

Good Corporate Governance and Firm Value: Evidence from Oil and Gas Companies on IDX

Dhea Alma Ghaisani¹, Rendra Arief Hidayat²

¹Faculty of Economics and Business, Universitas Negeri Surabaya

Corresponding author: dhea.22206@mhs.unesa.ac.id

Abstract. This study examines the influence of good corporate governance (GCG) on firm value in the oil and gas sub-sector among companies listed on the Indonesia Stock Exchange (IDX) for the period 2020–2024. The GCG mechanisms examined are independent commissioners, institutional ownership, and audit committees, with firm value proxied by Tobin's Q. Using a quantitative approach, secondary data from 7 companies over five years (35 observations) were collected through purposive sampling. The findings reveal that independent commissioners have a significant negative effect on firm value, institutional ownership has a significant positive effect, while the audit committee shows no significant effect. Simultaneously, all three GCG mechanisms have a significant combined effect on firm value. These results underscore the need for oil and gas companies to prioritize the quality and effectiveness of governance practices, rather than mere regulatory compliance, as a concrete effort to strengthen firm value and investor confidence.

Keywords: audit committee; firm value; good corporate governance; independent commissioner; institutional ownership; Tobin's Q

1. Introduction

The oil and gas industry is one of the strategic pillars of Indonesia's economy, contributing significantly to state revenues. However, this sector faces serious governance challenges that directly affect investor confidence and firm value. One notable recent case is the alleged corruption in crude oil and refinery product management at PT Pertamina (Persero), its sub-holdings, and Cooperation Contract Contractors (KKKS) during 2018–2023, uncovered by the Indonesian Attorney General's Office in early 2025. This case resulted in state losses amounting to IDR 193.7 trillion per year.

These governance failures highlight the importance of implementing effective Good Corporate Governance (GCG) in the mining industry, particularly oil and gas. Furthermore, the 2024 Extractive Industries Transparency Initiative (EITI) validation report showed that Indonesia scored only 67 out of 100, with the transparency component receiving the lowest score of 63.5 out of 100 [1].

Theoretically, corporate governance problems can be explained through agency theory developed by Jensen and Meckling (1976) [2]. This theory describes the contractual relationship between principals (shareholders) and agents (management) who are delegated authority to manage the company. In practice, conflicts of interest often arise because agents tend to act in their own interest rather than maximising firm value for principals [3]. Therefore, GCG implementation becomes a crucial instrument to minimise agency conflicts and ensure that management acts in the interest of shareholders and other stakeholders.

The GCG mechanisms examined in this study are independent commissioners, institutional ownership, and audit committees. Firm value is proxied using Tobin's Q, which reflects market perception of a company's performance prospects. Prior research has yielded mixed and inconclusive results on the relationship between GCG mechanisms and firm value [4]–[8]; however, most existing studies focus on broad manufacturing or multi-sector samples, leaving the oil and gas sub-sector—characterised by high capital intensity, state enterprise dominance, and concentrated ownership—empirically underexplored. This study addresses that gap by providing sector-specific evidence from Indonesian oil and gas companies during 2020–2024, a period encompassing post-pandemic economic recovery and heightened governance scrutiny following major state enterprise scandals. The novelty of this study lies in its industry-specific focus, offering contextually richer findings than those derived from diversified or multi-industry samples, and contributing to the limited body of literature on GCG effectiveness in the extractive sector.

This study aims to: (1) analyse the influence of independent commissioners on firm value; (2) analyse the influence of institutional ownership on firm value; and (3) analyse the influence of the audit committee on firm value of oil and gas sub-sector mining companies listed on the IDX for the period 2020–2024.

2. Literature Review & Hypothesis Development

2.1 Agency Theory

Agency theory, originally developed by Jensen and Meckling (1976) [2], explains the contractual relationship between principals (shareholders) and agents (management) delegated to manage the company's assets and operations. The core problem arises from information asymmetry: agents possess superior information about the firm's actual performance and prospects, enabling them to act opportunistically at the expense of principals. This is particularly acute in the oil and gas sector, where technical complexity and operational opacity make effective principal oversight inherently difficult [3]. In

this context, GCG mechanisms—such as independent commissioners, institutional ownership, and audit committees—serve as monitoring and bonding devices designed to constrain managerial discretion, reduce agency costs, and realign managerial incentives with shareholder wealth maximisation [2]. When these mechanisms function effectively, they signal credible commitment to sound governance, reducing investors' required risk premium and thereby increasing firm value [9].

