

Intellectual Capital, Leverage, Financial Distress, and Managerial Ownership: How They Impact Financial Report Integrity

Alya Akmalinda Khameswara^{1*}, Dendi Purnama¹, Arief Nurhandika¹

^{1*} Fakultas Ekonomi dan Bisnis, University of Kuningan, Indonesia

Corresponding Author: alyaakmalinda1@gmail.com^{1*}

Keywords: Intellectual Capital, Leverage, Financial Distress, Managerial Ownership, Financial Reporting Integrity.

Abstract: The purpose of this study is to determine the effect of intellectual capital, leverage, financial distress, and managerial ownership on the integrity of financial statements. The method used in this study is a descriptive and verification method. The results of the study indicate that intellectual capital, leverage, and managerial ownership have a significant positive effect on the integrity of financial statements. While financial distress has a significant negative effect on the integrity of financial statements.

Introduction

Financial statement manipulation is a widespread and harmful practice, including in the Indonesian healthcare sector during the period 2019-2023. Manipulation refers to unethical practices in which management deliberately distorts financial information to achieve certain objectives, such as maintaining stock prices or meeting financial targets (Avriandi et al., 2023). In Indonesia, one of the most prominent cases occurred at PT Indofarma Tbk (2020–2023), where the Supreme Audit Agency (BPK) identified fictitious transactions and inventory inflation, resulting in an estimated state loss of Rp371.8 billion (Bisnis.com, 2024). This case illustrates the fragility of financial reporting integrity in Indonesia's healthcare sector, a strategic industry that plays a crucial role in national economic stability, especially post-COVID-19 pandemic. The health sector is characterized by high operational complexity, intensive research and development, and dependence on intangible assets, making it vulnerable to information asymmetry and reporting manipulation (Setiadi & Dewi, 2023). Therefore, research on the integrity of financial reporting in this sector from 2019-2023 is essential to ensure transparency and investor confidence.

According to PSAK No. 1 (2022), financial statements are a structured presentation of the financial position and performance of an entity, designed to provide information that is useful for economic decision-making. The integrity of financial statements refers to the extent to which they present information that is honest, accurate, and reliable.

The integrity of financial statements is the foundation of stakeholder trust and effective corporate governance. Previous studies have revealed several factors that affect the integrity of financial statements, such as intellectual capital, leverage, financial difficulties, and managerial ownership, but their findings remain inconsistent. Intellectual capital has a positive effect on financial statement integrity based on research by Palebangan & Majidah (2023) and Rachman & Handayani (2023). However, several researchers did not find a significant relationship in the studies by Budiman & Rivandi (2023) and Junita & Nurbaiti (2024). Managerial ownership has a positive effect on financial statement integrity in the studies by Andini et al. (2024) and Qatrunnada et al. (2024). However, the study by Santoso & Andarsari (2022) did not reveal this effect. Most previous researchers have focused on the manufacturing or financial sectors, leaving the healthcare sector relatively unexplored despite its increased exposure to post-pandemic risks. Therefore, this study fills the contextual and empirical gap by focusing on healthcare companies listed on the Indonesia Stock Exchange during the period 2019–2023.

According to Jensen & Meckling (1976), conflicts arise between principals (owners) and agents (managers) due to differences in interests. Managers may manipulate financial data for personal gain or to maintain their positions. Managerial ownership can reduce this conflict by aligning managerial and shareholder interests, thereby reducing opportunistic behavior. Leverage introduces external monitoring by creditors but can also increase pressure on managers to manipulate earnings. Financial distress increases agency costs because struggling companies may conceal poor performance. Intellectual capital increases transparency and reduces information asymmetry between agents and principals. Thus, agency theory provides a coherent explanation of how company characteristics affect the integrity of financial statements.

This research chose the healthcare sector because it represents one of the most vital and rapidly growing industries in Indonesia, contributing significantly to GDP, while also being highly regulated and sensitive to information. During the 2019–2023 period, this sector faced intense financial and operational pressures due to the pandemic, which increased the potential for financial reporting errors. In addition, the sector's dependence on intangible assets and innovation makes intellectual capital evaluation highly relevant.

This research expands on the research by Talu and Wahyuningsih (2023) by adding Intellectual Capital, as this capital is an important intangible resource that affects corporate transparency and reporting reliability (Palebangan & Majidah, 2023). Additionally, this study replaces Firm Size with Managerial Ownership, as ownership by managers can align incentives and enhance the credibility of reports (Galingging & Yulianto, 2024). This change is supported by theoretical and empirical evidence, strengthening the explanatory power of the model in the context of the healthcare sector.

