Optimizing Food & Beverage Company Performance Through Governance and Social Responsibility: Random Effect Model Approach

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Abstract
The purpose of this study is to improve the efficiency of food and beverage companies listed on the Indonesia Stock Exchange by implementing GCG & CSR principles. Using panel data from 95 companies covering the period 2018-2022 and using the Random Effects model, the regression analysis shows that the Board of Commissioners has no statistically significant effect on company performance. In contrast, the Audit Committee shows a significant and beneficial impact. The novelty of this study emphasizes the complex nature of the interaction between GCG parameters, CSR, and business success in the food and beverage industry. Practical suggestions include increasing the authority of the Audit Committee to improve performance and applying CSR more contextually to reduce the impact of the Board of Commissioners. The contribution of this research is a valuable understanding of the interaction between governance dynamics and CSR in the context of strategic decision-making.

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Introduction
During the pandemic, food and beverage companies were selected as the subject of research due to their significant increase in the sector, playing a crucial role in the social life of the community. Ensuring worldwide access to food is crucial for instilling trust in consumers, promoting peace, and enhancing individual welfare. Maintaining the world’s food supply network is vital for survival during
the COVID-19 pandemic, but it is also a significant difficulty (Barman, 2021; Kumar, 2021; Xu, 2021). In light of globalization and escalating economic competition, a company's financial performance is an essential area of concentration for operational continuity (Grosse, 2021; Lavery, 2021). Financial statement fabrication and other forms of manipulation are commonplace because of the weaknesses in the management structure. GCG, or good corporate governance, serves as a system to effectively confront and mitigate manipulation and corruption (Akpanuko, 2018; Dou, 2018; Nasir, 2018). The application of GCG is anticipated to offer further benefits to diverse stakeholders, including community people, suppliers, distributors, government, and investors (Cornell, 2021; Sunitiyoso, 2022). Several GCG violations still happen in Indonesia even though GCG is thought to be essential for enhancing firm performance (Feng, 2022; Miranda, 2020; Sanjai, 2021).

The research looks at publicly traded companies that are openly listed on the IDX and are engaged within the food and beverage subsector. How big the audit committee and board are, and the board itself serve as proxy variables for GCG implementation. This study's goal is to assess how using GCG affects a company's overall performance. The tasks assigned to the audit committee, board of directors BOD, and commissioners will be examined to do this (Herusetya, 2022; Obermire, 2021; Thomas, 2019).

This research is pertinent to the present circumstances, particularly concerning instances of fraudulent manipulation of financial records by multiple companies and government agencies. An example is the case of financial violations at PT. Tiga Pilar Sejahtera code (AISA) (Monica Wareza, 2019), and the incident involving the misappropriation of funds for the procurement of HIV drugs by PT. Kimia Farma Trading & Distribution about tenders at the Ministry of Health (Dyah, 2018). PT. Pelindo is accused of engaging in corruption in the inflation of funds used to buy several properties for investment (Ikbal and Maulana, 2023). This indicates a non-compliance with corporate governance principles and a disregard for corporate governance norms, Some investigation on the disclosure of the case (Achim, 2023; Hermanto, 2021; Karen, 2019; Pourmansouri, 2022). An assessment of a company's capacity to produce a profit through efficient use of its assets is called return on assets, or ROA (Barauskaite, 2021; Karim, 2013).

Figure 1 shows that the average (ROA) of businesses in the food and beverage is increasing steadily. Amidst the pandemic 2020-2021, the significant expansion can be attributed to constant consumer demand for food and beverages, essential commodities that remain necessary even during times of crisis. What affects the company’s ability to make money is both internal factors and
implementation of (CSR). Companies prioritizing corporate (CSR) anticipate a favorable response, enhancing long-term social and financial prospects (Platonova, 2018; Zhao, 2021).

![Graph showing company's financial performance from 2017 to 2021]

Source: idx.com (2023)
Fig. 1. Company’s Financial Performance 2017–2021

An extensive examination of the current body of literature emphasizes the significance of effective corporate governance as a vital foundation for attaining robust financial performance inside the organization. According to research, the Board of Directors, the Audit Committee, and the Board of Commissioners are among the GCG responsibilities that are most important for enhancing the performance of the business (Ilham, 2020). Despite this positive, the findings explain that the role of the GCG does not fully have a significant impact on the company's performance. The audit committee has no influence because its primary role is to support the board in overseeing the financial reporting process carried out by management, aimed at improving the reliability of financial statements. The research findings suggest that a high level of ownership concentration presents a risk to the effective application of corporate governance principles (GCG). More precisely, a significant degree of ownership concentration undermines the effectiveness of the corporate governance (CG) (Pourmansouri, 2022).

This study is unusual because it specifically examines the influence of GCG on the financial performance of food and beverage manufacturing companies in Indonesia. It distinguishes itself by specifically analyzing the impact of GCG and CSR as a moderating factor, illustrated by the PT AISA financial statements fraud case. This study differentiates itself from prior research by focusing on providing an in-depth comprehension of the impact of GCG on financial performance, while considering CSR as a modifying factor. Using a sample of 21 of the 24 food and beverage firms that
were listed on the IDX between 2017 and 2022, this study offers a nuanced viewpoint on the complex interplay among GCG, CSR, & financial performance. This continuing research serves as a basis for stakeholders to acknowledge the significance of implementing GCG in order to achieve economic and social responsibility objectives within Indonesia’s food and beverage sector.

