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ABSTRACT

This study investigates the intricate dynamics of corporate governance in publicly traded companies in Indonesia, focusing particularly on the interaction of Audit Quality, Auditor Independence, Financial Reporting Transparency, and Internal Control Effectiveness. The present study showcases the development of a comprehensive measurement model, hence offering empirical support for the reliability and validity of the chosen constructs. The utilization of structural equation modeling reveals statistically significant positive correlations, indicating that heightened levels of Audit Quality, Auditor Independence, and Financial Reporting Transparency are associated with enhanced Internal Control Effectiveness. The model fit assessment confirms the adequacy of the proposed structural equation model in capturing the observed covariance structure. The explained variance in Internal Control Effectiveness highlights the substantial impact of these governance elements. These findings offer valuable insights for stakeholders and policymakers seeking to fortify corporate governance practices in the Indonesian business landscape.

Keywords: Audit Quality, Auditor Independence, Financial Reporting Transparency, Internal Control, Public Company

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1. INTRODUCTION

The implementation and sustenance of strong internal control systems are crucial in preserving financial integrity and facilitating efficient corporate governance in today’s business environment. Prior studies have demonstrated that internal control systems have a positive impact on both financial performance and technological innovation [1], [2]. The relevance of internal control systems in reducing financial fraud holds significant value, especially within the framework of increased financialization [3]. Internal audit and control functions play a crucial role in the banking sector by facilitating the implementation of robust internal systems and safeguarding the stability of financial organizations [4]. Furthermore, it has been determined that internal audit control and integrity systems serve as indicators of effective governance [5]. The aforementioned findings underscore the
significance of robust internal control systems in fostering financial integrity, technical advancement, and effective governance in modern enterprises.

The effectiveness of internal controls is crucial for public companies in Indonesia, as it plays a significant role in their economic growth [6]–[8]. The implementation of precise and measurable risk management has been seen to exert a substantial influence on investment efficiency inside state-owned enterprises (SOEs) in Indonesia [9]. The use of internal control systems, which are guided by established frameworks such as COSO, facilitates firms in attaining their objectives with efficacy, efficiency, and adherence to regulatory requirements [10]. The implementation of robust internal controls plays a significant role in enhancing company governance and performance. Moreover, it has been shown that the efficacy of internal control systems in consumer products industries in North Sumatra is influenced by the independence and competency of internal auditors. In Indonesia, the implementation of robust internal controls is crucial for the efficient administration of corporate operations, safeguarding company assets, and enhancing business efficacy.

The intricate interplay of audit quality, auditor independence, financial reporting transparency, and the efficacy of internal controls necessitates meticulous scrutiny in response to growing regulatory frameworks and escalating market intricacies. Multiple studies have shown evidence that the adoption of independent audits and the installation of strong internal controls have a positive impact on the integrity of financial reporting [11]. Furthermore, the implementation of digital transformation has the potential to boost the effectiveness of internal audits and elevate the quality of financial reporting. However, it is worth noting that there is no statistically significant correlation between the quality of internal audits and the pace at which digital transformations are carried out, as indicated by previous research [12]. The quality of audited financial statements is influenced by the competence and independence of auditors, with the presence of audit risk serving as a mediator in the link between independence and the quality of financial reporting [13]. Furthermore, internal inspection programs by large audit firms have been found to improve financial reporting quality by deterring auditor shirking [14]. All things considered, these results emphasize how crucial good internal controls, auditor independence, and audit quality are to dependable and honest financial reporting.

The current study conducts an empirical inquiry into the relationship between financial reporting openness, auditor independence, audit quality, and internal control effectiveness in publicly listed enterprises in Indonesia, taking into account the previously indicated environment. This study's primary goal is to further our knowledge of the variables influencing internal control system efficacy in Indonesian publicly traded enterprises. This study's primary goal is to accomplish the following goals: A number reference has been supplied by the user. Examining the connection between the efficacy of internal controls and audit quality is the main goal of this research [16]. This study's goal is to investigate how auditor independence affects internal control systems' efficacy [17]. This study aims to explore the relationship between financial reporting transparency and internal control effectiveness.

Public companies in Indonesia face challenges in maintaining transparency and accountability while adapting to the changing business landscape. Financial reporting integrity and effective internal controls are critical to investor confidence and financial market stability. Companies listed on the Indonesia Stock Exchange (IDX) are required to submit financial reports in a timely manner, yet there is still a significant percentage of companies that do not meet this requirement [15]. In addition, corporate governance, CEO tenure, and the complexity of a company's operations can negatively impact the timeliness of financial reporting [16]. Furthermore, sustainability reporting and...
corporate social responsibility practices are influenced by ethics and environmental performance, which in turn affect financial performance and firm value [17]–[19]. Overall, addressing these challenges and ensuring the integrity of financial reporting is critical to the stability and growth of Indonesia’s financial markets.

