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## The Effect of Financial Leverage, Capital Turnover, Asset Composition, Firm Size on The Tendency of Financial Statement Fraud

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**Abstract** This study aims to determine the factors that can predict the tendency of financial statement fraud in manufacturing companies. This study used a sample of 185 manufacturing companies that published financial reports on the Indonesia Stock Exchange for three years, namely 2019 to 2021. The data collection method was carried out by purposive sampling. While the analysis used was panel data regression. The results of the data analysis showed that all independent variables Financial Leverage (X1), Capital Turnover (X2), Asset Composition (X3), and Firm Size (X4) influenced the tendency of financial statement fraud.

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**Keywords:** Financial Leverage, Capital Turnover, Asset Composition, Firm Size, Financial Statement Fraud

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### INTRODUCTION

In the economic development of Indonesia, the manufacturing sector has significantly contributed to the GDP, with a 22% share from 2019 to 2021. This underscores the importance of manufacturing companies as a cornerstone of Indonesia's economy, highlighting the need for these companies to attract investors for operational funding to achieve high profits (Abubakar et al., 2024). Therefore, company management needs to produce financial statements that are available to the public, ensuring that the information contained is accurate and truly reflective of the company's financial situation. Any inaccuracies in financial reporting can result in significant losses for various stakeholders (Mongwe & Malan, 2020).

In practice, producing accurate and reliable financial statements is challenging due to the external pressures and financial stability concerns faced by management (Khudir, 2021). This pressure may drive managers to engage in financial reporting fraud. Evidence of such fraud includes PT Garuda Indonesia Tbk, which reported revenue of USD 239.94 million, including USD 28 million from a partnership with PT Sriwijaya Air, yet PT Mahata has not made any payment for the recorded revenue (SP 26/DHMS/OJK/VI/2019).

Additionally, PT Tiga Pilar Sejahtera Food Tbk is suspected of overstating figures by Rp 4 trillion in accounts receivable, inventory, and fixed assets, and Rp 662 billion in sales, with further allegations of Rp 1.78 trillion in funds transferred through transactions with affiliates of the previous management (cnnindonesia.com, 2019). Lastly, PT Kimia Farma Tbk, which went public on July 4, 2001, reported a net profit of Rp 132 billion in its December 31, 2001, financial statements. However, the OJK deemed this profit excessively high and suspected manipulation. An

The Effect of Financial Leverage, Capital Turnover, Asset Composition, Firm Size on The Tendency of Financial Statement Fraud audit on October 2, 2002, revealed the actual profit was Rp 99.56 billion, indicating that PT Kimia Farma Tbk had overstated its net profit in the December 31, 2001, financial report (cnbcindonesia.com, 2021).

## RESEARCH METHODS

The research methodology employed is quantitative, defined as research that can be measured using numerical scales and hypothesis testing. The research design is causal. The aim of this study is to determine whether the hypotheses regarding the effects of certain variables are valid, specifically to test the impact of Financial Leverage (X1), Capital Turnover (X2), Asset Composition (X3), and Firm Size (X4) on Financial Statement Fraud (Y) among manufacturing companies listed on the Indonesia Stock Exchange from 2019 to 2021. This study is conducted in Indonesia using secondary data from annual financial reports for the years 2019-2021. The sample selection criteria are as follows:

1. Manufacturing companies listed on the Indonesia Stock Exchange from 2019 to 2021.
2. Manufacturing companies that were not suspended during the years 2019-2021.
3. Manufacturing companies with revenue reported for the years 2019-2021.