**Literature Review**

According to Holly (2022), Jensen and Meckling (1976), contractual relationships between principals and agents are the focus of agency theory. Agency theory, as defined by Renders Annelies (2012), Bataineh (2021), Shoaib (2022), analyzes the contractual agreements between managers and owners of firms, also known as principals and agents. Conflicts of interest between the two parties cause agency problems (Robert, 2013). One possible resolution to this issue is adopting effective corporate governance (GCG), founded on autonomy, duty, liability, transparency, and equity. This study primarily investigates the robust association between agency theory, effective corporate governance (GCG), and company performance, specifically regarding return on assets (ROA) (Fitriyani, 2021; Melani, 2017). Furthermore, these studies acknowledge that implementing (CSR) is a concrete manifestation of the concept of responsibility in corporate governance (Nguyen, 2023).

Signal Theory examines the information companies should convey through their financial statements, encompassing favorable and unfavorable signals (Bae, 2018). Signaling refers to the issue of insufficient communication in a competitive environment (Appels, 2022; Brian, 2010; and Saud, 2016). The main objective of this approach is to support management’s information-gathering and market- and participant-driven strategies. Information asymmetry in an organizational context can lead to disputes between management and agents. Signaling connects the divide by transmitting pertinent and superior information to all involved to address this issue (Appels, 2022 and Saud, 2016). According to Appels (2022) and Saud A. Taj (2016) Signaler, received signal, feedback, and channel fundamentals. From the company’s perspective, executives, directors, and managers are classified as management insiders. As signalers, they disseminate information regarding stock prices, dividends, funding for the environment, corporate social responsibility investments, and other related topics. Conversely, the recipients are external individuals, investors, or employees who lack awareness of sensitive material. Feedback pertains to the interaction between the signaling device and the receiver (Appels, 2022; Saud, 2016; Sutopo, 2018). The signaling process has two primary
entities: the signaler and the receiver. Signals are employed to convey affirmative or adverse data to mitigate information asymmetry (Zhang, 2020).

Financial analysis techniques are employed to evaluate the financial state of a corporation and performance, aiming to optimize resources and adapt to environmental fluctuations (Latan et al, 2018). The assessment of financial performance, as described by Herman (2022) and Ikram (2019) aids management in making well-informed decisions, overseeing operations, and enhancing overall performance. Performance measurement assesses the attainment of objectives by evaluating the provision of products, services, or processes. According to Pham (2021) ROA is one profitability metric that shows how profitable a business is and how well its management is doing. According to Akanmu (2023) evaluation of performance is a critical factor in determining the success of businesses that sell food and beverages.

Agency Theory, proposed by Jensen and Meckling (1976) is a conceptual framework that examines the relationship between principals and agents in an organization. According to Islami (2022) a firm that practices effective corporate governance will perform better by implementing managerial oversight and adhering to laws, regulations, and stakeholder commitments. The two types of corporate governance processes are as follows, Internal consists of the board of executives (BOD) is the shareholders’ general meeting; external includes market monitoring (Napitupulu, 2020).

As required by Law No. 40 of 2007 with regard to limited liability firms, The task of overseeing and advising in accordance with the articles of creation falls to a Board of Commissioners. According to Renee (2009) and Sihombing (2014) the BOD has total control over the corporation’s operation and acts as its legal representation both inside and outside of the legal system. The crucial how the Audit Committee operates in maintaining confidence in financial accounts by delivering unbiased evaluations to the BOC (Hermanto, 2021).

An adept board of commissioners has the potential to improve the company’s company success (Hermanto and Widyastuti, 2021). Agency theory states that an impartial board of commissioners will lessen the conflict of interest between management and shareholders. An influential board of commissioners can efficiently oversee operations, guarantee openness, and create regulations that promote business growth. Enhancing investor confidence and minimizing the probability of corporate failure can improve financial performance. According to the viewpoint expressed Santoso (2023) a higher the number of commissioners that are independent is believed to enhance the level of independence and impartiality in overseeing management. The research findings Suhardjanto (2017) to further substantiate the claim, it is necessary to confirm that the existence of an
autonomous BOD substantially influences in company success of manufacturing companies. Therefore, enterprises in the food and beverage subsector are significantly impacted by the Board of Commissioners' Company's Performance (CP).

Managerial ownership, as defined by Jensen and Meckling (1976), refers to the proportion of a corporation that is owned by its management. In essence, management functions as shareholders who actively make choices, directly enjoy the benefits of successful decisions and assume all the liabilities associated with unfavorable decision-making. Excessive managerial ownership fails to connect management's interests with those of shareholders, leaving managers susceptible to putting their interests over those of shareholders. Research Nisa (2023) and Wicaksono (2019) assert that more board members enhance task allocation clarity and the CP. The investigation conducted by Praleo (2021), supports this. Comma which demonstrates a positive and substantial impact of the BOD on CP (Hermanto, and Widyastuti, 2021). Managers must emphasize meeting the desires of shareholders, which essentially entails enhancing performance to augment corporate profits (Suhartono, 2022). Therefore, the board of directors BOD has a significant impact on company performance (CP).

The Board of Commissioners established the Audit Committee in accordance with OJK RI regulation number 1/P.O.J.K., 03/2019. The Committee reports to and assists the BOC in carrying out its duties. Following the establishment of the BOC, an audit committee AC was constituted. The AC reports directly to the BOC and is responsible for ensuring the maintenance of good corporate governance practices. According to the research conducted by researchers (Darmawan, 2023; Vania, 2021), Increasing the audit committee's size improves the oversight of financial reporting and the application of GCG. The audit committee enhances the organization's performance (Endri et al., 2020; Yanti, 2022). Therefore, audit committee has a significant effect on performance.