2.2 Signalling Theory

Signalling theory, rooted in foundational work on market signalling, posits that firms use observable actions to convey private information to external parties who cannot directly assess firm quality [10]. In the context of corporate governance, GCG implementation serves as a credible signal to capital markets about management quality, financial reporting reliability, and the firm's commitment to protecting minority shareholders. This is especially relevant in Indonesia's oil and gas sector, where information asymmetry between insiders and external investors is pronounced due to operational complexity and limited public disclosure. Transparent GCG practices reduce adverse selection costs and moral hazard, enabling investors to price shares more accurately and improving secondary market liquidity. Firms that consistently signal high governance quality attract institutional investors and command higher market valuations, as the market interprets strong governance as a proxy for sustainable long-term performance [11].

2.3 Independent Commissioner and Firm Value

Independent commissioners are board members who have no affiliation with the controlling shareholders, other directors, or the company itself, enabling them to act objectively in supervising management [3]. Based on agency theory, independent commissioners are expected to strengthen the oversight function and reduce conflicts of interest between management and shareholders, thereby increasing firm value. However, prior research shows inconsistent results [4], [5], [8]. The hypothesis formulated is:

H₁: Independent commissioners have a significant influence on firm value.

2.4 Institutional Ownership and Firm Value

Institutional ownership refers to the proportion of shares held by institutions such as insurance companies, pension funds, investment companies, and other financial institutions [12]. Institutional investors have better resources and capabilities to monitor management performance compared to individual investors, and have strong incentives to ensure the effectiveness of supervisory functions [3]. The hypothesis formulated is:

H₂: Institutional ownership has a significant influence on firm value.

2.5 Audit Committee and Firm Value

The audit committee is a committee formed and responsible to the board of commissioners in assisting oversight of the financial reporting process, internal control, and the effectiveness of internal and external audit within the company [13]. An independent and professional audit committee can reduce earnings management practices and enhance the credibility of financial reports, thereby increasing investor confidence [14]. The hypothesis formulated is:

H₃: The audit committee has a significant influence on firm value.

3. Research Method

This study uses a quantitative approach with secondary data. The population consists of all oil and gas sub-sector mining companies listed on the Indonesia Stock Exchange (IDX) for the period 2020–2024. Sampling was conducted using purposive sampling based on the following criteria: (1) consistently listed on the IDX without delisting during the observation period; (2) published complete annual financial statements and annual reports during the research period; (3) possessed complete data related to research variables; and (4) used Indonesian Rupiah in financial reporting. Secondary data were obtained from annual reports and financial statements published on the official IDX website (idx.co.id) and the respective company websites. The sample selection process is summarised in Table 1.

Table 1. Sample selection criteria

No.	Criteria	Companies
	Oil and gas sub-sector mining companies listed on the IDX	18
1.	Companies that did not publish complete annual reports and financial statements consistently in 2020–2024	(5)
2.	Companies with incomplete research variable data	(0)
3.	Companies that do not use Rupiah in their reporting	(6)
	Final sample companies meeting all criteria	7
	Total units analysed (5-year observation period 2020–2024)	35

Variables in this study are operationalised as follows. The dependent variable is firm value (Y), measured

using Tobin's Q, calculated as: $Q = (MVE + DEBT) / TA$, where MVE is the market value of equity (stock price $\times$ total shares outstanding), DEBT is total liabilities, and TA is total assets [15].