## RESULTS AND DISCUSSION

### Descriptive Statistics Test

**Tabel 1. Descriptive Statistical Test Results**

|              | Y         | X1       | X2       | X3       | X4        |
|--------------|-----------|----------|----------|----------|-----------|
| Mean         | 19.59084  | 0.521030 | 0.889848 | 0.495684 | 26.80676  |
| Median       | 20.03944  | 0.475580 | 0.781320 | 0.489920 | 27.68319  |
| Maximum      | 30.00701  | 5.167740 | 6.949370 | 1.000000 | 33.53723  |
| Minimum      | 13.35042  | 0.003450 | 0.000440 | 0.026990 | 17.75151  |
| Std. Dev.    | 2.399279  | 0.447861 | 0.637807 | 0.204171 | 3.540949  |
| Skewness     | -0.513933 | 6.211839 | 3.240688 | 0.070556 | -1.153094 |
| Kurtosis     | 3.710003  | 58.89094 | 23.97032 | 2.515313 | 3.590759  |
| Jarque-Bera  | 36.08919  | 75807.10 | 11140.76 | 5.893043 | 131.0609  |
| Probability  | 0.000000  | 0.000000 | 0.000000 | 0.052522 | 0.000000  |
| Sum          | 10872.91  | 289.1717 | 493.8658 | 275.1046 | 14877.75  |
| Sum Sq. Dev. | 3189.123  | 111.1210 | 225.3661 | 23.09399 | 6946.230  |
| Observations | 555       | 555      | 555      | 555      | 555       |

Source: Output Eviews 12

The table above shows that the sample consists of 185 companies over a period of 3 years, from 2019 to 2021, resulting in a total of 555 observation units. These are explained by the variables Financial Leverage (X1), Capital Turnover (X2), Asset Composition (X3), Firm Size (X4), and Financial Statement Fraud (Y).

### Panel Data Regression Model

**Table 2. Concluding Results of the Panel Data Regression Model**

| Test | Test Criteria   | Significant | Results       |
|------|-----------------|-------------|---------------|
| Chow | Cross-section F | 0,7777      | Common Effect |

|                     |                             |        |                      |
|---------------------|-----------------------------|--------|----------------------|
| Hausman             | <i>Cross-section Random</i> | 0,1233 | <i>Random Effect</i> |
| Lagrange Multiplier | <i>Breush-Pagan</i>         | 0,2349 | <i>Common Effect</i> |

Source: Processed data

Based on the results of the three tests conducted, it can be concluded that the panel data regression model to be used for hypothesis testing is the Common Effect Model (CEM).

**Classic assumption test**

The test results indicate that the variance inflation factor (VIF) values for all variables are less than 0.85, suggesting that the model is free from multicollinearity issues. Additionally, the heteroscedasticity test results show that the p-values for all independent variables are greater than 0.05, indicating that there is no evidence of heteroscedasticity in the research model.

**Partial Test T**

| Table 3. Partial Results T Model |             |            |             |        |  |
|----------------------------------|-------------|------------|-------------|--------|--|
| Variable                         | Coefficient | Std. Error | t-Statistic | Prob.  |  |
| C                                | 1.00E-06    | 4.19E-06   | 0.239740    | 0.8106 |  |
| X1                               | 1.199999    | 1.11E-06   | 1076757.    | 0.0000 |  |
| X2                               | 1.400000    | 8.43E-07   | 1660948.    | 0.0000 |  |
| X3                               | 3.299999    | 2.65E-06   | 1243822.    | 0.0000 |  |
| X4                               | 0.600000    | 1.40E-07   | 4293089.    | 0.0000 |  |

Sumber: Data diolah dengan Eviews 12, 2024

With the p-values for each independent variable being 0.0000, which is less than 0.05, hypotheses H1, H2, H3, and H4 are accepted. This indicates that Financial Leverage, Capital Turnover, Asset Composition, and Firm Size all have a significant impact on the tendency for financial statement fraud in this study.

**Impact of Financial Leverage on Financial Statement Fraud**

The t-test for the financial leverage variable shows a significance value of 0.0000, less than 0.05. The analysis reveals that Financial Leverage (X1) positively affects the Z-Score, which predicts Financial Statement Fraud. This is because a company unable to meet its obligations will have high financial leverage. High financial leverage can make a company’s performance appear poor due to its low ability to pay off debts. This situation can affect creditors' willingness to lend funds, prompting company management to manipulate financial statements to improve the appearance of company performance.

**Impact of Capital Turnover on Financial Statement Fraud**

The t-test for the capital turnover variable shows a significance value of 0.0000, less than 0.05. The analysis indicates that Capital Turnover (X2) has a significant positive effect on the Z-Score, predicting Financial Statement Fraud. Capital Turnover is a crucial indicator of how efficiently a company uses its capital or assets to generate revenue. A high capital turnover rate pressures management to maintain or improve this ratio to demonstrate good company performance, both operationally and in capital management. This pressure can increase the risk of financial statement fraud.