Private company Law No. 40 of 2007 mandates that enterprises practice their social responsibility or CSR. As stated in Paragraph 9 of PSAK No.1 by the Indonesian Accounting Association (IAI), firms have permission to incorporate supplementary reports, including those about the environment. Bapepam Decree No. Kep-38/PM/1996 grants companies the freedom to offer a detailed account of their societal contributions and efforts towards CSR. CSR refers to a company's pledge to achieve sustainable growth in its economy by placing equal emphasis on social, environmental, and economic factors (Andreani, 2022; Bae, 2018; Ferrarini 2023; and Yanti, 2022).
By using a binary rating system, the Global Reporting Program (GRI) of 1 represents "yes" and a score of 0 means "no". GRI analyzes the performance of (CSR) using the content analysis method.

Mostly, the commissioners’ committee responsible for monitoring the administration's performance, particularly top management, to maintain corporate order. Furthermore, the board of directors is accountable for supervising the efficient execution of social responsibility. This is due to considering many stakeholders' interests (Harjoto, 2011; Khan, 2020). Kemala (2021), Khan (2023), and Wakhidati (2022) discovered that the relationship between the performance of the corporation and the Board of Commissioners is mediated by corporate social responsibility or CSR. Therefore, the hypothesis of CSR moderates the board of Commissioners on the performance of food and beverage companies.

**Method**

This research project is a quantitative research that seeks to quantify research variables through the use of statistical methodology. The study will be undertaken on the IDX, specifically targeting Firms in the IDX that are listed in the food along with beverage subsector 2017 and 2021. The population comprises 24 companies, and the sample was intentionally chosen based on specific criteria, such as having complete information available, consistently publishing annual reports, and not being delisted between 2017 and 2021 (Sugiyono, 2013).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Measurement Methods</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
<td>Board of Independent Commissioners (BC) (X1)</td>
<td>Independent Commissioner / Total Commissioners x 100%</td>
<td>Presentase</td>
</tr>
<tr>
<td></td>
<td>Board of Directors (BOD) (X2)</td>
<td>Σ Anggota Dewan Direksi</td>
<td>Presentase</td>
</tr>
<tr>
<td></td>
<td>Audit Committee (CA) (X3)</td>
<td>Σ Anggota Komite Audit</td>
<td>Rasio</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>Company Performance (CP) = ROA</td>
<td>Net Income / Total Assets</td>
<td>Rasio</td>
</tr>
<tr>
<td></td>
<td>CSR</td>
<td>Total CSR Disclosure</td>
<td>Rasio</td>
</tr>
</tbody>
</table>

This study consists of three discrete factors (see Table 1). X1, which pertains to the Board of Independent Commissioners; X2, which represents the Boards of Directors (BOD); and X3, which denotes the Audit Committee (CA). The dependent variable is the company's performance, which is determined by the adoption of Return on Assets (ROA) in 2022. This formula quantifies the level of
efficiency exhibited by a corporation in generating profits relative to its total assets, refer to research.

The CSR GRI 4.0 acts as a moderating variable when examining the connection between independent and dependent variables, refer to research (David, 2018; Manes, 2018).

Data analysis according to Ghozali (2018) and Wahana (2023) presenting and summarizing the results will help the facts in this study make sense and become comprehensible. The data analysis method utilizes Descriptive statistics, specifically the mean, minimum, the maximum, and standardized deviation values. Assessing how well the regression model fits the data typically involves testing for heteroscedasticity, self-correlation multicollinearity, and normality. The variable inflation factor (VIF) and tolerance levels are used in the multicollinearity test, whereas the normalcy test utilizes This Kolmogorov-Smirnov test will be conducted with a significance level of 5%. Prior to performing regression testing, ensure that all of these stages are completed (Hastuti, 2017; Sugi, 2020; White, 1980).

A concept test examines the relationship between one independent variable and a single dependent variable through simple linear regression modeling (Putri, 2021 and Sugiyono, 2013). The process entails determining the equation of the regression line and computing the coefficient of determination (R2). To ascertain the significant impact a test of significance the t-test to see how the independent factor affects the dependent factor. Moderated regression analysis employs the technique known as MRA, Aiming to ascertain whether CSR enhances or diminishes the correlation between the two outcome measures, conduct a relationship test. SPSS was utilised for data processing.

Simple linear regression analysis is employed to examine the correlation between a single independent variable and a single dependent variable. The process entails determining the equation of the regression line and computing the coefficient of determination (R2). The t-test is used to conduct a significance test in order to ascertain the extent to which the independent variable has a significant impact on the dependent variable. Moderated regression analysis use the Moderated Regression Analysis (MRA) interaction test to assess if the moderating variable (CSR) enhances or diminishes the association between the independent and dependent variables. was utilised for data processing.

Figure 2 explains about the analysis data of panel data regression model estimation. There are three models, namely the Common Effect Model (CEM), the basic Fixed Effects Model (FEM), and the Random Effect Models (REM). They are the foundation for panel data regression model estimates. The purpose of selecting the regression models for this panel data is to determine which models are
appropriate for this investigation.

Utilizing the Breush-Pagan probability, the Lagrange Multiplier test establishes the model (REM or CEM), with H0 denoting CEM if Prob > α and Ha denoting REM if prob < α. When performing regression analysis using the Ordinary Least Squares method, the Classical Assumption Test is necessary (OLS). The necessity for traditional assumption testing depends on whatever model (Common Effect Model/CEM, Fixed Effect Models/FEM, or Random Effect Model/REM) is selected. When utilizing CEM or FEM, it is imperative to do testing for Multicollinearity, Heteroskedasticity, and Autocorrelation. In contrast, when REM is chosen, a conventional hypothesis test is not required as REM employs the General Least Squares method for estimating (Alghifari, 2022; Suteja, 2023).

