

The Impact Of Corporate Governance On Internal Control Disclosure: Evidence From Indonesia

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Abstract

This study investigates the effect of corporate governance proxied by the board of commissioners' size, independent commissioners, institutional ownership, managerial ownership, audit committee size, and external auditor size on internal control disclosure. This study utilizes hand-collected data from annual reports of nonfinancial companies listed on the Indonesia Stock Exchange and obtained 726 firm-year observations from 242 companies during 2017-2019. The data analysis technique used is panel data regression analysis with the selected random effect model. The findings of this study indicate that the independent board of commissioners and institutional ownership positively affect internal control disclosure. In contrast, managerial ownership has a negative effect on internal control disclosure.

Keywords: *internal control disclosure, independent board of commissioners, institutional ownership, managerial ownership, audit committee size*

1. INTRODUCTION

Internal control has a vital role in protecting investors' interests, especially since the enactment of the Sarbanes-Oxley Act in 2002 (Shu et al., 2018; Su et al., 2022). Weak internal control can cause intentional or unintentional errors in providing financial reports to stakeholders (Gad, 2015; Salehi, Ghasempour, 2021). Internal control activities carried out by the company cannot be known directly by investors (Alqaraleh, 2024; Zhang et al., 2024). Internal control disclosure is also important for investor decision-making (Leng, Ding, 2011; Yushu et al., 2024). Ashfaq and Rui (2019); Xu (2025) stated that internal control disclosure is essential for companies to fulfill investors' information needs regarding management's ability to achieve company targets and objectives.

In Indonesia, internal control disclosure is mandatory. Financial Services Authority Circular Letter Number 30/SEOJK.04/2016 states that public companies must disclose the company's internal control, namely related to financial and operational control, as well as compliance with laws and reviews of the effectiveness of internal control. Although internal control disclosure is important for companies and is mandatory for public companies in Indonesia, the level of internal control disclosure in Indonesia is still low (Aswar et al., 2021; Hanif et al., 2023). Weli et al. (2023) found that the disclosure of internal control of healthcare sector companies when viewed from the aspect of internal control activities, was only 58.3%, even the aspect of reporting the internal control system was only 26.66%. In addition, the results of research by Ismail and Ardiyanto (2017) showed that the disclosure of internal control of companies listed on the main board of the Indonesia Stock Exchange was still relatively low, especially when viewed from the aspect of internal control review, the average disclosure was only 9%. Based on the results of these studies, the level of internal control disclosure carried out by companies in Indonesia is still far from the complete information disclosure value of 100%.

Several previous studies have shown that corporate governance mechanisms affect the extent of internal control disclosure (Agyei-Mensah, 2016; Ismail, Ardiyanto, 2017; Leng, Ding, 2011). For companies, corporate governance functions as a system to direct and regulate company management (Singh, 2025; Nadel & Savès, 2025). Hadiprajitno (2013); Wan et al. (2025) stated that corporate governance is a regulation made by a company that aims to ensure business success and corporate accountability.

If the company implements good corporate governance, it can achieve its goals and provide quality information (Setianingsih, 2013; Ding & Yang, 2025). Agyei-Mensah (2016); Gyimah & Owusu-Afriye (2025) stated that companies that implement good corporate governance will provide important information for shareholders and other stakeholders, thus minimizing the occurrence of information asymmetry. One of the disclosures of information is regarding internal control.

The corporate governance mechanisms used in this study are board of commissioners size, independent commissioners, institutional ownership, managerial ownership, audit committee size, and external auditor size. According to (Agyei-Mensah, 2016), internal control disclosure in annual reports and the factors that influence it have been widely studied in developed countries. Meanwhile, there is still limited research on internal control disclosure in developing countries. Therefore, this study was conducted in Indonesia, which requires public companies to disclose information related to their internal control disclosure. Although internal control disclosure is mandatory, the level of disclosure by companies in Indonesia is still relatively low. With the above considerations, researchers are interested in analyzing the effect of corporate governance on internal control disclosure in nonfinancial companies listed on the Indonesia Stock Exchange during 2017-2019.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Agency Theory

An agency relationship is a contract between one or more people (principals) and another person (agent) to carry out work on behalf of the principal that involves delegating some decision-making authority to the agent (Jensen, Meckling, 1976). The principal is the shareholder and owner of the company, while the agent is a third party appointed by the principal to manage and develop the company (Kusmawati, 2020). Agency theory states that if both parties, the agent and the principal, are utility maximizers, then the agent does not always act in the principal's best interests (Ma & Shleifer, 2025).

Hadiprajitno (2013); (Zhao & Shi (2024) also explains that owners and agents are assumed to have economic thinking motivated by personal interests, so they have different interests. Ahmad and Septriani (2008) explain that these differences in interests are very likely to occur because the management position is only as an agent of the principal. The agent will not bear the risk if they make mistakes in making business decisions. The principal bears all risks. Management benefits from their internal party position because they know more about the company than the principal (Agyei-Mensah, 2016; Squires & Elnahla, 2020). It will be easier for agents to commit moral hazards, namely agents neglecting their responsibilities or acting in their interests and contrary to the interests of the owner. To avoid this, the principal will incur various costs to limit management behavior (Hadiprajitno, 2013). This cost is referred to as agency costs. (Jensen, Meckling, 1976) stated that agency costs are the sum of the following three elements:

1. The monitoring expenditures by the principal

Monitoring expenditures are the costs incurred by the principal to limit the deviant activities of the agent so that the agent is expected to carry out the task of managing the company in accordance with the principal's interests.