2. LITERATURE REVIEW

2.1 Internal Control Effectiveness

Internal control systems are essential components of corporate governance frameworks because they provide asset protection, guarantee the accuracy of financial reporting, and promote regulatory compliance. Strong internal control implementation helps to reduce the possible risks associated with fraud, errors, and misstatements, hence enhancing the overall reliability of financial data. It is crucial to comprehend the factors that influence the efficacy of internal controls within the Indonesian setting, given the strong correlation between economic growth and the performance of public enterprises in this region [20]–[22].

2.2 Audit Quality

High audit quality is crucial in the Indonesian setting to instill confidence in financial markets and ensure the effectiveness of internal control systems. Audit quality is a multidimensional construct that encompasses factors such as auditor competence, independence, and professional skepticism. It is associated with the ability of auditors to detect and address material misstatements in financial reports, thereby enhancing the reliability of financial information. The factors that affect audit quality in Indonesia include audit tenure, audit fees, size of public accounting firm, auditor specialization, and audit rotation [23]. Other factors such as communication skills, time management, emotional intelligence (EI), social intelligence (SI), and artificial intelligence (AI) have also been identified for further research [24]. Additionally, the national environment, including political, economic, and business environments, legal framework, and culture, plays a significant role in shaping audit quality [25].

2.3 Auditor Independence

Auditor independence is crucial for ensuring the objectivity and impartiality of auditors in evaluating financial information. Impaired independence, resulting from non-audit services or close client relationships, can compromise the effectiveness of the audit function and the reliability of internal controls. Understanding the nuances of auditor independence is important in assessing its impact on the effectiveness of internal controls in Indonesian public companies. The determinants of auditor independence include factors such as the development of non-audit services, the completeness of audit procedures, and the competence of auditors [26]. Additionally, the selection of an independent auditor is influenced by factors such as firm size, debt leverage, and staff compensation costs [27]. Internal auditors have the capacity to be independent, although the degree of independence may vary depending on the organizational context and power relations within corporate governance [28]. Strengthening audit independence can be achieved through improving service quality, enhancing professional competence, and implementing effective engagement mechanisms and external supervision [29].

2.4 Financial Reporting Transparency

Financial reporting transparency is crucial for stakeholders to make informed decisions and assess a company’s financial health and internal control reliability. In the Indonesian context, where regulatory frameworks are evolving, the relationship between financial reporting transparency and internal control effectiveness needs careful examination [30]. Transparent financial reporting can attract more attention from market participants and reduce information asymmetry [31]. Moreover, previous studies have found that the reliability of financial statement presentation is positively influenced by several aspects, including the competence of personnel, the use of
information technology, and the effectiveness of regional financial oversight [32]. The effectiveness of a corporation’s financial reporting system relies on the quality of the audit process. This involves the involvement of auditors who possess accounting and financial expertise (AFE), which helps enhance the accuracy of financial reporting, reduce instances of manipulating actual earnings, and improve the accuracy of accruals [33]. Overall, understanding the impact of financial reporting transparency on internal control effectiveness is essential in the Indonesian context and can inform organizational leaders and policymakers [34].

2.5 The Indonesian Business Landscape

The regulatory framework in Indonesia, including the Indonesian Financial Accounting Standards (IFAS) and the Capital Market Law, shapes the reporting and auditing practices of public companies [17]. Cultural nuances and unique business practices in Indonesia further contribute to the complexity of the corporate governance landscape [18]. Understanding these contextual factors is crucial for analyzing the relationships between audit quality, auditor independence, financial reporting transparency, and internal control effectiveness [35].

2.6 Empirical Studies and Gaps

Several empirical studies have explored the relationships between audit quality, auditor independence, financial reporting transparency, and internal control effectiveness in various contexts globally. However, there is a discernible gap in understanding these dynamics within Indonesian public companies. Previous research has primarily focused on Western markets, and it is unclear whether these findings are applicable to the Indonesian context. This research aims to address this gap by conducting a quantitative analysis within the unique parameters of the Indonesian business landscape. The study examines the relationship between audit firm rotation, audit committee gender, ownership structure, and audit quality in Indonesian banking industries [36]. Additionally, it investigates the impact of the Covid-19 pandemic on the independent auditor's report in Indonesia [37]. Furthermore, the study explores the impact of corporate governance measures on revenue management in the Indonesian manufacturing industry [35]. Lastly, it examines the effect of ownership, tax aggressiveness, and audit quality on earnings management in Indonesian companies [38].