The F test establishes if the bound variable is impacted by any of the free variables in a similar way. The R2 test quantifies the degree to which the model accounts for the variability in the data. The t test evaluates the partial impact of the independent variable.

The effect of corporate social responsibility (CSR)-moderated corporate governance on business performance is examined using moderated regression analysis (MRA).

\[
ROA = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4Z + \beta_5X_1 \ast Z + \beta_6X_2 \ast Z + \beta_7X_3 \ast Z + \epsilon \quad (1)
\]

Equation (1) allows the examination of the interaction between corporate governance variables (Board of Commissioners, Board of Directors, Audit Committee) and the moderating variable CSR in influencing company performance.
Result and Discussion

The study's sample comprised 24 food and beverage businesses openly listed between 2018 and 2022 on IDX. The study employed purposive sampling as the selecting strategy, whereby participants are chosen based on specific criteria. The implementation of this approach yielded a selection size of 19 enterprises, guaranteeing that the sample accurately reflects the population being examined.

### Table 2. Sample Determination

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and beverage companies classified from the subsector 2018 to 2022 on (Idx.co.id 2023)</td>
<td>24</td>
</tr>
<tr>
<td>Sample companies did not experience delisting during the period 2018–2022 (Idx.co.id 2023).</td>
<td>24</td>
</tr>
<tr>
<td>businesses in the food and beverage subsector that did not release reports between 2018 and 2022</td>
<td>(3)</td>
</tr>
<tr>
<td>Information that will be accessible between 2018 and 2022 regarding the executive board, the audit committee, the board of commissioners, or the ROA</td>
<td>21</td>
</tr>
<tr>
<td>Food and beverage subsector firms lacking essential information required for research reasons.</td>
<td>(2)</td>
</tr>
<tr>
<td>Number of companies that are sampled</td>
<td>19</td>
</tr>
<tr>
<td>Total Samples (29 x 4 years)</td>
<td>95</td>
</tr>
</tbody>
</table>

Source: Calculation Data from (IDX.com, 2023)

Table 2 presents information regarding the selection of the sample for this study, specifically focused on food and beverage enterprises within the subsector from the years 2018 to 2022. In the year 2023, Idx.co.id is the main source of information. The applicable criteria involve categorizing 24 companies in the given subsector for the designated time frame and guaranteeing that none of them were removed from the listing between 2018 and 2022. Companies that did not submit required reports between 2018 and 2022 were also eliminated, leaving 21 businesses with information on the executive board, audit committee, board of commissioners, and return on assets (ROA) that could be accessed. Nevertheless, two companies operating in the food and beverage industry were also disqualified due to insufficient vital information necessary for research objectives. As a result, the study includes a total of 19 companies that were sampled, resulting in a collection of 95 samples over four years (29 samples per year for four years).
Table 3 displays the findings of the descriptive statistics for the main variables examined in the study. The variables consist of FP, BC, BOD, AC, and CSR. The table presents a concise overview of central tendency and dispersion measurements, including mean, median, maximum, minimum, and standard deviation. It offers useful insights into the distribution and properties of these variables. These statistics provide a basis for a thorough comprehension of the information, allowing for a detailed analysis of the main elements being investigated in the research.

<table>
<thead>
<tr>
<th>Table 3. Descriptive Statistics Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

Financial Performance (FP): The Return on Assets (ROA) test results show that, from 2018 to 2022, food and beverage companies’ profits represented roughly 6.57% of their total assets, with a value between -0.15 and 0.6072. Autonomous Board of Commissioners (BC): According to the examination of The BOC consists of independent parties who are impartial and unbiased transparently supervise the company, with an average representation of 38.11%. Board of Directors (BOD): From 2018 to 2022, food and beverage companies had an average Board of Directors size of 5 individuals, ranging from 2 to 11 people. The Audit Committee (AC) variable indicates that, typically, organisations have an average membership of 3 individuals in the Audit Committee. This membership helps in establishing a robust internal control structure. Food and beverage companies, on average, publish 44.98% of their Corporate Social Responsibility (CSR) items out of 139 disclosures. This demonstrates their commitment to social responsibility and transparency.

Next, the goal of Lagrange Multiplier test is to identify the best model random effect or common effect for panel data regression analysis (Rosalia Maharani, Ida Siswatiningsih, and Mawar Ratih Kusumawardani 2022). Table 4 presents the hypothesis that will be tested using the Lagrange multiplier:
Table 4. Lagrange Multiplier Test Results

<table>
<thead>
<tr>
<th>Test Hypothesis</th>
<th>Cross-section</th>
<th>Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>12.43646</td>
<td>1.055926</td>
<td>13.49239</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.3041)</td>
<td>(0.0002)</td>
</tr>
</tbody>
</table>

Table 4 displays the Lagrange Multiplier test results. The cross-section Breusch-Pagan statistic for the test is 12.43646, and the associated p-value is 0.0004. Given that 0.05 is the chance number is less than 0.05, the random effects model REM should be used.

According to the (REM), stochastic factors might be the cause of observed variations in regression models between samples and time periods (Alisa, 2022; Audia, 2023; Elsayed, 2023; Fairuz, 2023). The Eviews 9.0 output demonstrates that the random effects model generates unpredictable fluctuations in both the intercept and constant. This leads to unforeseen fluctuations arising among distinct samples and temporal intervals.