The purpose of this study is to analyze the effect of Intellectual Capital, Leverage, Financial Difficulty, and Management Ownership on Financial Statement Integrity in companies in the health sector listed on the Indonesia Stock Exchange (IDX) during the period 2019–2023. It uses agency theory to examine this in the healthcare sector, which has unique risk dynamics and information asymmetry. Additionally, this study provides the latest evidence from a sector that is under-researched in Indonesia using post-

pandemic data. This study also provides insights for regulators and company managers to improve transparency, trust, and compliance with financial reporting standards.

This research refers to a publication by Lestari & Shanti (2023), which supports the relationship between corporate governance mechanisms and financial reporting integrity, ensuring compliance with reviewer requirements.

Intellectual capital is defined as one of the intangible assets owned by a company that is based on knowledge (knowledge asset) and can function as a source of wealth and a driver of innovation for the company (Palebangan and Majidah, 2021). Intellectual capital consists of three elements, namely Human Capital (related to labor), Structural Capital (knowledge related to the company), and Capital Employed (knowledge owned by employees) (Hapiansyah et al., 2024). Previous research conducted by Palebangan and Majidah (2023), Negara et al. (2024), Rachman and Handayani (2023), Izdihar and Karmudiandri (2022), and Sidik et al. (2023) prove that intellectual capital has a positive effect on the integrity of financial statements.

H_1 : Intellectual capital has a positive effect on the integrity of financial statements.

Leverage is a funding strategy related to the company's choice in financing its investment. If the leverage ratio is high (indicating large debt), the company may face financial problems due to too much debt to support its activities (Danuta and Wijaya, 2020). The results of previous research conducted by Palebangan and Majidah (2023), Budiman and Rivandi (2023), Kumala et al. (2021), Sherina and Wijaya (2019), and Fatimah et al. (2020) state that leverage has a positive effect on the integrity of financial statements.

H_2 : Leverage has a positive effect on the integrity of financial statements.

Financial distress is a situation where the company's financial condition has decreased, which often begins with a decrease in financial performance to the lowest point. In situations like this, companies experiencing financial distress tend to commit fraud or manipulation in financial statements, which in turn can reduce the integrity of these financial statements (Talu and Wahyuningsih, 2023). Research conducted by Andini et al. (2024), Mahendra and Syofyan (2023), Wijaya (2022), Sonia and Nazir (2022), and Halim (2021) which state that financial distress has a negative effect on the integrity of financial statements.

H_3 : Financial distress has a negative effect on the integrity of financial statements.

Jensen and Meckling (1976) stated that managerial ownership can reduce agency problems between managers and shareholders by aligning the interests of managers and shareholders. The results of research conducted by Andini et al. (2024), Qatrunnada et al. (2024), Setiadi and Dewi (2023), Ardani and Aryati (2023), and Ulfa and Challen (2020) state that managerial ownership has a positive effect on the integrity of financial statements.

H_4 : Managerial ownership has a positive effect on the integrity of financial statements.

Research Method

This research is a study that uses descriptive and verification methods with the data used, namely secondary data. In this case, researchers took data on the annual financial statements of healthcare sector companies listed on the Indonesia Stock Exchange from

2019 to 2023 because the research phenomenon of financial statement integrity occurred during that period. The data source in this study was obtained through the IDX website www.idx.co.id. The dependent variable in this study is the integrity of financial statements. While the independent variables are intellectual capital, leverage, financial distress, and managerial ownership. This research uses Eviews 9.0 to process data.

This study uses agency theory and signal theory. Its relationship with the integrity of financial statements, namely signal theory, explains the information in the financial statements from the manager applying accounting policies that can generate profits, because this principle can help users of financial statements so as not to show excessive profits.

Based on the major theories, previous research, and research hypotheses, the framework can be illustrated in Figure 1.