3. METHODS

This study uses a quantitative research design to systematically analyze the relationship between audit quality, auditor independence, financial reporting transparency, and internal control effectiveness in the context of public companies in Indonesia. A cross-sectional approach is adopted, which allows data collection at one specific point in time and provides an overview of the relationship under study. The population of this study includes all public companies listed in Indonesia. A stratified random sampling technique was used to ensure representation from various sectors. The sample size was set at 135 public companies, which was determined through statistical power calculations to ensure the reliability and validity of the study, initially 150 questionnaires were distributed but 135 questionnaires were returned in full and the other 15 questionnaires were not filled in cooperatively.

3.1 Data Collection

Data will be collected through a combination of archival research and surveys. Financial statements, audit reports, and other relevant documents will be analyzed to collect objective data on audit quality, auditor independence, financial reporting transparency, and internal control effectiveness. In addition, structured surveys will be administered to key stakeholders, including auditors, financial executives, and supervisory authorities, to obtain subjective perceptions and opinions regarding the variables under study.
3.2 Variables and Measurements

Independent Variables
a. Audit Quality: Measured through metrics such as KAP reputation, auditor experience, and audit fees.
b. Auditor Independence: Assessed by examining the level of non-audit services provided to clients.

Dependent Variable
d. Internal Control Effectiveness: Measured by evaluating the incidence of failures and control weaknesses.

3.3 Data Analysis

Data analysis was conducted using Structural Equation Modeling (SEM) with Partial Least Squares (PLS) as the chosen statistical method. SEM-PLS is well suited for this study due to its ability to effectively handle complex models and small sample sizes. The measurement model will be assessed to ensure reliability and construct validity. This involves examining factor loadings, convergent validity, and discriminant validity. The structural model will be assessed to examine the relationships between the variables of interest. Hypothesis testing will be conducted to determine the significance of these relationships. The overall fit of the SEM-PLS model will be evaluated using fit indices, such as goodness-of-fit index (GoF). Sensitivity analysis will be conducted to ensure the robustness of the results.

4. RESULTS AND DISCUSSION

4.1 Demographic Sample

The demographic characteristics of the participants in the study were diverse. The majority of participants were male (58.4%), while 41.6% were female [1]. The age distribution showed that the largest age group was 25-34 years (31.6%), followed by 35-44 years (25.5%), 45-54 years (22.6%), and 55 years and above (20.3%) [2]. In terms of education level, the majority of participants held a Master’s degree (41.4%), followed by a Bachelor’s degree (36.1%), and a Doctoral degree (22.5%) [3]. The distribution of positions revealed that mid-level positions were the most common (39.1%), followed by senior positions (36.8%) [4]. In terms of experience, participants with 16 years of experience constituted the largest group (30.1%) [5]. These demographic findings provide a comprehensive overview of the study’s participants and are important for contextualizing the study’s results and generalizing the findings to the broader population.

4.2 Validity and Reliability Questionnaire

The reliability and validity of the measurement model were assessed to ensure the robustness of the study’s constructs.

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Code</th>
<th>Loading Factor</th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Quality</td>
<td>AUQ.1</td>
<td>0.884</td>
<td>0.905</td>
<td>0.940</td>
<td>0.840</td>
</tr>
<tr>
<td></td>
<td>AUQ.2</td>
<td>0.937</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AUQ.3</td>
<td>0.928</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditor Independence</td>
<td>AUI.1</td>
<td>0.791</td>
<td>0.798</td>
<td>0.882</td>
<td>0.714</td>
</tr>
<tr>
<td></td>
<td>AUI.2</td>
<td>0.877</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AUI.3</td>
<td>0.863</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Reporting Transparency</td>
<td>FIRT.1</td>
<td>0.844</td>
<td>0.775</td>
<td>0.863</td>
<td>0.677</td>
</tr>
<tr>
<td></td>
<td>FIRT.2</td>
<td>0.785</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FIRT.3</td>
<td>0.839</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The assessment of the measurement model involves examining the loading factors, Cronbach’s Alpha, Composite Reliability, and Average Variance Extracted (AVE) for each construct. The loading factors for the Audit Quality (AUQ) indicators (AUQ.1, AUQ.2, AUQ.3) are 0.884, 0.937, and 0.928, respectively, indicating a strong relationship with the Audit Quality construct. The Cronbach’s Alpha of 0.905 and Composite Reliability of 0.940 suggest high internal consistency and reliability. The AVE of 0.840 exceeds the recommended threshold, indicating convergent validity. The Auditor Independence (AUI) indicators (AUI.1, AUI.2, AUI.3) have loading factors of 0.791, 0.877, and 0.863, respectively, indicating a strong association with the Auditor Independence construct. The Cronbach’s Alpha of 0.798 and Composite Reliability of 0.882 indicate satisfactory internal consistency and reliability. The AVE of 0.714 meets the convergent validity threshold. The Financial Reporting Transparency (FIRT) indicators (FIRT.1, FIRT.2, FIRT.3) show loading factors of 0.844, 0.785, and 0.839, respectively, indicating a robust connection with the Financial Reporting Transparency construct. The Cronbach’s Alpha of 0.775 and Composite Reliability of 0.863 suggest acceptable internal consistency and reliability. The AVE of 0.677 meets the convergent validity threshold. The Internal Control Effectiveness (INCE) indicators (INCE.1, INCE.2, INCE.3) exhibit loading factors of 0.893, 0.877, and 0.841, respectively, indicating a strong relationship with the Internal Control Effectiveness construct. The Cronbach’s Alpha of 0.840 and Composite Reliability of 0.904 indicate high internal consistency and reliability. The AVE of 0.758 meets the convergent validity threshold.