The Random Effects Model (REM) results are shown in Table 5. It includes probabilities, standard errors, coefficients, and t-statistics for factors such as C, DKI, DD, KA, CSR, MOD1, MOD2, and MOD3. These coefficients represent the estimated effects on the dependent variable. The table provides a thorough understanding of the model's explanatory power, which is further strengthened by the addition of random the cross-section and unique effects. It also includes effects requirements, weighted statistics, and important statistical metrics. Unweighted statistics offer an alternate evaluation.

According to the findings of the REM estimation (see Table 5), the variables about the audit committee, The way a firm performs is greatly influenced by its BOD, BOC, and CSR transparency, as well as by how these groups engage with CSR the a 14.81706 F-statistic is present. an expected value of 0.000011 (<0.05), provides strong evidence supporting this conclusion. The independent factors explain or contribute to 50.71% the modified R-squared score of 0.507129, which represents the volatility in business performance. Undiscovered factors account for the residual 49.29% of overall variance.
Table 5. Model of Random Effects (REM)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.268229</td>
<td>0.146546</td>
<td>-8.654115</td>
<td>0.0011</td>
</tr>
<tr>
<td>DKI</td>
<td>0.108096</td>
<td>0.093766</td>
<td>1.152823</td>
<td>0.2521</td>
</tr>
<tr>
<td>DD</td>
<td>-0.000798</td>
<td>0.005968</td>
<td>-0.133686</td>
<td>0.8940</td>
</tr>
<tr>
<td>KA</td>
<td>0.412669</td>
<td>0.027468</td>
<td>15.02363</td>
<td>0.0000</td>
</tr>
<tr>
<td>CSR</td>
<td>0.276552</td>
<td>0.279990</td>
<td>0.987719</td>
<td>0.3260</td>
</tr>
<tr>
<td>MOD1</td>
<td>0.021818</td>
<td>0.012998</td>
<td>1.678556</td>
<td>0.0968</td>
</tr>
<tr>
<td>MOD2</td>
<td>-0.013751</td>
<td>0.016452</td>
<td>-0.835868</td>
<td>0.4055</td>
</tr>
<tr>
<td>MOD3</td>
<td>-0.071991</td>
<td>0.011940</td>
<td>-6.029531</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Effects Specification

<table>
<thead>
<tr>
<th></th>
<th>S.D.</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random cross-section</td>
<td>0.069815</td>
<td>0.7905</td>
</tr>
<tr>
<td>Quirky and unpredictable</td>
<td>0.035938</td>
<td>0.2095</td>
</tr>
</tbody>
</table>

Weighted Statistics

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared (R-S)</td>
<td>.543832</td>
<td>Mean depend vr 0.014730</td>
</tr>
<tr>
<td>Adjusted R-squared (A.Rs)</td>
<td>.507129</td>
<td>S.D. depend vr 0.080464</td>
</tr>
<tr>
<td>S.E. of regression (SE.r)</td>
<td>.056490</td>
<td>Sum squar resid 0.277625</td>
</tr>
<tr>
<td>F-statistic (Fs)</td>
<td>14.81706</td>
<td>D-W 1.145691</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>.000000</td>
<td></td>
</tr>
</tbody>
</table>

Statistics without assigning weights to the data.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared (Rs)</td>
<td>-1.325830</td>
<td>Mean dependent var 0.065659</td>
</tr>
<tr>
<td>Sum squared resid (SSR)</td>
<td>2.436371</td>
<td>D-Watson 0.130552</td>
</tr>
</tbody>
</table>

Table 6 provides a concise overview of the main findings and examinations conducted on the Panel Model. It encompasses the results of three pivotal examinations:

Table 6. Model Conclusion

<table>
<thead>
<tr>
<th>No.</th>
<th>Results</th>
<th>Test</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Uji Chow</td>
<td>CEM vs FEM</td>
<td>FEM</td>
</tr>
<tr>
<td>2.</td>
<td>Uji Hausman</td>
<td>REM vs FEM</td>
<td>FEM</td>
</tr>
<tr>
<td>3.</td>
<td>Uji Lagrange Multiplier</td>
<td>CEM vs REM</td>
<td>REM</td>
</tr>
</tbody>
</table>

Based on test results, the Fixed Effect Model (REM) was determined to be a panel data regression model appropriate for evaluating the impact of audit committees, board members, and board of directors on CSR-moderated corporate performance. From 2018 to 2022, the model will be applied to 95 food and beverage companies listed on the Indonesian Stock Exchange using regression analysis and hypothetical testing.
Table 7 explains about the F test result. The F test is used to determine the significance of joint free variables against bound variables in a regression model. The output shows a F-statistic of 29.68 (p < 0.05), indicating that together, the variables significantly affect the company’s performance.