2. The bonding expenditures by the agent

Bonding expenditures or bonding costs are the costs that must be incurred to ensure that the agent does not take actions that are detrimental to the interests of the principal or to ensure that the principal will receive compensation if the agent takes deviant actions.

3. Residual loss

Residual loss is the amount of money equivalent to the reduction in welfare experienced by the principal due to the agent's actions that are detrimental to the principal's interests. A company can incur high agency costs if it has high information asymmetry. One way to reduce these high agency costs is to make management more transparent, namely by disclosing broader company information (Agyei-Mensah, 2016). One of the disclosures of information made by management is the disclosure of internal control. With this disclosure, information asymmetry between management and principal and agency costs can be reduced.

2.2. Internal Control Disclosure

The Committee of Sponsoring Organizations (COSO) of The Treadway Commission defines internal control as a process implemented by the board of directors, management, and other personnel and designed to provide reasonable assurance regarding the achievement of objectives in the effectiveness and efficiency of the company's operations, fair financial reporting, and the company's compliance with laws

and regulations. Internal control ensures that the company's assets are protected from asset misappropriation and inefficiency in their management and that the financial statements are reliable. In line with this, Zamzami et al. (2017) also stated that implementing internal control aims to ensure that the company's operations have been running effectively and efficiently, the company's financial reports are reliable, and the company complies with laws and regulations.

As company owners, shareholders want internal control to be implemented effectively. However, shareholders cannot supervise and ensure the implementation of internal control themselves. This is because internal control is an activity in an organization in which shareholders do not participate (Deumes, Knechel, 2008). Shareholders can only find information about company management through financial statements reported by management (Spira & Page, 2010). Thus, shareholders can only find out about the company's internal control practices when management discloses the implementation of the company's internal control.

Extensive disclosure of internal control will provide benefits to the company. The first is to reduce information asymmetry between shareholders and management so that it can reduce agency costs. As an agent of shareholders, management can take actions that benefit themselves and not work optimally. To prevent this, owners take various actions or policies that can increase agency costs (Hadiprajitno, 2013). To reduce agency costs, the company discloses information to shareholders. Through the information disclosed by the company, shareholders can find out that management has conducted operational activities well and that its management has fulfilled its responsibilities in managing the company (Agyei-Mensah, 2016). Thus, the owner's control over management is also reduced, so agency costs can also be reduced. Internal control disclosure's second benefit is increasing the company's value. Information asymmetry between management and external parties makes external parties assess that the value of all companies is the same. Therefore, investors tend to give lower prices to protect themselves from risk (Hadiprajitno, 2013).

2.3. Board of Commissioners' Size and Internal Control Disclosure

The board of commissioners in a company has an important role in overseeing management decision-making and ensuring that the company discloses reliable information (Agyei-Mensah, 2016). The size of the board of commissioners will affect the performance of the board of commissioners. Gandía (2008) stated that increasing the number of Board of Commissioners will increase the Board of Commissioners' ability to supervise management. A sufficient number of boards of commissioners will encourage management to disclose broader information, one of which is internal control disclosure.

According to (Leng, Ding, 2011), the board of commissioners has to oversee the implementation of the internal control system. Therefore, the size of the board of commissioners is considered to affect internal control disclosure. The research findings of Zulfikar et al. (2015), Ismail & Ardiyanto (2017), Leng & Li (2011), and Jati & Anggoro (2018) show that the size of the board of commissioners has a positive effect on internal control disclosure. Based on the description above, this study formulates the following hypothesis:

H1: Board of commissioners' size has a positive effect on internal control disclosure.

2.4. Independent Commissioners and Internal Control Disclosure

An independent board of commissioners is a board of commissioners not affiliated with management. The company's management supervision process will be more optimal with an independent board of commissioners. Most previous researchers stated that an independent board of commissioners is the most effective supervisory instrument to control company activities (Ahmad et al., 2015).

Agency theory also states that an independent board of commissioners can contribute expertise and objectivity to minimize opportunistic management behavior (Fama & Jensen, 1983). In addition, according to Li et al. (2008), an independent board of commissioners can encourage management to disclose real company information. Independent commissioners do not have much access to company information, so independent commissioners will also encourage management to disclose information more widely. One of this information is related to internal control disclosure (Ismail & Ardiyanto, 2017). Based on the description above, this study formulates the following hypothesis:

H2: Independent commissioner has a positive effect on internal control disclosure.