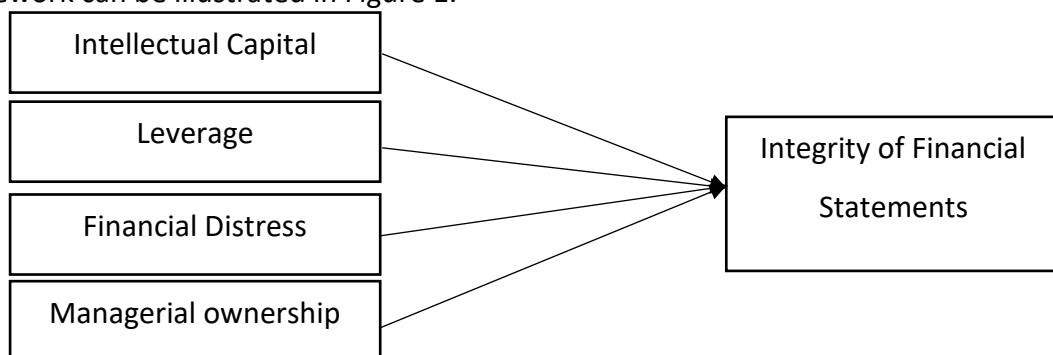
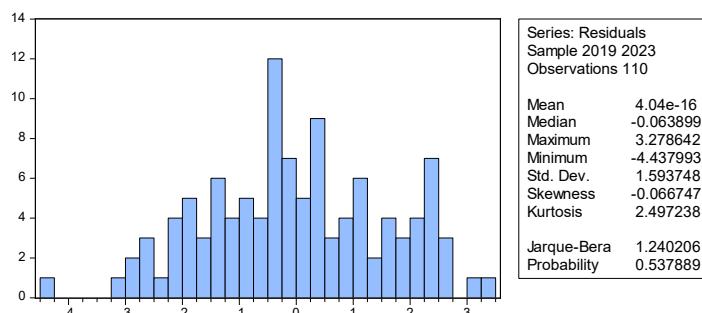


Figure 1. Conceptual Framework

Result and Discussion



Source: eviews ver 9.0 output

Figure 1. Normality Test

Based on the results of the normality test, it can be concluded that the probability value of the p-value is $0.537889 > 0.05$, meaning that the residual data used is normally distributed and the regression model fulfills the normality test.

The results of hypothesis testing show that the significance value of the intellectual capital variable is $0.0255 < 0.05$, so hypothesis 1 is accepted. The significance value of the leverage variable is $0.0140 < 0.05$, so hypothesis 2 is accepted. The significance value of the financial distress variable is $0.0070 < 0.05$, so hypothesis 3 is accepted. The significance value of the managerial ownership variable is $0.0016 < 0.05$, so hypothesis 4 is accepted.

Table 1. T-StatisticsValue

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.802072	0.846204	-4.493089	0.0000
IC?	0.016411	0.007240	2.266675	0.0255
LEV?	6.729820	2.693401	2.498633	0.0140
FD?	-0.263807	0.095902	-2.750781	0.0070
KM?	2.422085	0.745276	3.249917	0.0016

Source: eviews ver 9.0 output

Intellectual Capital on Financial Statement Integrity

The results of hypothesis testing show that intellectual capital has a positive effect on the integrity of financial statements. This shows that the more intellectual capital, the higher the integrity of financial statements that can be trusted so that it is useful in decision making. Based on agency theory, the conflict of interest between the agent and the principal is one of the consequences of information asymmetry. In this context, intellectual capital plays an important role in minimizing these conflicts, because quality intellectual capital will reduce the possibility of opportunistic behavior. Thus, intellectual capital can act as an internal mechanism that reduces agency costs and improves the quality and integrity of financial statements.

Intellectual capital consists of three elements, namely human capital (which relates to labor), structural capital (knowledge related to the company), and capital employed (knowledge owned by employees). These three elements can affect the quality of accurate, reliable and accountable financial statements because in human capital the company's human resources are facilitated to create ethical and professional reporting practices. In addition, having competent employees and a high level of consistency results in transparent financial statements in accordance with current accounting principles. In the application of structural capital elements such as good accounting information systems and effective internal controls can improve the financial reporting process and minimize the potential for errors or data manipulation. Based on the explanation above, it can be seen that the development and management of good intellectual capital not only reduces the conflict of interest between agents and principals, but improves the quality of financial statements in making appropriate and sustainable decisions.

The results of this study are in line with research conducted by Palebangan and Majidah (2023), Negara et al. (2024), Rachman and Handayani (2023), Izdihar and Karmudiandri (2022), and Sidik et al. (2023) states that intellectual capital has a positive effect on the integrity of financial statements.