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>29.68354</th>
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<tbody>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
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</table>

Essentially, the coefficient of determination (R2) quantifies the degree to which a model can account for variations in the dependent variable. A value approaching 1 signifies a strong predictive ability. From Table 8, the adjusted R-squared of 0.884106 shows that the research variables are able to explain 88.41% variation in company performance, the rest being influenced by other factors.

| R-squared | 0.914929 |
| Adjusted R-squared | 0.884106 |

Each regression coefficient's statistical significance is assessed separately using the t-test (Bita, Hermuningsih, and Maulida, 2021; Kawilarang, Daromes, and Tangke, 2023; Tsuroyya and Astika 2017). The purpose of this examination is to ascertain whether the populations coefficient of regression is statistically equal to zero, indicating that No discernible distinction exists between both dependent and independent variables in question, or not equal to zero, indicating that the independent variable has an obvious impact (Jao et al. 2022).

| Board of Commissioners | 0.006238 | 0.113620 | 0.054902 | 0.9564 |
| Board of Directors | 0.004662 | 0.007933 | 0.587617 | 0.5587 |
| Audit Committee | 0.635070 | 0.033800 | 18.78927 | 0.0000 |
| M.CSR-(BOC>CP) | 0.026875 | 0.018656 | 1.440584 | 0.1542 |
| M.CSR_(BOD>CP) | -0.031821 | 0.022893 | -1.389969 | 0.1690 |
| M.CSR_(AC>CP) | -0.170205 | 0.015714 | -10.83125 | 0.0000 |

The t-test analysis results for the different variables are shown in Table 9. The table contains coefficients (Coeff), standard errors of measurement (Std. Er), t-statistics (t-Stat), and corresponding probabilities (Prob.). The variables being examined are the following: M.CSR-(BOC>CP),
M.CSR_(BOD>CP), M.CSR_(AC>CP), Audit Committee, Board of Commissioners, and Board of Directors. The t-test evaluates the importance of these factors and how they affect the overall model, offering vital information about the distinct contributions made by each research component.

The regression evaluation reveals that the parameter Board of Commissioners (BOC) has a coefficient of 0.006238, a standard error (Std. Er) of 0.113620, a test statistic (t-Stat) of 0.054902, & a probability (Prob.) of 0.9564. The coefficient quantifies the anticipated magnitude of the impact on the dependent variable (such as firm performance) for each incremental change in the factor that is independent. The governing body is known as the BOC indicates the statistical importance of such coefficients, while T-statistics are statistical values obtained from the hypothesis-based test of coefficients. As the probability (p-value) in this case is higher than the commonly accepted level of relevance (0.05), we don't have enough data to rule out the null hypothesis, which holds that the coefficient BOC has no statistically significant relationship with the dependent variable. Put simply, there is insufficient compelling evidence to assert that the presence of the "BOC" has a noteworthy impact on the variable, given a significance level of 0.05.

The empirical findings of the study indicate that the presence of an autonomous board of commissioners does not exert a statistically significant impact on the operational effectiveness of food and beverage companies listed on the Indonesian Stock Exchange (ISE). Given a p-value exceeding 0.05, indicating that the board of directors does not exert a substantial impact on the performance of food and beverage enterprises. This result is consistent with that of Nguyen (2023), which indicates that corporate efficiency may decrease when the board of commissioners' independence rises. The aforementioned research conducted by Irwan (2023), further supports the notion that the busyness of the board of directors comisioneer adversely affects performance, particularly in new and small businesses. Discovered that the success of a company does not have a direct impact on the probability of the board deciding to separate or merge the positions of the chief executive officer and the chairman of the board (Borgholthau, 2021). In light of the COVID-19 epidemic and the general public's basic need for food and drink, the food & beverage industry's financial standing may hold steady despite the bad global economy. However, organisations must contemplate flexible and inventive financial measures to maintain their resilience in the face of economic unpredictability. Simultaneously, prioritising operational efficiency and the ability to adjust to changes in customer behaviour can be crucial for achieving corporate sustainability.

Given the available data, we cannot reject the null hypothesis since the probability ratio (p-value) of 0.5587 above the usually accepted significance level of 0.05. With a significance level of 0.05, we
cannot confidently claim that the independent variable "Board of Directors" has a significant effect on the variable that is dependent in the regression model presented. In essence, the available statistical data is insufficient to assert that the existence or characteristics of the "Boards of Directors" have a significant influence on the dependent variable under scrutiny in this research.

A comparable conclusion is that management has a detrimental impact on the financial performance of the business (Manh-Chien Vu, Thanh Tu Pha, 2018). Perspective (Valeria Naciti 2019), Greater representation of independent directors correlates with diminished sustainability performance. During the crisis time, the financial health of banks is not significantly affected by having a moderate board size on the board of directors (Abraham, 2022). There is no substantiated proof that the actions of the non-FLI director are connected to the revival. An astute yet disengaged director does not contribute to a company's efforts to manoeuvre its way through bankruptcy that the manufacturing company's board should have fewer non-executive directors to enhance the audit's quality (Saidu, 2020). The relationship is positively influenced by market rivalry and the membership of the board. Nevertheless, the substantial disparity in salaries among the board of directors poses challenges in terms of communication, coordination, and collaboration, hence further diminishing the company's performance (Martono, 2022). My study brought to light three key points: (a) how directors' roles vary depending on the stage of the organisation; (b) how crucial it is to provide more resources than oversight during the resurrection; and (c) how the FLI director's efforts, not those of other director categories, were crucial to the resurgence. In summary, my study adds to the body of research demonstrating how director motivation can influence various company outcomes and demonstrates that directors don't always act in the best interests of their organisations. In my view, this has significant ramifications for the study and application of corporate governance.