2.5. Institutional Ownership and Internal Control Disclosure

Institutional ownership is the ownership of company shares by institutional investors. Ownership in large amounts indicates that institutional investors have a significant interest in the company (Barako, 2007). Thus, institutional investors will tend to carry out more supervision of management. A high percentage of institutional ownership will encourage company management to disclose more information, including disclosure of internal control (Ismail & Ardiyanto, 2017). Dewayanto et al. (2017) found that institutional ownership positively affects the disclosure of internal control. Based on the description above, this study formulates the following hypothesis:

H3: Institutional ownership has a positive effect on internal control disclosure.

2.6. *Managerial Ownership and Internal Control Disclosure*

Dewayanto and Setiadi (2017) stated that managerial ownership negatively affects internal control disclosure. The lower the managerial ownership, the more likely the manager may not act in the company's best interests. Another reason is that voluntary disclosure is high if managerial ownership is low. Zulfikar et al. (2015) also showed a negative effect between managerial ownership and internal control disclosure. This condition can arise due to the opportunistic behavior of management to optimize their interests so that they do not disclose the company's actual information. Therefore, this study formulates the following hypothesis:

H4: Managerial ownership has a negative effect on internal control disclosure.

2.7. *Audit Committee Size and Internal Control Disclosure*

The audit committee assists the board of commissioners in supervising management. In addition, the task of the audit committee is to ensure that the company discloses fair financial reports and has implemented good corporate governance (KNKG, 2006). Disclosure of company information is one form of corporate governance implementation where the company must be transparent to stakeholders. In corporate governance, the audit committee plays an important role in the financial reporting process to reduce information asymmetry. The effectiveness of the audit committee will increase when the audit committee has adequate resources, is independent, and has members with financial expertise (Mangena, Pike, 2005). Based on the description above, this study formulates the following hypothesis:

H5: Audit committee size has a positive effect on internal control disclosure.

2.8. *External Auditor Size and Internal Control Disclosure*

Kinney and McDaniel (1989) stated that companies audited by the Big Four public accounting firms tend to disclose information related to internal control. Large public accounting firms have the ability to identify problems related to internal control. They can pressure their client to report weaknesses in their internal control.

Big Four accounting firms have more clients and are stronger and more independent, thus requiring more information disclosure. Therefore, the information disclosed by companies using the Big Four accounting firms is more reliable and accurate (Xiaowen, 2012). The study conducted by (Hoitash et al., 2009) revealed that the appointment of a public accounting firm positively affects the quality of internal control (Ashfaq & Rui, 2019). Therefore, this study assumes that the size of the external auditor influences the level of internal control disclosure. Based on the description above, this study formulates the following hypothesis:

H6: External auditor size has a positive effect on internal control disclosure.

3. METHODS

The population in this study is nonfinancial companies listed on the Indonesia Stock Exchange in 2017-2019. The sample used in this study is nonfinancial companies that publish complete annual reports during 2017-2019 and provide the variable data needed in this study. This study uses secondary data, namely the annual reports of nonfinancial companies listed on the Indonesia Stock Exchange in 2017-2019. This study used purposive sampling method and obtained 242 companies for three years so that there are 726 firm-year observations used as sample of this study. The company's annual reports were obtained through the Indonesia Stock Exchange website, namely www.idx.co.id. and the official website of each company.

The dependent variable in this study is internal control disclosure. Internal control disclosure is a disclosure made by the company related to the internal control system implemented by the company through the company's annual report (Deumes & Knechel, 2008). The level of internal control disclosure is the percentage of internal control disclosed (Weli & Sjarief, 2018). This study uses the content analysis method to measure internal control disclosure. This study develops the measurement of internal control

disclosure used by (Hooghiemstra et al., 2015). In this study, the internal control disclosure items are adjusted to the Financial Services Authority Circular Letter (SE) Number 30 / SEOJK.04 / 2016. The provisions for internal control disclosure required by the Financial Services Authority only include the following two points:

- a. Financial and operational control, and compliance with other laws and regulations.
- b. Review of the effectiveness of the internal control system

Thus, the details of the internal control information disclosure items developed in this study are as follows.

Table 1. Internal Control Disclosure Measurement

No	Item	Measurement
1.	Operational Risk	Score 1 if the annual report discloses operational and strategic risk information such as business competition, product development, health and safety, etc. Score 0 if the company does not disclose information related to operational risk at all.
2.	Financial Risk	Score 1 if the annual report discloses the information related to financial risks such as interest rate, exchange rate, liquidity, credit risk, etc. Score 0 if the company does not disclose any information related to financial risks at all.
3.	Financial Reporting Risk	Score 1 if the annual report discloses information related to financial reporting risks such as asset impairment, pension accounting, valuation of derivative securities, etc. Score 0 if there is no disclosure.
4.	Responsibility	score 1 if, in the annual report, management explicitly acknowledges its responsibility for internal control. Score 0 if there is no disclosure at all.
5.	Internal Control Measures	Score 1 if the annual report discloses information related to the company's activities to control risks. Score 0 if there is no disclosure at all.
6.	Internal Control Framework	Score 1 if the annual report discloses information related to the framework used by the company to design its internal control. Score 0 if there is no disclosure at all.
7.	Review of the Effectiveness of Internal Control Systems	Score 1 if the annual report only states that the company has reviewed the effectiveness of internal control. Score 0 if there is no disclosure at all.