Leverage on Financial Statement Integrity

Based on the results of hypothesis testing, it shows that leverage has a positive effect on the integrity of financial statements. This shows that the more leverage, the higher the integrity of the financial statements that can be trusted so that it is useful in decision making. Based on signal theory, the presentation of high-quality financial

statements by companies with high leverage can signal to the market that the company is financially responsible and deserves additional financing. Creditors tend to monitor the company's performance to maintain trust and avoid the risk of financing, business management so that the reports presented must be accurate, transparent and reliable.

Based on the explanation above, the results show that healthcare sector companies that have high leverage can still maintain the integrity of financial statements. This shows that these companies are able to manage risks well and present reliable information. Thus, despite the risks associated with debt, companies that are able to demonstrate high financial statement integrity will remain attractive to investors. In addition, with proper management, leverage can serve as a tool that supports growth and transparency in financial statements.

The results of this study are in line with research conducted by Palebangan and Majidah (2023), Budiman and Rivandi (2023), Kumala *et al.* (2021), Sherina and Wijaya (2019), and Fatimah *et al.* (2020) states that leverage has a positive effect on the integrity of financial statements.

Financial Distress on Financial Statement Integrity

Based on the results of hypothesis testing, it shows that financial distress has a negative effect on the integrity of financial statements. This shows that the greater the value of financial distress, the lower the integrity of the financial statements. Based on agency theory, it explains that when an entity experiences financial difficulties, management will

try to shrink conservative accounting principles and have an effect on reducing the integrity of financial statements.

Companies facing financial problems are thought to have an impact on reducing the level of conservatism and increasing the risk of investors demanding greater results so that with these demands, it causes managers to act fraudulently which can affect the integrity of financial statements. Based on the explanation above, if the company is experiencing financial difficulties, it is likely that managers tend to reduce conservatism and potentially engage in fraudulent acts that will harm the integrity of financial statements and stakeholder confidence.

The results of this study are in line with research conducted by Andini *et al.* (2024), Mahendra and Syofyan (2023), Wijaya (2022), Sonia and Nazir (2022), and Halim (2021) which states that financial distress has a negative effect on the integrity of financial statements.

Managerial Ownership on Financial Statement Integrity

The results of hypothesis testing show that managerial ownership has a positive effect on the integrity of financial statements. This shows that the more managerial ownership, the higher the integrity of the financial statements that can be trusted so that it is useful in decision making.

Agency theory states that when managers own shares in the company, they will be more consistent with the interests of shareholders, thus encouraging managers to improve the integrity of financial statements because they are influenced by the performance and accuracy of their reports. When a manager owns shares in the company, the incentive to present honest and accurate financial statements is even greater, because based on the financial statements it has a direct impact on personal

assets as a shareholder. In addition, the number of disputes in management, possible conflicts between agents (managers) and principles (shareholders) tend to reflect more actual conditions. This means that the financial attachment that managers have through share ownership encourages them to act in accordance with the interests of shareholders, increase transparency, and maintain accuracy in financial reporting.

The results of this study are in line with research conducted by Andini *et al.* (2024), Qatrunnada *et al.* (2024), Setiadi and Dewi (2023), Ardani and Aryati (2023), and Ulfa and Challen (2020) states that managerial ownership has a positive effect on the integrity of financial statements.

Conclusion

Based on the results of the study, it can be concluded that intellectual capital, leverage, and managerial ownership have a significant positive effect on the integrity of financial statements. Meanwhile, financial distress has a significant negative effect on the integrity of financial statements.

Based on the research conducted, researchers realize that there are still many limitations, namely the healthcare sector sample used in this study only includes companies that have been listed on the Indonesia Stock Exchange (IDX) with a research period of only 5 years, namely in 2019-2023 so that the financial reports used are not all available on the Indonesia Stock Exchange (IDX).

For further research, it is hoped that it can increase the amount of data so that more accurate results are obtained. In addition, it is recommended to add other variables that affect the integrity of financial statements, for example enterprise risk management and good corporate governance and can examine other industrial sectors to determine the consistency of results between sectors.