**Impact of Asset Composition on Financial Statement Fraud**

The t-test for the asset composition variable shows a significance value of 0.0000, less than 0.05. The analysis reveals that Asset Composition (X3) positively and significantly affects the Z-Score, predicting Financial Statement Fraud. Proper management and allocation of assets can

The Effect of Financial Leverage, Capital Turnover, Asset Composition, Firm Size on The Tendency of Financial Statement Fraud enhance financial performance and achieve business objectives more effectively. However, certain types of assets are more susceptible to manipulation or inaccurate valuation. Management may manipulate current asset accounts to inflate sales figures.

### **Impact of Firm Size on Financial Statement Fraud**

The t-test for the firm size variable shows a significance value of 0.0000, less than 0.05. The analysis shows that Firm Size (X4) has a significant positive effect on the Z-Score, which predicts Financial Statement Fraud. Firm size can be categorized as large or small, based on total sales, total assets, or the number of employees. A large firm typically has substantial assets and sales, supporting large-scale production processes. Larger firms often need a good reputation to attract relations or investors. The larger the company, the easier it is to enhance its perceived value. As a result, management may engage in financial statement manipulation to present a favorable financial image.

### **CONCLUSIONS**

The factors influencing the tendency for financial statement fraud are strongly explained by the variables of financial leverage, capital turnover, asset composition, and firm size. The research findings support agency theory, which posits that only company management has deeper access to information than investors. Consequently, management may engage in financial statement fraud to present a more favorable company performance, thereby attracting more investors to fund the company's operations.

### **BIBLIOGRAPHY**

- Companies. *Asian Journal of Economics and Banking*, 5(2), 116-135.
- Altman, E. I. (1968). Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. In *The Journal of Finance* (Vol. 23, Issue 4).
- Alzoubi, T. (2019). Firms' Life Cycle Stage and Cash Holding Decisions. *Academy of Accounting and Financial Studies Journal*, 23(1).
- Angesti, A., Fernaldy, F., Maisarah, M., Erica, E., Anwar, D., Ginting, W. A., & Purba, M. N. N. (2019). Pengaruh Capital Turnover, Return on Equity, dan Firm Size terhadap Price Book Value. *Jesya (Jurnal Ekonomi dan Ekonomi Syariah)*, 2(2), 52-70.
- Anichebe, A. S. (2019). Determinants of financial statement fraud likelihood in listed firms. *Journal of Accounting and Financial Management ISSN*, 5(2), 2019.
- Arifin, M. B., & Prasetyo, A. B. (2018). Factors Influencing in the Fraudulent Financial Reporting. *Jurnal Dinamika Akuntansi*, 10(2), 99–112.
- Association of Certified Fraud Examiners (ACFE) (2021). Financial Statement Fraud: Red Flags and Mitigation Strategies. *ACFE*.
- Babalola, Yisau Abiodun. (2013). The Effect of Firm Size on Firms Profitability in Nigeria. *Journal of Economics and Sustainable Development*, 4(5), 90-95.
- Balakrishnan, K., & Ha, B. (2020). The effects of voluntary disclosure on firm reputation and cost of capital. *Journal of Accounting Research*, 58(1), 161-203.
- Baridwan, Z., & Mardiaty, E. (2018). Profitability, liquidity, leverage and corporate governance impact on financial statement fraud and financial distress as intervening variable. *Вісник Київського національного університету ім. Тараса Шевченка. Серія: Економіка*, (5 (200)), 66-74.