Source: (Hooghiemstra et al., 2015); Circular Letter (SE) of the Financial Services Authority Number 30/SEOJK.04/2016

This study used the following formula to calculate the level of internal control disclosure (ICD).

$$ICD = \frac{\text{Total items disclosed}}{\text{Maximum disclosure}} \times 100\%$$

The indicators of independent variables are as follows:

1. Board of Commissioners' Size
The measurement of the Board of Commissioners' size used in this study is the number of members of the Board of Commissioners (Ashfaq & Rui, 2019).
2. Independent Board of Commissioners

The measurement of independent board of commissioners used is the proportion of independent board of commissioners (Ashfaq & Rui, 2019).

3. Institutional Ownership

The measurement of institutional ownership is the percentage of share ownership by institutional investors (Dewayanto et al., 2017)

4. Managerial Ownership

The measurement of managerial ownership is the percentage of share ownership by the board of directors (Deumes & Knechel, 2008)

5. Audit Committee Size

The measurement of audit committee size is the number of audit committee members (Krishnan, 2005; Ashfaq & Rui, 2019).

6. External Auditor Size

A dummy variable measures the variable of external auditor size in this study; score one if Big Four public accounting firms audit the company, and score zero if otherwise.

This study also used control variables, namely leverage measured by Debt to Equity (DER) and profitability measured by Return on Assets (ROA). The data analysis technique used in this research is panel data regression, with the best model selected is the random effect model. Below is the regression equation of this study:

$$ICD_{it} = \beta_0 + \beta_1 BOCS_{it} + \beta_2 IC_{it} + \beta_3 IO_{it} + \beta_4 MO_{it} + \beta_5 ACS_{it} + \beta_6 EAS_{it} + \beta_7 LEV_{it} + \beta_8 PROF_{it} + \epsilon_{it}$$

Notes:

ICD_{it} : internal control disclosure

BOCS_{it}: Board of Commissioners' size

IC_{it}: independent commissioners

IO_{it}: institutional ownership

MO_{it}: managerial ownership

ACS_{it}: audit committee size

EAS_{it}: external auditor size

Control Variables:

LEV_{it}: leverage

PROF_{it}: profitability

4. RESULTS AND DISCUSSION

This study analyzed 242 nonfinancial companies listed on the Indonesia Stock Exchange from 2017 to 2019 with 726 firm-year observation data. The dependent variable in this study is internal control disclosure (ICD). Meanwhile, independent variables are Board of Commissioners' Size (BOCS), independent commissioner (IC), institutional ownership (IO), managerial ownership (MO), audit committee size (ACS), and external auditor size (EAS). Control variables included in this study are leverage (LEV) and profitability (PROF). The descriptive of the research data are described in table 3 below.

Table 2. Descriptive Statistics

	ICD	BOCS	IC	IO	MO	ACS	EAS	LEV	PROF
Mean	0.67611 2	4.30854 0	0.4183 94	0.78534 9	0.04789 8	3.07438 0	0.39256 2	3.6544 15	0.00859 1
Median	0.71428 6	4.00000 0	0.4000 00	0.85225 0	0.00023 1	3.00000 0	0.00000 0	0.8247 18	0.03559 4
Maximum	1.00000 0	13.0000 0	1.0000 00	1.00000 0	0.84930 0	6.00000 0	1.00000 0	786.93 11	0.67568 5
Minimum	0.28571 4	2.00000 0	0.1666 67	0.00050 0	0.00000 0	2.00000 0	0.00000 0	30.6385 3	18.0517 3

Std. Dev.	0.139180	1.898416	0.116932	0.217945	0.127353	0.375056	0.488657	39.9100	0.686951
Skewness	-0.197739	1.059958	1.632791	-1.471783	3.780772	3.478118	0.440031	16.94284	25.11453
Kurtosis	2.152200	4.087543	7.252526	4.818907	18.59398	21.99080	1.193627	300.7018	659.9561
Jarque-Bera	26.47379	171.7230	869.6270	362.1835	9085.562	12373.45	122.1341	2715682.	13131957
Probability	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	490.8571	3128.000	303.7539	570.1636	34.77362	2232.000	285.0000	2653.105	6.236967
Sum Sq. Dev.	14.04408	2612.887	9.912968	34.43750	11.75866	101.9835	173.1198	1154786.	342.1283
Observations	726	726	726	726	726	726	726	726	726

Source: Eviews 12 output, data processed (2023)

The table above shows that the average internal control disclosure (ICD) level is 0.676 (67.6%). However, there are still companies whose disclosure level is only 28.57%, as seen from the ICD variable's minimum value. Meanwhile, the maximum value of the level of internal control disclosure is 1.000, meaning that some companies have disclosed 100% of information related to internal control in their annual reports according to the disclosure items used in this study. The result of multicollinearity test is described in table 4 below.