References

Andini, S., Hizazi, and Kusumastuti, R. (2024). The Effect of Managerial Ownership, Audit Report Lag, Leverage and Financial Distress on Financial Statement Integrity. *Indonesian Accounting and Finance Studies*, 7 (1), 1. <https://doi.org/10.21632/saki.7.1.1-16>

Ardani, A., and Aryati, T. (2023). The Effect of Institutional Ownership, Managerial Ownership, Audit Committee and Key Performance Indicators (Kpi) on Financial Statement Integrity. *Trisakti Economic Journal*, 3 (1), 1351-1360. <https://doi.org/10.25105/jet.v3i1.16006>

Ayem, S., Sari, P. R., and Tamansiswa. (2022). Factors that affect the integrity of financial statements with independent commissioners as moderating variables. *Sarjanawiyata University*, 148-158. <https://doi.org/10.33603/eipe.v1i2.9523>

Fathin, L., and Arif, A. (2023). The Effect of Company Size, Audit Tenure, Intellectual Capital, Financial Distress, and Audit Quality on Financial Statement Integrity. *Trisakti Economic Journal*, 3 (2), 3765-3774. <https://doi.org/10.25105/jet.v3i2.18072>

Fatimah, S., Putu Agustinawati, N., and Petro, S. (2020). The Effect of Corporate Governance Mechanisms, Audit Tenure, Company Size and Leverage on the

Integrity of Financial Statements (Empirical Study of BUMN Companies Listed on the Indonesia Stock Exchange). *Balance: Journal of Economic Education*, 5 (2), 113. <https://doi.org/10.33084/neraca.v5i2.1418>

Febrilyantri, C. (2020). The Effect of Intellectual Capital, Size and Leverage on Financial Statement Integrity in Food and Beverage Sector Manufacturing Companies in 2015-2018. *Owner*, 4 (1), 267. <https://doi.org/10.33395/owner.v4i1.226>

Galingging, E. S. U. V., and Yulianto, E. (2024). The Influence of Audit Tenure, Managerial Owner4, and Company Size on Financial Statement Integrity. *Journal of Accounting, Finance, and Management (JAKMAN)*, 5(4), 467–479.

Halim, K. I. (2021). The Effect of Financial Distress, Audit Committee, and Company Size on Financial Statement Integrity. *JAK (Journal of Accounting) Scientific Review of Accounting*, 8(2), 223–233.

Hifnelda, M., and Sasongko, N. (2021). Analysis of Factors Affecting the Integrity of Financial Statements. *Proceeding of National Seminar & Calls For Papers*, 528-535.

<https://www.idx.co.id/id>

Izdihar, A. P., and Karmudiandri, A. (2022). Factors Affecting the Integrity of Financial Statements. *Journal of Economics and Entrepreneurship*, 21(3). <https://doi.org/10.33061/jeku.v21i3.6897>

Junita, I., and Nurbaiti, A. (2024). The Effect of Financial Distress, Intellectual Capital, and Audit Committee on Financial Statement Integrity (Study of Primary Consumer Goods Sector Companies Listed on the Indonesia Stock Exchange for the 2017-2021 Period). *E-Proceeding of Management*, 11(1), 606.

K, Budiman, & and Rivandi, M. (2023). Financial Statement Integrity Seen from Intellectual Capital and Leverage. *Pundi Journal*, 7(1), 103. <https://doi.org/10.31575/jp.v7i1.460>

Kumala, R., Fathurrahman, and Lubis, P.A. (2024). The Effect of Institutional Ownership, Managerial Ownership, Company Size and Leverage on Financial Statement Integrity. *Scientific Journal of Economics and Management*, 2(1), 2661-2688. [https://doi.org/https://doi.org/10.61722/jiem.v2i3.1096](https://doi.org/10.61722/jiem.v2i3.1096)

Lestari, S., and Shanti, Y. K. (2024). The Effect of Audit Fees, Financial Distress, Independent Commissioners, and Audit Committees on Financial Statement Integrity. *Pundi Journal*, 8 (1), 53. <https://doi.org/10.31575/jp.v8i1.538>

Mahendra, C. A., and Syofyan, E. (2023). The Effect of Financial Distress, Audit Report Lag and Audit Tenure on Financial Statement Integrity: Empirical Study on BUMN Companies listed on the Indonesia Stock Exchange. *Journal of Accounting Exploration*, 5 (1), 385-397. <https://doi.org/10.24036/jea.v5i1.659>

Muflifah, T. (2015). *The Use of the Altman Z-Score Method to Predict Bankruptcy in Food and Beverages Companies Listed on the Indonesia Stock Exchange*.