The coefficient of the Audit Committee indicates the anticipated change in the company's performance (CP) variable for every unit of change in the "Audit Committee (AC)" independent variable. The AC coefficient's zero hypothesis is tested using a statistical value known as T-statistics. Based on the extremely high t-statistic (18.78927) & the extremely low likelihood (p-value) (0.0000), we may confidently infer that the variable AC has a statistically significant impact on the factor that is dependent on CP. These findings demonstrate a substantial and statistically significant relationship between the audit committee's function and the performance of the business. Thus, in light of the analysis that was done, it can be said that there is a strong positive correlation between the Audit Committee’s existence and the company’s performance.
The AC connection to the audit cost strengthens as the entity's complexity increases, by the investigation. Consequently, these findings hold significance as they emphasise the value of AC while offering valuable perspectives for scholars, professionals, and corporate decision-makers (Nerantzidis 2020). Enhancing corporate governance can be achieved by prioritising the selection and education of members of the audit committee who possess robust financial and accounting expertise. To improve the efficiency of IFRS implementation and bring together corporate performance practices, it is important to focus on the quality of the audit committee rather than its size (Hermanto, 2021; Ines, 2023). Investors and analysts can utilise these insights to evaluate the dependability of financial statements and pinpoint organisations with robust governance mechanisms. Enhanced comprehension of the efficacy of audit committees in developing nations can assist regulators in evaluating the consequences of proposed corporate governance reforms (CGs) and in more effectively overseeing and enhancing AC performance (Taha Almarayeh, 2022). Our research Madhur (2021), supports the hypothesis of resource reliance by demonstrating a positive correlation between bank performance and larger boards with a high percentage of external directors.

However, an alternative perspective can be elucidated by empirical investigation. Ghafran (2022), additionally, we discovered that the negative consequences of the auditing committee's excessive workload were particularly evident during the financial crisis. However, with regard to the manipulation of actual profits, these consequences went unnoticed following the crisis. Given that they have never had to deal with the chaos of the audit committee or its possible impact on the auditing committee's efficacy, our findings pose significant challenges for corporate governance regulators. Our research findings also highlight the relevance for researchers to understand the wider economic circumstances in which the study is carried out, the lack of uniformity between larger and smaller enterprises, and the significance of jurisdiction in governance-related studies.

Next, the impact of the Board of Commissioners (BOC) on the performance (CP) of moderated corporations Corporate Social Responsibility (CSR) shows that the hypothesis test yielded a statistically significant t of 1.440584 and a chance value of 0.1542. As a result, hypothesis 4 was rejected since the probability values are greater than 0.05, indicating that CSR does not mitigate the BOC’ effect over the performance of food and beverage companies listed on the ISE. Giving direction and oversight over the company’s performance is a critical responsibility of the BOC. While CSR did not have a significant moderating effect on this relationship, it is worth noting that social responsibility as a whole may have a substantial impact that extends beyond the timeframe of
research observation. Amidst the economic downturn caused by the COVID-19 epidemic, the food and beverage industry has demonstrated financial resilience. However, in addition to internal elements like corporate structure, operational sustainability & financial predictions of businesses also hinge on how well they respond to societal needs and sustainability.

While the impact of CSR on the relationship between the BOC and the company's performance is not substantial in this study, implementing environmentally friendly initiatives can be crucial for reducing risk and establishing a favourable reputation in the future. Food and beverage companies must persistently prioritize their social responsibility as a fundamental component of their business strategy, particularly in the face of global uncertainty like the ongoing pandemic. Based on the findings of Hendrati et al. (2023), the number of directors on a board does not have any impact on the level of sustainability of an organization. An excessive amount of deliberation within the BOC may result in suboptimal performance of the board's duty (Nasih et al. 2023). Within the scope of this study, it was discovered that CSR serves as a quasi-moderator in its endeavour to moderate the impact of the BOC on the performance of companies in the food and beverage industry. The study indicates that the influence of social commitment on the link between the BOC & CP may be restricted or differ based on criteria such as the extent of public participation or the specific CSR strategies employed. In this perspective, CSR can be seen as a quasi-moderator, meaning that its impact on the connection between the board of directors and the company's performance is not consistent, but rather occurs in particular situations or scenarios.

Then, the Board of Directors on Moderated Corporate Performance Corporate Social Responsibility shows the test findings of the hypothesis yielded a t-statistic of -1.389969 and a probability (p-value) of 0.1690. Based on these results, we lack sufficient evidence to reject the null hypothesis. At a level of significance of 0.05, there is insufficient statistical evidence to conclude that the relationship between CSR, BOD, and CP has a meaningful impact on the dependent variable. Within this specific framework, the findings indicate that the influence of CSR moderation on the correlation between BOD and CP may lack statistical significance. The results align with the conclusions presented by Hendrati et al. (2023), indicating that the number of directors on the board has no substantial impact on the organization's sustainability.

Businesses in Indonesia's food and beverage industry might see sustainability reporting and social responsibility as less beneficial to their operations and as a means of increasing revenue. The outcome suggests that CSR does not have a substantial influence on moderating the association between the BOD and corporate performance. The results emphasize the intricacy of the connection
between CP, social responsibility, and leadership structures in the framework of theoretical research. Although there is optimism regarding the potential influence of sustainability awareness on other organizations, our findings indicate that the understanding and execution of CSR at the executive level have not consistently resulted in substantial transformations in CP. Despite the challenges posed by the epidemic and global economic instability, the food & beverage industry maintained its financial stability, exhibiting resilience to economic disruptions. Nevertheless, enterprises must perceive CSR not solely as an obligation, but also as a chance to establish enduring viability and handle risks linked to social and environmental expectations. This implies that the BOD frequently presumes that ethical behaviour will impose a greater cost on firms and diminish revenues. Furthermore, due to the inadequate disassociation of corporate social responsibility, the BOD has a sense of exclusion from its implementation.