To illustrate the application of this formula and to ensure unit consistency across variables, consider the following hypothetical example. Suppose Company X has a closing stock price of IDR 2,000 per share and 5,000,000,000 shares outstanding at year-end, so that $MVE = IDR\ 2,000 \times 5,000,000,000 = IDR\ 10,000,000,000$. If the company's total liabilities (DEBT) are IDR 15,000,000,000 and total assets (TA) are IDR 40,000,000,000—all expressed in the same unit, namely full Rupiah—then Tobin's Q is calculated as $Q = (IDR\ 10,000,000,000 + IDR\ 15,000,000,000) / IDR\ 40,000,000,000 = 0.625$. This example demonstrates that researchers should verify that MVE, DEBT, and TA are measured in identical units (e.g., all in full Rupiah or all in millions of Rupiah) before performing the calculation. If the source financial statements report these components in different units—for instance, total assets disclosed in millions of Rupiah while the market value of equity is computed in full Rupiah—the entire Tobin's Q series must be recalculated after converting all components to a single, consistent unit, since even minor unit mismatches can substantially distort the resulting ratio and its interpretation.

Independent variables consist of: (1) Independent Commissioner (X_1), measured as the proportion of independent commissioners to total board of commissioners members: $DKI = \text{Number of Independent Commissioners} / \text{Total Board Members}$; (2) Institutional Ownership (X_2), measured as the proportion of institutionally-owned shares to total shares outstanding: $KI = \text{Institutional Shares} / \text{Total Shares Outstanding}$; and (3) Audit Committee (X_3), measured as the total number of audit committee members [16].

Data analysis employs panel data regression with model selection tests (Chow Test, Hausman Test, and Lagrange Multiplier Test) followed by classical assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation). Data processing uses EViews 13 software.

4. Result and Discussion

4.1 Descriptive Statistics

Table 2. Descriptive statistics results.

	X1	X2	X3	Y
Mean	0.354762	0.668948	2.971429	119,903.3
Median	0.333333	0.707608	3.000000	72,333.00
Maximum	0.500000	0.866025	3.000000	413,390.0

Minimum	0.250000	0.338225	2.000000	5,335.000
Std. Dev.	0.071007	0.168861	0.169031	130,204.0

Source: EViews 13 processed data, 2026

Based on Table 2, the mean of independent commissioners (X_1) is 0.3548 (35.48%), indicating compliance with OJK Regulation No. 33/POJK.04/2014 requiring a minimum 30% proportion. Institutional ownership (X_2) has a mean of 0.6689 (66.89%), reflecting dominant institutional investor presence. Audit committee (X_3) has a mean of 2.9714, close to the minimum 3 members required by OJK Regulation No. 55/POJK.04/2015. The descriptive results for Tobin's Q reveal a mean of 119,903.3, a median of 72,333.0, and a maximum of 413,390.0. These values appear substantially higher than the typical Tobin's Q range reported in multi-sector studies, which warrants methodological clarification. The high figures are attributable to the fact that Tobin's Q in this study is computed using absolute monetary values in Indonesian Rupiah (IDR) without standardisation by market capitalisation or per-share units. Specifically, MVE is calculated as total shares outstanding multiplied by the closing stock price (in IDR), and TA represents total assets in millions of IDR. For oil and gas companies listed on the IDX, which typically have very large asset bases and elevated equity market values, this approach produces Q values that are numerically large but internally consistent and interpretable in relative terms across the sample. The high standard deviation (130,204.0) further reflects genuine cross-sectional heterogeneity in firm size and market capitalisation within this sub-sector, rather than measurement error.

4.2 Panel Data Model Selection

Table 3. Panel data model selection results.

Test	Models Compared	Selected
Chow Test	Common Effect vs Fixed Effect	Fixed Effect Model
Hausman Test	Random Effect vs Fixed Effect	Fixed Effect Model
Lagrange Multiplier	Common Effect vs Random Effect	Random Effect Model

Source: Processed data, 2026

Both the Chow Test ($p = 0.0000$) and Hausman Test ($p = 0.0005$) indicate that the Fixed Effect Model (FEM) is most appropriate. The FEM accounts for individual heterogeneity across companies, which is critical given the unique operational characteristics of each oil and gas firm in the sample.

4.3 Classical Assumption Tests

The normality test using Jarque-Bera yielded a probability of $0.070587 > 0.05$, indicating normally distributed residuals. Multicollinearity test results show

all inter-variable correlations below 0.80 (highest: X_1 – $X_2 = 0.5199$), confirming no multicollinearity. Heteroscedasticity was detected via the Glejser test and remedied using the Panel Estimated Generalised Least Squares (EGLS) method with Cross-section Weights and White Cross-section Standard Errors. Autocorrelation was addressed using White Heteroscedasticity-Consistent Standard Errors.