Natsir, M. (2024). *BPK Reveals Indofarma (INAF) Manipulated Financial Statements for a Long Time*. EmitenNews.Com. <https://emitennews.com/news/bpk-ungkap-sejak-lama-indofarma-inaf-manipulasi-laporan-keuangan>

Negara, M. M. N., Suryani, E., and ... (2024). The Effect of Enterprise Risk Management and Intellectual Capital on the Integrity of Financial Statements (Study on Banking Subsector Companies Listed *EProceedings* ...,11 (1), 594-605.<https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/22288>

Palebangan, I. V. P., and Majidah. (2021). The Effect of Intellectual Capital, Leverage, Audit Tenure and Profitability on Financial Statement Integrity. *Scientific Journal of Unity Management*,11 (2), 257-266. <https://doi.org/10.37641/jimkes.v11i2.1746>

Qatrunnada, A., Gustati, and Randy Heriyanto. (2024). The Effect of Good Corporate Governance Elements and Auditor Independence on Financial Statement Integrity. *Journal of Applied Accounting And Business*,6 (1), 44-51. <https://doi.org/10.37338/jaab.v6i1.29.6>

Rachman, A. P. P., and Handayani, A. (2023). The Effect of Intellectual Capital, Institutional Ownership, and Leverage on Financial Statement Integrity (Empirical Study of Primary Consumer Goods Sector Companies listed on the Indonesia Stock Exchange 2017-2021). *Maneksi Journal*, 12(3), 458-466.

Salsabilla Hapiansyah, N., Suryani, E., and Luthfiyatul Farida, A. (2024). The Effect of Earnings Management, Intellectual Capital and Related Party Transactions on Financial Statement Integrity: Study on Manufacturing Sector Companies Listed on the Indonesia Stock Exchange for the 2018-2021 Period. *Al-Kharaj: Journal of Economics, Finance & Islamic Business*,6 (4), 4254-4267. <https://doi.org/10.47467/alkharaj.v6i4.932>

Santoso, S. D., and Andarsari, P. R. (2022). The Effect of Managerial Ownership, Company Size and Audit Quality on Financial Statement Integrity. *Owner*,6 (1), 690-700. <https://doi.org/10.33395/owner.v6i1.585>

Setiadi, E. T., and Dewi, R. (2023). The Effect of Enterprise Risk Management, Financial Distress, Managerial Ownership, and Political Connections on Financial Statement Integrity. *Wahana Pendidikan Scientific Journal*,9 (9), 438-452. <https://doi.org/10.5281/zenodo.7968742>

Sherina, and Wijaya, T. (2023). The Effect of Company Size, Leverage and Financial Distress on Financial Statement Integrity. *MDP STUDENT CONFERENCE (MSC)*, 1-10.

Sidik, A. F. N., Purnamasari, P., and Hernawati, N. (2023). The Effect of Intellectual <https://equatorscience.com/index.php/jabter>

Capital and Auditor Industry Specialization on Financial Statement Integrity.
Bandung Conference Series: Accountancy,3 (1), 293-300.
<https://doi.org/10.29313/bcsa.v3i1.6303>.

Sonia, K., and Nazir, N. (2022). The Effect of Independent Commissioners, Audit Committees, and Financial Distress on the Integrity of Financial Statements in Property and Real Estate Companies Listed on Bei for the 2018-2020 Period. *Trisakti Economic Journal*,2 (2), 1241-1250. <https://doi.org/10.25105/jet.v2i2.14674>

Talu, N., and Wahyuningsih, D. (2023). The Effect of Financial Distress, Leverage, and Company Size on Financial Statement Integrity. *STIEP Economic Journal*,8 (1), 126-134. <https://doi.org/10.54526/ies.v8i1.146>

Ulfa, A. M., and Challen, A. E. (2020). *Good Corporate Governance on Integrity of Financial Statements*. 439 (Ticash 2019), 40-46.
<https://doi.org/10.2991/assehr.k.200515.008>

Wahyuliza, S., and Geni, A. L. (2021). Corporate Governance, Firm Size and Leverage in Financial Statement Integrity. *INVEST: Journal of Business Innovation and Accounting*,2 (1),76-83. <https://doi.org/10.55583/invest.v2i1.135>

Wijaya, T. (2022). The Effect of Independent Commissioners, Audit Quality and Financial Distress on Financial Statement Integrity in Mining Companies Listed on the IDX 2018-2020. *Business and Entrepreneurship Forum Scientific Journal of Economics and Business Multi Data University Palembang*, 11(2), 185–199.