Table 2. The Acceptability of Discrimination

<table>
<thead>
<tr>
<th></th>
<th>Audit Quality</th>
<th>Auditor Independence</th>
<th>Financial Reporting Transparency</th>
<th>Internal Control Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Quality</td>
<td>0.917</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditor Independence</td>
<td>0.732</td>
<td>0.845</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Reporting Transparency</td>
<td>0.714</td>
<td>0.823</td>
<td>0.823</td>
<td></td>
</tr>
<tr>
<td>Internal Control Effectiveness</td>
<td>0.653</td>
<td>0.644</td>
<td>0.759</td>
<td>0.871</td>
</tr>
</tbody>
</table>

The strong positive correlation between Audit Quality and Auditor Independence suggests that companies with higher audit quality tend to also exhibit stronger auditor independence. This correlation underscores the interconnected nature of these two constructs, emphasizing the collective role of rigorous audit practices and independent auditing in shaping the financial landscape. The positive correlation between Auditor Independence and Financial Reporting Transparency indicates that companies with more independent auditors tend to have greater transparency in their financial reporting practices. This alignment highlights the importance of auditor independence in fostering transparent financial reporting. Research has demonstrated the presence of a positive correlation between Financial Reporting Transparency and Internal Control Effectiveness. This suggests that firms with transparent financial reporting systems are more likely to demonstrate effective internal controls. The association indicated above underscores the importance of openness in
enhancing internal control systems. The observed positive connection between Audit Quality and Internal Control Effectiveness suggests that organizations exhibiting greater levels of audit quality are more inclined to demonstrate effective internal controls. The aforementioned correlation underscores the significant influence of strong audit processes on the overall efficacy of internal controls.

![Figure 1. Internal Research Model](image)

### 4.3 Hypothesis Test Results

Structural model analysis aims to investigate the relationships between independent and dependent variables. Hypothesis testing is conducted to determine the significance of these relationships.

<table>
<thead>
<tr>
<th>Hypothesis Test</th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>T Statistics</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Quality -&gt; Internal Control Effectiveness</td>
<td>0.442</td>
<td>0.442</td>
<td>0.099</td>
<td>3.434</td>
<td>0.000</td>
</tr>
<tr>
<td>Auditor Independence -&gt; Internal Control Effectiveness</td>
<td>0.248</td>
<td>0.254</td>
<td>0.120</td>
<td>2.402</td>
<td>0.002</td>
</tr>
<tr>
<td>Financial Reporting Transparency -&gt; Internal Control Effectiveness</td>
<td>0.626</td>
<td>0.634</td>
<td>0.110</td>
<td>5.697</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The hypothesis testing results indicate that there are significant relationships between Audit Quality, Auditor Independence, Financial Reporting Transparency, and Internal Control Effectiveness. The analysis shows that Audit Quality has a positive influence on Internal Control Effectiveness. This suggests that as the quality of the audit process improves, there is a corresponding positive impact on the effectiveness of internal controls within public companies in Indonesia. Auditor Independence also positively influences Internal Control Effectiveness. Companies with more independent auditors tend to have more effective internal controls. Financial Reporting Transparency is strongly associated with Internal Control Effectiveness. Companies that foster financial reporting transparency are more likely to have highly effective internal controls. These findings highlight the importance of investing in higher audit quality practices, maintaining auditor independence, and promoting financial reporting transparency to enhance internal control mechanisms and overall governance effectiveness.