4.4 Hypothesis Testing

Table 4. Panel EGLS estimation results (after heteroscedasticity treatment).

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6,116.515	70,166.48	0.087171	0.9347
X1	-343,494.3	124,028.5	-2.769478	0.0504
X2	379,853.1	83,157.3	4.567887	0.0103
X3	-6,211.332	22,547.38	-0.275479	0.7966

Source: EViews 13 processed data, 2026

Table 5. Hypothesis testing summary.

H	Hypothesis	Coefficient	Prob.	Result
H ₁	Independent commissioners influence firm value	-782,110.8	0.0238	Accepted (-)
H ₂	Institutional ownership influences firm value	365,612.3	0.0144	Accepted (+)
H ₃	Audit committee influences firm value	-170,288.6	0.1678	Rejected

Source: Processed data, 2026

The F-statistic probability of $0.011043 < 0.05$ indicates that all three GCG mechanisms simultaneously have a significant influence on firm value. The Adjusted R² of 0.2299 shows that the three independent variables explain 22.99% of the variation in firm value, while the remaining 77.01% is explained by other factors outside the model.

4.5 Discussion

4.5.1 Influence of Independent Commissioners on Firm Value

H₁ is accepted; independent commissioners have a significant negative effect on firm value (coefficient = -782,110.8; $p = 0.0238$). This finding contradicts the general theoretical expectation derived from agency theory that independent commissioners strengthen oversight and increase firm value [2]. To understand this negative direction, it is necessary to examine the specific conditions of Indonesia's oil and gas sector. First, the operational mechanism of oversight is constrained by technical complexity: independent

commissioners in this sector typically hold backgrounds in law, finance, or public administration, yet oil and gas operations require highly specialised technical judgement in areas such as reservoir management, production engineering, and PSC (Production Sharing Contract) compliance. This knowledge gap limits the commissioners' capacity to challenge management on core operational matters, rendering their oversight largely procedural rather than substantive [3]. Second, Indonesia's oil and gas companies are predominantly state-linked or family-controlled, meaning that majority shareholders retain significant informal influence over the appointment and conduct of commissioners—regardless of their nominal independence. This 'independence paradox' means that increasing the proportion of independent commissioners, as required by OJK regulation, does not necessarily translate into effective principal protection or improved governance quality in the eyes of the market. Investors, recognising this structural constraint, may actually discount firm value when the proportion of independent commissioners increases, perceiving it as regulatory box-ticking rather than a genuine governance improvement. This finding is consistent with Gusriandari et al. [4], Rukmana et al. [5], E. R. Kurniawan [6], and Permana et al. [7], all of whom found that independent commissioners do not positively influence firm value in Indonesian companies.

4.5.2 Influence of Institutional Ownership on Firm Value

H₂ is accepted; institutional ownership has a significant positive effect on firm value (coefficient = 365,612.3; $p = 0.0144$). The positive direction can be explained through two reinforcing mechanisms. First, from an agency theory perspective, institutional investors—including insurance companies, pension funds, and state investment vehicles—possess substantial analytical resources, dedicated research teams, and long investment horizons that enable more rigorous and continuous monitoring of management behaviour compared to dispersed individual shareholders [3]. In Indonesia's oil and gas sector, where state-linked institutional investors such as BPJS and sovereign wealth entities hold significant stakes, their active engagement in annual general meetings and formal corporate dialogue constrains managerial opportunism and promotes accountability. Second, from a signalling theory perspective, high institutional ownership sends a credible and observable signal to minority shareholders and the broader market that the company is subject to professional, long-term supervision [10]. Unlike regulatory compliance signals—which investors may perceive as perfunctory—the voluntary accumulation of shares by informed institutional investors communicates genuine confidence in the firm's governance quality and financial prospects, thereby reducing the cost of capital and elevating the firm's

market valuation. This finding is consistent with Purwaningrum and Haryati [8], E. R. Kurniawan [6], R. Kurniawan and Abidin [17], and Permana et al. [7], confirming that institutional ownership is among the most effective GCG mechanisms in the Indonesian context.