- Baxter, N. D. (1967). Leverage, risk of ruin and the cost of capital. *the Journal of Finance*, 22(3), 395-403.
- Beatty, A., & Harris, D. G. (1999). The effects of taxes, agency costs and information asymmetry on earnings management: A comparison of public and private firms. *Review of accounting studies*, 4.
- Bhasin, M.L. (2023). Corporate accounting fraud: Techniques and challenges. *International Journal of Auditing*, 27(2), 179-200.
- Billett, M.T., King, T.D., & Mauer, D.C. (2021). Debt structure, firm size, and default risk. *Journal of Banking & Finance*, 125, 106084.
- Bowman, W., Calabrese, T., & Searing, E. (2018). Asset composition. In *Handbook of research on nonprofit economics and management* (pp. 97-117). Edward Elgar Publishing.
- Bowman, W., Calabrese, T., & Searing, E. (2021). Capital management in nonprofit organizations. *Nonprofit Management & Leadership*, 31(3), 401-421.
- Bowman, W., Calabrese, T., & Searing, E. (2021). Understanding asset composition in financial analysis. *Financial Management*, 50(1), 100-129.
- Brigham, E. F., & Houston, J. F. (2010). *Dasar-dasar Manajemen Keuangan*. Buku 1. Edisi 11. Terjemahan oleh Ali Akbar Yulinto. Jakarta: Salemba Empat.
- Cao, X., Cheng, Q., & Goh, B.W. (2021). Corporate disclosure and its impact on firm reputation and value. *Review of Accounting Studies*, 26(4), 993-1023.
- Capalbo, F., Frino, A., Molinari, M., & Palumbo, R. (2022). The impact of misrepresentation in financial reporting on investor trust. *Review of Accounting Studies*, 27(1), 89-112.
- Chen, J., & Zhang, Y. (2023). The role of accounting policies in financial statement fraud: A review. *Journal of Business Ethics*, 175(2), 345-367.
- Dalnial, H., Kamaluddin, A., Sanusi, Z. M., & Khairuddin, K. S. (2014). Accountability in Financial Reporting: Detecting Fraudulent Firms. *Procedia - Social and Behavioral Sciences*, 145, 61-69.
- Dang, V.A., & Yang, J. (2022). Corporate size, debt capacity, and the cost of financial distress. *Financial Management*, 51(2), 487-509.
- Darmawan, A., & Saragih, S. O. (2017). The impact of auditor quality, financial stability, and financial target for fraudulent financial statement. *Journal of Applied Accounting and Taxation*, 2(1), 9-14.
- De, Angelo. 1981. Auditor Independence, "Low Balling", and Disclosure Regulation. *Journal of Accounting and Economics* 3(8): 113-127
- Degeorge, F., Ding, Y., Jeanjean, T., & Stolowy, H. (2020). The effects of firm size on corporate transparency and investor perception. *Accounting Horizons*, 34(2), 159-186.
- Duhoon, A., & Singh, M. (2023). Corporate tax avoidance: a systematic literature review and future research directions. *LBS Journal of Management & Research*.
- Emalia, D., Midiastuty, P. P., Suranta, E., & Indriani, R. (2020). Dampak dari auditor quality, financial stability, dan financial target terhadap fraudulent financial reporting. *Studi Ilmu Manajemen Dan Organisasi*, 1(1), 1-11.
- Fischer, EO, Heinkel, R & Zechner, J 1989, 'Dynamic capital structure choice: theory and tests', *The Journal of Finance*, vol. 44, no. 1, pp.19-40.
- Gbadebo, A. D., Akande, J. O., & Adekunle, A. O. (2023). Financial Statements Fraud of Banks and other Financial Institutions in Nigeria. *International Journal of Professional Business Review, Int. J. Prof. Bus. Rev.*, 8(9), 9.

