage (LEV) measured using the ratio of debt to total assets, company size (SIZE) measured by the natural logarithm of total assets, and a dummy of state-owned enterprise (SOE) which is worth 1 for a company whose shares are partly owned by the government and 0 for the others.

**Model**

\[ CSRIᵢₜ = β₀ + β₁ZOM_DUMᵢocale; + β₂MODᵢʊₜ₋₁ + β₃ZOM_DUMᵢʊᵢₓXMODᵢʊᵢₓ₋₁ + \sum β₆CVᵢₓ + ε \]

Explanation:

CSRI = Corporate Social Responsibility Index of company i in year t
ZOM_DUM = Dummy of zombie company
MOD = Moderator variables of company i in year t-1, consisting of independent board of commissioners composition (BC), family ownership (FOWN), and institutional ownership (IOWN)
CV = control variables which include leverage (LEV), the dummy of state-owned enterprises (SOE), and firm size (SIZE)

**RESULTS AND DISCUSSION**

**Descriptive**

Table 1 displays the descriptive statistics of the research variables. The lowest value of the CSRI variable is 3.00%, while the highest is 77.00%, with an average of 24.16%. This shows the low commitment of companies in carrying out CSR activities. The average value of the zombie company variable (ZOM_DUM) of 0.21 indicates that 21.00% of observations are zombie companies. The lowest proportion of independent directors is 30.00% with an average of 41.47%. This shows that all companies have fulfilled the rules in the FSA Regulation regarding the minimum proportion of independent directors in a public company.

The variable financial leverage (LEV) has the lowest value of 2.00% and the highest 2071%.
The average value of LEV of 59.55% can be said to be quite high and shows the average company uses debt to finance about two-thirds of its total assets. Meanwhile, the highest LEV value of 2071% can be interpreted as the company has a negative equity value. Companies with negative equity have the potential to become zombie companies. The standard deviation value of 0.93514 also shows that the proportion of companies with negative equity is adequately large.

Table 1. Descriptive

<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>CSRI</td>
<td>1865</td>
<td>0.03</td>
<td>0.77</td>
<td>0.24</td>
<td>0.1702</td>
</tr>
<tr>
<td>ZOM_DUM*</td>
<td>1865</td>
<td>0.00</td>
<td>1.00</td>
<td>0.21</td>
<td>0.808</td>
</tr>
<tr>
<td>BC</td>
<td>1865</td>
<td>0.30</td>
<td>0.83</td>
<td>0.41</td>
<td>0.103</td>
</tr>
<tr>
<td>FOWN</td>
<td>1865</td>
<td>0.00</td>
<td>0.85</td>
<td>0.02</td>
<td>0.095</td>
</tr>
<tr>
<td>IOWN</td>
<td>1865</td>
<td>0.00</td>
<td>0.99</td>
<td>0.62</td>
<td>0.257</td>
</tr>
<tr>
<td>LEV</td>
<td>1865</td>
<td>0.02</td>
<td>20.71</td>
<td>0.59</td>
<td>0.935</td>
</tr>
<tr>
<td>SOE*</td>
<td>1865</td>
<td>0.00</td>
<td>1.00</td>
<td>0.04</td>
<td>0.204</td>
</tr>
<tr>
<td>SIZE*</td>
<td>1865</td>
<td>25.03</td>
<td>35.15</td>
<td>28.55</td>
<td>1.628</td>
</tr>
</tbody>
</table>