Table 3. Multicollinearity Test

	BOCS	IC	IO	MO	ACS	EAS
BOCS	1					
IC	-0.149	1				
IO	0.118	0.079	1			
MO	-0.099	-0.034	-0.610	1		
ACS	0.260	0.018	0.050	-0.056	1	
EAS	0.327	-0.047	0.233	-0.121	0.133	1

Based on the multicollinearity test in the table above, it is known that the correlation value between independent variables in this study is less than 0.8 so that it can be said that there is no multicollinearity problem. In addition, the result of panel data regression analysis can be seen in the table below.

Table 4. Results of Panel Data Regression Analysis

	Predicted Sign	Common Effect	Fixed Effect	Random Effect
Constant		0.4823 (0.0000)	0.7008 (0.0000)	0.5969 (0.0000)
BOCS	+	0.0060 (0.0406)**	-0.0058 (0.2075)	0.0013 (0.6835)

IC	+	0.0846 (0.0568)*	0.0822 (0.0873)*	0.0815 (0.0469)**
IO	+	0.0733 (0.0156)**	0.0275 (0.4557)	0.0521 (0.0806)*
MO	-	0.0753 (0.1369)	0.1523 (0.0452)**	0.0984 (0.0731)*
ACS	+	0.0223 (0.1132)	-0.0213 (0.1820)	-0.0038 (0.7753)
EAS	+	0.0030 (0.7858)	0.0051 (0.8087)	0.0115 (0.3923)
Control Variables				
LEV	+	0.0002 (0.0757)*	0.0001 (0.0254)**	0.0001 (0.0179)**
PROF	+	0.0182 (0.0142)**	0.0074 (0.1569)	0.0092 (0.0653)*
Adjusted R ²		0.0309	0.7092	0.0153
F-statistic (Prob)		3.896 (0.0000)	8.104 (0.0000)	2.4106 (0.0000)
Obs		726	726	726
Chow (Prob)		-	7.941 (0.0000)	-
Hausman (Prob)		-	-	14.889 (0.0613)
Breusch Pagan (Prob)		341.396 (0.000)	-	-
Notes: *significant at α 10%, **significant at α 5%, ***significant at α 1%.				
Source: Eviews 12 output, data processed (2023)				

Based on the table above, the results of the model selection test with the Chow test, Hausman test, and Breusch Pagan Lagrange Multiplier test show that the selected regression model is random effect. Then, when viewed from the regression coefficient and its significance, the board of commissioners' size (BOCS) variable has a coefficient of 0.0013 with a significance level of $0.6835 > 0.05$. Thus, the BOC size does not significantly affect internal control disclosure. The result of this study is in line with the results of the (Agyei-Mensah, 2016) and (Leng & Ding, 2011) study, which revealed that board size has no significant effect on internal control disclosure.

The independent board of commissioner (IC) variable has a coefficient value of 0.0815 with a significance of $0.0469 < 0.05$, which means that the variable has a positive and significant effect at the α level of 5%, according to the hypothesis of this study. This result is in line with the findings of (Michelon et al., 2015) and (Ashfaq & Rui, 2019), which show that an independent board of commissioners positively affects internal control disclosure. The higher the proportion of commissioners who are not affiliated with the company, the more effective their supervision over management can be in encouraging management to disclose internal control more completely.

Table 5 above also shows that the coefficient of the institutional ownership variable, which is 0.0521, is significant at the α level of 10%. This study's results align with those of (Ashfaq and Rui, 2019) and (Dewayanto et al., 2017), which found that institutional ownership positively affected internal control disclosure. Managerial ownership (MO) has a negative effect on internal control disclosure. Meanwhile, Board of Commissioners' size (BOCS), audit committee size (ACS), and external auditor size (EAS) have no significant effect on internal control disclosure. Furthermore, the control variable, namely leverage (LEV), has a significant effect at α 5%. However, profitability (PROF) is only significant at α 10%. This result shows that the higher the level of leverage and the company's ability to seek profit, the higher the level of internal control disclosure.

DISCUSSIONS

Based on the results of the panel data regression analysis, it is known that the independent board of commissioners has a positive and significant effect on internal control disclosure. This result is in line with the results of Leng & Li's (2011) study, which showed that the independent board of commissioners positively affects internal control disclosure. In addition, (Agyei-Mensah, 2016); (Ashfaq & Rui, 2019) and (Michelon et al., 2015) concluded that the independent board of commissioners has a significant effect on internal control disclosure. The independent board of commissioners is a member of the board of commissioners who are not affiliated with the company so that they can perform more effective supervisory functions. (Cao & Lu, 2018) stated that independent directors can monitor the company's operations effectively and ensure that internal control functions effectively. The independent board of commissioners can also encourage management to disclose information more widely, including internal control disclosure (Ismail & Ardiyanto, 2017).

The results of this study also show that institutional ownership has a positive effect on internal control disclosure. From the agency theory perspective, institutional ownership is crucial in monitoring management to ensure the company's goals are achieved properly. The higher the institutional ownership proportion, the more control over management conducted by external parties is getting stronger (Legina et al., 2022). The finding of this study is in line with Dewayanto et al. (2017) study that revealed that institutional ownership has a positive effect on internal control disclosure.