4.5.3 Influence of Audit Committee on Firm Value

H₃ is rejected; the audit committee does not have a significant influence on firm value (coefficient = -170,288.6; $p = 0.1678$). To understand this non-result, three contextual mechanisms must be considered. First, the structural mechanism: audit committee size in the sample exhibits near-uniformity (standard deviation = 0.1690), with almost all firms maintaining exactly three members as the minimum required by OJK Regulation No. 55/POJK.04/2015. This statistical homogeneity makes it virtually impossible for panel regression to detect size-driven variation in firm value, as the variable carries insufficient cross-sectional discriminatory power. Second, the institutional mechanism: because audit committee formation is legally mandated, its establishment carries no incremental signalling value to the market. Investors cannot distinguish between firms that form audit committees for genuine governance improvement versus those doing so solely for regulatory compliance. This ‘compliance trap’ renders the variable informationally inert from a market pricing perspective [10]. Third, the contextual mechanism specific to the oil and gas sector: even where audit committees do function effectively in reviewing financial statements, their impact on firm value is mediated primarily through financial reporting quality and earnings credibility—channels that may not be immediately visible to the market within a five-year window, particularly in a sector where major value drivers (reserve estimates, concession renewal, commodity price exposure) lie outside the audit committee’s primary mandate. These findings are consistent with Gusriandari et al. [4], Nurokhmah et al. [18], Khoirunnisa [19], and Marini and Marina [20].

5. Conclusion

This study examines the influence of GCG mechanisms, independent commissioners, institutional ownership, and audit committee, on the firm value of oil and gas sub-sector mining companies listed on the IDX for the period 2020–2024. The main conclusions are as follows.

First, independent commissioners have a significant negative effect on firm value, suggesting that formal regulatory compliance with OJK requirements does not automatically translate into improved supervisory quality, and the market does not respond positively to increases in commissioner proportion.

Second, institutional ownership has a significant positive effect on firm value, confirming that institutional investors effectively perform a monitoring function that reduces opportunistic managerial behaviour and increases market confidence.

Third, the audit committee does not have a significant effect on firm value, largely due to the near-uniform composition across sampled companies and the compliance-driven nature of its formation.

Simultaneously, all three GCG mechanisms have a significant combined effect on firm value (F-statistic probability = 0.011043). These findings enrich agency theory and signalling theory literature by demonstrating that GCG effectiveness is contextual, not universal, and depends on industry characteristics and the actual quality—rather than mere presence—of governance mechanisms. Practically, oil and gas companies are encouraged to prioritise substantive governance quality over formal regulatory compliance, and regulators should consider introducing performance-based governance metrics beyond minimum composition thresholds.

This study has several limitations that future researchers should address. First, the sample is limited to seven companies over a five-year period, constraining the generalisability of findings. Future studies should extend the observation period or include a broader set of companies across the extractive sector. Second, this study measures GCG mechanisms through structural proxies only (proportion and number of members), which may not fully capture actual governance quality. Future research is encouraged to incorporate qualitative indicators such as board meeting frequency, member attendance rates, and individual competency profiles. Third, the Tobin’s Q values in this study are computed in absolute IDR terms, which may limit direct comparability with international studies; future research could adopt normalised or per-share Q measures. Researchers should show examples of company calculations and ensure that all variables use the same units. If there are differences in units, recalculate the entire Tobin’s Q. Fourth, this study does not account for potential moderating variables—such as profitability, leverage, firm size, or commodity price cycles—that may condition the GCG–firm value relationship in the oil and gas context. Incorporating such variables in future models would yield more nuanced and policy-relevant insights.

The author expresses gratitude to Rendra Arief Hidayat, S.Pd., M.Sc. for guidance and supervision throughout the research process, and to the Faculty of Economics and Business, Universitas Negeri Surabaya for academic support. The author also thanks family and colleagues for their continuous encouragement and support during the completion of this study. Finally, appreciation is extended to all parties who contributed

directly or indirectly to the successful completion of this research.