Source: SPSS output

Note: Results are stated in%, except those marked *

Table 2. Output

<table>
<thead>
<tr>
<th></th>
<th>MODEL 1</th>
<th>MODEL 2</th>
<th>MODEL 3</th>
<th>MODEL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1A</td>
<td>1B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.248***</td>
<td>-0.572***</td>
<td>-0.565***</td>
<td>-0.567***</td>
</tr>
<tr>
<td></td>
<td>(55.928)</td>
<td>(-9.021)</td>
<td>(-8.749)</td>
<td>(-8.793)</td>
</tr>
<tr>
<td>ZOM_DUM</td>
<td>-0.028***</td>
<td>-0.027***</td>
<td>-0.027***</td>
<td>-0.027***</td>
</tr>
<tr>
<td></td>
<td>(-2.924)</td>
<td>(-3.104)</td>
<td>(-3.602)</td>
<td>(-3.023)</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.006*</td>
<td>-0.006*</td>
<td>-0.006</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(-1.663)</td>
<td>(-1.663)</td>
<td>(-1.662)</td>
<td>(-1.603)</td>
</tr>
<tr>
<td>SOE</td>
<td>0.234***</td>
<td>0.233***</td>
<td>0.235***</td>
<td>0.233***</td>
</tr>
<tr>
<td></td>
<td>(13.194)</td>
<td>(13.072)</td>
<td>(13.223)</td>
<td>(11.197)</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.028***</td>
<td>0.029***</td>
<td>0.028***</td>
<td>0.028***</td>
</tr>
<tr>
<td></td>
<td>(12.801)</td>
<td>(12.801)</td>
<td>(12.714)</td>
<td>(12.714)</td>
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<tr>
<td>BC</td>
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<td>(-0.540)</td>
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<tr>
<td>ZOMXBC</td>
<td>0.001</td>
<td>(0.094)</td>
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</tr>
<tr>
<td>FOWN</td>
<td>0.035</td>
<td>(0.842)</td>
<td></td>
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<tr>
<td>ZOMXFOWN</td>
<td>-0.015**</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>(-1.738)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOWN</td>
<td>0.000</td>
<td>(0.995)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZOMXIOWN</td>
<td>-0.010</td>
<td>(-0.319)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.004</td>
<td>0.179</td>
<td>0.180</td>
<td>0.185</td>
</tr>
<tr>
<td></td>
<td>0.179</td>
<td>0.179</td>
<td>0.179</td>
<td>0.179</td>
</tr>
<tr>
<td>$F$</td>
<td>8.548***</td>
<td>102.897***</td>
<td>68.590***</td>
<td>69.140***</td>
</tr>
<tr>
<td></td>
<td>68.767***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS output

Notes: Table 2 reports the results from OLS and Moderated Regression Analysis. The dependent variable is CSR Index during period 2010 – 2017. T-statistics are in parentheses. *, **, *** Indicate significance at the 10, 5, and 1% levels, respectively.
Hypothesis Testing and Analysis

Table 2 shows the results of several models developed from the basic model. Model 1 is a model without moderation. Models 2, 3, and 4 respectively are models with moderator variables BC, FOWN, and IOWN. The classical assumption test results on all models show the p-value of the Kolmogorov-Smirnov tests are more than 0.05, multicollinearity tests show tolerance values > 0.1 and VIF <10, and heteroscedasticity tests with Spearman's Rho show p-values of more than 0.05.

Table 2 shows that the ZOM_DUM variable in all models exhibit negative coefficients. Thus, the hypothesis stating that zombie conditions have a negative influence on CSR performance is acceptable. CSR performance in zombie companies is lower than non-zombies. Moderated regression analysis (MRA) on models 2 to 4, shows that only family ownership moderates the influence of zombies on CSR performance. Table 2 shows that family ownership exacerbates the relationship between zombies and CSR performance, and acts as a pure moderator. Therefore, hypothesis 3 is accepted. Meanwhile, the proportion of independent commissioners and institutional ownership do not display moderating effects. Therefore, hypotheses 2 and 4 are rejected.

The results show that family ownership acts as a pure moderator which strengthened the negative influence of zombie company on CSR performance. Companies with high family ownership tend to try to maintain their ownership so that it can be passed on to the next generation. In conditions of distress, the priority of such companies is survival. This situation causes companies to tend to ignore CSR and divert resources used for CSR into efforts to save the company. These results relatively support the findings of Ghoul et al. (2016) which shows that companies with higher family ownership tend to have lower CSR performance.

The independent board of commissioners does not moderate the influence of zombie company on CSR performance. This result reflects that the independent commissioner at the zombie company is more concerned with saving the company’s operations and finances, so it tends not to pay attention to matters related to CSR. This supports the research of Michelon and Parbonetti (2012) and Liao et al. (2018). Institutional ownership also does not moderate the influence of zombie company on CSR performance. These results indicate that institutional investor tends to have goals of maximizing their benefit without regard to the benefits of other shareholders and therefore tends to neglect CSR performance. The results of this study support the findings of Barnea and Rubin (2010).