- Ginting, C. U., & Hidayat, W. (2019). The effect of a fraudulent financial statement, firm size, profitability, and audit firm size on audit delay. *International Journal of Innovation, Creativity and Change*, 9(7), 323-341.
- Graham, J.R., & Leary, M.T. (2020). Size and corporate financing decisions: Evidence from international data. *Review of Financial Studies*, 33(6), 2546-2589.
- Harford, J., Klasa, S., & Maxwell, W.F. (2019). The impact of firm size on access to financing and the cost of capital. *Journal of Corporate Finance*, 60, 101545.
- Hoskisson, R.E., Gambeta, E., Green, C.D., & Li, T. (2022). Disclosure practices and their role in financial statement fraud. *Strategic Management Journal*, 43(4), 512-535.
- International Auditing and Assurance Standards Board (IAASB). (2021). International Standard on Auditing (ISA) 240: The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements. *IAASB Handbook, 2021 Edition*, 45-70.
- Iswati, D., Nindito, M., & Zakaria, A. (2017). The effect of internal financial indicators on the tendency of accounting fraud. *Jurnal Dinamika Akuntansi*, 9(2), 123-131.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360
- Jofre, M., & Gerlach, R. (2018). Fighting accounting fraud through forensic data analytics. *arXiv preprint arXiv:1805.02840*
- Johnson, R., Williams, A., & Thompson, D. (2021). Analyzing Financial Fraud: Current Trends and Prevention Strategies. *Financial Accountability Journal*, 18(2), 142-159.
- Jones, M.J., & Lee, C. (2021). The complexity of fraudulent financial reporting: An analysis of 21st-century corporate fraud cases. *Journal of Forensic and Investigative Accounting*, 13(3), 432-459.
- Kaminski, K. A., Sterling Wetzel, T., & Guan, L. (2004). Can financial ratios detect fraudulent financial reporting?. *Managerial Auditing Journal*, 19(1), 15-28.
- Kanapickienė, R., & Grundienė, Ž. (2015). The model of fraud detection in financial statements by means of financial ratios. *Procedia-Social and Behavioral Sciences*, 213, 321-327.
- Kara, S., & Yerehi, A. N. (2013). Effectiveness of the financial ratios in the determination of the fraudulent financial statements: turkey practice. *Journal of Modern Accounting and Auditing*, 9(10), 1342-1353.
- Kawatu, F. S. (2019). *Analisis Laporan Keuangan Sektor Publik*. Deepublish.
- Kieso, D. E., Weygandt, J. J., & Warfield, T. D (2011). *Intermediate Accounting Volume 1 IFRS Edition*. United States of America : Wiley.
- Kieso, D., Weygandt, J., & Warfield, T. (2014). *Intermediate Accounting: IFRS Edition*. John Wiley & Sons.
- Kim, Y., & Kim, M. (2019). The use of log-transformed total assets as a measure of firm size in financial studies. *Journal of Corporate Finance*, 57, 265-284.
- Kourtis, E., Kourtis, G., & Curtis, P. (2019). An integrated financial ratio analysis as a navigation compass through the fraudulent reporting conundrum: a case study. *International Journal of Finance, Insurance and Risk Management Volume IX, Issue 1-2*, 2019
- Lin, W.T., & Lee, M.C. (2022). Internal control quality and firm size: Evidence from global data. *Journal of International Financial Management & Accounting*, 33(1), 64-86.
- Liu, C., Chan, Y., Alam Kazmi, S. H., & Fu, H. (2015). Financial fraud detection model: Based on random forest. *International journal of economics and finance*, 7(7).

- Lyon, S. C. (2017). Reconciling the Conflicting Results of Prior Research on the Relation between Aggressive Book and Tax Reporting. In *Advances in Taxation* (Vol. 24, pp. 37-82). Emerald Publishing Limited.
- Manurung, D. T., & Hadian, N. (2013, November). Detection fraud of financial statement with fraud triangle. 23rd International Business Research Conference, World Business Institute.
- Miller, J., & Zhang, S. (2023). The Impact of Fraud on Financial Statements: An Empirical Investigation. *International Journal of Accounting and Finance*, 20(1), 98-113.
- Mohd Nor, J., Ahmad, N., & Mohd Saleh, N. (2010). Fraudulent financial reporting and company characteristics: tax audit evidence. *Journal of Financial Reporting and Accounting*, 8(2), 128-142.
- Mongwe, W. T., & Malan, K. M. (2020). A survey of automated financial statement fraud detection with relevance to the South African context. *South African Computer Journal*, 32(1), 74-112.
- Muhammad, Z. I. N., Kurnia, R. T., & Kusumah, W. R. (2023). The Influence of Leverage, Working Capital Turnover and Profitability on Fraudulent Financial Statements in Manufacturing Companies. *Tec Empresarial*, 18(2), 246-251.
- Mustika, I. (2020). Analisis Fraud Diamond Dalam Pendeteksian Financial Statement Fraud Melalui Faktor Pressure, Opportunity, Rasionalization, Dan Capability. *Economic and Business Management International Journal (EABMIJ)*, 2(01), 11-22.
- Mwangi, S. W., & Ndegwa, J. (2020). The influence of fraud risk management on fraud occurrence in Kenyan listed companies. *International Journal of Finance & Banking Studies* (2147-4486), 9(4), 147-160.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.
- Myers, SC 2003, 'Chapter 4 Financing of corporations, in Constantinides, GM, Harris, M and Stulz, RM (ed.), *Handbook of the Economics of Finance*, 1 st ed, Elsevier, Philadelphia, vol. 1, no. 1, pp. 215-253
- Napitupulu, R. B., Simanjuntak, T. P., Hutabarat, L., Damanik, H., Harianja, H., Sirait, R. T. M., & Lumban Tobing, C. E. R. (2021). Penelitian Bisnis, Teknik dan Analisa dengan SPSS-STATATA-Eviews.
- Natalis, N. (2022). The Effect of Financial Ratio's in Detecting Fraudulent Company Listed on the Indonesia Stock Exchange. *SSRG International Journal of Economics and Management Studies*.
- Nedelcu, A. (2017). Capital turnover as determinant factor of the financial performance of industrial enterprises-an empirical analysis. *The Scientific Journal of Cahul State University "Bogdan Petriceicu Hasdeu" Economic and Engineering Studies*, 2(2), 13-29.
- Niresh, J.A., & Velnampy, T. (2019). Firm size and financial performance: A study of the insurance industry. *Global Journal of Management and Business Research*, 19(2), 1-11.
- Norbarani, L., & Rahardjo, S. N. (2012). *Pendeteksian kecurangan laporan Keuangan dengan analisis fraud Triangle yang diadopsi dalam sas no. 99* (Doctoral dissertation, Fakultas Ekonomika dan Bisnis).
- Octani, J., Dwiharyadi, A., & Djefris, D. (2022). Analisis pengaruh fraud hexagon terhadap fraudulent financial reporting pada perusahaan Sektor Keuangan yang Terdaftar di Bursa Efek Indonesia Selama Tahun 2017-2020. *Jurnal Akuntansi, Bisnis Dan Ekonomi Indonesia (JABEI)*, 1(1), 36-49.