The other results of this study revealed that managerial ownership has a negative effect on internal control disclosure. These findings support the research by (Deumes, Knechel, 2008); (Ashfaq & Rui, 2019); (Dewayanto, et al., 2017) which found that managerial ownership has a negative and significant effect on internal control disclosure. Zulfikar et al. (2015) also showed that managerial ownership negatively affects internal control disclosure. This condition can arise due to opportunistic management behavior to optimize their interests so that they do not disclose the company's actual information.

Based on the results of the panel data regression analysis, it is also known that the size of the external auditor does not significantly affect the disclosure of internal control. Thus, the hypothesis of this study, which states that the size of the external auditor has a positive effect on the disclosure of internal control, is not supported. This result shows that companies that use the services of Big Four public accounting firms do not necessarily disclose more complete internal control information compared to companies that use the services of non-Big Four.

The other variable of this study that has no significant effect on internal control disclosure is the size of the board of commissioners. The size of the Board of Commissioners does not guarantee the effectiveness of the Board of Commissioners' performance. The number of Board of Commissioners will not necessarily affect the encouragement of the Board of Commissioners to make management more transparent. The results of this study are in line with the findings of (Leng & Ding, 2011), which state that board size does not have a significant effect on internal control disclosure, and the research conducted by (Ji, Lu, Qu., 2015), which found that the size of the supervisory board does not have a significant effect on the disclosure of internal control weaknesses.

The result of this study also show that audit committee size has no significant effect on internal control disclosure. The minimum number of Audit Committee members in Indonesia is regulated under the Financial Services Authority Regulation (POJK) No. 55/POJK.04/2015 concerning the Establishment and Implementation Guidelines of the Audit Committee, which stipulates that the Audit Committee shall consist of at least three members. The size of the audit committee does not necessarily ensure more comprehensive disclosure of internal controls, as management often limits itself to meeting only the minimum requirements prescribed by regulation. Sem and Hastuti (2024) observe that numerous firms constitute audit committees primarily as a means of regulatory compliance rather than as a substantive mechanism for enhancing disclosure quality.

5. CONCLUSION, IMPLICATION AND LIMITATION

This study investigates the effect of the board of commissioners' size, independent commissioners, institutional ownership, managerial ownership, audit committee size, and external auditor size on internal control disclosure. The findings of this study revealed that independent commissioners and institutional ownership positively affect internal control disclosure. Meanwhile, managerial ownership has a negative

effect. In addition, board of commissioners', audit committee, and external auditor size have no significant effect on internal control disclosure. These findings can be considered by the company management in order to improve internal control disclosure. Independent commissioners should optimize their role in supervising and encouraging management, especially to disclose more complete information related to internal control

One of the limitations of this study is that internal control disclosure items are not detailed, so the disclosure scores of companies that disclose information in general and those that disclose information more detail in are not clearly differentiated. Therefore, the other researchers can use more detailed scoring to measure internal control disclosure.