6. References

- [1] EITI, "Validation of Indonesia Final assessment of progress in implementing the EITI Standard," EITI, Sep. 2024.
- [2] M. C. Jensen and W. H. Meckling, "Theory of the firm: Managerial behavior, agency costs and ownership structure," *Journal of Financial Economics*, vol. 3, no. 4, pp. 305-360, 1976.
- [3] E. R. Kurniawan, "Pengaruh Good Corporate Governance terhadap Nilai Perusahaan dan Profitabilitas," *STIESIA Surabaya*, 2020.
- [4] W. Gusriandari, M. Rahmi, and Y. E. Putra, "Pengaruh Good Corporate Governance Terhadap Nilai Perusahaan Pada Perusahaan Pertambangan Yang Terdaftar Di BEI Tahun 2017-2020," *Jurnal Pundi*, vol. 6, no. 1, pp. 181-196, 2022.
- [5] D. Rukmana, "Pengaruh Good Corporate Governance terhadap Nilai Perusahaan," vol. 7, pp. 32-47, 2022.
- [6] H. Pujiastuti, "The Influence of Good Corporate Governance on Company Value With Audit Quality as Moderating Variable," vol. 3, no. 2, pp. 215-226, 2022.
- [7] S. Permana, Aruddy, and S. Jahroh, "The Effect of Good Corporate Governance on Company Value," vol. 9, no. 3, pp. 805-818, 2023.
- [8] I. F. Purwaningrum and T. Haryati, "Pengaruh Good Corporate Governance terhadap Nilai Perusahaan," *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, vol. 4, no. 6, pp. 1914-1925, 2022.
- [9] S. Bakhtiar and H. Rokhayati, "Corporate Governance, Profitabilitas, dan Nilai Perusahaan," vol. 7, pp. 1503-1513, Apr. 2023.
- [10] W. A. Darniaty et al., "Pengaruh Good Corporate Governance Terhadap Nilai Perusahaan Dengan Performa Keuangan Sebagai Variabel Mediasi," vol. 9865, pp. 95-104, 2023.
- [11] H. Al Amosh, S. Fadel, and A. Khatib, "Theories of Corporate Disclosure: A Literature Review," vol. 6, no. 1, pp. 46-59, 2022.
- [12] T. K. Kusumaningtyas, "Pengaruh Good Corporate Governance terhadap Nilai Perusahaan," *Jurnal Ilmu & Riset Akuntansi*, vol. 4, no. 7, 2015.
- [13] S. M. Helmi, E. Heniwati, A. Kurniadi, and A. Faisal, "Determinan Kualitas Audit dimoderasi oleh Komite Audit," vol. 8, pp. 2470-2483, 2024.
- [14] M. W. Rahmatika, W. Widarjo, and P. Payamta, "Peran Komisaris Independen dan Komite Audit dalam Meningkatkan Kinerja Keuangan Perusahaan Wholesale dan Retail Trade di Indonesia," *Jurnal Akuntansi dan Bisnis*, vol. 19, no. 1, p. 54, 2019.
- [15] S. Hermuningsih, "Profitabilitas, Growth Opportunity, Struktur Modal dan Nilai Perusahaan," 2012.
- [16] A. Nurkhin, A. Wahyudin, and A. S. A. Fajriah, "Relevansi Struktur Kepemilikan terhadap Profitabilitas dan Nilai Perusahaan Barang Konsumsi," *Jurnal Akuntansi Multiparadigma JAMAL*, vol. 8, no. 1, pp. 35-46, 2017.
- [17] R. Kurniawan and Z. Abidin, "The Influence of Good Corporate Governance on Company Value in Registered State-Owned Companies on the Indonesian Stock Exchange," vol. 3, no. 1, pp. 39-50, 2025.
- [18] U. Nurokhmah, T. Tohir, and I. Shaferi, "Pengaruh Tata Kelola Dewan Komisaris, Komite Audit, Dan Utang Terhadap Nilai Perusahaan," *Jurnal Ekonomi, Bisnis, dan Akuntansi*, vol. 23, no. 3, pp. 37-54, 2021.
- [19] S. Khoirunnisa, "Pengaruh Ukuran Dewan Komisaris, Dewan Direksi dan Komite Audit Terhadap Nilai Perusahaan Pada Indeks Kompas100 BEI Periode 2018-2020," 2022.
- [20] Y. Marini and N. Marina, "Pengaruh Good Corporate Governance Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Manufaktur yang Terdaftar di BEI)," *Jurnal Humaniora*, vol. 1, no. 1, pp. 1-14, 2017.