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- Olawale, L. S., Ilo, B. M., & Lawal, F. K. (2017). The effect of firm size on performance of firms in Nigeria. *Aestimatio: The IEB International Journal of Finance*, (15), 68-87.
- Omar, N., Johari, Z. A., & Smith, M. (2017). Predicting fraudulent financial reporting using artificial neural network. *Journal of Financial Crime*, 24(2), 362-387.
- Ozcelik, H. (2020). An analysis of fraudulent financial reporting using the fraud diamond theory perspective: an empirical study on the manufacturing sector companies listed on the Borsa Istanbul. In *Contemporary Issues in Audit Management and Forensic Accounting* (Vol. 102, pp. 131-153). Emerald Publishing Limited.
- Persons, O. S. (1995). Using financial statement data to identify factors associated with fraudulent financial reporting. *Journal of Applied Business Research (JABR)*, 11(3), 38-46.
- Prasetyo, A. B., Septiani, A., Ramadhan, A. F., & Fauziah, A. K. Financial Ratio Analysis as a Tool for Fraud Detection: A Study of Non-Financial Firms in Indonesia. *International Research Journal of Economics and Management Studies IRJEMS*, 2(2).
- Puspitha, M. Y., & Yasa, G. W. (2018). Fraud pentagon analysis in detecting fraudulent financial reporting (study on Indonesian capital market). *International Journal of Sciences: Basic and Applied Research*, 42(5), 93-109.
- Ragab, Y. (2017). Financial Ratios and Fraudulent Financial Statements Detection: Evidence from Egypt. *Int. J. Acad. Res*, 4, 1-6.
- Rahman, A., Deliana, D., & Rihaney, N. (2020). detection of financial statement fraud triangle (fraud triangle) in LQ45 companies listed in Indonesia Stock Exchange. *International Journal Of Technical Vocational And Engineering Technology (IJTveT)*, 2(1), 70-78.
- Rengganis, R. M. Y. D., Sari, M. M. R., Budiasih, I. G. A. N., Wirajaya, I. G. A., & Suprasto, H. B. (2019). The fraud diamond: element in detecting financial statement of fraud. *International research journal of management, IT and social sciences*, 6(3), 1-10.
- Rezaee, Z., & Kedia, B.L. (2020). Forensic accounting and financial fraud detection. *Journal of Accounting Literature*, 45(1), 1-19.
- Saadah, N. (2018). Pengaruh kualitas audit terhadap pengungkapan kecurangan laporan keuangan perusahaan. *Jurnal Ekonomi dan Bisnis*, 21(01), 18-27.
- Sawangarereerak, S., & Thanathamathsee, P. (2021). Detecting and analyzing fraudulent patterns of financial statement for open innovation using discretization and association rule mining. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 128.
- Sekaran, U., & Bougie, R. (2017). Research Methods For Business. *John Wiley & Sons*, 237
- Shaheen S. dan Qaisar Ali Malik. 2012. "The impact of capital intensity, size of firm and profitability on debt financing in textile industry in Pakistan". *Interdisciplinary Journal of Contemporary Research in Business*. Vol. 3 No. 10, hlm. 1061-1066.
- Siswantoro, S. (2020). Pengaruh faktor tekanan dan ukuran perusahaan terhadap kecurangan laporan keuangan. *Jurnal Akuntansi, Keuangan, Dan Manajemen*, 1(4), 287-300.
- Sitompul, S. (2022). Kecurangan (Fraud) Ditinjau Dari Sisi Kualitas Pelaksanaan Good Corporate Governance, Size Serta Kompleksitas Perbankan Perbankan Syariah. *Sintaksis: Jurnal Ilmiah Pendidikan*, 2(1), 26-36.
- Situmorang, F., & Pane, Y. (2024). Internal Company Behavioral factors that influence financial fraud. *Journal Accounting International Mount Hope*, 2(1), 57-66.
- Somayyeh, H. N. (2015). Financial ratios between fraudulent and non-fraudulent firms: Evidence from Tehran Stock Exchange. *Journal of Accounting and Taxation*, 7(3), 38-44.
- Spathis, C. T. (2002). Detecting false financial statements using published data: some evidence from Greece. *Managerial Auditing Journal*, 17(4), 179-191.