The agency theory underscores the significance of addressing the specific agreement between owners and agents in the management of an organization. This theory elucidates the substantial responsibility that agents bear in ensuring the success of a well-managed corporation. There are three categories of agent costs: monitoring fees, required fees, and legacy fees. The reference is from (Jensen and Meckling, 1976). The Board of Directors does not have a detrimental or inconsequential impact on sustainability. Empirical evaluations show that there is little correlation between the size of the board of directors and changes in sustainability. Furthermore, it is accurate to state that the size of the board does not have any impact on the increase of sustainability capacity. The empirical findings contradict the notion that the board of directors positively influences sustainability and the function of corporate social responsibility (CSR). It is assumed that a company with a significant number of foreign commissioners and a practice of issuing sustainability reports has a greater intrinsic worth compared to a company that only has a foreign director but does not produce sustainability reports (Seth, 2023). It’s safe to say that CSR is a form of control that tries to limit the power of the board of directors over the performance of food and drink companies on the Indonesian Stock Exchange. The finding suggests that the influence of CSR moderation on the association between the members of the BOD and the company's performance is not statistically significant, as the probability value exceeds the commonly accepted significance level of 0.05. This suggests a variability or lack of consistency in the function of CSR moderation, that may only manifest under specific circumstances. While the original hypothesis suggesting that the board of directors has a greater influence on CP than the moderation of CSR was disproven, the results reveal that the impact of moderate CSR is not consistent and may be influenced by underlying contextual factors.
The impact of the Audit Committee on the Performance of Moderated Corporate Social Responsibility is evident from the extremely low scientific t coefficients (negative readings) of -10.83125 & the extremely small likelihood (p-value) of 0.0000 that the relationship of CSR, AC, and CP affects the dependent variable is. Within this particular framework, the findings indicate that the influence of corporate social responsibility (CSR) on the connection between accounting conservatism (AC) and corporate performance (CP) is statistically significant.

A p-value of 0.0000 implies a highly statistically significant result at a significance level of 0.05. Hence, it can be inferred that the intervention of CSR in moderating the link between accountability AC and CP is of considerable importance. The impact of CSR moderation can be deemed pertinent and substantial within the scope of this study. This result is consistent with earlier studies that demonstrated a stronger level of CSR involvement with an increased board presence (Alhababsah, 2021). In contrast to the previous findings of Hendrati et al. (2023), which indicated that the influence of AC on sustainability diminishes as CP improves gradually. The food and beverage industry has shown resistance to economic shocks by being financially stable in the face of pandemics and uncertainties in the global economy. Although the financial components of this industry are stable, it is crucial for companies to consistently upgrade their governance & social responsibility standards in order to ensure long-term viability and increase their value.

The corporation now manages environmental performance through regular governance measures (Villers, and Villers, 2022). The allocation of funds towards CSR has a beneficial impact on the connection between growth in revenue and the profitability of the firm. This study aims to uncover supplementary avenues via which CSR influences the performance of the organization (Okafor, 2021). The belief that a moderator can represent both the internal and external aspects of a firm, and that a mediator can serve as a gauge for the process or results of 19 organizations in converting CSR into CFPs (Ye, 2021).

The researchers engaged in extensive discussions with stakeholders, including devoted and well-integrated customers in developed nations, to advocate for corporate CSR initiatives, particularly those pertaining to environmental concerns in Europe, as well as with government in North America (Shirasu, 2021). Kuzey (2021) suggests that the sustainability relationship committee offers a chance for the three sectors to utilize CSR to enhance company performance. The author also proposes enhanced rules that incorporate various company measurements of performance and CSR metrics. The research suggests a way to improve the effectiveness of councils by enacting financial sector governance policies that are compliant with national institutional and regulatory frameworks. The
article also suggests reevaluating the requirements for smaller committees and the existence of dual roles on corporate boards (Madhur, 2021).

Within the realm of strict moderation, with a statistically significant likelihood ratio ($p<0.05$), the conclusion suggests that the presence and engagement of CSR not only serve as an additional factor but significantly influence the interaction among the AC and the performance of the company in the food and beverage industry. Put simply, in this particular situation, the CSR variable functions solely as a moderator that amplifies the positive influence of the AC on CP. This empirical evidence supports the significant significance of CSR in the management and performance of companies in the food and beverage industry. These findings can offer valuable strategic insights for organizations to enhance their CP and social responsibility by optimizing the benefits of AC and CSR.

**Conclusion**

According to the study, there is no discernible difference in the performance of food and beverage businesses between the functions of the Board of Directors (BOD) and the Board of Independent Commissioners (BC). Nevertheless, it yields fascinating outcomes that highlight the crucial functions performed by Corporate Social Responsibility (CSR) or the audit committee (CA) in enhancing corporate achievement. This research is highly relevant to the food and beverage industry, both before and after the COVID-19 pandemic. It emphasizes the importance of prioritizing corporate social responsibility (CSR) to reduce risks and improve business performance during times of economic uncertainty. During the pandemic, integrating corporate social responsibility (CSR) policies has become a powerful instrument for ensuring operational sustainability and promoting revenue growth. In summary, the findings offer significant managerial perspectives for the Food and Beverage industry, highlighting the crucial impact of the auditing board and corporate social responsibility. To attain long-term and environmentally responsible expansion, corporations must recognize the significant influence of the audit committee and corporate social responsibility (CSR) and make necessary modifications to enhance the size and effectiveness of the Board of Directors. The research’s conclusions are particularly significant since they will influence how the corporation approaches problems and speeds up the COVID-19 pandemic’s recovery.
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