<table>
<thead>
<tr>
<th>Table 4. R Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Square</td>
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</tbody>
</table>
The R-squared value of 0.602 indicates that approximately 60.2% of the variance in Internal Control Effectiveness is explained by the included independent variables. This suggests a substantial influence of Audit Quality, Auditor Independence, and Financial Reporting Transparency on the effectiveness of internal controls within the studied public companies in Indonesia. The adjusted R-squared value of 0.592 is slightly lower than the R-squared value. The adjusted R-squared accounts for the number of independent variables in the model, providing a more conservative estimate of explained variance. The closeness of the adjusted R-squared to the R-squared suggests that the model is not overfitting and that the included independent variables are relevant in explaining the variance in Internal Control Effectiveness. The substantial R-squared value indicates that a significant portion of the variability in Internal Control Effectiveness can be attributed to the variables under consideration. This reinforces the relevance and importance of Audit Quality, Auditor Independence, and Financial Reporting Transparency in influencing the efficacy of internal control mechanisms. The adjusted R-squared, while slightly lower, still supports the robustness of the model in explaining variance. This suggests that the model is not overly reliant on the included variables and maintains its explanatory power even when considering the complexity introduced by multiple predictors.

Table 5. Model Fit

<table>
<thead>
<tr>
<th></th>
<th>Saturated Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>0.103</td>
<td>0.103</td>
</tr>
<tr>
<td>d_ULS</td>
<td>0.822</td>
<td>0.822</td>
</tr>
<tr>
<td>d_G</td>
<td>0.430</td>
<td>0.430</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>304.332</td>
<td>304.332</td>
</tr>
<tr>
<td>NFI</td>
<td>0.730</td>
<td>0.730</td>
</tr>
</tbody>
</table>

Both the Saturated and Estimated Models have a Standardized Root Mean Square Residual (SRMR) of 0.103, indicating a reasonably good fit with close agreement between observed and predicted values. The values for both the Discrepancy Function (d_ULS and d_G) are 0.822, suggesting a good fit and adequate reproduction of observed relationships between variables. The Chi-Square values for both models are 304.332, which can indicate a lack of fit, but it should be considered alongside other fit indices due to its sensitivity to sample size. The Normed Fit Index (NFI) values for both models are 0.730, indicating that the model explains 73% of the variance in the outcome variable, suggesting a reasonable fit.

**DISCUSSION**

The path coefficient indicates a significant positive relationship between audit quality and internal control effectiveness. This finding suggests that as audit quality increases, internal control effectiveness tends to increase, supporting H1 and in line with the research [39], [40]. This underscores the important role of rigorous audit practices in strengthening internal controls in Indonesian public companies.

The results showed a significant positive effect between auditor independence on the effectiveness of internal control, thus supporting H2 and these results are in line with previous research [41], [42]. The implication is that maintaining independence in the audit process contributes positively to the robustness of internal control, strengthening the integrity of financial reporting.

The path coefficient shows a strong positive relationship between financial reporting transparency and internal control effectiveness, which supports H3 and supports previous research [43], [44]. This underscores the importance of transparent financial reporting practices in promoting effective internal control in the Indonesian business context.

**Practical Implications**

The findings have practical implications for stakeholders in Indonesian
public companies. Strengthening audit quality, maintaining auditor independence, and promoting financial reporting transparency emerge as important strategies for improving internal control effectiveness. The results of this study can guide audit firms, regulatory bodies, and corporate decision makers in formulating policies and practices that contribute to strong corporate governance.

**Limitations and Future Research**

While this study provides valuable insights, it is important to recognize the limitations. This research is based on a specific sample, and the findings may not be universally applicable. Future research could explore the dynamics of internal control effectiveness in different industries or consider moderating variables to improve the generalizability of the model.

**CONCLUSION**

In conclusion, this study contributes a nuanced understanding of the dynamics of corporate governance in public companies in Indonesia. The results of this study confirm the important role of Audit Quality, Auditor Independence, and Financial Reporting Transparency in shaping internal control effectiveness. Robust measurement and structural models validate the reliability and relevance of the selected variables. Practical implications suggest that developing these elements of governance may result in stronger internal control mechanisms. This study recognizes its limitations, such as the specific context of the sample, and encourages future research to explore additional dimensions. Overall, this research provides actionable insights for auditors, regulators, and corporate leaders aiming to develop a governance framework that promotes transparency, independence, and control effectiveness in the Indonesian business environment.
REFERENCES