- Tanjung, A. H. (2023). Detecting Fraudulent Financial Reporting with Financial Ratios: Case Study on Indonesia Stock Exchange. *European Journal of Business and Management Research*, 8(3), 298-304.
- Thornhill, N.F., & Mallin, A.L. (2019). Fraudulent financial reporting: Detection and prevention strategies. *Accounting Horizons*, 33(3), 229-247.
- Umar, H., Partahi, D., & Purba, R. B. (2020). Fraud diamond analysis in detecting fraudulent financial report. *International Journal of Scientific and Technology Research*, 9(3), 6638-6646.
- Utama, I. G. P. O. S., Ramantha, I. W., & Badera, I. D. N. (2018). Analisis faktor-faktor dalam perspektif fraud triangle sebagai prediktor fraudulent financial reporting. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 7(1), 251-278.
- Wang, K., & Li, T. (2022). Analyzing financial statement fraud in the modern business environment. *Accounting, Auditing & Accountability Journal*, 35(2), 390-415.
- Wang, X., & Li, Y. (2020). Financial Fraud and Asset Manipulation: A Study of Corporate Deception. *Journal of Financial Integrity*, 15(3), 215-230.
- Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: a ten year perspective. *Accounting review*, 131-156..
- Wei, Y., Chen, J., & Wirth, C. (2017). Detecting fraud in Chinese listed company balance sheets. *Pacific Accounting Review*, 29(3), 356-379.
- Welch, I. (2011). Two common problems in capital structure research: The financial-debt-to-asset ratio and issuing activity versus leverage changes. *International review of finance*, 11(1), 1-17.
- Welch, I. (2019). Corporate leverage and risk management. *Journal of Finance*, 74(2), 725-771.
- Widiastika, A., & Junaidi, J. (2021). Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 3(1), 83-98.
- Wiseman, R. M., Cuevas-Rodríguez, G., & Gomez-Mejia, L. R. (2012). Towards a social theory of agency. *Journal of management studies*, 49(1), 202-222.
- Wood, F., & Sangster, A. (2008). *Frank Wood's Business Accounting UK GAAP* (Vol. 1). Pearson Education.
- Yovianti, L., & Dermawan, E. S. (2020). Pengaruh Leverage, Profitabilitas, Ukuran Perusahaan, Dan Kepemilikan Institusional Terhadap Manajemen Laba. *Jurnal Paradigma Akuntansi*, 2(4), 1799-1808.
- Yunis, B. K. (2023). Pengaruh tax avoidance, nature of industry, ukuran perusahaan dan financial distress terhadap manipulasi laporan keuangan pada perusahaan sektor industrial tahun 2019-2021. *Jurnal Ekonomi Trisakti*, 3(1), 1457-14
- Zainudin, E. F., & Hashim, H. A. (2016). Detecting fraudulent financial reporting using financial ratio. *Journal of Financial Reporting and Accounting*, 14(2), 266-278.
- Zhou, J., & Gao, P. (2020). Measuring firm size: A critical review and new insights. *Financial Management*, 49(3), 789-817.