All control variables show influences on CSR performance. Leverage shows negative effects. This shows that the higher the level of leverage of a firm, the greater the fixed financial charge and, therefore, reducing the ability to carry out CSR. This finding is in line with the results of Harrison and Coombs (2006). SOE shows a positive coefficient, which means the CSR performance of state-owned companies is higher than non-SOEs. The higher CSR performance of SOEs is due to the implementation of CSR in Indonesian’s SOEs have been formally regulated in various SOE ministerial decrees regarding partnership and community development programs (PKBL) since 2007. The results of this study are consistent with Lau et al. (2014). Company size has a positive effect on CSR. Porter and Kramer (2006) explain that there are four CSR justifications: moral obligation, sustainability, license to operate, and reputation. The higher the size of the company, the greater the need and encouragement for the company to achieve these four goals.

Robustness check

We conducted robustness checks following Banerjee and Hoffman (2018), which define zombies as companies that exhibit the interest coverage ratio (ICR) of less than one for three consecutive years and with at least 10 years of age. Because the IPO wave in Indonesia was only flourished since 2010 and thereafter, we modified the categorization by only requiring an ICR of less than one for two consecutive years. The robustness check results are in table 3.

Models 5 to 8 are arranged using the patterns of Models 1 to 4. The results of the robustness analysis are relatively consistent with the previous ones. ZOM_DUM determined by ICR criteria has a negative effect on CSR performance. All control variables also show a significant relationship with CSR performance. However, the family ownership moderation effect was not detected in the results.
### Table 3. Output of Robustness Check

<table>
<thead>
<tr>
<th></th>
<th>MODEL 5A</th>
<th>MODEL 5B</th>
<th>MODEL 6</th>
<th>MODEL 7</th>
<th>MODEL 8</th>
</tr>
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<td>(59.765)</td>
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<td>(-1.981)</td>
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<td>(12.331)</td>
<td>(12.630)</td>
<td>(10.545)</td>
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<td></td>
<td>(10.861)</td>
<td>(11.010)</td>
<td>(10.833)</td>
<td>(10.825)</td>
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<td>0.174</td>
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<td>89.047***</td>
<td>60.088***</td>
<td>59.478***</td>
<td>59.452***</td>
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Source: SPSS output

Notes: Table 3 reports the results from OLS and Moderated Regression Analysis. The dependent variable is CSR Index during period 2010 – 2017. T-statistics are in parentheses. *, **, *** Indicate significance at the 10, 5, and 1% levels, respectively.

### CONCLUSION

CSR performance in zombie companies is lower than non-zombies. The condition of zombie companies experiencing financial resource shortages due to their relatively poor ability to generate profits limits their ability to carry out CSR activities. Family ownership strengthens the negative influence of zombie company status on CSR performance. The priority of companies with high family ownership in the survival of the firm has resulted in a tendency to ignore CSR and divert CSR resources into efforts to save the company. Meanwhile, the Board composition and Institutional ownership do not moderate the influence of zombie company status on CSR performance. In a distress condition, the independent commissioner’s attention is focused on saving the company, while, institutional investors only aim to maximize personal benefits, thereby ignoring matters related to CSR.

This research is expected to raise awareness about the existence of zombie companies in Indonesia. This understanding is expected to help the general public to change expectations that not all companies can demonstrate good CSR performance. Understanding the existence of zombies is also expected to lead to awareness about the diversity of variables that affect company performance, both accounting performance and market performance, as well as company stock performance. For this purpose, further research is needed. It is also interesting to conduct a study of the factors that cause companies to become zombies. Finally, considering that the zombie company is related to the restructuring program specifically in the form of interest subsidies, further research related to the zombie company can also be
directed to determine its impact on the country’s macroeconomic conditions.

There is currently no unanimous consensus on the zombie company measurement method. How to determine whether a company is a zombie? The methods presented since Cabalerro et al. (2008), Fukuda and Nakamura (2011), Hoshi and Kim (2012), and Banerjee and Hoffman (2018) have their respective advantages and disadvantages. Therefore, the biggest challenge related to research on zombie companies is to develop measurement methods with the best reliability.

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