REFERENCES

1. Agyei-Mensah, B. K. (2016). Internal control information disclosure and corporate governance: evidence from an emerging market. – *Corporate Governance (Bingley)*, 16(1), 79–95. <https://doi.org/10.1108/CG-10-2015-0136>
2. Ahmad, R. A. R., Abdullah, N., Jamel, N. E. S. M., & Omar, N. (2015). Board Characteristics and Risk Management and Internal Control Disclosure Level: Evidence from Malaysia. – *Procedia Economics and Finance*, 31(December), 601–610. [https://doi.org/10.1016/s2212-5671\(15\)01147-8](https://doi.org/10.1016/s2212-5671(15)01147-8)
3. Ahmad, A. W., & Septriani, Y. (2008). Konflik Keagenan: Tinjauan Teoritis dan Cara Mengurangnya. – *Jurnal Akuntansi Dan Manajemen*, 3(2), 47–56. <http://ojs.polinpdg.ac.id/index.php/JAM/article/view/515>
4. Ashfaq, K., & Rui, Z. (2019). The effect of board and audit committee effectiveness on internal control disclosure under different regulatory environments in South Asia. – *Journal of Financial Reporting and Accounting*, 17(2), 170–200. <https://doi.org/10.1108/JFRA-09-2017-0086>
5. Aswar, K., Jumansyah, J., Mulyani, S., & Sumardjo, M. (2021). Moderating effect of internal control system to determinants influencing the financial statement disclosure. – *Investment Management and Financial Innovations*, 18(3), 104–112. [https://doi.org/10.21511/imfi.18\(3\).2021.10](https://doi.org/10.21511/imfi.18(3).2021.10)
6. Alqaraleh, M. H. (2024). Evaluating the effect of investor culture on internal control reporting and investor perceptions of disclosure credibility. – *Investment Management and Financial Innovations*, 21(4), 314–322. [https://doi.org/10.21511/imfi.21\(4\).2024.25](https://doi.org/10.21511/imfi.21(4).2024.25)
7. Barako, D. G. (2007). Determinants of voluntary disclosures in Kenyan companies annual reports. – *African Journal of Business Management*, 1(5), 113–128.
8. Deumes, R., & Knechel, W. R. (2008). Economic incentives for voluntary reporting on internal risk management and control systems. – *Auditing*, 27(1), 35–66. <https://doi.org/10.2308/aud.2008.27.1.35>
9. Dewayanto, Totok; Suhardjanto, Djoko; Bandi; Setiadi, I. (2017). Ownership Structure, Audit Committee, and Internal Control Disclosure: Indonesia and Philippines. – *Review of Integrative Business and Economics Research Online CDROM*, 6(4), 353–363.
10. Ding, T., & Yang, L. (2025). Intellectual property protection and corporate digital transformation: An empirical analysis from the perspectives of intellectual property protection and digital governance. – *International Review of Economics and Finance*, 100(January), 104125. <https://doi.org/10.1016/j.iref.2025.104125>
11. Gad, J. (2015). The main categories of disclosures concerning control over financial reporting: The practice of companies listed on the Warsaw Stock Exchange. – *Business and Economic Horizons*, 11(3), 162–172. <https://doi.org/10.15208/beh.2015.12>
12. Gandía, J. L. (2008). Companies determinants of internet-based corporate governance disclosure by Spanish listed companies. – *Online Information Review*, 32(6), 791–817. <https://doi.org/10.1108/14684520810923944>
13. Gyimah, P., & Owusu-Afriyie, R. (2025). Bank sustainability: Do corporate governance and internal audit quality matter?. – *World Development Sustainability*, 6(May 2023), 100222. <https://doi.org/10.1016/j.wds.2025.100222>
14. Hadiprajitno, P. B. (2013). Struktur kepemilikan, mekanisme tata kelola perusahaan, dan biaya keagenan di Indonesia (Studi empirik pada perusahaan di Bursa Efek Indonesia). – *Jurnal Akuntansi dan Auditing*, 9(2), 97–127.
15. Hanif, R. A., Silalahi, S. P., Supriyono, S., Hariyani, E., & Wiguna, M. (2023). Disclosure Level of Local Government's Financial Statements in Indonesia: Role of the Internal Control System. – *Investment Management and Financial Innovations*, 20(3), 13–21. [https://doi.org/10.21511/imfi.20\(3\).2023.02](https://doi.org/10.21511/imfi.20(3).2023.02)
16. Hoitash, U., Hoitash, R., & Bedard, J. C. (2009). Corporate governance and internal control over financial reporting: A comparison of regulatory regimes. – *Accounting Review*, 84(3), 839–867. <https://doi.org/10.2308/accr.2009.84.3.839>
17. Hooghiemstra, R., Hermes, N., & Emanuels, J. (2015). National Culture and Internal Control Disclosures: A Cross-country Analysis. – *Corporate Governance: An International Review*, 23(4), 357–377. <https://doi.org/10.1111/corg.12099>
18. Ismail, M. D., & Ardiyanto, M. D. (2017). Pengaruh Mekanisme Corporate Governance Terhadap Pengungkapan Informasi Pengendalian Internal. – *Diponegoro Journal of Accounting*, 6(3), 1–13. Available at: <http://ejournal-s1.undip.ac.id/index.php/accounting>
19. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. – *Corporate Governance: Values, Ethics and Leadership*, 77–132. <https://doi.org/10.4159/9780674274051-006>
20. Jati, A. T., & Anggoro, R. W. (2018). Determinants of internal control disclosure and its impact on company value. – *International Journal of Engineering and Technology*, 7(3), 127–132.
21. Ji, X. dong, Lu, W., & Qu, W. (2015). Determinants and economic consequences of voluntary disclosure of internal control weaknesses in China. – *Journal of Contemporary Accounting and Economics*, 11(1), 1–17. <https://doi.org/10.1016/j.jcae.2014.12.001>
22. Komite Nasional Kebijakan Governance. (2006). Pedoman umum good corporate governance Indonesia. Indonesia: Komite Nasional Kebijakan Governance.

23. Kinney, W., & McDaniel, L.S. (1989). Characteristics of firms correcting previously reported quarterly earnings. –*Journal of Accounting and Economics* 11 (1989) 71-93. Available at: <https://www.sciencedirect.com/science/article/abs/pii/0165410189900141>
24. Krishnan, J. (2005). Audit committee quality and internal control: An empirical analysis. – *Accounting Review*, 80(2), 649–675. <https://doi.org/10.2308/accr.2005.80.2.649>
25. Kusmawati, K. (2020). Biaya Keagenan, GCG, dan Kinerja Perusahaan Keluarga. – *Mbia*, 19(3), 331–342. <https://doi.org/10.33557/mbia.v19i3.1208>
26. Leng, J., & Ding, Y. (2011). Internal Control Disclosure and Corporate Governance: Empirical Research from Chinese Listed Companies. – *Technology and Investment*, 02(04), 286–294. <https://doi.org/10.4236/ti.2011.24029>
27. Leng, J., & Li, L. (2011). Analysis of the Relationship between Listed Companies ' Earnings Quality and Internal Control Information Disclosure. 2011 (November), 893–900. <https://doi.org/10.4236/me.2011.25100>
28. Ma, Y., & Shleifer, A. (2025). The invention of corporate governance. – *Journal of Financial Economics*, May, 104115. <https://doi.org/10.1016/j.jfineco.2025.104115>
29. Mangena, M., & Pike, R. (2005). The effect of audit committee shareholding, financial expertise and size on interim financial disclosures. – *Accounting and Business Research*, 35(4), 327–349. <https://doi.org/10.1080/00014788.2005.9729998>
30. Michelon, G., Bozzolan, S., & Beretta, S. (2015). Board monitoring and internal control system disclosure in different regulatory environments. – *Journal of Applied Accounting Research*, 16(1), 138–164. <https://doi.org/10.1108/JAAR-03-2012-0018>
31. Nadel, S., & Savès, M. (2025). Corporate governance and ecological investments. The case of French industry. –*Ecological Economics*, 234(February). <https://doi.org/10.1016/j.ecolecon.2025.108588>
32. Salehi, M., & Ghasempour, F. (2021). Material internal control weakness with intangible assets, capital structure and commercial risk. – *Management Research Review*. <https://doi.org/10.1108/MRR-06-2020-0335>
33. Setianingsih, E. P. (2013). Pengaruh mekanisme tata kelola perusahaan dan kinerja perusahaan terhadap kualitas laba (Studi kasus perusahaan otomotif dan komponen di Bursa Efek Indonesia). – *Proceeding PESAT*, 105–112.
34. Shu, W., Chen, Y., Lin, B., & Chen, Y. (2018). Does corporate integrity improve the quality of internal control ? –*China Journal of Accounting Research*, 11(4), 407–427. <https://doi.org/10.1016/j.cjar.2018.09.002>
35. Singh, D. (2025). Corporate governance, board networks and firm performance. – *Journal of International Management*, 31(4), 101261. <https://doi.org/10.1016/j.intman.2025.101261>
36. Spira, P. (2003). Risk management. 16(4), 640–661. <https://doi.org/10.1108/09513570310492335>
37. Squires, B., & Elnahla, N. (2020). The roles played by boards of directors: an integration of the agency and stakeholder theories. – *Transnational Corporations Review*, 12(2), 126–139. <https://doi.org/10.1080/19186444.2020.1757340>
38. Su, W., Zhang, L., Ge, C., & Chen, S. (2022). Association between Internal Control and Sustainability: A Literature Review Based on the SOX Act Framework. – *Sustainability (Switzerland)*, 14(15). <https://doi.org/10.3390/su14159706>
39. Wan, D., Yang, Y., & Kong, Y. (2025). Research on the relationship between R & D investment , corporate governance and corporate performance –an empirical analysis based on listed pharmaceutical manufacturing enterprises. – *International Review of Economics and Finance*, 102(July), 104369. <https://doi.org/10.1016/j.iref.2025.104369>
40. Weli, & Sjarief, J. (2018). The effect of internal control disclosure on financial information quality and market performance distinguished by the corporate governance index. – *International Journal of Accounting and Financial Reporting*, 8(1), 241–260. <https://doi.org/10.5296/ijaf.v8i1.12823>
41. Weli, W., Hadinata, Y., Tiffany, T., Bella, V., & Devi, N. V. (2023). Peran Tata Kelola Perusahaan Pada Pengaruh Pengungkapan Sistem Pengendalian Internal Terhadap Kinerja Perusahaan Kesehatan. – *Jurnal Bisnis Dan Akuntansi*, 25(1), 29–44. <https://doi.org/10.34208/jba.v25i1.1412>
42. Xiaowen, S. (2012). Corporate Characteristics and Internal Control Information Disclosure- Evidence from Annual Reports in 2009 of Listed Companies in Shenzhen Stock Exchange. – *Physics Procedia*, 25, 630–635. <https://doi.org/10.1016/j.phpro.2012.03.136>
43. Xu, Z. (2025). Can the participation of party organizations in corporate governance enhance the risk-bearing capacity of listed companies?. – *International Review of Economics and Finance*, 101(February), 104129. <https://doi.org/10.1016/j.iref.2025.104129>
44. Yushu, K., Zongkeng, L., & Rui, L. (2024). Disclosure of internal control evaluation reports of Chinese enterprises: History, problems and strategies. – *Finance Research Letters*, 66(February), 105642. <https://doi.org/10.1016/j.frl.2024.105642>
45. Zhang, J., Zhang, L., & Zhang, M. (2024). Media pressure, internal control, and corporate environmental information disclosure. – *Finance Research Letters*, 63(December 2023), 105369. <https://doi.org/10.1016/j.frl.2024.105369>
46. Zhao, S., & Shi, B. (2024). Agency conflicts, financial constraints, and dynamic q-theory. – *Economics Letters*, 234(November 2023), 111501. <https://doi.org/10.1016/j.econlet.2023.111501>
47. Zulfikar, R., Millatina, F., Mukhtar, M., Astuti, K. D., Ismail, T., Meutia, M., & Fazri, E. (2021). Antecedents of Disclosure on Internal Control and Earnings Management. – *Journal of Asian Finance, Economics and Business*, 8(3), 391–397. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0391>